

Globalisation and the UK: strength and opportunity to meet the economic challenge

December 2005



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ISBN: 1-84532-114-6

ISBN 1-84532-114-6



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EXECUTIVE SUMMARY

E1 The UK is in a strong position to respond to the challenges and opportunities of globalisation. It is the location of world-class businesses and sectors; has particular strengths in finance, science, innovation and creativity; and a long history of trading links across the world. Macroeconomic stability, flexible markets, and openness to competition have given businesses a good foundation from which to plan, invest and compete both domestically and worldwide. Businesses in the UK's financial services, pharmaceuticals, high-technology manufacturing and creative industries, among others, are thriving in increasingly integrated, competitive global markets.

E2 The Government's programme of microeconomic reforms, designed to close the UK's long-standing productivity gap with other advanced economies and to improve flexibility, is helping to strengthen the environment for businesses to start-up, to invest and to grow. However the fast pace of technological change, combined with the emergence of rapidly industrialising economies, such as China and India, presents new challenges as well as opportunities, both for businesses and for policymakers. It compels the Government to think differently about what more needs to be done to improve the ability of UK-based businesses to thrive in more intensely competitive global markets, and to maintain the UK as an attractive location for businesses. The UK has many strengths, and its openness and flexibility make it well-suited to meet the challenge of globalisation, but there is no room for complacency. This is a growing global challenge which requires sustained domestic action.

E3 This paper therefore builds on the analysis of globalisation set out in a range of UK Government policy documents¹. *Long-term Global Economic Challenges and Opportunities for the UK*², published alongside the 2004 Pre-Budget Report, identified the defining trends in global markets and trade over the next decade³, and set out six key policy challenges these present for developed economies such as the UK in responding to globalisation:

- entrenching macroeconomic stability in a more integrated global economy;
- building an enterprising and flexible business sector where firms can succeed and seize the opportunities presented by a more open and competitive global economy;
- promoting innovation to drive forward scientific research and knowledge-driven industries;
- opening the acquisition of skills to secure the right skills profile for the global economy;
- ensuring fairness to provide security for those who need it while providing incentives to work and save; and
- increasing the energy and resource efficiency of the economy.

¹ These include: DTI (2004): *Trade and Investment White Paper 2004: Making globalisation a force for good*; DTI (2004): *Liberalisation and Globalisation: Maximising the Benefits of International Trade and Investment*, DTI Economics Paper No 10; HM Treasury (2005): *Global Europe: Full Employment Europe*.

² HM Treasury (2004): *Long-term Global Economic Challenges and Opportunities for the UK*, published alongside the 2004 Pre-Budget Report.

³ For a discussion of the trends in globalisation and the opportunities and potential benefits these present, see, for example, Wolf, M. (2004): *Why Globalisation Works*; and Bhagwati, J.N. (2004): *In Defense of Globalisation: Its Evolution and Contemporary Consequences*.

E4 This paper builds on that analysis and examines more specifically the implications for the UK. It finds that UK-based businesses are leading the response to globalisation, combining traditions of openness and trade with an evolving culture of entrepreneurship to seize the opportunities that new markets, new technologies and more intense competition offer. Businesses are in the front line in responding to changing markets and new opportunities with changes to their strategies in a range of areas including investment, employment, training, research and development, product development, creativity and market strategy.

E5 The role of the Government is to promote the conditions in which UK-based businesses can shape their market strategies, plan, invest and compete effectively in global markets, and also to make the UK as attractive a place as possible for international businesses. In particular, flexibility across the whole of the economy is key to the success of UK businesses, and to attracting internationally competitive businesses to the UK.

The analytical framework

E6 Governments therefore need to consider a number of factors in developing the policy response to globalisation and shaping a supportive and flexible environment for business. These are factors which have a significant influence on businesses' decisions on where best to locate their activities to maximize their competitive advantage in globalised markets.

E7 First, globalisation means that economies and markets will become ever more interlinked and interdependent, through increased cross-border trade and investment and more integrated financial markets. These trends will increase the speed with which economic shocks – such as financial market volatility or national economic downturns – in one part of the world can be transmitted to other regions.

E8 Entrenching **macroeconomic stability** is therefore essential to allow firms, consumers and the Government to plan more effectively for the long term and react to change, and is key to ensuring the UK continues to be an attractive destination for investment. Stability should improve both the quality and quantity of investment in physical and human capital and help to raise productivity and the economy's long run growth potential.

E9 Second, in an increasingly integrated global economy, the pace of economic change is faster than in the past. If markets and individuals do not have the flexibility and adaptability to respond to change, then exposure to competition in new markets and to new technologies may result in falling relative earnings or long-term unemployment, particularly among lower-skilled workers. Markets, businesses, institutions and individuals all need to have the **flexibility** to react quickly to changing circumstances and to reallocate resources efficiently in response to new incentives, needs and opportunities. Economies with more flexible labour, product and capital markets will be able to undertake adjustment more easily and will be better able to respond to new challenges and opportunities.

E10 However, in the short term, flexibility may be associated with considerable changes bringing insecurity for individuals as labour and capital are redeployed from traditional activities into expanding industries⁴. It is therefore important that flexibility is accompanied by the support necessary to enable individuals to cope with and benefit from change.

E11 Third, **comparative advantage** theory predicts that, in the absence of trade barriers, the underlying characteristics and resources of countries determine the activities in which they specialise. So, for example, more labour-intensive, lower-technology production is likely to take place in countries with an abundance of low-cost labour, while advanced economies with higher labour costs and more developed skills and physical capital will tend to concentrate on skill- and capital-intensive goods and services. This specialisation drives

⁴HM Treasury: Flexibility in the UK economy (March 2004).

trade, and allows countries to use their resources more efficiently. In the long run this benefits everyone by increasing the global potential for growth. As globalisation continues, comparative advantage will not be determined solely by stocks of physical capital and labour but also, in a knowledge-driven economy, by the ability of individuals to learn quickly and to take on and develop new information and knowledge. As emerging economies invest more in advanced skills and technology the pattern of comparative advantage will therefore change, increasing the importance of a flexible economy where businesses and individuals can adapt quickly to change, and which invests in education and skills.

E12 Fourth, comparative advantage theory has more recently been complemented by work on **new economic geography**. Based on theories of agglomeration – or clustering – new economic geography suggests that external economies of scale – such as the presence of highly-skilled pools of specialised labour and networks of expertise – make it more profitable for firms in the same industry to locate near each other.

E13 Successful clusters, once created, can become increasingly attractive locations in which to set up a business. This means that a range of factors affect business location decisions and that in particular external economies may lead businesses to locate in clusters to exploit the non-cost advantages they offer. Location decisions taken today could therefore have long-lasting effects on industrial development. This is known as **path dependency** – where past decisions have important implications for the nature of subsequent economic development.

E14 These four factors provide a framework for thinking about how globalisation will affect the UK. As a relatively open economy, the UK stands to benefit from the rise of the global economy through increased competition, innovation and new opportunities for business. The global economy can also create real benefits that will be felt far more widely, helping to enable a more efficient and equitable global allocation of resources, tackling poor living standards, reducing poverty, and providing economic opportunities worldwide. However, this depends on Government and businesses taking the right decisions for the long term.

The UK needs to build on its strengths

E15 The UK's response to the challenges of globalisation will have both a domestic and international dimension, to ensure that the economy and society reaps the many long-term benefits globalisation offers. This response will require efforts to improve further the economic environment that enables businesses to make the most of the opportunities. UK businesses will have a key role to play in responding to the trends of a bigger and better global economy, and will be supported by Government action to tackle market failures that undermine business growth, and the creation of an environment in which businesses and individuals can respond quickly to new opportunities and rapidly changing markets.

E16 The UK is starting from a strong position:

- historically unparalleled macroeconomic stability, underpinned by the long-term decisions taken by this Government since 1997 to reform the macroeconomic and fiscal framework. This has created the longest period of uninterrupted economic growth for over 200 years, with low interest rates and low and stable inflation, providing a solid foundation for businesses to plan for the long term;
- a good regulatory record by international standards, with the UK ranked highest in the OECD on measures of economic flexibility, with the lowest barriers to entrepreneurship of any major economy, illustrating the UK's strong position on the business environment;

- with a strong record of ninety Nobel Prize winners in science, and with a robust policy framework in the 10-year Science and Innovation Investment Framework, the UK has the capacity and ability to expand knowledge through science, and to translate it into innovative products and better services;
- the improvement in the UK skills base since 1997 – with significant increases in the skill levels of young people, improvements in adult basic skills, and more people in higher education – will pay dividends in the long term. There is nevertheless more to do, and a substantial challenge for both Government and businesses is to ensure that the UK has the stock of high-skilled, flexible labour that is essential for firms in knowledge-intensive, dynamic industries;
- a strong track record on employment, with unemployment at the lowest levels for a generation, together with a strong policy framework that makes work pay, and removes barriers to work so that more people can participate in the labour market and allows individuals to respond to new opportunities and share in the gains from globalisation; and
- during a time of sustained economic growth the UK has reduced greenhouse gas emissions by over 12 per cent by 2003 from the Kyoto 1990 baseline, with emissions of carbon dioxide down by more than 4 per cent. This shows the commitment of the UK to reduce pressure on scarce energy resources and tackle the challenge of climate change.

Key areas to build on **EI7** This platform provides businesses with the best opportunities to strive for global success and prosperity for the UK, while the Government also leads on the international stage to push for further reforms towards a new international trade and economic system, helping to deliver economic growth and fairness worldwide. However, the UK should not be complacent. *‘Long-term global economic challenges and opportunities for the UK’* set out how globalisation creates six key challenges to which advanced economies such as the UK must respond. The analysis in this paper builds on this and identifies five policy areas in which the UK needs to make substantial further progress in order to benefit fully and secure the gains from globalisation.

The importance of meeting changing skills needs **EI8** The UK’s skills profile must be responsive to the changing needs of the economy, so that individuals and businesses can adapt to the new opportunities offered by globalisation. It is a high priority for the UK to tackle both adult basic skills and intermediate skills of the existing workforce, together with raising ambitions for higher level skills. The Leitch Review will report on the skills profile that the UK should aim to achieve by 2020, in order to maximise productivity and growth over the long term. **The first area where there is a particular need for further progress is therefore to raise the UK skills profile and ensure the workforce has the skills and flexibility to take advantages of changes in technology and new opportunities offered by globalisation, supported by appropriate training opportunities that are more responsive to changing business needs.**

Strengthening science and innovation **E19** The UK must continue to invest in science and innovation to ensure the economy has the capacity to expand knowledge through science and translate it into innovative products and services – driving forward the knowledge economy and enabling agglomeration benefits. This will require not only the implementation of the 10-year Science and Innovation Investment Framework and the significant increases in public investment that have been committed, but also significant increases in business expenditure on R&D to meet the Government’s ambition to raise R&D expenditure from 1.9 per cent to 2.5 per cent of GDP by 2014. **The second area where there is a particular need for further progress is therefore to continue to improve the UK’s capacity for science and innovation, through investment in the science base and improving links with business – to attract Foreign Direct Investment (FDI) and build high value-added R&D intensive firms and sectors that will raise private investment in R&D.**

Reducing regulatory burdens on business **E20** The burden of unnecessary regulatory inspection and enforcement on business must be reduced. Following the Hampton Review⁵ regulatory burdens on business and the parallel report from the Better Regulation Task Force⁶, far-reaching reforms are being introduced throughout the UK’s regulatory framework. These changes will ensure that regulatory enforcement is risk-based, reducing the burden of inspections and form-filling for the majority of compliant businesses, so that regulatory resources are focused on areas where the risks to society are greatest. **The third area where there is a particular need for further progress is therefore to continue to strive to minimise undue regulatory burdens by ensuring that regulation is used only where absolutely necessary, and that administrative burdens of understanding and complying with regulations are as low as possible.**

Planning should respond to economic needs **E21** The planning system must operate in a way that promotes sustainable economic growth and employment opportunities. A choice of suitable sites ensures that businesses can seek location advantage in response to various external factors, including the demands of customers; access to raw materials and suppliers; links with other businesses; the workforce catchment area; and good transport links. Business also requires a planning system that is speedy and transparent, and minimises the transaction costs associated with gaining planning permission. The Government has introduced a number of reforms which have improved the efficiency and responsiveness of the planning system, but recognises the need for further improvements. **The fourth area where there is a particular need for further progress is therefore to ensure the planning system is flexible and responsive to changing economic needs and realities, so that it encourages rather than hinders the development of competitive and productive business.**

Transport should support business flexibility **E22** The UK’s transport infrastructure must facilitate economic growth by providing effective and efficient global connectivity for business. Since 1997, the Government has reversed the historic underinvestment of many decades in the transport system, but recognises that this is only the start. The Eddington Transport Study is analysing the long-term impacts of transport on the UK’s economic growth, productivity and stability. It will analyse both the domestic and international economic implications of transport policy, establishing a framework for prioritising and delivering investment; maintaining and utilising the network; and responding to the challenges and opportunities of the global economy. **The fifth area where there is a particular need for further progress is therefore to ensure the UK’s transport infrastructure supports a flexible and enterprising business sector, by reducing costs and congestion, enabling access to skilled labour and encouraging agglomeration benefits.**

⁵ HM Treasury & Hampton, P. (2005): *Reducing administrative burdens: effective inspection and assessment*.

⁶ Better Regulation Task Force (2005): *Less is More: Reducing burdens, improving outcomes*.

E23 Robust and sustained action will be required in each of these five areas if the UK is to build on success and reap the rewards of globalisation. Rising to this challenge will require leadership from both Government and the business community, and an even greater flexibility in the economy and wider society to adapt and adjust to the changing world. It is a challenge that the UK is well-placed to respond to, and a challenge that the Government – with the support of the business community – will strive to meet.

INTRODUCTION

Profound changes in the global economy bring opportunities for all

1.1 The global economy is undergoing a profound transformation, involving fundamental changes in trading patterns and in the use of technology, and bringing radical changes to economies across the world. Globalisation has the potential to increase global output, income and wealth in all economies, whether advanced, industrialising or developing. This potentially brings new opportunities for businesses and individuals, a better deal for consumers, and could lift millions out of poverty, but it also presents new challenges. *'Long-term Global Economic Challenges and Opportunities'*, published at last year's Pre-Budget Report, analysed the nature of globalisation and the challenges it poses for advanced industrial economies. This paper builds on this analysis to draw out the key policy responses for the UK.

1.2 Papers published by Government over the last year, including the 2004 Trade and Investment White Paper, *'Making Globalisation a Force for Good'*, and the HM Treasury and DTI paper, *'Trade and the Global economy: the role of international trade in productivity, economic reform and growth'* set out the key trends shaping global markets and trade patterns, and the policy challenges they present¹. *'Long-term Global Economic Challenges and Opportunities'*, published with the 2004 Pre-Budget Report, identified six trends that will shape the global economy over the next decade:

- the shifting balance of global economic activity, with an increasing proportion of global output produced in rapidly emerging large economies;
- the increasing integration of global markets, as international trade and investment expand;
- the internationalisation of economic activities, with production chains becoming increasingly flexible, specialised and dispersed across continents;
- growing rewards from innovation, as the pace of technological change increases and countries move into higher-value activities;
- the importance of higher skill levels to realise the benefits that arise from global integration, enabling individuals to adapt to change and countries to move into high value-added areas; and
- increasing pressure on energy resources, other natural resources and the environment.

1.3 In responding to the continuing trends of globalisation, the paper identified six key policy challenges which will shape the response of all developed countries to globalisation:

- entrenching macroeconomic stability in a more integrated global economy;
- building an enterprising and flexible business sector where firms can succeed and seize the opportunities presented by a more open and competitive global economy;
- promoting innovation to drive forward scientific research and knowledge-driven industries;

¹For a more detailed overview of the globalisation trends we are witnessing today, see DTI (2004): *Liberalisation and Globalisation: Maximising the Benefits of International Trade and Investment*; DTI Economics Paper, No 10.

- opening the acquisition of skills to secure the right skills profile for the global economy;
- ensuring fairness to provide security for those who need it while providing incentives to work and save; and
- increasing the energy and resource efficiency of the economy.

1.4 This paper builds on this previous analysis to consider the impact of globalisation on the UK. It examines the impact of firms' decisions on location and investment, and what implications this has for individuals and for the Government's policy response.

Box 1.1: Capturing the benefits of globalisation and trade

Globalisation and technological change have resulted in greatly expanded trade over the last fifty years, driving global growth and prosperity. As set out in 'Trade and the Global Economy'² published in May 2004, open economies have been better able to harness the power of trade to boost competitiveness and productivity, helping to improve living standards and sustain economic growth.

However, the benefits offered by globalisation cannot be achieved without accepting change. Resources are shifting away from traditional industries and into new ones where they can be put to more productive use, and this change is accelerating as developing and emerging economies increase their share of world trade.

This change should be welcomed, as it strengthens the drivers of productivity by providing greater opportunities to exploit economies of scale; by enhancing the dynamic forces of competition; by rewarding innovation and providing opportunities for technology transfer; and increasing incentives and opportunities for investment. However, at an individual level the transition to a more open global economy can result in insecurity and adjustment costs. There is a role for the Government both in facilitating the transition process and helping to mitigate the adjustment costs which come with change.

Progress in multilateral liberalisation through the current WTO Doha Development Agenda round of trade negotiations offers the best opportunity for all countries to benefit from trade integration and expansion. By further integrating emerging markets into the world trading system while supporting their development needs, the expansion of trade and increasing integration of the global economy could be one of the key drivers of increased global prosperity, productivity and development over the coming decade.

An ambitious outcome to the Doha Development Round is essential to deliver substantial increases in market access and real benefits to developing countries. With the opportunity for all countries to benefit from what could be at least \$300 billion in world growth each year, the EU and other key participants must take the opportunity of the Hong Kong Ministerial in December to secure a new trade deal that will reverse the recent retreat into protectionism.

Businesses are at the forefront of globalisation

1.5 Businesses are in the front line as global trade and markets change. Directly exposed to changing market conditions, the closer integration of global markets and the resulting intensification of competition, businesses will have to respond to new pressures and new opportunities in the markets in which they compete. It would be a mistake to think, as some argue, that governments can either shield businesses from global competition or that they can guide the response to changed markets by 'picking winners'. Businesses are best placed, and most powerfully incentivised, to judge what specific actions are needed in their development of new products and services, investment in both equipment and skills, employment, market and growth strategies to respond to the circumstances they face.

² HM Treasury & DTI (2004): *Trade and the Global Economy: the role of international trade in productivity, economic reform and growth.*

Government must provide the conditions for business to respond successfully **I.6** Successful adjustment to the new opportunities which globalisation presents therefore depends on the entrepreneurship and leadership of the UK's businesses. The role of government is to establish the conditions which help businesses, workers and consumers to adjust to changing circumstances – securing macroeconomic stability, promoting flexibility in labour and product markets, ensuring a skilled workforce which can retain and improve its standard of living, removing protectionism, and improving other aspects of the environment for business and enterprise; while ensuring that individuals have the flexibility and opportunities to share in the gains of globalisation. Government must also ensure that fairness is maintained in the global economy, by providing security alongside flexibility to help deal with short-term costs and insecurity.

I.7 This paper examines the implications of these principles for the UK. It considers how far the UK's existing strengths help businesses and individuals to respond to the new global challenges, and identifies the key microeconomic reforms needed to underpin and improve the environment in the UK in the next decade as a base from which businesses with global ambitions can respond to radically changing global markets. The analysis in the paper will also contribute to the evidence base underpinning the Comprehensive Spending Review³.

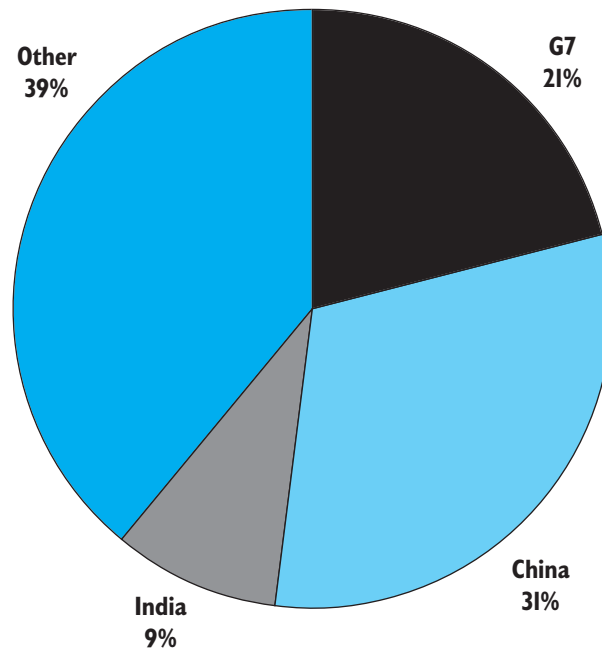
The Global Context **I.8** As set out in *'Long-term Global Economic Challenges and Opportunities for the UK'*, the global economy is undergoing a major transformation as the boundaries between what can and cannot be traded are being eroded by technological advance, and as economic activity becomes increasingly flexible, divisible and dispersed across continents, with an increasing level of specialisation. More countries are opening up their economies, while global output continues to grow. This means that, as production can be relocated increasingly easily, no economy can be complacent and rely on its existing areas of strength and expertise.

Emerging markets will increasingly challenge advanced economies **I.9** China, India and other major emerging economies are playing an increasingly important role in global markets – research from the International Monetary Fund (IMF) shows that China accounted for 13 per cent of world output in Purchasing Power Parity (PPP) terms in 2004, while the UK accounted for just over 3 per cent⁴. Chart 1.1 shows that China and India contributed 40 per cent of global growth between 2001 and 2004. By 2015 both countries may produce around a quarter of world output when measured in PPP terms⁵. These are dynamic and growing economies, with an abundance of low-cost labour, and a growing entrepreneurial culture. Their emergence is a driving force for greater competition, resulting in a growing premium on innovation and productivity and high quality skills and technology in advanced economies, and their investment in skills means that they will increasingly challenge advanced economies in more knowledge-intensive areas.

³ See Statement laid before Parliament by the Chief Secretary to the Treasury on 19 July 2005 announcing the second Comprehensive Spending Review.

⁴ IMF WEO Database, April 2005 <http://www.imf.org/external/pubs/ft/weo/2005/01/data/index.htm>

⁵ IMF (2005): *Consensus Forecast*, EIU

Chart I.I: Contributions to Global Growth**(Average 2001-04, weighted by Purchasing Power Parities)**

Source: IMF World Economic Outlook, 2005.

The UK is well-placed to respond but must not be complacent

I.10 The UK is in a strong position to respond to the challenges and opportunities of globalisation. Building on the UK's long-established traditions of openness and transparent institutions, as well as our strengths in, for example, trading relationships and the English language, microeconomic reforms and macroeconomic stability have improved the UK's productivity performance relative to some other advanced economies. The output gap per worker with Germany has closed, and has narrowed in relation to France – leaving the UK economy better-placed to play a major part in a more dynamic global economy, although the gap still persists with the US. However, the transformation of economies such as India, China and Brazil presents new and greater challenges, as well as opportunities for businesses, individuals and policy makers. This makes it important to understand how these economies are changing, how this will influence their relative economic strengths, and the likely impacts on opportunities for countries like the UK of changes in the pattern of production, specialisation and trade.

Box 1.2: China and India – growing competition and new opportunities

China and India are investing heavily in skills to enable businesses to compete in new areas. China now educates around 2 million graduates each year compared to 250,000 in the UK, and more than 200,000 Chinese postgraduate students are expected to graduate in 2005⁶. India now produces 260,000 engineers a year, and its number of engineering colleges is due to double to 1,000 by 2010. It is of course the quality rather than the quantity of graduates that matters, and the Indian Institutes of Technology are ranked among the world's best universities.

The rapidly developing emerging economies are not content to remain the location of labour-intensive, low value-added industries. They are increasingly investing in technology and R&D. For instance, while today the majority of Chinese domestic pharmaceutical companies concentrate on low-technology generic products, and only a few domestic Chinese pharmaceutical industries have the capacity to have a strong R&D presence – R&D intensity (R&D expenditure as a proportion of sales income) of Chinese companies is only around 2 per cent compared to about 15 per cent in the UK⁷ – investment in technology is increasingly being encouraged by the Chinese Government at all levels, with the aim of developing China into a major player in biotechnology⁸. As foreign investors also begin to have a presence in China, R&D investment and knowledge spillovers should encourage the industry to develop.

The emergence and rapid growth of the outsourcing and business services industry in India is a good example of a sector taking root in Asia. Outsourcing from other countries earned India revenues of over \$17 billion in 2004/05 (44 per cent of the world total) according to Nasscom, India's software services trade association, and this is growing at over 30 per cent a year. As more firms look to outsource and offshore to minimise costs, the importance of outsourcing to India is likely to continue to grow – Nasscom believes that revenues could grow to \$50 billion a year by 2008⁹ if India remains an attractive location and costs do not rise. The global outsourcing industry has grown rapidly since it emerged in India, and India's facility in the English language has given it a competitive edge. The Indian market has become highly competitive, with strong competition on price, and significant wage competition for graduate employees.

⁶ Chapter 21 of "Education, Science and Technology" of the China Statistical Yearbook 2004 from National Bureau of Statistics of China, 2005 found at: www.stats.gov.cn

⁷ Calculated from DTI R&D Scoreboard 2005.

⁸ Accenture (2005): *Fast Forward to China*.

⁹ Business Week (22 November 2004): *India: Let the Deals Begin*.

I.II In developing a response to globalisation and shaping a supportive environment for business, governments need to consider the various factors which have a significant influence on businesses' decisions on where to locate. The following chapters examine the challenges in more depth and consider the specific responses for businesses, individuals and government:

- examining how macroeconomic stability and flexibility provide the foundations necessary for an economic environment where businesses can successfully respond to globalisation; and how comparative advantage combined with new economic geography theories help us to understand what changes in the global economy mean for business and policy (Chapter 2);
- setting out what this analysis means for the Government in developing the policy response to the challenges posed by globalisation (Chapter 3); and
- concluding by drawing out five key policy areas for immediate action: skills; science & innovation; minimising regulatory burdens; planning, and transport infrastructure (Chapter 4).

2

ECONOMIC DETERMINANTS OF LOCATION

2.1 In a globalised world, economic activity can more easily be transferred between locations. All countries, including the UK, therefore need to reassess how policy decisions will affect businesses, and what more can be done to provide the right economic environment for business success. This chapter looks in more detail at the economic analysis relating to the policy response to globalisation, particularly in the context of greater specialisation in more competitive and integrated global markets.

Impact of globalisation on businesses' choices

2.2 In shaping the policy response to globalisation over the next decade, it is essential to understand the factors that are likely to influence businesses' decisions on where to locate their activities, and how far those factors are likely to be affected by the Government's decisions. As technological change and more intense competition drive globalisation, there will be continuing trends towards the fragmentation and relocation of production, so that resources are employed where they can be used most efficiently, promoting growth. In spite of these trends, proximity and location characteristics unrelated to cost can nevertheless have a significant influence on businesses' decisions.

2.3 This chapter sets out the importance of an economic environment that enables businesses to make the most of the opportunities offered by globalisation. In particular:

- it explains how macroeconomic stability and a flexible business environment provide the foundations necessary for a prosperous domestic economy. Globalisation makes it all the more important to secure these conditions as businesses seek the most favourable location for their activity; and
- it provides an understanding of businesses' trade and investment decisions in a globalised world. Macroeconomic stability and flexibility provide a supportive economic environment for business. In an open, stable and flexible economy, comparative advantage theory helps to explain trade and location patterns by countries' relative economic endowments. Comparative advantage is complemented by newer theories which seek to explain the emergence of agglomerations of competitive firms, by highlighting the importance of a wider range of factors.

2.4 Understanding how these theories interact helps to explain how globalisation impacts on business decisions, and allows a policy framework to be developed.

THE MACROECONOMIC ENVIRONMENT

The need for stability

2.5 In an integrated global economy, increasing cross-border trade, more integrated capital markets and greater global competition all reinforce the need for a stable domestic macroeconomic environment. Entrenching macroeconomic stability is essential to allow firms, consumers and the Government to plan more effectively for the long term and react to change, and is key to ensuring the UK continues to be an attractive destination for investment. Stability should improve both the quality and quantity of investment in physical and human capital, and helps to raise productivity and the economy's long-run growth potential.

2.6 Macroeconomic volatility can result in distortions in firms' and individuals' behaviour. Minimising these distortions can lead to gains in economic growth and the level of output.¹ Excessive volatility – a 'boom and bust' cycle – leads to wasted resources with significant economic and social costs. In particular, during a boom, resources may be over-invested in inefficient activities, while during the bust that follows business and consumer confidence falls, and there may be under-investment in physical capital. Moreover, at the individual level, volatility can result in prolonged periods of unemployment, depleting human capital and reducing incentives to invest in skills. In the absence of volatility, individuals and firms can plan for the long term and the quality of decisions is improved. Increased stability may therefore lead to an improvement in the quality of investment as well as an increase in the quantity of investment.² As a consequence, the economy's efficiency increases.

2.7 There are also significant costs from unanticipated inflation, which is more likely to be associated with volatile inflation. The price mechanism works less effectively as firms and individuals find it more difficult to identify relative price changes when all prices are increasing. In addition, there are arbitrary redistributions of income and wealth; long-term investment is more difficult as agents are discouraged from entering into long-term monetary contracts; savers and lenders may respond to inflation uncertainty by demanding a risk premium; and monetary policymakers are more likely to make mistakes.

2.8 Macroeconomic stability and sustainable growth are also important for attracting foreign investment and encouraging domestic business investment – key drivers of innovation and growth.³ As financial markets across the world become more integrated, and emerging economies become a more attractive destination for investment, the importance of maintaining stability to encourage and attract investment will increase.

2.9 Globalisation means that economies and markets will become ever more interlinked and interdependent, through increased cross-border trade and investment and more integrated financial markets. These trends will increase the speed with which economic shocks – such as financial market volatility or national economic downturns – in one part of the world can be transmitted to other regions. This reinforces the importance of entrenching a stable macroeconomic environment in the UK which can cope effectively with shocks.

Sustainable macroeconomic frameworks

2.10 Maintaining robust domestic fiscal and monetary policy frameworks is critical to reducing the impact of external shocks on the UK economy and reducing any adjustment costs associated with them. Macroeconomic stability is also fostered by increased market flexibility, discussed further below. Greater flexibility means that firms are able to adjust prices, output, employment and investment more quickly in response to shocks and changes in macroeconomic policy.

¹ HM Treasury & DTI (2004): *Productivity in the UK 5: Benchmarking the UK productivity performance*.

² Barlevy, G. (2004): *The Cost of Business Cycles Under Endogenous Growth*. American Economic Review.

³ For example, Aizeman, J. and Marion, N. (1999): *Volatility and Investment: Interpreting Evidence from Developing Countries*. Economics.

Box 2.1: Macroeconomic Stability – the UK

In past decades, the UK experienced high levels of macroeconomic instability with high inflation volatility and GDP growth volatility. Average inflation was high and economic growth relatively low. The UK was one of the most unstable economies in the OECD and the EU.

Since 1997, the Government has reformed the macroeconomic policy frameworks, granting operational independence to the Bank of England's Monetary Policy Committee in setting interest rates, and establishing a fiscal policy underpinned by two strict rules that ensure sound public finances over the medium term.⁴ These reforms, alongside a series of microeconomic reforms to promote market flexibility, have helped the UK to achieve strong and stable growth through a period of rapid economic change during which the global economy has been affected by a number of shocks, including the Asian financial crisis of 1998, the slowdown in many major economies in 2001, and recent increases in the price of oil.

The UK is now experiencing an historically unprecedented period of stability, and is rated as the most stable economy in the OECD and G7. In its 2005 report on the UK economy the OECD stated that the UK's macroeconomic performance over the last decade has been a 'paragon of stability'.⁵ Since 1998 the UK has had:

- the most stable GDP growth in the G7 and the second most stable GDP growth in the OECD;
- the most stable output gap in the G7 and OECD on the OECD's measures; and
- the most stable inflation in the G7 and OECD.

The challenge for the UK is to entrench this stability in response to a more integrated global economy, and to ensure fiscal sustainability in the face of the long-term demographic challenges facing all developed economies.

FLEXIBILITY

2.11 Economic flexibility means the ability to respond to change efficiently and quickly in a way that maintains high employment, low inflation, and high and stable levels of GDP growth.

Flexibility to respond to challenges and opportunities

2.12 In an increasingly integrated global economy, the pace of economic change is faster than in the past. If markets and individuals do not have the flexibility and adaptability to respond to change, then exposure to competition in new markets and to new technologies may result in falling relative earnings or long-term unemployment, particularly among lower-skilled workers. Markets, businesses, institutions and individuals all need to have the flexibility to react quickly to changing circumstances and to reallocate resources efficiently in response to new incentives, needs and opportunities. Economies with more flexible labour, product and capital markets will be able to undertake adjustment more easily and will be better able to respond to new challenges and opportunities:

- **Product market flexibility** is the ability of firms to respond to changing market conditions, allowing them to exploit new opportunities and to deal with potential challenges effectively. A flexible response is particularly important in a globally integrated economy, with increased competition from developed and emerging markets, and faster take-up of new technologies and innovation.

⁴For details see Balls, E. and O'Donnell, G. (eds) (2002): *Reforming Britain's Economic and Financial Policy*. HM Treasury.

⁵OECD (2005): *Economic Survey of the UK*.

- **Labour market flexibility** is the ability of the labour market to adjust to changing economic conditions in a way that maintains high employment, and low inflation and unemployment. In an integrated global economy, increased cross-border trade and investment will mean that some sectors grow while others decline. Labour market flexibility ensures that workers can move quickly from declining sectors to expanding ones. In the global economy, the pace of technological change and innovation will increase demand for a skilled workforce with the flexibility to adapt to change. A highly-skilled workforce will be key for advanced economies looking to move into high-value areas of economic activity. This places a premium on ensuring that workers have opportunities to develop and update their skills.
- **Capital market flexibility** ensures that capital is employed effectively and that business and entrepreneurs have access to funds to develop their ideas. Access to deeper, more flexible capital markets in the global economy should lower the cost of capital for businesses, facilitating entrepreneurship and greater investment. In addition, open capital markets enable investors to diversify their risks across countries.

2.13 Box 2.3 considers how the UK performs on each of these aspects of flexibility.

**Fairness
alongside
flexibility**

2.14 Flexibility in labour, product and capital markets is critical to economic success in a globally competitive environment. However, in the short term, flexibility may be associated with considerable changes as labour and capital are redeployed from traditional activities into expanding industries. At any point in time, these costs will fall disproportionately on particular individuals and particular industries. For the individuals concerned this may entail considerable short-term costs, both in terms of income, and in the challenges they face to acquire new skills and find new employment. It is therefore important that flexibility is accompanied by the support necessary to enable individuals to cope with and benefit from change. Such support ensures that flexibility is accompanied by fairness. For example, policies that support individuals through periods of unemployment, and equip them to re-enter the labour force, promote fairness by ensuring that these adjustment costs are minimised. They also contribute to flexibility by enabling individuals to make the transition between different forms of employment more rapidly.

Box 2.2: The Impact of Housing on UK Flexibility

Flexibility in the economy can be hampered by an inflexible housing market. High housing costs and large price differentials between regions can act as a barrier to prevent people from moving to improve their prospects and enter different labour markets, and companies from taking advantage of new opportunities. The housing market has a particular impact on labour market flexibility, which is essential to enable all in the UK to make the most of new opportunities and to share in the gains from globalisation.

Kate Barker's independent review of housing supply⁶ set out the long-term upward trend in real house prices experienced in the UK – an average 2.4 per cent per annum over the last 30 years, compared to an EU average of 1.1 per cent – and how house building had fallen to its lowest level since the Second World War. The Review concluded that a more responsive housing market and a lower trend in house prices would be desirable to maintain a flexible labour market and sustain macroeconomic stability. The Government will set out its response to the Barker Review at the 2005 Pre-Budget Report.

⁶ Barker, K. (2004): *Review of Housing Supply: Delivering Stability – Securing our Future Housing Needs*, Final Report – Recommendations.

Openness 2.15 While flexibility is necessary to succeed in an economy that is increasingly open to international competition, global integration itself also increases the rewards to structural reforms. As set out in *‘Trade and the Global Economy’*,⁷ a domestic economy which encourages strong competition, rapid adoption of innovation, a culture of entrepreneurship and investment in both physical and human capital, will find its businesses have more capacity to compete both internationally and domestically. By contrast, a lack of flexibility will limit the benefits that can be reaped from globalised markets. Barriers to the creation of new enterprises or to the exit of less efficient ones, high costs of job creation, a lack of transferable skills or the inaccessibility of re-skilling, can hinder or even prevent the reallocation of resources needed to improve economic efficiency and to release growth potential. This will impose costs both on business, which will not be able to take advantage of new opportunities, and on individuals, who will be more likely to suffer prolonged periods of unemployment and will be less able to capitalise on their investments in skills. The long-term growth prospects of the economy are likely to suffer as a result.

2.16 The importance of flexibility for the UK must also be seen in a European context. As the UK’s major trading partner, inflexibilities and low productivity and growth in the EU will exert a negative impact on the UK’s growth prospects. The importance of pursuing economic reform within Europe along the three themes of productivity and competition; skills and employability; and openness was set out in *‘Global Europe: Full Employment Europe’*,⁸ published earlier this year, and other documents⁹ have explained progress against these goals, and set out where the future challenges lie.

⁷ HM Treasury & DTI (2004): *Trade and the Global Economy: The role of international trade in productivity, economic reform and growth*.

⁸ HM Treasury (2005): *Global Europe: Full Employment Europe*.

⁹ See, for example, HM Treasury (2005): *Growth and Opportunity: Prioritising economic reform in Europe*.

Box 2.3: Flexibility – product, labour and capital markets in the UK

The UK has a long tradition of promoting flexible markets, recognising the advantages of a responsive economy. The current Government has made flexibility, combined with fairness, a key part of its drive to improve productivity. Significant progress has been made – the OECD ranks the UK highest among its members using a composite policy indicator of flexibility.¹⁰

Product markets: The UK has a tradition of low barriers to trade, which enable greater competition across product markets. Domestically, the Enterprise Act (2002) has given full independence to the UK competition authorities and given the Office of Fair Trading more proactive powers to investigate markets where competition may be restricted or distorted. The Government has also introduced tax incentives and reforms to reduce the regulatory burden on business, in order to promote an enterprise society. The OECD now ranks the UK first among the G7 countries for liberal product market regulation.¹¹ In Europe the UK has led the way in liberalising energy markets, and now rank among the best for gas and electricity costs.

Labour markets: Since the 1980s, the UK labour market has undergone a number of reforms which have improved flexibility. This has paid dividends – UK unemployment is at its lowest level for 30 years, while maintaining a relatively stable rate of wage growth. This improvement in part reflects the reintegration of long-term unemployed and marginalised groups into the labour market, which has helped to ensure that the economy does not run into labour supply bottlenecks. Other aspects of Government policy have included enhancing wage and employment flexibility, promoting geographic mobility, developing skills and improving labour market opportunities. The UK is now enjoying record employment levels, at 28.8 million, and ranks highly compared to other OECD countries in most aspects of labour market flexibility.

Capital markets: The UK has historically been at the forefront of pushing for capital market liberalisation, which has played a key role in making London one of the world's main financial centres. Evidence also suggests that UK consumers have been less liquidity-constrained than EU counterparts such as France, Italy and Spain over the last 30 years.¹² However, the Government also recognises the importance of ensuring everyone is able to benefit from more flexible capital markets. This means removing barriers to raising finance for small firms, promoting innovation and openness. A recent study ranked Britain as the best financial environment in the world for entrepreneurs, partly thanks to its vibrant equity market.¹³ Capital market liberalisation should also benefit individuals, and the Government is working to ensure markets provide an effective range of products for saving and investment to all members of society, so they can smooth consumption in response to fluctuations in income.

COMPARATIVE ADVANTAGE

2.17 Macroeconomic stability and a flexible business environment are important conditions to have in place to enable businesses to take long-term decisions with confidence, and to be able to respond to changing opportunities. As barriers between markets break down, and technology enables ever more goods and services to be traded, business location decisions are driven by complex dynamics.

¹⁰ OECD (2005): *Economic Survey of the United Kingdom*.

¹¹ OECD (2005): *Economic Policy Reforms: Going for Growth*.

¹² Al-Eyd, A.J. and Barell, R. (2005): *Estimating Tax and Benefit Multipliers in Europe*. NIESR, Economic Modelling.

¹³ Milken Institute (2005): *Capital Market Index 2005: Best Markets for Entrepreneurial Finance*.

2.18 This section discusses the theory of comparative advantage, which explains the location of economic activity and patterns of trade by countries' relative endowments. This provides an analytical framework for patterns of trade and investment in globally integrated markets. Comparative advantage is complemented by new economic geography theories which show that – as well as resource endowment and cost – countries' comparative advantages are also shaped by the way in which industries develop and deploy resources, skills and knowledge. This is particularly the case where there are external economies of scale which lead to the development of industrial clusters – as discussed later in this chapter.

**Shifts in patterns
of production
and trade**

2.19 Increasingly, globalisation and rising competition from emerging economies are forcing sectors and industries to adapt. The rapid growth of emerging economies, combined with the increasing integration of global markets, and advancing technology which reduces the cost of transport, communication and information transfer, is shifting the balance of global economic activity. This can result in benefits for all – the rise of India and China, in a relatively short space of time, is lifting hundreds of millions of their citizens out of poverty, and their increasing incomes and wealth are providing enormous new commercial opportunities for UK firms. In addition, new technologies and opportunities for trade help drive greater competition, creating strong incentives so UK firms can innovate and improve efficiency, thus benefiting consumers. This means that globalisation offer potentially benefits for all countries, both developed and developing, which are able to engage openly with the global economy.

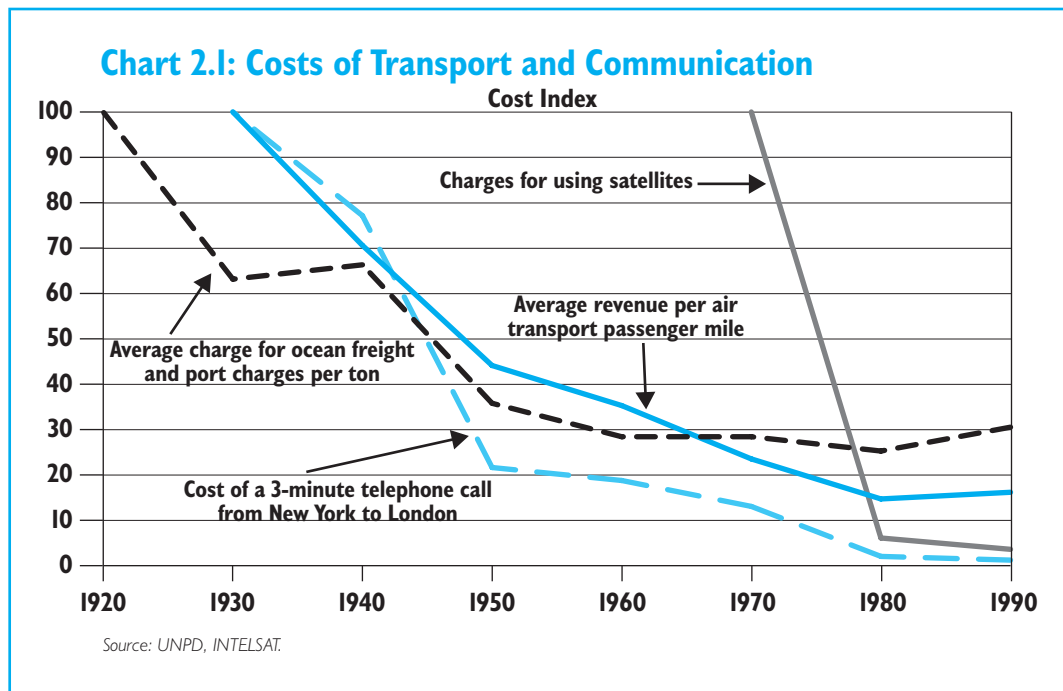
2.20 The erosion of barriers between markets, and the increased tradability of many goods and services, is enabling reorganisation of production and trade along the lines predicted by the traditional economic theory of trade based on the principle of comparative advantage, first developed by David Ricardo in the early nineteenth century. This states that, in a world without trade barriers, the innate characteristics and resource endowments of countries, such as their labour supply, land availability, natural resources and climate, will determine the activities in which they specialise. Comparative advantage predicts that, when economies have the flexibility necessary to adapt to more open markets, labour-intensive, lower-technology production will take place in countries with an abundance of low-cost labour, while advanced economies, where labour costs are higher but physical capital and expertise are more prevalent, will concentrate on exporting more skill- and capital-intensive goods. This specialisation by countries in the production of goods and services in which they have a relative advantage drives trade. Specialisation resulting from comparative advantage allows countries to use their resources more efficiently, which in the long run benefits everyone by increasing the global potential for growth.

**Business
relocation**

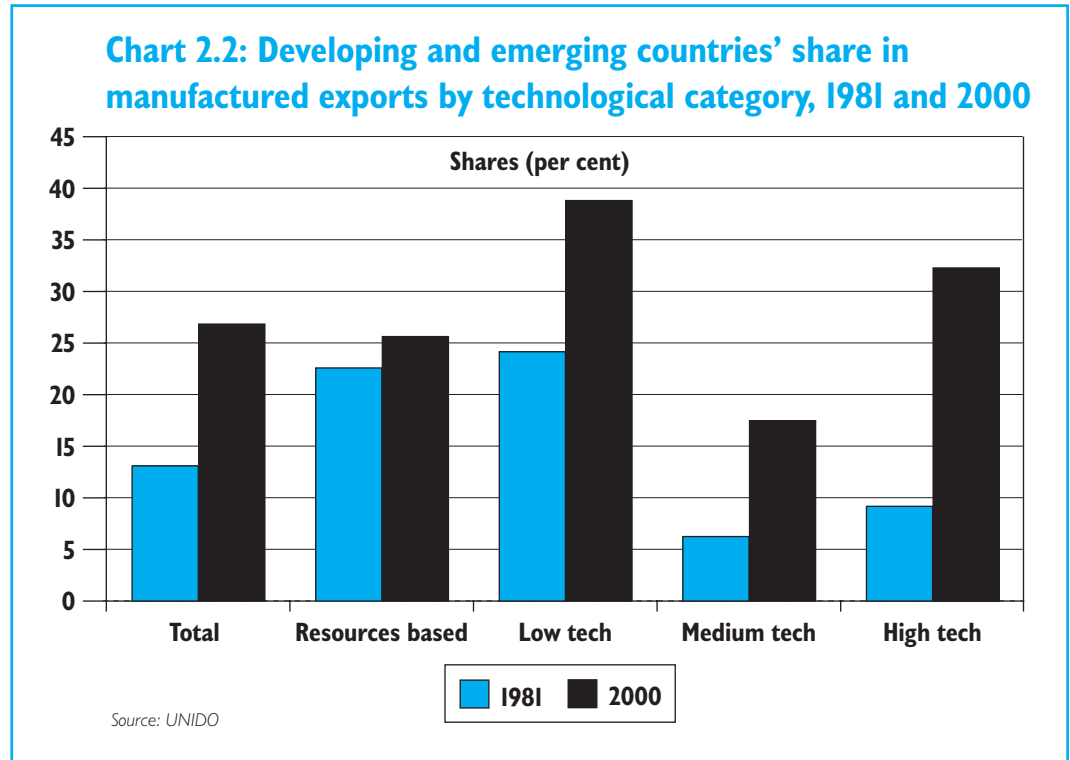
2.21 In response to the greater integration of global markets and advances in technology, businesses in some sectors are becoming more mobile or are fragmenting production to make use of the comparative advantage of other countries' supply of labour. For example clothing retailers are increasingly sourcing their supplies from countries such as China and Bangladesh. Other service sectors in which location of production is changing include business support, health, and internet-related services. Production is becoming increasingly fragmented as firms seek to maximise efficiency – one estimate suggests that 30 per cent of world trade in manufactures consists of components rather than final products.¹⁴

¹⁴Yeats, A. (1998): *Just how big is global production sharing?* World Bank Policy Research Working Paper No 1871.

Technological change 2.22 Developments in information technology have intensified competition in service sectors which were previously largely sheltered from international competition and the forces of comparative advantage. HSBC estimates that the cost of a one-minute telephone call from India to the UK or US fell by more than 80 per cent between January 2001 and October 2003. Chart 2.1 below shows how both communication and transport costs have fallen as a result of technological advances. Given that services represent 73 per cent of UK GDP and 79 per cent of employment, the potential implications of increasingly integrated markets are significant. This will enable the division of labour on an international scale, and therefore provide added pressure for firms to maximise efficiency where possible.



The knowledge economy 2.23 Importantly, as globalisation continues, comparative advantage will not be determined solely by stocks of physical capital and labour but also, in a knowledge-driven economy, by the ability of individuals to learn quickly and to take on and develop new information and knowledge. This increases the importance of a flexible economy where businesses and individuals can adapt quickly to change, and which invests in education and skills. Chart 2.2 shows how developing and emerging countries are increasing their share of manufactured exports, particularly in high-tech sectors. For example, China has utilised Foreign Direct Investment (FDI) inflows and an increasingly skilled workforce to move rapidly into higher value-added manufacturing, for example exporting computers and telecommunications equipment. India has begun to utilise its millions of highly educated English-speaking workers to take advantage of new opportunities in tradable services, from call centres to software design. Both countries are also becoming attractive destinations for international R&D activity as they try to develop areas of comparative advantage in higher value-added areas of activity.



Framing a policy response **2.24** These developments mean that countries need to identify which characteristics play the most important role in strengthening their comparative advantage. The theory enables a consideration of how competitive strengths may change over time. It allows policymakers to look back at past industrial development trends and, as emerging economies grow and technologies change, to develop an informed view about where the UK's future comparative advantage may lie.

2.25 The rise in higher value-added production in emerging economies potentially benefits the UK in the long run, as resources here and in other advanced economies are put to more productive use. The resulting specialisation drives the development of new technologies and growth, and UK consumers and businesses can source more efficiently produced goods and intermediate products from international markets. The global increase in allocative efficiency provides the potential for enhanced growth worldwide, ensuring that the UK's national income can continue to grow, even if advanced countries' share of world GDP is challenged by emerging competitors.

Box 2.4: Comparative Advantage: The UK

The UK economy possesses a number of strengths which put UK-based businesses at an advantage when competing in global markets, and which attract businesses to locate in the UK. These include:

- A tradition of open and competitive markets – the UK has maintained a long tradition of encouraging competition, and pushing for free trade in goods and services. The OECD rates the UK as being one of the most attractive countries in terms of low barriers to competition.¹⁵
- Strengths in science – with just 1 per cent of the world’s population, the UK undertakes 4.5 per cent of the world’s research, produces 9 per cent of the world’s scientific papers and receives 11 per cent of the world’s citations for those papers. UK scientists claim around 10 per cent of internationally recognised scientific prizes every year.
- A highly creative economy – the creative industries accounted for 8 per cent of UK gross value added in 2003, with creative employment totalling 1.8 million jobs. The sector grew by an average of 6 per cent a year between 1997 and 2003.¹⁶ Vibrant creative industries also help to create an environment that attracts other businesses to the UK.
- A transparent and well-respected regulatory tradition – the OECD ranks the UK as highest among OECD countries using a composite policy indicator of labour, product and capital market flexibility.
- Historical linkages to overseas markets – as a member of the European Union, the UK has unfettered access to the world’s largest market place. It also has strong trading links with the US, various Commonwealth countries, China and India.
- Use of English as the international language of business – English is the main language of books, newspapers, airports and air-traffic control, international business and academic conferences, science, technology, diplomacy, sport, international competitions, pop music and advertising. Over two-thirds of the world’s scientists read in English, 75 per cent of the world’s mail is written in English, and 80 per cent of the world’s electronically stored information is in English.¹⁷
- World-class universities – a recent study¹⁸ ranked Oxford and Cambridge universities as 5th and 6th in the world. London is a global centre for higher education, with four institutions in the top 50 worldwide – London School of Economics, Imperial College, University College London, and the School of Oriental and African studies. In Europe, the UK is a clear leader, with six higher education institutions in Europe’s top ten.

Making the most of comparative advantage

2.26 As technological development and the integration of markets continue, the balance of economic activity shifts to reflect comparative advantage, generating growth benefits. For example, in a flexible economy firms are able to outsource labour-intensive manufacturing and assembly to low-cost locations, while keeping design in more knowledge-intensive economies. This movement of economic activity reflects businesses’ efforts both to exploit the UK’s comparative advantage, and also other countries’ comparative advantage. This

¹⁵ OECD (2005): *The Benefits of Liberalising Product Markets and Reducing Barriers to International Trade and Investment: The Case of the United States and the European Union*. OECD Economics Department Working Paper No. 432

¹⁶ DCMS (2005): *Creative Industries Economic Estimates Statistical Bulletin*.

¹⁷ British Council website

¹⁸ Times Higher Education Supplement (2004): *World’s Top 50 Universities*.

process can benefit all countries, including the UK, because it leads to a more efficient use of resources and allows countries to concentrate on what they do best. In particular, the increased tradability and potential for greater fragmentation of services provides a potentially valuable opportunity for the UK to capitalise on its comparative advantage in the more value-added elements of service provision, such as design, and high-end financial services.

Box 2.5: Education Exports – importance for the UK economy

One example of the UK's ability to capitalise on its comparative advantage is the success of UK educational institutions in benefiting from – and promoting – growing international activity in higher education.

The UK's higher education system is world-class, and it is second only to the USA in terms of the number of foreign students it attracts (see table below). The UK higher education sector is also at the forefront of other transnational developments. For example, some UK higher education institutions have been establishing campuses abroad, while others are involved in the provision of higher education through partnerships with institutions overseas. The benefits go far beyond the important contribution they make to export earnings. They enrich the educational experience of all students and help to develop and spread new ideas, skills and innovation both here and across all countries involved in this international activity. Moreover, with a greater proportion of high-skilled people across the world having benefited from a UK education, the UK stands to benefit from an increased awareness of, and familiarity with, our institutions, transparent regulatory systems and other advantages.

Several factors explain the UK's success in higher education. For example, the sector has a good reputation for teaching quality, with students at UK universities reporting high rates of satisfaction in the quality of their courses. UK graduates also have good employment prospects - they are less likely to be unemployed than the OECD average. But other factors such as language, cultural strengths and historic ties may also be important. For example, the ability to offer courses in a major global language, while also offering the opportunity to improve English language skills, is likely to be attractive for many contemplating study on a UK course either here or in their home country.

Table 2.1: Market share of the overseas student market, by country

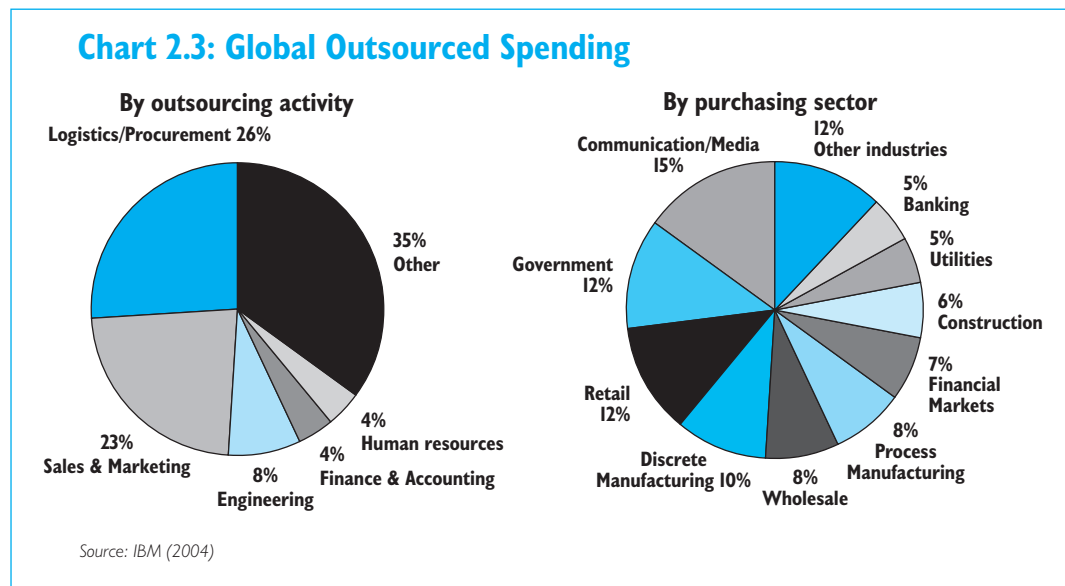
Rank	Country	No. of Students*	Share of World Market 2002-03
1	United States	586,316	27%
2	United Kingdom	255,233	12%
3	Germany	240,619	11%
4	France	221,567	10%
5	Australia	179,619	8%
6	Japan	86,505	4%
7	Spain	53,639	2%
8	Belgium	41,856	2%
9	Italy	36,137	2%
10	Switzerland	32,847	2%
(17)	New Zealand	17,732	1%
	Other	410,264	19%
		2,162,334	100%

Source: UNESCO, 2002-03. Australia and New Zealand which are based on 1999-00.

Benefiting from others' comparative advantage

2.27 Outsourcing and offshoring trends demonstrate how UK firms have benefited from recognising others' comparative advantage. A recent report by Deloitte notes that UK-based companies have more than one-fifth of all their non-customer operations located outside the UK,¹⁹ with companies' relocation strategies being driven more by capability acquisition than cost reduction. An area in which significant benefits are being generated both for the UK and other countries is business and computer services, where outsourcing has grown rapidly with technological advances. There is a growing trend for advanced countries such as the UK to outsource lower-value, labour-intensive activities to countries with a relatively abundant and cheap supply of skilled workers. Activities that can be easy for firms to offshore include tax administration, payroll services, customer analyses, and call centre operations. Chart 2.3 shows the breakdown of global outsourcing spending by activity and by sector. China's exports of business and computer services now total over \$18 billion, followed by India with \$17.5 billion. For India, this represents an eightfold increase since 1996.

2.28 Outsourcing allows firms to compete more effectively in world markets. This ensures that the economy can continue to generate new and sustainable jobs and business opportunities. As lower-value work moves abroad it can be replaced by higher value-added jobs, raising productivity. Illustrating the benefits of this trend as markets become more integrated, a study by McKinsey²⁰ showed that for every \$1 of US service activity that was offshored, there was a net global gain of \$0.47; of this, \$0.33 went to the economy receiving the offshored work, and \$0.14 to the US economy. In total, for each dollar offshored, \$1.14 was retained in the US, distributed between different agents in the economy – importers, re-employed workers, consumers and shareholders.



2.29 It is also important to recognise that countries' comparative advantage will change over time. In part this will come about from the evolution of unit wage costs, which reflect differences in productivity between locations. Over time, as fast-growing developing and emerging economies experience real exchange rate appreciation, their cost-competitiveness will begin to diminish. And in the longer-term, global market integration and the removal of trade distortions should lead to some degree of alignment of relative factor prices. Moreover, emerging economies are increasingly investing to be able to compete in higher value-added areas that were traditionally the preserve of more advanced economies. Their investment in skills and research, and their efforts to attract international business are targeted at developing new areas of comparative advantage that do not rely simply on their abundance of low cost labour.

¹⁹Deloitte (2005): *Trading Places – How globalisation will drive future UK competitiveness.*

²⁰McKinsey Global Institute (2003): *Is it a win-win game?*

CLUSTERS AND THEIR INFLUENCE ON THE LOCATION OF INDUSTRIES

Comparative advantage doesn't explain all trade

2.30 Comparative advantage theory, whereby countries' underlying characteristics determine their industrial structure and pattern of trade, has been widely accepted as a fundamental explanation for the distribution of trading activity. It is complemented by new economic geography theories which shows that – as well as resources and endowments – countries' comparative advantage is also shaped by the way in which industries develop and deploy resources, skills and knowledge, particularly where there are external economies of scale which lead to the development of industrial clusters. In 2004 only 22 per cent of the UK's exports went to developing countries. Indeed, today the UK's biggest trading partner is Germany, which accounts for approximately 12 per cent of our trade in goods and services. This is followed by the US, France, Ireland and the Netherlands – all countries that are fairly similar to the UK in terms of their industrial structure. In contrast, China and India together account for just over 4 per cent of UK trade. This trade with other advanced countries is often in similar goods: Germany sells cars and financial services to the UK, and the UK sells cars and financial services to Germany. This suggests that comparative advantage is one driver of trade and the location of economic activity, but on top of this there is a range of additional factors which impact on businesses' production, trade and investment decisions.

External economies of scale

2.31 Countries often create leads in dynamic sectors as firms build on an initial strength, and develop this into an internationally competitive sector. To do this requires a foundation of macroeconomic stability and flexibility which enables firms to take long-term decisions and respond to new opportunities. As these agglomerations develop over time, generating benefits both for and from their constituent firms, the existence of the clusters themselves becomes part of the locational comparative advantage. Clusters can contribute to the industrial attractiveness of a location through 'centripetal' forces, such as market size effects, deep pools of skilled labour, and external economies of scale,²¹ even though 'centrifugal'

Box 2.6: Enabling competitive clusters to emerge

Economic analysis by Burgess and Venables²³ of how countries grow and how clusters emerge has divided the drivers of growth into two subsets: First Advantage and Second Advantage. First Advantage factors are the conditions that provide a pro-business environment in which new activities can be profitably developed. These are in line with traditional economic theory, e.g. access to markets and factors of production, basic infrastructure, the institutional environment etc, and are important for all industries. Second Advantage factors enable firms to benefit from increasing economies of scale and can result in the emergence of a persistent lead. These are factors such as technological spillovers, learning, and well-developed and specialist markets of suppliers and pools of labour. First Advantage and Second Advantage factors interact to determine how industries develop in different locations, and both are needed for economic growth.

This means that building on the Second Advantage factors that can promote the development of clusters is not the only response necessary. It is equally vital to ensure that the characteristics of the economy that give it its underlying comparative advantage are maintained.

²¹ This is where firms in a particular sector enjoy lower production costs or generate greater value as the overall size of a co-located industry increases. See, for instance, Krugman, P. (1990): *Increasing Returns and Economic Geography*, NBER Working Paper 3275; Norman, V. & Venables, A. (2002) *Industrial Clusters: equilibrium, welfare and policy*, CEPR; Ethier, W.J. (1982): *National and International Returns to Scale in the Modern Theory of International Trade*, American Economic Review, Vol 72

²² Porter, M (1990): *The Competitive Advantage of Nations*, New York

forces, such as land and labour costs, would suggest that businesses should locate elsewhere according to comparative advantage theory.²² Some of the factors which pull clusters together, and which can drive them apart, are set out later in this section.

2.32 Evidence shows that in some industries, other key factors influence the location of firms in industrial clusters. The reason for this is the existence of important inherent benefits derived from locating in an agglomeration in the form of external economies of scale. The advantages associated with such external economies of scale can be generated through various mechanisms:

- **Access to a pool of skilled labour** – workers' incentives to acquire specialised skills can increase within agglomerations, as a cluster improves the marketability of their skills, and reduces the risk that skills become redundant if one firm fails. This creates what is known as a 'deep' labour market, which also reduces job search costs for employers. This process can be seen in the growing importance of skills and R&D in determining the location of industries within the EU in recent years.²⁴
- **Exchange of 'tacit' knowledge between firms and between individuals** – often this is embodied in a skilled workforce and entrepreneurs within a cluster rather than in a single business, with information being exchanged through informal linkages or via rapid job changes. The sharing of knowledge in Silicon Valley is a classic example of this.²⁵
- **The ability to draw on specialised suppliers** – this can include specialist business services such as venture capital or patent lawyers, the existence of which facilitates entrepreneurial behaviour as well as prompting the relocation of established firms. Firms and entrepreneurs can benefit from large local markets and a large number of local suppliers.²⁶

2.33 It is partly because of these benefits of co-location and clustering that some firms are prepared to pay the premium of locating in agglomerations in advanced economies. Sectors that demonstrate these sorts of characteristics are often referred to as being 'sticky' because, once a cluster is created, no single business in the cluster is likely to gain from relocating elsewhere, and so it is more difficult for them to be pulled apart. Because such industries use skilled labour, generate knowledge spillovers and/or draw on specialised inputs, they also tend to be sectors with higher levels of productivity, such as financial services, or high value-added manufacturing.

²³ Burgess, R. & Venables, A. *Towards a Microeconomics of Growth*, in Bourguignon, F. & Pleskovic, B. (eds) (2004): *Accelerating Development: Annual World Bank Conference on Development Economics*, World Bank.

²⁴ Midelfart-Knarvik, K. et al (2001): *Comparative Advantage and Economic Geography: estimating the determinants of industrial location in the EU*.

²⁵ Venables, A. (2001): *Trade, Location and Development: an overview of theory*: 'Many other information based activities require face-to-face contact, either because a high degree of interaction between participants is needed (R&D) or because of problems of contractual incompleteness and monitoring'.

²⁶ Venables, A. (2001): 'In some activities, new technologies actually seem to increase the value of proximity; new stock

Box 2.7: 'Sticky' Industries and Clusters: The UK

The UK has developed leading and strong international positions in growing sectors, and has the characteristics to ensure it is well-placed in relation to other countries. Some examples of where the UK is a global leader are:

- London's financial services sector – home to 36 per cent of global over-the-counter derivatives trading, 31 per cent of global foreign exchange trading turnover, and 45 per cent of global foreign equity trading. Half of all European investment banking activity takes place in London, arguably the financial centre of the world.
- Business Services – between 1996 and 2003, UK exports of business and computer services rose 124 per cent to \$51.8 billion, second only to the US. This reflects the purchase of long-established advisory and professional services by businesses in other countries,²⁷ as well as a capacity for innovation.
- Legal services – London is a major centre for international legal services. Four of the largest global firms, based on revenue, were from the UK in 2003/04. In terms of head count, UK firms held 5 of the top 7 places.²⁸
- Pharmaceuticals – in 2004/05 the UK's two largest investors in R&D were GlaxoSmithKline and AstraZeneca, spending £2.84 billion and £1.98 billion respectively, and ranked 2nd and 11th globally respectively in terms of global pharmaceutical research spending. The pharmaceutical sector accounts for 23 per cent of all private sector R&D in the UK.²⁹
- Creative Industries – the UK's clusters of creative industries – e.g. the cluster of advertising, design, media, public relations and related consulting firms in Central London – are not only dynamic in their own right, but also generate spillover benefits for many other sectors to which they provide services.
- High value-added manufacturing, such as aerospace – aerospace makes up a larger proportion of R&D in the UK than in the US, Germany or France, with market leaders including BAE Systems, Rolls Royce and Smiths Group. The UK is a centre of excellence for the production of wings for the Airbus consortium, now the world's largest manufacturer of civil aircraft.

2.34 The existence of external economies of scale for particular industries has played an important role in determining the geographic distribution of industrial activity seen in the world today, and notwithstanding the faster pace of change in the global economy, this is likely to remain important in the future. Because such external economies of scale can make it more profitable for firms to locate near each other, successful clusters, once created, can become increasingly attractive as locations in which to set up a business. This can lead to a dynamic process of cumulative causality³⁰ where industrial activity becomes entrenched in particular places or agglomerations despite the existence of lower costs elsewhere and falling barriers to trade, enabling a persistent lead in an activity to develop.³¹

²⁷ International Financial Services, London (2005): *Offshoring of Services: Impact and Implications*.

²⁸ International Financial Services, London (2003): *City Business Series 2003: Legal Services*.

²⁹ DTI (2005): *The 2005 R&D Scoreboard*.

³⁰ Venables, A. (1998): *The Assessment: Trade and Location*.

³¹ Venables, A. (2001): *Trade, Location and Development: an overview of theory*; Krugman, P. (1994): *Peddling Prosperity*.

Co-location of economic activity 2.35 This means that despite the trend for some economic activity to move to lower-cost locations, it is a mistake to conclude that the rise of lower-cost producers and manufacturers automatically drives the loss of production and jobs to lower-cost competitors. As we have seen with offshoring and outsourcing, there can be benefits to the UK as well as to recipient countries of such reallocation of production where this results in productivity growth – for example, at a firm level, the outsourcing to Malaysia of manufacturing and assembly by Dyson led to increased profits, enabling the company to significantly increase investment in R&D and high-skilled employment at its UK base in Malmesbury, Wiltshire. Firms in some sectors may choose not to relocate because they can benefit from remaining near to similar firms and to sources of skills and expertise and, for them, these advantages can outweigh simple cost considerations. In other words, geography matters for certain kinds of firm, particularly in terms of knowledge spillovers and the supply chain. Academics have found that concentration is more likely in technology- and knowledge-intensive industries than in other sectors.³² Moreover, while companies are more willing now to consider outsourcing, headquarters activities are more ‘sticky’ – Deloitte reports that only 3 per cent of UK companies currently review relocating their headquarters on a regular basis, and nearly one-third would never consider relocating corporate headquarters.³³

2.36 Economists, for example Krugman (1981), have explained the trade in similar goods between advanced economies as being the result of a greater degree of specialisation and consumers’ preference for variety. This is because history, early leads and the accumulation of expertise, specialist suppliers and a skilled labour force all reduce the cost of producing specialised goods, making it more efficient for countries to import them rather than replicating production domestically. In this way, specialisation itself drives trade.

Box 2.8: Path Dependency

Evidence shows that countries or regions that start out with the same endowments of capital, labour and environmental resources can follow significantly different growth paths as a result of one country taking an initial lead in an industry, particularly in industries that exhibit increasing returns to scale. This creates a pattern of cumulative causation, or path dependency, whereby past decisions, or accidents of history, have important implications for the nature of subsequent economic development. It also means that the decisions taken by individuals, businesses and public bodies today may have a crucial role to play in shaping the future structure of the UK economy.³⁴ Galli provides an example of how later take-up of IT technology in the EU compared to the US may have led to long-run productivity differences, suggesting that catch-up is not inevitable.³⁵

The UK already has many key strengths, as is evident from global leadership in sectors such as finance and pharmaceuticals. The strength of these key sectors can be traced back to aspects of the business environment going back many years. For instance, the success of London’s financial services sector is based on a long tradition of openness and regulatory flexibility, welcoming foreign firms, individuals and teams from overseas, and providing relatively easy access to markets. Similarly, internationally-leading pharmaceutical firms have emerged, developed and remained in the UK, due in part to the UK’s strengths in science.

³² See, for example: Audretsch, D. & Feldman, M. (1996): *R&D Spillovers and the Geography of Innovation and Production*, American Economic Review, Vol 86, No 3.

³³ Deloitte (2005): *Trading Places: How globalisation will drive future UK competitiveness*.

³⁴ For a more detailed explanation, see Krugman, P. (1981): *Trade, Accumulation and Uneven Development*.

³⁵ Galli, R. (1997): *Is there long run industrial convergence in Europe?* International Review of Applied Economics, Vol 11, Issue 3.

Developing a long-term lead

2.37 Moreover, as globalisation results in more intense competition, the benefits to firms in certain high-growth industries of locating in a cluster are likely to become more important, not less, as they benefit from external economies of scale. This applies to both service and manufacturing businesses – notably in the case of high-tech modern manufacturers whose businesses invest heavily in knowledge, innovation and creativity, and draw on advanced skills. Critically, it is especially important where close contact with thriving networks of related researchers and businesses yield advances in knowledge and innovation which would not occur if the participants were geographically dispersed.

2.38 In many parts of the UK economy we observe the presence of clusters of firms in the same industry all locating geographically near to each other. The co-location of financial services in the City is a good example of this – it is home to more than 550 foreign banks, more than any other country. This is because the benefits to these firms of locating in London – being able to take advantage of a pool of highly skilled, flexible and innovative talent – outweigh potential disadvantages such as congestion and relatively high wage costs. The UK is also home to clusters of creative firms, not just in London, but also in cities such as Manchester and Brighton. The North East has developed a successful petrochemicals cluster, with half the UK's petrochemical industry, benefiting from proximity to oil reserves, new technology, investment and skills, and the Centre for Process Innovation in the Tees Valley which stimulates and drives innovation, working collaboratively across private and public companies, the public sector and universities.

Box 2.9: The City of London

The City of London is arguably the world's leading international financial centre. An indication of London's importance in the world's financial architecture is immediately apparent in its size relative to other centres. London is the location for:

- 70 per cent of the international secondary bond market;
- over 40 per cent of the over-the-counter derivatives market;
- over 30 per cent of world foreign exchange business; and
- 20 per cent of cross-border bank lending.

Since the introduction of the Interest Rate Equalisation Tax in the US in 1963, when the majority of issuing and trading of dollar bonds moved to London, attracted by the City's openness and flexibility, the City has been the predominant currency and international bond trading centre of the world and it has built on this success. Building on its deep historical roots, London has consolidated or increased its market share in most of the world's financial markets over the past decade.

The City is a prime example of a sector which has responded successfully to the challenges of globalisation and reaped the benefits. Openness to global competition has driven firms in the City to excel. Because the City is in many ways a microcosm of the global financial system, the competition City firms face on their own doorstep is often just as fierce as that which they face across international markets. International openness also ensures a consistent flow of innovation and new ideas. Embracing innovation and new technology has allowed the City continually to introduce new products to meet the changing needs of markets. And the presence of an environment in which entrepreneurial activity can thrive ensures new ideas are taken up quickly and that incumbent firms always face the threat of a new competitor.

The City has also successfully exploited the benefits of clustering to help maintain its competitive edge. Its deep, transparent and highly liquid markets attract further business and therefore further liquidity. City firms also have ready access to the legal and accounting services they need to make their businesses work: London is home to five of the world's six biggest law firms and all of the major accounting firms have substantial operations in the City. However, technology is increasingly allowing business to be conducted over long distances and thus eroding some of the benefits the City derives from its cluster status. To remain competitive, in the future the City must focus on the complex, innovative and client-focused activities that still require geographical proximity.

2.39 It is important that policy recognises the importance of these phenomena, that the factors that encourage them are strengthened, and that barriers to their development are identified and removed. It is crucial to identify constraints that may prevent or inhibit the UK's further economic development and the factors which draw businesses to the UK. This means improving the UK as a location for business compared to competitor countries, investing in infrastructure and skills, but also supporting factors which contribute to making the UK a creative, dynamic and pleasant place to live and work. By focusing on such enabling factors, the Government can help to create a climate that allows firms to capture the opportunities presented by an increasingly globalised economy.

2.40 This does not mean that the Government should respond to globalisation by supporting specific industries and shielding them from globalisation through subsidies and other forms of protectionism. While market failure means that some industries do generate positive externalities for the wider economy and society, experience has shown that governments are not well-placed to identify where support would maximise these spillovers. The result can often be to support declining industries, to introduce distorting economic incentives, and to prevent the reallocation of resources to more productive uses. Such an approach prevents the economy from responding fully, efficiently and flexibly to the challenges of globalisation. Global integration and technological change are set to continue, and the wrong policy response would prevent the UK from being able to benefit fully from the opportunities this creates.

Forces that can drive clusters apart **2.41** It is important to recognise that successful clusters can erode and unravel over time, and that continuing globalisation – technological advances and new sources of competition – and shifting comparative advantage can lead to this. Moreover, as clusters arise, they generate certain policy challenges. Over time, if not addressed, these can create such excessive costs for firms in a cluster that they can result in pulling the cluster apart.

- **Factor price increases** – while the benefits of agglomeration will mean that firms are prepared to pay a premium to locate in a cluster, costs do still matter and over time increasing land rents and excessive labour costs can result in certain firms relocating to an alternative location. Where this occurs, firms can seek to agglomerate in alternative locations and the original cluster can unravel;
- **Skills shortages** – access to a pool of skilled labour is a key factor in the development of successful clusters, and firms are willing to pay a premium for specialist skills. However, if supply of skilled labour is limited, firms may well be encouraged to seek alternative locations;
- **Congestion** – as more and more firms are attracted to an area, the risk of congestion increases, increasing costs to firms and reducing their flexibility. In particular, congestion in transport infrastructure can prevent firms from being able to respond to new opportunities; and
- **Poor regulation** – an inflexible regulatory and business environment can undermine the benefits firms derive from locating in a cluster. One pertinent example comes from the US: regulatory and tax measures imposed from the late 1950's targeted to protect the US balance of payments restricted financial institutions and sharply increased the cost of locating in the US. This then led to many institutions relocating to London, which had the advantage of a lack of regulatory restrictions, and openness to skilled migrants and foreign institutions.

2.42 Deloitte reports that, for headquarter relocations, UK businesses are three times more likely to be pushed to another location than be pulled to a destination.³⁶ This highlights the vital importance of addressing these factors which can drive clusters of firms apart.

³⁶Deloitte (2005): *Trading Places: How globalisation will drive future UK competitiveness*.

2.43 One illustrative example of how the effects of global integration can lead to a once successful cluster unravelling is the decline of textiles mills in Lancashire.³⁷ During the nineteenth century Lancashire's textile industry developed into an internationally competitive cluster, led by export growth and specialisation, with businesses economically and socially embedded in the region. However, during the twentieth century, external market developments and technological advances undermined the attractiveness of Lancashire as a location for the textiles industry, and the success of machinery exported to Asia and the Pacific, combined with their labour cost advantages, led to the collapse of spinning and weaving in the UK. However, despite the unravelling of the comparative advantage behind the original cluster, the industry evolved to develop competitiveness in niche markets for high performance fabrics and technological textiles, responding to new sources of higher technology demand from industry and the outdoor activity trade. This illustrates the point that clusters evolve in a way that is difficult for Government to predict, and that UK firms need to have the flexibility to take advantage of new opportunities provided by the knowledge-driven economy and move up the value-chain.

THE RIGHT TRANSITION TO A GLOBAL ECONOMY

2.44 The analysis in this chapter has shown how the importance of maintaining and enhancing the stability and flexibility of the economy, so that as globalisation continues, firms are able to take long-term decisions and to respond to changing opportunities. Furthermore, comparative advantage and new economic geography theories provide us with an understanding of how the continuing integration of global markets from technological advances and new emerging sources of competition will affect businesses' decisions, and provide a basis for developing a policy response.

2.45 Global market integration is continuing, and the speed of technological change is increasing, providing firms with a wider choice of potential locations. All this means that addressing the challenges globalisation poses for the UK and all other countries, and creating the conditions businesses need to succeed, is becoming ever more important. It is important that the right policy decisions are made in response, founded on an understanding of the factors which influence businesses' decisions.

Globalisation requires an international response

2.46 Moreover, building a successful UK economy is inextricably linked to building a consensus around the benefits and inevitability of globalisation at a European and global level. The UK has historically played a key role in progress towards more open markets, and this leadership will be important in promoting a better world economic system, removing barriers to trade and promoting market access for all; avoiding protectionism, and developing partnerships based on openness and equity with poorer and emerging economies that will be to the benefit of all.

2.47 Moreover, reform and liberalisation of the EU economy and the international trading system are as important to coping successfully with globalisation as the domestic stability and reform agenda. Achieving these requires international agreement. Action required by the UK, the EU, and at an international level was set out in the Trade and Investment White Paper published in 2004³⁸ and in '*Global Europe: Full Employment Europe*'.³⁹

³⁷Rose, M. & Parsons, M. (2005): *The Neglected Legacy of Lancashire Cotton: industrial clusters and the UK outdoor trade, 1960-1990*, Lancaster University Management School, Institute for Entrepreneurship and Enterprise Development

³⁸DTI (2004): *Trade and Investment White Paper 2004: Making globalisation a force for good*.

³⁹DTI (2004): *Trade*

⁴⁰HM Treasury (2005): *Global Europe: Full Employment Europe*.

2.48 Globalisation is set to continue, and all countries will have to meet the challenges it poses. Empirical evidence⁴⁰ looking at growth rates of European countries linked to deviations from the optimal industrial structure suggests that countries that are reluctant to accept changes to their industrial structure will pay a penalty in the form of reduced growth rates. At the same time, countries willing to accept changes as a way to utilise technological change and globalisation to their advantage can enhance their growth potential, and can help to lock in a lead over the longer term.

The need for a domestic response **2.49** The analysis set out above provides an understanding of how globalisation will impact businesses' decisions, and enables a policy response to be developed. There are sometimes misinterpretations of what the theories of comparative advantage and clusters mean for policy. Rather than seeking to shelter business from globalisation in an effort to resist change, the UK has focused on reforms to improve flexibility which enable businesses to respond and succeed. This promotes more efficient resource allocation; helps UK industries to become more competitive for the long term; and will promote the development of new competitive clusters by enabling the economy to respond to economic incentives. Path dependency theory implies that the alternative – protecting industries from globalisation – would be likely to have unintended but important adverse implications for the long-term growth path of the economy.

Enabling all sectors and regions to compete **2.50** The Government's strategy is to provide a supportive economic environment and infrastructure for all business, and to support investment in R&D and science that will raise the productivity of all. Policies that seek to promote or support specific sectors, beyond tackling market or government failures, risk distorting economic incentives, and crowding out the development of new high-growth clusters. The risk of undermining national competitiveness is strongest in sectors characterised by external economies of scale or increasing returns to investment. The Government has put in place a regional policy where each region can build on its inherent economic advantages and incentives. Regional Development Agencies are strategic drivers of economic development in these regions, responsible for identifying comparative advantage and distinct policy priorities. However, attempts to homogenise industrial development across regions are likely to lead to wasted resource, and can undermine the benefits of regional specialisation and clusters where they emerge naturally. Seeking to spread clustering industries over a range of regions is likely to undermine potential external economies of scale, resulting in the 'pulling apart' of potential clusters.

Flexibility to reallocate resources **2.51** The economy needs to have the flexibility to respond to new technologies and changing economic incentives. The UK's approach is to ensure a smooth transition from declining industries to a more productive use of resources, while providing security for individuals. Resisting industrial restructuring by providing subsidies and protection will prevent resources moving to those sectors where they can bring the greatest returns, potentially hindering the development of high-growth clusters. This can have long-term impacts on the growth of the economy.

⁴⁰Audretsch, D. et al (2000): *Impeded Industrial Restructuring: The Growth Penalty*, CEPR Discussion Paper 2648.

New sources of competition 2.52 Global competition drives productivity, and the UK is a key proponent of multilateral efforts towards more open and competitive global markets. Strategic trade policy to support domestic producers and to protect them from international competition, aimed at promoting a favoured industrial mix, risks destroying the benefits of global competition. It is important for industries to face competitive pressures and to let the market determine the nature and location of clusters.

2.53 The UK therefore needs to continue to adapt in order to remain an attractive location for internationally competitive businesses. Building on the progress made on macroeconomic stability and economic flexibility, the principal challenge is for businesses to become more innovative and competitive, investing more in R&D so as to be at the forefront of new technologies, supportive of a skilled workforce for the future, and recognising the importance of world-class management able to take the right decisions to succeed in more competitive markets. The Government must also recognise the importance of the challenges of globalisation for policy, and, based on an understanding of the factors which make the microeconomic environment more or less conducive to businesses competing in global markets, take action to improve the economic environment and attractiveness of the UK for business.

2.54 Chapter 3 identifies the implications of this analysis for the UK's response. It looks in detail at how policy should respond to meet the six policy changes set out in *'Long-term global economic challenges and opportunities for the UK'*.

3

IMPLICATIONS FOR THE UK'S RESPONSE

3.1 Chapter 1 has shown that the global economy is in the midst of a transformation which is both radical and unavoidable. Faster information flows and falling communications and transport costs are breaking down geographic barriers and providing new opportunities for economic activity. This transformation is introducing far-reaching and fundamental changes in the way our economy works – in technology, production and trading patterns – and in the wider society. While these changes may present short and medium-term challenges, they have the potential to bring huge long-term benefits not only to the UK economy and society, but also beyond – improving the global allocation of resources and improving living standards, reducing poverty, and providing opportunities for all worldwide.

3.2 Chapter 2 illustrated the factors that drive the location of economic activity – from macroeconomic stability and economic flexibility, to comparative advantage and dispersion and clustering of economic activity. In this context, it is critical to have the right policy response to strengthen the UK's underlying advantages, and to secure the right business environment. This chapter sets out what this means in terms of specific policy priorities for the UK.

Responding to the rise of the global economy

3.3 Crucially, both the scale and the pace of transformation of the global economy require us to think in a new way about the changes needed to respond effectively and to create the right environment for UK businesses to trade and compete worldwide. At the heart of this agenda is ensuring the UK is able to respond to the challenges facing all advanced economies that were outlined in the paper *'Long-term global economic challenges and opportunities for the UK'*:

- entrenching macroeconomic stability in a more integrated global economy;
- building an enterprising and flexible business sector where firms can succeed and seize the opportunities presented by a more open and competitive global economy;
- promoting innovation to drive forward scientific research and knowledge-driven industries;
- opening the acquisition of skills to secure the right skills profile for the global economy;
- ensuring fairness to provide security for those who need it while providing incentives to work and save; and
- increasing the energy and resource efficiency of the economy.

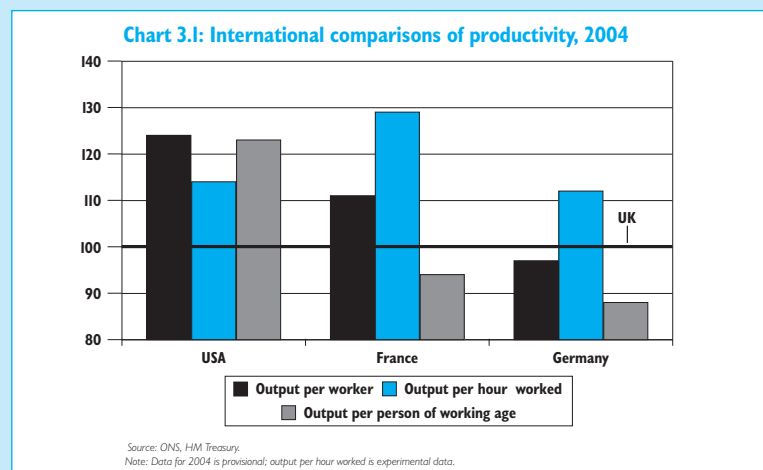
Box 3.1: Meeting the productivity challenge

The UK is well-placed to respond to the challenges and to reap the rewards of globalisation provided the right long-term decisions are taken. The UK has an unparalleled recent track record of macroeconomic stability, a world-class science and innovation base, thriving creative industries, educational institutions among the best in the world, and a legacy of openness to global talent, trade and ideas. UK-based businesses and clusters are leading the response to globalisation, combining Britain's traditions of openness and trade with an evolving culture of entrepreneurship to seize the opportunities that new markets, new technologies and more intense competition offer.

Central to this agenda are the Government's microeconomic reforms focused on strengthening productivity – essential to the long-term growth and welfare prospects of the economy¹. Tackling the productivity challenge centres on the five drivers identified as central to productivity growth:

- **Competition** – encourages flexible markets and business efficiency, and promotes choice and quality for consumers;
- **Investment** – efficient private sector investment improves the stock of physical capital in the economy;
- **Enterprise** – to encourage innovation and ensure the economy is well-placed to take advantage of new opportunities;
- **Science and Innovation** – to promote the development of new technologies and more efficient ways of working; and
- **Skills** – to create a more flexible and productive workforce, ready to adopt innovative technologies and move into new areas of work.

Historically, UK productivity has been lower than in other major economies, but there are signs that the UK is now making progress in narrowing this gap. In terms of productivity measured by output per worker, the UK gap with France has narrowed from 22 per cent in 1995 to 10 per cent, and the gap with Germany has closed. In addition, adjusting for the effect of employment growth, it is estimated that the underlying rate of productivity growth was 2.70 per cent over the recent past compared to 2.22 per cent over the previous economic cycle. These gains in terms of relative productivity performance are all the more impressive given the UK's strong employment performance. Improvements in UK productivity are being supported by improvements in UK skills, ICT investment, the competition regime, and macroeconomic stability. But despite this progress, there remains a considerable productivity gap between the UK and other G7 countries, in particular the US, as shown by the chart below.



¹ See analysis in Porter, M & Ketels, C (2003): *UK Competitiveness: Moving to the next stage*. ESRC, DTI Economics Paper No 3.

A sustained response 3.4 The analysis in Chapter 2 showed that, although the UK's productivity gap with other advanced economies is improving, there is a need to do more to embed and strengthen the UK's attractiveness as a base for international businesses as globalisation continues. This challenge is made more important as technological developments continue at a fast pace and as emerging economies with rapidly developing entrepreneurial classes become more dynamic sources of competition. If these challenges are ignored, the abundance of low-cost labour in these locations, combined with increasing investment in infrastructure, advanced skills, science and technology, will encourage more and more businesses to look to relocate production not only in labour-intensive activities, but also in more knowledge- and capital-intensive industries. This challenge requires a sustained drive to maintain and enhance the UK's comparative strengths.

BUILDING THE FLEXIBILITY TO RESPOND

3.5 The rest of this chapter sets out the UK Government's priorities in responding to the six challenges set out in paragraph 3.3 above and identified in '*Long-term Global Economic Challenges and Opportunities for the UK*'.² It places particular prominence on the need for flexibility and continued change in the face of technological advances and the sustained transformation of emerging technologies. The following sections outline progress made since 1997 against each of these challenges, and highlight the priority policy challenges in each area.

The Macroeconomic Framework

3.6 The Government's economic objective is to build a strong economy and a fair society where there is opportunity and security for all. The long-term decisions the Government has taken – introducing a symmetric point inflation target, giving independence to the Bank of England, new fiscal principles, objectives and rules and a reduction in debt – have contributed to and entrenched macroeconomic stability. Achieving macroeconomic stability means that businesses, individuals and Government can plan effectively for the long term, resource allocation is improved and the economy's potential growth rate is boosted.

A strong macroeconomic framework 3.7 The Government's macroeconomic framework is based on the principles of transparency, responsibility and accountability, and is designed to entrench macroeconomic stability. The monetary and fiscal policy frameworks are based on medium-term objectives but allow constrained and short-term discretion to enable policy to respond quickly to shield the economy from shocks.

3.8 The **monetary policy** framework is based on clear and precise objectives. While the primary objective of monetary policy is to deliver price stability, the adoption of a single, symmetric inflation target ensures that outcomes below target are treated as seriously as those above target, so that monetary policy supports the Government's objective of high and stable levels of growth and employment. The framework ensures full operational independence for the Bank of England's Monetary Policy Committee (MPC) in setting interest rates to meet the Government's inflation target. The decision-making process ensures openness, transparency and accountability. The 'open letter' system ensures credibility and flexibility. The framework is recognised by international commentators as close to, if not at, world best practice.

3.9 The Government's **fiscal policy** is underpinned by two strict rules that ensure sound public finances over the medium term. The fiscal rules are the foundation of the Government's public spending framework, which facilitates long-term planning and provides

²HM Treasury (2004): *Long-term Global Economic Challenges and Opportunities for the UK*.

government departments with the flexibility and incentives they need to increase the quality of public services and deliver specified outcomes. The fiscal rules are:

- **the golden rule** – over the economic cycle, the Government will borrow only to invest and not to fund current spending; and
- **the sustainable investment rule** – public sector net debt as a proportion of GDP will be held over the economic cycle at a stable and prudent level. Other things being equal, net debt will be maintained below 40 per cent of GDP over the economic cycle.

Securing macroeconomic stability

3.10 As set out in Chapter 2, both the monetary and fiscal frameworks have played a critical role in achieving – and entrenching – economic stability and greater prosperity. The economy is currently enjoying its longest unbroken expansion on record, with GDP having grown for 53 consecutive quarters. The last ten years have seen the UK move from last to third of the G7 nations in terms of GDP per capita, and from 22nd to 14th in the world. With volatility in the UK economy at historically low levels and now the lowest in the G7 and OECD, the stability delivered by the Government's macroeconomic framework puts the UK in a strong position to respond to the global economic challenges and opportunities of the next decade.

Sustaining stability in the future

3.11 The UK's macroeconomic framework is designed to maintain long-term economic stability. Large fluctuations in output, employment and inflation add to uncertainty for businesses, consumers and the public sector, lead to inefficient resource allocation and can reduce the economy's long-term growth potential. **The policy priority for the future is therefore to ensure that the macroeconomic framework continues to deliver stability for business and individuals.**

3.12 Over the past four years, many industrialised countries have experienced economic downturns, including the US and much of the euro area. More recently, the international economy has been affected by geopolitical uncertainty, rising oil prices, and large current-account imbalances and shifting exchange rates between Europe, Asia and the US. In the UK, with low and stable inflation, interest rates set by the Monetary Policy Committee to meet the Government's symmetric inflation target, and fiscal policy supporting monetary policy over the economic cycle, the economy has grown continuously throughout this period. **The policy priority for the future is for the monetary and fiscal policy frameworks to continue to ensure that the UK remains resilient in the face of wider global economic shocks and downturns.**

3.13 Finally, in the medium term, developments in emerging markets provide opportunities and challenges for the UK, and the success of the UK economy depends on maintaining effective trading links and building new trading opportunities with these emerging markets – particularly with China and India – to ensure that UK businesses are able to take advantage of the new opportunities. **The policy priority is to ensure the UK maintains an outward-looking position in the global economy and builds strong trading partnerships with emerging markets, and continues to play a strong leadership role internationally working towards a fairer and more open trading system.**

An enterprising and flexible business sector

3.14 In order to attract businesses in a competitive global economy, and create an environment that promotes business growth, an economy requires flexible infrastructure and a regulatory framework that facilitates business decision-making, without imposing unnecessary burdens. Removing constraints to business flexibility can be particularly important in encouraging the development of clusters, where firms need to be able to respond quickly to changing technologies and markets.

A flexible business environment **3.15** The Government has made significant progress in creating a flexible business environment in which firms can flourish. The UK has low rates of business taxation and the Government has introduced incentives that reward long-term business investment. The rate of capital gains tax on business assets held for more than two years has been cut from 40 per cent to 10 per cent. In addition, since 1997 the Government has significantly reformed the UK competition framework, with the Enterprise Act 2002 strengthening UK competition authorities' powers to combat anti-competitive activity and to investigate proactively markets that are not working well for consumers.

A world-class business location **3.16** The UK has a good regulatory record by international standards, ensuring open and flexible markets that allow business to adapt and adjust to the changing demands of the global economy. The OECD recently ranked the UK highest among all OECD countries on measures of economic flexibility, and has rated the UK as having the lowest barriers to entrepreneurship of any major economy. Similarly, the World Bank's *Doing Business in 2005*³ places the UK top in the European Union, and seventh in the top twenty economies in the world with the best business conditions, and also ranks the UK fifth in terms of the cost of starting a business, less costly than both France and Germany. A recent report⁴ ranked the UK as number one in terms of the ability of entrepreneurs to access capital because of its deep, mature and flexible capital markets and the availability of non-standard sources of finance, such as venture capital. A peer review of the competition regime⁵ commissioned by the Government ranked the UK third globally behind the US and Germany, and described the UK competition authorities as having the necessary powers to develop a world-class competition regime.

3.17 However, there is no room for complacency, and the UK is committed to building upon excellence in the business environment. The need for businesses and entrepreneurs to respond quickly to new opportunities and incentives will become increasingly important as global competition intensifies. This is an ongoing process, and the Government is committed to full and effective delivery of the agenda to ensure flexibility for the future. This section sets out a number of specific policy priorities on which the Government is focusing its efforts.

Tackling unnecessary regulation **3.18** Over-burdensome regulation imposes constraints on firms, taking up resources that could be more productively used if firms had the flexibility to respond to new opportunities offered by globalisation. Furthermore, unnecessary regulation can act as a constraint that reduces flexibility and can, in the worst cases, serve as a catalyst that can break-down the benefits of agglomeration and clustering. Following the Hampton Review⁶ of the burdens of regulatory inspection and enforcement on business and a parallel report from the Better Regulation Task Force (BRTF)⁷, far-reaching reforms are being introduced throughout the UK's regulatory framework. These changes will ensure that regulatory enforcement is risk-based, reducing the burden of inspections and form-filing for the majority of compliant businesses, and focusing regulatory resources on areas where the risks to society are greatest. **The policy priority is therefore to continue to strive to minimise undue regulatory burdens by delivering the Hampton and BRTF reports, ensuring that regulation is used only where absolutely necessary to support justifiable policy aims, and that the administrative burdens of understanding and complying with regulations are as low as possible.**

³World Bank (2004): *Doing Business in 2005*.

⁴Milken Institute (2005): *Capital Access Index: Best Markets for Entrepreneurial Finance*.

⁵KPMG & DTI (2004): *Peer Review of Competition Policy*, May 2004.

⁶HM Treasury & Philip Hampton (2005): *Reducing administrative burdens: effective inspection and assessment*.

⁷Better Regulation Task Force (2005): *Less is More: Reducing Burdens, Improving Outcomes*.

Transport infrastructure to meet the needs of the economy

3.19 Transport infrastructure can play a key role in enabling businesses to respond quickly to changing markets and new opportunities. Since 1997, the Government has reversed the historic underinvestment of many decades in the transport system, but recognises that this is only the start. The Eddington Transport Study⁸ has been commissioned to analyse the long-term impact of transport on the UK's economic growth, productivity and stability. It will analyse both the domestic and international economic implications of transport policy; establishing a framework for prioritising and delivering investment; maintaining and utilising the network; and responding to the challenges and opportunities of the global economy.

3.20 It is clear that transport supports the efficient functioning of the economy, playing a fundamental role in the operation of labour, capital and product markets. It has a key role in minimising the congestion problems that can arise from agglomerations of firms, which, if left unresolved, could drive clusters apart. Transport also plays a critical role in supporting trade and growth by integrating domestic and world markets. The macroeconomic relationship between infrastructure and economic growth was first proposed in 1989 by Aschauer⁹ who, using data for the US economy, found a positive relationship between infrastructure and economic growth. Subsequent studies broadly support this conclusion but are more cautious about the scale of the relationship. **The policy priority is, therefore, to recognise the importance of transport's relationship with economic growth and productivity, and to support a flexible, enterprising business sector by ensuring that the UK's transport infrastructure reduces costs and congestion to business, enables access to skilled labour and does not constrain agglomeration.**

Housing supply

3.21 A stable and responsive housing market is essential to the UK's future economic and social success. Kate Barker's independent review of housing supply¹⁰ identified how reduced housing supply can constrain labour mobility, damaging the flexibility and performance of the UK economy and public services, and can also translate into wider macroeconomic instability. The Government's response to the Review, to be published alongside the 2005 Pre-Budget Report, will set out the Government's ambitions for increasing housing supply, as well as its proposals for delivering the infrastructure necessary to support housing growth, and for reforming the mechanisms, particularly planning, by which new housing and infrastructure are delivered. **The policy priority is therefore to press ahead with reforms to increase housing supply in the UK through the implementation of the Barker Review recommendations.**

Flexibility in the planning system

3.22 The planning system and land use regulations are a key determinant of the flexibility of the business environment and firms' ability to take advantage of new opportunities. A central objective of the planning system is to promote sustainable economic growth and employment opportunities. A choice of sites will ensure that businesses can seek location advantage in response to various external factors, including the demands of customers; access to raw materials and suppliers; links with other businesses, particularly important for clusters and agglomeration economies; the workforce catchment area; and good transport links.

⁸The Study, led by Sir Rod Eddington, is a joint HM Treasury and Department for Transport study, announced by the Chancellor of the Exchequer and the Secretary for State for Transport in the 2005 Budget.

⁹Aschauer, D.A. (1989). *Is Public Expenditure Productive?* Journal of Monetary Economics 23: 177-200.

¹⁰Barker, K. (2004): *Review of Housing Supply: Delivering Stability – Securing our Future Housing Needs*, Final Report – Recommendations.

3.23 Business also requires a planning system that is value for money, speedy and transparent, in order to minimise the transaction costs associated with gaining planning permission to ensure that the investment potential of new business opportunities is realised, and to provide increased certainty for investment decisions. Delays and lack of transparency not only cause microeconomic costs to individual businesses, they can also have negative macroeconomic impacts through lost positive investment spillover effects. Planning can also have an impact on the costs to businesses that arise from development of clusters, such as congestion, which can negatively impact on location decisions. The Government has introduced reforms to make the planning system more efficient and effective, including reducing the backlog of appeal cases and ensuring that enforcement by planning authorities is fairer, faster and imposes less burdens on businesses.

3.24 The Government has also introduced a number of reforms to improve the quality of the planning system, including the introduction by the Office of the Deputy Prime Minister of Regional Spatial Strategies and Local Development Frameworks aimed at increasing the flexibility of the plan-making system, and the creation of the Planning Delivery Grant tying additional funds to meeting local authority performance targets. These reforms have begun to deliver, with 55 per cent of local authorities now meeting their targets for handling major applications, up from 20 per cent in 2003. **The policy priority is to ensure that these reforms are built upon so that the planning system is flexible and responsive to the changing needs of sustainable economic development, so that it attracts rather than hinders the development of competitive and productive business, particularly avoiding inhibiting the growth of clusters.**

Enterprise culture in the UK

3.25 Creating an enterprising society where business skills are nurtured and valued is essential if the UK is to make the most of the opportunities presented by globalisation. As well as creating an economic environment that promotes business growth, this means creating a society in which enterprise is valued, and where young people consider entrepreneurship as an essential aspect of any career. This culture must begin in schools, with the education system providing the next generation of entrepreneurs with the inspiration, confidence and skills to set up their own business, and fulfil their ambitions and potential. **The policy priority is therefore to build an enterprise culture within the UK so that enterprise is valued and individuals can take advantage of the new economic opportunities offered by globalisation and fully realise their potential in business.**

Effective management practices

3.26 Management skills within firms are a key driver of business performance. Firms need to be managed in a way that responds quickly to new market conditions and opportunities. Several studies have looked at UK management practices, raising some questions about relative performance in an international context. A study for the Institute for Electrical Engineers confirmed the importance of management practice for productivity and financial performance in manufacturing.¹¹ An LSE/McKinsey study attempted to measure the quality of middle management practices in medium-sized manufacturing firms and found that the quality of management practice varied widely within countries, and overall ranked the UK behind the US, Germany and France.¹² (This study related only to manufacturing firms and evidence on the quality of management practices in other sectors is less well established). Recent studies by the EEF,¹³ also focusing on manufacturing, looked at the issues that need to be addressed if the UK

¹¹ See Dorgan, S & Dowdy, J (2005): *Mind the Gap! Using management practices to close UK manufacturing's productivity gap*. Institute of Electrical Engineers.

¹² Bloom, Dorgan, Dowdy, Van Reenen & Rippin (2005): *Management practices across firms and nations*. LSE / McKinsey. The study found a positive relationship between management and Total Factor Productivity (TFP) which measures the efficiency with which inputs are combined in the production process to produce outputs, so a firm with higher TFP is able to produce the same output but with the use of fewer inputs of labour, capital and materials.

¹³ EEF (2004): *Catching up with the Continent: Final report on EU and UK manufacturing productivity*; and EEF (2003): *Catching Up with Uncle Sam: EEF's Final Report on UK and US Productivity*.

is to see a sustained improvement in the manufacturing sector, and found that management investment decisions in the UK were failing to exploit fully the benefits of a more stable investment climate. **The priority, principally for business itself, is to ensure that UK business can fully take advantage of world-class management techniques and practices.**

Promoting science, research and innovation

3.27 Chapter 2 recognised that in the global economy the UK's future prosperity will depend increasingly on the capacity to expand knowledge through science and translate it into innovative products and better services.

Strategic approach to science and innovation

3.28 Since 1997, the Government has made science and innovation a key priority and has focused on strengthening the science base and improving incentives for research to be commercialised. The **Science and Innovation Investment Framework 2004-14** sets out how the Government has made strengthening the UK's position in science and R&D a long-term priority. This framework set an ambitious target of increasing UK R&D investment as a proportion of GDP from its current level of 1.9 per cent to 2.5 per cent by 2014. Public spending on science through DTI and DfES will rise to over £5 billion by 2007/08. But achieving the framework requires partnership with, and investment from, the private sector.

3.29 In addition, Government has introduced a system of **R&D tax credits** to ensure that the right incentives are in place for businesses to undertake innovation. To date, over 17,000 claims have been made since the R&D tax credits were introduced and over £1.3 billion of support has been claimed through the scheme.¹⁴

3.30 The **Technology Strategy** was launched in 2004 and provides a business-driven framework for identifying and supporting emerging technologies which will have a significant impact on sectors where the UK has the potential to exploit such technology and the research capacity to maintain a leading global position, as well as deriving wider economic, social or environmental benefits.

Centre of excellence for science

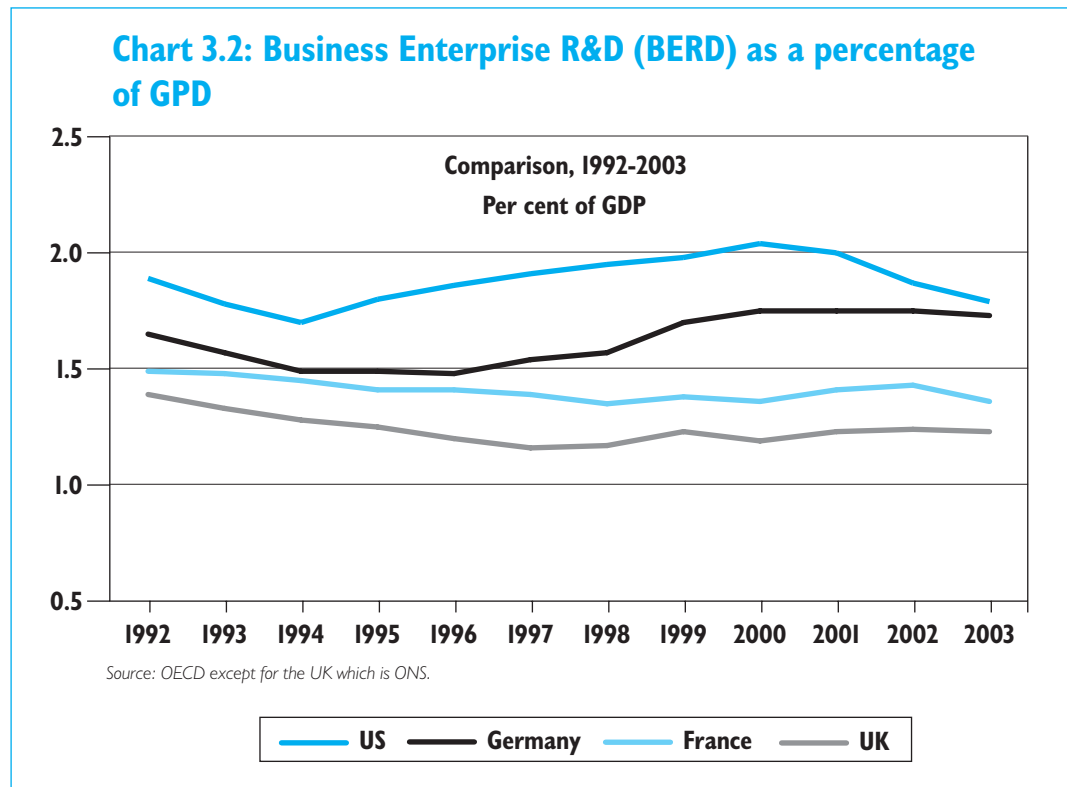
3.31 The Government's focus on science is already producing results. The UK science base is performing strongly, second only to the US the volume and influence of quality scientific publications it produces – the UK produces more publications per researcher and citations per researcher than any other G8 nation. In addition, the links between universities and businesses are growing, and knowledge transfer is improving – spin-offs, licensing income and patenting applications have all quadrupled since 1998.

Private sector investment in R&D

3.32 As technological development continues, and particularly as China and India invest in innovation and increase the technological content of their economic activity, the challenge to advanced economies such as the UK grows. The challenge for the UK is to turn the significant investments made in science and technology into rising levels of business R&D and innovation. Chart 3.2 shows how we currently lag behind the US, France and Germany in this regard. This means continuing to invest in getting the most out of our science base and improving business-university links; continuing to make the UK an ever more attractive location for private sector R&D and ensuring that the UK is successfully nurturing new technology-based SMEs – the larger businesses of the future. 'Supporting Growth in Innovation: next steps for the R&D tax credit'¹⁵, details how the Government intends to build on the early success of the R&D tax credit. **The policy priority is to encourage business investment in R&D, so that private R&D investment increases, contributing to productivity and growth.**

¹⁴ See DTI & HM Treasury (2005): *R&D Intensive Businesses in the UK*. DTI Economics Paper No 11

¹⁵ HM Treasury (2005): *Supporting growth in innovation: next steps for the R&D tax credits*.



Science skills 3.33 To support the UK's ambition to move to a higher level of R&D intensity, it is crucial to ensure that the UK has the right stock and flow of skilled scientists, technologists, engineers and mathematicians. The supply of a highly-skilled and diverse workforce will contribute to business productivity and innovation. The education system also needs to be responsive to what employers want, giving them opportunities to shape training provision and coherent progression routes.¹⁶ The ten-year science and innovation framework outlined the Government's approach towards achieving a step change in the level of science skills employed in the UK economy. The annual report on this framework, published in July 2005, however, noted that the indicators for improving the supply of scientists, engineers and mathematicians showed a mixed picture. **The policy priority is therefore a renewed drive to improve the skills base for science, in order to respond to the needs of business in an ever more science and knowledge-driven economy.**

Stronger links between industry and the science base 3.34 Greater responsiveness of the publicly-funded research base to the needs of the economy and business is also critical. There is an economic imperative to make sure that scientific knowledge is ultimately used by business to create wealth. The ten-year framework included the Government's response to the recommendations of the Lambert Review on business-university collaborations. In addition, the Government has provided dedicated funding for knowledge transfer and commercialisation activities from English universities through the Higher Education Innovation Fund. Plans for increasing knowledge transfer and interaction with businesses have now been prepared by each Research Council. Arrangements for the 2008 Research Assessment Exercise have also been adapted to ensure better recognition of excellent research in all its forms, including applied research. Finally, as recommended by Lambert, the RDAs have been given an enhanced role in strengthening business-university links, and have set specific targets for the number of regional collaborations they will facilitate between businesses and the research base. **The policy priority for the future is to encourage still stronger links between industry and the science base, and enhance the UK's current and future comparative advantage.**

¹⁶ HM Treasury, DTI & DfES (2005): *The ten-year Science and Innovation Investment Framework Annual Report 2005*.

Attracting inward investment 3.35 One of the mechanisms through which the UK can promote innovation is through greater inward investment. Foreign investors tend to invest more, employ more skilled people, and are more productive¹⁷. Inward investment brings new ideas, ways of working and innovations, which can spill over into the wider economy, generating further productivity growth. Investment from foreign multinationals can play a key part in the UK's efforts to achieve the target of 2.5 per cent of GDP to be spent on R&D. Many of the reasons that make the UK an attractive location for Foreign Direct Investment (FDI), such as macroeconomic stability, the regulatory regime, and our position in Europe, are already well entrenched. However, there remains a role for Government in attracting potential inward investors into the UK. **The policy priority is therefore to attract more multinational R&D investment to the UK.**

Supporting creativity and design 3.36 As well as continuing to focus on science and innovation, the Government recognises the role that creativity and design can play in contributing to the performance and productivity of UK businesses and of the economy as a whole. Applying creativity allows businesses of all sizes to access new global markets by increasing the distinctiveness of products and services and competing on the basis of the added value of their unique appeal to consumers. Notwithstanding the success of the UK's creative industries, there is evidence that UK businesses are not realising the full potential of applying creativity more widely. Sir George Cox's review of creativity in UK business,¹⁸ commissioned at the time of Budget 2005, has been looking at the steps that are needed to ensure that UK businesses make better use of our world-class creative capabilities. His review has now been published – in parallel with this report – and the Government will respond in the forthcoming 2005 Pre-Budget Report. In parallel with the Cox Review, the DTI has published an economic study of the role of creativity and design in businesses.¹⁹ It presents evidence of the positive relationship between creativity, design and business performance and highlights how effective use of creative inputs are important competitive tools for firms. **The policy priority is to ensure that the UK offers an entrepreneurial environment in which businesses of all sizes in all sectors are encouraged to employ creativity and design.**

Developing and building the right skills profile

3.37 Chapter 2 set out how globalisation is increasing the premium on skills in the world economy, and the imperative for advanced economies to ensure that their workforce has the skills to take advantage of changes in technology. A stock of high-skilled, flexible labour is important to encourage firms in knowledge-intensive, dynamic industries, and this can lead to long-term benefits for the economy.

Improving skills 3.38 Since 1997, the Government has radically increased investment in education, and made significant efforts to improve skills acquisition for those already in the labour force so that everyone can share in the gains of globalisation. This focuses on all levels of the education system, in primary, secondary and further education, and on improving work-related training and skills development for those already in the labour force. The Government's approach is to target support where there is market failure, particularly prevalent at lower skills levels. Measures have been introduced to ensure that skills are relevant to the needs of the economy. These include the focus on supporting low skilled adults with the New Deal for Skills, delivered in conjunction with Jobcentre Plus, and developing apprenticeships for young people wishing to combine vocational learning with work experience.

¹⁷ Empirical evidence in support of the productivity advantages of multinational firms compared to domestic businesses is provided by Griffith, Redding & Simpson (2004): *Foreign Ownership and Productivity: New Evidence from the Service Sector and R&D Lab*. Oxford Review of Economic Policy, Vol 20. For a theoretical explanation see: Helpman, Melitz & Yeaple (2004): *Export versus FDI with Heterogeneous Firms*. American Economic Review, Vol 94.

¹⁸ Sir George Cox (2005): *Cox Review of Creativity in Business: building on the UK's strengths*.

¹⁹ DTI (2005): *Creativity, Design and Business Performance*. DTI Economics Paper No 15.

Results since 1997 **3.39** The Government's investment in skills is delivering results. Young peoples' skills have improved: 55.7 per cent of 16 year olds achieved five or more A* to C grade GCSEs in 2005,²⁰ compared to 45.1 per cent in 1997, and the Government has reached its target to help 750,000 adults gain basic skills by 2004. There are over 250,000 young people currently learning through apprenticeships. Between 1997-98 and 2005-06, the Government increased funding for further education by 48 per cent in real terms; and this supported 670,000 more adults a year participating in further education than in 1997.

3.40 As China and India continue to invest heavily in the skills of their workforce, the UK needs to ensure that skills are more responsive to the needs of business and the wider economy. The UK's ability to adapt to these ongoing challenges, however, is likely to be constrained by the large stock of low-skilled adults and its relatively poor international position in intermediate skills.

Skills to meet business needs **3.41** As the UK economy adjusts to the challenges of globalisation, including the increased emphasis on technology and the fragmentation and relocation of business activities, the skills of the UK workforce need to be responsive to businesses' changing needs. There is therefore a need for a more demand-led approach to education and training. If employers, individuals and government are to see an effective return on increased investment in training, a network of high quality training providers that are responsive to labour market demand is vital. Sir Andrew Foster's report on Further Education Colleges,²¹ published on 15 November, makes a number of recommendations about the potential of the college networks to make a greater contribution, in particular by focusing their role on increasing workforce skills. The Government will respond in full to Sir Andrew Foster's report in Spring 2006. **The policy priority is to ensure that skills development and training delivery becomes more responsive to the needs of business and the economy.**

More business engagement **3.42** Given that 70 per cent of the future workforce of 2020 is already over 16 and therefore out of compulsory education, businesses too have a key role to play in skills development. The Government is keen to support this, and as a core element of the Government's strategy to develop a more demand-led approach to training for employers, 'Train to Gain', the National Employer Training Programme will roll out across England during 2006/07. The network of Sector Skills Councils and Regional Skills Partnerships the Government has established should play a key role in strengthening the employers' voice in the skills supply system and identifying the skills employers need to improve productivity now and in the future. **The policy priority is to reinforce businesses' engagement in delivery of skills to ensure that workforce skills are kept up to date and relevant to the needs of the economy.**

²⁰ Provisional figure.

²¹ DFES (2005): *Realising the Potential – A review of the future role of further education colleges*. Review led by Sir Andrew Foster.

Long-term skills needs 3.43 The interim report of the **Leitch Review** of skills²², 'Skills in the UK: the long-term challenge', will be published alongside the 2005 Pre-Budget Report. The report will set out analysis of the UK's current skills base and the extent to which it is constraining long-term growth, prosperity and improvements in social justice. The Review is consulting widely with employers, providers and learners and working closely with the Departments for Education and Skills, Work and Pensions, and Trade and Industry, as well as the Learning and Skills Council, Sector Skills Development Agency and the devolved administrations. The review will present its final report to Government in 2006, making recommendations on the skills profile that the UK should aim to achieve in 2020 and considering the policy implications of achieving that profile. **The policy priority is to ensure that there is a better understanding of how the skills profile required by the UK workforce is likely to change as globalisation trends continue. This will provide a better foundation for development of skills policy.**

Box 3.2: Targeted migration to meet labour market needs

As globalisation continues, the attractiveness of a country as a location for business will depend more and more on the ability to attract and retain a skilled workforce, and competition for skilled workers is likely to continue to increase.

The UK's objectives are to use targeted migration to increase the number of highly skilled workers in the UK and fill the gaps in the UK labour market that cannot be filled by the domestic workforce. In July this year the Government published 'Selective Admission: Making Migration Work for Britain', a consultation on proposals for a new single points-based system for managed migration. The new system is designed to target and attract highly-skilled individuals, and will be simple and more transparent so that employers and migrants find it easier to use. The Government will report early in the New Year with more detail on the proposals.

Fairness, security and incentives to work and save

3.44 Globalisation has the potential to increase global prosperity significantly but it brings new challenges and entails significant adjustments. Chapter 2 set out the importance of a flexible economy to enable businesses and individuals to respond to new opportunities, but flexibility must be combined with fairness so that all individuals can share in the gains from globalisation. Developing skills is a major part of this, but structural reform of the labour market and improving the incentives inherent in the tax-benefit system also have a key role to play.

Employment policy 3.45 Since 1997, the Government has put in place a policy framework that enables more people to participate in the labour market. This comprises:

- active labour market policies – tailored and appropriate help for those without work, to prevent long-term detachment from the labour market;
- policies that make work pay – improved incentives through reform of the tax and benefit system, and the introduction of the National Minimum Wage (NMW); and
- policies that reduce barriers to work –including education, skills, childcare and training policies to create an adaptive, flexible and productive workforce.

²²Leitch Review (2005): *Skills in the UK: the long-term challenge*.

More employment opportunities

3.46 Welfare reforms continue to increase incentives to work, improve skills acquisition, and increasingly focus on helping those with greater disadvantage in the labour market to move into work. The launch of Jobcentre Plus in April 2002 has for the first time delivered an active, work-focused service to all benefit claimants of working age, helping unemployed and economically inactive people to move closer to the labour market and search effectively for work. As a result of the Government's reforms, 2.2 million more people are in work now than in 1997.

3.47 The measures the Government has introduced since 1997 to make work pay have enabled more people to participate in the global economy. The National Minimum Wage guarantees a fair minimum income and the Working Tax Credit provides financial support on top of earnings for households on low incomes. The reforms provide extra help for people with disabilities and support for childcare costs. Together, these policies allow the Government to ensure a minimum income that people can expect when they move into work. They also mean that many people have opportunities to progress in work and gain a pay rise. In 1997, 750,000 families were in a position where they lost 70 per cent or more of any extra income they earned because of taxes and benefits being withdrawn – today there are now half a million fewer families in this situation.

3.48 Globalisation places a premium on a well-performing labour market that combines flexibility with fairness – equipping people to cope with change and tackling the insecurities that surround it. It is important that individuals are able to take advantage of the changing opportunities offered by globalisation and increased prosperity. As integration of markets and technological change continues, the premium on workforce skills and flexibility will increase. The Government's role is to support a flexible response by individuals through providing opportunities for skills development, and a labour market that offers the opportunity for individuals to maximise the return on those skills. **The policy priority is to ensure a flexible labour market by continuing reforms to strengthen skills and human capital and to increase the ability of individuals to adapt to change.**

Support for vulnerable groups

3.49 Although a flexible response to globalisation should lead to an increase in productivity and growth, economic restructuring can also result in greater uncertainty for individuals. The Government must ensure that everyone, including the most vulnerable, is able to reap the benefits of the opportunities created by globalisation. The Government will continue to test and monitor different ways to engage with those not in work and to help them make the transition to work. **The policy priority is to support vulnerable individuals through the transition to a more global economy by helping those who can work to work, while providing support for those who cannot work.**

Increasing energy and resource efficiency

3.50 As globalisation continues, pressures on scarce resources, particularly energy sources, and on the environment will intensify. Increased trade and the fragmentation of production will mean further growth in international transport; and as emerging economies' and developing countries' energy needs grow, competition for scarce resources will intensify. To ensure that globalisation and increases in prosperity are sustainable, the challenges this poses for the UK and the global economy need to be addressed.

Progress on energy efficiency 3.51 The Government has recognised the challenge of increasing energy and resource efficiency, and is taking steps to become significantly more resource- and energy-efficient. Resource pressures provide an opportunity to improve the productivity of the economy and of individual businesses. Through a combination of demand and supply measures implemented as part of the Climate Change Programme, UK industry has already made significant progress on the more efficient use of environmental resources. Measures include the Climate Change Levy, the EU Emissions Trading Scheme, and the Business Resource Efficiency and Waste Programme. In addition, the Government has accompanied energy efficiency measures with policies supporting low-carbon energy sources through the Renewables Obligation (RO). The Government has also adopted a long-term strategy of promoting lower carbon transport, improving fuel efficiency and giving economic incentives to individuals to make more sustainable transport choices.

Positive and sustainable environmental outcomes 3.52 Measures introduced in the UK are provisionally estimated to have reduced greenhouse gas emissions by 12.5 per cent between 1990 and 2004. Carbon dioxide emissions, which accounted for 86 per cent of UK greenhouse gas emissions in 2003, reduced over the same period by 4.2 per cent, while the economy grew by around 35 per cent. In terms of renewable energy, over the past decade, the Non Fossil Fuels Obligation and, since 2002, the Renewables Obligation (RO), have stimulated the UK's renewable energy industry so that just over two per cent of electricity was supplied under the RO in 2003, mainly from onshore wind. Average carbon emissions from new cars have fallen every year for the last decade, spurred by innovation in car manufacturing, a voluntary agreement between the European Commission and car manufacturers, and by the measures the Government has taken to incentivise the purchase of less polluting vehicles. Not only does improving energy efficiency mitigate against the impact of rising energy prices, it also reduces the emission of greenhouse gases. Despite these twin benefits, uptake of energy efficiency measures by businesses and households has not been strong.

Greater energy efficiency 3.53 Economic expansion, particularly among emerging economies, means increased demand for the world's energy resources. This poses a serious challenge for the UK to become significantly more energy- and resource-efficient. As noted above, progress towards this objective is being made, but there is a long way to go. In the transport sector, the challenge is to deliver an efficient transport network that promotes UK economic strength and mobility, protects revenues and minimises fraud, while decoupling growth in the sector from growth in emissions. For energy efficiency more widely, the 2004 Pre-Budget Report announced a joint DEFRA and HM Treasury review into innovation in energy efficiency, the purpose of which is to examine current practice and identify how technological, policy, financial and organisational innovation can best contribute to a longer-term improvement in energy efficiency. These findings will feed into the wider review of the UK Climate Change Programme, which will be published shortly, as well as other subsequent decision-making processes. **The policy priority is to ensure that energy efficiency continues to be encouraged without undermining business competitiveness, and taking into account wider economic and social implications of action.**

Stronger evidence on climate change

3.54 Climate change is a crucial challenge facing all countries, including the UK, and has the potential to have a significant impact on global economic growth in the long-term. It needs to be seriously addressed. Climate change poses a major economic challenge, and the Government has asked Sir Nicholas Stern to conduct a review to gain a better understanding of the economics of climate change. **The policy priority is to ensure a comprehensive evidence base on climate change that allows the UK and the international community to develop effective and fair policies to tackle the issue.**

Box 3.3: Climate Change – the challenge

If left unchecked, in the medium to long-term climate change has the potential to become a significant threat to global prosperity. The Government recognises this, and the UK is playing a key role in international efforts to tackle the issue.

To be able to tackle climate change in the most effective way in the future, we need to continue to improve the evidence base on which decisions are made. This is crucial if climate change is to be tackled in a way that supports economic growth and progress towards social objectives.

To develop its understanding of the challenges posed by climate change issues, the Government has asked Sir Nicholas Stern to carry out a review of the economics of climate change. The Review will enhance understanding of the economic consequences of climate change in both developed and developing countries.

The review will examine the evidence on the implications for energy demand and emissions of the prospects for economic growth over the coming decades; the economic, social and environmental consequences of climate change in both developed and developing countries; the costs and benefits of actions to reduce the net global balance of greenhouse gas emissions from energy use and other sources; and the impact and effectiveness of national and international policies and arrangements in reducing net emissions in a cost-effective way and promoting a dynamic, equitable and sustainable global economy. The review will report in Autumn 2006.

TOWARDS A FLEXIBLE RESPONSE TO GLOBALISATION

3.55 This chapter has shown that the UK has a strong position on which to build for the future to respond to the economic challenges raised by globalisation. This foundation has been significantly strengthened by the stability offered by the new macroeconomic framework and the flexibility offered by the Government's programme of microeconomic reforms, with impressive results evident since 1997.

3.56 However, the Government must not stop there. There is more to do to lock in existing reforms to ensure stability, and to press ahead with reforms to enhance flexibility yet further for businesses, individuals and institutions – building on the UK's comparative advantage and removing rigidities that prevent businesses from competing effectively, and enabling new, knowledge-intensive clusters to emerge.

3.57 This will require continued action to maintain macroeconomic stability; support an enterprising and flexible business sector; promote science, research and innovation; develop and build the rights skills profile; ensure fairness, security and incentives to work and save; and increase energy and resource efficiency. In certain key policy areas, an ambitious agenda of reform in the shorter-term will be required – with Government, business and the wider population having to adapt and adjust to ensure the UK is best-placed to respond flexibly to the emergence of the global economy.

4

CONCLUSION

4.1 This paper has outlined the radical transformation underway in the global economy. Faster information flows and falling transport costs are making it easier and quicker to trade globally, breaking down traditional geographic barriers and boundaries. Together with the emergence of rapidly industrialising economies – particularly India and China – this transformation is creating a new global economic geography with new opportunities and challenges worldwide.

Globalisation can drive prosperity **4.2** Globalisation is a positive force with potential benefits for all. The UK – as a relatively open economy – stands to benefit from the rise of the global economy through increased competition, innovation and new opportunities for business. The global economy can also have real benefits that will be felt far more widely, helping to enable a more efficient and equitable global allocation of resources, tackling poor living standards, reducing poverty, and providing economic opportunities worldwide.

Building on the UK's strengths **4.3** The UK's response to the challenges of globalisation will also have both a domestic and international dimension, to ensure that the economy and society reap the many long-term benefits of globalisation. This response will require efforts to improve further the economic environment, enabling businesses to make the most of the opportunities. UK business will have a key role to play in responding to the trends of a bigger and better global economy, and will be supported by Government action to tackle market failures that undermine business growth, and the creation of an environment in which businesses and individuals can respond quickly to new opportunities and rapidly changing markets.

4.4 The UK is starting from a good position.

- Unparalleled macroeconomic stability in recent times, underpinned by the long-term decisions taken by this Government since 1997 to reform the macroeconomic and fiscal framework. This has created the longest period of economic growth for over 200 years, with low interest rates and low and stable inflation, providing a solid foundation for business to plan for the long term.
- A good regulatory record by international standards, with the UK ranked highest in the OECD on measures of economic flexibility, with the lowest barriers to entrepreneurship of any major economy, illustrating the UK's strong position on the business environment.
- With a strong record of ninety Nobel Prize winners in science, and with a robust policy framework in the 10-year Science and Innovation Investment Framework, the UK has the capacity and ability to expand knowledge through science, and to translate it into innovative products and better services.
- The improvement in the UK skills base since 1997 – with significant increases in the skill levels of young people, improvements in adult basic skills, and more people in higher education – will pay dividends in the long term, ensuring the UK has the stock of high-skilled, flexible labour that is essential for firms in knowledge-intensive, dynamic industries.
- A strong track record on employment, with unemployment at the lowest levels for a generation, together with a strong policy framework that makes work pay, and removes barriers to work so that more people can participate in the labour market, and allows individuals to respond to new opportunities and share in the gains from globalisation.

- During a time of sustained economic growth the UK has reduced greenhouse gas emissions by over 12 per cent by 2003 from the Kyoto 1990 baseline, with emissions of carbon dioxide down over 4 per cent. This shows the commitment of the UK to reduce pressure on scarce energy resources and to tackle the challenge of climate change.

The UK's strong position 4.5 This strong position is testament not only to the stability provided by the macroeconomic framework, but also to the flexibility of the UK economy and the Government's programme of microeconomic reforms, providing the UK with a strong position from which to build long-term success. This platform provides business with the best opportunities to strive for global success and prosperity for the UK, while the Government also leads on the international stage to push for further reforms towards a new international trade and economic system, helping to deliver economic growth and fairness worldwide.

Key areas to build on 4.6 However, the UK should not be complacent. In particular, Chapter 3 set out a wide range of areas where there remains a need for substantial further progress if the UK is to fully benefit and secure the gains from globalisation. Of these, the Government intends to focus on five key areas for future policy development.

Meeting changing skills needs 4.7 First, the UK's skills profile must be responsive to the changing needs of the economy, so that individuals and businesses can adapt to the new opportunities offered by globalisation. It is a high priority for the UK to tackle both adult basic skills and intermediate skills of the existing workforce, together with raising ambitions for higher level skills. The Leitch Review will report on the skills profile that the UK should aim to achieve by 2020, in order to maximise productivity and growth over the long term. **The first area where there is a particular need for further progress is therefore to raise the UK skills profile and ensure the workforce has the skills and flexibility to take advantages of changes in technology and new opportunities offered by globalisation, supported by appropriate training opportunities that are more responsive to changing business needs.**

Strengthening science and innovation 4.8 Second, the UK must continue to invest in science and innovation to ensure the economy has the capacity to expand knowledge through science and translate it into innovative products and services – driving forward the knowledge economy and enabling agglomeration benefits. This will require not only the implementation of the 10-year Science and Innovation Investment Framework and the significant increases in public investment that have been committed, but also significant increases in business expenditure on R&D to meet the Government's ambition to raise R&D expenditure from 1.9 per cent to 2.5 per cent of GDP by 2014. **The second area where there is a particular need for further progress is therefore to continue to improve the UK's capacity for science and innovation, through investment in the science base and improving links with business – to attract FDI and build high value-added R&D intensive firms and sectors that will raise private investment in R&D.**

Reducing regulatory burdens on business 4.9 Third, the burden of unnecessary regulatory inspection and enforcement on business must be reduced. Following the Hampton Review of regulatory burdens on business and the parallel report from the Better Regulation Task Force, far-reaching reforms are being introduced throughout the UK's regulatory framework. These changes will ensure that regulatory enforcement is risk-based, reducing the burden of inspections and form-filling for the majority of compliant businesses, so that regulatory resources are focused on areas where the risks to society are greatest. **The third area where there is a particular need for further progress is therefore to continue striving to minimise undue regulatory burdens by ensuring that regulation is used only where absolutely necessary, and that administrative burdens of understanding and complying with regulations are as low as possible.**

Responsive planning system **4.10** Fourth, the planning system must operate in a way that promotes sustainable economic growth and employment opportunities. A choice of suitable sites ensures that businesses can seek location advantage in response to various external factors, including the demands of customers; access to raw materials and suppliers; links with other businesses; the workforce catchment area; and good transport links. Business also requires a planning system that is speedy and transparent, and minimises the transaction costs associated with gaining planning permission. The Government has introduced a number of reforms to improve the efficiency and speed of planning decisions and inspections, but recognises there is more to do. **The fourth area where there is a particular need for further progress is therefore to build on these reforms to ensure the planning system is flexible and responsive to changing economic needs and realities, so that it encourages rather than hinders the development of competitive and productive business.**

Better transport infrastructure **4.11** Fifth, the UK's transport infrastructure must facilitate economic growth by providing effective and efficient global connectivity for business. Since 1997, the Government has reversed the historic underinvestment of many decades in the transport system, but recognises that this is only the start. The Eddington Transport Study is analysing the long-term impacts of transport on the UK's economic growth, productivity and stability. It will analyse both the domestic and international economic implications of transport policy, establishing a framework for prioritising and delivering investment; maintaining and utilising the network; and responding to the challenges and opportunities of the global economy. **The fifth area where there is a particular need for further progress is therefore to ensure the UK's transport infrastructure supports a flexible and enterprising business sector, by reducing costs and congestion, enabling access to skilled labour and encouraging agglomeration benefits.**

4.12 Robust and sustained action will be required in each of these five areas if the UK is to build on success and reap the rewards of globalisation. Rising to this challenge will require leadership from both Government and the business community, and an even greater flexibility in the economy and wider society to adapt and adjust to the changing world. It is a challenge that the UK is well-placed to respond to, and a challenge that the Government – with the support of the business community – will strive to meet.

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