THE 21ST CENTURY AND THE KNOWLEDGE ECONOMY

THE AGE OF REGIONS?

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1. Introduction

The UK economy has undergone a powerful and profound shift over the last 30 years away from manufacturing towards the production of services as the primary source of wealth creation. The manufacturing sector has shrunk both as a proportion of total GDP and as the major creator of jobs – down from over 8 million jobs in 1979 to just over 3 million jobs today. Put simply there has been a fundamental shift in what we produce and how we produce it.

During the 1980s and 1990s Britain reformed and became more competitive predominantly through an ability to compete on price rather than quality. This 'low road' has reached its own dead end. The countries of Eastern Europe and East Asia, particularly China and India, have vast pools of cheap labour. Mass-market manufacturing will increasingly happen in the East. Moreover, as described below, markets are becoming more competitive and more global. In this new world the current UK economic model has a limited future: we need to reform and innovate. Without reform around a new policy agenda the UK economy cannot continue to grow at or above the current trend rate of 2.25% – 2.5%

The growth of the world economy offers the UK more opportunities for growth and development, but also creates more intense competitive pressures that intensify the need to reform. For European economies two factors emerge. The first is that if we all act together we can all benefit from reform and the second is that in this new world order the region is the organising unit for affecting change. Regions and city/regions will be the new mediators of the new economy – the knowledge economy.

The Regional Development Agencies have been given the responsibility for tackling the economic deficit of the English regions and being in the vanguard of change. The South East region has unparalleled advantages. It is the UK's one global region. Its population of 8 million people produces nearly 16% of the UK's gross value added which amounts to more economic output than European countries such as Denmark, Norway or Greece. It exported nearly £30 billion of goods last year, the highest total of any UK region, and contributed nearly £18 billion to the UK exchequer. The number of VAT registered businesses is neck-and-neck with London as the highest in the UK. They also have a better chance of surviving in the medium term and enjoy relatively high levels of investment. These businesses have the highest proportion of product innovation and represent the densest clusters of technologically intensive firms anywhere in the UK.

The South East's airports – Heathrow and Gatwick – and major ports at Dover, Portsmouth and Southampton are the gateway to the UK for the peoples of Europe and the world.

Its has the highest number of working age people in work of any region – 80% - and they are relatively highly skilled with more than 17.5% of the total in

managerial or professional jobs – again the highest of any region. If any of the UK's regions can create a knowledge economy then it is the South East.

But it also suffers from spatial inequalities, relatively high and inelastic property prices, areas of intense economic and social deprivation with high levels of unemployment, skills deficits in core knowledge economy sectors, is more open to the global economy and thus more exposed than other UK regional economies to the exogenous shocks from the global economy and has a low level of regional identity and thus cohesion. All of these problems need to be addressed.

This provocation argues that there can be no turning back from the knowledge economy. The UK's future depends on our ability to lead the development of the knowledge economy within the European Union and to encourage openness to global markets. The South East as a region is at the point of this spear.

2. The Context - what's changed?

Changes in the UK economy are being driven by three major factors: globalisation, particularly as it affects trade between OECD countries; ICT production and use; and the drive for single market completion in the European Union. Complicating matters for any country in the developed world is an ageing population and shrinking working age population at a time when more, not fewer, workers are needed.

Globalisation

Global opportunities are increasing: since 1980 global trade flows have gone up dramatically. As a proportion of global GDP, world trade grew by 50 per cent between 1990 – 2003 to reach 30%.[1] Merchandise exports from the UK between 1990 and 2000 grew by an average 6.4 per cent per annum compared with merchandise production at 2.5 per cent and GDP at Purchasing Power Parity (PPP) at 3.4 per cent.[2]

Yet the increase in global trade also brings with it significant competitive pressures. The emergence of China as a major exporter of manufactured goods is the most significant change in the international economy in decades. Like China, India has focused on liberalising its economy, adding impetus to the Asian-led sustaining of global demand. In India, GDP growth since 1990 has averaged 6.2 per cent per annum.[3]

China and India are rightly perceived to threaten some UK industries in the low value-added sectors through their far cheaper cost base. No UK business can undercut typical manufacturing labour costs of $2 per worker per day, and this has led some commentators to argue, given the parallel expansion of other Asian economies, that a fundamental shift in the international division of labour is taking place that threatens the economy and trade of many developed countries. Yet this is both to overstate the threat and to understate the opportunities..

It is certainly the case that the UK cannot compete with China and India on cost. However, there is an opportunity for the UK to compete and grow based on innovation and quality. These economies also offer many opportunities for investment, exports and growth to others. And global demand – potentially for high quality, innovative products - will continue to be sustained by East Asian growth. Chinese growth alone is a major driver in sustaining overall levels of global demand. The Chinese economy (now the world's fourth largest at 13 per cent of global GDP) continues to grow at between 8 – 9 per cent a year. In 2003, more Chinese subscribed to new phone lines (112 million) than the

[1] World Trade Report 2004, WTO 2005
[2] Ditto
[3] Bradford DeLong, J. *India Since Independence: An Analytic Growth Narrative*, University of Berkeley, California 2001

populations of Britain and France combined.[4] A third of its exports are now in electronics. It also accounts for about one third of the growth in global oil demand importing around $26 billion barrels of oil in 2004.[5]

At the high-valued added, research-based end of the spectrum of international trade, the US has achieved a dominant leadership position since the mid 1990s. . This suggests that international trade is a positive rather than zero sum game: winners are not necessarily offset by losers. Standard theory suggests that the UK can gain from China's entry into the world economy at the bottom end, and from the US's dynamism at the top end – but benefits depend upon knowledge-driven innovation and quality.

Of all UK regions, with the possible exception of London, the South East is best placed to maximise the opportunities that globalisation has to offer. It is already the UK's most open region. It is well placed to benefit from more open trade with other parts of the world and in particular Europe.

European Integration

In the medium term, however, it is the case that what happens in Europe has more relative impact on the UK economy than what happens in China and India and elsewhere in the world. Nearly 60 per cent of Britain's trade is with other parts of the European Union (EU)[6]. Common rules concerning employment rights and standards, environmental protection and competitiveness help create a level playing field on which all companies compete equally. Moreover, the EU negotiates trade terms as a bloc which helps UK firms competing in global marketplaces acquire better market access.

That is not to say Europe is one homogenous whole. Performance varies widely but as the Chairman's introduction to SEEDA's Regional Economic Strategy 2002 declares (and this goes for the UK as a whole) 'We must set our sights high. Our real competitors – and the regions against which we must judge our performance – are the top regions worldwide.' And many of those regions are in Europe.

For Europe's regions as a whole the challenges are clear. As last year's report of the High Level Group on the Lisbon Strategy chaired by former Dutch Prime Minister Wim Kok said: 'Europe needs to innovate on its own behalf. The strength of its knowledge industries and Europe's capacity to diffuse knowledge across the totality of the economy are key to lifting the growth of its productivity to compensate for falling population growth and pay for its social model. Lisbon should be understood as a means of transitioning the European economy, from structures where it essentially caught up with

[4] Chinese National Bureau of Statistics
[5] JPMorganChase Treasury Services
[6] ONS data

the world's best, to establishing economic structures that will allow it to exercise economic leadership.' [7]

This means over the next five to ten years, the newly enlarged European Union will be maintaining a sustained drive to create the world's leading knowledge economy despite the political problems arising from the debacle of the European Constitutional referenda in France and Holland. The route to this new nirvanah was laid out in the report to the Council of Ministers at the end of last year.[8] The report summarised the challenge thus, 'This will require urgent action across five areas of policy:

> **The Knowledge Society** – How to attract and retain high class scientists and technologies and facilitating greater impact from the scale of Europe's research base.
>
> **The Internal Market** – Completion of the internal market for free movement of goods and capital and urgent action to create a single market for services.
>
> **The Business Climate** – Reducing the total administrative burden, improving the quality of legislation, and facilitating the rapid start up of new enterprises; and creating an environment more supportive to entrepreneurs.
>
> **The Labour Market** – Rapid delivery on the recommendations of the European Employment Taskforce; developing a strategy for life long learning and active ageing and underpinning partnerships for growth and employment.
>
> **The Environment** – Developing the spread of eco-innovation and building leadership in eco-industry; pursuing policies which lead to long term and sustained improvements in productivity through eco-efficiency.'

The need to accent growth is all the more urgent because EU economic performance has recently been poor. American output per person hour worked has been growing faster than the EU's since the mid 1990s, and it no longer looks as though the gap is due to the particularities of the respective economic cycles. The most recent analysis suggests that it is structural. Unemployment is high in France, Germany, Spain and Italy. The policy challenge is therefore to accommodate more and faster growth with Europe's social and economic model, so that greater economic dynamism gives the resource base to underwrite Europe's social preferences.

The stronger economic performance of the Nordic countries than the US shows this is attainable. But very few member states have managed simultaneously to grow both employment and productivity as the US has

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[7] High Level Group on the Lisbon Strategy, *Facing the Challenge: The Lisbon Strategy for Growth and Employment*. European Commission 2004

[8] Ibid

done. This includes Britain, despite our good economic record since the recession of the early 1990s.

The High Level Task Group felt strongly – and the European Commission agreed - that the more inter-dependently policy is organised both within and between member states the better. At EU level the powerful evidence is that a rising economic tide floats all boats, with particularly strong affects in the knowledge economy. Consequently the overlaps, synergies and serendipities between policy areas are growing and need to be captured and exploited both to benefit particular member states and the wider European economy. This has important implications for the governance of policy at regional, national and EU level.

For more UK regions to compete effectively in such a marketplace they need to focus on knowledge economy building strategies benchmarked against the best that Europe and the world has to offer. The South East has some world-class industries - pharmaceuticals, biotechnology and ICT to name three – and is in a strong position to both lead the way and to work with and learn from other regions across Europe in building a knowledge economy.

Information and Communications Technology

ICT is the final piece of the puzzle. Despite the dot com crash of the early 2000's, Information and Communication Technologies (ICT) are continuing to exert increasing competitive pressures by shortening the life cycles of new products, making it more imperative for firms to operate at the technological frontier. In particular ICT is having several effects simultaneously:

- it is greatly reducing the marginal cost of processing, storing and transferring information, activities that are central to knowledge-intensive sectors;
- it is spawning new industries, such as Internet commerce and multimedia entertainment; and
- it is increasing the relative attractions of organizational forms – such as the network – which encourage the production and dissemination of knowledge.

The digitalization of texts, symbols, instructions, patterns, visual images, and music allow huge data sets to be marshalled more efficiently than in the past. It also means that many economic activities that once depended on physical proximity, and face-to-face encounters, can now be conducted at a distance.

The UK needs to capitalise more on the opportunities that ICT offers. For example, there is growing agreement that the higher whole economy productivity growth in the US over the last 10 years compared to Europe is due in large part to the US's greater exposure to, and application of, ICT. The United States ICT advantage is closely related to spatial issues and focused particularly on ICT use in the retail and wholesale sectors where spatial factors have greater purchase than in other sectors. Europe, with its denser

populations and older cities cannot compete in this regard.[9] And it is faster productivity growth in ICT intensive services that accounts for the largest element of the productivity growth differential between the US and Europe.[10]

Six out of 56 sectors common to both the EU and US – office equipment, semiconductors, communication services, wholesale, retail and financial services – dominate the growth story in both Europe and the US over the last 10 years and all are heavy users or producers of ICT. Despite the importance of these sectors in both the UK and the US, the US seems to apply ICT better and it also invests more, outscoring all EU economies and investing at nearly three times the rate of the UK.[11] The South East has strong densities in many of these sectors and will need to understand how to better exploit the potential of ICT in order to increase productivity.

3. Towards the knowledge Economy

Knowledge - the primary factor of production

The premise of this provocation is clear. To increase productivity, the UK needs to become more innovative, and innovation relies upon knowledge and higher skills. Knowledge is increasingly the key to making more effective use of the traditional factors of production such as physical capital and labour.

Nor is knowledge restricted to ICT, as some have argued. Although information and communication technology plays a decisive role in this new corporate environment, the concept of the knowledge economy encompasses far more than ICT alone. It refers to a cluster of competences, capabilities and institutions that may largely determine the competitive potential of firms during the 21st century. Put simply, the firms and nations that rise to the challenges posed by knowledge capitalism are likely to prosper while those that rely on the now-dated conceptual framework of industrial capitalism will fall behind.

In recent years, sceptics have wondered whether knowledge capitalism is a real departure. The ability to invent and innovate – that is to embody new ideas in products and processes - has always played a central role in economic development. Since the industrial revolution, entrepreneurs have exploited a succession of scientific advances, in the process “creatively destroying” existing industries and boosting productivity. The term “creative destruction”, coined by Joseph Schumpeter, a pioneer in knowledge economics, is itself one hundred years old. Of course, technological development is not a smooth, continuous process: the successive evolution of water, coal and oil as energy sources each represented a wave of bunched economic and social possibilities. At a minimum, the knowledge economy represents another bunched wave of innovation.

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[9] For a full argument see Turner, Adair, *Just Capital*, Pan 2001

[10] Van Ark, Inklaar and McGuckin, *ICT Productivity in Europe and the Unites States: Where do the differences come from?* The Conference Board 2005

[11] Veugelers, Reinhilde*, ICT and Productivity Growth in Europe*, DG Economic and Financial Affairs, European Commission

Yet the shift towards a knowledge economy represents a change that is *qualitatively* different to those associated with previous technologies. The processes associated with digitalization, together with other aspects of the burgeoning knowledge economy, such as nanotechnology and biotechnology, bring together many formerly unconnected capabilities and raise the potential of others – and do so from a new level of scientific complexity and sophistication. If societies are fully to exploit these new opportunities they will need to consider more flexible and collaborative forms of wealth creation and develop regulatory, educational, research and welfare policies that are supportive of knowledge capitalism.

The new 'demand' side

The knowledge economy is multifaceted and will transform the way that we live and work. A market system that arose primarily to coordinate the production and exchange of private goods must adapt to a world in which knowledge – the pre-eminent "public good" – plays a pivotal role. This adaptation will involve changes in the composition of economic output, in business organisation, in factor inputs, in the structure of labour markets, and in public regulation. At the same time there are new strains on the welfare state as individuals face greater uncertainty and firms are less capable of providing pensions and other benefits for a longer-living population. As people become more aware of the need for lifelong learning, and as the boundaries between work and learning begin to blur, schools, universities and research institutions will also need to re-define their missions.

Since basic material needs are increasingly satisfied in advanced economies, consumers are spending relatively more on knowledge-intensive goods and services - in the public as well as the private sectors. The knowledge economy is as much about healthcare, education (understood as lifelong learning) and intelligent policing, as about the digitalised entertainment industry, biotechnology and consumer electronics. It has to do not just with artefacts in which knowledge is embedded but with any human activities involving the use of symbols.

These changes in demand are among the forces driving the ICT revolution. As firms focus more clearly on knowledge as a factor of production, they are organising themselves in new ways. Business networks and collaborative structures are substituting for competition between large integrated firms, partly because firms are increasingly reliant on external as opposed to internal knowledge sources. Indeed, some argue that we are approaching a tipping point: the superior efficiency of the "network", underpinned by ICT, could trigger a new round of creative destruction, and produce unexpected changes in the corporate pecking order.

The new 'supply' side

Sweeping changes are also occurring in the organisation of research and development and in the structure of labour markets. The complexity of the

changes underway is evident in the explosive growth in the issue of patents, representing the attempted privatisation of commercially-relevant knowledge, and in the simultaneous advance of the "open-source" movement, which advocates free access within cooperative "knowledge communities".

Meanwhile the boundaries between the firm and the market are shifting as companies increasingly opt to buy people's knowledge and skills on the open market through outsourcing and short-term contracts, rather than hire employees for the long haul. More firms are also creating internal network dynamics allowing many more staff to work flexibly – in touch but out of sight. Smaller organisations are increasingly reliant on maintaining relationships and effective supply-chains in order to understand and deliver to their customer.

New skills are required for this knowledge economy: both high level technical skills and the ability to work with others. For Government and the RDA's the challenge is to establish a benchmark level for skills acquisition considerably higher than it is today. More and better skills is the slogan.

2. The Challenges Ahead

The challenges of creating and sustaining a knowledge economy are many and complex. A knowledge economy can increase inequalities between the knowledge rich and the knowledge poor. Firms must get the internal offer to employees right and improve the quality of work they offer. Competitive pressures will grow and demand and supply need to be re-understood and re-framed. There is also a need to re-draw the relationship between the public sector and business to support higher levels of innovation and of skills, better links between universities and business, and support for entrepreneurship.

Innovation

Both the corporate and public sectors will need to respond imaginatively to these challenges. For instance, companies will have to invest in knowledge more systematically than in the past, which will involve putting more emphasis on innovation. As William Baumol has argued[12] innovation rather than price competition is what drives the market process. Companies must innovate to survive. This means in the future they will need to collaborate more with universities and research institutes, pay more attention to the skills of their workforce, and participate more in the business networks through which knowledge is increasingly diffused. Public organisations such as the RDAs will need to work to support these business / university links.

Supporting the new Demand and Supply

Providers of equity and loan capital may have to devise new instruments that take better account of the needs of enterprises, whether start-ups or mature

[12] William J Baumol, *The Free Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*, Princeton University Press 2002

businesses, whose principal assets are intangible knowledge rather than plant and machinery or real estate.

The public sector, meanwhile, will need to embark on reforms on several fronts: to overhaul education, training and research at all levels, with special attention to the interface between universities and business; to improve public components of the transport and communications infrastructures upon which all wealth creation depends; and to create a more proactive welfare state, dedicated to supporting the victims of rapid economic change and to promoting the trust and social capital that business feeds off but does not necessarily replenish.

No country or region in the developed world has yet come close to producing the matrix of required responses. Some are further down the path than others, and a small number of city-regions or ideopolises – Munich, Helsinki and Cambridge for example – seem to be making the most progress. Indeed, greater variations in the performance of individuals, firms and regions may be one of the consequences of a shift to knowledge capitalism.

Tackling Income Inequality

There is already some evidence that, in the absence of countervailing policies, the knowledge economy can exacerbate income inequality, and reduce, rather than enhance, social mobility because wealthy and talented parents find it relatively easy to transmit their advantages to their children.

Meanwhile, once a city or region has captured a first-mover advantage it can attract firms and individuals that reinforce its advantage – a classic virtuous circle - while those trapped in traditional industries can find themselves in a downward vortex that is hard to correct.

Creating ‘good’ work

In principle knowledge capitalism should make work more enjoyable: it will be good for producers as well as consumers. However, unless individuals, firms and government adopt new attitudes and strategies, there could be many losers as well as winners.

Partly in response to more intense competition (reflecting deregulation and globalisation), firms are focusing more clearly on knowledge as a factor of production. They are recognising that what they have always needed is knowledge and skills rather than labour per se. The traditional employment contract is thus under pressure because firms can satisfy many of their knowledge and skill requirements without making a long-term commitment to employees. And this is shifting the boundary between the firm and the market because much work previously done inside companies by employees is now outsourced in various ways – by means of short-term contracts, the use of agency staff and the hiring of consultants.

A new contract

The corporation and the state have collaborated in the production of knowledge and technology for decades. Governments everywhere fund much of the basic research on which firms depend. But with the advent of knowledge capitalism, a redrawing of the implicit contract between business and the public sector appears overdue.

Ownership and financial structures that grew up to support industrial capitalism in the 19th and 20th centuries are unlikely to be well adapted to the knowledge economy. Knowledge companies have intellectual rather than physical capital to offer as collateral. Payback periods are long and uncertain. This implies the need for suppliers of financial capital that are capable of making sophisticated assessments of credit-worthiness and that have unusually long time-horizons. Knowledge companies are also unusually dependent on their core employees, those that have not been "externalised" because their knowledge and skills are crucial to their firm's success. The knowledge capital of such firms is largely embodied in such employees. Co-ownership, after all, is often the favoured corporate structure in knowledge-intensive service sectors, such as law, accountancy and consultancy.

4. The Challenge for the South East

Since the South East wishes to move from being one of the top 50 regional economies in the world to one of the top 15 its policy choices are more urgently proscribed. As the Treasury have said[13] the key drivers of productivity are skills, investment, innovation, enterprise and competition. But above all these is the strategic goal of creating a knowledge economy with policies aligned to that objective.

If SEEDA's economic policies are examined through the prism of the knowledge economy framework (outlined below) it becomes easier to discern what needs to change. The building blocks of the knowledge economy can be described as follows.

1. Innovation and investment in R&D as the drivers of economic growth.
2. Effective competition policies to stimulate the demand for and supply of innovation
3. An infrastructure of world-class research universities with strong linkages to the business community.
4. Access to a ready supply of venture capital with long time horizons for business (and universities) to ensure that "blue skies" research can be transformed into real products, services and processes and an aptitude to manage innovation.
5. A high skilled workforce – where the majority of employees have level 3 qualifications or above, since it is only at this level that investment in skills delivers real improvements in productivity and performance.
6. Employers with the capacity to fully utilise the skills of a more highly qualified workforce – evidence suggests that at present around 25 per cent of the UK workforce are employed in jobs below their skill level.
7. Efficient transport infrastructure to facilitate access to markets.
8. Efficient ICT infrastructure where access to broadband is ubiquitous and businesses make the most effective use of ICT to streamline processes and boost productivity. This includes the need for software and hardware producers to ensure integration.
9. The promotion of more effective collaboration across industries, whether through business clusters or formal and informal business networks.
10. Openness to global markets
11. High levels of social capital to promote trust between businesses and between employers and employees.'[14]

[13] Productivity in the UK – the regional dimension, HM Treasury/DTI 2001
[14] Coats, D et al, Working Paper: *What is the Knowledge Economy?* The Work Foundation Forthcoming

i. Better Alignment of Policy

But what does this mean for new policy prescriptions? The first goal must be to align regional policy behind national and European thinking. The new targets and measures agreed as part of the mid–term review of the Lisbon strategy should be adopted wholesale and regionalised with interim and other targets established[15] (see Appendix 1). There needs to be a regional Lisbon strategy with potentially a Regional Lisbon Council to oversee and guide it made up of social partners, Regional Development Agency, local politicians to overcome the current democratic deficit at a regional level, civil society, representatives of venture capital and others. This should align with other bodies such as the Regional Skills Alliance.

ii. Increase R&D

Of particular importance is the Lisbon target of 3% of GDP spent on R&D by 2010. As argued above the Knowledge Economy must increase rates of innovation which is unattainable without additional levels of investment available to firms. This investment comes in three forms, capital, skills and ease of market access.

It must become easier for firms with high innovation potential to access capital more quickly. Levels of venture capital funding need to be increased especially given the South East's spatial advantages and track record. Perhaps major lending institutions could be encouraged to develop regional strategies with greater network dynamics to be encouraged between different lending sources. This will develop the current attempts to build funding 'escalators' for new and growing businesses.

Clearly existing initiatives such as Enterprise Hubs and Enterprise Gateways and the South East Regional Business Support Board are excellent ways of encouraging young companies to start and then grow. These mechanisms aid networking, knowledge transfer, ease of access to capital and fast track building of competence. But more can be done. More noise needs to be made around successes. Regulations from central Government and Europe need to be smarter to enhance further the ability of individuals to start businesses and sustain them.

Broadband investment is a national priority. Without the diffusion of broadband ICT potential will not be optimised. Without optimising ICT use and distribution the South East as the UK's lead region will fail to drive the catching up of productivity growth with the US and the best of Europe as outlined above. There should thus be a funding bias to businesses that are high developers and users of ICT.

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[15] For a list of the targets and measures see europa.eu.int/growthandjobs/pdf/kok_report_en.pdf page 51

Iii Develop city regions

But more than this the region should actively seek to build up the potential of its 'ideopolises' and 'sub-ideopolises' arguably focused or capable of being focused around Oxford with its concentrations of advanced engineering, bio technology, ICT, new media and publishing industries; Canterbury with environmental technology, pharmaceuticals and medical equipment; Southampton/Portsmouth with aerospace, bio-technology, defence, ICT and marine technologies; Brighton and Gatwick with creative industries, financial services, health services, logistics, and tourism and hospitality; and Milton Keynes with research and development, new media and building and construction. These will need to take account of London as both an opportunity and a challenge for the South East.

Iv Stronger university/business links

This means working with the major universities to match their research output with businesses capable of turning ideas into products and services; developing social and environmental capital to attract businesses and people to work and remain in these localities, and investing in infrastructure that is both sustainable and fit-for-purpose. The key element in such thinking is conceptual - to 'see the joins' between different policy initiatives, so as to turbo boost the outcomes.

V Build high value-adding manufacturing base

Manufacturing in the UK will become more niche, more value adding and more technologically complex. Many of the UK's manufacturers operate high performing organisations working at the technological frontiers of their industries. The South East with its more than 25,000 manufacturing enterprises achieves higher levels of value added and exports than other UK regions. The region should investigate twinning with other regions around the world, particularly in Eastern Europe and the Far East, capable of boosting export share and knowledge diversity and transfer.

Vi Skills,Skills, Skills

But no business, no economic growth and no productivity catch up will be possible without the people with the skills to deliver growth. In a knowledge economy people are the key asset and skills the key driver of higher performance. And the core skills needed, from which all other higher skills are developed are literacy and numeracy, ITC skills, learning to learn – processing, evaluating, problem-solving, Interpersonal and civic competences, entrepreneurship and life skills and cultural awareness.

Again the target is set out in the revised Lisbon strategy - 85 per cent plus of labour market entrants qualified to at least level 2 by 2010. To achieve this there needs to be National Qualifications structure with transferability of credits between formal and informal learning; mutual recognition of qualifications; training institutions that are demand focused with high employer

involvement and leadership through qualifications, assessment and quality of curricula and training content. There must be powerful mechanisms to ensure minimum standards with new co-financing arrangements including more employee commitment encouraged by Trades Unions and other employee representative bodies. For the Government agencies the focus must be on ensuring access to basic skills for the most disadvantaged groups. There must be a comprehensive strategy for older workers worked through with the Department for Work and Pensions. Universal childcare for all children from the age of 12 months onwards must be the policy goal both as an instrument of early learning and to raise female participation rates. By doing all this the horizon lifts from basic skills to whole life skills.

The delivery mechanisms for achieving the above need to be guided far more by the demand side - by employers themselves. The new Sector Skills Councils have the clear potential to do this but need to be run by employers and engaged with employers. The history of the last 100 years is littered with the failures of well-meaning Government initiatives in this area that have foundered on the rocks of employer indifference and bureaucratic bungling. The Sector Skills Councils need to take the lead in clear mapping of the labour market dynamics by sector, ensuring the pay-offs on training are well-grounded, well-disseminated and well-understood and close involvement in the development of suitable curricula and apprenticeships.

Regionally this means developing better strategies for workforce engagement via sectors, clusters, the Social Dialogue Forum and other mechanisms. It also means prioritising excluded groups such as the low skilled, and older workers seeking to retrain through individual mentoring schemes for example.

Vii Environment First

The local and global environment is critical to business and productivity growth. First pleasant local environments help attract knowledge workers. As the workforce becomes more highly skilled their labour market power becomes potentially stronger, particularly in high growth knowledge sectors where there are already severe skills shortages. With employers not offering the traditional trade-off for long-term commitment of a job for life and its concomitant security, knowledge workers want different but no less important things. They have swapped a job-for-life thinking for the concept of employability for life. Thus for employers to keep them they need to offer a range of different benefits – all of which, if done properly, will feed through into higher productivity.

This means nicer working environments, more flexibility and control over when, where and how work is accomplished. It means greater reliance on measuring outputs and not inputs such as ‘time’, which in turn means a new way of managing people and marshalling resources. Thus policies need to be geared to attracting the best and the brightest to come to the South East. It means thinking about the design and siting of new business and new business developments. It means creating the conditions for the transfer of best human resource management practices across the region. And it means

considering how ‘mobile working’ can tap into the beauty of the South East and its attractiveness as a quality place to live with the opportunity to see this in daylight through flexible working arrangements.

The other aspect of the environment is eco-technology. Europe as a whole leads the world in this regard. The South East has a leadership role in the UK. Globalisation will intensify pressures on companies, countries and Governments to do more to protect the environment. The NGO movement. as auditors of corporate performance and reputation, will intensify the campaign for greater environmental protection from companies and Governments, naming and shaming as they do so. This presents a major opportunity for businesses that help other businesses to protect the environment. Eco-tax breaks should be increased. More smart regulation at a European level to develop this sector will help this process.

5 Conclusions

Globalisation offers an opportunity for the UK to lead Europe in developing a new economy for the 21st Century. This economy divides comparative advantage unevenly and in complex ways around the world. In the developed countries of the North our first mover advantages in higher levels of skills and investment, in soft infrastructure such as company law, and in our ability to attract the brightest and the best will remain for a considerable time.

This allows us to conceive of a different economic future. One that is based around knowledge as the key factor of production, offering primacy of place to the smart and the innovative, the networked and the e-enabled. Such an economy creates many challenges not least being the potential to increase inequalities between the knowledge rich and the knowledge poor. It places pressure for the public sector to develop new soft infrastructure that re-imagines the contract between business and the state. And it argues for a commonwealth of regions where size and flexibility combine to create leverage and network opportunities.

The South East economy is well placed to make a quantum leap into this new economy. But to do so it must align its policies with the best in Europe. It should seek out more opportunities to identify and invest in high value adding sectors and firms and be aggressive in a policy of openness to global trade and inward investors. More than that it should seek to open up dialogue with new regions in Europe and elsewhere.

This is not to minimise the problems faced by the South East. It must tackle spatial inequalities, areas of intense economic and social deprivation with high levels of unemployment and skills deficits in core knowledge economy sectors. Some of the policy solutions to these problems have been outlined above. Perhaps more fundamental than these issues will be the challenge of overcoming a perceived democratic deficit. The English like their county councils, their towns and cities. But regions make economic sense. They combine economies of scale with local ownership of decisions. The South East may not have a regional identity like some other regions in the UK but that can be overcome. The region and city/region is here to stay.

Appendix 1

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Communication to the Spring 2005 European Council: Working together for growth and jobs – a new start for the Lisbon strategy

The Commission published their mid-term review of the Lisbon strategy on 2 February 2005[16]. This document essentially endorsed the central conclusions of the second Kok report and set out a programme for action by member states. The objectives are explained in the foreword in the terms of the draft constitutional treaty:

> *[T] he sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress and a high level of protection and improvement of the quality of the environment.*

Key recommendations from the Commission include:

Delivery

- Implementation of Lisbon demands a "renewed partnership for growth and jobs.
- The Commission will take responsibility for initiating policy and monitoring implementation by member states.
- Member states must take action to address the backlog of Lisbon reforms.

A renewed Lisbon action programme

There are three areas where the Lisbon process needs to be re-energised

- Making the EU a more attractive place to invest and work
- Promoting knowledge and innovation to generate sustainable growth
- Creating more and better jobs

Member states will be required to prepare a single Lisbon action plan against which progress can be monitored. The number of targets will be reduced. Member states are invited to identify a minister with specific responsibility for delivering the Lisbon process.

Making the EU a more attractive place to invest and work
This demands action if the following four areas:

- Extending and deepening the internal market
- Improving European and national regulation
- Ensuring open and competitive markets inside and outside Europe
- Expanding and improving European infrastructure

The Commission propose therefore that:

[16] Communication to the Spring European Council. *Working together for growth and jobs – A new start for the Lisbon strategy*. COM (2005)24. 2 February 2005.

- Member states should take further steps to open up markets for telecoms energy and transport.
- Further reforms are needed to open up markets for financial services and services in general. There should be a consolidated corporate tax base and a Community Patent
- The regulatory climate must be improved and the Commission will launch a new regulatory reform initiative, particularly focused on how impact assessments are carried out.
- Competition rules must be applied proactively. Sectoral screenings of barriers to competition will be launched in energy, telecoms and financial services.
- The EU will press hard for the completion of the Doha round at the WTO and continue to develop bilateral arrangements or regional economic relationships.

Knowledge and Innovation for Growth
Action is needed to:

- Increase and improve investment in R&D
- Facilitate innovation, the use of ICT and the sustainable use of resources
- Contribute to a strong European industrial base.

Specifically this means that the following actions should be taken as a matter of priority:

- Member states must give a high priority to innovation policy – and must work towards making the knowledge society a reality. The EU focus on biotechnology and eco-innovation will help in this endeavour.
- More investment, both public and private, is needed in R&D. The Commission will present proposals in April on a new Community research framework programme.
- A major programme of reform of state aids policy will begin later this year. Member states will have more scope to support research and innovation – particularly by SMEs.
- The Commission will propose the creation of a European Institute of Technology, to attract the best minds, ideas and companies from around the world and will support the establishment of Innovation Poles – bringing together high tech SMEs, universities and the necessary business and financial support.
- The Commission and member states must step up their promotion of eco-innovation – in other words the development of environmental technologies to ensure that economic development can continue on a sustainable path. There will be more support for environmental R&D, including the leveraging of private finance through the European investment Bank to promote low carbon technologies.
- Partnership with industry will be reinforced through the European Technology Initiative, building on the success of the Galileo satellite navigation system.

Creating more and better jobs
Action is needed to:

- Attract more people into employment and modernise social protection systems
- Improve the adaptability of workers and enterprises and the flexibility of labour markets
- Invest more in human capital through better education and skills.

The following actions should therefore be taken as a matter of priority:

- The social partners should develop a joint Lisbon action plan in advance of the 2005 Spring Council to identify their contribution to the Lisbon goals.
- Member states and the social partners are invited to consider how active employment policies can make work pay and help disadvantaged groups to stay in work. This includes active ageing policies so that people do not leave the workforce too early and the reform of social protection systems, which offer flexibility and security for workers confronting labour market change.
- Member states should fix national employment targets for 2008 and 2010.
- There must be a focus on the employment prospects of young people, with reforms to ensure that they possess the skills they need to find work and learn throughout their lives.
- Member states and the social partners must work to improve the adaptability of the workforce and businesses as well as the flexibility of the labour market
- Demographic change demands that the EU develops a sophisticated policy of managed migration.
- Europe needs more and better investments in education and training. The Commission will contribute to the process buy adopting a new lifelong learning programme to replace existing arrangements.
- Member states should work with the Commission to promote more labour mobility across the EU. This demands action to ensure effective mutual recognition of qualifications.
- The EU structural funds should be used to support projects focused on the delivery of the Lisbon goals – looking at how jobs and growth can be delivered at a local level.

Improving Lisbon Governance

- The Commission will bring forward a Lisbon action programme to explain what is to be done and who is responsible
- Governance arrangements must be reformed so that Lisbon becomes more effective and is more easily understood.
- The Commission is proposing to streamline the Broad Economic Policy Guidelines. An integrated set of guidelines alongside the Lisbon action programme will be used to move the reform process forward. These will cover macro-economic policy, employment policy and structural reform.
- Member states should appoint a single minister responsible for the delivery of the Lisbon process.
- Reporting will be simplified so that there is a single report at European level and single national action plans. This will allow the Council and the Parliament to focus on the critical policy issues.

The Commission are therefore inviting the Council to:

- Launch a new partnership for Growth and Jobs

- Endorse the Community action programme and the proposal that member states establish their own action programmes
- Approve the new arrangements for governance and the reporting of the Lisbon process.

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