Research evidence to underpin a productive, fair and sustainable return to growth

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Although Britain is officially out of recession there remain searching questions about how the economy can be nursed back to full health.

How can the government tackle the huge deficit in public finances without risking another recession? What can the Chancellor and the Bank of England do to revitalise the housing market? What fiscal strategies could promote private spending and speed economic recovery? How can the government increase the supply of credit to businesses to reignite growth? How can innovation be encouraged? And how can all this be achieved while at the same time creating a fairer, more equal and sustainable society?

*Recovery Britain* presents findings from economic and social research and provides a snapshot of what we know about our current economic situation. By examining the possible policy responses to the challenges it looks forward to offer a view of what may happen as a consequence of what government, business and civil society do now.

Never before has economic and social research been so important to help find the solutions to the problems we face. The huge economic and societal benefits to the UK that such research contributes will help ensure that the nation has a productive economy, healthy society and can contribute to a sustainable world.

Professor Paul Boyle  
Chief Executive, Economic and Social Research Council
As Recovery Britain points out, the aftermath of the recession poses difficult problems for fiscal policy. These issues deserve careful scrutiny and the purpose of this comment is to probe a bit more deeply the rationale for, as well as the dangers of, early fiscal consolidation – that is, taking action to reduce government borrowing with a view to stabilising public finances in the medium term.

The budget deficit is around 11 per cent of GDP while the ratio of net public debt to GDP has almost doubled from the 40 per cent thought prudent in the days of Gordon Brown’s fiscal rules. At the same time, raising taxes and/or cutting public expenditure are deflationary. At worst, in such situations policymakers may be forced to choose between the Scylla of default when public debt becomes unsustainable and the Charybdis of a double-dip recession when aggregate demand fails to maintain recovery.

Fortunately, Britain is still quite far from this dilemma. Nevertheless, failing to take action to reduce the budget deficit would imply a trajectory on which debt and debt interest payments relative to GDP rise remorselessly over time while, on the other hand, substantial fiscal retrenchment has risks at a time when recovery is still vulnerable to adverse shocks.

The detailed analysis that was set out by the Institute for Fiscal Studies (IFS, 2010) very clearly explains the rationale for fiscal consolidation while also recognising that there is some room for manoeuvre over the timing and a good deal of scope to vary the composition of the fiscal measures to be taken. The implication of the financial crisis is that in future real GDP will be lower than was previously expected, in particular because investment has been adversely affected, so that if fiscal plans are unchanged there will be a structural budget deficit – that is, a deficit that would remain even when economic activity had returned to normal non-recessionary levels.

The central case that the IFS considers is that the structural deficit has increased by 5.2 per cent of GDP (£73 billion at 2009/10 prices) to 8.2 per cent of GDP but their analysis suggests that this increase may be 7.5 per cent of GDP. This would be at the upper end of the impact that OECD research suggests (Furceri and Mouragne, 2009) but well below that which the United States suffered in the Great Depression (Crafts and Fearon, 2010).
In the absence of policy action, the public debt to GDP ratio would be on an upward path, reaching 100 per cent in 2020 and 125 per cent in 2030 according to the IFS projections. Such levels of national debt are a serious burden on future generations in particular because they reduce future economic growth through their implications for investment. These effects become serious after the debt to GDP ratio reaches 90 per cent (Checherita and Rother, 2010).

The primary surplus (excess of government revenues over expenditure excluding debt interest) as a share of GDP that is required for fiscal sustainability depends on the debt ratio and the difference between the interest rate and the growth rate, which increases sharply when the debt ratio becomes large and risks of implicit or explicit default are perceived to mount. No responsible government would wish to go down this route so fiscal consolidation is required quite soon.

But the risks of a double-dip recession are non-trivial. The most notorious example of this happening in what had seemed to be a very strong recovery is the United States in 1937/8 where real GDP fell by 11 per cent when monetary and fiscal policy were tightened appreciably at the same time (Velde, 2009).

Starting from recessionary conditions with interest rates at the lower bound, it is reasonable to think that the multiplier effects of fiscal policy tightening are relatively large so that withdrawing fiscal stimulus threatens recovery. The risks of fiscal consolidation can be greatly reduced, however, if its deflationary impact is offset by expansionary monetary policy. This may seem difficult with nominal interest rates near zero but the key is to raise expectations of future inflation and reduce real interest rates; a classic example of such a policy was leaving the gold standard in the 1930s (Crafts and Fearon, 2010).

The implication is to change the mandate of the Bank of England’s Monetary Policy Committee, perhaps by adopting a price-level target that can only be reached by inflation somewhat above two per cent per year over the relevant horizon. This logic is well known (Wren-Lewis, 2010). Crucially, deflation must be avoided both because it raises real interest rates when nominal interest rates are at the floor and because it makes the fiscal arithmetic of debt sustainability much worse. So, the UK fiscal dilemma can be dealt with but, of course, the problem that then remains is ultimately to devise an exit strategy that returns to a credible conventional macroeconomic policy when the economy is strong enough.

My conclusion is that Recovery Britain does well in sketching the issues relating to fiscal policy and it will hopefully encourage policymakers to reach further into the wide range of economic research that is now available. The lessons from economics and economic history on what to do when a major banking crisis erupts have been well heeded by policymakers in the ‘Great Recession’. We can hope that this will also apply to using research findings to manage the fiscal aftermath of the crisis.

References
Introduction

After the longest and deepest downturn since full records began in the mid-1950s, the British economy is officially out of recession and, at least until the contraction in the last three months of 2010, had four consecutive quarters of growth up to the end of September 2010. Unemployment is likely to rise further, but so far the extent of job losses has not been as bad as expected based on the experience of the past three recessions – those of the mid-1970s, the early 1980s and the early 1990s.

At the same time, the financial crisis and the economic damage associated with it have created an almost unprecedented ‘hole’ in the public finances, which needs to be addressed over the coming years. Decisions by the coalition government on the appropriate balance between spending cuts and tax increases in its plan for ‘fiscal consolidation’ indicate that the country will experience the longest and deepest period of cuts to public services since the Second World War.

Britain faces the enormous challenge of tackling the deficit while reigniting sustainable economic growth that delivers a fairer society. Reform of the financial system (which was the immediate source of the recession) is also vital – this is a matter of global concern. And there are many longer-term questions to ensure that the recovery is helping and not hindering national engagement with growing global competition, migration and the challenges of climate change and global poverty.

This report outlines some of these challenges, looks at policy options and explores what can be learned by looking at evidence from economic and social research. The report draws on analysis of a broad range of data sources and the work of numerous researchers and research institutions, many of them centres, programmes and individual scholars funded by the Economic and Social Research Council (ESRC).
FINDINGS
from economic and social research
Innovation policy
Innovation is a key driver of growth. When public money is tight, policy should focus more on direct spending on innovation and rather less on tax incentives, such as the research and development (R&D) tax credit to companies.

Management practices
Firms with better management are more productive, more profitable and more likely to survive. Management practices – and hence productivity growth – can be improved by increasing skills, promoting competition and tax reform.

Lifelong learning
Long-term economic growth relies on increasing the productivity of the labour force. Lifelong learning – the study and acquisition of qualifications by people after they leave full-time education – has a key role to play in raising productivity.

Training and technology
Training combined with investment in information technology has a significantly positive effect on labour productivity. Organisational change and retraining of the workforce are important for diffusing new technology.

The long tail
Tackling education and skills at the bottom end of the distribution – giving better opportunities to low-achieving, ‘hard-to-reach’ children from poorer families – will help promote fairness as well as improving Britain’s productivity.

Competition policy
Competition often encourages innovation. Reducing administrative burdens, introducing greater flexibility into the labour market and liberalising key services sectors can help firms to reap the full potential of new technologies.

Making work pay
The loss of employment has been far lower than in past recessions but the generally good news on jobs may not be sustained. Reforms that increase the financial returns to working relative to not working should help here.

Public sector pay
The pay review bodies are affecting healthcare provision by keeping down wages in the high cost areas of the South of England. Deregulating pay-setting in healthcare could lead to more positive health outcomes.

Unequal chances
Improving social mobility is difficult when some children grow up in deprived families and others have parents with immense resources. One policy route is through education – but direct measures to address poverty are also important.

The pupil premium
Increasing overall per pupil expenditure can have a large impact on economically disadvantaged children. The premium would be better based on a measure of educational need than on household (or neighbourhood) income status.

Systemic risk
All businesses rely on finance to function – when the sector contracts, it pulls down the real economy with it. Crises in other industries are painful but not fatal to the health of the economic system. A sustained recovery demands financial stability.

Financial regulation
The financial sector is going to be essential to sustaining the recovery. Policy must improve the financial sector’s resilience without damaging competition or competitiveness.

Too big to fail
Financial institutions must be of a size, complexity and interconnectedness that allow regulators to promise credibly that they will be allowed to fail. This could be done through a tax that grows with the size of assets or a limit on balance sheet size.

Macroprudential policy
A big push is needed to support the creation of a new set of worldwide systemic supervisors with the function of looking at the ‘forest’ of systemic risk rather than the ‘trees’ of how each individual bank is performing.

A Champions League for pan-European financial institutions
What Europe needs in banking is what it has in football – national rules and supervision for national teams and players; and European rules and supervision for pan-European players.

Finance for small business
Support for start-ups through R&D grants, creating a EU-wide patent, strengthening universities and removing bureaucracy would all help improve the environment for the growth of small businesses.

Housing finance
The rise in problem mortgages has been less severe than in past recessions, but mortgage arrears and re-possessions are strikingly sensitive to higher interest rates. Housing finance should be a key focus of policies to foster recovery.

Infrastructure
Half a trillion pounds is needed for the investment in infrastructure that will improve Britain’s productive potential. Competition and effective regulation may be key tools to attract capital at reasonable rates – and to ensure efficient delivery.

Trade
The deep, rapid trade collapse following the financial crisis reflected the steep drop in global demand rather than a sudden increase in protectionist measures. But continued global trade integration remains key to economic growth.

Exports
For Britain’s recovery both short- and long-term, the key trade issue is seeking to encourage an expansion of exports relative to imports. There is a tendency for the economy to pull in more imports than it generates in exports as it grows.
TACKLING THE DEFICIT
The recessionary impact of the financial crisis
The housing market
Exit strategies from the economic stimulus
The effectiveness of fiscal policy
From stimulus to austerity
Cutting public spending
Productivity and pay in the public sector
Public services and the voluntary sector
The British economy has experienced its longest and deepest recession since records of quarterly economic growth and contraction began back in the mid-1950s. The comparison that has most frequently been made is with the Great Depression of the 1930s, when employment, production, trade and stock markets plummeted across the world (Eichengreen and O'Rourke, 2010). Then, the responses of economic policymakers were generally weak and ineffective, and a strong recovery only really emerged as a consequence of rearmament and war. This time, some of the lessons of history were learned quickly. Public authorities across the world responded decisively to what has become known as the Great Recession of 2008-09.

Central banks cut interest rates to unprecedentedly low levels and embarked on programmes of ‘quantitative easing’ – buying assets, mainly government bonds, and creating the money to do so – to increase the money supply. Finance ministries pursued policies of ‘fiscal stimulus’ – raising public spending or lowering taxes to boost demand. And through the G20, governments made efforts to co-ordinate their macroeconomic policies, support trade and reform the regulation of financial markets.

**The Recessionary Impact of the Financial Crisis**

Although there are other, long-term factors, the recession in Britain and across the world was most directly a result of the credit crunch that began in August 2007 and which worsened dramatically into a global financial crisis in the autumn of 2008. As elsewhere in the world, notably in the United States, the central problem was that many of Britain’s banks had invested their reserves in assets that turned out to be unsafe, illiquid or even worthless. As this problem became apparent and was compounded by domestic and foreign holders of capital withdrawing their deposits, the banks had to cut back their loans.

Nick Bloom of Stanford University and the Centre for Economic Performance (CEP), who in the spring of 2008 forecast that the credit crunch would lead to an economic slowdown much worse than was then anticipated, explains the recessionary impact of the financial crisis in terms of what it did to levels of uncertainty. Fears about the extent of financial damage, the identities of the next banking casualties and the unpredictability of the policy response all led to tremendous stock market instability.

As a result, 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’ – increased six-fold between the first emergence of the US ‘subprime’ crisis in August 2007 and October 2008, not long after the collapse of Lehman Brothers and at the height of the financial crisis. Indeed, the index reached levels far higher than after the 9/11 terrorist attacks, the Gulf wars, the Asian crisis of 1997 and the Russian default of 1998.

So why is a rise in uncertainty so damaging for the ‘real economy’? First, the lack of credit strangles firms’ abilities to make investments, hire workers and start new innovation projects. Second, for the lucky few firms with access to credit, the heightened uncertainty leads them to postpone making investment and hiring decisions. It is expensive to make a hiring or investment mistake – so if conditions are unpredictable, the best course of action is often to wait (Bloom, 2009).

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 growth. Similarly damaging effects 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 since uncertainty makes people cautious about buying a bigger house.

Even as the economy emerges from recession, uncertainty continues and that threatens to deter firms from making the investments that will drive a strong recovery. In this recovery at least, heightened uncertainty also extends to policymakers. The Office for Budget Responsibility (OBR), formed in May 2010 to make independent assessments of the public finances and the economy, describes the current economic situation as ‘even more uncertain than usual’.

A report from the UK Innovation Research Centre (UK-IRC) takes up this theme: ‘as a result of the banking crisis and credit crunch, policymakers are working in the dark. The known unknowns, let alone the unknown unknowns, mean that policymakers have to think about a very wide range of future economic scenarios, none of which can be confidently ruled in or ruled out’ (Martin, 2010a).

**The Housing Market**

The housing market was the epicentre of the crisis. Financial turmoil was initially triggered in the United States in mid-2007 by the rise in defaults by so-called ‘subprime’ mortgage borrowers – house buyers whose income and job prospects were relatively poor. Their mortgages – totalling over one trillion dollars – had been bundled together and sold as ‘mortgage-backed securities’, offering the promise of safe, high returns to British banks and many other institutions around the world.

When US housing markets turned down, there were lots of simultaneous defaults (over a million foreclosures within a year) and the market value of the mortgage-backed securities collapsed. This was followed by the implosion of the global market for the complex financial instruments that banks and other investors had devised to slice up and re-sell mortgage-backed securities and to hedge against risks.
In the latter half of 2007 and into 2008, more and more banks found that securities they thought were safe were ‘toxic assets’. At the same time, the rising number of foreclosures helped speed the fall in house prices, and the number of prime mortgages in default began to increase. While housing prices kept falling, banks’ balance sheets kept deteriorating, leading to further fears of bank insolvency, further reductions in available credit and so on.

As in the United States, house prices in Britain have fallen a long way from their peak. CEP research suggests one reason why prices may continue to fall for a while longer. As prices decline, more potential sellers take their houses off the market. With fewer houses on the market, potential buyers know that it will be harder to find a house that matches their tastes or needs, so more buyers drop out of the market, leading to further declines in prices (Ngai and Tenreyro, 2009).

By reducing household wealth and thereby reducing consumer spending, falling house prices can constrain an economic recovery. Research by John Muellbauer and colleagues for the Spatial Economics Research Centre (SERC) surveys evidence on this ‘housing wealth effect’, as well as the interactions between financial innovation and the housing market (Duca et al, 2010). The study shows the importance of financial liberalisation and credit conditions for consumption, housing demand, residential construction, house prices and cross-country differences in economic performance.

To foster the recovery, policymakers need to give particular attention to housing finance. For example, another SERC study examines the surge in mortgage re-possessions and arrears arising from the recession. The rise in problem mortgages has been less severe than in the early 1990s recession, in part because of lenders’ forbearance and more generous government income support for those with mortgage payment difficulties (Aron and Muellbauer, 2010).

But the researchers warn of the striking sensitivity of arrears and repossessions to higher interest rates. If the Bank of England were to raise interest rates, mortgage rates would also increase, though probably by a smaller amount. The bad loans resulting from significantly higher mortgage rates could further impair the financial system, reducing economic growth.

By late 2009, most developed countries had emerged from recession and returned to growth. But then came perhaps the most difficult time for policymakers – what the International Monetary Fund (IMF) called the ‘need to begin preparing for an orderly unwinding of extraordinary levels of public intervention’. For central banks, the question about unwinding – their ‘exit strategy’ – is when to start withdrawing quantitative easing and raising interest rates. Given their obligation to maintain price stability – inflation close to two per cent a year in the case of the Bank of England – this will be when there are signs of strong inflationary pressures. Despite inflation having been consistently above the target during 2010, most commentators agree that this is not an immediate threat.

For fiscal policymakers, the question of exit strategy is more complex. A fiscal stimulus may encourage private spending and promote economic recovery in the short term. But in the longer term, increasing public spending or cutting taxes can do more harm than good if they jeopardise the sustainability of the public finances. That happens when annual government borrowing (the budget deficit) and the total stock of public debt get so high that it is not clear how they will be reduced. At that point, international investors in government bonds begin to worry about debt default or currency depreciation, and demand higher rates of interest. That is what happened in Greece and other highly indebted euro area countries in the early months of 2010. The policy response has required severe ‘austerity’ budgets plus guarantees of financial support from the IMF, the European Union (EU) and the European Central Bank.

After the Greek crisis, the international consensus quickly shifted from putting a priority on helping the recovery to stabilising the public finances. 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.
Key decisions for ‘fiscal consolidations’ include the size of the necessary tightening, when it should begin, how quickly to try to complete it and how to spread the pain between tax increases and cuts in spending on public services. The ‘emergency budget’ introduced by the coalition government in June 2010 opted for an immediate and substantial tightening to be completed over the course of one parliament and with spending cuts bearing at least three quarters of the burden.

The opinion of economists is divided on its likely effectiveness, some welcoming the early commitment to reduce the deficit by cutting public spending and raising taxes, and others arguing that Britain has taken a wrong turn and that the measures risk creating a ‘double-dip’ recession.

This debate reflects long-running disputes about the effectiveness of fiscal policy as a countercyclical policy tool. Research by CEP’s Ethan Ilzetzki and colleagues uses a new database on government spending, covering 20 high-income countries and 24 developing countries, to analyse this question. It finds that the short-run fiscal multiplier – defined as the short-term growth in output caused by an increase in government spending – is small in impact while the long-run fiscal multiplier varies considerably.

The size of the fiscal multipliers critically depends on key characteristics of the economy or on the type of policy being considered. In open economies and those with flexible exchange rates, a fiscal expansion leads to no significant output gains. In contrast, in closed economies or those with fixed exchange rates, the long-run effect of government spending is large.

According to the study’s classification, Britain is both a relatively open economy and one where the exchange rate fluctuates freely. Based on this classification, the study predicts that both increases and cuts in government spending are likely to have negligible effects on economic growth (Ilzetzki et al, 2010).

At the same time, the results indicate that the interaction between fiscal and monetary policy is a crucial determinant of the effects of fiscal stimulus. For example, it is vital to consider the reaction of the Bank of England in assessing the potential economic fallout from the current austerity measures. Should the Bank respond as inflation-targeting central banks typically do, it will attempt to contain the economic costs of fiscal austerity through further lax monetary policy.

On the other hand, with the current Bank rate at 0.5 per cent, and unconventional purchases of the central bank (under the Asset Purchase Programme) already standing at £200 billion, it is unclear whether the Bank of England has the means to react to fiscal austerity as it typically would. Moreover, if inflation concerns force the Bank to begin an unwinding of its loose monetary stance, a co-ordinated fiscal-monetary contraction could cause significant economic pain.

FROM STIMULUS TO AUSTERITY

The smaller euro area countries – the so-called PIGS: Portugal, Ireland, Greece and Spain – are in a particularly difficult fiscal position because they are part of the euro and are uncompetitive relative to Germany. 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. With this in mind, are policymakers right to switch from stimulus to austerity so abruptly? According to Simon Wren-Lewis of Oxford University, it is almost certainly the case that austerity measures will reduce the speed of the recovery. He argues that 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 United States is that stimulus package reduced the depth of the US recession, but as the stimulus runs out, the recovery is slowing. In Britain, the OBR said that the emergency budget in June increased the chances of a ‘double dip recession’.

Does this mean that in Britain stimulus should still 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.

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 the Labour government, 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 had roughly doubled in the OECD area as a whole, and there was no good economic justification for this.
Why should there be a problem with deficit bias? Even ignoring financial markets and default, there are two good reasons. First, deficits burden 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. 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 putting this problem off until the recovery is stronger means that it will get forgotten about again. Economists describe this as a commitment problem. Today, policymakers 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.

Is it possible to get round 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 OBR is Britain’s fiscal council. Wren-Lewis notes that it is ironic that as the coalition government implements massive public spending cuts, which will surely slow the recovery, it has also set up an institution that might allow those cuts to be postponed until more appropriate times.

**CUTTING PUBLIC SPENDING**

Rowena Crawford, Gemma Tetlow and colleagues at the Institute for Fiscal Studies (IFS) have analysed the deep cuts that will need to be made to public services over the next four years. They find that the pain detailed in the budget will be slightly more severe on average than was implied by the previous government’s plans, but much of it would probably still have happened, just a bit later on (IFS, 2010; Chote et al, 2010a).

Part of the increase in planned spending cuts follows the first set of public finance figures produced by the OBR. These estimate that the hole blown in the public finances by the financial crisis and the associated recession is 5.8 per cent of national income or £86 billion. This is slightly higher than was implied by the Treasury’s figures in the March 2010 budget.

The June budget aimed to build on the repair job planned by Labour to plug this hole by 2015/16. The new measures will cut borrowing by £40 billion more than Labour had planned. Of this, 85 per cent is to come from spending cuts, and 15 per cent from tax rises. This brings the overall composition of the tightening (including the measures already announced by Labour, of which 70 per cent was to come from spending cuts) to around 77 per cent from spending cuts and the rest from tax increases.

The coalition government is therefore relying more than Labour said it would have done on spending cuts, and also much more than the last Conservative government did in a similar repair job in the 1990s. The Ken Clarke and Norman Lamont budgets of 1993 aimed for a roughly 50:50 split between tax rises and spending cuts.

This reliance on spending cuts implies some very difficult decisions. Although welfare spending is targeted for around £10 billion of the cuts by 2014/15, public services will bear the brunt of the remainder. The cuts will be the most sustained in a half-century – public service spending has been cut for a maximum of only two consecutive years before. The average real cut planned to 2015/16 (1.8 per cent a year) will also be the tightest six-year period, surpassing even the stringent six years ending in 1981/82 when Britain was operating under the IMF’s austerity plan.

A report from the ESRC’s Public Services Programme explores lessons from that time as well as an earlier period of cutbacks in public spending: the ‘Geddes Axe’ of the 1920s (Hood et al, 2009). According to this research, the experience of the 1970s and 1980s offers a model of how to ‘brake’ the growth of public spending while the 1920s experience offers a model of how to put public spending growth into reverse.

In both periods, ‘normal’ Treasury processes of negotiating spending with departments were augmented by other institutional measures: in the 1970s by the conditions attached to the IMF loan, which served to change policy from a stance of spending stability and deferred tax rises to a stance of immediate spending cuts and tax increases; and in the 1920s by a special high-powered committee that effectively doubled the cuts made by the ‘normal’ processes.

IFS analysis makes it clear that the cuts to public spending will reduce the quantity and or the quality of public services available. Even the holy grail of ‘efficiency savings’ cannot make this painless. The Comprehensive Spending Review in October 2010 confirmed expectations that the pain will not be shared equally across all departments: there will be real increases in the budgets for health, international development and energy and climate change; and the largest cuts will fall on the government departments responsible for communities and local government, for the environment, food and rural affairs, and for business, innovation and skills.

A series of evaluations of health, education, crime and labour market policies by CEP researchers have shown the cost-effectiveness of a number of public spending programmes – for example, those supporting mental health (Layard, 2006), helping disadvantaged pupils (McNally, 2005), fighting street crime (Machin and Marie, 2005) and tackling youth unemployment (Blundell et al, 2004). These suggest that specific well-designed and targeted resources can have important beneficial impacts and that cutbacks should be similarly carefully chosen and designed to avoid adverse effects on schools, crime and hospital performance.
Productivity and Pay in the Public Sector

Alongside spending cuts are continued pressures to raise productivity in the public sector, a central objective of the previous government. But while estimates from the Office for National Statistics (ONS) suggest that public services improved considerably between 1997 and 2007, the increase in measured outputs was less than the increase in inputs; in other words, productivity fell. At the same time, the relative price of inputs rose, so that the ‘bang for each buck’ of spending on public services fell by more than productivity.

According to IFS calculations, if Labour had managed to maintain the ‘bang for each buck’ at the level it inherited in 1997, it would have been able to deliver the quantity and quality of public services it delivered in 2007 for £42.5 billion less. Alternatively, it could have improved the quality and quantity of public services by a further 16 per cent for the same cost (Chote et al, 2010b).

Nevertheless, some of Labour’s public service reforms were successful in improving quality and efficiency. Research by CEP and SERC shows that market-based reforms to the NHS in the mid-2000s, which focused on promoting patient choice and hospital competition, saved lives (Cooper et al, 2010a), improved efficiency (Cooper et al, 2010b) and boosted management quality (Bloom et al, 2010). This research illustrates how policymakers can get more value from the health service instead of rationing care for cancer, lengthening waiting times or cutting staff.

More could be achieved by reforming the setting of public sector pay. Despite some moves towards more local pay-setting arrangements, the pay of the vast majority of public sector employers – doctors, teachers, nurses, members of the armed forces – is set by the government following recommendations by the pay review bodies. These bodies seek to ensure that individuals are paid equally for equal work.

Research by John Van Reenen of CEP and Carol Propper of the Centre for Market and Public Organisation (CMPO) shows that market-based reforms to the NHS in the mid-2000s, which focused on promoting patient choice and hospital competition, saved lives (Cooper et al, 2010a), improved efficiency (Cooper et al, 2010b) and boosted management quality (Bloom et al, 2010). This research illustrates how policymakers can get more value from the health service instead of rationing care for cancer, lengthening waiting times or cutting staff.

One of the reasons why the voluntary sector workforce is bucking overall employment trends is that the main fields in which it is involved have not yet been affected by the recession. Analysis shows that 93 per cent of voluntary sector employees work in social care, health, education or housing. These industries are still growing in employment. In contrast, the numbers of employees in mainly private sector industries, such as finance, manufacturing and construction, have decreased over the last three years.

The TSRC suggests that these increases in voluntary sector employment may not continue. The funding patterns of the sector mean that there is a lag between what affects the private and public sectors and what goes on to affect the voluntary sector. The large cuts to the public sector outlined in the June budget are likely to have a significant impact on the voluntary sector over the next year.

Research by the TSRC’s John Mohan has examined the willingness of the population to become more involved in volunteering. It shows that rates of volunteering have been very stable for many years. Between 26 and 29 per cent of the population provide unpaid help to organisations on at least a monthly basis with 40-45 per cent doing so less frequently but at least once a year.

But much of the work is done by a ‘civic core’, a small subset of the population that carries out the majority of volunteering, charitable giving and civic participation. Around 7.5 per cent of the population provide unpaid help to organisations on at least a monthly basis with 40-45 per cent doing so less frequently but at least once a year.

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Women, people with higher education qualifications, and the middle-aged and young retirees are much more likely than their counterparts in other social groups to be members of the core. Nearly 60 per cent of women with higher education qualifications and aged 50-64 would be part of the core. This is a highly engaged group, but only accounts for around seven per cent of the population of working age. Crucially, these groups tend to be overrepresented in the most prosperous parts of the country.

What about the capacities of voluntary organisations? The regional and local distribution of registered charities and other third sector organisations shows a complex mosaic. This is sometimes characterised in terms of a contrast between ‘charity deserts’ in some parts of the country, principally the former industrial regions of the North of England, and ‘hotspots’ in prosperous rural areas of the South East.

The TSRC concludes that it is not clear whether it will be possible to achieve substantial change in the numbers of volunteers or in their social and geographical distribution. Paradoxically, it is likely to require – in significant parts of the country – investment in the infrastructure needed to recruit and retain volunteers, as well as in supporting organisations that provide vital services yet which are more reliant on the public sector than traditional philanthropic sources of income. Without this ‘rebalancing’ the resources available to communities through voluntary effort will vary considerably. This would then mean that it is likely to be the most prosperous communities that benefit most from the big society.
REIGNITING GROWTH
2

Job losses
Youth unemployment
The threat of scarring
Productivity
Skills and management
Science and innovation
Technology, competition and regulation
Green innovation
The British economy had its fourth consecutive quarter of growth in the third quarter of 2010. According to the ONS, gross domestic product (GDP) – a standard measure of the total value of a country’s output of goods and services – increased by 0.7 per cent between July and September 2010 and by 2.7 per cent in the 12-month period from October 2009 to September 2010, the first year of the recovery. But the first estimate of growth in the last three months of 2010 suggests that the economy actually contracted by 0.5 per cent.

The widely accepted definition of a recession is two consecutive quarters of ‘negative economic growth’ (contraction of the economy). In fact, the Great Recession of 2008-09 involved six consecutive quarters of falling output from the second quarter of 2008 to the third quarter of 2009, which added up to the longest and deepest recession since the 1930s. By the time positive growth restarted, the British economy was 6.4 per cent below its peak in March 2008.

The National Institute of Economic and Social Research (NIESR) interprets the term ‘recession’ to mean a period when output is falling or receding, while ‘depression’ is a period when output is depressed below its previous peak. Thus, unless output turns down again for two consecutive quarters, the recession is over, while the period of depression is likely to continue for some time – see Figure 1, which compares this period of ‘depression’ with Britain’s experiences of economic contraction in the early 1930s, the 1970s, early 1980s and the early 1990s. By December 2010, 33 months had passed since the onset of recession, yet the economy still remained more than three per cent below its pre-recession peak.

NIESR uses monthly ONS data for industrial production, manufacturing output and retail sales to provide GDP estimates for any three-month period (Mitchell et al, 2005). The latest estimates suggest that output grew by 0.5 per cent in the three months ending in December 2010 and by 1.6 per cent over the whole of 2010. But GDP growth has ‘softened’ since the summer. NIESR expects growth to continue to decelerate over the coming months as the effects of fiscal consolidation take hold, and estimates a one in five chance of the level of GDP falling in 2011.

The Bank of England’s August 2010 Inflation Report was also cautious about the prospects for growth: ‘The UK recovery is likely to continue, underpinned by the considerable monetary stimulus, further growth in global demand and the past depreciation of sterling. But the risks to growth remain weighted to the downside.’ In the November 2010 Inflation Report, the Bank ‘continues to judge that relative to the most likely path... the risks to growth are skewed to the downside.’

Job losses and a rising rate of unemployment are perhaps the most prominent features of an economy in a recession and the early stages of recovery. In the 1980s recession, the percentage fall in employment was broadly in line with the percentage fall in GDP. In the 1990s recession, the relative fall in the employment rate was somewhat larger than the percentage fall in GDP. Moreover, in the previous two recessions, the fall in employment was only halted 12 to 14 quarters after the onset of recession. But the Great Recession was strikingly different. While the fall in GDP was markedly worse than in past recessions, the loss of employment was much smaller – roughly three per cent of the initial level – and the period over which employment fell was much shorter than in the past – see Figure 2, which shows the path of employment as well as the paths of full-time and part-time employment. According to research by CMPO’s Paul Gregg and CEP’s Jonathan Wadsworth, the number of jobs saved so far relative to what might be expected by the drop in GDP amounts to roughly one million (Gregg and Wadsworth, 2010).

Figure 1: The profile of recession and recovery
Does this mean that employment in Britain has benefited from its putative flexible labour market? The evidence does not support this view. The United States is held to be the prime example of the flexible model and Ireland is also a relatively less regulated country, and both countries experienced large falls in employment. Spain has strong labour protection but also has a large share of temporary jobs, which are weakly protected and have proved to be vulnerable in the downturn. In contrast, Sweden, Italy, Germany and the Netherlands have relatively high levels of employment protection and relatively good employment records over the recession. In short, there appears to have been little relationship between a country’s supposed degree of labour market flexibility and employment losses in the recession. So what explains the outcome in Britain? It seems that the answer consists of several elements. First, policymakers were better prepared this time round. After all, there had been two severe recessions well within the memory of most adults over the age of 30. The understandings that were gained undoubtedly helped frame a policy response in the latest downturn, allied with a greater willingness to intervene than in the past. Workers also did the right thing in accepting lower nominal wage growth, which kept firms’ costs down and reduced the need to cut costs through lay-offs. At the same time, real take-home pay was sustained by cuts in interest rates and VAT and this may have maintained consumer demand. And firms did the right thing in, wherever possible, holding onto valuable labour in the face of the pressure on profits and the severe nature of the crisis. Employers entered the recession in good financial shape and this also helped avoid the level of job shedding that occurs when firms get into deep financial trouble. But the weak recovery means that firms have under-used labour at the moment and this will allow them to grow without the need to hire much in the short to medium term. And if demand continues to be weak, then job shedding is likely to continue on a slow but sustained basis. The Great Recession represents the first serious test of the active labour market policies that have been in place since 1996. Increased conditionality on welfare claimants to take active steps to secure work, packages of support services for job search available to those claiming benefits and use of outside providers to deliver these services rather than Job Centres are all innovations aimed at keeping individuals in the labour market and maintaining search effectiveness. Reforms that increased the financial returns to working relative to not working – the minimum wage and in-work tax credits – should also help continue to make work pay through a period when job prospects may not be as good as when the economy is doing well. The signs are that unemployment also has not risen as much as many expected. When compared with previous recessions, the unemployment rate during the last two years has remained lower. In the ninth quarter following the onset of the 1980s recession, the unemployment rate stood at 10.4 per cent. In the ninth quarter following the start of the 1990s recession, the unemployment rate was 9.9 per cent. But ONS estimates for the second quarter of 2010 show the unemployment rate at 7.8 per cent, a decrease of 0.2 percentage points compared to the previous quarter.

UNEMPLOYMENT HAS NOT RISEN AS MUCH AS MANY EXPECTED

Figure 2: Unemployment and GDP growth (Index: 2008 Q1 = 100)
Nevertheless, there are fears that unemployment will rise again despite the recovery. Indeed, the unemployment rate for the three months to November 2010 was 7.9 per cent, up slightly on the previous quarter. The generally good news on jobs may not be sustained as the public spending cuts take effect and employers begin to assess their longer-term employment needs. Employment took eight to nine years to get back to pre-recession levels after the last two recessions. This time it might be less if a second wave of job shedding is avoided.

**YOUTH UNEMPLOYMENT**

Despite the surprisingly robust performance of the British labour market in the Great Recession and its aftermath, young people have fared much worse than other groups with larger increases in their unemployment and bigger falls in hours and wages. Analysis by CEP indicates that, unfortunately, this is to be expected as young people always suffer worst during downturns, and it does not seem that relatively they did particularly badly in the latest recession compared with the 1980s and 1990s recessions.

More worrying, however, is that the fact that the rates of youth unemployment and of NEETs (young people ‘not in employment, education or training’) were bad going into the recession having been rising since 2004. The poor showing of the youth labour market is particularly worrying given the considerable policy reform to the Employment Service (especially for young people) in the last two decades.

**THE NEW DEAL FOR YOUNG PEOPLE WAS INTRODUCED IN 1998 WITH THE AIM OF IMPROVING THE INCENTIVES AND PROSPECTS FOR YOUNG WORKERS TO FIND JOBS**

Jobseeker’s Allowance (JSA) was introduced in 1996 as the main form of unemployment benefit and greatly increased the job search requirements for receiving benefits. It did appear to reduce the claimant count, but few of those leaving seemed to find sustainable jobs. JSA did not seem to improve the overall employment rate significantly (Manning, 2009) and may even have reduced it for the young (Petrongolo, 2009).

The New Deal for Young People was introduced in 1998 with the aim of improving the incentives and prospects for young workers to find jobs. All 18-24 year olds on JSA for six months now receive help with job search from a dedicated personal adviser. So there is some ‘carrot’ of job search assistance as well as a tougher ‘stick’ of stricter monitoring. Rigorous evaluations show that job finding rates increased by about 20 per cent as a result of the policy (Blundell et al, 2004; de Giorgi, 2005).

Around 2004, the Employment Service was incentivised to focus less on young people on JSA and relatively more on other groups such as lone parents and those on incapacity benefits (through a system of ‘job points’). This was because the problem of long-term youth unemployment was thought to have been broadly solved. Although there is no rigorous evaluation of this change, the timing does suggest that this may have been a cause.

The existing evidence does not give a firm answer as to why, after over a decade of steady improvement, youth unemployment started rising in the mid-2000s. CEP analysis suggests that part of it was due to some softening of the overall labour market, and part of it was due to the changes in the Employment Service. Other suspects — such as immigrants, the minimum wage and skill demand — do not seem to be to be blame.

**THE THREAT OF SCARRING**

The work on search and matching models of the labour market by the 2010 economics Nobel laureate Chris Pissarides of CEP explains why it is often so difficult to return to full employment after a severe economic downturn. If unemployment continues to rise or falls only slowly in the recovery, it is a particular worry because of the ‘scarring effects’ of joblessness, which can persist for a long time in an individual’s life.

Scarring is a phenomenon that has been studied by Simon Burgess and colleagues at CMPO. One report looks at the impact of the early 1980s recession, when unemployment more than doubled from 5.8 per cent in 1979 to 13.1 per cent in 1984. For young people, the labour market was particularly bad, with unemployment of those under 18 years at 30.8 per cent in July 1981 (Burgess et al, 2003).

The research finds that high aggregate unemployment when a cohort is aged 16-18 has mixed effects on subsequent unemployment. For low-skilled individuals, there is a lasting adverse effect. In this sense, the ‘class of ’81’ have continued to feel the impact of the deep recession that coincided with their entry into the labour market.

But for high- and mid-skilled individuals, there is a small fall in subsequent unemployment rates. The adverse economic climate may have encouraged these individuals to remain out of the labour market and take more, or more advanced, qualifications, thus making them more employable later. This might explain the boom in demand many sixth-form colleges and universities are now experiencing as young people seek to acquire more skills and delay entering the world of work.
Another CMPO study examines the consequence of youth unemployment for wages up to 20 years later. It finds that youth unemployment imposed a sizeable wage ‘scar’ (lower earnings) on both young men and women at age 23. This was followed by substantial recovery over the next ten years, but only if the individual avoided further spells of unemployment. A modest residual wage scar persisted up to 20 years later even for those who had no further experience of unemployment (Gregg and Tominey, 2004).

**PRODUCTIVITY**

For economists, labour productivity – the amount of output produced per hour worked or per worker – is the key indicator of economic health. Over the long haul, real income growth and hence living standards must follow labour productivity growth. But although productivity in Britain has grown steadily over the past five decades, there has been a persistent gap with the United States and other major economies: for a given labour input, the country produces fewer outputs. The Britain-US productivity gap narrowed over the late 1980s and early 1990s but has widened slightly since 2004. In 2008 – the latest year for which international comparisons are available – US workers were 33 per cent more productive than those in Britain. The country’s lower level of productivity has contributed to a lower level of GDP per capita. In 2009, GDP per capita, measured in US dollars, was $37,391 in Britain and $46,008 in the United States.

How does productivity typically evolve during a recession and recovery? By definition, output falls in a recession. At the same time, it is common for some people to lose their jobs or to reduce their hours of work. The path of labour productivity in a recession is determined by the relative sizes of the falls in output and total hours worked. A fall in total hours worked will have a negative effect on output, but the effect on productivity is less clear. If a reduction in hours means that the lowest-productivity workers are no longer working or if workers are more productive when working fewer hours, then reduced hours would lead to an increase in productivity. In the Great Recession, labour productivity in Britain fell while US productivity continued to grow and has recovered from the effects of the recession more quickly.

The United States maintained productivity growth because of a much larger fall in hours worked relative to falls in output compared with Britain. In both countries, hours worked fell by more than the number of workers, as people have taken reductions in their working hours or moved to part-time working. According to IFS analysis, the different experiences of Britain and the United States are likely to have consequences for the two economies as they emerge from recession (Griffith and Miller, 2010). But it is difficult to say which country will fare better. The greater falls in hours worked (and employment) in the United States may have placed firms in a better position to restructure their businesses. It may also have encouraged a shift in employees across sectors in response to changes in expected demand. This may place the United States in a more flexible position coming out of the recession.

But US workers will have faced greater falls in their incomes during the recession (especially since there is no equivalent to unemployment benefits), which is likely to have reduced welfare. In addition, unemployment may have longer-lasting, dynamic, effects. First, workers may lose skills when out of the labour force and may find it harder to find a new job in the future, especially if that job is in a different industry. Second, employers may have learned during the recession that they can operate with fewer staff, which would reduce the creation of jobs coming out of the recession. It is therefore unclear what the effect of the evolution of output and hours in Britain and the United States during the Great Recession will mean for the welfare of workers and for the growth of the economy going forwards.

**SKILLS AND MANAGEMENT**

Long-term economic growth relies on increasing the productivity of the labour force. A NIESR study indicates that lifelong learning – the study and acquisition of qualifications by people after they leave full-time education – has a role to play in this. There are considerable returns to men who undertake lifelong learning, both because of an effect on their wages and because their employment chances improve (Dorsett et al, 2010). Work close to completion shows similar returns for women.

A study by the ESRC research centre for Learning and Life Chances in Knowledge Economies and Societies (Llakes) shows that the effects of the recession on training have been uneven. In some firms, the slowdown in business activity provided an opportunity to step up training to make good use of time and prepare for future market opportunities. But in other firms, which experienced very sharp reductions in sales, the recession contributed to reduced coverage of adult training and especially off-the-job training for skilled and highly qualified employees (Mason and Bishop, 2010). This slowdown in training in a sizeable proportion of firms reinforced a process of gradual decline in job-related training for adult employees during the 2000s, which, left unchecked, will have negative implications for economic competitiveness. Llakes surveys of employers in diverse sectors and city-regions find a wide range of adult skills improvement and updating needs, which are being driven by rapid changes in products, technologies, work organisation and regulatory requirements. These needs for skill improvement apply to employees at all qualification levels – those who are already well qualified and skilled as well as those at the lower end of the skills spectrum.
In the face of budgetary pressures, it will be tempting to focus scarce resources primarily on initial training for young people, especially those who are most vulnerable to unemployment and economic inactivity. But it is important to remember that adult employees constitute a large majority share of the current and future workforce. Thus the productivity impact of improving their skills is likely to be greater than raising the skills of new entrants to the workforce. In this context, it will be important to have the right balance between beginning-of-career training and adult-updating training.

Firms’ demand for skills is also important. Work at the ESRC research centre on Skills, Knowledge and Organisational Performance (SKOPE) has long emphasised that if skills are to deliver all that policymakers intend, they have to be taken up and used in the workplace. This suggests that knowing what skill utilisation is – and how to measure its presence – is vital as is the ability to evaluate specific programmes (Payne, 2009).

NIESR work finds a number of factors that affect who is likely to receive training. In Britain, lower skilled and older workers are less likely than others to receive training (O’Mahony and Peng, 2008). In the light of the economic downturn, in the short run, credit constraints are likely to inhibit firms from spending on activities such as training, which are not considered essential. But the downturn may also encourage firms to provide training given that labour is underused during recessions. In the long run, however, the impact of the crisis on training is likely to be linked with its effect on propensities to innovate and adopt the latest technologies and on the emergence of new business models. NIESR research has examined various aspects of employee training in the EU: the impact of productivity and earnings, the links with the adoption and use of information and communications technologies (ICT), the determinants of who is trained and the field of training (O’Mahony et al, 2009a).

The results show that training alone has insignificant or even negative overall effects on labour productivity and wages, but training combined with ICT capital has a significantly positive effect. This finding highlights the role of organisational change and retraining of the workforce in diffusing new technology.

Training also has an impact on ICT adoption. But perhaps surprisingly, training provided to workers with a higher educational attainment contributes less to ICT adoption than training provided to workers with low educational attainment. This suggests that firms that train less educated workers may increase the overall skill level of the workforce to a greater extent, which stimulates the adoption of ICT and raises productivity.

CEP research also finds that technology is reshaping firms in complex ways. ICT generally helps lower level workers do more so it leads to decentralisation and ‘delayering’. But better communication (emails, networks etc) is paradoxically increasing centralisation because managers can issue orders more easily (Bloom et al, 2009).

CEP research on management more generally finds strong evidence of the importance of improving firms’ management practices for raising productivity growth (Bloom and Van Reenen, 2010). At the firm level, better management practices are strongly associated with higher firm-level productivity, profitability and survival. It seems clear that they also play an equally important role in country-level productivity growth, where Britain is distinctly mid-rank alongside France, Italy and Poland – ahead of Southern Europe and developing countries (Brazil, China, Greece and India) but well behind the United States, Germany, Japan and Sweden. The CEP research programme on management suggests that key ways to improve management practices include increasing education and skills (at both the high and low end of the skill distribution); promoting competition, which can shrink the UK’s ‘long tail’ of badly managed firms; and tax reform that gets rid of the distortions that promote inefficient family-run firms. Such efforts to raise productivity through better management should not come at the cost of making workers miserable: firms with better management also have superior work-life balance and more family-friendly policies.

An historically important driver of relatively slow productivity growth in Britain is relatively low levels of investment in R&D. Despite the high quality of British science, there is a difficulty in translating scientific achievement into productivity, which is reflected in low levels of business R&D expenditures and low levels of patenting and innovation.

R&D is important for innovation and productivity, not just for pushing forward the technological frontier in itself but also making it possible for firms to learn about and absorb innovations from elsewhere, including the output of basic science (Griffith et al, 2004). As universities and science minister David Willetts says, ‘some 95 per cent of scientific research is conducted outside the UK. We need to be able to apply it here – and, in advanced scientific fields, it is often necessary to conduct leading-edge research in order to understand, assimilate and exploit the leading-edge research of others.’

Publicly funded research raises the productivity of R&D in the private sector – through what are known as ‘knowledge spillovers’ – and encourages companies to do more R&D themselves. It also leads to inventions that can be commercialised through licensing to private companies or via the formation of new start-up companies. Large cuts in such spending would have long-term consequences. They would be likely to lead to both a fall in innovative outputs and a reduction in the extent to which Britain is seen as a desirable place for firms to conduct research. This would risk placing the country in a weakened position from which to recover.
A study that has measured the impact of public investments in science finds strong evidence of very high productivity benefits for the rest of the economy – see Figure 3. The study finds no evidence of such spillovers to the private sector from public spending on civil or defence R&D nor from companies’ own investment in intangible assets, including R&D (Haskel and Wallis, 2010).

Taken together these findings tentatively suggest that in a world of constrained government spending, public policy for innovation should focus on direct spending on innovation, specifically research councils, rather than through tax incentives, such as the R&D tax credit to companies.

The researchers estimate the contribution of spending by the research councils to GDP. With current annual spending at around £3.5 billion, the analysis suggests that there is around £60 billion of additional market sector output. Halving this for a more conservative estimate gives a contribution of publicly funded research to GDP of £30 billion, about two per cent of GDP. Put another way, if support for research councils were cut by, say, £1 billion from its current £3.5 billion, GDP would fall by around £10 billion.

**Figure 3: Smoothed market sector TFP growth and Research Council spending**

R&D IS IMPORTANT FOR INNOVATION AND PRODUCTIVITY, NOT JUST FOR PUSHING FORWARD THE TECHNOLOGICAL FRONTIER IN ITSELF BUT ALSO MAKING IT POSSIBLE FOR FIRMS TO LEARN ABOUT AND ABSORB INNOVATIONS FROM ELSEWHERE

Notes: Research Council spending is as a proportion of GDP, lagged one year.
Productivity growth is highest in industries that face greater product market competition. It is driven by 'survival of the fittest' – the Darwinian process of entry and exit, in which less productive firms contract and close while new more productive ones open and grow; and where competitive pressures on existing firms force them to improve (Nickell, 1996; Disney et al, 2003). The historic weakness of competitive intensity in many sectors of the British economy is gradually being eroded with deregulation and strengthened legislation against anti-competitive practices.

The US economy has a productivity advantage with respect to many large European economies in part because of its flexibility in adapting to major changes such as the ICT revolution (Bloom et al, 2007). A NIESR study for the 2009 European Competitiveness report shows that restrictive regulatory regimes in product markets hinder ICT investment and lower the impact of ICT capital on productivity (Rincon-Aznar et al, 2009).

The results also show that strict employment protection legislation (which makes it costly to hire and fire workers) impedes ICT capital accumulation and productivity since it may hinder companies from shifting towards high-skilled workers or make it more difficult for them to provide training. The results confirm the idea that regulation changes incentives to invest and innovate.

The regulatory areas that are more detrimental for investment and productivity are those of an administrative nature, such as barriers to start-up as well as barriers to trade. Results for key services sectors indicate that restrictions on competition have a considerable impact on other manufacturing and non-manufacturing sectors of the economy. In particular, there is a negative long-run effect of anti-competitive regulation on productivity in some key services sectors: wholesale and retail, financial intermediation and business services.

Despite the fact that Britain ranks high in measures of market-friendly reforms, its productivity performance has not been outstanding. The NIESR results highlight the importance of continuing the process of reducing administrative burdens, introducing flexibility in the labour markets and liberalising key services sectors to reap the full potential of ICT and increase firms’ abilities to assimilate new technologies.

Nick Crafts of the ESRC research centre on Competitive Advantage in the Global Economy (CAGE) has explored the lessons from some of Britain’s successful sectors for the impact of competition and regulation on growth. He finds that general competitiveness policies have had important effects, notably through the availability of human capital and the provision of infrastructure to underpin agglomerations rather than through investment subsidies. Regulation can also be important – Britain’s regulatory stance was key to the growth of the City of London from the 1980s (Crafts, 2010).

IFS research has examined the impact of the widespread reforms to product markets made by the EU to stimulate competition, innovation and economic growth. It provides empirical evidence that the reforms carried out under the EU’s single market programme were associated with increased product market competition, as measured by a reduction in average profitability, and with a subsequent increase in innovation intensity and productivity growth for manufacturing sectors (Griffith et al, 2010).

Research at the Centre for Competition Policy (CCP) has looked at policy interventions that will improve market outcomes for consumers in the face of supply-side problems such as cartels (Stephan, 2009) and demand-side issues such as consumers’ behavioural traits (Garrod et al, 2008; Chang and Waddams Price, 2008). These research projects have added resonance at a time when unemployment is still rising and there is concern for the welfare of low-income households.

A CEP study indicates that product market deregulation led to the boom of the 1980s and 1990s (Ebell and Haefke, 2008). And Nick Bosanquet of Imperial College argues that: ‘If there is one clear lesson from the past, it is that recovery comes from competition and innovation. The 1980s recovery was driven by deregulation in mobile phones, airlines, utilities, the media and the housing market.’ With competition policy, Bruce Lyons of the CCP suggests that the recession and its aftermath should be taken as an opportunity: ‘Rather than fall into the fallacy of sacrificing competition policy supposedly to avoid the short-term consequences of recession, we need to enforce competition policy robustly to avoid the long-term consequences’ (Lyons, 2009). He calls for greater vigilance on agreements between firms (‘crisis cartels’), abuse of dominance, mergers, state aid and protectionism.
Chris Hendry of the ESRC’s Advanced Institute of Management Research (AIM) sees potential for growth in developing green technologies, but he warns that British industry lags behind other countries. For example, despite its wind resources, Britain has failed to develop successful firms to exploit wind power. The risk is that Britain will continue to miss out on the green revolution as the world shifts from fossil fuels to low carbon technologies, and will not develop the new industries to benefit from this.

Publicly funded demonstration projects and field trials play a vital role in accelerating the development of low carbon energy technologies, by bridging the gap between research and commercialisation. While countries such as Germany and Japan clearly recognise this, it has been a blind spot in British innovation policy for years. As a result, Germany is a world leader in renewable energy from wind and solar power, with Japan, Germany and the US leading the development of hydrogen fuel cells.

Moving new energy technologies from the laboratory to commercial application can take many years, especially when they face powerful entrenched interests. Demonstration projects and field trials help firms through this ‘uncertain middle’ phase in a number of ways. They raise consumer awareness and stimulate investment; they identify attractive early applications; they provide opportunities to test applications in real settings; they identify barriers to market entry that may require regulatory change; and they help create supply chains to support the new industry.

The development of wind power, solar photovoltaics and fuel cells in the United States, continental Europe and Japan provides many lessons for managing demonstrations and trials effectively. Above all, it is important to foster national advantage by stimulating domestic markets for local firms. But trials need to be of sufficient scale and duration. Governments should be realistic about early stage projects that provide a subsidy to innovative small firms, and ensure their survival until real markets form.

Many countries, not least the United States, have made mistakes in developing low carbon technologies. Britain’s failure is not so much in mismanaging public demonstrations and field trials, but in the lack of commitment to funding them. The nation spends substantial money on basic research and market subsidies. Without support for the ‘uncertain middle’ phase as well, the investment in new energy technologies will be wasted and Britain will find itself without significant firms to deliver a low carbon economy.
PROMOTING FAIRNESS
3

Technology and inequality
Social mobility
Education policies
Inequality and crime
Regressive fiscal policy
Wellbeing and resilience
Inequalities in earnings and incomes are high in Britain, both compared with other industrialised countries, and compared with 30 years ago. *An Anatomy of Economic Inequality in the UK*, a report by the independent National Equality Panel, shows that over the most recent decade, earnings inequality has narrowed a little and income inequality has stabilised on some measures, but the large inequality growth of the 1980s, where all parts of the distribution significantly widened, has not been reversed.

The panel, led by John Hills of the Centre for Analysis of Social Exclusion (CASE), was set up to examine how inequalities in people's economic outcomes – such as earnings, incomes and wealth – are related to their characteristics and circumstances such as gender, age or ethnicity. The report finds that some of the widest gaps in outcomes between social groups have narrowed in the last decade, particularly between the earnings of women and men, and in the educational qualifications of different ethnic groups. But deep-seated and systematic differences in economic outcomes remain. Despite the elimination and even reversal of the qualification differences that often explain them, significant differences in employment rates and relative pay remain between men and women and between ethnic groups.

Differences in outcomes between the more and less advantaged within each social group, however the population is classified, are much greater than differences between social groups. Even if all differences between groups were removed, overall inequalities would remain wide. The inequality growth of the last 40 years is mostly attributable to growing gaps within groups rather than between them.

Many of the differences examined tend to accumulate across the lifecycle, especially those related to socio-economic background. Economic advantage and disadvantage reinforce themselves across the lifecycle, and often on to the next generation. Policy interventions to counter this are needed at each lifecycle stage. Achieving 'equality of opportunity' is very hard when there are such wide differences between the resources that people and their families have to help them fulfil their diverse potentials.

**TECHNOLOGY AND INEQUALITY**

CEP research on wage inequality shows that the rises in wage inequality in Britain have mainly been due to a combination of skill-biased technological change and institutional changes affecting the labour market, such as the decline of unions (Machin and Van Reenen, 2010).

In the 1980s, inequality rose significantly, and at both the top and bottom ends of the wage distribution – the upper and lower tails. A key aspect to this was rising wage gaps between more and less educated workers – in other words, the wage returns to education rose. The next two decades proved somewhat different. In the 1990s, wage inequality continued to rise but at a more muted pace. In the 2000s, lower tail inequality narrowed but upper tail inequality continued to expand.

Part of the reason for growing upper tail inequality lies in ‘bankers’ bonuses’. Over the decade from 1998, the top ten per cent of workers in Britain saw their share of total annual wages rise from 27 per cent to 30 per cent. The majority of this went to the top one per cent and can be mainly accounted for by bonuses to financial sector workers. By 2008, the increased share that bankers were taking amounted to an extra £12 billion per year in wages alone (Bell and Van Reenen, 2010).

Patterns of lower tail inequality are linked to significant changes in the returns to different levels of education. While graduates’ wages have continued to increase relative to those of non-graduates, the wages of students with ‘A’ levels or equivalent (those who leave school at age 18) have ceased to increase relative to those who leave at age 16. It also seems that jobs in middle-skilled occupations have decreased in number relative to both high-skilled and low-skilled occupations.

What accounts for this ‘polarisation’, in which the prospects of the middle-skilled have been declining? One clue is to be found by looking at robot competitions in Japan. Every year in Tokyo, the ‘Robo-One’ competition rewards the robot that is best at doing tasks such as cleaning, playing football, dancing and punching other robots. What is remarkable about this competition is not so much the sophistication of Japanese technology, but how bad these robots are at doing things that humans find very easy.

This suggests that what new technologies – such as ICT – are very good at doing is replacing repetitive, boring, 'routine' tasks (Autor et al, 2003; Goos and Manning, 2007). Tasks that require responding rapidly to unfamiliar situations (such as driving) are not easy for robots to reproduce. But repetitive activities that were traditionally performed by less educated workers, such as assembly workers in a car factory, have been good candidates for job destruction by new technology.

But it is not only this group that has been affected. ICT has also reduced the need for middle-educated workers carrying out routine tasks. Bank clerks, for example, have found demand for their services plummeting as a result of computerisation – ATMs, online banking and the like.
More educated workers making analytical, non-routine use of ICT – such as management consultants, advertising executives and physicians – have found their jobs made easier by ICT rather than threatened by it. Nor has ICT reduced the demand for less educated workers carrying out non-routine manual tasks – such as caretakers and cab drivers – contrary to claims that low-skilled jobs are disappearing.

Since the numbers of routine jobs in the traditional manufacturing sectors (such as car assembly) declined substantially in the 1970s, the subsequent growth of computerisation may have primarily increased demand for highly educated workers at the expense of those in the middle of the educational distribution, leaving the least educated (mainly working in non-routine manual jobs) largely unaffected.

A CEP study analyses 25 years of data across 12 countries and all sectors of the economy to show that industries that had a faster growth of computerisation also had an increase in demand for graduate workers relative to workers with middle levels of education, leaving the least skilled unaffected (Michaels et al, 2010).

After 1980, countries with faster upgrading of ICT (Britain, Finland, the Netherlands and the United States) also saw the most rapid increase in high-skilled workers. Across different countries, similar industries – for example, financial services, telecommunications and electrical equipment manufacturers – replaced middle-skilled workers with high-skilled workers at the fastest rate.

SKOPE research has broken down changes in wage distributions in Britain over the period 1987-2001 into the effects of a range of variables, including educational attainment, occupational structure and institutions. It finds evidence for the concept of a polarising labour market, but suggests that the effect is often small compared to other changes in the composition of the workforce, for example, the expansion of higher education or the decline of union membership (Holmes and Mayhew, 2010).

**SOCIAL MOBILITY**

Nick Clegg has said that ‘promoting social mobility is at the top of our social agenda’. According to CMPO’s Paul Gregg, his basic case is unarguable: children should succeed in life based on abilities and efforts, not the circumstances of their birth.

The deputy prime minister is also right to say Britain’s record here is poor. Children leaving school in the Thatcher years saw their chances in life more firmly tied to their family origins than in previous generations. The evidence is in a series of studies revealing that social mobility fell between the cohort of British children who grew up in the 1960s and early 1970s and those who grew up in the 1970s and 1980s (Blanden et al, 2004).

A child’s chances in life are largely shaped by three factors: their abilities, their home environment and educational investment in them. Large variations between similar countries – for example, the United States has lower mobility than most European countries – suggest that Britain’s patchy record is mostly due to the latter two. For example, a report on education mobility by the Institute for Social and Economic Research (ISER) finds that children’s levels of achievement are more closely linked to their parents’ background in England than in many other developed countries (Del Bono and Ermisch, 2010).

Nick Clegg noted that inequalities of incomes and opportunity are deeply connected. But they are not the same thing. When some children grow up in deprived families, and others have parents with immense resources, improving mobility simply gets harder.

It is also difficult to judge whether policies over the last decade or so have helped to reverse the fall in social mobility. Intergenerational mobility requires observations of changes from childhood well into people’s thirties, and children who attended school under Labour are simply not old enough yet.

In so far as it is possible to tell, the situation probably improved slightly. Gaps in those achieving good GCSE results, the benchmark for going on to higher qualifications, started to narrow soon after Labour came to power – although this probably reflects changes introduced under the last Conservative government too. The ISER study, for example, finds some indications of an improvement for the 1989/90 generation, which was educated almost entirely under Labour.

Even so, major inequalities persist. Children born to degree-educated parents in 1989/90 were four times more likely to obtain at least five GCSEs at grades A to C than those born in the same year to parents who did not go to university. And the ISER research finds that the achievement gap widens during the teenage years, almost entirely because children with degree educated parents are far more likely to attend higher performing secondary schools, benefiting from a combination of better resources, teaching, advice and positive peer effects.

While Labour sought to reduce child poverty and enhance mobility – and indeed saw poverty as a key cause of low mobility – the coalition government places a far greater emphasis on mobility alone. This is not to say that the analysis is wrong but with cuts in education spending, welfare support and other areas looming, finding new resources to make a difference also seems unlikely. It is more likely that there will be a repackaging of existing spending.

**EDUCATION POLICIES**

How to make a difference? Nick Clegg highlighted research showing the importance of education. This is correct, but is also politically helpful: the coalition wants to link mobility to learning, in turn allowing them to push their school reforms, including a ‘pupil premium’ for poor children, as part of the solution. Although one policy route is obviously through schools, further and higher education, direct measures to address poverty are also very important.

Simon Burgess of CMPO says that in principle, the pupil premium is an excellent idea, though there is no evidence on what level of premium would be needed to make schools indifferent between admitting a pupil from an advantaged or disadvantaged background. But the plan to attach the premium to household (or neighbourhood) income status seems less useful than basing the premium on a measure of educational need – that is, on a low prior test score.
The latter approach has two advantages – it attaches the additional resources to the problem that they are designed to address, and in practical terms the prior test score is a fixed number rather than (say) free school meals status, which can vary from year to year. The constancy allows schools to plan properly how to spend the resources and offer contracts to extra teachers.

Even if the pupil premium were to be adopted, there is no guarantee that individual pupils from disadvantaged socio-economic backgrounds benefit from the extra school funding – about 20-40 per cent higher than other pupils (Holmlund et al, 2009). And an evaluation of the Excellence in Cities programme shows that the largest effects were for pupils of high ability in the most disadvantaged schools (McNally, 2005).

Certainly, it is vital to tackle the ‘long tail’ of people without basic skills by giving better opportunities to low-achieving, ‘hard-to-reach’ children from poorer families. Although some indicators suggest that education in Britain is reasonably good, a longstanding problem is a relatively high proportion of students who drop out of full-time education at a young age and/or do not have good educational qualifications. For example, Labour Force Survey data for 2009 shows that 11 per cent of 16-24 year olds in England have no qualifications and 15-20 per cent are classified as NEETs.

The relevance of tackling education and skills at the bottom end of the distribution is not only for reasons of fairness but also for improving national productivity. NIESR research suggests that relying on individuals to bear the cost of investment in education and training may be harmful to economic performance. It finds evidence of potentially large and significant returns to industry level schooling over and above the return to individuals’ own level of schooling. The social returns to education, when measured by years of schooling, might exceed the private returns by as much as 40-60 per cent ( Kirby and Riley, 2008).

These findings suggest that investing in education is even more important for economic performance than it is to the individuals who do so, and that excess reliance on individuals bearing the cost of education may lead to significant underinvestment in human capital. One strategic issue is the balance between general and vocational education in the education system. In this context, it is important to note evidence of the relatively low returns to vocational qualifications (Dearden et al, 2004).

A large body of evidence suggests that education and labour market opportunities influence criminal activity. Someone with a poor education and bleak labour market opportunities is more likely to commit a crime. This may be because, for property crimes, the potential financial gains outweigh the risks.

Most research findings point to a strong impact of economic conditions, in particular income inequalities, on crime. For example, in the 1980s, there were larger increases in crime in areas where low wages deteriorated most strongly (Machin and Meghir, 2004). The introduction of the national minimum wage in 1999 also appears to have reduced crime by improving the relative pay of the worst-off workers (Hansen and Machin, 2002). By contrast, the relationship between crime and unemployment is more uncertain (Freeman, 1999; Machin and Marie, 2004).

Labour market policies are also potentially important for crime since they have the potential to alter economic incentives. The Machin and Marie study looks at the introduction of more stringent unemployment benefit requirements with the JSA in 1996. There was a substantial drop in unemployment, but some of these individuals dropped out of the labour market and shifted into criminal activities.

Research also shows that improved education opportunities can reduce crime. Since Britain has one of the lowest post-compulsory participation rates in education in Europe, this could well be linked to higher crime rates for 16 to 18 years olds. There is research evidence that increases in the school leaving age in England and Wales (in 1947 and 1972) have had important long-term crime-reduction effects (Machin et al, 2010).

The previous government introduced the Education Maintenance Allowance, which pays low-income pupils to stay in school, and this policy has had some success in improving their staying-on rates (Dearden et al, 2009). An additional benefit is that in areas where the allowance was first introduced, juvenile property crime rates fell by more than in areas where it had not yet been introduced (Feinstein and Sabates, 2005).

Improving people’s education opportunities therefore emerges as an important crime reduction policy. This works in two ways: first, by reducing crime by increasing people’s potential future income; and second, by reducing crime participation while individuals stay involved in the education system.
**REGRESSIVE FISCAL POLICY**

The Chancellor claimed that his June 2010 budget was a ‘progressive Budget’, backed up by distributional analysis showing that tax and benefit changes due to come into effect between now and 2012-13 will hit the richest more than the poorest. IFS researchers immediately cast doubt on this claim, noting that the main measures that will lead to losses among better-off households were announced by the previous government, and that the reforms to be in place by 2014-15 are generally regressive. The distributional analysis in the budget documents also excludes the effects of some cuts to housing benefit, disability living allowance and tax credits that will tend to hit the bottom half of the income distribution more than the top half.

Subsequent IFS research makes use of analysis published by the Department for Work and Pensions since the budget, and attempts to reflect the impact of all the benefit cuts announced in the budget. It shows that, once all of the benefit cuts are considered, the tax and benefit changes announced in the emergency budget are clearly regressive as, on average, they hit the poorest households more than those in the upper-middle of the income distribution in cash, let alone percentage, terms.

**WELLBEING AND RESILIENCE**

Richard Layard of CEP emphasises the need to consider issues of wellbeing and resilience in economic policymaking by the coalition government. He argues that it is vital that while cutting the deficit, the government should aim positively to build up the mental resilience of the population and the strength of the family:

‘For the NHS, this means completing the programme of Improved Access to Psychological Therapy for adults and extending it to the mental health services for children. For schools, it means improving the teaching of life skills, especially in secondary schools, and encouraging some universities to make this a specialism in teacher training. For skills, it means ensuring that there is a real awareness of hope for young people by implementing the Apprenticeship Act (2009) and delivering the apprenticeship entitlement from 2013 onwards.

‘And for parents, it means support for those whose children are in trouble or whose relationship is under stress. So the training of ‘parenting practitioners’ (able to help disturbed children) should continue as should plans to make ‘behavioural couples therapy’ available in the NHS. And pre-natal classes should cover not only childbirth and the physical care of children but also the emotional aspect of parenthood.

‘If the government puts wellbeing high on its agenda, it can do much to soften the impact of the cuts.’
The fundamental problem: contagion and moral hazard
Addressing ‘too big to fail’
Macro-prudential policy
International financial regulation
Getting finance to support investment
The financial crisis and the Great Recession have made it clear that financial regulation has failed in its most fundamental goal of preserving financial stability, something that is absolutely essential to sustainable economic growth. What went wrong and how can it be fixed? Even more fundamentally, what is a financial system for?

A wide-ranging discussion of these questions is contained in a report co-ordinated by Richard Layard, bringing together the insights of researchers, commentators, market participants and policymakers. The report shows that the financial system has become far more complicated than it needs to be to discharge its functions – and dangerously unstable into the bargain (LSE, 2010).

**The Fundamental Problem: Contagion and Moral Hazard**

There are two key economic considerations. First, liquidity problems in some financial institutions can spread very quickly through other institutions – the ‘contagion’ effect. When the system is interconnected, ‘systemic risk’ is high, and the whole system can collapse. What makes this is a particular problem is that all businesses rely on finance to function – when the sector contracts, it pulls down the real economy with it. Crises in other industries are painful – car manufacturing, for example – but not fatal to the health of the economic system.

Second, there are excessive incentives for risk-taking in financial institutions. This is the result of the government offering (explicit or implicit) protection for financial institutions against bankruptcy. This in turn protects lenders – and not just depositors, but largely all lenders – from bad decisions. This is the ‘moral hazard’ problem. The moral hazard issue is largely a result of an effort to avoid the contagion effects. Avoiding panics requires insuring depositors and other players, and this requires regulating the industry to avoid excessive risk. In other words, if there are going to be rescues and bailouts, risk-taking needs to be limited. Unfortunately, these regulatory safeguards did not work.

The essence of capitalism is that people accept responsibility for the risks they take – they enjoy the upside wins, but also suffer the pain if the bet goes the wrong way. Without this, there is a moral hazard problem as the downside protection encourages firms to take excessive risk. In other words, ‘heads, I win; tails, society loses’.

**There are Excessive Incentives for Risk-Taking in Financial Institutions**

Most current proposals for financial reform do not deal with this fundamental problem. Improving corporate governance, reforming bankers’ pay and crude taxes on all banks and/or financial transactions are mainly distractions. Without reform, the risks of a repeat financial crisis have increased. There is less uncertainty that governments will bail out banks, and key sectors like investment banking are more concentrated (Lyons, 2009).

Peter Boone and Simon Johnson describe a ‘doomsday cycle’ that could lead to economic disaster after the next financial crisis. They argue that the best route to creating a safer financial system is to have very large and robust capital requirements. The rules need to change so that creditors do not expect another bailout when the next crisis happens, and they conclude: ‘We must stop sending the message to bankers that they can win on the rise and also survive the downside’ (Boone and Johnson, 2010).

**Addressing ‘Too Big to Fail’**

According to CEP analysis, the solution to the fundamental problem must lie in re instituting some fundamental discipline (Garicano and Van Reenen, 2010). If a company has too much debt and becomes insolvent, taxpayers have no responsibility; the company suspends payments, it closes and its shareholders and creditors lose their money. How can this threat be re instituted and become credible for financial institutions?

To make bankruptcy attain the role of disciplining managerial behaviour, two changes need to take place. First, financial institutions must be of a size, complexity and interconnectivity that allow the regulator to promise credibly that they will be allowed to fail. In other words, there must be no banks ‘too big to fail’. This can be done through a tax that grows with the size of assets or a literal limit to the size of the balance sheet.

Second, banks need to have a ‘living will’, a clear statement about what would happen to its assets if it were to fail, so that any financial institution can disappear in a weekend without creating chaos. These need not necessarily be made public, but they must be available in a timely fashion to the regulator.

Size is not the only characteristic that defines a systemic institution, but it must be one of the relevant criteria. First, size should be size in the country. For example, while Deutsche Bank has a balance sheet in the billions of dollars, similar to the Royal Bank of Scotland, home assets of Deutsche Bank are only 16 per cent of German GDP while for the Royal Bank of Scotland, they are 71 per cent of British GDP.

Second, the diversity and complexity of activities within a bank and the interrelationships between them should also be critical criteria in establishing the systemic risk of an institution. If investors and counterparties cannot have a view of what the institution is doing,
any problem in any activity may raise doubts about the viability of the whole institution. But complexity also makes it hard for the supervisor to predict the consequences of failure, and thus makes it more likely that intervention will be needed.

Third, the centrality of the institution matters. An institution that is very closely connected to others in the system will be more likely to bring others down in case of bankruptcy.

Finally, there are institutions that by their peculiar sphere of action and the novelty of their activities, either by the use of financial innovations or simply expanding their business activities, may pose more systemic risk.

Once identified, systemic institutions require unique regulatory solutions. Ideally, no institution should be systemic. Credible bankruptcy requires that no institution is too big, too complex or too central; regulators should ensure that this is the case. A big push here involves the creation of a new set of worldwide systemic supervisors with the function of looking at the ‘forest’ of systemic risk rather than the ‘trees’ of how each individual bank is performing.

MACRO-PRUDENTIAL POLICY

Charles Goodhart (of the Financial Markets Group) and colleagues argue that today’s financial regulatory systems assume that regulations that make individual banks safe also make the financial system safe. Their report shows that this thinking is flawed: actions that banks take to make themselves safer can — in times of crisis — undermine the system’s stability (Brunnermeier et al, 2009).

The report calls for a different approach, in which there is ‘micro-prudential’ (bank-level) regulation, ‘macro-prudential’ (system-wide) regulation and careful co-ordination of the two. Macro-prudential regulation needs reform to ensure it counters the natural decline in measured risk during booms and its rise in subsequent collapses.

‘Counter-cyclical capital charges’ are the way forward; regulators should adjust capital adequacy requirements over the cycle by two multiples: the first related to above average growth of credit expansion and leverage, the second related to the mismatch in the maturity of assets and liabilities. ‘Mark-to-market’ procedures must also change.

Macro- and micro-prudential regulation should be carried out by separate institutions since they differ in focus and expertise required. Central banks should be tasked with macro-prudential regulation, financial services authorities with micro-prudential regulation. Improved international co-ordination is also important.

Since financial cycles differ from country to country, counter-cyclical regulatory policy needs to be implemented mainly by the ‘host’ rather than the ‘home’ country.

NIESR research is also looking at regulatory responses that are available to reduce the probability of crises happening in the future. Ray Barrell and colleagues (2010a) show that increasing the capital base of the banking system will provide stronger defences against crises, and reducing the incidence of property price bubbles will reduce the probability of banking crises.

CENTRAL BANKS SHOULD BE TASKED WITH MACRO-PRUDENTIAL REGULATION, FINANCIAL SERVICES AUTHORITIES WITH MICRO-PRUDENTIAL REGULATION

Property price bubbles are difficult to control, and a second study suggests that it should be possible to offset their impact on the banking system by increasing capital and liquidity within banks in countries that have experienced such bubbles (Barrell et al, 2010b).

Controlling the growth of credit on its own, as suggested by the Bank for International Settlements, will not be sufficient to reduce either property price bubbles or to reduce the probability of banking crises. In countries with liberalised financial markets, credit tends to ‘follow’ house prices, rather than the other way round.

A third NIESR study looks for a complete set of factors that might affect the probability of banking crises, as regulators need to judge how to respond to them (Barrell et al, 2010c). In addition to housing market bubbles, crisis probabilities rise with increased current account deficits and the growth of off-balance sheet activities. They are not particularly influenced by either the growth of the economy or factors associated with loose monetary policy.

The obvious policy responses are to look to national saving, or lack of it, as a precursor to financial crises, and also to increasing complexity in the products and income sources generated by banks. As the economy emerges from the crisis, regulators need to look at the products banks are allowed to produce and governments need to be more concerned with their policies toward asset prices, such as housing, and to national saving as shown in a current account deficit. Macro-prudential policy can help reduce the probability of crises happening again, but it cannot eliminate that possibility completely.
At the EU level and in the context of efforts to establish a single market in financial services, Luis Garicano and Rosa Lastra argue that what Europe needs in banking is what Europe has in football: national rules and supervision for national teams and players and European rules and supervision for pan-European players. In short, what is needed is a Champions League for pan-European financial institutions, governed by key principles, in particular consolidated and integrated supervision, management by exception and a hierarchical structure (Garicano and Lastra, 2010).

Any reform proposal for the EU must contend with what is an inevitable tension in the current EU structure: a national mandate in prudential supervision, combined with a single European currency (which affects all eurozone members) and a European mandate in the completion of the single market in financial services, which affects all EU member states. Moreover, reformers have to contend with the different jurisdictional areas of the EU and the eurozone.

Until now, only monetary policy has been centralised (and only for eurozone members). Supervision and crisis management have remained for the most part a national competence. Regulation is both national and European, with a large amount of directives and regulations providing a unifying picture with regard to banking and financial regulation in the EU – an approach that has been described as ‘European regulation with national supervision’.

Catherine Schenk, a researcher in the ESRC’s World Economy and Finance programme, asks why international financial regulation has not worked in the past. Among the causes, she lists a lack of commitment by national authorities to relinquish sovereignty, reinforcement of the national approach by the variety of institutional structures (political and legal as well as financial) and the fact that although co-operative planning is prompted by a crisis, the incentives for implementation recede as the urgency for action eases (Schenk, 2009).

How does this help us with the current crisis?, Schenk asks. ‘We need to be sure to avoid the mistakes of the past’, she says. ‘The strategy of developing ambitious global standards imposed by an external institution has failed repeatedly. We need a new more market-based approach that creates lasting incentives to promote less risky behaviour among borrowers and lenders and to increase transparency. The current strategy of encouraging the merger and acquisition of weakened financial institutions will make effective supervision and enforcement much more difficult.’

The financial system is meant to channel savings towards profitable opportunities for investment, which should, in turn, lead to higher growth. Fixing banking is the top priority for improving investment opportunities. But what about increasing the pressure on banks to lend to small firms and giving them other kinds of investment breaks?

Governments like to do things for small firms. First, it creates great headlines: helping a million firms with £1 sounds a lot better than giving one firm £1 million. Second, it sounds much fairer to help small struggling firms. But this reflects a confusion between helping people with small incomes (a good thing) and helping small firms, which can be owned by very rich people (for example, hedge funds).

Governments should decide on their redistribution policies among people not firms. Capitalism works by allocating more market share to the most productive firms and allowing the less productive firms to shrink and die. This is a brutal process of natural selection, but it is the major way that productivity and therefore wages increase.

For example, small and badly managed Indian firms are allowed to hang on indefinitely because a complex system of regulations prevents the more efficient from growing and pushing them out; US markets, by contrast are aggressive at weeding such firms out (Bloom and Van Reenen, 2010).
Policymakers need to specify what is the market failure that prevents firms from obtaining finance. There is a case that new firms with radical innovative ideas are at a disadvantage as it is hard for outside investors to gauge their quality. Support for start-ups through R&D grants, creating an EU-wide patent, strengthening universities and removing bureaucracy would all help here. But blanket subsidies for small firms (many of whom are not even young) are misguided.

Some argue that because large firms lobby effectively and get ‘lollipops’ from the public purse, there must be offsetting ‘lollipops’ for small firms. But this reverses policy logic: everything possible needs to be done to stop the larger firms corrupting the system, not pandering to other special interests and creating even more distortions, which distract firms from doing what they are best at – looking after their own business.
LOOKING TO THE LONGER TERM
5

Infrastructure
Migration
Trade and global rebalancing
Achieving a productive, fair and sustainable return to growth is not only a matter of tackling the deficit and reforming finance. Many longer-term issues are also important for Britain’s recovery. Education, health and crime have been touched on in previous sections. This final section examines three more: infrastructure, migration and international trade.

**INFRASTRUCTURE**

One of the big issues facing the government is the large amount of infrastructure investment required, particularly in the utilities. Current estimates are that needs amount to half a trillion pounds on infrastructure. The challenge is both to make such investment possible and to ensure that expenditure is cost-effective.

The expenditure necessary will provide a short-term boost to growth whether or not it is well spent. But it will deliver a bigger boost if more of the cost is spent on infrastructure and less on financing and more, over time, if implementation is efficient.

Regulation and competition are the key tools to attract capital at reasonable rates, and to ensure efficient delivery. In a number of infrastructure sectors (natural monopolies), regulation is inevitable. In general, ministers who have no money will find regulation a more immediate tool. And where competition can work well, it is likely to be a superior tool for attracting and allocating investment.

Several CCP studies provide evidence on the challenges and efficacy of designing regulation and competitive markets. Research has looked at the impact of liberalisation on consumers in retail energy markets (Waddams Price, 2007; Waddams, 2008); the regulation of the communications infrastructure (Cadman, 2010); the diffusion of new energy technologies (Diaz-Rainey, 2010); and consumers’ willingness to pay for green electricity (Diaz-Rainey and Ashton, 2008).

**MIGRATION**

The percentage share of migrants in employment in Britain is around eight per cent, lower than in Germany (14 per cent), France (nine per cent) or Spain (11 per cent). But the figure for Britain hides a considerably higher degree of variation demonstrating that migrants are concentrated in a few regions.

And for high-skilled employment, the average share of immigrant workers in the workforce is one of the highest in Europe, almost 30 per cent.

Placing a limit on immigration by non-EU workers is one of the coalition government’s most controversial policy commitments, with concerns being expressed that a permanent cap will damage Britain’s fragile economic recovery. But as Martin Ruhs and Bridget Anderson of the Centre on Migration, Policy and Society (COMPAS) argue, the key problem for government 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 (Ruhs and Anderson, 2010).

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.

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 example of a 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, often undertaken in unsocial hours and 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 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 policy areas typically remains unexplored in public debates. Britain’s reliance on migrant workers is not – as is sometimes argued – simply a consequence of lax immigration controls. Neither can it be reduced to ‘exploitative employers’, ‘lazy Britons won’t do the work’ or ‘migrants are needed for economic recovery’.

Britain’s demand for migrant workers arises from a broad range of institutions, public policies and social relations.

Ruhs and Anderson 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.

NIESR research is investigating patterns of migration and its impact on productivity in the EU. A study of the relationship between the migration of high-skilled workers and productivity performance finds that there is a positive link between the level of productivity and the share of high-skilled migrant workers. This effect is not so clear for productivity growth, suggesting that productivity changes resulting from migrant labour are more likely to materialise in the long run (O’Mahony et al, 2009b).

The researchers conclude that despite the fact that international competition for migrants focuses on the high-skilled, comprehensive migration policies need to address future labour market needs for all types of skills. In addition, an increase in the selectivity of migration regimes alone is no longer sufficient for attracting more highly skilled foreign labour. There is also an increasing need to integrate highly skilled foreign-born workers into the labour market, in particular highly skilled women.

**Trade and Global Rebalancing**

One final area of rules and regulations in which national and international policymakers are having a fundamental rethink in the aftermath of the economic crisis is the multilateral trading system. ‘Resisting protectionism and promoting global trade and investment’ has been a pledge at successive summits of the G20. It remains a vital commitment to avoid the policy errors of the 1930s recession and to ensure that the global recession builds into a lasting recovery.

In the wake of the global crisis, as many economies have witnessed the sharpest falls in their exports in decades and with unemployment rising to levels not seen since the early 1980s, there have been fears that governments may be tempted to renege on their pledge not to ‘repeat the historic mistakes of protectionism of previous eras’.

Even though the world has not seen a return to the across-the-board tariff increases of the early 1930s, governments have resorted to massive stimulus packages, bailouts and subsidies, many of which include nationalistic provisions that effectively harm trading partners’ exporters, investors, and workers. An independent monitor of policies affecting world trade – Global Trade Alert (globaltradealert.org) – is providing information in real time on ‘crisis-era’ state measures that are likely to discriminate against foreign commerce.

But despite the magnitude of the crisis, and unlike in previous cases of global depression, there has not been a wave of protectionism backlash. Why? A probable reason relates to countries’ commitments in the World Trade Organization (WTO). This is probably why ‘Buy American’ clauses, which at the height of the crisis looked almost inevitable, ended up being watered down. As soon as other countries started to ‘remind’ the Obama administration that this would be against the US commitment to the government procurement agreement at the WTO, the administration softened up.

A study by CEP’s Giordano Mion and colleagues shows that the deep but rapid trade collapse was hardly affected by protectionism; instead, it reflected the steep drop in global demand (Behrens et al, 2010). So while there have been occasional anti-trade measures, they were few and have had little effect on trade flows. A separate study looks at aggregate evidence for many OECD countries and finds that the degree of trade openness, which should be affected (beside other things) by protectionism, has barely decreased during the crisis (Eaton et al, 2010).

For Britain’s economic recovery, the key trade issue is seeking to encourage an expansion of exports relative to imports. A report for UK-IRC argues that the end of the booms in oil and finance leaves Britain exposed to longer-run structural changes that are reflected in a tendency for the economy to pull in more imports than it generates in exports.

The tendency is captured by a long-established disparity in the economy’s income trade elasticities: the growth in imports induced by an increase in British income is higher than the growth in exports induced by a comparable increase in overseas income. The latest trade figures confirm this tendency, with imports growing by 10.3 per cent and exports growing by 7.5 per cent in the year to the end of October 2010.

The precise cause and interpretation of this disparity is open to debate. But taken at face value, it implies that Britain has to grow less quickly than its trading partners to secure a non-deteriorating trade account with unchanged levels of competitiveness. Should Britain grow more quickly, there would be a tendency for the balance of payments to deteriorate. Currency devaluation provides a partial solution to this problem, enabling a faster recovery that would be less likely to meet a balance of payments constraint (Martin, 2010b).

A study by the Centre for Economic Policy Research (CEPR) looks more broadly at the issue of rebalancing the global economy — seeking to bring about a state of affairs where saving countries, such as China and Germany, spend more and spending countries, such as Britain and the United States, save more (Claessens et al, 2010). The report emphasises that trade integration remains key to economic growth.

**There is an Increasing Need to Integrate Highly Skilled Foreign-born Workers into the Labour Market, in Particular Highly Skilled Women**
FURTHER READING
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Stijn Claessens, Simon Evenett and Bernard Hoekman (2010) Rebalancing the Global Economy: A Primer for Policymaking, CEPR


Robert Chote, Rowena Crawford, Carl Emmerson and Gemma Tetlow (2010b) ‘Public Spending under Labour’, IFS Briefing Note No. 92


Lorraine Dearden, Steven McIntosh, Michal Myck and Anna Vignoles (2000) ‘The Returns to Academic and Vocational Qualifications in Britain’, Centre for the Economics of Education Discussion Paper No. 4


Bill Martin (2010a) ‘Rebalancing in the Dark’, Centre for Business Research, University of Cambridge, July

Bill Martin (2010b) ‘Rebalancing the British Economy: A Strategic Assessment’, Centre for Business Research, University of Cambridge, April


Sandra McNally (2005), ‘Evaluating Excellence in Cities’, *CentrePiece*


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The ESRC is an independent organisation, established by Royal Charter in 1965, and funded mainly by the Government.

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ISBN 978-0-86226-203-7