

The Asian Century

Opportunities and challenges for the UK



Written by:

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The Advanced Institute of Management Research (AIM) develops UK-based world-class management research. AIM seeks to identify ways to enhance the competitiveness of the UK economy and its infrastructure through research into management and organisational performance in both the private and public sectors.

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AIM consists of:

- Over 200 AIM Fellows and Scholars – all leading academics in their fields...
- Working in cooperation with leading international academics and specialists as well as UK policymakers and business leaders...
- Undertaking a wide range of collaborative research projects on management...
- Disseminating ideas and shared learning through publications, reports, workshops and events...
- Fostering new ways of working more effectively with managers and policymakers...
- To enhance UK competitiveness and productivity.

AIM's Objectives

Our mission is to significantly increase the contribution of and future capacity for world class UK management research.

Our more specific objectives are to:

- Conduct research that will identify actions to enhance the UK's international competitiveness
- Raise the quality and international standing of UK research on management
- Expand the size and capacity of the active UK research base on management
- Engage with practitioners and other users of research within and beyond the UK as co-producers of knowledge about management

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Current AIM research projects focus on:

UK productivity and performance for the 21st century.

How can UK policymakers evaluate and address concerns surrounding the UK's performance in relation to other countries?

National productivity has been the concern of economists, government policymakers, and corporate decision-makers for some time. Further research by scholars from a range of disciplines is bringing new voices to the debates about how the productivity gap can be measured, and what the UK can do to improve the effectiveness of UK industry and its supporting public services.

Sustaining innovation to achieve competitive advantage and high quality public services.

How can UK managers capture the benefits of innovation while meeting other demands of a competitive and social environment?

Innovation is a key source of competitive advantage and public value through new strategies, products, services and organisational processes. The UK has outstanding exemplars of innovative private and public sector organisations and is investing significantly in its science and skills base to underpin future innovative capacity.

Adapting promising practices to enhance performance across varied organisational contexts.

How can UK managers disseminate their experience whilst learning from others?

Improved management practices are identified as important for enhancing productivity and performance. The main focus is on how evidence behind good or promising practices can be systematically assessed, creatively adapted, successfully implemented and knowledge diffused to other organisations that will benefit.

There is no hiding from the economic rise of the developing economies, and in particular that of China and India. Leading global investment bank Goldman Sachs estimates that China will overtake the USA as the world's largest economy by 2039. No doubt India will be close behind.

Understandably many in business and government, at a local, regional, national and multinational level, see the rise of China and India as a challenge and threat. Yet while such rapid growth undoubtedly presents many challenges to the developed economies, it also presents many benefits and opportunities.

For example:

- Growth in China and India increases demand for goods produced in the rest of the world, including the UK;
- Imports from China and India reduce prices, increasing the buying power and choice available to consumers in the UK;
- China and India provide investment opportunities for UK companies and individuals;
- Sourcing goods and services from China and India enables UK companies to become more competitive in global markets;
- China and India provide opportunities for innovation and scientific collaboration that can benefit the UK and the wider world.

Courtesy of the Norfolk Trust, we completed a world study tour, observing the rapid economic expansion of China and India at first hand, and seeking opinion from those best placed to comment on this exciting phenomenon. Our trip, while only a brief snapshot of the events taking place, provided us with valuable insights into what the UK must do, at a business and policy level, in order to make the most of the opportunities that are and will become available.

In particular, policymakers, and business where appropriate, must focus on:

Flexibility: Flexible economies, where regulations do not discourage hiring and firing, and the costs of entry are low, are most successful in creating new jobs to replace old ones.

Education: Preparing the workforce includes helping workers to acquire the right skills at the right time, and ensuring that regulations and policies support labour market flexibility. This includes a focus on transferable skills, and the role that colleges, universities and employers can play in lifelong learning.

Understandably many in business and government, at a local, regional, national and multinational level, see the rise of China and India as a challenge and threat.

Science and innovation: Policy should aim to make the most of collaboration opportunities with emerging centres of excellence in India and China. The flows of people across countries are crucial in building and maintaining research networks, and this should be a focus for policy and incentive structures for scientists. At the same time policy should continue to make the UK an attractive location for research, both in terms of costs and skills, but also the regulatory and social environment for cutting edge research.

Integration: Even though the UK is in many respects an internationally open economy, many industries and institutions have not yet opened up sufficiently to international networks and collaboration.

The role of institutions: Governance systems in the UK offer a competitive advantage over India and China. It is important to continue to monitor these systems to avoid any unnecessary adverse impact on cost and efficiency.

Other institutions with a role to play include universities and regional bodies. Co-location of agencies and institutions in China and India, for example, might be more productive than the existing fragmented approach.

Attention should be given to how to support workers dealing with greater uncertainty, risk and change.

Support: Finally, there is the social impact to be considered. Although the economy as a whole may gain, individual citizens and workers may suffer greater job insecurity and/or a reduction in wages. The challenge is to effectively ease this transition for those most adversely affected. Attention should be given to how to support workers dealing with greater uncertainty, risk and change.

The economic boom in India and China presents tremendous opportunities for the UK. It is essential that the UK be well placed to take advantage of these opportunities.

In the past two years, government ministers have rarely delivered a speech on the economy, education or skills without a reference to China and India. These two vast, heterogeneous nations – home to a third of the world’s population – are perpetually joined together in a form of political shorthand designed to convey the onward march of globalisation.

The headline numbers make impressive reading:

- Goldman Sachs estimates that China will overtake the USA as the world’s largest economy by 2039;
- China and India produced 125,000 computer science graduates in 2004, compared to just 5,000 in the UK;
- India is second only to the USA in the production of software applications and the design and management of databases;
- China is now the world’s manufacturing hub, last year producing 50 per cent of the world’s cameras, 30 per cent of air conditioners, and 25 per cent of washing machines.

The headline numbers are well publicised, but what lies behind them? What is actually taking place on the ground in these economies? And what do these changes mean for the UK? Confronted with the progress of China and India it is all too easy to slip into the language of ‘threats’ and ‘challenges’. But while there may be challenges ahead, there will also be opportunities flowing from new forms of trade and collaboration between China, India and the UK.

As part of a study tour funded by the Norfolk Trust, we travelled around the world and talked to people deeply involved in the economic boom in China and India, as well as policymakers and commentators in Europe and the USA.¹ We assessed the challenges, but we also examined how the UK can benefit from its relationship with these two economic giants. This report is an attempt to distil our main conclusions and observations.²

The 2005 Norfolk Fellows:

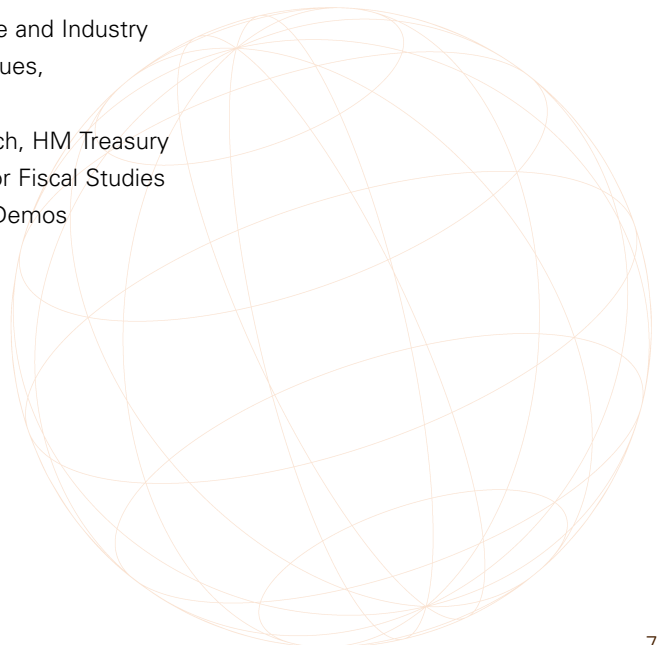
Matt Adey, Economic Adviser, Department of Trade and Industry

Andrew Gibbons, Head of European Economic Issues,
Department of Trade and Industry

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Perceptions

"My visits to Asia, especially to China, have convinced me that Asia is in no doubt that it is in a race to the top – investing in technology, innovation, science and skills, with four million extra graduates each year." Gordon Brown, 9 September 2005.

Globalisation is leading to the rapid integration of many countries into the global economy; in particular countries in Asia, South America and other parts of the developing world. A number of factors are driving this integration: cost, proximity to markets, flexibility and access to skilled workers, and new communication technologies. The result is that supply chains have become fragmented across the globe; first in manufacturing industries and now service activities and even R&D.

Such a shift has potentially profound implications for the future of the UK economy. However, while the rapid growth of China and India does present some serious challenges, it also offers many potential benefits:

- Growth in China and India increases demand for goods produced in the rest of the world, including the UK;
- Imports from China and India reduce prices, increasing the buying power and choice available to people in the UK;
- China and India provide investment opportunities for UK companies and individuals, which support incomes and pensions in the UK;
- Sourcing goods and services from China and India enables UK companies to become more competitive in global markets, allowing them to continue creating jobs and wealth in the UK;
- China and India provide opportunities for innovation and scientific collaboration that can benefit the UK and the wider world;
- Growth enables ever-greater numbers of Chinese and Indian citizens to escape poverty, meeting the UK's objectives for international development and improving the sum of human well-being.

China and India provide opportunities for innovation and scientific collaboration that can benefit the UK and the wider world.

What alarms some commentators is that both India and China are increasingly successful at activities regarded as the preserve of developed economies. R&D centres in Beijing, and software design companies in Bangalore, do not fit the classical picture of low-cost mass-production. However, while the emergence of China and India as hi-tech centres poses a challenge for countries like the UK, there are a number of reasons not to be too alarmist.

First, the basic premise is only partly true. While there are numerous high-tech success stories in both China and India, there are limits to their capacity for rapid growth. The biggest potential for growth in both countries is in medium-skilled manufacturing and services.

Second, even in the areas where China and India challenge the dominance of more developed economies, the gains from trade are still likely to be positive, through increased variety and the benefits of competition, for example.

Third, many of the areas in which China and India are becoming successful were not previously traded internationally: in particular, business services such as software design and back-office support. The mutual gains from trade in these areas are no different in principle from traditional trade in goods.

This is not to say that the next phase of globalisation is without challenges for the UK. Some sectors and regions are likely to lose out. In the short term, globalisation of supply chains will result in the destruction and relocation of some jobs and the creation of others. Individuals with low skills, or whose skills are specific to a particular occupation, may not easily find replacement jobs, or may be forced to accept lower wages.

In the longer term, an increased global supply of low and medium-skilled workers in countries like China and India may exert downwards pressure on the wages of workers in the UK with similar skills. These trends are reinforced by technological developments such as information technology that increase the productivity of more skilled workers.



Downwards pressure on wages and job insecurity are not confined to low-skilled workers. India and China are producing ever more highly skilled graduates in science and engineering disciplines. International benchmarking – of education, scientific knowledge, innovation, investment and high-tech economic output – suggests that they are increasingly competing with the EU and US.³ In 2000, 52 per cent of all bachelors degrees awarded in China were in engineering and science, compared to 17 per cent in the US and a world average of 27 per cent.

Arguably, the relevant distinction is no longer between low and high-skilled occupations, but between those occupations that are codifiable, routinised and easily relocated, and those that require geographical proximity, sophisticated analysis or intimate market knowledge. This latter group includes relatively low-skilled jobs like care home assistants and hairdressers.

These changes have profound implications for prosperity, inequality and the structure of employment in the UK. Developing the right institutions and policies in response is a major challenge. A focus on skills, innovation and flexibility must be at the centre of any strategy, but many specific questions remain unanswered.

So, whilst it is right to expect the next phase of globalisation to be turbulent at times, the opportunities that it creates for the UK are just as significant as the challenges.

India: from call centres to offshore innovation

'India Shining', Election slogan of the losing BJP in the 2004 Indian election.

We spent a week in India: two days in Delhi, the political and administrative capital; and four days in Bangalore, the birthplace of India's IT and offshoring boom.

Here new technologies are enabling firms to divide up the production of services in the same way as the production of goods. However, despite our focus on India's hi-tech success story, it is important to bear in mind that India remains a very poor country, with most of its one billion people dependent on agriculture, and a third living in poverty on less than \$1 a day.

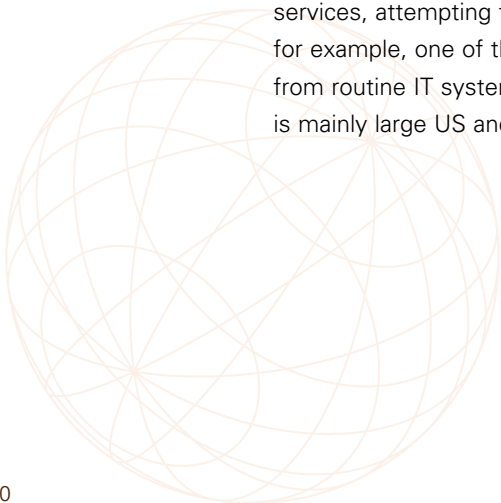
(i) The offshoring revolution

"For basic service activities the offshoring model is well-established and easily scaleable within India." Management Consultant, Bangalore.

Three examples help explain how the international fragmentation of production is working in India, and where it might be heading.

IT services and software

Offshoring in India began with software and computer programming. Now the largest Indian IT-services firms are integrated providers of consulting and business services, attempting to challenge world leaders such as IBM and Accenture. Infosys, for example, one of the largest Indian IT-services providers, offers services ranging from routine IT system maintenance to customised software design. Its client base is mainly large US and UK multinationals.



One of Infosys' biggest challenges is to recruit and train enough consultants and software engineers to sustain its rapid growth. Higher-level skills and management expertise are in increasingly short supply. Infosys has invested in a central 4000-person training facility in Mysore near Bangalore. Indian IT-services providers are increasingly investing in other low-cost locations in order to access pools of educated workers and language skills. As well as spreading beyond the traditional centres within India, other destinations for investment include China, French-speaking North Africa, and Eastern Europe.

Offshoring in financial services

An alternative offshoring model is the captive operation; a multinational firm sets up a wholly owned subsidiary to provide it with services. For example, we visited an international bank that had set up a back-office operations unit in Bangalore in 2000. Initially the unit specialised in simple labour-intensive tasks such as data inputting and form-processing. With wages at a fraction of developed world rates, overall savings were more than 30 per cent.

More recently, the unit has taken on increasingly complex tasks, starting with telephone customer support and now data analytics to develop better risk analysis and pricing strategies. While costs are still lower for these more complex activities, the main driver behind locating them in India was the difficulty of finding people with the right analytical skills (at the right price) in the bank's home locations.

The Bangalore unit still faces some problems. Employee attrition means up to 40 per cent of new employees leave within the first year, often using their newly acquired skills to secure higher wages elsewhere. Another challenge is overcoming internal resistance in the bank's home operations. The bank has essentially stopped recruiting at home for relocated occupations.

Offshore innovation

A UK-based high-tech engineering firm is working with an Indian partner in Bangalore to provide design and support services to its engineers in the UK. The Bangalore unit focuses on low-risk routine tasks, releasing UK engineers to work on the core technologies that are a key part of the firm's competitive advantage.

Operating costs in India are about 30 per cent lower than in the UK. If successful this model will be rolled out to other parts of the business. The cost advantage is being slowly eroded over time by rising wages, but the increasing capacities and efficiency of the firm's Bangalore operations are likely to compensate for this.

As well as spreading beyond the traditional centres within India, other destinations for investment include China, French-speaking North Africa, and Eastern Europe.

(ii) Future growth areas

"You can place more bets in India with the same research budget and you're more likely to win." Economist, Delhi.

While basic IT services and BPO continue to make up the majority of offshoring activity in India, R&D and offshore product development are gaining momentum thanks to a growth in demand for embedded software in devices such as mobile phones, and a move towards outsourcing of product development by large technology companies.

In today's fast moving consumer goods markets, locating development offshore can get a new product to market more quickly by allowing a company to try out multiple approaches to a problem simultaneously for the same price as doing it at home.

Other future growth areas include financial services, consulting, biotech research, education, and healthcare services. In each case the biggest potential lies in labour-intensive and easily codified activities, but more sophisticated activities may follow close behind.



Many other industries and countries provide a potentially huge source of demand for offshore services. For example, many airlines have not yet offshored reservation and other support services, largely due to union opposition. In the longer term even some government services and administration could be offshored. Many Indian IT and BPO companies are also investing abroad in order to access language skills that would allow them to service the relatively underdeveloped European market for offshore services.

There is huge potential for growth in higher-end knowledge process outsourcing such as analysis, design and research...

(iii) Constraints and challenges

India's growth will not be without problems. Already, wage growth and employee attrition means that activity is spreading beyond the first-tier centres – Bangalore, Delhi, Mumbai, Chennai and Hyderabad. And, while there are large numbers of qualified and trainable workers in second and third-tier locations, for voice work there are only a few pockets in India with sufficiently good English language skills. Other constraints became apparent on our travels through India.

Skill bottlenecks

"Everyone thinks you can go to India and just pull people in off the street. It's not true. There are some good engineers, but the best ones go to the US. You've got to work hard to get skilled and capable people." Manager of UK engineering firm, Bangalore.

There is huge potential for growth in higher-end knowledge process outsourcing such as analysis, design and research, but there is evidence of short-run bottlenecks in the supply of skilled workers, especially in first-tier centres such as Bangalore. The prestigious Indian Institutes of Technology produce a relatively small number of world-class graduates each year, and the Indian government is struggling to respond to the increases in demand.

In the longer term many of the people we spoke to were also concerned about shortfalls in management skills and experience required to manage innovation and risk-taking. The lack of a sophisticated venture capital industry is another barrier to genuine innovation in India. Some of the firms we visited are beginning to develop their own products and intellectual property, but most remain principally service providers.

Other constraints

"The IT industry in India is like Silicon Valley grafted on to a very poor country." Manager, Bangalore.

A recent article in the *McKinsey Quarterly* argues that India's weak physical infrastructure, such as roads, airports and ports, is its least attractive feature for offshoring companies.⁴ These factors are more important for the manufacturing industry than for services, but in the face of competition from other offshoring locations it is becoming a limiting factor for the Indian offshoring industry.

Soft infrastructure such as data protection, competition policy and regulation is also a priority, though perhaps less so than in China. Developing strong regulatory structures takes time, and industries such as financial services depend heavily on efficient and reliable regulation.

Finally, one of the biggest differences between India and China is the lack of integration of the IT and offshoring industry with the domestic market. The lack of a strong local manufacturing industry can hinder product development and design.

The IT and offshoring industry cannot generate all of the growth and jobs that India needs to lift its enormous population out of poverty. A recent report found that India must create over seven million jobs each year outside agriculture just to maintain its current unemployment level of seven per cent.⁵ Manufacturing has grown at a rate of seven per cent per year since 1995, but more is needed.

There was some agreement about what needs to be done to broaden India's economic progress. Top of the list was improving infrastructure such as roads, ports and electricity, followed by reforming India's restrictive labour market regulations, reducing import duties and liberalising foreign investment.

Offshoring: facts and figures

How big is the IT and offshoring industry in India, and how important is it for the UK economy?

Despite its international profile, the Indian IT and offshoring industry currently accounts for only four per cent of Indian GDP, with annual sales in 2004-05 of \$28bn.⁶ More significant is the fact that it is growing by about 30 per cent a year, and will probably employ over four million people by 2008. IT services and software account for over half of the industry's sales, while Business Process Outsourcing (BPO) and hardware account for about 20 per cent each.

The US and the UK together still make up over 90 per cent of the industry's customer base, thanks in part to a common language. UK imports of services from India rose by 64 per cent between 1998 and 2003 from £485m to £744m, but this still made up only one per cent of total UK imports of services.⁷ UK exports of services to India, including financial services and other high value-added activities, also rose from £481m to £680m during the same period. In addition the UK has a trade surplus with India in physical goods, with exports growing from £1.2bn in 1998 to £2.3bn in 2003.

These numbers illustrate the fact that the offshoring phenomenon is not a one-way street. As well as providing low cost services to UK customers, India's economic success is a potential source of demand for goods and services produced in the UK.

China: sustaining the long boom

Global investment bank Goldman Sachs made the headline-grabbing projection that China could overtake the USA as the world's largest economy by 2039.⁸ A recent OECD report suggests that China will be the world's largest exporter by 2010.⁹

The past year has seen no shortage of examples of China's growing impact on the world economy: the collapse of Rover in the UK, the debate over the revaluation of the Yuan, the purchase of IBM's PC operations by Lenovo. Much of the comment on the growing influence of the Chinese economy has focused on bilateral trade balances, in particular China's trade surplus with the US, which reached \$162bn in 2004. But assessing the long-term impact of China's economic growth requires more than simple extrapolations of current trends and the impact of exchange rate movements on the trade balance.

Chinese manufacturing has captured rapidly growing market share for many consumer goods.

Our short visit to Beijing, Shanghai and Hong Kong provided a partial snapshot of a large and complex country.

(i) Growth

Manufacturing powerhouse

"China's rapid growth will last longer than Japan or Korea did because of the sheer volume of cheap labour that remains in the interior of the country."
Senior Academic, Beijing.

Chinese manufacturing has captured rapidly growing market share for many consumer goods. The key to China's potential is its large pool of cheap educated labour and its efficient physical infrastructure.

Foreign direct investment (FDI) has played a crucial role in China's manufacturing success. China is the largest recipient of FDI of all developing countries. Initially, the principal focus was on labour intensive manufacturing and assembly for export, but in recent years the Chinese government has attempted to increase the technological component of FDI to build up domestic capabilities.

Although many consumer goods in UK shops are 'Made in China', the dominance of labour intensive manufacturing means that the proportion of the overall value of these goods captured in China is limited. Labour intensive assembly of manufactured goods accounts for a relatively small part of the value added in the production process, with research, design, marketing and logistics making up the lion's share.

Imitation to innovation

'Senior figures in the Chinese government have a mantra: "What we want is innovation, not imitation." They want to switch from a resource-driven economy to a technology-driven economy.' Science policy expert, Beijing.

Besides foreign investment, the future strength of the Chinese economy also depends on its capacity to grow its own highly productive enterprises. The long-term drivers of productivity, such as China's performance on science, innovation, investment and entrepreneurship, will be as important as macroeconomic considerations. The Chinese government's spending on R&D has trebled in the past seven years, and is predicted to rise from one per cent of GDP to two per cent by 2010.

As with India there are shortages of management skills and the experience needed to manage successful innovation.

Our visit to Tsinghua Science Park highlighted the progress made in developing science and enterprise. The first national science park, it contains approximately 400 companies, nearly a third of which have connections with Tsinghua University.

Two-thirds of the companies are in IT, with environmental and life science companies also well represented. International companies such as Sun Microsystems have set up there, but the site also includes incubator facilities for start-up companies, which are then encouraged to locate within the park.

(ii) Challenges and constraints

'When people say to me, "How far is China behind the US in terms of technology?", I say "three months, if you don't count creativity." If someone at MIT posts some results, then China can recreate it in three months. But it takes longer than that to train and instill creativity.' Manager, global software firm, Beijing.

As with India there are shortages of management skills and the experience needed to manage successful innovation. Bottlenecks are emerging in higher education and business schools. As a result there is potential for overseas education providers to enter the Chinese system more directly. A high profile example is the Ningbo campus of Nottingham University – the first such campus to be established in China by a UK university.

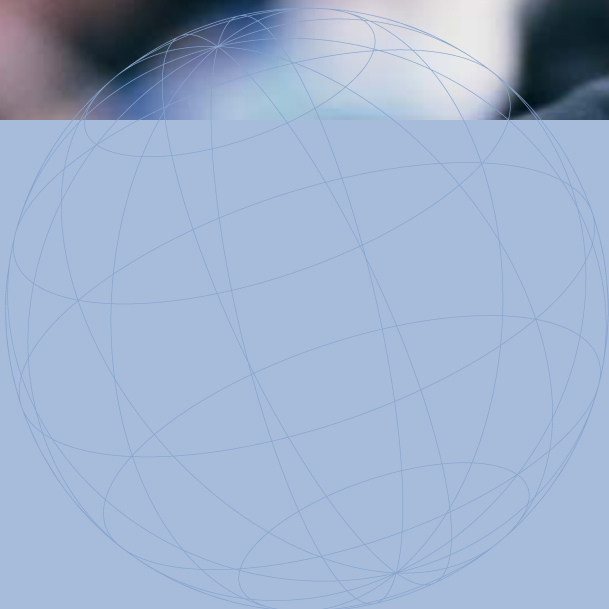
As China begins to develop a knowledge-based economy, the enforcement of intellectual property rights (IPR) becomes increasingly important. This is particularly pertinent in industries like pharmaceuticals and health care where professional bodies, standards and huge liabilities limit the potential for offshoring.

One of the Chinese government's main concerns is the need for ever-greater quantities of natural resources and inputs in the manufacturing sector. Domestic energy and other raw materials supplies cannot satisfy the demands of the Chinese economy. As a result, improving access to natural resources has become an important driver of Chinese trade policy. The environmental consequences of China's reliance on fossil fuels also pose a serious challenge, not only to China but to the region and the whole world.

A further issue is the lack of reform in the financial sector. China analysts frequently point out that an unreformed and state-dominated banking sector will not channel investment funds to new and potentially profitable sectors. In recent years investment has tended to be channelled to yet more infrastructure projects, rather than being risked on private sector business developments.

Nevertheless, as the public sector role in financial services declines, and the financial markets are increasingly opened to international suppliers, international companies will be looking to expand activities in the financial services sector. A good example is Royal Bank of Scotland's £3.1 billion investment in a ten per cent stake in Bank of China. Further reform of the financial sector, therefore, represents an opportunity for international suppliers to provide financing for the development of new industries.

Finally, it is impossible to ignore the fact that, despite its economic liberalisation, China remains an authoritarian country. Change appears to be gradual rather than sudden. In addition, economic growth is precipitating social change and increasing internal tensions between regions, especially between urban and rural areas. How these tensions are resolved has considerable implications for the speed and extent of China's economic growth.



the UK and European response

The European position

"Reform is not a problem of analysis, but of implementation." Senior Commission Official, Brussels.

Attitudes to China and India vary hugely within Europe. While all countries face the same changing global environment, different national institutions and priorities mean that some see threats where others see opportunities. Much will depend on how companies respond to the economic developments in Asia. We believe that, compared to some other European countries, the UK is well placed to benefit from the next phase of globalisation.

Although they may vary in nature and extent from country to country, a number of opportunities do exist for European firms, both in selling goods and services to emerging markets, and using offshore locations to increase their efficiency and reduce costs.

(i) Growing markets

Multinationals in many sectors have been quick to enter Chinese markets, with BP, Shell, Vodafone, Unilever and Rolls Royce amongst the UK firms to have made substantial investments.



The existence of organisations such as the British Chamber of Commerce in China, and the China-Britain Business Council, and the presence of bodies such as the Confederation of British Industry, Scottish Enterprise and a number of Regional Development Agencies in China, means that there is significant support available for companies wishing to establish operations in China.

The attraction for many foreign investors has been the potential to transfer manufacturing activity to produce goods for export. However, the new middle class in China has a voracious appetite for goods and services. Western firms have an opportunity to establish a presence in China, with a view to accessing the consumer market.

Western firms have an opportunity to establish a presence in China, with a view to accessing the consumer market.

The pace of service sector liberalisation in China is likely to increase, partly as a result of World Trade Organisation accession commitments, but also due to domestically driven reforms. In financial services such as banking and insurance, and in other parts of the service sector, UK companies are likely to find new opportunities.

Besides consumer markets, there are opportunities for sales of capital goods, infrastructure and inputs to manufacturing processes. Plus, expanding demand from businesses in China for all kinds of service inputs offers substantial opportunities for European firms.

Finally, as regulations regarding international travel are relaxed, countries that can cater for Chinese tourists heading for Europe will benefit.

India also offers growing market potential. Not only is it a major outsourcer itself, but there are opportunities to market and distribute a wide variety of products throughout the country, assuming the infrastructure challenge can be overcome.

(ii) Increasing efficiency

Notwithstanding language barriers, the growth in offshoring of production and services to China and India will continue to provide European companies with significant opportunities to reduce costs and increase efficiency.

Offshoring is expanding to include knowledge based, information handling work, across much of the supply chain for manufactured goods and services. This encompasses basic product design, business support processes and research and development. As this happens there will be opportunities not only to reduce costs, but also to gain strategic advantage by trying multiple routes to solving a problem.

(iii) Policy challenges for western European governments

Our discussions in Brussels reinforced the message that flexibility is key for surviving the challenges of globalisation. This applies both to businesses attempting to adjust to fragmentation of the production process and offshoring, and to governments minimising the adverse social impacts of labour market dislocation.

For the larger EU economies to reap the benefits of globalisation and minimise adjustment costs, economic reform to achieve flexibility of markets is essential, not an optional extra. But reform also needs compensating provision, through the acquisition of transferable skills to increase adaptability, for those who may lose their jobs.

We were told that the primary responsibility for setting appropriate policy responses rests with national governments. Countries must understand their capabilities, and identify what are likely to be their strengths and weaknesses. Necessary reforms to product and labour markets are politically difficult because the short term costs are concentrated and visible, while the benefits are longer term and more dispersed.

The UK Response

(i) Considering a response

"Fear that my job will be offshored to China or India is a legitimate concern for any individual, but not for a nation. For nations, jobs are always changing." Roundtable at Harvard University.

There are a number of important dimensions to bear in mind when considering an effective UK response to the challenges of the Asian Century.

First, the process of structural change is not new. Developed economies have coped with the transition from predominantly agricultural economies, through industrialisation, to become concentrated in high technology manufacturing and services. Experience suggests that flexible economies, for example, where regulations do not discourage hiring and firing, and the costs of entry are low, are most successful in creating new jobs to replace old ones.

Countries must understand their capabilities, and identify what are likely to be their strengths and weaknesses.

Second, structural change is not being driven exclusively by competition from China and India. Technological change continues to alter the structure of industrial organisation, production and jobs, and would be challenging businesses and workers even in the absence of international openness. China has actually experienced more job losses in the manufacturing industry than the US or EU.

Third, the government should not focus on second-guessing, picking winners, seeking to protect individual jobs, or trying to put the breaks on change. Rather, at the aggregate level, the process of creative destruction means that market share and jobs will be lost in some economic sectors and will be counterbalanced by employment gains in other areas. This is not a new process.

The main focus of policy should be to ensure that the economy is flexible enough to support this process. However, it is important to remember that public institutions already play a direct role in areas such as education, public investment in infrastructure, and basic R&D. As such, we should consider how the quality of these interventions will affect future comparative advantage, and the ability of workers and businesses based in the UK to compete in a global market.

Finally, it is clear that globalisation has significant social and distributional impacts that are felt in both emerging and developed economies. Although the economy as a whole may gain, there may be individual citizens and workers who suffer greater job insecurity and/or wage loss. The challenge is to effectively ease this transition for those most adversely affected.

(ii) Key issues

The cornerstone of the response should be skills and flexibility, but our visit exposed a number of specific areas that deserve attention.

Connections and collaborations

"Economic competition, unlike politics, can be a win-win kind of competition, but you don't win if you don't play." Kent Hughes, Woodrow Wilson International Center for Scholars.

A number of processes integrate countries into the global economy, including:

- Trade in goods and services;
- Flows of capital and Foreign Direct Investment (FDI);
- Flows of people, temporary and permanent migration;
- Research networks and collaborations.

Although, as a relatively open and multicultural nation, the UK is well placed to benefit, there is no room for complacency. There has recently been a decline both in UK exports to China and the number of Chinese students applying to UK universities.

While the UK is in many areas well-integrated into the global value chain, many industries and institutions have not yet opened up sufficiently to international networks and collaboration.

Given the close historical relationship, and the cultural and linguistic benefits arising from migration, UK firms should enjoy potential advantages with respect to business links with India. It is a significant and growing market for the UK's broader service sector and gaining an early foothold is important. The UK should also do everything in its power to attract Indian students, taking advantage of US visa restrictions on foreign students, and the growing number of international students who no longer want to go to the US.

Prepare the workforce

“Protect people, not jobs”, Motto of the L.O., the Swedish labour union for blue collar workers.

Preparing the workforce includes helping workers to acquire the right skills at the right time, and ensuring that regulations and policies support labour market flexibility.

Universities can equip people with more broad-based problem solving skills and the ability to integrate processes done in a number of countries. Offshoring itself can vastly increase management complexity.

In addition, workers will have to be equipped with the skills to communicate with a more diverse workforce, consumer market and supply chain. English as a first and only language may become more and more of a disadvantage to those wanting to take advantage of the new global opportunities.

Ultimately, however, it is impossible to predict exactly what skills will be needed in the coming decades and generally employers are best placed to identify skill needs.

Preparing the workforce includes helping workers to acquire the right skills at the right time...



Speed is as important as specific skills, and courses that allow students to specialise relatively late on, may respond more effectively.

The focus should not only be on school education, but also on the needs of older workers who may be more expensive, and whose skills may be more out of date. Lessons from the US and Ireland suggest that further education colleges may be able to play an essential role in lifelong learning and working with employers to “take what they get and turn it into what they need”.

Policies to promote labour market flexibility go further than labour market regulation. Other things to consider, for example, range from the housing market – and obstacles that the housing market and regional price differentials place on people’s abilities to move in response to changes in jobs – to pension provision and the ability of workers to transfer benefits, such as pensions, between jobs.

Consider social impacts

“Those who can do things no one else can do will prosper, but those without special skills will face long hours and low pay.” Economist, Washington D.C.

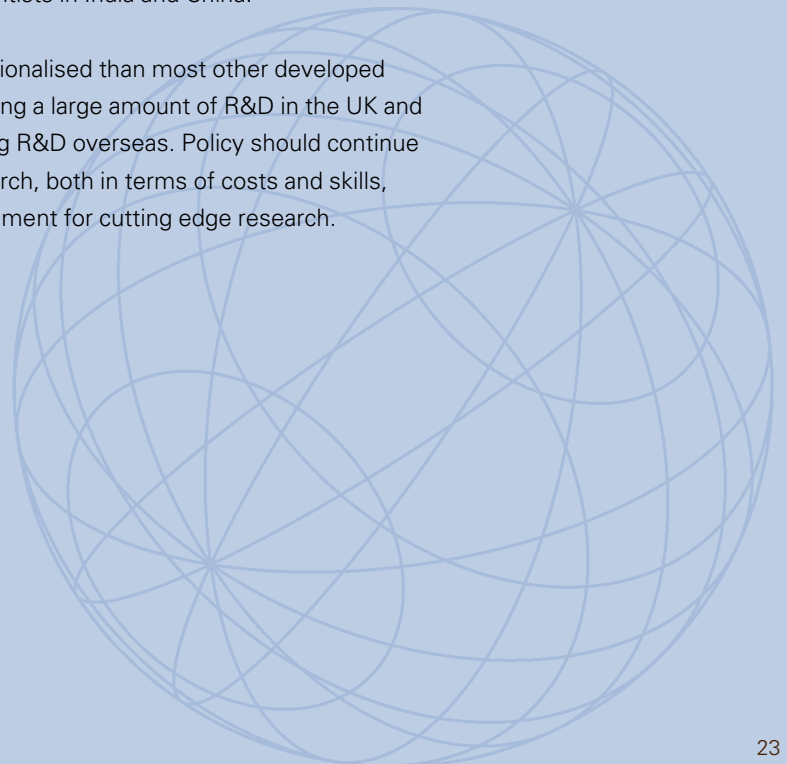
One of the main negative impacts identified was the potential for further widening of the wage distribution. If the effects of both trade and technology are biased towards more highly skilled workers, wages at the top end of the distribution would be expected to grow. In response, a growing proportion of workers will be employed in low-wage jobs as the domestic service sector expands in response to the demands of well-paid knowledge workers.

As a greater number of jobs are created in the domestic service sector, finding ways of generating productivity growth, and therefore wage growth, in these sectors will become increasingly important. In addition, attention should be given to how to support workers dealing with greater uncertainty, risk and change.

Build on science and innovation capabilities

The UK has a world-class science base, but policy should aim to make the most of collaboration opportunities with emerging centres of excellence in India and China. Flows of people across countries are crucial in building and maintaining research networks, and this should be a focus for policy and incentive structures for scientists. In particular the incentives provided to scientists early in their careers should be considered. There may also be potential for a reorientation of European level funding towards collaborative research with scientists in India and China.

Business R&D in the UK is more internationalised than most other developed countries, with foreign multinationals doing a large amount of R&D in the UK and UK multinationals increasingly performing R&D overseas. Policy should continue to provide an attractive location for research, both in terms of costs and skills, but also the regulatory and social environment for cutting edge research.

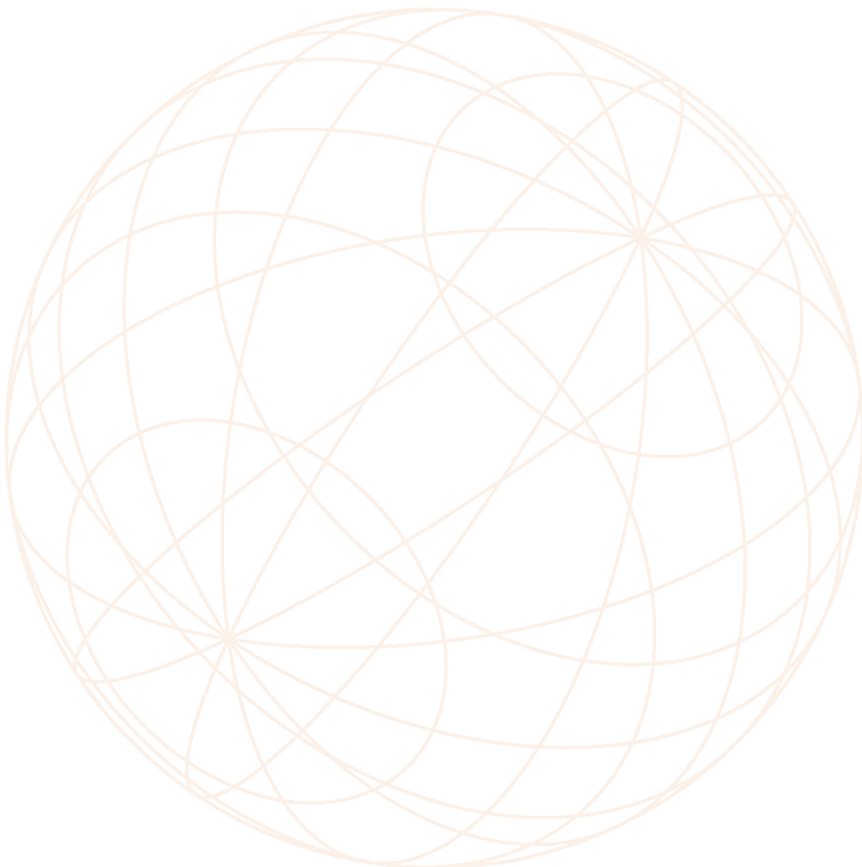


Recognise the role of institutions

UK governance systems may remain an important competitive advantage. Although China and India clearly have the capability to grow the number of skilled workers, and innovative capacities over time, institutional frameworks – an effective justice system, property rights, more transparency in allocating public funds to productive activity and effective regulatory bodies – take longer to develop. The UK is particularly well placed in financial services and pharmaceuticals. In these areas, robust London-based regulatory industries provide a strategic selling point, positioning the UK as a gateway to the EU.

Other institutions with a role to play include universities and regional bodies. Regional policy should not prevent the natural agglomeration of activities in the most effective domestic locations, but seek to exploit and maintain natural advantage. Cambridge in East Anglia is a good example of a successful cluster of economic activity around a leading university. But such success does not necessarily spread to the whole region. A main focus should be on how best to spread the benefits throughout the region. It is clear that the implementation of the types of national policies discussed in this chapter requires efforts at the local as well as the regional level.

Increasing economic integration and regional specialisation means that regions and localities are increasingly trading and competing directly with one another, and are increasingly active in their participation. Some in India and China seemed to find the range of UK representatives confusing when many other countries concentrate their presence in the Embassies. From our observations, the different UK bodies did not even typically locate physically together – at face value, co-location might be expected to be more productive.



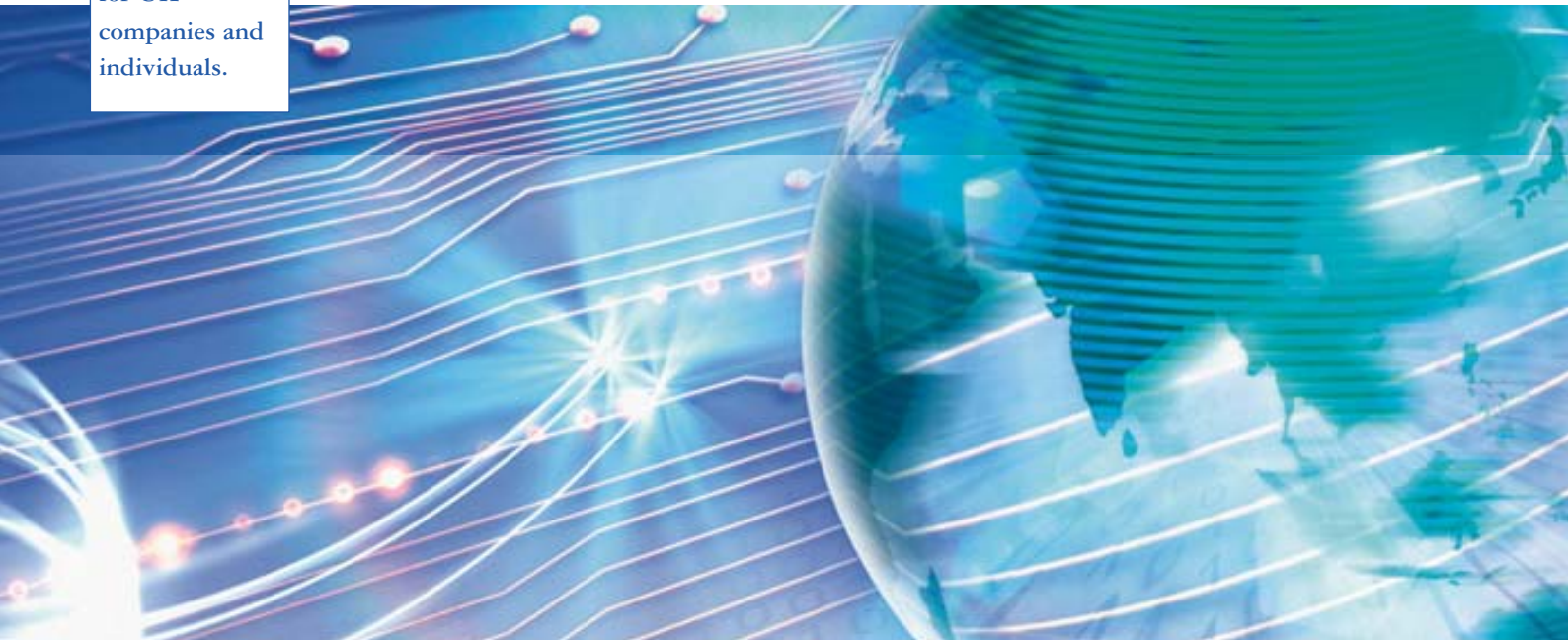
conclusions

Understandably many in business and government, at a local, regional, national and multinational level, see the rise of China and India as a challenge and threat. Yet while such rapid growth undoubtedly presents many challenges to the developed economies, it also presents many benefits and opportunities.

For example:

- Growth in China and India increases demand for goods produced in the rest of the world, including the UK;
- Imports from China and India reduce prices, increasing the buying power and choice available to consumers in the UK;
- China and India provide investment opportunities for UK companies and individuals;
- Sourcing goods and services from China and India enables UK companies to become more competitive in global markets;
- China and India provide opportunities for innovation and scientific collaboration that can benefit the UK and the wider world.

China and India provide investment opportunities for UK companies and individuals.



Our trip, while only a brief snapshot of the events taking place, provided us with some valuable insights into what the UK must do, at a business and policy level, in order to make the most of the opportunities available.

...many industries and institutions have not yet opened up sufficiently to international networks and collaboration.

In particular, policymakers, and business where appropriate, must focus on:

Flexibility: Flexible economies, where regulations do not discourage hiring and firing, and the costs of entry are low, are most successful in creating new jobs to replace old ones.

Education: Preparing the workforce includes helping workers to acquire the right skills at the right time, and ensuring that regulations and policies support labour market flexibility. This includes a focus on transferable skills, and the role that colleges, universities and employers can play in lifelong learning.

Science and innovation: Policy should aim to make the most of collaboration opportunities with emerging centres of excellence in India and China. The flows of people across countries are crucial in building and maintaining research networks, and this should be a focus for policy and incentive structures for scientists. At the same time policy should continue to make the UK an attractive location for research, both in terms of costs and skills, but also the regulatory and social environment for cutting edge research.

Integration: Even though the UK is in many respects an internationally open economy, many industries and institutions have not yet opened up sufficiently to international networks and collaboration.

The role of institutions: Governance systems in the UK offer a competitive advantage over India and China. It is important to continue to monitor these systems to avoid any unnecessary adverse impact on cost and efficiency.

Other institutions with a role to play include universities and regional bodies. Co-location of agencies and institutions in China and India, for example, might be more productive than the existing fragmented approach.

Support: Finally, there is the social impact to be considered. Although the economy as a whole may gain, individual citizens and workers may suffer greater job insecurity and/or a reduction in wages. The challenge is to effectively ease this transition for those most adversely affected. Attention should be given to how to support workers dealing with greater uncertainty, risk and change.

As previously stated, and discussed in this briefing, the economic boom in India and China present tremendous opportunities for the UK. It is therefore essential that the UK is well placed to take advantage of these opportunities.

¹ We are extremely grateful to the trustees and staff of the Norfolk Trust for providing us with this opportunity, as well as those officials at the British High Commission in India and the British Embassies in China, Sweden and the USA who provided invaluable advice and assistance. Details of the Norfolk Trust and the Norfolk Fellows Programme can be found at www.nctfellowship.com

² The conclusions reflect our views as individuals rather than those of our employers

³ The Task Force on the Future of American Innovation, www.futureofinnovation.org/ (2005)

⁴ The McKinsey Quarterly, September 2005

⁵ National Manufacturing Competitiveness Council

⁶ National Association of Software and Service Companies

⁷ Office for National Statistics

⁸ Wilson, D. and Purushothaman, R. (2003), "Dreaming with BRICs: The Path to 2050", Global Economics Paper No.99, Goldman Sachs

⁹ OECD (2005), "Economic Survey of China"



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