RECESSION AND RECOVERY

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Why is it necessary for Britain to sustain the current level of public investment in R&D?

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Public spending on R&D 'crowds in' private spending on R&D

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Research for economic growth

Romesh Vaitilingam explains why public investment in the science base is key to Britain's economic recovery

WHAT CONTRIBUTION DOES scientific research make to innovation, productivity and long-term economic growth? Why does such a substantial share of a country's spending on research and development (R&D) need to be publicly funded, even in the US? And is it really necessary for Britain to sustain the current level of public investment in science, particularly in straitened economic times – or can British businesses and the British economy 'free-ride' on research done elsewhere?

These are the questions explored in a report from Research Councils UK, a strategic partnership of the country's seven research councils, encompassing a broad range of research across the arts and humanities, social science, engineering and physical science, and the medical, environmental and natural sciences. As policymakers seek to sustain recovery from the worst recession since the Second World War, the role of these public investments in the science base is of fundamental importance.

The answer to the first question – how research supports growth – is straightforward. Virtually all evidence indicates that the new knowledge and innovative ideas generated by research – whether it is done in the public or private sector – are key drivers of productivity growth. And as the economics Nobel laureate Professor Paul Krugman once wrote, 'Productivity isn't everything – but in the long run, it's almost everything'.

Answering the second and third questions – why research needs public support and why it needs to happen in Britain – is more complex. To understand why public spending makes up a large proportion of total spending on research, it is essential to understand the idea of 'market failure' – where, for various reasons, the private sector fails to deliver products and services that benefit society.

In this case, the potentially high costs of research, in terms of both money and time, and the very uncertain payoffs discourage firms from spending as much on R&D as they otherwise might. They are further discouraged by their inability to reap all the benefits of research because of 'knowledge spillovers' to other firms.

As a result, without public investment, society as a whole would underinvest in research. So a very substantial proportion of the R&D that creates new knowledge and leads to increased productivity is done in universities and other publicly funded research institutions.

Public spending on research can generate immediate returns in terms of commercial applications, university start-ups, spin-out companies and licensing of ideas and technology. But it also has a positive impact on private sector spending on R&D.

Fears are sometimes expressed that public spending of any kind 'crowds out' private spending. In fact, public spending on R&D 'crowds in' private spending on R&D via the positive effects of knowledge spillovers. Not only are companies encouraged to do more R&D themselves when public sector R&D increases, but that private sector R&D is more productive. The reverse is true too: reductions in public R&D reduce private R&D.

Alongside publicly available research results, universities provide much more to value to the private sector, including staff training, consultancies, conferences and contract research. Most of all, they produce an essential resource for business and industry: highly trained graduates. (In addition, Britain's universities are a significant source of export revenues via the many overseas students they attract.)

So are there real barriers to successful collaboration between universities and business that need to be tackled? A study for the Advanced Institute of Management Research (AIM) by Professor Ammon Salter and colleagues suggests that far from being cut off from society, in the ivory towers of popular imagination, British researchers are actually highly entrepreneurial.

The last five years have seen academics and industry forge ever closer connections

Furthermore, the last five years have seen academics and industry forge ever closer connections. The academics surveyed for the AIM research are five times more likely than the ordinary person to be engaged in a business venture. And British academics are competitive with their international counterparts in terms of their links with business and industry. These links are often fundamental to how they conduct their research.

The combination of new knowledge, top quality researchers and highly skilled graduates that universities produce is not only beneficial to British firms. It also attracts inward investment by foreign-owned companies, which has many benefits for the British economy.

This begins to suggest answers to the third question of why it is so essential to sustain current levels of public funding for research in Britain. First though, it is important to address the question of whether Britain could 'free-ride' on the university research of larger countries, notably the US.

Such a policy would 'work' only if it could be done without significantly reducing the available pool of research. This requires that the free-rider is a small contributor relative to the total, and that punitive reactions can be avoided.

But Britain is not a small player in global science and research. Indeed, the country ranks high in terms of scientific publications per head of population – about 50 per cent higher than the European Union average and 16 per cent higher than the US. Any serious cutback in Britain would have a significant effect on the pool. It might also trigger attempts by other countries to restrict British scientists' access to research findings.

Continued public investment in scientific endeavour is essential for the success of British business and industry for several far more positive reasons. First, geography still matters. Britain needs to be doing frontier research to generate local development around its universities.

The current high quality of British research makes the country attractive for inward investment by international business and industry through collaborations and through siting offices and R&D facilities. Universities also encourage innovation by local businesses and, through incubators and science parks, the emergence of new companies.

Second, 'absorptive capacity' is vital. Research on the 'two faces' of science shows that it is important for innovation and productivity, not just for pushing forward the technological frontier. It also makes it possible for companies to learn about and absorb innovations from elsewhere, including the output of basic science. Britain needs to be doing frontier research to be able to take advantage of frontier research being done elsewhere.

Universities and science minister David Willetts has acknowledged the significance of the research evidence confirming this idea: "We need enough good science so we have the capacity to tackle a new problem, to react effectively to scientific breakthroughs however or wherever they may arise, and to capitalise on those breakthroughs via research programmes and business initiatives of our own."

Third, there is the issue of skills. Britain needs to be doing frontier research to attract and retain world-leading researchers and to continue to build a high-skills economy. As argued in Lord Sainsbury's 2007 review of British science and innovation policy, the country cannot win a 'race to the bottom'.

The Sainsbury report was written before the financial crisis, the economic recession and the budget deficits that demand constrained government spending. But even at a time of economic weakness, the arguments remain compelling. Short-term retrenchment may be needed, but significant reductions in research funding could have very damaging long-term consequences for the British economy.

The US intends to double its scientific research budget by 2016

A study by Professor Jonathan Haskel of Imperial College London has measured the impact of public investments in research and finds strong evidence of very high productivity benefits for the rest of the economy. These benefits arise from research council spending rather than from research that is directly government funded or from tax incentives for private sector innovation. The estimates suggest that a cut of £1 billion in annual spending would lead to a fall in GDP of £10 billion.

Speaking at the annual conference of Universities UK (UUK) in September 2010, Professor Steve Smith, vice-chancellor of the University of Exeter and president of UUK, made the following analogy about such a threat: "Cutting back on the UK's R&D base now would be the equivalent of the government cutting back on the production of Spitfires in the early summer of 1940."

Fortunately, fears that a £1 billion cut in research funding might be part of the coalition government's comprehensive spending review proved unfounded. Funding is promised to remain flat in cash terms over the next four years, which is equivalent to a real terms fall of less than ten per cent.

Nevertheless, this settlement still stands in contrast to the very different science policies being pursued by many other developed countries. France, Germany and the US, for example, are in comparable fiscal difficulties to Britain, but they are responding by increasing not reducing their public spending on research. Indeed, the US intends to double its scientific research budget by 2016.

So work remains to be done to sustain Britain's public investment in research in a globally competitive environment. Professor Smith's speech eloquently summarises the importance not just for growth now but also for Britain's longer-term future: "It is absolutely imperative for the future of this country that the UK remains a first-rank knowledge economy, not for the sake of universities, not even for the sake of current and future staff and students; no, the UK has to remain a leading knowledge economy because there literally is no other choice if we want to bequeath economic prosperity to our children." ■

www.rcuk.ac.uk/aboutrcuk/publications/corporate/future.htm
www.youtube.com/watch?v=fzwtfH4cplY

Romesh Vaitilingam is author of *Research for our Future: UK business success through public investment in research* published by Research Councils UK

Lord Sainsbury: Britain cannot win 'a race to the bottom'

Lessons from the Great Depression

Tim Hatton stresses the importance of policies to tackle unemployment

THE DEEP RECESSION that followed the global crisis looked very much like the Great Depression to start with, but so far it has not turned out as badly. While some observers point to monetary policy and fiscal stimulus as the decisive difference, it is also important to look at the supply side. Developments in interwar labour markets slowed recovery from the Great Depression, an experience from which today's policymakers could learn.

Before the First World War, the unemployment rate in Britain and the US averaged six per cent. A sharp recession in 1920-21 pushed unemployment above ten per cent in both countries. But while the US labour market bounced back to something resembling its pre-war unemployment rate, Britain's did not. Yet after 1929, the US unemployment rate rapidly overtook Britain's and seemed to settle at a permanently higher level.

Estimates of the 'non-accelerating inflation rate of unemployment' (NAIRU) for Britain show that it shifted up decisively in the 1920s, with no further change in the 1930s. By contrast, the US NAIRU shifted dramatically up in the 1930s but not before. This suggests that to identify key shifts in labour market performance, we should look at Britain in the 1920s and the US in the 1930s.

SHOCKS AND INSTITUTIONS

One way of thinking about persistently high unemployment is to consider 'shocks' to labour demand and supply and their interaction with 'institutions' – the structures, rules and customs that determine how flexibly the labour market responds to shocks. This approach has been used to explain stubbornly high European unemployment in the 1980s and 1990s, and it is just as relevant to the 1920s and 1930s.

The second decade of the 20th century saw dramatic changes in Britain's labour market institutions. Union density tripled – from 14 per cent in 1910 to a peak of 44 per cent in 1920 – and industrial militancy dramatically increased. Wartime pressures accelerated the trend towards industry-level collective bargaining and, in some industries, minimum wages were introduced.

> **Union density tripled from 14 per cent in 1910 to a peak of 44 per cent in 1920**

Taken together, these forms of centralised wage-setting covered about half the British labour force by 1920. In addition, the unemployment insurance scheme, established in 1911, was expanded to cover the majority of workers: benefits were increased and made available for longer unemployment durations.

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The 1930s saw marches against poverty

The sharp negative demand shock of 1920-21 was compounded in Britain by a supply shock. In 1919, average weekly hours were cut by 13 per cent with no cut in the weekly wage. During the 1920s, the British economy recovered slowly from these shocks while contemporary observers worried about the lack of labour market adjustment.

Looking across the Atlantic, they would have seen a very different picture. US unionism rose modestly during the First World War and then fell back to the pre-war level, while the structure of industrial relations remained largely unchanged. No national system of unemployment insurance emerged. And the more gradual decline in working hours was easily absorbed by stronger productivity growth.

NOW TO THE GREAT DEPRESSION

The demand shock that initiated the Great Depression was more severe in the US than in Britain and it created pressure for action. President Roosevelt's New Deal was once seen as a Keynesian-style recovery package, but research has downgraded the positive demand-side effects and upgraded the negative supply-side effects.

Foremost among these was the 1933 National Industrial Recovery Act, which involved raising wage rates and cutting hours; it also spawned anti-competitive industry agreements. The 1935 National Labour Relations Act further strengthened the hand of labour organisations. As a result, both nominal and real wages failed to adjust downwards despite unemployment remaining historically high.

In both Britain and the US, labour markets were much more fluid than today, labour turnover was higher and unemployment durations were shorter. But as workers queued for jobs, unemployment durations lengthened. In 1936, 27 per cent of unemployed men in Britain had been without work for over a year. By 1940, the US figure exceeded one third.

The long-term unemployed became less and less able to compete for work as their skills and motivation atrophied. As a result, wage pressure was not as strong during the recovery as the persistently high unemployment rates would suggest.

POLICY RESPONSES

The early and aggressive use of fiscal and monetary policy in the recent recession attests to the long shadow cast by the Great Depression. In the 1930s, policy activism meant leaving the gold standard, and abandoning the policy dogma that went with it. But these policy shifts did not come into effect until two years into Britain's recession and nearly four years into the US recession. Given developments in the labour market – by that time, the NAIRU was ten per cent in Britain and even higher in the US – they were insufficient to promote a vigorous recovery.

In the interwar years governments were under severe pressure to act. Much of their effort went into maintaining high wages and ameliorating the plight of the unemployed to stave off unrest. These policy packages contained interacting elements that magnified the shocks and caused their effects to persist.

An important lesson from the Great Depression is that policies should be firmly focused on fostering labour market flexibility, maintaining employability and avoiding measures that cause unemployment to persist. It is worth remembering that the Great Depression lasted for ten years and mass unemployment was brought to an end not by labour market adjustments but by the massive boost to aggregate demand from the Second World War. Without that the depression would have lasted well into its second decade. ■

oxrep.oxfordjournals.org

Tim Hatton, *Professor of Economics at the University of Essex and Fellow of the Centre for Economic Policy Research co-wrote* Labour Markets in the Interwar Period and Economic Recovery in the UK and the USA *with Mark Thomas in* Oxford Review of Economic Policy, *Autumn 2010.*

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The Bank of England uses the Consumer Prices Index to set interest rates

Indexing benefits and tax credits: which inflation measure to use?

Swapping the RPI and the Rossi for the CPI could save billions

EACH YEAR, THE government has to decide how much to increase benefit payments. Typically, to compensate people for increases in the prices of goods and services that they buy, most benefits are linked to one of two measures of inflation: the retail prices index (RPI) or the Rossi index (which is the RPI excluding rent, council tax and mortgage interest payments), the latter being used to 'uprate' means-tested benefits.

In the 2010 budget, it was announced that, from April 2011, all benefits and tax credits would be increased with the consumer prices index (CPI), the measure of inflation the Bank of England targets to set interest rates.

Since the CPI inflation rate tends to be lower than either the RPI or the Rossi index (see chart), this change is very likely to save the government money. While in any single year the differences between different measures of inflation may be small, over time the cumulative difference, and thus the potential savings, could be substantial. This measure is forecast to save £5.8 billion in 2014/15 relative to maintaining the current system. It was the largest benefit cut by value announced in the June budget.

Aside from the potential savings, the government argued that the CPI provided 'a more appropriate measure of benefit and pension recipients' inflation experiences than RPI'. Two main reasons were offered as to why this might be the case.

The first – which researchers at the Institute for Fiscal Studies (IFS) call the 'coverage' argument – is that the CPI excludes goods and services that do not affect the inflation rate experienced by benefit recipients. Compared with the RPI, the CPI excludes mortgage interest and council tax payments.

It is not obvious, however, that the coverage of the CPI will be an improvement over the status quo. Evidence from household survey data suggests that the benefit recipients most likely to be insulated from changes in mortgage interest and council tax costs are those receiving means-tested benefits. But these are linked to the Rossi index, which already excludes them.

They are also typically insulated from changes in rent through housing benefit, and rent is excluded from the Rossi index but included in the CPI. The coverage of the Rossi index may be more suitable for this group than the CPI, though this may change in the future as a result of changes in housing benefit announced in the budget.

Further, mortgage interest and council tax costs on average make up a significant proportion of spending for those receiving RPI-linked benefits. This group are not often insulated from these costs, so excluding them from the inflation index used to uprate benefits would not appear to capture their 'inflation experience' more accurately. So the coverage argument is questionable.

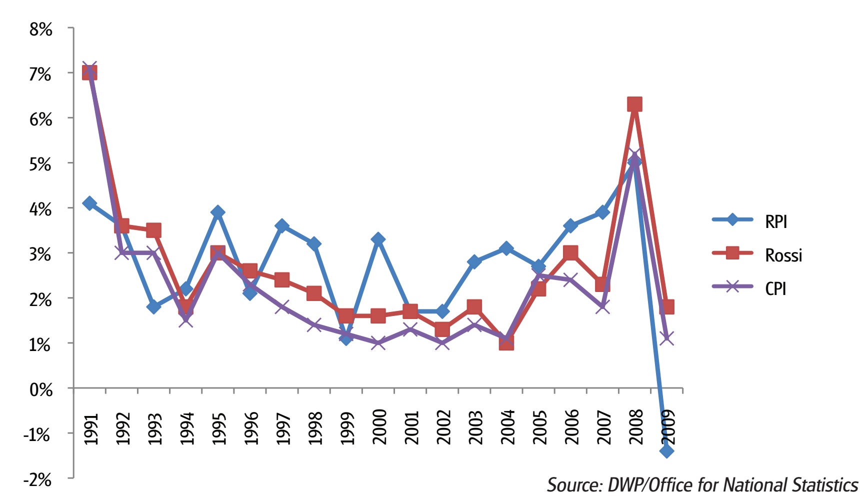
The second rationale (the 'formula' argument) is that the CPI is calculated in a different way to both the RPI and the Rossi index, so that even if they covered exactly the same goods, the CPI would tend to give a lower measure of inflation. This is because measures used in the RPI and the Rossi index ignore the fact that consumers can substitute from higher to lower priced goods when prices change, and therefore overstate the 'true' increase in the cost of living.

The method used to calculate the CPI, however, does allow for some substitution – albeit in a very particular way – and so is widely regarded by economists to be superior. This is therefore a defensible reason for the switch.

The IFS analysis concludes that the 'formula' argument offers reasonable grounds to believe that the CPI offers a better measure of claimant's inflation experience whereas the 'coverage' argument does not necessarily. The strongest motive for the change, however, might well have been the 'deficit' argument and the amount of money it is expected to save in the years ahead. ■

www.ifs.org.uk

Different inflation measures 1991-2009



Source: DWP/Office for National Statistics

Britain's demand for migrant labour

Reducing Britain's reliance on migrant workers will require more than changes in labour immigration policy

Britain's construction industry relies on casual labour, providing no incentive for investment in training

CAPPING THE IMMIGRATION of skilled workers from outside the European Union is one of the coalition government's most controversial policy commitments. Over the summer of 2010, the government and the independent Migration Advisory Committee conducted two separate public consultations about the level and policy mechanisms of the permanent cap, which will become effective in April 2011.

As might be expected, the cap is meeting fierce resistance from a wide range of employers, who are lobbying the Home Office, the business secretary and the Migration Advisory Committee. But as research by Dr Martin Ruhs and Dr Bridget Anderson of the ESRC Centre on Migration, Policy and Society (COMPAS) shows, the key problem for efforts to reduce numbers of non-national workers is that the demand for migrant labour is deeply embedded in the institutions and structure of the British economy.

Britain has long prided itself on its flexibility and relatively low levels of labour regulation. This, together with a range of public policies from training to housing, has contributed to creating a growing demand for migrant workers.

For example, in the construction sector, the difficulty in finding suitably skilled British workers is critically related to low levels of labour market regulation and the absence of a comprehensive vocational education and training system. The industry is highly fragmented. It relies on temporary, project-based labour, informal recruitment and casualised employment, including widespread bogus self-employment.

These practices may have proved profitable in the short term, but they have eroded employers' incentive to invest in long-term training. As a consequence, in many construction occupations, vocational education and training provisions are lacking, of low quality and/or inadequate to meet the present and future needs of the sector.

Britain prides itself on its flexibility and relatively low levels of labour regulation

In contrast, many European states have well developed training and apprenticeship programmes, producing workers with a wide range of transferable skills. It is often these workers who are to be found doing jobs in Britain such as 'groundworks', which is low paid and, despite years of lobbying by contractors, has no formal training requirement.

Social care is another sector where the current institutions and public policies play an important role in creating demand for migrant workers. The shortages of social care workers and care assistants – two-thirds of care assistants in London are migrants – are largely due to the low wages and poor working conditions. The work is physically and emotionally demanding and often undertaken in unsocial hours. It also has very low social status.

Most social care in Britain is publicly funded but provided by the private sector and voluntary organisations. Constraints in local authority budgets have contributed to chronic underinvestment. Together with the structure of the care sector itself, this has resulted in a growing demand for low waged, flexible workers. Simply reducing legal access to migrant workers without addressing the causes of non-migrants' reluctance to apply for jobs in the sector is only going to put more pressure on an already creaking system.

Immigration is often viewed as a discrete area of policy and the relationship between immigration, labour demand and other areas remains unexplored in public debate. And Britain's reliance on migrant workers is not just a result of lax immigration controls.

Most lone parents move into work when their youngest child starts school

Getting lone parents with school age kids back to work

LONE PARENTS OFTEN find it difficult to work because they do not have access to childcare or childcare is too expensive. This problem should be at least partially alleviated when their youngest child starts school, because it offers them a number of hours of free childcare every weekday during term-time.

A study by the Institute for Fiscal Studies uses rich administrative data to compare the labour market outcomes of lone parents receiving benefits whose youngest children are eligible for school and those whose youngest children are not yet eligible for school.

The researchers make use of the fact that most children in England are entitled to start school on 1 September following their fourth birthday. This means that children born just either side of the cut-off date are likely to start school one year apart.

The research finds that around ten per cent more lone parents stop receiving benefits and move into work when their youngest child starts school. This happens about six months after school entry, suggesting that lone parents may start looking for work when their child has settled into school.

Neither can it be reduced to ‘exploitative employers’, ‘lazy Britons won’t do the work’ or ‘migrants are needed for economic recovery’. Instead, Britain’s demand for migrant workers arises from a broad range of institutions, public policies and social relations.

The COMPAS researchers conclude that whatever one thinks about the merits of a cap and reduced labour immigration, it is clear that slowing or reducing Britain’s increasing reliance on migrant workers will require more than changes in labour immigration policy.

It requires fundamental changes to the public policies and institutions that create the demand for migrant workers in the first place. Whether Britain is ready – or can – make these kinds of changes in exchange for fewer migrants is another question. ■

www.compas.ox.ac.uk

Who Needs Migrant Workers? Labour Shortages, Immigration and Public Policy by Martin Ruhs and Bridget Anderson is published by Oxford University Press.

Nevertheless, the overall impact is small. For every 100 lone parents receiving benefits whose youngest child starts school, around two, on average, are directly induced to start work during their child’s first year of school.

These findings are clearly relevant to the coalition government’s plans to require lone parents receiving benefits to look for work when their youngest child turns five.

Although childcare provided by the English education system is very inflexible, the results suggest that policies that provide lone parents with subsidised childcare are much less effective in helping them to move into work than policies such as wage supplements or support from personal advisers. ■

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Committee of experts

What influences members’ votes on key economic policy decisions?

OVER THE PAST two decades, governments around the globe have increasingly handed over important economic policy decisions to committees of experts. The latest example in Britain is the Office for Budget Responsibility (OBR), an independent committee to produce the economic forecasts that underlie fiscal policy, which was created by the coalition government soon after it took office.

How do members of such bodies reach the conclusions that then drive policy? In their research for the ESRC Centre for Economic Performance Professor Michael McMahon of Warwick University and Professor Stephen Hansen of the Universitat Pompeu Fabra looked at the decision-making of a committee of experts established with comparable fanfare in the early days of the previous Labour government: the Monetary Policy Committee (MPC) of the Bank of England.

The MPC’s objective is to achieve a target inflation rate of two per cent. If inflation is more than three per cent or less than one per cent, the Bank’s Governor must write an open letter to the Chancellor of the Exchequer explaining why. Missing the target in either direction is treated with equal concern. Members are urged to vote for the interest rate they believe is most likely to achieve that target.

The Chancellor appoints four of the nine MPC members from outside the Bank – the external members. The five internal members come from within the bank. Each member is independent in the sense that none represents an interest group or faction.

The research uncovers an unusual pattern in the MPC’s voting record: after a year on the panel, external members start to vote for lower interest rates. Thus, the outsiders evolve into ‘doves,’ while the insiders remain ‘hawks,’ wanting to control inflation at all costs. This divergence is especially surprising because committee members have such similar backgrounds and expertise that they could plausibly serve in either role.

One possible explanation of the change in voting behaviour relates to the external members growing in expertise. After a year on the panel, they may feel more confident about voicing divergent opinions. Another explanation relates to a change in their underlying view of the necessary interest rate to achieve the inflation target. As they serve longer on the committee, external members may begin to believe that lower interest rates are compatible with inflation at the target rate.

To disentangle these effects, the researchers develop an analytical tool that predicts how each member is likely to vote. This is based on the idea that voting behaviour will respond differently depending on whether the choice of interest rate is clear-cut or subject to greater uncertainty. Using market information collected in the days before the decision, the researchers examine the voting behaviour of external and internal members under different degrees of decision ‘straightforwardness’.

Comparing actual voting behaviour with the predictions of the analysis, the result is clear. Surprisingly, there is limited evidence to support the learning explanation. The voting behaviour of the external members strongly suggests the effects of a change in economic philosophies that underpin their view of the situation.

One plausible reason for an evolution in outsiders’ philosophies is career concerns. The external members may wish to signal their expertise or their economic philosophy. For example, they may want to signal particular preferences to the private sector to line up more opportunities when they leave the MPC.

The worldwide trend toward consolidating economic influence among multi-member panels raises a basic and as-yet unanswered question: what is the ideal group? This research indicates that the composition of the committee matters a great deal. Better understanding the forces at work and how they sway individual members’ outlooks could affect policy as well as the design of the MPC, the OBR or other similar committees. ■

www2.warwick.ac.uk/fac/soc/economics/research/centres/eri/bulletin/2009-10-3/mcmahon

George Osborne launched the OBR in May 2010

Bailed out bankers escape liability through a legal loophole

WHEN THE GOVERNMENT bailed out many of Britain's banks in 2007-8, did it save irresponsible bankers from being held accountable for their actions? Dr Demetra Arsalidou of the ESRC's Centre for Business Responsibility, Accountability, Sustainability and Society (BRASS) has examined the legal implications of the bailout for the directors whose financial institutions were rescued.

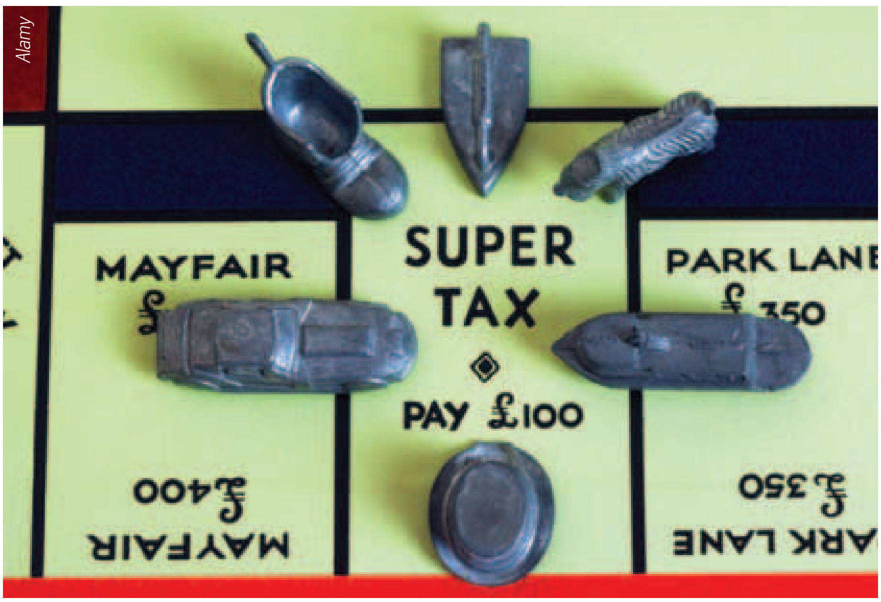
The Company Directors Disqualification Act 1986 provides for the mandatory disqualification of directors whose company becomes insolvent, for a minimum of two years and a maximum of 15. The Act also gives courts the power to impose personal liability on directors for the debts of an insolvent company if they have engaged in 'wrongful trading.'

This personal liability is intended to encourage directors to face financial problems before it is too late. But the sanctions only apply to directors of insolvent companies. Directors of a company brought to the brink of insolvency, but rescued by nationalisation or other forms of government protection, cannot be disqualified or held accountable, no matter how much wrongful trading they have done.

By rescuing Northern Rock through nationalisation, the Royal Bank of Scotland and Lloyds through share purchases and Bradford and Bingley through loans, the government won plaudits for prompt action that saved them from collapse.

But the price of the bailouts may be more than financial. The injection of taxpayers' money into failing firms not only saved their directors from liability, but it also created a safety net, which encouraged the kind of excessive risk-taking that caused the credit crunch.

The BRASS research argues that if both the banks and the bankers can escape the consequences of reckless trading, there is an urgent need to tighten the law. In 2009, the government introduced a Banking Act, which includes the possibility of bank directors being



The Mirrlees Review recommends merging income tax and National Insurance contributions

A better tax system

Overhauling the tax system requires a delicate balancing act that promotes economic growth, efficiency and fairness

TAXES ARE NECESSARY. But they impose all sorts of costs on the economy – and not just in the sense that it costs us all money to pay taxes. People and companies also change their behaviour in response to taxes and often spend large amounts of time and money finding ways to minimise tax payments.

In the most fundamental look at the economics of the British tax system in over 30 years, the Mirrlees Review, carried out at the Institute for Fiscal Studies, shows how the tax system can be overhauled so as radically to reduce its costs to the economy and to people's well-being. Given the current state of the public finances and the need to raise additional money, getting the tax system right is more important than ever.

The Review's recommendations are based on several simple tenets, which seem constantly to be forgotten by policymakers.

First, unless there is a very good reason, the system should always try to treat similar activities similarly. Otherwise, it creates unfairness and complexity and leads people to alter their behaviour purely to avoid tax.

Second, the tax system should be designed with an understanding of how different people will react to taxes. If some people will respond to taxes more than others, then it might make sense to tax them differently.

Third, the system should be considered as a whole. Different taxes do different things: they need not all be progressive or green. So long as the system as a whole achieves the desired objectives, not every tax needs to contribute. In fact the most efficient way to achieve redistribution is generally to use income-related taxes and benefits.

Based on these ideas and on a wealth of economic theory and evidence, the Review recommends some fundamental changes to the British tax system.

One important recommendation is that VAT, or something very similar, should be charged in full on a much greater part of consumption than at present. That should include goods like food and domestic energy. The revenue raised should be combined with an effective compensation package to maintain the progressivity of the current system while increasing its fairness and efficiency. It would also end an effective subsidy to energy consumption which sits very oddly with concerns about climate change.

But the Review's proposals on VAT go much further than this. Financial services are currently exempt from VAT, both creating great complexity and favouring this sector. The Review suggests how this might be remedied.

Thinking properly about VAT as a tax on consumption can also help to sort out the taxation of housing. A simple tax proportional to the current value of a property could replace the regressive and outdated council tax as well as the hugely inefficient stamp duty.

disqualified. But while the loophole remains open, preventing bankers from being held accountable, it is unlikely to change their behaviour, particularly if they believe that ultimately banks will not be allowed to fail.

Dr Arsalidou concludes that Britain needs a special bank directors' regime, which links the wrongful trading provisions of the Insolvency Act with the aims of the Banking Act to ensure that irresponsible directors can be held accountable. Knowing they cannot evade responsibility for their actions may deter bank directors from presiding over reckless behaviour, while providing some redress for those who suffer losses as a result. ■

www.brass.cf.ac.uk/projects/keywords/csr

Other fundamental changes proposed in the Review include merging income tax and National Insurance contributions, and simplifying the system of income-related benefits. This should improve efficiency and simplicity. At the same time, reforms to the tax and benefit system should ensure that those most responsive to work incentives – for example, those around retirement age and women with school-age children – face lower effective tax rates.

The Review also proposes aligning tax rates on different forms of income – from earnings, savings, capital gains and self-employment, to minimise complexity and opportunities for tax avoidance. At the same time it is important to ensure that the 'normal return' to savings is not taxed.

It recommends treating equity-financed investment by companies in the same way as investment financed by debt by introducing an allowance for corporate equity. This would both promote investment and get rid of an important distortion. The other big change proposed for businesses would see the replacement of business rates with a land value tax for business (and agricultural) land.

Finally, introducing a consistent price on carbon across the economy is a priority, as is using road pricing to capture the external costs of motoring properly.

Together these recommendations make up a radical but rational agenda for reform in Britain. They will be challenging for any government. But by ironing out many of the complexities and inefficiencies in the current tax regime, they can promote economic growth and efficiency while maintaining fairness – surely a priority at any time, but perhaps now more than ever. ■

www.ifs.org.uk/mirrleesReview

Young people are particularly vulnerable to permanent 'scarring' from unemployment

Back to work

Getting the unemployed into jobs: insights from Britain's latest economics Nobel laureate

AFTER THE WORST recession since the Second World War, the problem of unemployment is one of the biggest challenges facing policymakers. While the extent of job losses in Britain has not been as bad as expected, based on the experience of the past three recessions, many fear that unemployment will take a long time to start falling significantly. For those out of work for extended periods, there is a risk of permanent 'scarring', especially for young people without prior experience of the labour market.

So it was particularly timely for the latest Nobel prize in economics to be awarded for research that explains the process of search: how people look for work, how they are matched with appropriate job vacancies and how various 'frictions' impede that outcome. One of the three 2010 economics laureates is the first economist based in Britain to receive the accolade in over a decade: Professor Chris Pissarides of the London School of Economics, who has been a cornerstone of the ESRC-funded Centre for Economic Performance (CEP) since it was founded in 1990.

It is important to make sure that people do not stay unemployed too long

Professor Pissarides explains his work thus: "Our research looks at what happens to someone who loses his or her job because of changes in economic environment. We have created a model that allows us to analyse the processes and decisions, such as policy, which affect how long it is before someone finds productive employment again."

CEP's director Professor John Van Reenen adds: "Chris has been recognised for his outstanding work in understanding how markets really work. Rather than assuming that workers were being smoothly and instantaneously matched with jobs as in traditional models, he elegantly modelled the process by which both sides are constantly searching for opportunities to find the right match."

Professor Van Reenen continues: "These 'frictions' matter substantially for our understanding of movements between jobs and unemployment. They are not mere analytical inconveniences but fundamental to our analysis of aggregate unemployment and business cycles."

Professor Pissarides' research has immediate implications for policymakers at a time of economic weakness, as he makes clear: "One of the key things we find is that it is important to make sure that people do not stay unemployed too long so they don't lose their feel for the labour force. The ways of dealing with this need not be expensive training – it could be as simple as providing work experience." ■

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Agriculture was the largest sector in Britain in 1381

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Rethinking Britain's economic past

Life in the past may not have been as hard as we imagine

LIVING CONDITIONS IN Britain during medieval times were far better than has previously been believed, with average incomes twice those of people in the world's poorest nations today. That is one of the findings of a study by a team of researchers led by Professor Stephen Broadberry of the ESRC's centre on Competitive Advantage in the Global Economy (CAGE).

The research provides the first annual estimates of GDP for England between 1270 and 1700 and for Britain between 1700 and 1870. Far more data is available for this period than is widely realised. Britain after the Norman conquest was a literate and numerate society that generated substantial written records, many of which have survived. So the research can draw on a wide variety of records – among them manorial records, tithes, farming records and probate records.

The CAGE team has compared these records with modern national accounts to reconstruct the path of per capita income over most of the second millennium. Previous work has found no sustained economic growth before the Industrial Revolution, and no appreciable differences in living standards between England over a 600-year period, or between England in 1800 and the average hunter-gatherer society.

By contrast, the new study shows that already by 1700, the structure of the British economy had shifted away from agriculture towards industry and services, and living standards were twice as high as in 1270.

By 1700 the structure of the British economy had shifted away from agriculture

It is instructive to consider Britain's historical economic experience in an international perspective. The figure of $400 (expressed in 1990 international dollars) is commonly used as a measure of 'bare bones subsistence' and is seen in many poor countries today. Expressed in 1990 dollars, English per capita incomes in the late Middle Ages were in the order of $1,000.

This is well above the widely accepted per capita income estimate of $400 for English per capita incomes in the year 1000. Even on the eve of the Black Death, which first struck in 1348/49, per capita incomes in England were more than $800. Estimates for other European countries also suggest late medieval living standards well above $400.

In some countries, Italy for example, this may be explained by high levels of urbanisation. For most of Western Europe, however, the researchers believe that it can be explained by the prevalence of mixed agriculture with a large pastoral sector. They reconstruct the path of real and nominal output in agriculture on an annual basis for England over the period 1270-1870, distinguishing between all the main crops in the arable sector and all the main animal products in the pastoral sector.

One of the most striking findings is the already very high share of the pastoral sector in medieval England. This meant that although the English people did not have a particularly generous diet in terms of kilocalories, it was a varied diet, with meat, dairy produce and ale to supplement the less highly processed grain products that made up the bulk of the diet.

The large share of pastoral agriculture had a number of important implications for future growth. First, this was high value-

GDP per capita grew substantially during the Black Death crisis

added agriculture, even if it did not produce many more kilocalories per head than arable agriculture. Second, this was a highly capital intensive agriculture, with animals making up a large share of the capital stock. Third, this was agriculture that was highly intensive in the use of animal energy.

In these respects, Western Europe already looked very different from Asia long before what has been called the 'great divergence' of the Industrial Revolution. Key features of industry during the Industrial Revolution are already apparent in Britain's medieval mixed agriculture.

Although agriculture was the largest sector in Britain in 1381, it was not as dominant as has often been imagined. Furthermore, by 1700, industry already accounted for a larger share of value added than agriculture. Services, moreover, accounted for a substantial share of economic activity already during the Middle Ages, and had become the largest sector by the early 19th century.

The British economy seems to have been stimulated by the growing population density in urban areas, which not only stimulated infrastructure projects in metropolitan areas, but also raised productivity by permitting the reorganisation of agriculture in the counties surrounding London.

Ultimately, the central question is what happened to GDP per capita, the most widely accepted indicator of material living standards over the long run. English per capita GDP grew at an annual rate of 0.2 per cent between 1270 and 1700, which resulted in an approximate doubling of per capita incomes.

But growth was episodic. GDP per capita grew substantially during the Black Death crisis of the mid-14th century, when almost half the population was wiped out by the plague. Per capita incomes then remained on a plateau between 1450 and 1650, before resuming growth during the second half of the 17th century. ■

www2.warwick.ac.uk/fac/soc/economics/research/centres/cage

This study forms part of *Reconstructing the National Income of Britain and Holland, c.1270/1500 to 1850*, a research project co-funded by the Leverhulme Trust and the European Commission.

On your bike

Encouraging people to escape from areas of high unemployment sounds great in theory but will it work?

THE WORK AND pensions secretary Iain Duncan Smith is looking to make people more mobile. He reasons that to help millions of people "trapped in estates where there is no work… sometimes you just need to be able to move to the work." Will this policy be effective and what about those left behind?

Professor Henry Overman, director of the ESRC Spatial Economics Research Centre (SERC), notes that it is certainly true that some places are better at generating jobs. Between 1998 and 2008, Manchester added 33,700 private sector jobs while Stoke lost 20,900.

Places that are better at generating jobs also pay higher wages. Gross value-added per person ('income') in inner London is twice that in the Tees Valley and Durham. Taken at face value, this suggests that Mr Duncan Smith has a point: shouldn't we help people move if it doubles their income?

Unfortunately, things are more complicated than this comparison suggests. One reason why incomes differ across areas is because different types of people live in different places. Comparing average incomes in the Tees Valley to London muddles this composition effect with the effect of moving. Loosely speaking, the comparison captures what happens if a steel worker from the Tees Valley moves to London to be a banker.

The government is right to focus on the social housing allocation system as one part of the problem

A better comparison comes from following people as they move and seeing what happens to their labour market outcomes. Unfortunately, data is not available to do this for unemployment but SERC research has been able to do it for wages.

It turns out that the lowest wage area in Britain has wages about 20 per cent below the average area. But following individuals moving from the lowest wage area to the average area, their wages only increase by six per cent. As a result of the composition effect, area averages overstate the wage gains from mobility threefold. Getting people to move may help, but not as much as might be hoped.

Why do people not move in response to these differences? Here, according to Professor Overman, the coalition government is 'half right'. The housing market is a large economic barrier to migration. The government is right to focus on the social housing allocation system as one part of the problem.

But where the government is in danger of going wrong, he argues, is on the supply of private housing. At present, it is unclear that the 'new homes bonus' incentive will be sufficient to generate new private housing in successful places.

Even if policy can encourage mobility, what about those left behind? For the local labour market, out-migration may help, as the direct effects of reducing excess supply are likely to outweigh indirect effects arising from reducing the size of the labour market. Offsetting this are the negative effects of living in a place with a declining population.

Here, Professor Overman argues, policy must help to address the worst negative consequences. This calls for a different policy mix than that pursued traditionally. But in a world of limited resources it may be worth trying because decades of policy aimed at 'turning places around' simply does not seem to be working. ■

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Ian Duncan-Smith: "sometimes you just need to be able to move to the work"

A question of commitment

Simon Wren-Lewis looks at the economic arguments for stimulus or austerity

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A wise move – Gordon Brown's decision not to join the euro in 2003

WHEN THE GREEK government almost defaulted on its debt early in 2010, the views of leading policymakers around the world changed almost overnight. Before the Greek crisis, the British and US governments, as well as the International Monetary Fund (IMF), had suggested that helping the recovery should be the priority. High levels of debt could be tackled later.

But after euro area governments and the IMF were forced to rescue Greece, the international consensus became that stabilising the public finances had to come first. In Britain, this shift followed a change in government, but critically the Liberal Democrats changed their minds between campaigning during the election and forming a coalition.

The immediate trigger for this abrupt change in view was a fear that financial market panic might spread from Greece to any country with high and rising debt levels, which meant nearly everyone. But a global panic where investors refused to buy any country's government debt was always extremely unlikely.

The recession has not only led to rapid increases in government debt, but also large increases in private saving, and that saving has to go somewhere. As a result, interest rates on US government debt over the last few months have steadily fallen to very low levels as demand outstrips supply. The British government has had no funding problems either.

The smaller euro area countries – the so-called PIGS: Portugal, Ireland, Greece and Spain – are in a different position because they are part of the euro and are uncompetitive relative to Germany in particular. These countries have to lower their costs relative to Germany, and because they share the same currency, this means reducing their wages and prices. To achieve this almost certainly requires a period of stagnation. It is the combination of low expected growth and high debt that worries the market.

Britain, in contrast, has seen sterling depreciate by around 20 per cent against the euro over the last three years. Whatever people may think of Gordon Brown as prime minister, his decision not to join the euro in 2003 has saved us from the fate of the PIGS.

With this in mind, were policymakers right to switch from stimulus to austerity so abruptly this year? It is almost certainly the case that austerity measures will reduce the speed of the recovery. It is very hard to find a macroeconomic theory that tells a plausible story about the recession and yet also says that cutting government spending or raising taxes will leave output and employment unscathed.

The evidence from the US is that Obama's stimulus package reduced the depth of the US recession, but now as the stimulus runs out, the recovery is slowing. In Britain, the newly created Office for Budget Responsibility (OBR) said that the emergency budget in June increased the chances of a 'double dip recession'.

Does this mean that in Britain stimulus should take priority over government austerity, and that policymakers have got it wrong? Taking just a narrow macroeconomic view, the answer has to be yes. The right time to reduce government debt is when times are good, not in the middle of the deepest recession since the 1930s.

'Deficit bias' means we are exploiting our children

But unfortunately, the politics has gone the other way. In good times tax receipts are high and government deficits are low, so the debt problem appears less acute. Instead, politicians are keen to raise spending or cut taxes, believing, like governments for the last 30 years, that when times are good the electorate will reward them for doing so.

This has led to the problem of 'deficit bias'. Over the 30-year period before the recession, levels of government debt relative to GDP roughly doubled in the OECD area and there was no good economic justification for this.

Why should we worry about deficit bias? Even if we ignore financial markets and default, there are two good reasons. First, we are burdening future generations with higher taxes compared with the current generation. These higher taxes will tend to reduce output.

Second, it is probable that in the long run (but not the short run), high government debt will also divert savings from investment in capital, which once again lowers future growth. Simply put, deficit bias is a means by which we are exploiting our own children.

This is why almost every macroeconomist agrees that rising government debt is a serious problem that has to be tackled at some point. Those advocating austerity now fear that if we put this problem off until we are out of the recession, it will get forgotten about again. Economists describe this as a commitment problem. Today, we would like to commit to reducing the deficit when times are better. But that commitment, judging by the evidence of the past, is not credible.

How do we get around this commitment problem? One possibility is for governments to set up independent watchdogs, generally called fiscal councils, which will put pressure on them to apply fiscal discipline even in good times.

The newly formed OBR is Britain's fiscal council. It is ironic that as the coalition government implements massive public spending cuts that will surely slow the recovery, it has also set up an institution that might allow those cuts to be postponed until more appropriate times. ■

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