



SURVIVING THE ASIAN CENTURY

FOUR STEPS TO SECURING SUSTAINABLE
LONG-TERM ECONOMIC GROWTH IN THE UK

New Era Economics
REPORT

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FOREWORD

The 2008 financial crash demonstrated with devastating effect serious flaws in the UK's economic model. These events alone demand a profound reconsideration of the principles which have guided our economic policymaking. The crisis has also, however, shone a light upon a wider set of problems, questions and changes regarding our economy.

Our economic environment is changing with, for example, the rise of China; our understanding of how capitalist economies work is being challenged by, for example, evolutionary and complexity economics; and progressives have begun to question what economic policy is – or should be – *for*. Is growth with redistribution enough nowadays?

IPPR's New Era Economics project is an ambitious programme that seeks to tackle these big questions about our economy – and, by extension, about our society – head-on. Aided by our New Era Economics panel, a group of eminent men and women working on the cutting edge of economic and progressive thought, we are working towards the construction of a new, progressive economic model for the UK. We will do this by:

1. Provoking new, progressive thinking on the economy
2. Understanding the role policy can play in moving us towards a more successful, progressive economy, and
3. Contributing to the building of a constituency to drive the change we want to see.

This paper builds on the analysis developed elsewhere in the project, and in particular the *Creative Destruction* report.¹ It does so by exploring in greater depth how some of the trends identified there are playing out – especially the rise of a new 'general purpose' technology (the interactive web), and the shifting of economic power to the east. It examines what capacities the UK would need in order to successfully adapt to these changes, and suggests that we are lacking in some very important areas. It then looks at what our more successful competitors have done to put the necessary adaptive capacities in place, and recommends what the UK might do to survive in this tumultuous move into an 'Asian century'.

By looking to the long term – years and decades, not quarters or months – and by examining the UK's place in the global economic system (drawing on the emerging school of evolutionary economics), this paper helps us to think about our economy and economic policy in a different way. We hope, therefore, that it will help us in our search to shift economic policy debates – and reality – in a new, more progressive direction.

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Nick Pearce
Director, IPPR

1 Lent and Lockwood 2010

EXECUTIVE SUMMARY

While political attention continues to be focused overwhelmingly on the fiscal crisis, there is a great risk that we overlook two equally significant challenges facing the UK's economy, risks which potentially matter as much, if not more, in the long run. The first of these is well known: the rise of the BRIC² economies and, particularly, the Asian behemoths of China and India. The second is less widely acknowledged as a challenge: the spread of the interactive web and its impact on business practices.

This discussion paper – which forms part of IPPR's New Era Economics flagship programme of work – draws on the historical evolutionary strand of economic analysis and a suite of comparative economic data to explain the nature and the scale of these challenges. Our aim is to understand how this period of global and technological transformation will affect the UK, how our economy will need to adapt, and how this should shape policymaking over the coming years and decades.

The nature of the challenge

Two shifts are transforming our economic world.

First, few dispute that China, India and other 'emerging economies' are now central players in the global marketplace. On a whole range of key indicators, they have been performing very strongly and are expected to continue to do so. For instance:

- China and India have sustained very high rates of GDP growth (close to or often above 10 per cent per annum) for a number of years, continuing almost unaffected by the global recession. Indeed, the seven largest developing economies are expected to grow to twice the size of the Group of Seven (G7) industrially advanced countries by 2050.
- While China has become the world's leading exporter, it has also seen a recent surge in domestic private consumption, a development that is being replicated in other emerging economies.
- The BRIC economies account for an increasing share of global equity markets, while the gap between the advanced and emerging economies in terms of research and development (R&D) expenditure is closing steadily.

Second, the interactive web is transforming the way that business is done in the UK and across the world. No sector or company appears immune to what is proving to be a truly 'disruptive' technology moving at incredible speed. A recent McKinsey survey of companies around the world found, for example, that 65 per cent of firms now use web 2.0 technologies,³ compared to 50 per cent just three years ago (Bughin and Chui 2010). McKinsey also found that those firms which make the widest use of the web – including for internal, customer relation and business partner and supply chain purposes – were 50 per cent more likely to report market share gains and faster earnings growth.

This combination of a rapidly spreading 'general purpose technology'⁴ transforming the business world with the rise of new global economic players should sound alarm bells in

2 Brazil, Russia, India and China.

3 Web 2.0 technologies are highly interactive applications that facilitate information sharing, user-centered design and collaboration over the web. They include prediction markets, blogs, rating, mash-ups (combining multiple sources of data into a single tool), microblogging, peer-to-peer services, podcasts, RSS (Really Simple Syndication), social networking, tagging, video sharing and 'wikis' (user-edited reference resources).

4 A 'general purpose technology' is one that has the potential to fundamentally transform existing economic activities, business and societal structures. The internet – and web 2.0 technologies as a specific component of this – is generally seen as the latest general purpose technology to emerge. Previous examples include the steam engine, electricity, the railroad and the computer.

the UK. On the three occasions when this combination of factors has occurred during the 20th century, it marked a significant deterioration in the UK's role in the global economy.⁵

In the early part of the century, the development of mass production techniques helped the United States to topple the UK from the dominant position it held in the global economy and led to wide public debate about the relative inefficiency of British industry. In the period following the second world war, Germany and France adopted and refined US mass production techniques, meaning that by the 1950s, the UK was trailing not only the US but also its European competitors in terms of productivity and growth. This failure to innovate on the part of the UK ultimately contributed to the severe and prolonged economic crisis of the 1970s and early 1980s. This crisis was compounded by the rise of Japan, which made innovative use of flexible production techniques from the 1960s onwards, further diminishing the UK's role in key markets.

Some may argue that the supply-side revolution unleashed by Margaret Thatcher has addressed the barriers which prevented British business from innovating and competing in these earlier periods, and stand us in good stead to face the Asian century. It is certainly true that the deregulation, privatisation and trade union legislation of that period did instil a more innovative and competitive spirit in certain sectors, such as media and telecommunications.

However, a closer look at comparative economic data suggests that the key weaknesses which characterised the UK economy throughout the 20th century – and made it more difficult at that time for British business to adjust to change and remain competitive in the global marketplace – still exist today. These underlying or 'adaptation' weaknesses – all relative to other major advanced economies⁶ – are (1) lower business investment, (2) a weaker skills base, (3) less innovative and productive firms, and (4) a smaller presence in the most vibrant emerging markets. Just as they have stymied our performance in the past, these problems are critically important today, and must be overcome if we are to adapt effectively to the geo-economic and technological changes underway and capitalise on the opportunities they present.⁷ The UK economy needs to be at the top of its game, and it is our view that the UK's ability to address these challenges will determine its success or failure in the Asian century before us.

The UK's weaknesses

For the purposes of this report, we analysed a comprehensive range of internationally comparable data compiled by the major international organisations and national statistical offices. Taken together, the data reveals the extent to which the four key weaknesses identified above have characterised the UK economy.

Low and skewed business investment

As a share of GDP, investment in the UK has for many decades lagged behind investment in major competitor countries, such as Germany, the US and Japan. While this gap appeared to be narrowing after the early 1990s, it has recently begun to widen again. In the UK, business investment fell to a low of 9.7 per cent of GDP in 2006 and only recovered to reach 10.2 per cent in 2008, while the US, Germany and France, for example saw business investment rates of 11.7 per cent, 12.3 per cent and 12.7 per cent respectively in 2008 (OECD, see BIS 2010a).

Although one might expect business investment rates to be lower in the UK than in an economy like Germany because of the dominance of the service sector (which is less capital-intensive and requires lower levels of investment in fixed assets than

5 For more see Lent and Lockwood 2010

6 The majority of data in this paper compares the UK with countries we have identified as being Britain's key current competitors: Germany, France, Japan and the US. However, some data is available for groups of countries (such as the G7 or OECD) rather than at a national level, and so we use these group categories instead. In other cases, data is easily available for other competitor countries (such as Canada) and so we present this as well.

7 Such structural or supply-side components of the economy can be thought of as 'adaptation capacities'. They allow for transformations in technologies, business models and locuses of economic power to be capitalised on so that they represent an opportunity rather than a threat.

manufacturing), the UK's sectoral mix is not too dissimilar to those of our competitor countries. In 2007, services contributed 76.3 per cent of gross value added (GVA) in the UK, which although slightly higher than Germany and Japan, was less than the US and France.

Furthermore, a disproportionate share of investment in the UK has tended to be skewed towards property and financial services rather than a wider range of sectors. This lack of investment diversity not only undermines the resilience of the British economy but also hampers the ability of other industries and businesses to position themselves at the head of the curve in adapting to economic and technological change.

Weak skills base

There have been undoubted improvements in skill levels over the last 20 years in the UK, with a larger proportion of the population earning higher level qualifications and a smaller proportion having no qualifications at all. But the UK still lags its closest competitors on many comparative measures, to the detriment of businesses and the economy at large.

According to the OECD (2010a), the proportion of adults in the UK with low or no qualifications is still more than double that of Germany and the US. Furthermore, while 33 per cent of adults have higher level qualifications, a greater proportion than in France and Germany, this compares poorly with over 40 per cent in the US and Japan.

Less innovation and low productivity

On several measures, UK companies tend to be less innovative than foreign firms. According to Eurostat (2011), the UK ranks 17th out of 28 EU member states in terms of the number of businesses classed as 'innovation active'. This ranking is derived from the fact that only 46 per cent of UK businesses have undertaken some form of innovation activity – whether product or process based – compared to a reported 80 per cent of German firms and 50 per cent of French firms.

Findings from NESTA's Innovation Index (2009) paint the UK in a slightly better light and suggest we compare more favourably with Germany and France on 'hidden innovation', which includes activities such as organisational improvement, market research and advertising, and training for innovation. However, the UK is said to be a 'mid performer' in terms of the wider conditions for innovation, with notable shortcomings apparent in access to finance and the use of government procurement to stimulate innovation.

The ability to innovate is closely correlated to business productivity. While there have been significant productivity gains made in the British economy in recent years, productivity levels in the UK are still 17 per cent below those of the US, 14 per cent lower than France and 10 per cent lower than Germany (McKinsey Global Institute 2010).

Limited presence in emerging markets

Historically, the UK has failed to compete adequately in the most vibrant emerging markets, with business focusing heavily on imperial and then Commonwealth markets until the 1960s, which meant there was little incentive for firms to explore the US and European markets. Since then, the UK's share of the export market has dwindled to the point where the UK now accounts for less than 3 per cent of global exports.

This is a problem that continues today with regards to the BRIC economies. According to ONS (2011) data, only about 6 per cent of UK exports currently go to the BRICs. It is telling that the proportion of UK exports headed to Belgium and Luxembourg – 2.9 per cent in 2010 – is almost double the proportion to China, and yet the combined GDP of Belgium and Luxembourg amounts to less than one-tenth of China's.

In contrast, German exports to China alone totalled €53.5 billion in 2010, approximately 5.6 per cent of all German exports in that year.⁸ This represents a significant rise of 44 per cent on 2009 figures, far outpacing overall growth of 18.5 per cent in total German exports over the same period.

8 See the German Federal Statistical Office's interactive foreign trade atlas at <http://ims.destatis.de/aussenhandel/Default.aspx> (in German)

In terms of foreign direct investment stock, the UK's performance in emerging markets has been mixed, but it continues to lag behind several of its rivals, particularly in terms of investment in China (see BIS 2010b). Over the period 1997–2007, UK foreign direct investment (FDI) in China has been similar to that of France, but lower than that of Japan, the US and Germany.

Policy solutions

The different policy phases through which the UK economy has passed over the last hundred years have not significantly repaired the UK's key adaptation weaknesses. Adapting to evolutions within our economic environment has never been identified as a major policy priority, and as a result has never been addressed head-on by concerted government action.

Recognising that the economy evolves through different eras, and requires certain built-in capacities to actively respond to these changes, implies the need for a new, sequenced policy framework.

We suggest this should begin with the observation that little progress can be made towards creating a responsive, innovative economy without addressing the long-run problem of relatively low business investment.

Once the question of the supply of capital to business has been answered then it is vital to create the conditions under which the demand for that capital can grow. For this reason, a set of policies is needed to improve the UK's performance on skills and on business innovation.

On this set of foundations, the UK has a fighting chance to compete effectively across a range of export sectors in the global economy and particularly in emerging markets.⁹ Further policy reform can then be initiated to give extra support to those companies seeking an overseas presence.

In addition, these policies should be based as much as possible on evidence of what has proven effective for those competitors that do not perform as poorly as the UK in the four key areas outlined above.

A state investment bank

One outstanding feature shared by most other major economies with higher levels of business investment, but which is absent in the UK, is greater direct state involvement in the practice of investment. This takes the form of a state investment bank (as in Germany and Scandinavian countries), a major state-led investment fund (as in France) or some form of major private investment vehicle shaped and fully guaranteed by the state (as in the US).

The reason that these facilities increase levels of business investment is not difficult to deduce. State funds can be run with a remit to invest in areas that are less immediately attractive to the commercial banking sector, that is, those investments which combine lower immediate returns to the investor, greater positive externalities for the economy as a whole, higher levels of risk and longer timeframes. In contrast to those of short-term profit-maximising investments, these are features of the types of business innovation that can arguably provide an economy with improved sustainability and competitiveness over the longer term. It is this gap that state-run investment plugs.

There is a strong case for the UK to adopt the state investment bank model, not least to leverage additional investment in a wider range of sectors and to help reduce its dependence on property and finance. A fully fledged bank has the capacity to raise large amounts of funds on the commercial markets, backed by a smaller capital base provided by the state. A state investment bank could be set up on a strictly commercial basis to be run by an independent board subject to a remit to generate a long-term return based on investment in British business in a diverse spread of sectors and in infrastructure. This

9 It is worth noting that entering into foreign markets often has a positive reinforcing effect on productivity and propensity to innovate (UKTI 2010).

addresses fears that state-led investment is subject to interference from politicians or officials who are motivated by political rather than commercial gain and, at the same time, lack understanding of effective investment practices. This is the model that has been used by successful state banks in other European countries and around the world.

Given that business investment in the UK tends to lag our closest competitors by about £40 billion per year, a one-off capitalisation of £15–£20 billion over the space of five years would allow a state bank to raise approximately £200 billion on the markets to make up this shortfall. In the context of a planned fiscal consolidation which foresees a reduction of £100 billion in public spending by 2015, such an amount would constitute a reprofiling of the deficit reduction path rather than a significant deviation.

A new long-term skills strategy

We believe that a new evolutionary approach to skills policy is needed that is grounded in foresight, with government explicitly aiming to identify – in close collaboration with business – those skills which will be relevant to the future UK economy, with its evolving business practices and new technologies. The building blocks of a new, more forthright skills policy should consist of the following elements:

- A reformed initial skills formation system: The UK's post-compulsory education system is too fragmented and often fails to provide qualifications of use in the labour market. The government's goal must be to put in place a robust, fully inclusive and high-standard system of post-compulsory education and training, as is commonplace in the rest of the EU and many other leading economies.
- Long-term strategic planning to connect skills supply with employer demand: A more proactive approach by government and government agencies is required based on the forecasting of skills need and appropriate planning, and this will require much more intensive collaboration with business. There is also a case for exploring in detail the potential use of incentive mechanisms and selective licences to practice to encourage greater business investment in training in certain sectors.
- Strategies to improve skills utilisation: Skills policy needs to focus far more closely on supporting the utilisation of skills by businesses, particularly among the long tail of low-skill, low-productivity firms. There is no simple solution to this issue, since it goes to the heart of the structure of the UK economy. However, a comprehensive strategy of the kind advocated in this paper to tackle the fundamental weaknesses of the UK economy can help to ensure that employers both demand and utilise higher levels of skills and so move up the value chain.
- Sustaining skills in a flexible labour market: Although businesses tend to welcome greater flexibility in their ability to hire and fire workers, this can lower incentives to invest in training and skills are lost when workers remain out of work or training for long periods. Britain can learn from countries such as Denmark, which has demonstrated the merits of a labour market that compensates for relatively low levels of employment protection with higher levels of social security and support for life-long learning.

Enhancing levers to support innovation

A bold 'new deal' for high-value, high-innovation firms should be launched. This would be underpinned by a state investment bank – as described above – working with high-value businesses and start-ups in a range of sectors, particularly those in which the UK enjoys comparative strength, to address the capital constraints that impede innovation investments. It would also play a major role in financing costly infrastructure projects, such as the modernisation of our transportation, energy and communication systems, on which many of the successful businesses of tomorrow will depend.

In addition to this, we believe that the government should raise the level of ambition outlined in existing plans and enhance the levers of innovation at its disposal:

- Various small-scale and piecemeal efforts to promote business and innovation across the UK – such as enterprise zones (EZs) and technology and innovation centres – should be reconfigured into more ambitious 'innovation zones'. Rather than relying heavily on tax breaks (as is the case with EZs), these should offer greater government

support for R&D activity and start-ups in key sectors and an environment that fosters intensive cross-industry collaboration. Successful zones will focus on developing close working relationships between businesses and local universities, technical colleges and business service providers. In addition, new public-private bodies should be tasked with helping to develop strategies to support, and address barriers facing, the long-term growth of high-value industries within individual zones.

- The shift to using public procurement as a way of helping small and medium enterprises (SMEs) and high-value start-ups to grow must be continued and expanded. Particular note should be taken of procurement techniques employed in countries such as Japan, Sweden and the US. In the US case, for example, it is possible to learn from the successful Small Business Innovation Research program, which is designed to encourage cutting-edge innovation and catalyse the commercialisation and market breakthrough of new advanced technologies.
- Greater powers and resources for economic development should be held locally and regionally, since it is at this level that the greatest understanding of opportunities and coordination of efforts to compete can be developed.

Expanding the Export Credit Guarantee Scheme

In its recent *Trade and Investment for Growth* white paper (BIS 2011), the government proposed several changes to the way the UK's Export Credit Guarantee Scheme works. The proposals are welcome, but more needs to be done to create a policy as extensive and proactive as those operating in other countries.

Canada, Germany and India, for instance, all have more extensive and targeted export credit guarantee arrangements that are designed not just to guarantee against loss but also to share information about trade opportunities, help recover debts and promote particular sectors – including tailored guarantee schemes for service industries.

As the UK economy looks to exports to spearhead recovery and long-term growth, there is a case for expanding the financial safeguards available under the existing scheme to support UK businesses seeking to do business overseas. In 2009/10, the Export Credit Guarantee Department paid out a mere £48 million in insurance policies. At those levels, even a significant expansion is likely to cost only a limited sum to the Treasury. Furthermore, the government will need to be far more proactive in encouraging a more diverse range of businesses, across a range of sectors where the UK enjoys competitive advantage, to make use of the scheme.

Growing and competing in the Asian century

In the current economic environment, the most immediate hurdle that any new policy proposal faces is cost. With the government committed to its deficit reduction plan, it may seem foolhardy to recommend a set of economic policy measures with, in some cases, substantial price tags attached. However, while the cost of the initiatives outlined above is unlikely to be small, they are not unaffordable measures to put in place over the next years – and decades – in order to build a new era economy.

While it is important to understand the brute fiscal constraints on government spending, we should not lose sight of the wood for the trees. Indeed, considering the problems created in the past by the UK's long-term economic weaknesses, it is clear that in the long run the real risk to the public finances and our economic vitality resides in not investing the necessary funds to ensure that UK economy is well positioned going forward. We need a smart, active government that understands the nature of the global economic and technological evolutions taking place, the capacities required in the economy in order to adapt effectively, the UK's strengths and especially its weaknesses in relation to those capacities (crucially, in terms of investment, skills, innovation and market access), and how it can best respond.

We believe that this will be the basis on which the UK can achieve long-term, sustainable growth and compete in the Asian century.

INTRODUCTION

THE SCALE OF THE CHALLENGE

The 2010 general election was almost entirely about one thing: the deficit in the public finances. Ever since, the issue has utterly dominated policymakers' minds and public debate. However, as the aphorism goes, life is what happens while you are making other plans. In the state of the public finances, this political generation may have found its defining focus, but there are far greater forces at play which will have at least as profound an effect on the UK in the coming years and decades as the fiscal crisis. Unfortunately a full public debate about the nature of the challenges facing us – let alone the creation of a clear policy programme to address them – evades us.

One of these forces is at least widely acknowledged, if not yet discussed in detailed policy terms. This is the rise of Asia and the BRIC economies as enormously important players in the global marketplace. The second is well known but is rarely regarded as a significant economic challenge to the UK. This is the spread of interactive internet technologies (commonly known as web 2.0) and the way they are transforming business practices and market conditions across the world.

This paper draws on the historical evolutionary strand of economic analysis, in particular the work of Carlota Perez, alongside a host of comparative economic data, to explain the nature and the scale of the challenge this period of global and technological transformation poses for the UK and to explore how we might best respond.

1. THE RISE OF ASIA AND THE BRIC ECONOMIES

The phrase ‘emerging markets’ is widely used in financial circles and yet, in many respects, is deeply misleading. Many of the economies that we term ‘emerging’ are not emerging at all: they have already done so. Economies like India and China are already powerhouses of the global economy, while Brazil, Malaysia, Mexico, Indonesia and South Africa, among others, have made significant strides forward in recent years. What is striking is that these economies clearly still possess much additional potential, to the extent that most commentators agree we are likely witnessing a fundamental recasting of the constellation of global economic power.

The collective rise of the BRIC economies has been particularly spectacular. Annual output growth in the four BRIC countries has been consistently high since the early 2000s, broken only (and temporarily) by Russia and Brazil in the immediate post-crisis period.¹⁰ China stands out as having registered growth close to or topping 10 per cent for a number of successive years – 2007 saw an increase in output of 14.2 per cent on the previous year.

India too has seen GDP growth expand from 4.4 per cent at the start of the last decade to 9.9 per cent in 2007. What is more, those two economies remained relatively strong during the global downturn, with output growth in 2008 at 9.6 per cent in China and 6.2 per cent in India, before both rebounded in 2010 with growth rates of 10.30 per cent and 10.36 per cent respectively. And while Brazil did experience recession in 2009, it has since burst out of the downturn, producing growth at 7.5 per cent in 2010, largely thanks to strong domestic demand, particularly in household expenditure.

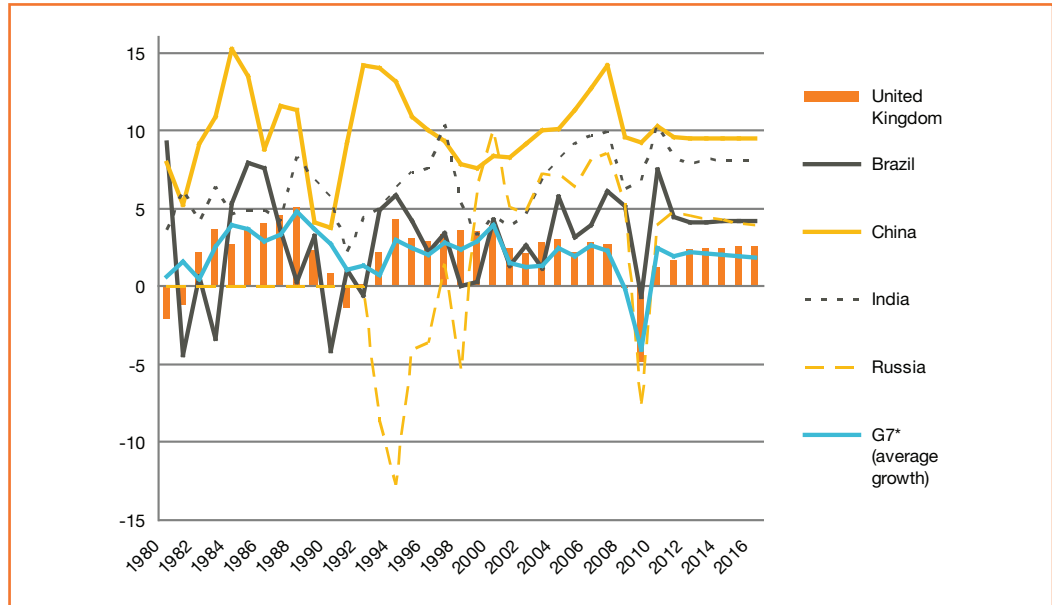
It is worth putting these figures into perspective. Since 1980, the average growth rate of the G7 economies was highest in 1998, when it averaged 4.8 per cent (the UK registered a 5 per cent increase in annual growth that year) – in the same year, China increased its output by 11.3 per cent and India by 8.7 per cent (see figure 1.1 over). Of course, advanced economies would not be expected to outperform a developing economy that has hit its economic stride, but the sheer extent of the difference in performance provides some indication of the speed of the BRIC economies’ ascent.

In the long run, this trend is expected to continue. Several forecasts (PwC 2011, Hawksworth and Cookson 2008) suggest that by 2050 the combined GDP of the seven largest developing economies will be 50 per cent larger than that of the current G7 countries in purchasing-power parity terms. China is predicted to overtake the US as the world’s largest economy by 2025¹¹ and by 2050 is expected to grow to 130 per cent the size of the US economy, from a starting point of 23 per cent in 2007 (ibid, BIS 2010: 54). In the short term, China is expected to achieve sustained growth of 9.5 per cent per annum over the period 2010–2015 (see figure 1.1).

¹⁰ 2009 saw Russia experience a severe if brief contraction of 7.9 per cent and Brazil a slight dip into negative growth.

¹¹ Although others have predicted that this will occur as soon as 2016. See for instance <http://blog.wallstreetgrand.com/2011/04/chinas-economy-to-overtake-us-by-2016/>.

Figure 1.1
Gross domestic product in BRIC and G7 economies, annual percentage change, constant prices, 1980–2016



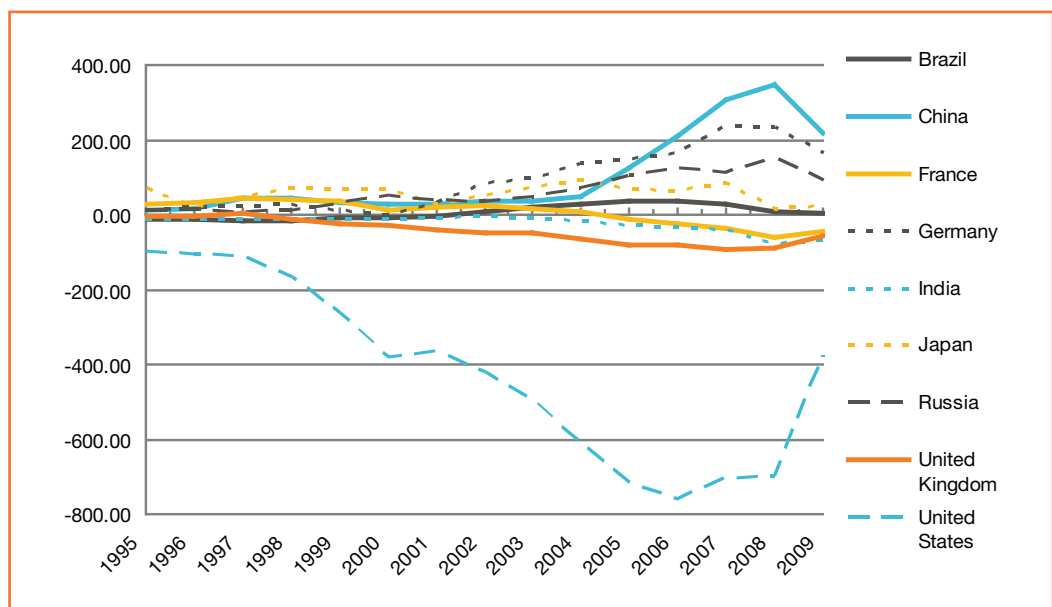
Source: IMF, World Economic Outlook Database, April 2011 (last accessed 21 June 2011). <http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx>

* Canada, France, Germany, Italy, Japan, the US and the UK

Note: Data for Russia starts in 1994. IMF estimates start after 2010, except for Brazil and Russia which start after 2009.

Aside from output growth, another good indicator of the stature that the BRIC economies now have in the global economy is balance of trade. With the exception of India, the BRICs have been performing notably strongly in net trade compared to the clear majority of established economies (Germany, with its traditionally strong export sector, and to a lesser extent Japan buck this trend)(see figure 1.2). Despite a fall in demand for its exports with the onset of the global recession, China still registered a substantial trade surplus of \$22.01 billion in 2009 (it was \$35 billion in 2008), while Russia registered a surplus of \$9.1 billion in 2009.¹² This contrasts to the US, whose trade deficit has soared since the early 1990s and remains far larger than that of any of the other advanced economies. Of course, a huge trade surplus is not necessarily a good in itself, but the extent to which these economies have come to dominate global export markets is a clear indicator of enhanced global competitiveness.

Figure 1.2
Net trade in goods and services, balance of payments, current \$bn, 1995–2009



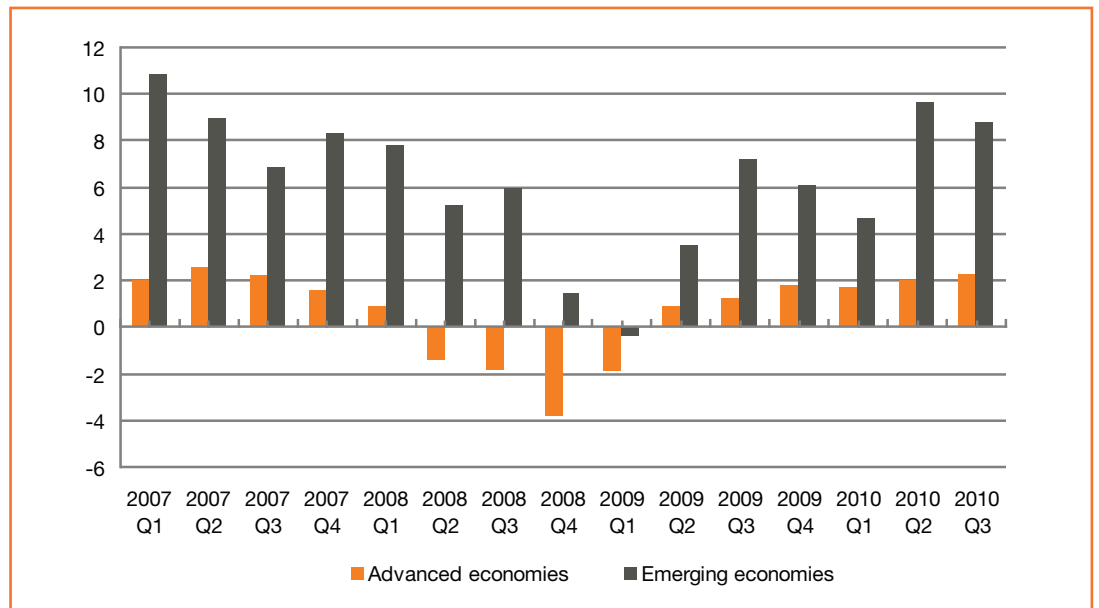
Source: IMF, Balance of Payments Statistics Yearbook and data files (last accessed 21 June 2011). <http://data.worldbank.org/indicator/BN.GSR.GNFS.CD>

¹² Unless otherwise indicated, all dollar amounts are in US dollars.

In addition to their growing role in export markets – and partly in response to concerns that their export growth is exacerbating global imbalances – the BRICs and other emerging economies have begun to take steps to stimulate demand for goods and services at home, increase consumption and expand domestic markets.

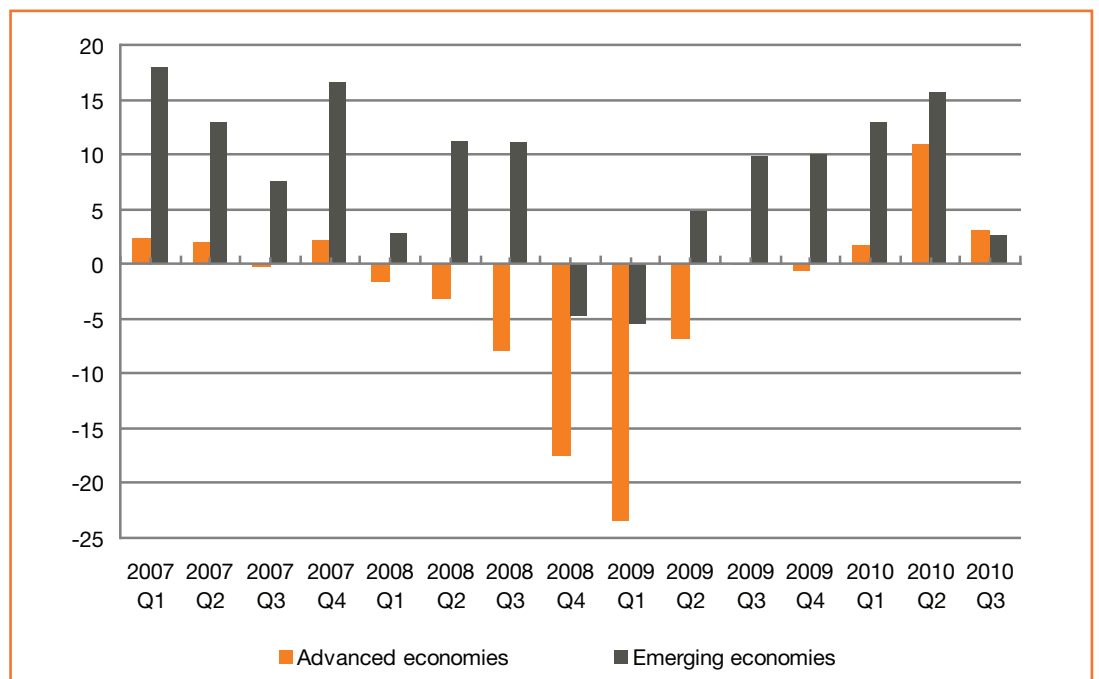
A recent briefing by the IMF (2011) suggested that recent growth in emerging markets has been ‘buoyed by well-entrenched private demand ... accommodative policy stances and resurgent capital inflows’. Hence, despite a brief contraction in Q1 2009, private consumption has been growing strongly in emerging economies and has far outpaced levels in advanced economies (although consumption there has been picking up gradually since 2009)(see figure 1.3). Fixed investment in emerging economies has also been growing at a strong rate, although investment in machinery and equipment investment declined markedly in final quarter of 2010 (see figure 1.4).

Figure 1.3
Real private consumption, annualised percentage change from preceding quarter, 2007–2010



Source: IMF Recent Economic Indicators, 2011 (last accessed 24 July 2011). <http://www.imf.org/external/pubs/ft/weo/2011/update/01/data/fig2.csv>

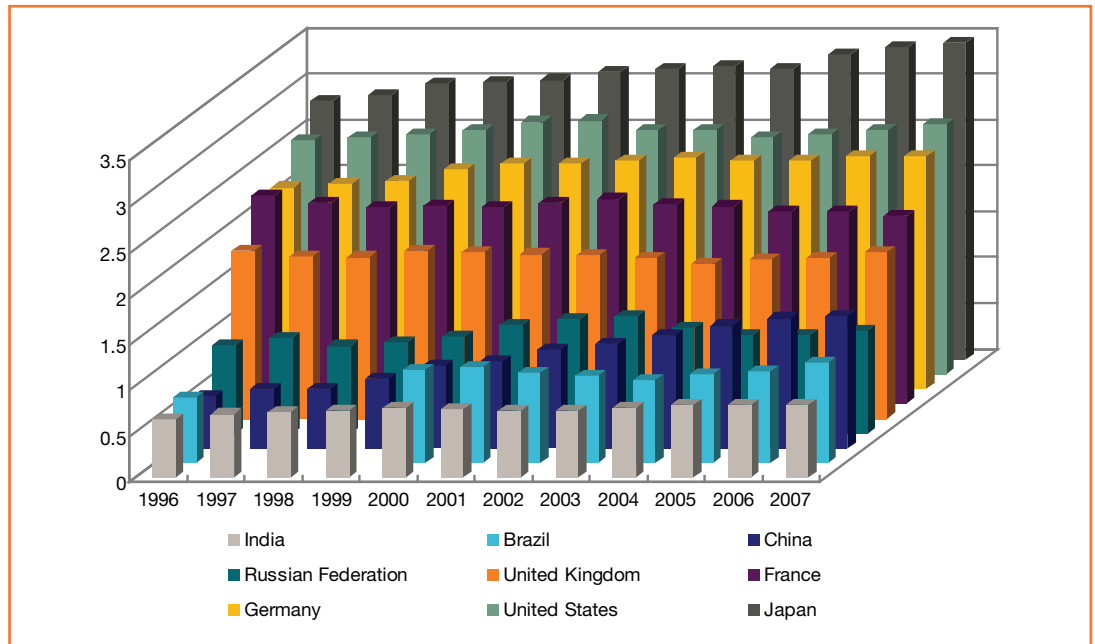
Figure 1.4
Real gross fixed investment, annualised percentage change from preceding quarter, 2007–2010



Source: ibid

It is also important to note that the BRIC economies, and especially China, are not only increasing investment in fixed assets but also in intangibles, including research and development. The amount China spends on R&D increased from 0.57 per cent of GDP in 1996 to 1.49 per cent in 2007 (see figure 1.5) and today the figure is approximately 1.5 per cent, which equates to around £100 billion annually. While it has still some way to go to catch up with the advanced economies on this measure, China aims to increase its R&D spending to 2.5 per cent of GDP by 2020 – if it succeeds, this would rival the US’s current R&D spending of \$325 billion.¹³ In other BRIC countries, the amount of public and private funds invested in R&D has been fairly consistent year-on-year, and Brazil and Russia now spend over 1 per cent of GDP per annum on R&D.

Figure 1.5
Research and development expenditure, percentage of gross domestic product, 1996–2007



Source: UNESCO Institute for Statistics, sourced from the World Bank (last accessed 21 June 2011). <http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS>
*No data available for Brazil between 1997 and 1999

Partly because of this increased expenditure on R&D, but also because of effective deployment of imported technology and strong capital inflows, the BRIC economies are also beginning to perform well in new growth sectors. In clean energy technology, for instance, China is leading the way in terms of absolute investment as domestic demand for renewables booms and Chinese firms begin to tap into clean-tech export markets. According to interim data released by Bloomberg New Energy Finance¹⁴ renewable energy investment in China increased by 30 per cent in 2010 and totalled \$51.1 billion, by far the largest figure for any country. Of the \$119 billion invested worldwide in utility-scale clean energy projects and technologies in 2009, \$33.7 billion was invested in China, compared to only \$17 billion in the second-ranked US. Together, China, Brazil and India ranked first, fifth and eighth in the world respectively in 2009, attracting investment totalling \$44.2 billion: this represented 37 per cent of worldwide investment in clean energy (United Nations Environment Programme and Bloomberg New Energy Finance 2010).

Despite inflationary pressures and risks of overheating, capital inflows, investment, and consumer demand are predicted to continue growing in the BRIC economies. The McKinsey Global Institute (2010) estimates that between now and 2020 approximately 900 million people in Asia will enter the middle class, with disposable income at their fingertips, which is likely to lead to new markets emerging and higher rates of consumption. At the same time, Goldman Sachs (2010) expects China to surpass the US

¹³ See Gapper J ‘Educate or import the new entrepreneurs’, *Financial Times*, 2 February 2011. <http://www.ft.com/cms/s/0/1ebccad2-2f08-11e0-88ec-00144feabdc0.html>

¹⁴ See Morales A ‘Low-Carbon Energy Investment Hit a Record \$243 Billion in 2010, BNEF Says’, Bloomberg News, 11 January 2011. <http://www.bloomberg.com/news/2011-01-11/low-carbon-energy-investment-hit-a-record-243-billion-in-2010-bnef-says.html>

in equity market capitalisation terms by 2030 to become the single largest equity market in the world. Together, the four BRICs could account for 41 per cent of global market capitalisation in 2030.

Although the data presented here only provides a snapshot of the growing importance of emerging markets, it sufficiently highlights the extent to which a major shift in economic power is underway and reshaping the global economy. As these trends – which have been described as heralding the coming of the ‘Asian century’ – continue, they will inevitably have a huge impact on an open economy like the UK, presenting both opportunities in terms of commerce but also significant challenges.

2. THE SPREAD OF THE INTERACTIVE WEB

The increasing influence of the interactive web, or web 2.0, over commercial activity (and many other areas of life) is self-evident. Nevertheless, it is worth surveying the limited quantitative data that currently exists on the subject to get a sense of the considerable scale of this change. Alongside this, it is vital to examine what historical research suggests happens with the emergence of a new 'general purpose technology' such as the interactive web, the resulting revolutions which take place in social and business organisation, and the challenges and opportunities this creates.

An ongoing annual survey of business executives across the world conducted by McKinsey and Company provides the most comprehensive data on the extent to which web 2.0 is being used by business and the impact it is having. The survey is particularly significant because it covers a wide range of different sectors and company functions and, in so doing, provides some clear evidence of the extent to which web 2.0 is emerging as a general purpose technology.

The latest survey results, presented in a report by Jacques Bughin and Michael Chui (2010), reveal that web 2.0 technologies are being adopted with striking speed. For instance, 40 per cent of firms employ social networking, compared to just 19 per cent in 2007, while 38 per cent use blogs, up from 16 per cent three years earlier. At the same time, 65 per cent of companies surveyed make use of web 2.0 technologies for internal uses, compared to 50 per cent in 2007, while 63 per cent employ them for the purposes of customer interaction, up from 45 per cent.¹⁵

Marketing is one specific area of business that is being transformed by web 2.0 technologies, particularly social media. A separate survey of 4,000 American SMEs conducted by BIA/Kelsey and ConStat found that 20 per cent of SMEs used Twitter for local marketing purposes, while as many as 48 per cent used Facebook. More than one-third of respondents had increased their use of links and adverts on social media sites during 2010 and 46 per cent 'planned further increases in the next 12 months'.¹⁶

Investment in social media and other web technologies is not slowing down. In the latest McKinsey survey, 65 per cent of respondents at companies already using web 2.0 said they planned to increase investments in web 2.0 technologies in 2010, compared to 53 per cent of those surveyed in 2009. According to the authors, 'healthy spending plans during both of these difficult years underscore the value companies expect to gain' (Bughin and Chui 2010).

Indeed, the commercial benefits of employing the interactive web appear to be strong. The McKinsey surveys have consistently found that companies using the web typically gain greater market share and enjoy higher margins as a result of web-based management practices (ibid). The 2009 survey found that 69 per cent of respondents were of the opinion that their companies had gained 'measurable business benefits' as a result of using web technologies, including 'more innovative products and services, more effective marketing, better access to knowledge, lower cost of doing business, and higher revenues' (McKinsey and Company 2009). The survey conducted in 2010 found that this figure had risen to almost 90 per cent.

15 For more, see https://www.mckinseyquarterly.com/Business_and_Web_2.0_An_interactive_feature_2431.

16 See <http://www.emarketer.com/%28S%28d5sues550wg4nv55jnzpa0zq%29%29/Article.aspx?R=1008266&AspxAutoDetectCookieSupport=1>.

Bughin and Chui suggest that:

‘Web technologies can underwrite a more agile organization where frontline staff members make local decisions and companies are better at leveraging outside resources to raise productivity and to create more valuable products and services. The result, the survey suggests, is higher profits.’

Bughin and Chui 2010: 7

As a result, those companies which have made the most extensive and transformational use of web 2.0 – what the report calls ‘highly networked enterprises’ – were 50 per cent more likely to report market share gains against their competitors, faster earnings growth and consolidated profits, suggesting that this model is likely to be a ‘benchmark for more vigorous competition in many industries’. However, and perhaps most importantly, these highly networked enterprises only made up 3 per cent of the survey (ibid: 7).

The interactive web as a general purpose technology

Beyond this, in order to fully understand the impact of the interactive web as a shift of a magnitude and importance similar to the rise of the BRIC economies, it is necessary to consider historical analysis as well as the latest quantitative data. Looking back over history suggests that there are strong grounds for assuming that the change will be far-reaching and radical. The grounds for such a belief are based, in large part, on the general purpose nature of this technology.

Unlike many of the trends and developments that occur all the time in an advanced economy, and which are undoubtedly important, the emergence of a new technology that can be applied across a wide range of sectors and business practices is extremely rare. For this reason, when such innovations do emerge, they are always deeply disruptive to existing practices and bring about very significant transformation. Crucially, this is not an argument about the importance of so-called knowledge sectors or high-growth IT sectors to the UK economy, but about the way that the web itself is transforming a wide range of sectors.

But not only does the interactive web have the feel of a general purpose technology, we are also seeing it being deployed in a specific set of historical circumstances (Lockwood and Lent 2010). The economic historian and theorist Carlota Perez has strongly argued that periods following financial crashes tend to see a quickening of the pace at which general purpose technological change occurs within businesses – making revolution in economic organisation and practice more likely now than ever. This is a key component of Perez’s analysis: she stresses that such change is never just about the deployment of new technologies, but is necessarily wrapped up in wider ‘paradigm shifts’ involving different ways of organising businesses and economies (Perez 2002).

Earlier such shifts, in technologies and in associated economic and business paradigms, are outlined in table 2.1 (over).

What this means this time around is still hard to pin down, but the implication is clear. We can expect web 2.0 to initiate a much more profound shift than simply the implementation of new ways of conducting communications or marketing products – we need to be ready for new ways of doing business, as profoundly different from the past as those before and after the building of the canals, or the construction of the national grid.

Table 2.1
A different techno-economic paradigm for each technological revolution, 1770–2000s

TECHNOLOGICAL REVOLUTION	TECHNO-ECONOMIC PARADIGM
Country of initial development	'Common-sense' innovation principles
<p>FIRST</p> <p>The 'Industrial Revolution'</p> <p>Britain</p>	<p>Factory production</p> <p>Mechanisation</p> <p>Productivity/timekeeping and time-saving</p> <p>Fluidity of movement (as ideal for machines with water-power and for transport through canals and other waterways)</p> <p>Local networks</p>
<p>SECOND</p> <p>Age of steam and railways</p> <p>Britain, spreading to the continent and US</p>	<p>Economies of agglomeration/industrial cities/national markets</p> <p>Power centres with national networks</p> <p>Scale as progress</p> <p>Standard parts/machine-made machines</p> <p>Energy where needed (steam)</p> <p>Interdependent movement (of machines and of means of transport)</p>
<p>THIRD</p> <p>Age of steel, electricity and heavy engineering</p> <p>US and Germany overtaking Britain</p>	<p>Giant structures (steel)</p> <p>Economies of scale of plant/vertical integration</p> <p>Distributed power for industry (electricity)</p> <p>Science as a productive force</p> <p>Worldwide networks and empires (including cartels)</p> <p>Universal standardisation</p> <p>Cost accounting for control and efficiency</p> <p>Great scale for world market power; 'small' is successful, if local</p>
<p>FOURTH</p> <p>Age of oil, the automobile and mass production</p> <p>US, spreading to Europe</p>	<p>Mass production/mass markets</p> <p>Economies of scale (product and market volume)/horizontal integration</p> <p>Standardisation of products</p> <p>Energy intensity (oil-based)</p> <p>Synthetic materials</p> <p>Functional specialisation/hierarchical pyramids</p> <p>Centralisation/metropolitan centres – suburbanisation</p> <p>National powers, world agreements and confrontations</p>
<p>FIFTH</p> <p>Age of information and telecommunications</p> <p>US, spreading to Europe and Asia</p>	<p>Information-intensity (microelectronics-based ICT)</p> <p>Decentralised integration/network structures</p> <p>Knowledge as capital/intangible value added</p> <p>Heterogeneity, diversity, adaptability</p> <p>Segmentation of markets/proliferation of niches</p> <p>Economies of scope and specialisation combined with scale</p> <p>Globalisation/interaction between the global and the local</p> <p>Inward and outward cooperation/clusters</p> <p>Instant contact and action/instant global communications</p>

The authors thank Carlota Perez for permission to reproduce this table.

3. SHOULD THE UK BE WORRIED?

This combination of growing economic power in new regions of the world coupled with the widespread deployment of potentially revolutionary business practices associated with new technologies has proved exceptionally disruptive to dominant economic arrangements in the past. Younger economies tend to have all the benefits of growing sources of capital, skills and labour with which to take advantage of new ways of doing business, alongside fewer of the obstacles to change such as management inertia, worker resistance to new techniques, out-of-date skills sets, and sunk costs in old technologies. In addition, the newer economies' benefits are underpinned by a collective self-confidence and sense of mission which is less intense in the older economies.

As was explained in the IPPR pamphlet, *Creative Destruction: Placing Innovation at the Heart of Progressive Economics*, this coincidence of technology and new economies occurred three times during the 20th century with striking results (Lent and Lockwood 2010).

In the first half of the last century, the US gradually became the world's most significant economic force driven by its deployment of highly productive and market shaping mass production technologies coupled with access to the higher levels of capital, skills and labour generated by its economic development during the second half of the nineteenth century. A key result of this was, of course, the erosion of the British Empire as the undisputed economic force in the world: a development which had enormous economic, geopolitical and social consequences.

In the period after the Second World War, the mass production revolution became a genuinely global affair with Germany and France in particular rapidly modernising and expanding their industrial base (with considerable help from the US with the provision of investment capital in the form of Marshall Aid). As a result, highly productive and innovative European companies were able to compete with the US both in global export markets and even in the US's own domestic markets. Although this development did not significantly shift economic or wider geopolitical power away from the US, it did further erode British influence. Thus while living standards continued to improve in the UK, Britain fell significantly behind its European neighbours in terms of growth, productivity and share of global and domestic markets.

In the 1960s and 1970s, a further radical technological shift occurred with the development of flexible production, supported by early computerised systems, which greatly increased the diversity of products available in a variety of markets and once again achieved major breakthroughs in productivity. This time it was Japan that was in the vanguard of the revolution. American companies soon found themselves outperformed in a number of global and domestic markets, and Japan more comprehensively outstripped European countries to become the world's second largest economy.

The common and worrying thread running through each of these three transformations is that in each case, the UK saw its economic performance and global market share fall behind those of other nations.

In the first case, such an outcome was perhaps unavoidable: Britain's massive imperial commitments and its sheer global dominance meant that the arrival of a new economic powerhouse armed with radical new technologies was bound to dent Britain's standing. However, by the 1940s no such explanations could apply. It was abundantly clear by the post-war period how important mass production techniques were to achieving productivity gains and higher market share. Indeed, leaders such as Stafford Cripps were personally

determined to 'Americanise' British industry but faced limited political and business support.

In the 1960s and 1970s, the same problem emerged once again. Japan may have led the world in flexible production techniques – particularly in the automotive and electronics industries – but Germany and Italy soon employed flexible production and computerised systems management to make a continuing success of important sectors such as textiles, fashion, light engineering and ceramics. By contrast such sectors in the UK, which had already suffered as a result of the mass production revolution, were all but finished off by the arrival of flexible production.

The UK's escape from its persistent failures to keep up with shifts in economic power and business practices was ultimately resolved (at least until the 2008 Crash) by the growing importance of service sectors such as retail, finance and property as the growth drivers of the economy. The problem now, however, is that the interactive web is a technology that is transforming the service sector in as radical and as rapid a way as mass production and flexible production did manufacturing. We can see this simply by looking at data relating to one of the UK's key service industries, the retail sector.

According to the Centre for Retail Research (CRR)¹⁷ online retail sales in the UK in 2010 were worth £44 billion or 10.7 per cent of total UK retail trade, a substantial increase of 16 per cent compared to 2008. This year, online retail sales are predicted to grow by an additional 14 per cent, reaching £50.3 billion or 12 per cent of total retail trade. Within the EU, e-commerce is one of the fastest growing markets, with the European market worth £145,600 million in 2010 (up from £102,900 million in 2008) (ibid).

An example of how rapidly this transformation is occurring can be found in the rapid rise of online grocer Ocado. Ocado's online grocery sales were up by 25 per cent in the 12 weeks to 20 February 2011 compared with one year earlier. In order to meet soaring demand and fulfil its ambitious growth plans, the FTSE 250- listed company has increased capacity by 25-30 per cent this year and it now claims it is equipped to deliver to 70 per cent of UK households.¹⁸ Conventional grocers such as Tesco and Waitrose have responded by setting up their own web grocery services that, like Ocado, will deliver directly from the warehouse rather than sourcing products off the supermarket shelves.

Ebay provides another specific example. The international auction website nearly quadrupled its revenue and number of unique visitors over the period 2001–2007. Importantly for the UK, Ebay increasingly functions as an export hub for many UK SMEs. Indeed, overseas sales by UK-based SMEs on the site were valued at £446 million in 2010 and, according to the firm, this represented 'an increase of 128 per cent since the credit crunch began in 2007, compared to only a 20.5 per cent increase in exports in the wider economy over the same period.'¹⁹

On the face of it, this data suggests that at least one part of the UK's economy is adapting rapidly to new technology and possibly the paradigms that are associated with it. However, we currently have no way of knowing whether the extent and ways in which the UK service sector is employing web 2.0 is more or less advanced than that being employed in other economies. Nor, more significantly, can we tell how the full range of sectors that make up the British economy are performing (on web 2.0 technologies) relative to their competitors abroad.

So what can be done? Two important observations emerge from this historical analysis. First, advanced economies have an inherent disadvantage when faced with new technologies and new paradigms. As mentioned at the beginning of this section, emerging economies tend to be much better placed to capitalise on them – often because they

17 See <http://www.retailresearch.org/onlinereetailing.php>.

18 'Ocado plans new capacity as sales rise 25%', BBC News, 4 March 2011. <http://www.bbc.co.uk/news/business-12646610>. Note, however, that Ocado's share price fell in the weeks before publication of this report, with investors expressing concerns at the company's ability to deliver on its strategy.

19 See http://www.ebay-mediacentre.co.uk/Latest-News/SMEs-outperform-the-market-as-eBay-fuels-half-a-billion-pound-UK-export-boom-ea.aspx#_ftn1.

are not locked in to existing technologies and infrastructure, having never secured them. Second, this does not inevitably mean that advanced economies suffer. While they may be disadvantaged, they can respond – at an individual, business and policy level – to the change taking place. But in order to do this, they require a number of adaptation capacities – capacities which allow the challenge of change to be seized as an opportunity, rather than another harbinger of reduced economic success and influence.

The UK has not, however, adapted successfully to economic change since at least the 1940s, suggesting that we have a number of chronic weaknesses. In a period of what seems to be equally significant transformation, it is wise to identify and investigate these weaknesses more closely and consider possible solutions.

4. THE UK'S LONG-TERM ECONOMIC WEAKNESSES

Our research suggests that the UK economy suffers a number of underlying 'adaptation weaknesses' and that these are important in explaining the UK's relative failure to adjust to past economic evolutions. To successfully adjust an economy needs to be flexible, forward looking, and proactive, and this in turn requires the right resources (specifically, a strong human capital base), as well as a desire to seize new opportunities (which is reflected in high levels of investment, presence in new markets, and commitment to innovation). Without these underpinnings, it is easy to see why we have failed in the past, and hard to see how we will do any different this time around.

It is no secret, moreover, that the UK has entrenched problems in these areas. Policymakers and business leaders have been aware of them for many decades (it is striking, for example, that fourteen years ago the IPPR's Commission on Public Policy and Business (1997) identified a remarkably similar set of weaknesses afflicting the UK economy as those considered here). However, there has never been a sufficiently concerted effort to develop effective and bold resolutions to these problems. This is likely partly because we were stuck in a static, neoclassical view of economic policy, without an understanding of economic evolution. Now that economic thinkers are increasingly taking on a more historical and structural view of the way our economy works, we must engage afresh with these challenges.

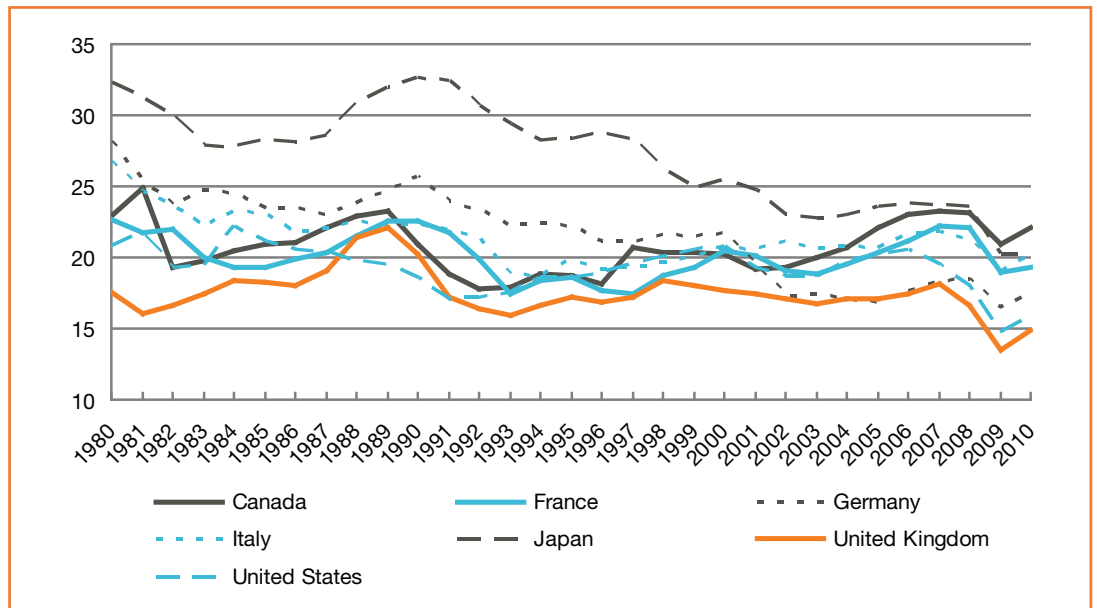
This paper thus now examines in some detail each of these four problems: low and skewed business investment, weak skills base, less innovation and low productivity, and failure to compete in emerging markets. The aim is to substantiate just how problematic each of the weaknesses is, in order to determine the extent and nature of the policy response required.

4.1. Low and skewed business investment

Historically, the UK's record on investment has been relatively poor compared to our closest competitors. Comparative data shows that as a percentage of GDP we have consistently been outperformed by Germany, the US, Japan and others (see figure 4.1 over). Average annual investment, expressed in terms of gross fixed capital formation (GFCF)(which encompasses business, government and household investment²⁰), over the period 1980–2010 was 17.5 per cent of GDP in the UK compared to 20.1 per cent of GDP in France and 27.2 per cent of GDP in Japan.

20 When data is disaggregated, business investment is typically the largest component of overall investment in the case of each of the countries listed.

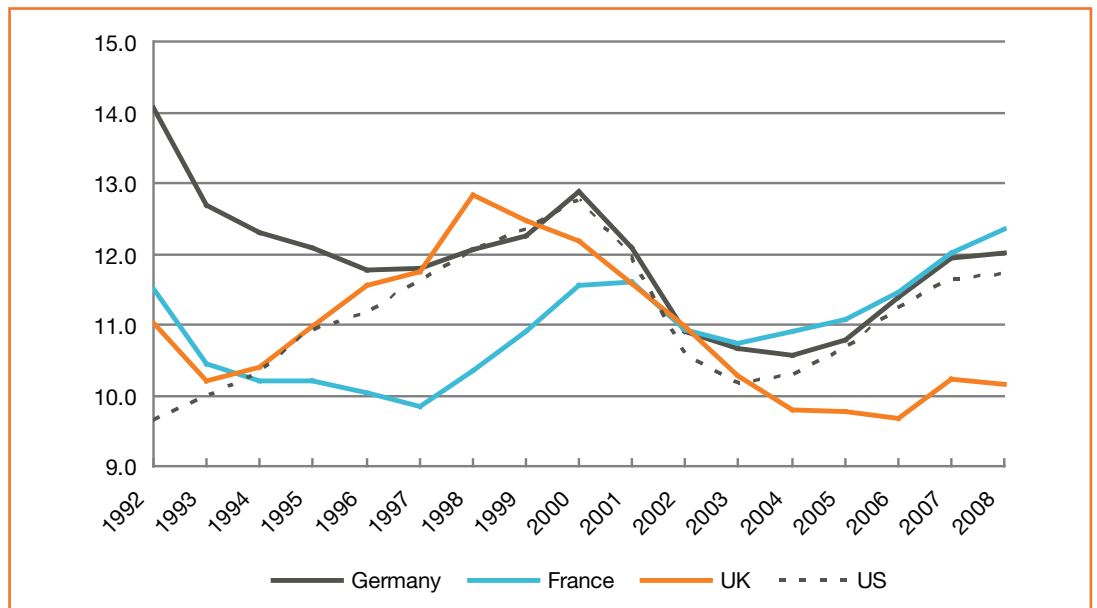
Figure 4.1
Investment, percentage
of GDP, 1980–2010



Source: IMF, World Economic Outlook Database, April 2011 (last accessed 21 June 2011). <http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx>

Comparative OECD data on business investment between 1992 and 2008 shows similar, albeit less stark, trends. Despite reaching 12.8 per cent of GDP in 1998, the UK's performance on business investment has typically lagged behind Germany and the US (although it is on a par with France). Average annual business investment over the period was 10.9 per cent of GDP in the UK and France, compared to 11.1 per cent in the US and 11.9 per cent in Germany (see figure 4.2). Moreover, since 2003, business investment in the UK has remained at approximately 10 per cent of GDP, falling to a low of 9.7 per cent in 2006 and only recovering to reach 10.2 per cent in 2008. In contrast, the US, Germany and France saw business investment rates rise to 11.7 per cent, 12.3 per cent and 12.7 per cent respectively in 2008.

Figure 4.2
Business investment,
percentage of GDP,
1992–2008



Source: OECD: reproduced from BIS 2010a

The relative lack of investment is a problem that has long been recognised by policymakers of all political hues. Since the Macmillan Committee of the 1930s through to the Wilson and Heath governments of the 1960s and early 1970s, efforts were made to stimulate private sector investment in tangible assets, through economic planning and competition policy, with mixed success. The introduction of an explicit inflation target

in 1992 was designed to restore macro-economic stability and hence, it was hoped, businesses would have greater confidence to invest. Yet following a momentary hike in business investment in the mid to late 1990s (which was partly attributable to the 'dot com boom' and resulting investments in IT and communication equipment), business investment in the UK had, by 2005, slumped to its lowest level as a proportion of GDP since 1965, when official data was first collected (see Gieve 2006).

It could be argued that one might expect the UK to have lower levels of business investment than many other advanced economies, given its domination by the service sector, which is less capital-intensive than manufacturing. Furthermore, it is important to note that investment in services is difficult to measure and is likely to be underestimated: GFCF does not capture fully investment in intangible assets, which are particularly important to service sector productivity and growth²¹ (and recent studies on investment in intangibles find that the UK performs better than its competitors).²²

However, while these points are certainly valid, they do not explain the relatively low levels of investment in the UK over *many* decades when manufacturing was a far stronger contributor to output (OECD 2009a). They also fail to take account of the fact that the UK's sector split is not actually that distinct from our competitors'. In 2007, services contributed 76.3 per cent of GVA in the UK, while Germany, Japan, the US and France showed figures of 68.7 per cent, 70.1 per cent, 76.9 per cent and 77.4 per cent respectively.²³ And while the UK's manufacturing sector is small relative to Germany and Japan, it is a similar size, relative to GDP, to France and the US. In addition, once mining and the energy sectors are incorporated into the measure – both capital intensive sectors but not usually classed with manufacturing – the difference with Germany and Japan is much less stark.

A large part of the problem for the UK lies in the fact that investment has been increasingly skewed towards financial services²⁴ and property, rather than a more diverse range of service and manufacturing sectors. As Lord Adair Turner (2010) pointed out in a recent speech at the LSE, household and corporate sector denominated debt skyrocketed from 22 per cent of GDP in 1964 to 125 per cent of GDP in 2009. The vast majority of this debt was lent by banks and used to finance household mortgages. Indeed, residential mortgage lending reached nearly 80 per cent of GDP in 2009, with as much as 20 per cent accounted for by securitised credit (ibid). The extension of credit to the corporate sector has increasingly been dominated by loans to finance commercial real estate, which, as Turner noted, are 'primarily used to finance the tax advantaged purchase of already existing assets in the expectation of future capital gain', rather than financing 'new productive investment'.

With such a substantial scaling up of available credit in property markets over the last 40 years, it is little wonder that the UK experienced a house price boom. To give an indication of the scale of this, nominal house prices in the UK rose from approximately £51,000 in 1991 to just under £185,000 by 2007 – far outpacing rates of inflation. Likewise, the value of residential buildings as a percentage of all UK non-financial tangible asset values increased from 51 per cent in 1999 to 64 per cent in 2007 (ONS 2008: 243).

21 GFCF does include investment in intangible fixed assets such as deferred tax assets, patents, copyrights and expenditure on R&D. However, it misses investment in other intangibles, such as training, marketing, branding, design and business process improvement – all of which are usually more important to service businesses than investment in tangible assets such as equipment.

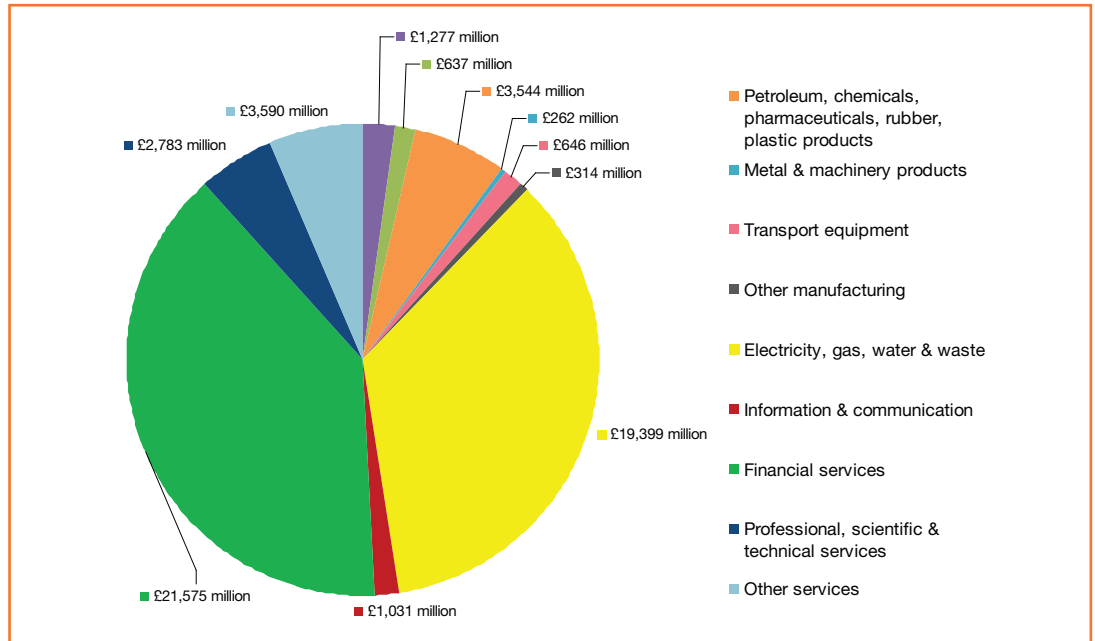
22 Separate studies on investment in intangibles – such as the OECD's innovation strategy work – show that the UK invests more in intangibles as a percentage of GDP than France and Germany, but less than the US and Japan (Haskell 2011). Data presented by Haskell also suggests the UK invests more in intangible than tangible assets.

23 See OECD data set 'Sectoral contributions to gross value added' (last accessed 21 June 2011). http://www.oecd-ilibrary.org/sectoral-contributions-to-gross-value-added_5kmh793s8r38.xls?contentType=/ns/Table/ns/StatisticalPublication&itemId=/content/table/oif-2009-table6-en&containerItemId=/content/serial/15615537&accessItemIds=&mimeType=application/vnd.ms-excel

24 Note however that although financial assets such as securities, financial instruments, bank deposits and debt are classed as tangible assets, they are not captured in GFCF data.

At the same time, measured real value added of the financial intermediation sector more than trebled over the period between 1980 and 2008, while total UK economic output merely doubled over the same period (Haldane 2010). The scale of this growth is clearly staggering and what is more, even after the worst financial crisis since the Great Depression, the financial service industry's share of GDP still managed to hit 10 per cent in 2009/10 according to City estimates.²⁵ Furthermore, overseas investment continues to be channeled heavily into the UK financial services industry and in 2009 the sector attracted £21,575 million in net flows of foreign direct investment, more than any other sector (see figure 4.3).

Figure 4.3
Net foreign direct investment flows into the UK, by sector



Source: ONS, Foreign Direct Investment 2009, <http://www.statistics.gov.uk/statbase/product.asp?vlnk=9614>
Note: Sectors registering net disinvestment are not included.

On the one hand, this underlines the continued critical importance of financial services to our economy. However, the ballooning of the financial sector has also had the negative effect of drawing capital, investment and labour away from a more diverse range of sectors. In effect, the problem for the UK is not simply about levels of investment per se, but the nature of that investment and its recipient sectors.

4.2. Weak skills base

The UK has an internationally-renowned higher education system and we have registered significant improvements in educational attainment at all levels over the past two decades. Between 1994 and 2005, the proportion of adults in England with a higher level qualification increased from 21 to 29 per cent while the proportion without any qualifications fell from 22 to 13 per cent (Leitch Review of Skills 2006).

Having said this, the UK's skills base remains relatively poor compared to many of our key competitors. According to the latest available internationally comparative data compiled by the OECD (for 2008) and presented in table 4.1 below, the UK ranks:

- 17th out of 31 OECD countries in terms of the proportion of adults aged 25–64 with low or no qualifications (described as 'below upper secondary', which equates to less than Level 2 in the UK), with 30 per cent at this level. Although identical to France, this is more than double the proportion in the best-performing nations: only 15 per cent of adults have low or no qualifications in Germany and only 11 per cent in the US.
- 21st for the proportion with intermediate education (upper secondary and post-secondary non-tertiary), with only 37 per cent of adults qualified to this level (and no higher). This compares to 43 per cent of adults in France, 48 per cent in the US, 57 per cent in Japan and, thanks to its highly-developed apprenticeship system, 60 per

²⁵ See <http://thecityuk.com/assets/Uploads/Economic-Contribution-of-UK-Financial-Services-2010.pdf>

cent in Germany. Of particular concern, the UK has made minimal progress since 1997 in raising the proportion of adults qualified to this level (see table 4.1).

- On a more positive note, the UK ranked 11th in terms of the number of adults acquiring tertiary (university) education, with 33 per cent holding a university degree in 2008. This is notably higher than France and Germany (27 per cent and 25 per cent), but lower than the US, Japan and Canada, where the proportion of adults qualified to this level is 41 per cent, 43 per cent and 49 per cent respectively.

Taken together, these figures are a cause for concern. Taking full advantage of major business transformations – such as the spread of web 2.0 outlined above – and potential opportunities in new, high-tech and knowledge-intensive sectors requires a large pool of educated school-leavers and young professionals with technical vocational qualifications, as well as the highly-qualified young graduates that our university system has delivered over the last 15 years. Just as the mass production and flexible production revolutions created a significant demand for a new generation of specialists able to apply and develop innovative techniques as well as a larger group of workers with new skill sets, so the interactive web revolution will require the same.

At the same time, and despite major improvements since 1997, there is a risk that our still relatively high proportion of adults lacking basic skills will bring major difficulties in the future, as the rest of the workforce adapts to business transformations, exacerbating the marginalisation of low-skilled, low-paid jobs in the economy.

Table 4.1
Trends in educational attainment: 25-64 year-old population, percentage by educational level, 1997–2008

Country	Educational level	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08
France	Below upper sec.	41	39	38	37	36	35	35	34	33	33	31	30
	Upper sec. and post-sec. non-tertiary	39	40	40	41	41	41	41	41	41	41	42	43
	Tertiary education	20	21	21	22	23	24	24	24	25	26	27	27
UK	Below upper sec.	41	40	38	37	37	36	35	34	33	32	32	30
	Upper sec. and post-sec. non-tertiary	37	36	37	37	37	37	37	37	37	38	37	37
	Tertiary education	23	24	25	26	26	27	28	29	30	31	32	33
Germany	Below upper sec.	17	16	19	18	17	17	17	16	17	17	16	15
	Upper sec. and post-sec. non-tertiary	61	61	58	58	59	60	59	59	59	59	60	60
	Tertiary education	23	23	23	23	23	23	24	25	25	24	24	25
US	Below upper sec.	14	14	13	13	12	13	12	12	12	12	12	11
	Upper sec. and post-sec. non-tertiary	52	52	51	51	50	49	49	49	49	48	48	48
	Tertiary education	34	35	36	36	37	38	38	39	39	39	40	41
Japan	Below upper sec.	20	20	19	17	17	NA	NA	NA	NA	NA	NA	NA
	Upper sec. and post-sec. non-tertiary	49	49	49	49	49	63	63	61	60	60	59	57
	Tertiary education	31	31	32	34	34	37	37	39	40	40	41	43

Source: OECD 2010a (last accessed 22 June 2011)

Adjusting to major technological revolutions also requires workers who are equipped with significant scientific know-how and mathematical and technical competencies, and yet here the UK's record is decidedly mixed. According to OECD (2010b) PISA data for 2009, only 10 per cent of UK students achieve either of the top two grades (levels 5 and 6) in maths, compared to an OECD average of 12.5 per cent. As a result, the UK ranks 31st of 65 countries in high-level maths performance. The UK does do markedly better in sciences however, with 11.5 per cent achieving the top two grades compared to an OECD average of 8.5 per cent, meaning the UK is ranked 12th.

Despite improvements in the number of secondary school students receiving high grades in STEM (science, technology, engineering and maths) subjects and going on to study

STEM subjects at university, it appears that available supply of qualified graduates in these subjects is still lacking. A recent CBI (2011) survey found that 43 per cent of the 566 employers interviewed were currently struggling to hire STEM-qualified employees, rising to 53 per cent who expected to have difficulty recruiting in this area over the next three years.

More generally, our skills deficit has a negative impact not only on economic productivity but also on employment. Approximately one-fifth of the UK's productivity gap with countries such as France and Germany is due to this skills deficit and it has been suggested that the UK employment rate could increase by 10 per cent over the next 30 years if adult skill levels are significantly improved (Leitch Review of Skills 2006).

The source of the UK's relatively poor performance on skills may well be complex but the data does suggest that while our historical spending on education is not among the lowest, nor is it particularly high. The UK may have substantially increased public funding for education in recent years, meaning we no longer are one of the lowest spenders as a proportion of GDP, but the increase meant we only just breached the OECD average (see table 4.2).

Table 4.2
Public expenditure on education as a percentage of GDP (percentage of total public expenditure)

	2007	2000	1995
Australia	4.3 (13.7)	4.5 (13.8)	4.9 (13.8)
Canada	4.9 (12.3)	5.1 (12.4)	6.2 (12.7)
France	5.6 (12.5)	6.0 (12.5)	6.3 (11)
Germany	4.5 (10.3)	4.4 (9.8)	4.6 (8.5)
Italy	4.3 (9.0)	4.5 (9.8)	4.7 (9.0)
Japan	3.4 (9.4)	3.6 (9.5)	3.6 (n/a)
United Kingdom	5.4 (11.7)	4.3 (11.0)	5.0 (11.4)
US	5.3 (14.1)	4.9 (14.4)	4.7 (12.6)
Sweden	6.7 (12.7)	7.1 (13.4)	7.1 (10.7)
OECD average	5.2 (13.3)	5.1 (13.4)	n/a (10.7)
<i>Others</i>			
Brazil	5.2 (16.1)	3.8 (10.4)	3.9 (11.2)
China	3.3 (16.3)	n/a	n/a

Source: OECD 2010a

Note: Public expenditure presented here includes subsidies to households for living costs (scholarships and grants to students/households and students loans).

The risks that UK spending on education will once again fall behind international benchmarks must now be high. In the 2010 spending review, the Treasury announced that schools will get a real terms increase of 0.1 per cent a year over the period 2010/11 to 2014/15 and that underlying per pupil funding will be maintained in cash terms.²⁶ However, the settlement agreed for the Department for Education in fact amounts to a 3 per cent real-terms cut.²⁷ Furthermore, it has been calculated that in order to protect schools, other parts of the education budget, including capital for school buildings, are being cut by up to 60 per cent. Additional savings will be made by no longer safeguarding Sure Start and the controversial decision to scrap the £560 million education maintenance allowance (EMA), which will be replaced by a much smaller £180 million bursary scheme.²⁸

However, despite the merits of investing in education – and thus increasing skills supply – this is by no means the only solution to improving our skills base. In the UK, the other parts of the skills puzzle have tended not to be prioritised. Specifically, increases in the supply of skills through public education have not necessarily been matched by increases in underlying demand from businesses for skilled professionals, nor a desire on the part of business to take responsibility for funding in-work training and skills development.

26 See http://cdn.hm-treasury.gov.uk/sr2010_chapter2.pdf

27 <http://www.mikebakereducation.co.uk/blog/299/spending-review-what-it-really-means/>

28 <http://www.bbc.co.uk/news/education-12881747>

For many firms, there are a number of perceived disincentives to investing in training and skills: the returns to training are long-term, especially if training starts from scratch, while the benefits of training are often considered to be primarily captured by the worker, who may move on to another job and take with them the benefits of that investment. Furthermore, investing in certain training programmes – especially those which require technical equipment – can be costly. As a result, many firms seek to benefit from a pool of talented labour trained by others, without investing sufficiently in training themselves (Clifton et al 2009).

Yet, it is not purely a matter of cost and capture that discourages business from investing in training. Ewart Keep and colleagues have argued that the main challenge in getting employers to invest more in skills is often of lower-order priority for them (see for instance Keep et al 2006).²⁹ Having a competitive product market strategy is usually the core priority for a business, followed by an effective delivery system, which in turn depends on having a workforce structure and employee relations system that serve the business strategy. Typically, only once employers are satisfied that these systems and structures are in place will they think about investing in skills.

At the same time, many businesses fail – or simply choose not – to utilise the existing skills of their workforce. This is a problem that tends to be associated with small and medium-sized – particularly family-run – firms and is often explained as being caused by a lack of sufficient capital to tap into skills, as well as poor management structures and HR practices (Bloom and Van Reenen 2010³⁰). Yet, the problem is by no means confined to unproductive SMEs: indeed many large and highly productive organisations have developed forms of work organisation that create repetitive, low-skilled jobs.³¹

As a result of this, it is perhaps unsurprising that the UK's record on business investment in skills and training is relatively poor. Currently, around one-third of UK firms provide no training at all, rising to around half in some sectors and especially among smaller businesses (UKCES 2009a).³² However, there is some evidence to suggest the situation has been improving, at least prior to the recession: between 2005 and 2007, total training spend in England increased from £33.3 billion to £38.6 billion; factoring in inflation, this amounted to a real-terms increase of £3.5 billion or 10 per cent (ibid: 66).

The recession has certainly had an impact on employer investment in training, but the effect has been less pronounced than was expected, with total investment falling by only 5 per cent after inflation in 2009.³³ Moreover, despite the fact that the percentage of the UK workforce receiving training in 2009 fell by 7 per cent, more is being spent, per head, on each member of staff being trained.³⁴ However, there is a significant risk that the government's newly proposed employment law reforms, which will remove incentives for employers to invest in workforce skills and retain staff, may yet have a further levelling-down effect on business skills investment.

Furthermore, when compared to other OECD countries, the UK performs below average for workplace training. The proportion of employees in work receiving some form of certified continuing vocational training is relatively low by European standards – approximately 33 per cent compared to 45 per cent in France for example (ibid: 66–67).

29 The point was also relayed in a recent personal communication from Ewart Keep.

30 The relationship between human capital and management practices has been analysed in depth by Nick Bloom and John Van Reenen (2010). Their analysis suggests that firms that use human capital more intensively, as measured by more educated workers, are more likely to have better management practices.

31 The so-called 'factorisation' of clerical, administrative and customer facing jobs in particular has been driven in part by ICT advances. As a result, the spread of web 2.0 technologies provides as many challenges for skills development and utilisation as opportunities.

32 In contrast, larger establishments and those in sectors dominated by public sector services or finance typically have higher levels of training activity.

33 According to Felstead et al (2011), the reason behind this is that many employers are choosing to 'train smarter' by focusing their training on key business needs, organising more in-house courses, and using their own staff as trainers.

34 In 2009, employers spent an average of 3 per cent more on training per trainee in real terms than was the case in 2007. Allowing for inflation, the average annual investment in training per trainee has increased from £2,775 in 2007 to £3,050 in 2009.

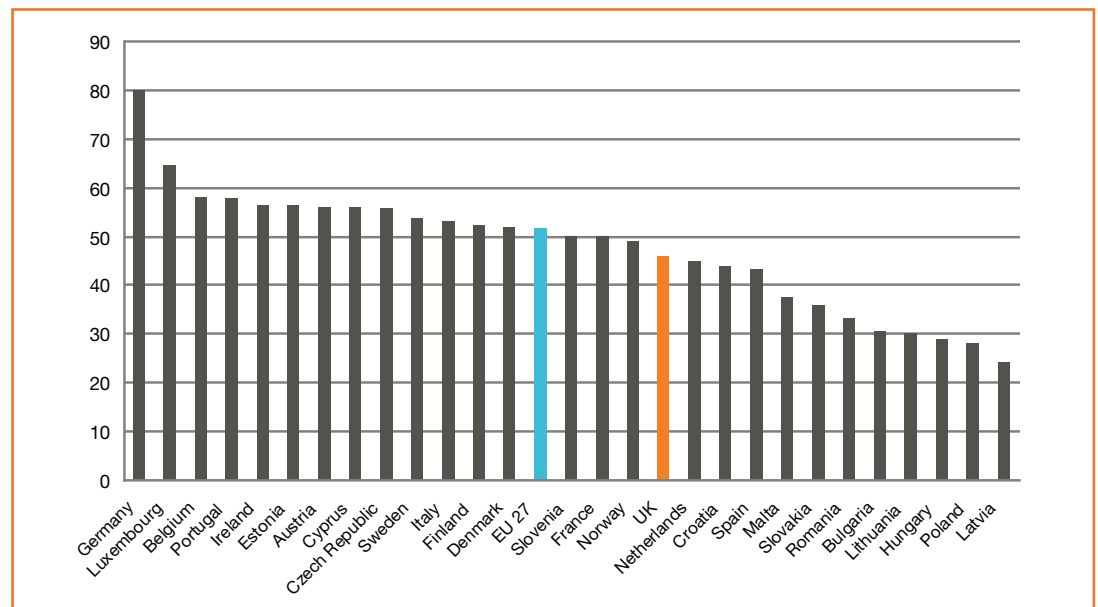
The UK's recent record on apprenticeships is also poor. In 2009, only 8 per cent of employers offered apprenticeships in England compared to one-third of employers in Australia and one-quarter in Germany (Steedman 2010). This is particularly worrying because apprenticeships are an important means to bridge the technical skills gap, equip young individuals with skills of direct relevance to specific trades and sectors, and provide those who choose not to go to university with a springboard into skilled careers. Furthermore, the quality of current apprenticeships has been criticised. The recent Wolf report (2011) on vocational education commissioned by the government concluded that high-quality apprenticeships are rare and that hundreds of thousands of young people are enrolled on publicly supported further education courses that are inadequate and unlikely to lead to either a decent job placement or further training.

4.3. Less innovation and lower productivity

Innovation is a key driver of productivity growth, and thus of economic growth. The latest annual innovation report produced by BIS and NESTA (2011) suggests that innovation accounted for 63 per cent of labour productivity growth between 2000 and 2008, while investments in intangibles accounted for an additional 23 per cent. It also argued that in 2008 innovation in the economy played an important role in helping to limit the negative impact of the recession on productivity.

Despite this, on several measures UK companies appear to be less innovative than foreign firms. According to Eurostat (2011) statistics for 2008, the UK ranks 17th out of 28 EU member states in terms of the number of businesses classed as 'innovation active':³⁵ only 46 per cent of UK businesses undertake some form of innovation activity – whether product or process based – compared to a reported 80 per cent of German firms and 50 per cent of French firms (see figure 4.4). This is particularly worrying, since only by innovating will UK businesses be able to adapt effectively to technological change and compete for new market opportunities.

Figure 4.4
Innovation active firms, percentage of all enterprises, EU-27 and Croatia, 2008



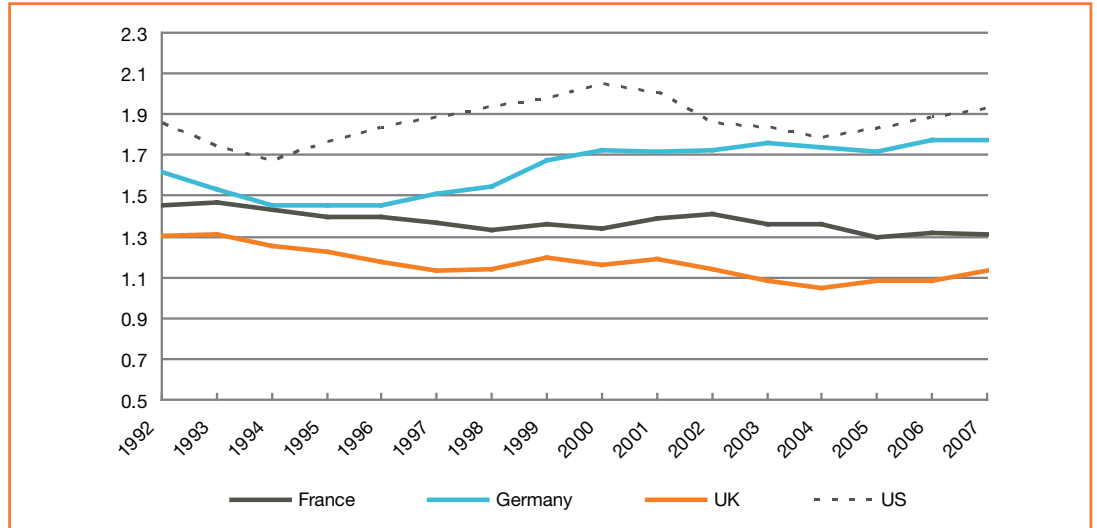
Source: Eurostat 2011

In addition, it is often noted that UK firms have historically invested relatively little in research and development. Over the period 1992–2007, spending on R&D by the private sector peaked at 1.31 per cent of GDP in 1993 and since then has averaged 1.14 per cent per year, marking a slight aggregate decline. In contrast, private spending on R&D in Germany has risen steadily since the mid-1990s and hit 1.7 per cent of GDP in 2007, while in the US it exceeded 2 per cent of GDP over two consecutive years between 2000 and 2001 (see figure 4.5 over).

³⁵ Eurostat's definition of 'innovation active' includes firms that have undertaken product or process innovation that is ongoing or has been abandoned, as well as forms of organisational and marketing innovation.

When government expenditure is added to this figure, R&D intensity³⁶ in the UK is in line with the European (EU-27) average at approximately 1.8 per cent. However, it is below the level recorded in the US, Germany and France. In part, the gap between the UK and Germany may reflect differences in the sector mix of these economies: on the whole, there is less R&D expenditure in financial services and more in manufacturing, and the UK does relatively more of the former while Germany does more of the latter. Yet, this does not explain why the UK lags behind the US and France on this particular measure.

Figure 4.5
Business enterprise
R&D, percentage of
GDP, 1992–2007



Source: BIS 2010a, citing OECD collated data based on national accounts

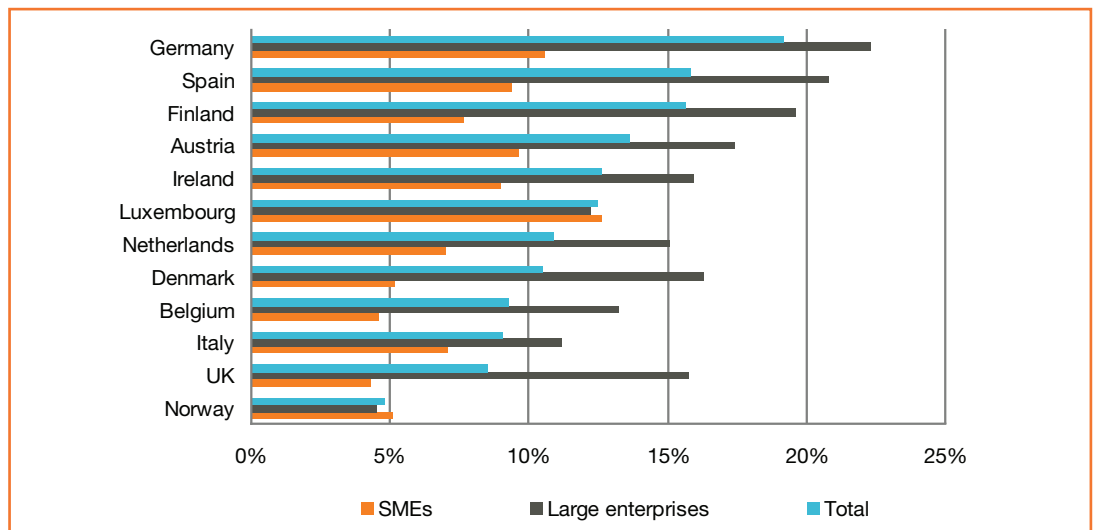
Note: For several countries, the estimates of national saving are built up from national accounts data on gross domestic investment and from balance of payments-based data on net foreign investment.

US data excludes most or all capital expenditure.

Of course, there are several problems with relying on R&D spending to gauge the scale of innovation in the economy, not least because it uses a measure of input to assess the level of output. Nevertheless, output measures of innovation show similar trends.

First, UK companies tend to be less successful in generating turnover from product innovation than many of our European competitors. In 2006, the UK ranked 11th in the EU for business turnover derived from product innovations as a percentage of total turnover activity, with only 8.5 per cent of total sales attributed to product innovation (compared to 19.2 per cent for their German counterparts). Moreover, the UK relies heavily on large firms to generate this kind of turnover: In 2006, only 4.3 per cent of total turnover in UK SMEs was attributable to product innovation, the lowest share among SMEs in the 12 EU member states surveyed by Eurostat (see figure 4.6).

Figure 4.6
Share of turnover from
product innovations,
percentage of total
turnover, all enterprises,
2006

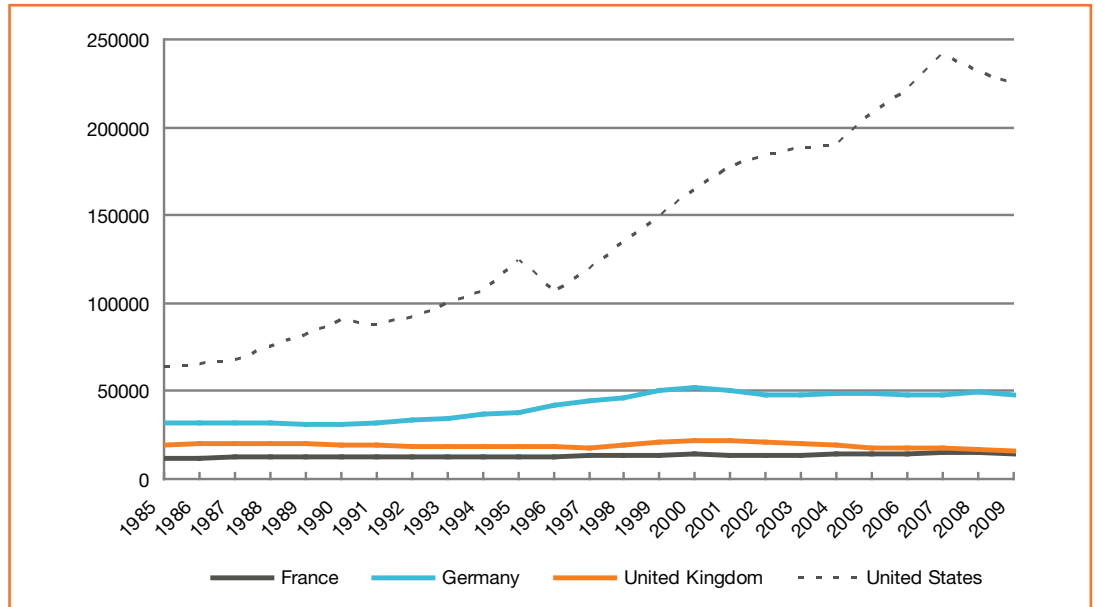


Source: Eurostat, cited in BIS 2010a

36 The total level of expenditure as a share of GDP.

Second – and directly related to this – the UK’s record on patenting has also lagged behind our competitors, particularly Germany and the US, which may help to explain the relatively low levels of profitability from product innovation in the UK. According to statistics from the World Intellectual Property Office, over the period 1998–2008, UK residents filed on average total of 19,204 patent applications per annum with the Patent Cooperation treaty and national patent offices. In contrast, US residents filed an average of 146,544 patents each year over the same period and Germans filed 42,472³⁷ (see figure 4.7). This means that while both Germany and the US file approximately 0.0005 patents per person per year, the UK manages to file only 0.0003 per person.

Figure 4.7
Patent applications,
total number filed by
residents, 1985–2009



Source: World Bank / World Intellectual Property Organization (WIPO), *WIPO Patent Report: Statistics on Worldwide Patent Activity*. <http://data.worldbank.org/indicator/IP.PAT.RESD/countries/1W?display=graph>

Furthermore, there is some evidence to suggest that the UK is failing to innovate at scale and to accrue new intellectual property rights in new and emerging growth sectors. According to OECD indexed data, the UK registered relatively fewer patents in new growth sectors per capita of the population than its G7 competitors between 2005 and 2007 (outperforming only Canada and Italy) and was below the OECD average. While UK firms have performed relatively well in health-related patents – an indicator of our strong pharmaceutical industry – we have performed less well in other sectors, such as environmental and low-carbon technologies and nanotechnologies (see table 4.3).

Table 4.3
Acquisition of patents in
new growth sectors*

Country	Environment-related patents 2004–06	Health-related patents 2004–06	Biotechnology patents 2004–06	Nano-technology patents 2004–06	Total patents per capita 2005–07
Canada	159.7	189.5	201.2	115.38	63.4
France	112.8	109.8	112.4	128.31	117.8
Germany	138.8	102.1	86.0	123.29	222.1
Italy	133.0	148.6	99.5	84.45	38.4
Japan	161.1	106.7	109.2	158.78	335.3
UK	125.7	175.0	142.5	116.86	80.6
US	72.5	183.8	169.2	189.62	157.4

Source: OECD (2009), *Science, Technology and Industry Scoreboard*. http://www.oecd.org/document/10/0,3746,en_2649_33703_39493962_1_1_1_1,00.html

*All variables are OECD-based indexes with OECD average = 100.

37 The number of patents filed by non-residents shows similar trends.

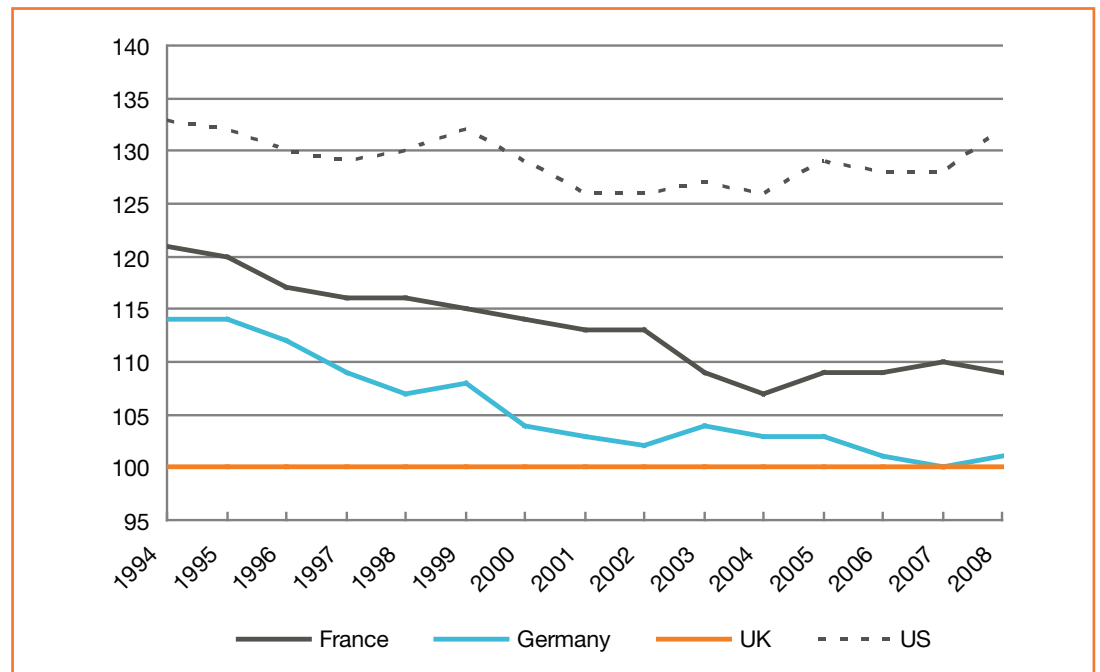
However, it is important to bear in mind that innovation takes a variety of forms, beyond R&D, product development and patenting. As noted in section 4.1, the UK performs significantly better on intangible investment and, in particular, compares favourably with Germany and France on ‘hidden innovation’; which according to NESTA (2009) includes activities such as organisational improvement, market research, advertising and branding, software development, and training for innovation).

Nevertheless, the UK does appear to have a significant weakness in this area and although the government has taken steps to protect its science budget from the worst of the spending cuts, more needs to be done to encourage businesses to invest in research, to increase the commercialisation of the best new ideas and to support firms to innovate their business models and practices. NESTA (ibid) has argued the UK is a ‘mid performer’ in terms of having the wider conditions required for successful innovation, with notable shortcomings apparent in access to finance for businesses seeking to innovate and the use of government procurement to stimulate innovation.

At the same time, as mentioned above, putting in place the broader building blocks to support innovation is desirable in terms of the positive knock-on effects this can bring to the wider economy, not least on productivity.³⁸ Although there have been significant productivity gains made in recent years, productivity in the UK remains lower than in our major competitors.

GDP per head in the UK increased faster than in any other G7 economy between 1994 and 2008. As figure 4.8 shows, we have also substantially closed the gap for GDP per individual worker with France and almost eliminated this gap with Germany (although we have registered only a slight improvement against the productivity of the average US worker). In part, this reflects the fact that UK workers increasingly spend more time at work than their European counterparts, but work shorter hours on average than US workers.

Figure 4.8
GDP per work,
index UK = 100,
1992–2008

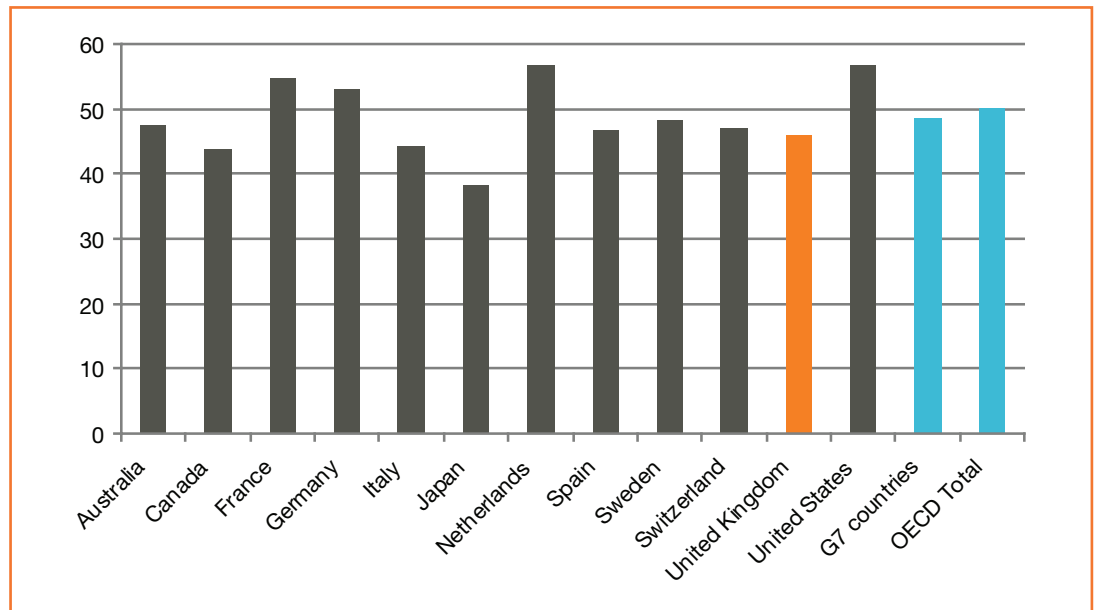


Source: ONS, cited in BIS 2010a

Nevertheless, according to the McKinsey Global Institute (2010), overall productivity levels for the UK are still 17 per cent below those of the US, 14 per cent lower than France and 10 per cent lower than Germany. This is similar to the latest OECD calculations of GDP generated per hour worked, which show that despite being higher than the OECD average, UK worker productivity is still approximately 20 per cent lower than in the US, 14 per cent lower than in France and 10 per cent less than Germany (see figure 4.9 over).

³⁸ There is a strong body of evidence to suggest that various forms of innovation are positively correlated with higher levels of productivity. See for instance OECD 2009b, Griffith et al 2006 and Nickel and Van Reenen 2001.

Figure 4.9
GDP per hour worked,
current prices,
US\$, 2009



Source: OECD i-library, 'Breakdown of Gross Domestic Product per capita in its components'. <http://www.oecd-ilibrary.org/content/data/data-00496-en>

In terms of pinpointing where today's productivity problem lies, part of the answer resides in the nature and size of individual businesses. Large firms in the UK – particularly, but not exclusively, those that compete in international markets – often compare favourably with their overseas counterparts on productivity and ability to gain market share. But the UK also has a 'long tail' of smaller firms in domestic sectors, which are not open to the same level of overseas competition and have relatively low levels of productivity. The McKinsey Global Institute (2010) partly attribute this weakness to poor management structures and processes within UK SMEs and, in a separate commissioned study, found that UK management scores are on average 10 per cent lower than the US and less than France and Germany (Bloom et al 2007).

McKinsey have also suggested that the UK suffers varying levels of productivity performance from one sector to the next and that the answer lies in tackling productivity 'within sectors' (rather than trying to alter the UK economy's sectoral mix). In particular, McKinsey single out the performance of the services sector. According to their analysis, local services, business services, and professional and financial services together account for up to two-thirds of the productivity gap between the UK and the US (business services are up to 40 per cent less productive in the UK than in the US). In contrast, manufacturing has accounted for over 25 per cent of total productivity growth in the UK since 1995, which is in part due to the steady reduction in the size of the workforce employed in the manufacturing sector over this period (McKinsey Global Institute 2010: 7).

4.4. Limited presence in emerging markets

The UK's presence in international markets has changed markedly over the last 60 years.

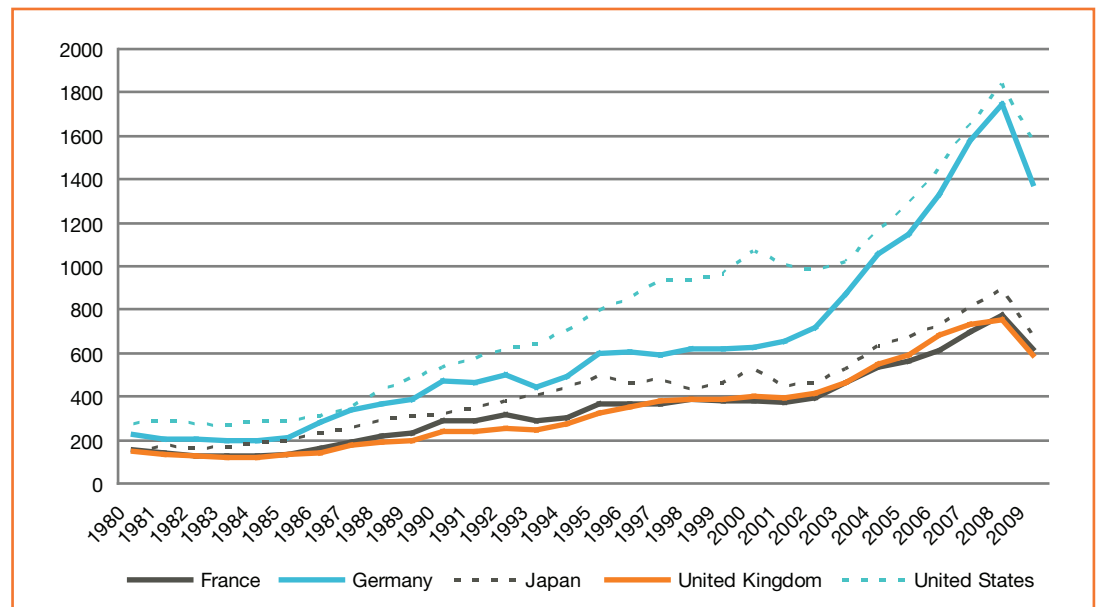
Firstly, our share of exports in the global economy has declined significantly. In 2009, the UK accounted for less than 3 per cent of global exports, compared to over 10 per cent in 1950 (Ernst and Young 2011).

While this downward trend has been experienced by other developed countries as well, even among this group the UK's global export share has fallen more rapidly, to the extent that since the 1990s we have consistently posted a trade deficit (see figure 1.2 above). The problem appears to have begun in the early 1980s, when – partly due to North Sea oil production and partly as a result of extremely tight monetary policies – sterling's exchange rate rose significantly. This led to a marked deterioration in the trade balance in non-oil goods, peaking when the 'Lawson boom' led to a surge in imports in the late 1980s.

There was a brief respite in the mid-1990s, when UK companies enjoyed a boost to their competitiveness after sterling was ejected from the European exchange rate mechanism (ERM), but since then there has been a steady deterioration in the overall trade balance and in the balance in goods, despite surpluses being recorded for services. Capital inflows to the City, driving the exchange rate higher and so making other industries less competitive, are part of the explanation for these trends. The recession in 2008 and 2009 led to only a temporary and very small improvement in the trade balance.

Second and commensurately, although the quantity and value of UK exports has steadily increased, especially since the early 2000s, the exports of Germany and the US in particular, have increased at a greater rate (see figure 4.10). As a result, by the end of 2009 the total value of German exports (\$1376.86 billion) was more than double the value of UK exports (\$588.6 billion) despite Germany's economy being only one-third larger than the UK's. Similarly, while UK exports contributed 27.7 per cent of GDP in 2009, exports were responsible for 40.8 per cent of GDP in Germany (although it should be noted that they accounted for only 11.2 per cent of GDP in the US).³⁹

Figure 4.10
Exports of goods and services, US\$, 1980–2009



Source: IMF data mapper, balance of payments statistics. <http://www.imf.org/external/datamapper/index.php>

While exports paint a fairly negative picture of the UK's presence in overseas markets, our record on foreign direct investment (FDI)⁴⁰ is notably better and has been on par with our competitors. In 2007, the total sum of UK equity and capital investments in overseas markets was worth a record \$275,521 million compared to \$179,572 million of German investments and \$169,105 million of French investments. Expressed as a percentage of GDP, net outflows of UK investment have been amongst the highest, if erratic at times, with notable peaks of 16.2 per cent in 2000 and 11.9 per cent in 2007, before falling to 2.1 per cent in 2009 (see figure 4.11 over).

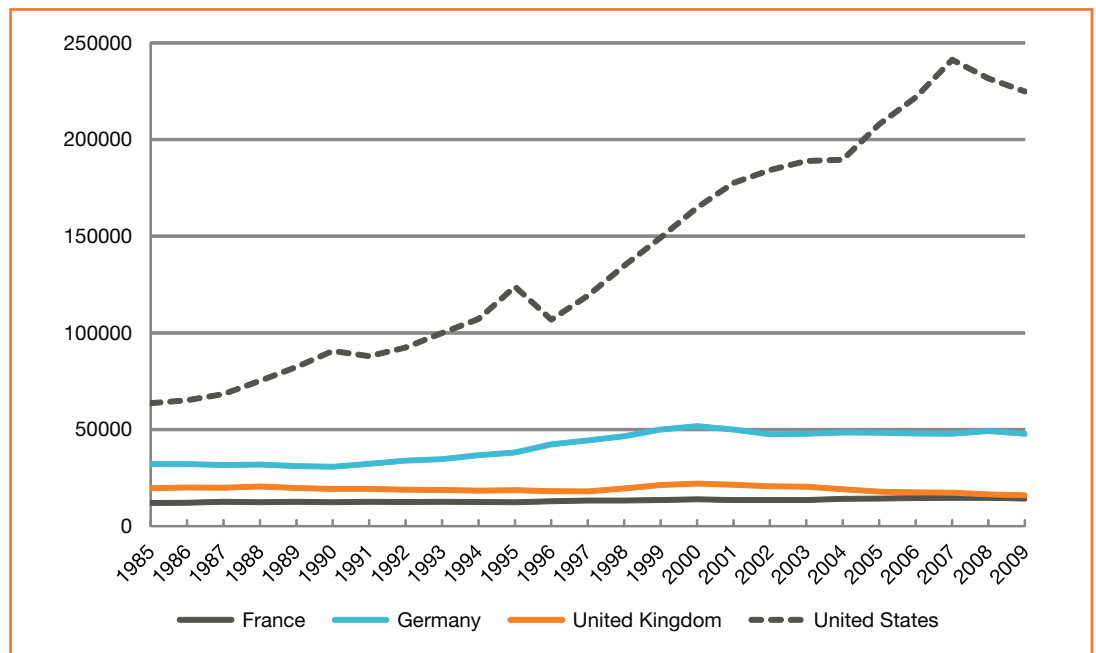
It is also worth noting that foreign investment coming into the UK has been relatively strong since the early 2000s, rising to \$175,973 billion or 8 per cent of GDP in 2005. As with other advanced economies capital inflows into the UK were affected negatively during the recession, but were still higher than Germany and France (although less than the US), which suggests that the UK is deemed a favourable destination for foreign business and investors.⁴¹

39 See World Bank data 'Exports of goods and services (% of GDP)' (last accessed 11 August 2011). <http://data.worldbank.org/indicator/NE.EXP.GNFS.ZS>

40 The World Bank defines foreign direct investment as the 'net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments.' See <http://data.worldbank.org/indicator/BM.KLT.DINV.GD.ZS>

41 See OECD data 'Inflows of foreign direct investment' (last accessed 11 August 2011). http://www.oecd-ilibrary.org/economics/oecd-factbook-2010/inflows-of-foreign-direct-investment-table_factbook-2010-table80-en

Figure 4.11
Net outflows of FDI,
percentage of GDP,
1995–2009



Source: IMF, International Financial Statistics and Balance of Payments databases, World Bank, Global Development Finance, and World Bank and OECD GDP estimates (last accessed 22 June 2011). <http://data.worldbank.org/indicator/BM.KLT.DINV.GD.ZS>

However, despite this relatively strong performance in FDI, the data is coloured by the fact that a large proportion of outward investment has been in financial services rather than the more diverse range of sectors which would constitute the rebalancing currently focused upon by policymakers and which would help improve export performance.

For instance, in 2007, 25.5 per cent of total outbound FDI (or £40,580 million) was invested in financial services. The majority of this (£30,374 million) was invested in other EU countries. Other main recipients of UK FDI outflows in 2007 were transport and communications (£45,490 million) and to a lesser degree chemicals, plastics and fuel products (£18,562 million) and mining and quarrying (£17,795 million)(ONS 2011). And although the financial services sector's share of FDI outflows collapsed in 2008 (£1,820 million, less than 2 per cent of total outflows) it recovered rapidly in 2009 (£6,042 million, or 28 per cent of total outflows).

Similarly, inward investment into the UK has also been directed at financial services. In 2007, prior to the crisis, £41,297 million was invested in the financial sector or 49 per cent of total inbound FDI (£84,885 million) that year. This represented an increase on the previous year (2006) when £13,283 million or 16 per cent of FDI was invested in the City.

Turning from the UK's presence in international markets generally to the UK's role in emerging markets in particular, the evidence suggests that this is still a fairly minor part of the UK's overall trade and international investment profile. According to the ONS (ibid), only about 6.6 per cent of UK exports (goods and services) currently go to the BRIC economies. Of these, in 2010, the UK exported most to China (approximately 2.9 per cent of total UK exports, valued at £7,609 million in 2010), followed by India (1.5 per cent), Russia (1.4 per cent) and Brazil (0.8 per cent, or £2,219 million). It is telling that the combined percentage of UK exports to Belgium and Luxembourg in 2010 (5.1 per cent, valued at £13,607 million) was almost twice the percentage of UK exports to China (ibid: 69) – and yet the combined GDP of Belgium and Luxembourg amounts to less than 9 per cent of China's.⁴²

In contrast, German exports to China totalled €53.5 billion in 2010, approximately 5.6 per cent of all German exports in that year.⁴³ This represents a significant rise of 44 per

⁴² According to IMF data, the combined GDP of Belgium and Luxembourg was \$520.63 billion in 2010. In the same year, China's GDP was \$5.88 trillion. See the World Economic Outlook database for April 2011: <http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx>

⁴³ See the German Federal Statistical Office's interactive foreign trade atlas <http://ims.destatis.de/aussenhandel/>

cent on 2009 figures, far outpacing the overall surge in German exports of 18.5 per cent⁴⁴ over the same period. Even during the 2008–2009 slump in German exports – when total exports declined by 17.9 per cent – German exports to China increased at a rate of 7 per cent and at the end of 2009 accounted for 4.5 per cent of total German exports.⁴⁵

Similarly, in 2009, US exports of goods to China accounted for 6.6 per cent of total US exports in goods (\$1,056.9 billion). China was ranked third-most popular destination for US goods that year, behind Canada and Mexico.⁴⁶ The only country to export a lower percentage of its total exports (goods and services) to China than the UK was France, at 2.3 per cent (€7.9 billion out of a total of €340.9 billion).⁴⁷

The UK's export performance in other emerging markets is also rather weak, with exports to South Africa amounting to 1.1 per cent of total UK exports in 2010 (£2,891 million). Similarly, Singapore was the destination for 1.3 per cent of UK exports (£3,448 million) and Malaysia 0.5 per cent (£1,272 million) (ONS 2011).

In terms of FDI stock too, the UK's performance in emerging markets has been mixed and we continue to lag behind several of our rivals, particularly in terms of investment in China. According to data collated from national sources by UNCTAD and presented in a recent BIS report (2010b), UK FDI in China has been significantly lower than that of Japan, the US and Germany and similar to that of France over the period 1997–2007. In 2007, UK stock investment in China was worth approximately \$4 billion, compared to approximately \$17 billion worth of German stock, \$25 billion of US stock and \$49 billion of Japanese stock in that country.

UK FDI stock in India (again, around \$4 billion in 2007) presents a more positive picture, being comparable to that of Germany and Japan, and higher than France. In comparison to the US, however, UK performance looks weaker. US FDI stock in India has increased rapidly since 2003, and in 2007 its value was more than twice as much as the value of that of the UK, Germany or Japan (BIS 2010b: 78–79).

As for investment flows – the other main measure of FDI – the trends are similar in terms of our presence in the Chinese and Indian markets. According to OECD data, average net UK FDI flows over the period 2000–2010 into China amounted to \$955.8 million per year, compared to \$1,990 million for Germany, \$3064.2 million for the US and \$786.3 million for France – although there were huge negative FDI flows registered by the US in 2010 (see figure 4.12 over). Average outward FDI flows to India over the same period were slightly better in relation to our competitors: \$623.3 million for the UK, compared to \$800.33 million for Germany, \$1,405 million for the US, and \$316.6 million for France (see figure 4.13 over).

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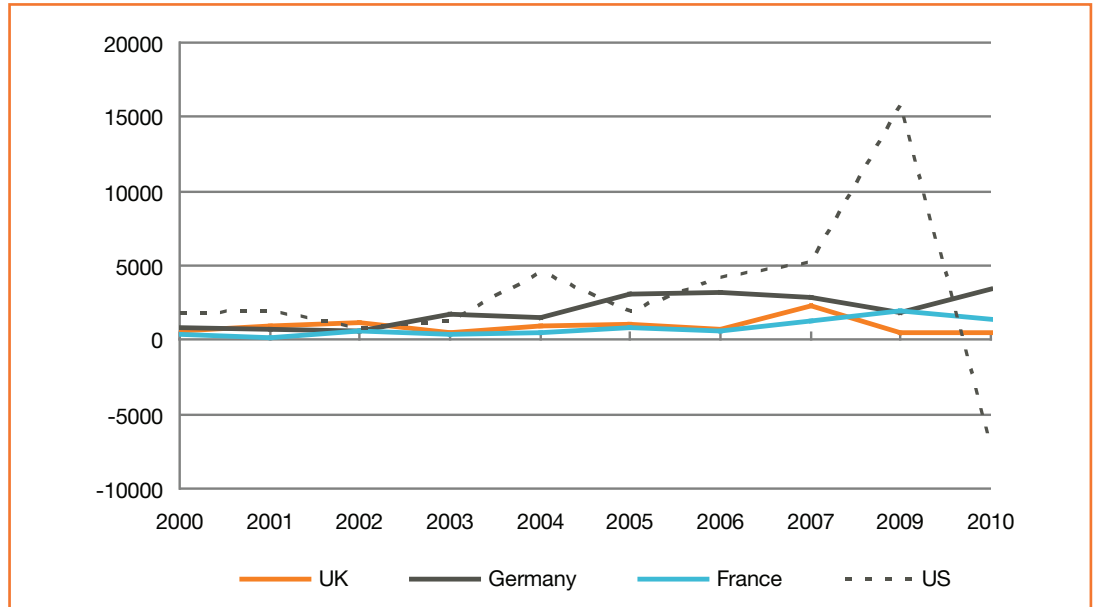
44 See http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/EN/press/pr/2011/02/PE11_052_51.templateld=renderPrint.psm!

45 See German Federal Statistical Office (2010) 'German exports to China increasing 7% in 2009': http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/EN/press/pr/2010/03/PE10_111_51.temp.lateld=renderPrint.psm!

46 US Census data: <http://www.census.gov/foreign-trade/statistics/highlights/top/top0912yr.html>

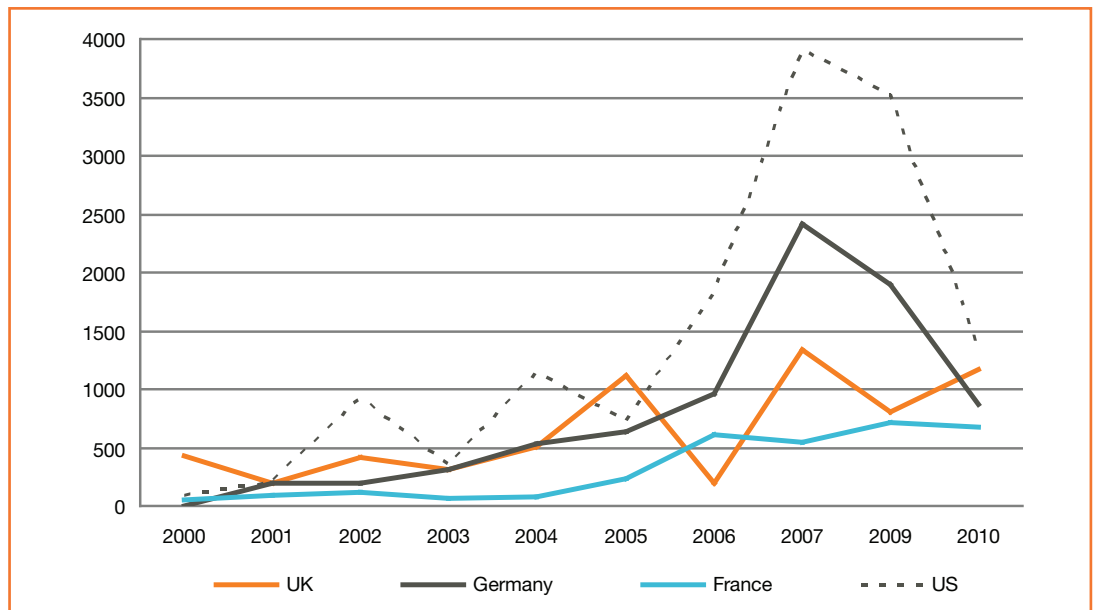
47 See Institut National de la Statistique et des Études Économiques: http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATTEF08467.

Figure 4.12
FDI in China, outward
flows by reporting
country, 2000–2010



Source: OECD, graph compiled by the authors⁴⁸

Figure 4.13
FDI in India, outward
flows by reporting
country, 2000–2010



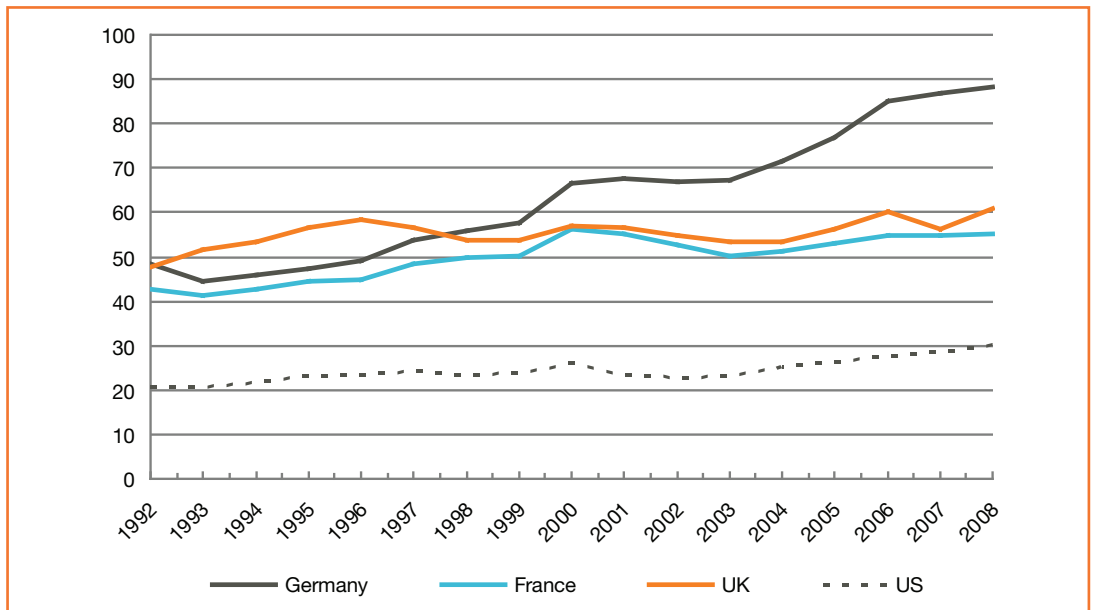
Source: OECD, graph compiled by the authors⁴⁹

Lastly, it is also worth noting that the degree to which domestic firms are exposed to international competition also depends on the extent to which the economy is deemed to be open to trade and foreign investment. According to the OECD, we have consistently been judged ‘more open’ (the total value of exports and imports divided by GDP) than the US and on a par with France. However, since the late 1990s, Germany has been increasingly more open to trade than the UK and in 2008 imports and exports accounted for approximately 88 per cent of German GDP.

48 Data for ‘FDI flows by partner country’ is available at <http://stats.oecd.org/Index.aspx> (last accessed 21 June 2011).

49 ibid

Figure 4.14
Openness to trade and
foreign investment,
1992–2008



Source: OECD (See BIS 2010a)
Note: Openness = (exports + imports)/GDP

Taken together, this data suggests that the UK has lagged behind many of our key competitors when it comes to exports in general and in exports to emerging markets in particular. The UK performs more impressively on outward FDI but less so when we focus on FDI into emerging markets. We also have to keep in mind that a large proportion of UK overseas investment channelled into the financial services sector, particularly those of other European countries.

5. POLICY SOLUTIONS

UK business must be able to adapt, transform and innovate if it is to adjust to the challenges, and potential, of web 2.0 technologies and the rise of the Asian century.

But can it? The evidence we have explored in this paper paints a worrying picture. It suggests that in the key capacities which allow an economy to adjust positively to technological and geo-economic change – business investment, workforce skills, tendencies towards innovation, and presence in emerging markets – the UK economy suffers from some important, entrenched weaknesses.

The consequences of these problems can be seen from tracing our past failures to adapt to previous evolutions of the economic system. And although little can be firmly predicted in the world of economics, there is a risk which must be taken seriously that, if the UK fails once again to address its long-term weaknesses, it will face a reckoning some years down the line.

When considering the way in which policy can respond to these ongoing challenges, it is important to start from the observation that the different approaches that have been taken to economic policy over the past decades, deriving from the various schools of standard economic thought, have each failed to resolve them. Indeed, after a century in which UK economic policy has been guided by pre-war laissez faire, post-war economic planning, 1960s interventionism, Thatcherite deregulation, and finally the inflation targeting and City-focused approach of the 1990s and 2000s, the same four problems still remain.

This is because the analytical lens which has been used to determine the choice of economic policy priorities has remained the same throughout (that is, the relative advantages of state and market in attaining efficiency in allocation), even if the specific policies which were put in place differed over time, sometimes radically. As such, the centrality of these four abiding weaknesses was not recognised and tackled head-on, and other policy matters – such as full employment in the post-war period and trade unions and ‘red tape’ in the 1980s – were prioritised instead, despite being less directly relevant to the long-term performance of the economy. The same mistake is now being made once again, with an excessively sharp focus on the public finances at the expense of most other economic policy areas.

In short, while the emerging school of evolutionary economics has highlighted the importance of strengthening the capacities which allow an economy to adapt to evolutions in technology and power, these lessons have not been taken on board by those with their hands on public policy levers. This, in our view, needs to change.

So what should be done differently? We strongly believe that responsible policymakers need to understand that the global economy and the world of business is undergoing a revolution, that the UK must be equipped with the necessary adaptive capacities, currently lacking, to respond to these shifts, and that they must act decisively to find routes to resolve these long-term economic weaknesses. Failure to do so is likely to leave the UK once again without the means to secure long-term sustainable economic development.

What will work? Here, we can draw from the experiences of our more successful competitors to guide us in selecting potential policy responses: the following section does just that, setting out examples of ways forward in each area. But perhaps even more vital than the specific policies highlighted (because we accept that further policy options and/or variations on these could serve a similar purpose and are worth exploring further), is acknowledging that bold and direct action is required. This is in part because of the pace and scale of the transformation taking place, but also because decades of mere policy tinkering have failed to resolve the long-term problems outlined above.

We also think it is important to sequence our policy responses to these challenges in a careful manner. Specifically, it is our view that little progress can be made towards the achievement of sustainable long-term growth for the UK economy without addressing the long-run problem of relatively low, skewed business investment.

Once the question of the supply of capital to business has been answered then it is vital to create the conditions under which the demand for that capital can grow. For this reason we urge a set of policies designed to improve the UK's performance on skills and on business innovation.

On this foundation, the UK has a fighting chance to compete effectively across a range of export sectors in the global economy and particularly in emerging markets. Further policy reform can then be initiated to give extra support to those companies seeking an overseas presence.

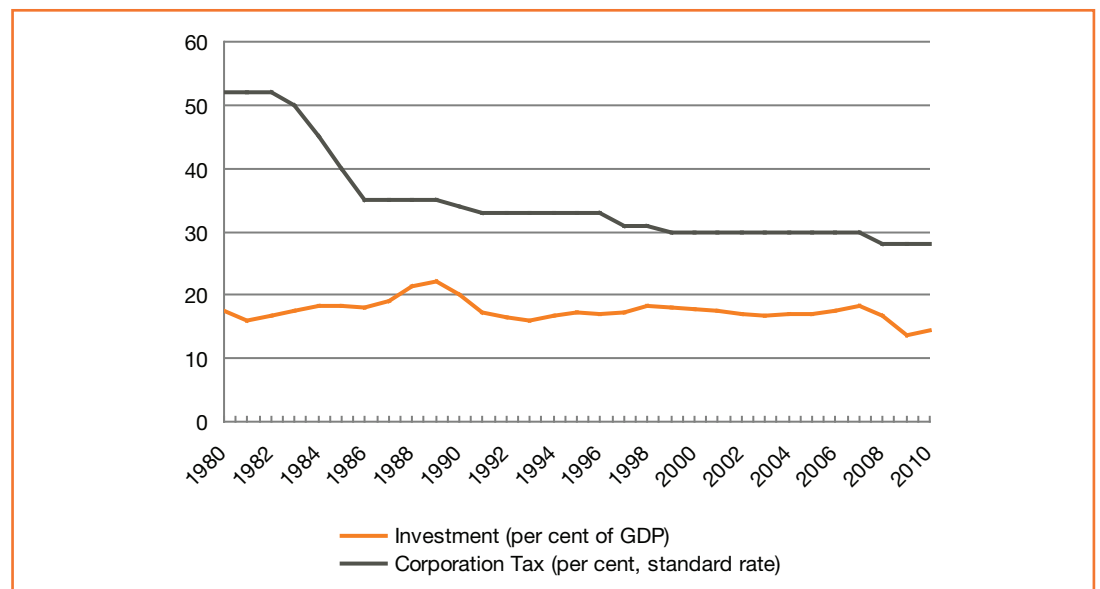
5.1. Addressing low and skewed business investment

The data presented in section 4.1 above suggests that the UK has for many years suffered from relatively low business investment relative to our major competitors. In addition the investment which does occur has historically been skewed heavily towards financial services and property. The (perhaps inevitable) result has been declining innovation and growth across most of the economy, including those export-led sectors which politicians of all hues now agree need to expand in order to provide the UK with a more globally competitive and stable economy.

The government's strategy for dealing with the problem has been to increase the rate of return on investment by enacting a supply-side revolution akin to that implemented in the 1980s, while also cutting corporation tax. This approach seems highly unlikely, however, to raise business investment to levels that compare favourably with our competitors, for a number of reasons.

Firstly, because the major steps which could be taken in this regard (major privatisation, deregulation and the restriction of the unions) have already been taken, and were not reversed by Labour during its time in power. There seems relatively little room to extend this further, and certainly not in a way which is likely to lead to radically different performance. Secondly, however, and more important, it is clear that this strategy simply did not work. It didn't work in the short run – while the late 1980s did see an increase business investment it was short-lived and was directed into precisely the sectors (property and finance) which the government no longer wishes to see acting as sole drivers of growth. And, as the data provided in the previous chapter showed, it hasn't worked in the long run, with our business investment levels still trailing our competitors. And this is despite, for example, a drop of corporation tax from over 50 per cent in the early 1980s to less than 30 per cent now (see figure 5.1).

Table 5.1
Corporation tax and investment



Source: IMF, Institute for Fiscal Studies⁵⁰

⁵⁰ Many thanks to Duncan Weldon for this graph.

A more fruitful approach, we believe, is to observe those countries most similar to the UK which have historically higher levels of business investment and seek to understand the ways in which they have acted differently. Clearly, higher levels of business investment will be encouraged by a variety of policies, and other factors, rather than any one measure alone. However, one outstanding feature of most other major economies with higher levels of business investment but which is absent in the UK is greater direct state involvement in investment. This can take the form of a state investment bank (as in Germany and Scandinavian countries) or a major state-led investment fund (as in France) or some form of major private investment vehicle shaped and fully guaranteed by the state (as in the US).

The best known models for major state investment include the KfW bank in Germany and the Nordic Investment Bank. The KfW has been particularly important for channelling investment in Germany and is listed as one of the five biggest German banks. In 2009, it provided finance to a record number of domestic businesses and its balance sheet total at the end of the year was worth over €400 billion (up from €334 billion in 2006).⁵¹ In 2009, KfW's total lending volume amounted to €384 billion and it also made a €1.1 billion profit.⁵²

According to Kamal Ahmed (2010), the KfW operates in a straightforward way:

'Corporate customers apply to their own, private bank for financing. The bank then forwards the application to KfW which then assesses the project for the "fit" with its key strategic targets, [namely] ... to promote SMEs, entrepreneurialism, clean-technology, nationally important infrastructure projects and international project finance. The bank can then re-finance the loan at favourable rates because of its government guarantee and its access not only to the capital markets but also to federal budgets.'

The Nordic Investment Bank (NIB) is owned by the five Scandinavian and three Baltic countries (Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden) and operates on a similar model. In 2010, it registered total assets worth €26,582 million and a profit of €131 million.⁵³ The bank has an authorised capital structure of approximately €6,142 million, which is supplied annually by NIB member countries according to agreed proportions of their GDP.⁵⁴ It then deploys this capital on the international capital markets in order to acquire funds for lending (via favourable long-term loans and guarantees).

NIB focuses its activities on providing investments in infrastructure, low-carbon and environmental technologies, the corporate sector and SMEs. The Bank's ordinary lending ceiling corresponds to 250 per cent of the authorised capital stock and accumulated general reserves. It also has special lending facilities guaranteed by the member countries.

These are not the only models of major state investment. The US, for example, has since the 1950s made wide use of 'small business investment companies' which, while being private investment firms, enjoy a full state guarantee as long as they can secure an official licence, which requires them to direct their investment to small, innovative business activity. France too has a history of large-scale strategic investment funds run by the state.

The reason that these facilities increase levels of business investment is not difficult to deduce. State funds can be run with a remit to invest in areas that are less immediately attractive to the commercial banking sector, that is, those investments which combine lower immediate returns to the investor, greater positive externalities for the economy as a whole, higher levels of risk and longer timeframes. In contrast to those of short-term profit-maximising investments, these are features of the types of business innovation that can arguably provide an economy with improved sustainability and competitiveness over the longer term. It is this gap that state-run investment plugs.

51 http://www.kfw.de/kfw/en/KfW_Group/About_KfW/Zahlen_und_Fakten/KfW_auf_einen_Blick/Bilanzsumme.jsp

52 http://www.kfw.de/kfw/de/III/Download_Center/Finanzpublikationen/PDF_Dokumente_Berichte_etc./3_Finanzberichte/100607_FB09_FINAL_EN_InternetPdf.pdf

53 http://www.nib.int/about_nib/key_data

54 http://www.nib.int/about_nib/capital_structure

It isn't that the UK is unaware of these challenges and it does have some policy tools which are meant to address them. For example the government announced plans last year for a £1.5 billion 'Business Growth Fund' to provide equity finance to established SMEs with a strong track record and viable growth plans which need capital to expand. The government has also said it will extend its share of Enterprise Capital Funds which will provide an additional £300 million in equity for early-stage SMEs 'with the highest growth potential'.⁵⁵ However, these are limited sums unlikely to bring about the step-change that is required in this area.

Instead, we would argue for the state investment bank model over other models in operation. Firstly, a fully fledged bank has the capacity to raise large funds on the commercial markets, backed by a smaller capital base provided by the state. Secondly, a state investment bank could be set up on a strictly commercial basis to be run by an independent board subject to a simple remit to generate a long-term return based on investment in British business in a diverse spread of sectors. This is important because it addresses fears, regularly stated and borne out in some contexts, that state led investment is subject to interference from politicians or state officials who are motivated by political rather than commercial gain and, at the same time, also lack understanding of effective investment practices.

Some express fears that state investment focused on domestic business risks a form of protectionism, which would damage the benefits the UK secures from being a highly open economy. But a glance at the comparative data on openness to foreign trade and investment presented in section 4.4 above reveals this need not be a problem (BIS 2010a). France has remained only marginally less open than the UK for many years, while Germany was rated as more open than the UK in the late 1990s and has very significantly widened the gap with the UK ever since, to the extent that a full 20 per cent more of German GDP is generated by foreign trade and investment than in the UK. Hence, rather than fostering an insular protectionism, state led investment has arguably enabled Germany to be more not less active in the global economy.

It is notable that in one particular area the argument for a state investment bank has been won. The government has recently confirmed that it will establish a Green Investment Bank capitalised by £3 billion of public money and designed to support low-carbon and renewable energy industries as well as energy efficiency programmes. From our perspective, this is a welcome step but it only very partially addresses the matters raised in this paper, given its narrow remit. While there can be little doubt that higher levels of 'green' investment are required to reduce reliance on fossil fuels and to ensure the UK takes advantage of the growing global market in low-carbon technologies, this paper has made it clear that there is also a much wider problem of investment in many different types of business which needs to be addressed.

In addition, the proposed bank's capitalisation is relatively low. Ernst and Young⁵⁶ has estimated that a state investment facility would need initial capitalisation of up to £6 billion (leveraging £100 billion in additional funds) just to address the UK's short-term low carbon investment needs.⁵⁷ In this sense, the proposed £3 billion capitalisation is likely to be much too low to achieve even its own important but narrow aims, let alone to address the wider business investment and innovation imperatives we have identified (which would also require a widening of the bank's mandate). There must also remain doubts about the source of capital funding for the bank, which currently relies on a rather vague commitment to funnel funds from the sale of state assets into the bank.⁵⁸

55 See http://www.hm-treasury.gov.uk/fin_sector_banking_business_lending.htm

56 See <http://www.ey.com/UK/en/Newsroom/News-releases/Power---10-10-13---Green-Investment-Bank-needs-to-plug-UKs-C2%A3370-billion-low-carbon-funding-gap>

57 However, by 2025, the report estimates that a total of £450 billion of investment in low-carbon technologies and energy infrastructure will be needed.

58 The authors identify approximately £50–£80 billion of existing capital currently available from conventional funding streams (utility companies, project finance and infrastructure funds), meaning that a green investment bank would need to plug a gap of at least £370 billion in the long term (ibid).

As such, we would urge the government to take the admirable principles behind the green investment bank and expand the plan to capture a wider range of business sectors with a larger capital base, and to also focus on infrastructure as a particularly crucial component of its activities. Highly innovative and productive businesses require the best infrastructure⁵⁹: whether modern transport for freight, high-speed broadband, access to smart energy grids for clean-tech start-ups, or state-of-the-art port infrastructure to support exports. Yet, the UK is ranked 33rd out of 139 countries for overall infrastructure quality, according to the latest World Economic Forum Global Competitiveness survey (2010).

Take one particular sector hampered by outmoded infrastructure: retail. Congestion on Britain's motorways costs UK retailers an estimated £10 billion per year on top of standard freight costs. The McKinsey Global Institute (2010) estimates that over £350 billion will be required over the next two decades merely to maintain the UK's existing transport infrastructure.

Similarly, our energy generation infrastructure will require as much as £170 billion in investment over the same period, according to the CBI (2009: 9). Upgrades to the national grid's existing fleet of centralised power stations will need to include measures to modernise the distribution and transmission system so that it can accommodate a scaling-up of renewable electricity to the grid. Our electricity infrastructure will also need to be equipped with new storage capabilities for intermittent power sources such as wind and solar.

A state investment bank could fund much of the needed infrastructure upgrading. Gerald Holtham (2011) has argued persuasively that government investment in infrastructure can be cost-effective and need not add to the national debt – so long as investment is targeted at marketable assets such as toll roads, high-speed rail and energy grid systems, which deliver tangible returns on investment. The cost of capital tends also to be cheaper for government than it is for private sector, which adds weight to the claim that government is best-placed to invest in these kinds of infrastructure projects.

For all these reasons, this should be the first priority of any policy package which aims to help the UK survive the Asian century.

5.2. A new long-term skills strategy

There is little dissent among policymakers or economists that the skills of an economy's workers have a fundamental impact on the capacity of that economy to innovate, generate employment and improve productivity. Raising the level of the UK's skills base has therefore long been an objective of politicians, trade unions and business leaders.

The Labour government invested significant resources in education and training programmes designed to improve the basic and intermediate skills of the UK workforce. As was noted in section 4.2, this produced a clear improvement in overall skill levels as measured against a number of international benchmarks. However, despite this improvement, the UK still lags behind our major competitors on many of the same measures. Too many adults still lack the basic and low-level skills needed in large numbers of jobs and the UK's stock of intermediate and technical skills remains low in comparison to other leading economies.

The current government's policy remains unclear. While the commitment to fund and expand apprenticeships remains in place, the Train to Gain⁶⁰ scheme worth £1 billion in 2010 has been ended and the right to request time off to train has also been abolished. The Department for Business, Innovation and Skills is currently consulting on its wider skills policy and is investigating the possibility of introducing new professional standards and voluntary levy-based arrangements⁶¹ in several – though, at the time of writing, unspecified – sectors and occupations. The new Growth and Innovation Fund (GIF) – worth £50 million a year – is intended to support these and other employer-led skills development initiatives.

59 Dieter Helm (2008) has argued that superior infrastructure is the reason why, despite having a less flexible workforce, France and Germany have higher levels of productivity than the UK.

60 Train to Gain was quite widely criticised for using public funds to pay for training that companies arguably would have done anyway without the extra funding.

61 See <http://www.ft.com/cms/s/0/e75b65bc-f1c2-11df-bb5a-00144feab49a.s01=1.html#axzz1FFp7we1X>

These commitments, despite remaining rather vague, are positive first steps. Yet on their own, they will not tackle the breadth of the challenges that the UK faces in creating a world-class skills base. What is needed is a new approach to skills policy that takes a long-term evolutionary perspective – working far more closely with businesses and providers to address current and future supply needs, the problem of low skills utilisation rates among many British employers, and imbalances between the supply and demand for skills.

For it to be effective, the strategy will require commitment and collective cost-sharing on the part of the state, employers and individuals across different sectors and regions of the UK. It will also need to be grounded in foresight, with government explicitly aiming to identify – in close collaboration with business – those skills which will be relevant to the future UK economy, with its evolving business practices and new technologies.

We believe that a new strategic framework for skills policy should rest on the following four building blocks.

5.2.1. A reformed initial skill formation system for young people

The UK still suffers from a fragmented post-compulsory education and training system that fails to prepare all young people for adult life. As the Wolf report made clear, too many courses lead to qualifications that pay little or no return in the labour market. Drop-out rates and ‘churn’ between courses is high, while many apprenticeships and vocational courses remain inferior to their academic counterparts.

The initial skill formation system should ensure that, by age 25 at the latest, all young people have acquired a good general education, including literacy and numeracy at GCSE A*–C grade level, a broad base of learning, and subject specific skills and knowledge. All programmes of learning – academic, vocational or mixed – should have high standards of educational content, and lead to recognised qualifications that are rewarded in further opportunity for study, higher wages and decent job prospects. Our goal must be to put in place a robust, fully inclusive and high-standards system of post-compulsory education and training, as is commonplace in the rest of the EU and many other leading economies.

Some actions which can help in the achievement of this ambition include expanding the number and variety of apprenticeships to cover a higher proportion of the cohort, and making entry to higher education more accessible through a variety of different learning pathways. Financial support for study should facilitate participation by all young people and should continue to be targeted at those families who need it most.

5.2.2. Long-term strategic planning to connect skills supply with anticipated employer demand

As the analysis above (p27–28) suggests, the UK skills market still experiences a disconnect between supply and demand. There are no simple solutions to this, but there are a number of components which need to be addressed.

A good place to start is with employers’ current demand for skills. The previous Labour government was committed in principle to a ‘demand-led skills system’. However, in practice it ran a target-led policy framework, providing public funds largely to train people in certain volumes of certain qualifications at specified levels. We must move towards a genuinely employer-led approach.

However, while taking employer demand into account is crucial, following the market demand of existing employers will not by itself be sufficient to ensure the economy possesses the skills it needs, either now or in the future. In some areas, large-scale skills training programmes will be required in anticipation of future needs (for example, in emerging or growing industries such as renewable and nuclear energy). In others, generic skills are required that employers may be reluctant to invest in providing, for fear of poaching by competitors.

For these reasons, skills policy needs to achieve a judicious mix of strategic planning and market-responsiveness. Government needs to gain a much better understanding of future skills gaps and an ability to anticipate shortages, and should consult widely with business

– particularly in high-growth sectors in which the UK hopes to be competitive – to support better long-term planning.

To its credit, in its last years in power the New Labour government moved towards accepting a more forward-looking approach with its ‘industrial activism’ strategy (HM Government 2009). And it is encouraging that the recent strategic skills audit conducted by the UK Commission for Employment and Skills (UKCES 2010) highlighted the importance of a forward-looking approach to forecasting and planning for new skills needs – such as to support the low-carbon transition – and the importance of government intervention to stimulate demand. By conducting regular audits of skills requirements with employer associations and providers across key sectors and industries, UKCES will also help to ensure that qualifications and training accurately reflect changing business needs.

Yet, if strategic planning is to work, the relatively weak and unstable nature of the institutional environment that governs the supply and demand of skills will need to be addressed. This is particularly the case in England, where businesses have expressed concern with the strength and remit of skills sector councils (SSCs) (see, for example, Jaffa 2009). While it is important to note that the quality of SSCs varies from one sector to another, many remain weak and their failings are seen as one of the major reasons why ‘employer-driven’ skills strategies have largely failed to take off. If sector skills councils are to survive, they must become genuinely respected leadership bodies for their sectors, commanding resources, respect and commitment from employers, trade unions and the government – otherwise, alternatives must be found.

In terms of the tools that can be used to turn skills forecasts into skills on the shop floor, we believe the government should undertake, as part of its ongoing consultation, a detailed survey of policy options for different sectors and industries. This would include looking at the potential role of incentive mechanisms – such as R&D tax credits for SMEs who invest in STEM training – as well as voluntary training standards, certification schemes and statutory requirements on employers.

In some sectors and industries, there may be a case – as UKCES (2009b) has set out – for expanding and extending licences to practise and professional standards, for instance by setting higher benchmarks to acquire the licence in the first place or by introducing a minimum threshold for continuing professional development required to legally perform the job. This is particularly true in occupations where there are concerns about professional competence and ‘where skills are sufficiently tangible and observable for competence to be verified’ (ibid). Currently, and compared to countries such as the US and Canada, licences to practise or similar regulated professional standards exist in the UK only in a relatively small number of high-skill professional occupations – including legal, accountancy and pension advice⁶² – and in other professions where a lack of adequate training could pose health, safety or financial risks.

Extending licences to practise and professional standards in other high-skill professions where the UK has comparative advantage, such as technical engineering, whether on the basis of voluntary arrangements or statutory schemes, could help to mitigate a common concern of employers: that funds invested in up-skilling a worker will be lost if that worker then exploits their increased employability to take a job elsewhere. At the same time, there may also be a case for raising on-the-job training requirements in a greater number of lower-paid sectors – for instance, social care and the hospitality industry – particularly if it enhances business productivity in the long term and has a levelling-up effect on wage structures (Kleiner and Krueger 2008).

There are, however, many challenges to introducing such schemes and, in the case of licences to practise, more work is needed to assess the extent to which subsequent investment in training by employers has taken place (UKCES 2009b). It is therefore critical that revamped sector skills councils – or new alternative industry-led associations

62 Pension advisors and other financial intermediaries are required to obtain one or more qualification approved by the Financial Services Skills Council. This legal requirement came into force after the pensions and endowment mortgages mis-selling scandals of the 1990s (UKCES 2009b: 47).

– closely scrutinise and review the effectiveness of existing licences before new ones are considered.

On instruments such as levies, the evidence is mixed.⁶³ We would urge the government to look at the experience of other countries⁶⁴ where levy arrangements are more widely used and learn from their application there. A forthcoming IPPR report⁶⁵ will look in more detail at the evidence behind levies and other statutory and voluntary instruments that are designed to encourage business investment in skills across a range of sectors in the UK.

For many SMEs, a lack of capital to support training will remain a key problem. The government has pledged £100 million of investment to support training delivered to SMEs annually and the new qualifications and credit framework enables employers and individuals to access units of training that are specific to their requirements (BIS 2010c: 8) – yet at a time when access to credit is constrained, more innovative ways of freeing up finance to invest in training will be needed.

5.2.3. Strategies to improve the utilisation of skills

Third, it is important to acknowledge that, while policy can encourage firms to invest in training, more needs to be done to enable and encourage businesses to utilise skills. As noted above (p27), many UK companies – particularly although not exclusively SMEs – often lack sufficient capital to deploy skills, and tend to have poorer HR and management structures. If SMEs are to become key assets in the UK's long-term competitiveness, it is critical that these barriers are addressed.

How can policy respond? In terms of improving management performance, Bloom et al (2007) suggest that strong competition, the presence of multinational companies and labour market flexibility are strong drivers of improved management performance – all are things which, paradoxically, the UK has in abundance.

One approach that the government could trial is to encourage formal and informal business networking as a source of learning and knowledge-transfer. UKCES (2009b) has suggested that pilot government funding could be made available for existing and new inter-employer networks, which could be organised on a sectoral, supply chain or geographical basis.

Rather than limiting the focus of these networks to training-related solutions, however, UKCES argues that the networks' remit should be broad, since 'engaging managers in solving wider business problems may hold greater appeal than an initial direct offer of training-related solutions'. Funding, which would be allocated through a competitive bidding process, would help network members pay for administrative costs and their own training procedures, while further incentives, such as access to training subsidies, could be offered to SME members (ibid).

This initiative could be complemented by introducing new collective capacity-building initiatives, such as group training associations, in some sectors, which could help employers to pool resources for management training and HR.

However, the issue of low skills utilisation is more deeply rooted than simple questions of management and funding. Indeed, in many respects it is centred on the models of

63 There is some evidence to suggest that levy systems often do not succeed in allocating funding for training to targeted employer groups, such as SMEs, and can often incur high administration and enforcement costs (UKCES 2009b).

64 There are many variations of levy type arrangements currently in use in other countries. In France, certain sectors are subject to payroll tax exemption schemes, where firms are only obliged to pay the maximum rate if their training expenditures fall short of a predetermined minimum level. The Netherlands, US and Belgium have schemes whereby sectoral bodies collect a proportion of payroll tax contributions from all firms and this is then disbursed to eligible firms that have requested training grants. In Italy, Japan, Spain and Belgium, similar schemes are coordinated nationally and are not sector-specific. In Denmark and the Netherlands, it is also common to have clauses in collective bargaining agreements organised at the sectoral level which specify minimum levels of investment in training – in Denmark, half of the total workforce, employed across some 15 sectors, receive training in this way (UKCES 2009b: 9).

65 This will be published in autumn 2011 as part of IPPR's 'Smarter skills' project. See <http://www.ippr.org/research-projects/44/7137/smarter-skills>

competitive advantage that UK firms have typically hitherto embraced. Cost competition, standardisation, short-term shareholder value, and merger and acquisitions have all been pursued at the expense of long-term investment, organic growth and the cultivation of human capital.⁶⁶ Only when executives take a broader view of their competitive strengths – a broadening which can be promoted by a judicious shaping of their incentives by policymakers – might we expect business demand for and utilisation of skills to change sufficiently for the better.⁶⁷

5.2.4. Sustaining skills in a flexible labour market

Finally, any long-term skills strategy needs to be set in the context of the UK's current labour market policies and the potentially damaging reforms proposed by the Coalition government. The government has recently set out plans to relax employment laws⁶⁸ – for instance, by making it easier to make workers redundant in the first two years of their employment – in the hope of boosting private sector growth and recruitment.

Although businesses tend to welcome greater flexibility in their ability to hire and fire workers, the implications for skills are often ignored.⁶⁹ Flexibility can reduce employers' incentives to invest in skills in the first place, as they can be less sure that those skills will benefit them and not their competitors. Moreover, skills can be lost as workers are made redundant and – when the jobs market is weak – remain out of work or training for long periods. This can be inefficient for the economy as a whole and ultimately for the employer, in the event that they rehire (Coats 2009).

There are many things that the UK can learn from countries such as Denmark. Life-long learning is seen as a critical element of the Danish 'flexicurity' model, with labour market flexibility combined with more opportunities to train and retrain, and relatively high rates of out-of-work benefits.⁷⁰ In contrast, UK expenditure on active labour market programmes (ALMPs) as a proportion of GDP is lower than in many other OECD countries and is highly concentrated on active job-search support. In 2008, the UK spent just 10 per cent of all ALMP expenditure on training, which is much lower than the OECD average of 28 per cent. Even less (five per cent) was spent on 'transitional jobs', which are designed to prepare and support people back into the labour market (Ben-Galim et al 2011). A radical shift in approach is urgently needed.

5.3. Enhancing levers to support innovation

As the data presented in section 4.3 shows, the UK trails its competitors in terms of having a well-developed ecology of highly innovative, high-value and productive companies. Once again, this problem is not new. As with all of the other issues mentioned here, policymakers have discussed the matter extensively over many years. And, as with the other issues, the policy response has tended to be piecemeal, lacking the ambition that is needed to respond to the transformational economic change we are now witnessing.

66 Thanks to Ewart Keep for this point.

67 Arguably, UK and other European businesses should already be thinking about their competitive base in these terms, in light of the rise of the BRICs and other emerging economies. As firms from these countries enter the global marketplace, UK firms will increasingly have to compete higher up the value chain, which will include focusing on high-value added skills and innovation. As a result, one might expect increasing demand for and utilisation of skills by export-seeking UK firms. However, this assumes that the other weaknesses of the UK economy identified in this paper, which have held back UK business adaptation to new competition in the past, have been addressed.

68 See 'Firms get powers to sack the slackers', *Telegraph*, 9 January 2011. <http://www.telegraph.co.uk/finance/economics/8249491/Firms-get-powers-to-sack-the-slackers.html>

69 While business groups often argue that reducing 'red tape' increases competition and opens up space for investment in skills, there is also evidence to suggest the opposite: that this reduces the incentive to invest in training that come when it is harder to fire workers (Lansley and Reed 2010, Evans 1990). Others (Almeira and Aterido 2008) have found more mixed evidence, suggesting that both the proliferation of temporary contracts on the one hand and increased protection of permanent workers on the other are likely to reduce the incentive for firms to invest in human capital.

70 Of course, Denmark relies on relatively higher taxes to support this system.

We argue that a bold ‘new deal’ for highly innovation firms in high-value-added sectors should be launched, focusing on three areas where the state can most effectively bring about the necessary transformation:

- finance for business innovation and infrastructure, through a state investment bank
- the creation of sector-specific innovation zones
- greater use of public procurement to support and develop highly innovative SMEs.

Because the value and shape of a potential state investment bank was discussed in section 5.1 above, this section focuses on the latter two measures.

5.3.1. The creation of sector-specific ‘innovation zones’

Increasingly, geographically focused innovation zones and business cluster formations sit at the heart of government plans to stimulate growth and productivity in specific sectors. The UK has clusters in an increasing number of industries – such as the ‘Silicon Roundabout’ at Old Street, London, which is home to an expanding cohort of digital technology start-ups, and the International Technology Renewable Energy Zone (ITREZ)⁷¹ in Glasgow – and others are emerging, particularly in high-tech manufacturing, such as biosciences, photonics and space communication technologies (HSBC 2011). Evidence suggests that the agglomeration of businesses in geographic locations can help to stimulate not only knowledge and technology transfer but also competition and hence the drive to innovate, all of which can spearhead industry productivity and growth (Delgado et al 2011, Porter 2000).

While the current government is keen to allow these clusters to develop organically, it has also announced several measures to spur innovation both in specific locations and more widely. This includes an intention to reform copyright and the intellectual property regime, the establishment of ‘growth hubs’ which will provide training and mentoring for growing SMEs, and plans to resurrect the enterprise zones (EZs) of the 1980s, which will offer tax breaks and superfast broadband to firms that choose to base themselves in one of a number of specified locations.

While much of this is welcome, it has the feel (once again) of a series of piecemeal and potentially disconnected initiatives, backed by limited financial resources. For example, the amount of money the government has pledged to support the establishment of technology and innovation centres – £200 million over four years – is dwarfed by the £379 million the German government spends each year on its Fraunhofer Institute centres, which perform a similar role.

At the same time, while the principle of supporting business innovation through fiscal incentives is an attractive one, we believe the EZ initiative lacks the strategic focus necessary to support growth and innovation in the most profitable and competitive UK sectors. As currently proposed, the initiative is too broad and is unlikely to foster the clustering of complementary industries (as clusters are intended to do) or promote long-term economic growth in areas where EZs are located (because subsidies are temporary). At their worst, there is a risk that EZs will simply draw businesses and productive resources away from other areas of the country and lead to macro-economic losses to the Treasury, as businesses exploit fiscal incentives to subsidise innovation activity that they would arguably have undertaken anyway (Sissons and Brown 2011).

Instead of launching initiatives that are well-meaning but potentially ‘soft’ or short-lived – or indeed inadvertently harmful – the government should be more strategic in its approach. The various piecemeal efforts currently on the table should be reconfigured into more ambitious ‘innovation zones’, which would offer greater government support for R&D activity and start-ups in key, high-value sectors. Specifically, innovation zones should seek to improve the ways in which existing and emerging innovative geographic clusters operate, by working with businesses, private stakeholders, researchers, local community groups and councils to address barriers to growth. This could include, for example, rapidly revising the planning process that inhibits the expansion of science parks, a key barrier faced by many high-tech manufacturing clusters.

71 See <http://www.sdi.co.uk/news/2011/03/Renewable-energy-innovation-zone-plans-launched.aspx>

The possibility of introducing better targeted tax incentives to spur innovation⁷² (rather than generalised tax relief for business per se) and lighter regulation for high-growth firms working within or linked to the top innovation zones should be explored further. However, it is critical that any support that is offered is constantly reviewed, in consultation with the business community, to see what works and what doesn't, and that it is time-limited and dependent on performance. To support this public-private dialogue – what Dani Rodrik (2004) has termed 'the discovery process' – there may also be a case for introducing new sectoral stakeholder bodies that foster intensive industry collaboration and assist firms in the most profitable cluster sectors to innovate at scale.

The government should also look to centre innovation zone activity on local universities, so that businesses have access to the best academic talent, new graduates and technical resources. Some important steps have been taken in this regard: the previous government introduced 'innovation vouchers' in England through the Business Link service, which enabled businesses to buy in technical know-how from a university or college to help in the development of new products, services and processes. In addition, through the Solutions for Business portfolio, small high-tech firms were able to apply for support from the Technology Strategy Board and the old Regional Development Agencies (RDAs) (HM Government 2009: 14). However, the future of these initiatives remains in doubt.

While innovation zones centred on universities will aid local businesses, universities can also benefit from their links to business. University start-ups are more likely to be successful in accessing venture capital and grow if they are 'business-ready': that is, they must have business planning and management know-how, and knowledge of patenting and links to patent attorneys (Clifton et al 2009). Knowledge-intensive business services located within innovation zones can help to support start-ups and more mature firms alike and, according to NESTA (2011: 54), are important agents for innovation and productivity gains. Unfortunately, this again is the exception rather than the norm in the UK and we have historically been very poor at turning our excellent research base into profitable commercial products (HM Government 2009: 13).

5.3.2. Greater use of public procurement

Government can and should be more strategic about the way it procures and delivers goods and services insofar as it is a way of fostering innovation. IPPR has in the past noted (Clifton et al 2009: 31) that 'as the largest customer and employer in the UK, the government can foster innovation through strategic procurement practices (it is not an accident that the UK's strengths in pharmaceuticals, aerospace and digital technologies mirror large government institutions like the NHS, military and BBC).'

Procurement should target particular growth sectors and offering public contracts to smaller firms can help with their business development, for instance, by providing potential NHS contracts to nascent bioscience firms. There are several straightforward measures the government could implement in this regard, including simplifying the procurement process, to help small businesses participate and make them more productive.

New ways of thinking about public sector procurement opportunities are also required, for instance, offering private firms the intellectual property rights on any innovation that helps to manage or deliver public services could be an important means of both improving service delivery and increasing wider demand for innovation (ibid).

In this context, it is encouraging that the government recently announced a review to propose ideas for increasing the value of public contracts going to SMEs. However, the proposals will need to be bold and implemented with some drive and speed. According to the Federation of Small Businesses,⁷³ only 24 per cent of public contracts in the UK go to small firms, compared to 44 per cent in France. The same research placed the UK

72 Although not restricted to cluster zones, the previous government introduced a relief scheme on corporation tax for SMEs carrying out R&D, and George Osborne announced plans in the March 2011 budget to increase the rate of relief from 175% to 200% as of April 2011, subject to state aid approval. However, to be eligible for relief, SMEs must be spending at least £10,000 a year on qualifying R&D, while the relief only applies to revenue expenditure, not funds spent on capital assets.

73 See <http://www.fsb.org.uk/News.aspx?loc=pressroom&rec=6935>

24th out of 27 EU member states in terms of SME access to public procurement markets across Europe.

Beyond this, the review should include a study of the methods that are widely used overseas by public procurement agencies to encourage innovation among contractors and which have spillover effects in the wider economy. For example, Sweden and Japan have both made use of innovative public procurement techniques to drive low-carbon technologies, which can then go on to be used more widely while enhancing the competitiveness of national firms in this particular sector (TUC 2009). We can also learn from the successful Small Business Innovation Research programme in the US, designed to encourage cutting-edge innovation and catalyse the commercialisation and market breakthrough of new advanced technologies. This programme has specialised procurement units within 11 individual government departments, including the Departments of Energy and Defense as well as NASA and the Environmental Protection Agency.

One final aspect of any new deal on innovation and productivity must be a commitment by the government to implement such strategies as far as possible at a regional and local level. It has long been noted that countries such as Germany and Italy have been able to be more responsive to technological developments and maximise their comparative advantage by having powerful local and regional agencies and leaders driving forward economic development and innovation.

Currently, the government is committed in principle to greater localism, but this needs to be backed up with a clear vision for the types of economic structures required and, where necessary, the right resources, institutions, funding and legal structures to make it effective. It remains to be seen exactly what impact the decision to dismantle existing regional structures – RDAs in particular – will have on efforts to join up economic development, enterprise and innovation at the local level. However, the decision to transfer the innovation responsibilities of the RDAs to the Technology Strategy Board, which sits at a national level, would appear to contradict the localist principle.

5.4 Expanding the Export Credit Guarantee Scheme

We have argued in section 4.4 that the UK economy has not been well-served by the relative failure of British business to venture into the newest and most competitive and innovative markets. The data presented above reveals that while FDI between the UK and foreign markets is strong (albeit with inward and outward flows still weighted towards the finance sector), our presence in export markets – particularly emerging economies – remains weak by comparison with some key competitors.

There is no doubt that the sort of extra training, information provision (such as the new peer-to-peer online service for UK SMEs looking to export (BIS 2011: 55)) and foreign embassy support already offered or planned by the government for firms wishing to export into emerging markets is important in addressing this weakness. However, we believe that a significant increase in the UK's presence in emerging markets will only occur when the harder measures outlined in this chapter are taken to address the UK's weaker record on business investment, workforce skills and innovation in SMEs. It is no coincidence that the most successful exporters among the advanced economies are those that have taken a proactive approach to addressing investment, skills and innovation.⁷⁴

There is one area, however, where the state could be doing more to support business efforts to break into emerging markets: the expansion of the Export Credit Guarantee Scheme. The scheme's remit is to 'insure exporters against non-payment by their overseas buyers; help overseas buyers purchase goods and/or services from UK exporters by guaranteeing bank loans to finance those purchases; and insure UK investors

74 The reverse is also true, namely that presence in global markets can be an important driver of business investment, skills development and innovation. On the latter, a survey by UK Trade and Investment (2010) found that 'conducting business overseas is a catalyst for innovation, with companies developing new and modified products to meet the needs of international customers.' According to the survey of exporting UK firms, 62% of respondents 'claimed that they develop new products and services when doing business overseas' while 72% said that as a result of overseas activities they often 'make changes or modifications to existing products or services'.

in overseas markets against political risks'.⁷⁵ In the 2009/10 financial year, the scheme issued £2.2 billion worth of guarantees and paid out £48 million in claims (ECGD 2010). This amount is not an insignificant sum, particularly when bearing in mind the relatively low value of the UK export industry compared to many of our competitors'. Nevertheless, for the purposes of comparison, it is worth noting that export credit agencies in other countries have been more proactive. In Germany for instance, the export credit scheme, known as the 'Hermes Cover' scheme, granted cover for export orders with a total value €22.4 billion in 2009, or 2.8 per cent of total German exports for the year.⁷⁶

In its recent *Trade and Investment for Growth* white paper (BIS 2011), the government proposed several changes to the way the scheme works, which have since been implemented. These have seen the remit of the scheme broadened to cover a broader range of non-capital and semi-capital goods, which better suit the export profile of many UK firms. The white paper has also:

- established a bond support scheme to help exporters raise tender and contract bonds by sharing risks with banks
- launched an export working capital scheme to facilitate exporters' access to finance for specific export contracts by sharing risks with banks on loans above £1 million
- developed a foreign exchange credit support scheme to facilitate exporters' management of their exposure to foreign exchange rate movements
- created a version of the Enterprise Finance Guarantee Scheme specifically for smaller firms (with an annual turnover of up to £25 million) seeking to export. This became operational at the end of April 2011 and is providing cover for contracts under £1 million (BIS 2011).⁷⁷

These measures are very welcome and directly address the problem of weak presence in emerging markets. However, more needs to be done to encourage take-up (through targeted information campaigns, a greater presence of the Export Credits Guarantee Department [ECGD] at trade fairs and so on) and bring the work of ECGD closer to business' needs. It is notable that, in 2008/09, the majority of guarantee and insurance policies issued were taken up by larger firms, notably by Airbus SAS to cover contracts with overseas airlines (ECGD 2010). A greater number of SMEs, across a far more diverse range of sectors, need to be encouraged to make use of the scheme.

Information sharing between government and exporters is also crucial and seems to be better developed in other, competitor countries than in the UK. Canada's export credit agency, Export Development Canada (EDC), convenes a regular industry stakeholder panel, which brings together business and industry associations from all major sectors to exchange perspectives on trade opportunities for Canadian exporters as well as guiding the EDC about the type of value, products and services it should offer, in view of the changing demands of all sectors of the international marketplace.⁷⁸ A similar forum (perhaps an expansion of the ECGD's small, seven-member advisory council) hosted alongside representatives of UKTI and BIS would be welcome.

Furthermore, ECGD's mandate could be broadened to better reflect business requirements, based on best practice overseas. For instance, the Export Credit Guarantee Corporation of India not only insures exporters against payment risks, it also provides information on the credit-worthiness of overseas buyers and assists exporters in recovering bad debts.⁷⁹ There is no reason why ECGD or an independent technical advisory body could not perform similar roles.

The government should also explore the possibility of introducing tailored export credit guarantees for service industries. This could draw on the experience of a particular

75 See <http://www.ecgd.gov.uk/assets/bispartners/ecgd/files/prods-servs/quickguides/quick-guide-to-ecgd-v7.pdf>

76 See http://www.agaportal.de/pdf/berichte/e_jb_2009_1.pdf

77 See <http://www.ecgd.gov.uk/news-and-events/news/new-support-for-exporters-from-ECGD>

78 See http://www.edc.ca/english/social_15856.htm

79 <https://www.ecgc.in/Portal/aboutus/aboutus.asp#q3>

sub-scheme of Germany's Hermes Cover, introduced in January 2010, which has been designed to enable professional services – such as architecture, engineering and consultancy – to be covered in isolation, without the need for them to be connected to the export of physical goods. Given that services account for a large proportion of UK trade and will continue to be important, a targeted scheme of this type could help to support the competitiveness of the UK service sector in the future.⁸⁰

Some may argue that the best way to drive exports is to ensure a favourable exchange rate. This is certainly true in the short term (although the recent decline in the value of sterling seems not to have had the enervating effect on UK exports that some might have expected). However, it is important to acknowledge that maintaining a lower exchange rate is not a sustainable route to export success: foreign exchange markets cannot be controlled by any single national government, so any economic policy based on those markets is necessarily high-risk. Ultimately, the UK will need the innovative, well-capitalised and productive companies that can survive in global markets even when sterling is high and can positively flourish when it is low.

80 http://www.agaportal.de/pdf/berichte/e_jb_2009_1.pdf

6. CONCLUSION

There will, of course, be those who will argue that, given the current climate of austerity, the policies proposed here are impractical, expensive and overly reliant upon the state. We would argue that this assessment could not be more wrong.

First, the evidence suggests that, far from being impractical, these measures are grounded in a much more practical, realistic view of the economy and the drivers of its success, than have been many previous packages of recommendations (including those based on austerity principles). Indeed, the substantial weight of data presented here suggests that, fundamentally speaking, the UK has for a long time gotten much of its economic policy wrong, and that despite trying a range of different approaches (from cutting state intervention to pursuing various facilitative but neo-classically framed methods) we continue to lack the adaptive capacities required to succeed in an evolving economic environment.

Second, while the cost of the initiatives outlined above is unlikely to be small, we do not believe they are unaffordable. Almost certainly, the biggest cost would arise in providing capitalisation for a state investment bank. Given that business investment in the UK tends to lag behind that of our closest competitors by about £40 billion per year (according to the higher IMF estimates), a one-off capitalisation of £15–£20 billion over the space of five years would allow a state bank to raise approximately £200 billion on the markets to make up this shortfall.

In the context of a planned fiscal consolidation that totals a reduction of £100 billion in annual public spending by 2015, such an amount would constitute a reprofiling of the deficit reduction path rather than a significant deviation. This kind of approach should not worry the bond markets: the funds would be invested to increase GDP growth and drive up tax revenues, addressing the deficit through expansion rather than contraction.

The various measures focused on skills could also potentially prove costly, but much would rely on what method of funding for a new skills framework was chosen. It seems unjustifiable for the cost of such a framework to be borne entirely by the taxpayer when British business would benefit significantly, so these costs could potentially be met partly, for example, through a limited rise in business taxes, thereby placing little burden on the public finances.

More broadly, it is clear from looking at the problems created in the past by the UK's long-term economic weaknesses, the real risk to the public finances resides in not spending the funds necessary to introduce such policies.

Third, in terms of countering likely claims that our proposals might amount to an over-reliance on the state, we argue that the state's role should not be determined by ideology but by what works. And what our long hard look at the UK's economic track record reveals is that the state does have a crucial role in some specific areas that are critical to a successfully functioning economy. This is not primarily for the reasons usually advanced – whether technocratic or otherwise – but because the state is the actor best placed to ensure that the UK has the capacities to adapt to evolutions – and revolutions – in technologies, economic structures and power.

Thus, while the deficit matters, we must think beyond it and look to the long term. Economic success means considering what we seek to achieve over decades not years. This means looking at the structural challenges that face us and how we can respond in a smart and strategic manner, and asking what the evidence can teach us about what has underpinned the success (and failure) of other countries and how we can adapt that knowledge for our own use. From this perspective, our proposals do not constitute a significant expense: they represent a crucial investment that will enable the UK to survive the Asian century.

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