HOUSE OF LORDS

Library Note

Debate on 18 July: Role of Government in Generating Economic Prosperity and Employment

This Library Note provides background reading for the debate to be held on Thursday 18 July on:

"the role of government in generating economic prosperity and employment".

This Note outlines recent data on the performance of the UK economy since the global financial crisis of 2008. It summarises recent announcements by the Government for capital spending, spending on research and development, and action to help businesses gain access to funding, including plans for the establishment of a Business Bank. It also looks at proposals for the Government to take more of a role in managing growth, in particular whether the UK needs a more coherent and long-term industrial strategy. The Parliamentary Office of Science and Technology (POST) have prepared a 'POSTbox' on the impact of publicly-funded research and development, included at the end of this Note.

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1. Introduction

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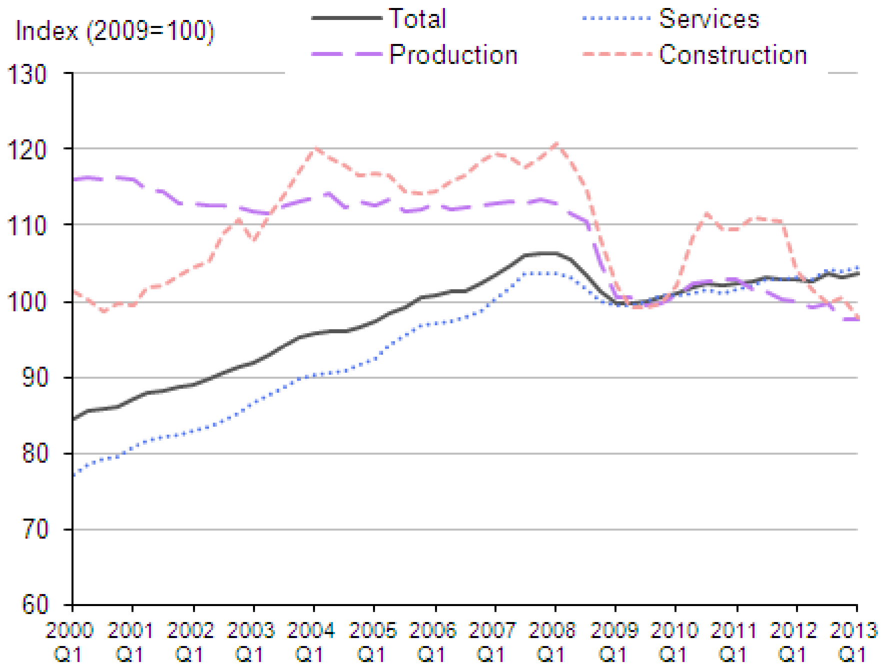
2. UK Economy since the Financial Crisis

Following the crisis in financial markets, the UK's gross domestic product (GDP) fell by 6.3 percent from the first quarter of 2008 to the second quarter of 2009. By the first quarter of 2013, output had recovered from this low point, but at a slower rate of growth, with GDP remaining an estimated 2.6 percent lower than at Q1 2008. During 2010 and 2011, the largest component of post 2008 UK GDP growth was in the construction sector. However, in 2012, increased output in the service sector rose above both construction and production as a component of GDP growth (ONS, *Gross Domestic Product Preliminary Estimate: Q1 2013*, 25 April 2013, pp 1–2).

GDP and Main Components



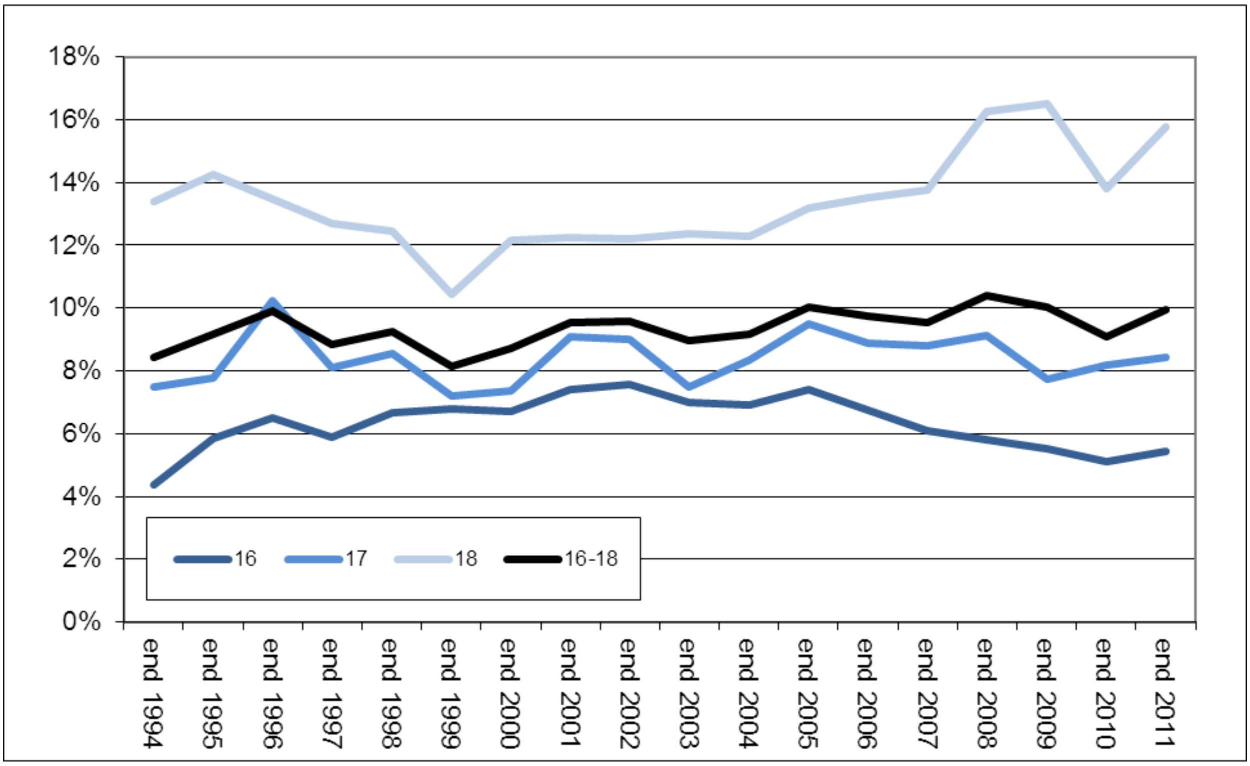
Source: Office for National Statistics

An alternative measure of prosperity is median household income. The ONS study *Middle Income Households, 1977–2010/11* (18 March 2013) found that, for households in the middle fifth of the income distribution, disposable income had fallen by 3.8 percent in real terms since the start of the economic downturn (ibid, p 3). These figures are based on data collected for the ONS Wealth and Assets Survey 2008–10.

Unemployment among those aged 16 and over dropped to 7.8 percent in the period February–April 2013 from a peak of 8.1 percent in February–April 2012 (ONS, *Labour Market Statistics: June 2013*, 12 June 2013, p 3). While the number of 18–24 year olds claiming Jobseekers Allowance had been in decline since 2012, by May 2013 the number of claimants remained higher than in 2008. In June 2013, the unemployment rate for 18–24 year olds was 18.6 percent (House of Commons Library, *Youth Unemployment Statistics*, 12 June 2013, SN/EP/5871).

The proportion of 16–18 year olds not in education, employment or training (NEET) rose from 9.1 percent in 2010 to reach 9.9 percent in 2011 (provisional). It was, however, smaller than at its high point of 10.4 percent in 2008 (Department for Education, *Participation in Education, Training and Employment by 16- to 18-year-olds in England, end 2011*, 21 February 2013, p 9, Chart 5 and p 25, Table G3).

Proportion of 16, 17 and 18 Year Olds NEET: England End 1994–End 2011



Source: Department for Education

In the Coalition Agreement, *The Coalition: Our Programme for Government* (May 2010), the Government stated that urgent action was required to tackle the deficit, while at the same time ensuring the UK economy recovered from the impact of the recession (ibid, pp 15–6). The target set by the Chancellor of the Exchequer, George Osborne, in the June 2010 Budget was for public sector net debt to start to fall as a share of GDP in 2015/16. The ONS have stated that public sector net borrowing (PSNBex, excluding the temporary effects of financial interventions) was £85.0 billion in the financial year 2012/13, £33.5 billion lower than its 2011/12 figure of £118.5 billion (ONS, *Public Sector Finances: May 2013*, 21 June 2013). The Office for Budget Responsibility (OBR), in their March 2013 *Economic Outlook*, stated that they believed the Government had a greater than 50 percent chance of meeting the fiscal mandate to balance the cyclically-adjusted current budget by 2017–18 (OBR, *Economic and Fiscal Outlook*, March 2013, p 16).

3. Analysis from International Bodies on the UK Economy and the Prospects for Growth

The International Monetary Fund (IMF), in *World Economic Outlook: April 2013* (July 2013), revised up its forecast for growth in the UK economy to 0.9 percent from its previous revised down prediction of 0.7 percent. This forecast came at the same time as a downward revision of a quarter of a percent for global growth. In its analysis of how to generate growth in the UK economy, the IMF argued that the Government should be more flexible in its approach to fiscal consolidation because of lacklustre demand (ibid, p 19).

The OECD's publication, *Economic Survey of the United Kingdom 2013* (February 2013), argued that there needed to be structural reform in the UK economy. It stated that the UK's productivity was under performing relative to most other OECD countries, having fallen since the onset of the recession by more than the OECD average. It argued that the UK's excessively restrictive land-use planning regulations and insufficient productive infrastructure were obstacles to growth (ibid, p 32). The report also found that innovation, including research and development, remained relatively low in the UK, despite public spending on science and research and development being protected from fiscal consolidation (ibid, p 33).

4. Government Investment in Infrastructure

At the same time as reducing the size of the deficit, the Government announced new capital expenditure on infrastructure projects, intended to help stimulate growth and increase employment. On 27 June 2013, the day after the Chancellor's 2013 Spending Review, HM Treasury published *Investing in Britain's Future* (June 2013, Cm 8669), a document which set out the Government's plans for £300 billion capital spending over the coming decade, of which £100 billion would be on infrastructure projects. This included £70 billion in spending on transport, including road building and the UK's High Speed Rail project HS2. *Investing in Britain's Future* also set out capital spending on schools, house building and flood defences.

In his statement to the House of Commons to launch the report, Chief Secretary to the Treasury, Danny Alexander, argued that "the British economy is moving from rescue to recovery" and that capital spending was possible "because we have chosen to find savings from day-to-day budgets, allowing us to recycle billions into long-term capital spending". He also argued that the Government was seeking, through investment in infrastructure projects, to correct a national mindset which had "privileged the short term over the long term" and to build "a stronger economy in a fairer society, enabling everyone to get on in life" (HC *Hansard*, 27 June 2013, cols 465–73).

In reaction to the announcement, the TUC General Secretary, Frances O'Grady, argued that, although she agreed that the announcement of major infrastructure projects could create confidence and encourage industry to invest, this was "too little, too late". She criticised the Government for having undermined confidence by reducing capital spending since 2010 ('Infrastructure projects need to start now, says TUC', TUC website, 27 June 2013).

The CBI Director-General, John Cridland, described the Government's policy to reduce the deficit while guaranteeing growth as a careful tightrope walk. He also identified investment in infrastructure as the "most effective engine for growth" but criticised the Government for a lack of tangible progress: "While the Government talks a good game on infrastructure we've seen too little delivery on the ground so far" ('CBI's full response to Spending Round', CBI website, 26 June 2013).

The ONS estimate for General Government Gross Fixed Capital Formation (GFCF) across the UK had fallen in Q1 2013 by 11.3 percent on the previous year. However, the ONS stated that this fall had been partially offset by growth in investment in public and private sector dwellings (ONS, *Business Investment: Q1 2013*, p 4).

5. Spending on Research and Development

The 2013 Spending Review also included additional resource funding for the Technology Strategy Board and a commitment to maintain capital spending on science in real terms (House of Commons Library, *The Outcome of the 2013 Spending Review*, SN/EP/6673, 4 July 2013, p 9).

In November 2012, The Department for Business Innovation and Skills (BIS) published its *Annual Innovation Report 2012*, monitoring the progress of the Government's *Innovation and Research Strategy for Growth* (December 2011). *The Annual Innovation Report 2012* stated that the Government saw itself as having an important role to "facilitate, in partnership with business and research organisations, an environment that encourages investment in innovation", quoting figures from Nesta's *Innovation Index* that, between 2000 and 2009, 27 percent of the UK's labour productivity growth was directly attributable to private investment in innovation (*Annual Innovation Report 2012*, p 1, and Nesta, *UK Innovation Index: Productivity and Growth in the UK Industries*, 2009, p 5).

The *Annual Innovation Report 2012* stated that the overall level of innovation investment in the UK remained competitive internationally, with spending on innovation holding up during the recession. However, it warned that the UK trailed behind competitor OECD countries in terms of research and development as a proportion of GDP (ibid, pp 7 and 9).

The House of Commons Science and Technology Committee commissioned the National Audit Office (NAO) to review spending on research and development funding for science and technology in the UK as part of an inquiry launched in July 2013. The NAO report, *Research and Development funding for science and technology in the UK* (June 2013), found that between 1995 and 2011, overall annual spending on research and development increased in real terms by 37 percent with most of this growth driven by UK businesses, but that spending had declined between 2007 and 2010. The House of Lords Committee on Science and Technology Committee launched an inquiry into scientific infrastructure in May 2013, and took oral evidence from the Minister of State for Science and Universities, David Willetts, on the 9 July 2013.

The Parliamentary Office of Science and Technology (POST) have prepared a 'POSTbox' on this subject which is available at the end of this Note.

6. Criticism of Infrastructure UK

The Government's planning for infrastructure projects has been criticised by the House of Commons Public Accounts Committee (*The HM Treasury: Planning for Economic Infrastructure*, April 2013, HC 872 of session 2012–13). In the Committee's review of the role of Infrastructure UK, an advisory unit within the Treasury established in 2010, it found that the body's *National Infrastructure Plan: Update 2012* (December 2012) did not represent "a rigorous plan with clear priorities for action or with a clear programme for delivery", and that projects had not been properly targeted and prioritised (*The HM Treasury: Planning for Economic Infrastructure*, p 3). The report argued that this uncertainty as to the Government's commitment to invest in different projects would have a negative effect on investors (ibid, p 5).

Miguel Coelho of the Institute for Government has argued that another criticism that could be levelled at the Government's infrastructure investment strategy is that there has been a failure to tackle public sector accounting distortions. He argued that these distortions have meant that "targets for fiscal policy often draw on measures of public debt while failing to account for the value (and depreciation) of public assets" (Institute for Government Blog, 'Politics of prosperity', 3 May 2013).

7. Proposal for a UK Industrial Strategy

The Business Secretary, Vince Cable, in a speech at Imperial College in September 2012, argued that there was a need for a strategic partnership between Government and industry to help companies invest in capital and provide clarity on Government policy (BIS website, 'Cable outlines vision for future of British industry', 11 September 2011). This speech followed speculation of a rift appearing between the two parties in the Coalition on the Government's strategy on infrastructure spending, following reports of a leaked letter from the Business Secretary to the Prime Minister, David Cameron and the Deputy Prime Minister, Nick Clegg (BBC News website, 'Cable: Government lacks 'compelling vision'', 6 March 2012).

In an interview with the *Daily Telegraph* prior to his Imperial College speech, Dr Cable defended the principle of having a greater strategy in industrial policy:

> Creating a strong and balanced economy continues to be the Government's priority. Government makes decisions every day that affect the British economy but has for too long done this in a chaotic, ad hoc way.
>
> There is not a large company in the world that would proceed in such an unplanned manner—just as business makes its strategic plans and sticks to them. Later on this week I will set out a strategy for the future of British industry—a long-term approach for the future, where Government and business working together will have real impact.
>
> (*Daily Telegraph*, 'Cable's Industrial Strategy will mean 'picking the UK's winners'', 8 September 2012)

The principle of a greater strategic role for Government has been supported by the CBI. In *Playing our Strongest Hand: Maximising the UK's Industrial Opportunities* (2012), the CBI recommended that the Government needed to promote the interests of specific sectors where the UK had a competitive advantage. Through such an industrial strategy, the report identified a potential £30 billion increase to exports, and the achievement of a trade surplus by 2020 (ibid, p 5).

8. No Stone Unturned in Pursuit of Growth

Lord Heseltine, in his report *No Stone Unturned in Pursuit of Growth*, argued that an industrial strategy was required so that the UK would be able to compete with countries where governments were already taking more action to support specific industries (ibid, p 9). He defended the principle of an industrial strategy on the grounds that the Government already made many choices when it spent money on the different business support schemes it ran (ibid, p 79).

Lord Heseltine's report also argued for reform to prevent central government from attempting to micromanage the economy. His report recommended that central government "should do less, better", with a Prime Minister-led National Growth Council providing a smaller, more strategic centre in Whitehall, working with local bodies. These local bodies would have more autonomy to make economic decisions through Local Enterprise Partnerships (ibid, pp 28 and 63). The Government announced in March 2013 that it would accept the majority of the recommendations of Lord Heseltine's report (HM Treasury and BIS, *Government's Response to the Heseltine Review*, March 2013, Cm 8587). The 2013 Spending Review included an announcement that the Single Local Growth Fund would be set up by 2015/16.

The Institute for Economic Affairs (IEA) have criticised Lord Heseltine's call for an industrial strategy on the grounds that this policy had already been tried and that previous governments had failed in their attempts to 'pick winners and losers' in the economy in the 1960s and 1970s. The IEA also argued that the Government was already providing support for the energy sector and tax subsidies for research and development on this basis, so it was not true that the UK was doing nothing to support favoured industries. It criticised the principle that an industrial strategy might be more robust if it was formed through a closer involvement between Government and businesses:

> Of course, we have been here before and it was a dismal failure. This is a recipe for corporatism and the imposition of policies that restrict competition (and therefore growth). The two current areas where business and government co-operate most closely would seem to be banking and energy—these are two sectors in which flawed policies are leading to declining productivity.
>
> (IEA website, 'There is no economic war—and we need no industrial policy', 31 October 2012)

9. Access to Funding for Businesses

Arguably one of the major obstacles to growth in the private sector, especially for small and medium sized enterprises (SMEs), has been an inability to access funding from the Banks. The Bank of England's *Financial Stability Report, June 2013* (June 2012) stated that, while there had been a strengthening of balance sheets across the financial system over the previous 6 months, confidence had remained fragile (ibid, p 65). As part of Project Merlin, an agreement between the banking industry and the Government reached in 2011, banks had agreed to a 15 percent increase in lending to SMEs (House of Commons Library, *Project Merlin*, 14 February 2013, SN/BT/6047). However, the Bank of England's report *Trends in Lending: April 2013* (April 2013) stated that the annual rate of growth in the stock of lending to UK businesses contracted in the three months to February 2012 (ibid, p 3).[1] With banks more reluctant to lend to businesses following the credit crunch, the Government have sought to establish alternative means of making investment available.

One proposal to enable access to finance for businesses has been the creation of a Business Bank. In September 2012, the Business Secretary announced that the Government intended to create such a body, to address "long-standing, structural gaps in the supply of finance" (GOV.UK website, 'New business bank to boost lending', 24 September 2012). The creation of a Business Bank has been supported by the British Chambers of Commerce (BCC) in *The Case for a British Business Bank* (September 2012). The Shadow Chancellor, Ed Balls, has also supported the creation of a Business Bank in principle, but criticised the Government for a lack of progress in establishing such a body, arguing that this has been delayed because of disagreement between the Chancellor and the Business Secretary (*Daily Telegraph*, 'BCC: 'Give us a bigger and bolder lender'', 31 January 2013). An update on the progress of the development of the Bank was published in BIS's *Building the Business Bank: Strategic Update* (March 2013), which stated that £2.9 billion worth of finance commitments made as part of existing schemes would be brought together in the Business Bank, with an extra £1 billion of capital from the Government (ibid, p 3).

Another strategy to increase the amount of finance available to businesses has been the Funding for Lending Scheme announced in 2012. The purpose of the Funding for Lending Scheme was to encourage lending by the banks through the Government ensuring liquidity would be more readily available to lenders (*Daily Telegraph* website, 'George Osborne's Mansion House speech: in full', 14 June 2012). In April 2013, the scheme was extended by one year to allow draw-downs up to the end of January 2015 (Bank of England, *Market Notice*, 24 April 2013). The Bank of England's Explanatory Note to accompany the announcement of this extension stated that it was also designed to greater incentivise banks to lend to SMEs. The Bank of England had found that, since the summer of 2012, SMEs have not benefitted to the same extent as large companies from the reduction in the cost of finance from capital markets. The damaging effect of this was compounded by the fact that SMEs were more dependent on bank finance (ibid, p 2). The IMF's analysis of the impact of the Funding for Lending Scheme reached a similar conclusion:

> Although it is still early days, so far the Funding for Lending Scheme's impact has been limited, encouraging mortgage lending more than lending to small and medium-size businesses.
>
> (IMF, *World Economic Outlook: April 2013*, July 2013, p 21)

Another body established since the crisis to provide targeted funding has been the UK Green Investment Bank. The Green Investment Bank was created in November 2012 with £3 billion of funding from the Government, and by March 2013 it had committed over £635 million in capital (UK Green Investment Bank, *Annual Report*, 2013). An additional funding of £800 million for 2015/16 was announced by the Business Secretary in June 2013 (GOV.UK website, 'Additional £800 million for Green Investment Bank', 27 June 2013). The OECD identified the need for investment in green infrastructure in the UK over the decade to come (OECD, *Economic Survey of the United Kingdom 2013*, February 2013, p 37). Further information on the Green Investment

[1] The next quarterly edition of *Trends in Lending* is scheduled to be published on 18 July 2013 on the Bank of England website.

Bank is provided in the House of Commons Library Standard Note, *Green Investment Bank* (January 2013, SN05977).

There are a variety of other forms of support that had been provided by the Government or made possible through Government support. These include the Enterprise Finance Guarantee, established by the previous Labour Government, which the current Government had committed to continue to support.

The Government has also announced an increase in funding to be made available to small businesses following the publication of Lord Young of Graffham's review *Growing Your Business—A Report on Growing Micro Businesses* (May 2013). Lord Young's review included an announcement that Start-Up Loans would be given an extra £30 million and new SME Growth Loans would be piloted from the summer of 2013.

10. Alternative Strategies and Analysis

Labour Party Proposals

In the months prior to the 2013 Spending Review, the Labour Party announced a number of policy proposals intended to improve the UK economy. The Shadow Business Secretary, Chuka Umunna, in a speech entitled 'An industrial strategy for a new economy' made on 3 July 2013, stated that Labour's approach to the UK economy would include the creation of a Business Investment Bank working with a network of regional banks, and the use of Government procurement to prioritise British industry. He also repeated the commitment made by the Shadow Chancellor, Ed Balls, to increase capital spending funded by an increase in borrowing ('Striking the right balance for the British economy—Ed Balls speech at Thomson Reuters', Labour Party website, 3 June 2013).

In March 2013, Sir George Cox published *Overcoming Short-termism within British Business—The Key to Sustained Economic Growth*, a review commissioned by the Labour Party. Sir George concluded that 'short-termism—the pressure to deliver quick results to the potential detriment of the longer-term development of a company—had become an entrenched feature of the UK business environment'. Some of the causes Sir George identified for this short-termism in British businesses were the way in which the equity market operated, a lack of structured funding for smaller businesses to enable them to grow in a stable way, and the tendency of UK governments also to focus purely on the short-term (ibid, p 6). His recommendations included changing the tax rules to attract long-term investors into the equity market and a review of the effectiveness of the various financial incentives and support schemes currently available to smaller businesses. He also recommended the establishment of an independent agency to determine infrastructure strategy, commission suppliers and oversee delivery (ibid, pp 8–11).

London School of Economics (LSE) Growth Commission

The LSE Growth Commission, in partnership with the Institute for Government and the Centre for Economic Performance, published a report entitled *Investing for Prosperity: Skills, Infrastructure and Innovation* (January 2013). The report argued that, despite the many strengths of the modern UK economy, the country had experienced years of inadequate investment in skills, infrastructure and innovation and that there had been a failure to achieve "stable planning, strategic vision and a political consensus on the right policy framework to support growth" (ibid, p 1). As well as doing more to invest in human capital, the report argued that a new 'institutional architecture' was required to ensure that government followed a correct strategy to improve the UK's infrastructure, recommending the creation of an Infrastructure Strategy Board, an Infrastructure Planning Commission and an independent National Growth Council to monitor progress. These new bodies, in some cases taking on the roles of existing organisations such as Infrastructure UK, would serve to depoliticise the decision making process for infrastructure projects and help prevent short-termism. The report also recommended the creation of a Business Bank to provide finance to new innovative businesses.

Investing for Prosperity: Skills, Infrastructure and Innovation provided the following description of the role of government:

> History shows that markets need government support with predictable rules and regulations. Government also plays a key role in supporting a productive economy through encouraging investments in skills, infrastructure and new technologies. But the quality of government depends on institutions that encourage a focus on long-term economic needs. Without these, the powerful forces unleashed by market incentives cannot be harnessed for the common good.
>
> (ibid, p 6)

The report went on to argue that there is "no reliable evidence that the growth potential of an economy is limited by the size of the government over the wide range we see in OECD countries" (ibid, p 6).

Centre for Policy Studies (CPS)

In *Take the Long View—Steps to Enhance Productivity and Growth in Budget 2013* (March 2013), the CPS also argued that the UK's growth problems were long-term rather than short-term and required a long-term solution. The solution advocated by the CPS was for government to do less and not to interfere in the operations of the market, "ensuring cuts to current expenditure are seen through, alongside targeted tax cuts and a real programme of tax simplification; speeding up deregulatory and supply-side reforms; and adopting a robust pro-competition agenda in several major industries" (ibid, pp 1–2). The CPS argued that the creation of state-led institutions such as a Business Bank, a National Growth Council and centrally-planned infrastructure bodies would only offer a short term solution and an "unreconstructed Keynesian approach" which ignored "both the dangerous effects of increasing public debt at an even faster rate than we already are, as well as overlooking the distortionary effects that high government spending has on the private sector in the medium term". The CPS also argued that:

> While there may be a case for additional spending on certain public goods infrastructure, such as certain rail improvements or to unlock road bottlenecks, this activity should be judged exclusively on the rate of return of the project in question, its effect on the supply-side of the economy, rather than a need to spend to "stimulate the economy" per se and it doesn't negate the need for spending restraint overall.
>
> (ibid, pp 5–6).

Institute for Public Policy Research (IPPR)

In March 2013, the IPPR published *New Priorities for British Economic Policy* which also recommended the adoption of an active industrial strategy to support the growth of firms operating in areas where the UK had a potential competitive advantage, and where global demand was strongest. It also recommended the devolution of powers and responsibilities from central to local bodies for skills and innovation policies and the creation of a British Investment Bank, to "remedy a long-term lack of infrastructure investment and the lending gap facing SMEs". The report's author, Senior Economist and Associate Director for Economic Policy at the IPPR, Tony Dolphin, argued that a bias among policy makers over the past decades towards a "neoliberal economic paradigm" had resulted in:

> ... concentration of power and capital, market dominance and short-termism, and ultimately to low investment in the wider economy, increased inequality and higher debt.
>
> (IPPR website, 'New priorities for British economic policy', 13 March 2013)

Impact of Publicly-funded R&D

UK R&D Spend

Figures from the Office for National Statistics (ONS) show that:

- in 2011 UK gross expenditure on R&D was £27.4 billion
- £17.4 billion (63.6%) of this was business investment
- £9.4 billion (34.6%) was government investment
- £0.5 billion (1.9%) was from private non-profit organisations
- UK R&D spend as a proportion of gross domestic product was 1.79%, slightly below the EU average of 2.03%.[1]

Difficulties in Assessing Impacts

Assessing the impact of publicly-funded R&D is difficult. Research and innovation is not a simple, linear process where a particular research project leads to a key piece of new knowledge that drives the development of a specific new technology or product(s). In practice the exploitation of publicly-funded research involves complex interactions between the public and private sectors that can take a long time - in some cases decades - to bear fruit[2]. Assessments of impact thus require an understanding of the connections between these two sectors and of the various pathways through which research can lead to economic or wider benefits. Moreover, because publicly-funded R&D is likely to be just one of many inputs, assessments of its impact inevitably involve assumptions about the extent of its relative contribution to the identified outcome(s)[2].

Approaches and Sources of Data

There are three main approaches are used to study the impact of publicly-funded research:[3] quantitative studies that use economic or other sources of data, qualitative studies that involve the use of surveys and interviews, and case studies that retrospectively assess the contribution of research to a particular outcome. Such approaches can be used to assess:

- **Academic outputs** such as research publications and their impact on other academics (citations). When assessed by such measures the UK research base performs strongly compared to international competitors.[4]
- **The international impact** of research by looking at who is downloading academic publications. Such measures show that UK research generates more usage per article authored than its international competitors.[4]
- **The flow of knowledge** between sectors by surveying download data. For instance one such survey showed that 40% of articles downloaded by corporate researchers were university authored and 77% of downloads of corporate research were by academics.[2]
- **The movement of people** (and thus knowledge) between sectors by using data on the institutional affiliations of publication authors. Such measures show a substantial movement of people from universities to the private sector and vice-versa.[2]
- **Interactions** between academics and industry. One survey of academics holding a grant from the Engineering and Physical Sciences Research Council found that most respondents had engaged with industry at conferences or through joint research projects or contract research.[5]
- **Commercialisation activities**. One survey across all UK academic disciplines showed that around 11% of academics had taken out a patent, licensed research outputs to industry or started a spin-out company and around 14% had been involved in consultancy.[6] The survey also included questions about networking with other people and organisations that revealed differences between academic disciplines. For instance academics in STEM subjects were more likely to be involved in patents, spin-outs or research licensing but less likely to be involved in people-based activities and networks.
- **The income derived by universities** from commercial activities. The annual higher education – business and community interaction survey shows that the biggest such sources of income are contract research and collaborative research, followed by continuing professional development and continuing education.

Benefits of Publicly-funded Research

The seven UK research councils along with Research Councils UK (RCUK) each publish annual reports that assess the impact of the research they have funded. A joint statement from RCUK, the Higher Education Funding Council for England and Universities UK noted that the benefits of research are "broad and diverse", can take a "wide variety of forms" and may manifest themselves in "an industrial or business context, in the fields of healthcare and social wellbeing, public policy or as a contribution to cultural life, public debate or improved understanding of the world that we live in".[8] Among the main benefits identified by the research councils and others are:[2,4]

- advances in knowledge, ideas for future research and the development of a university-based research capacity for problem solving
- a supply of highly educated people
- the establishment of new networks
- better informed public policy
- new product development and health benefits
- wider economic benefits such as new companies and jobs.

Endnotes

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