

Global trends for the next 20 years... and their implications for UK cities

This note summarises research by SAMI Consulting on trends that will affect the world that we operate in. These trends will have implications for all cities in the UK, including Sunderland. The drivers were presented at a cross-city workshop held by Centre for Cities in October 2008.

SAMI identifies key drivers for change that affect the economy and environment now, and will continue to do so in the future.

These drivers are:

- **Globalisation**
- **Climate Change and Raw Materials**
- **Technology**
- **People**

This analysis does not seek to predict the future. Rather, it provides a framework for discussion of possible future changes that will affect the way individuals live, businesses operate, and cities grow. As these trends continue, the UK and cities – including Sunderland – will have to adapt. Taking into account the complex set of forces that are underway can help understand how the challenges and choices facing policymakers will evolve.

Globalisation

‘Globalisation’ describes the internationalisation of trade in goods, capital flows, and movements of people. These combine to increase the economic integration between economies over the world. It is one of the key trends now shaping the economy in which businesses and individuals compete, and it affects every city.

Globalisation is changing the balance of the economy

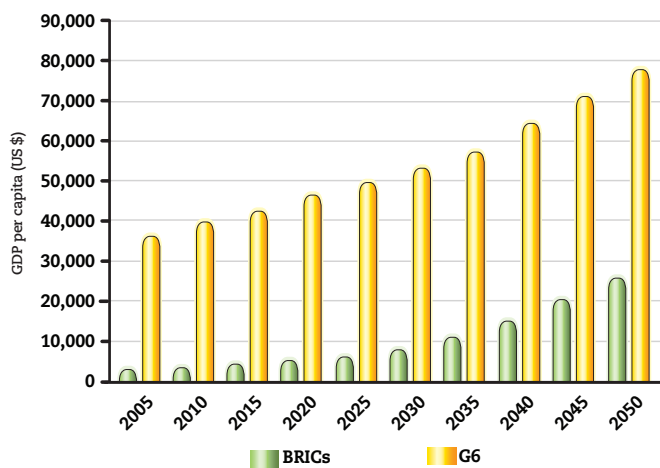
World trade grew rapidly in the years preceding the recession, but even so world trade growth was only recently reaching levels close to the high growth of the 1950s and 1960s, but the era of globalisation that we live in is new and different.

For most of the modern era, economic power has rested in Europe and North America. But we are witnessing a significant change in the balance of the global economy, with rapid growth of emerging economies.

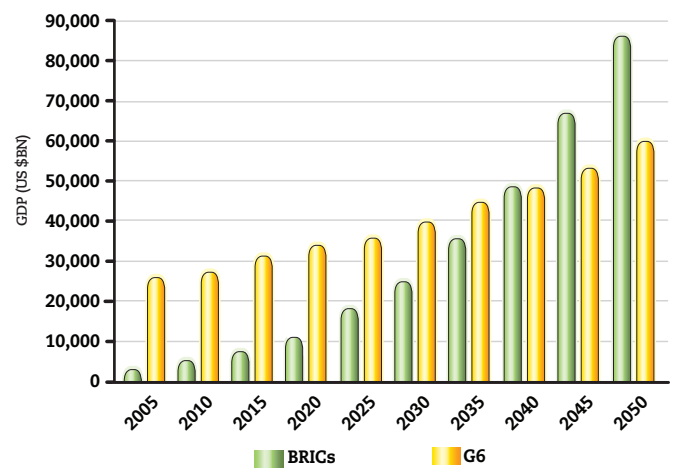
The recession has caused a sharp drop-off in the growth of world trade of about 18 percent in August 2009 from its peak in April 2008. However, this follows record growth in recent years – reaching 8.8% in April 2008 before starting its decline¹. As the world moves out of recession into recovery, long-term trends towards global economic integration are likely to continue to drive the economy.

By 2050, it is expected that the combined GDPs of the BRIC countries (Brazil, Russia, India, China) will exceed that of the G6 industrialised nations (USA, Japan, Germany, France UK, Italy) - although GDP per capita will remain below. As well as changing the balance of economic power, international relations and institutions will also have to adapt. Indeed, we are already seeing this with the increased importance of the G20 relative to the traditional G7/8 in formulating an international response to the current recession.

Projected GDP per capita



Projected GDP



Source: Goldman Sachs (2005)

This rebalancing will change the economic framework in which UK cities operate.

Globalisation drives structural change, helping to explain the decline of heavy manufacturing in many parts of the UK, and the growth of services and high-value manufacturing. Many cities, like Sunderland, have already seen the decline of traditional industries like shipbuilding, and find it difficult to position themselves in the new global context.

In addition, most UK cities are small on the global stage – with a population around 280,000. Sunderland is a medium-sized UK city, but small compared to many cities elsewhere in the world. Rapidly growing cities in emerging markets are much bigger – Mumbai and Mexico City have populations around 18 million, and Shanghai has 14 million inhabitants. Moreover, the average age of the population in many of these places is significantly less than in the UK and other developed countries, and the decline in working-age population is generally projected to take place later. As these cities' economic importance grows to match their population, UK cities may have to work harder, and work together, to maximise their economic weight.

Consumer markets will be heavily conditioned by this rapid growth of emerging economies and their young populations. For example, the new Nano car produced by Indian company Tata, which sells for £1000, can be expected to disrupt the established behaviour of companies in Europe and North America. Companies in both emerging markets and developed ones will adjust to meet new and rapidly growing sources of demand, and this will affect UK cities in their roles as both centres of production and consumption.

1. CPB World Trade Monitor August 2009 (published October 2009)

Globalisation and labour markets

Labour markets are changing. Increasingly, the global economy puts a premium on talent, and the returns to skilled and flexible labour will continue to grow. In addition, in a world where production chains are increasingly global and companies serve a range of different markets, jobs are now more mobile. Jobs are also more mobile than people, so restrictions on movement of labour will not necessarily shelter individuals and cities from global economic forces.

Local Authorities need to understand the implications for this for the sort of jobs that their cities will be able to grow, attract and retain in the years ahead.

Globalisation and regulation

A particular facet of the current era of globalisation is the growing significance of cross-border regulation. There is growing cross-border trade in goods and services, and an increasing number of international companies. Businesses seeking to do business across borders now have to comply with regulation in many jurisdictions, and these can often overlap. This can sometimes create real problems, e.g. when Shell suffered when the SEC in the US and the UK regulator both took different views of their oil reserves. At the extreme, the weight of complying with regulations could deter businesses from entering new markets.

The world is also seeing increased moves towards cross-border harmonisation of regulation. The most obvious example is the regulations that make up the EU Single Market. This will continue to evolve. For instance, following the crisis in global financial markets, there are discussions over increased international financial regulations.

US and China

The two most dominant countries in the global economy are the United States and China. In addition to each country's individual economic strength, they also have a close economic relationship. The US has borrowed heavily over the years from emerging economies, particularly China, to fund consumer expenditure. Financing US consumption with Chinese savings has resulted in global imbalances – and close ties.

How this relationship evolves over time will have implications for global economic stability. This has been clearly demonstrated as economic tensions – particularly over Chinese exchange rate policy and signs of US protectionism – have risen during the recession. However, this also highlights that the two countries have significant commonality of economic interest. Any unravelling of the relationship would have global economic consequences.

What questions does globalisation raise for Sunderland and other UK cities?

How will labour markets in UK cities be affected by globalisation?

- Jobs are increasingly mobile. As cities look to identify future sources of employment, they need to aim to attract 'sticky' jobs, which are less likely to move abroad.
- Attracting, retaining and developing talent and skills will be particularly important, in particular given the greater working-age population of many growing cities in emerging economies.
- There will be winners and losers from globalisation – policymakers need to be honest about this, and need to focus on equipping people with the skills they need to succeed.

What does globalisation imply for transport needs?

- As economic activity is increasingly affected by global economic flows, cities need to focus on external connectivity. This should be of a form (ports, airports, broadband) appropriate to the future role of the particular city in the global economy. Will cities need to be moving people, goods or information?
- UK cities are small on a global scale. In order to compete, networks will be key. Increasing interdependence of city economies implies that there will be growing pressure on inter-urban infrastructure.

What opportunities does globalisation create for increased trade and investment?

- Cities need to determine their niche within the global economy, and identify a small number of priorities, in particular to help them grow and attract higher value jobs.
- While international migration provides opportunities for businesses, it is important to recognise the costs for certain individuals from downside pressure on wages, and increased competition for jobs. This is particularly likely to affect those on the lower rungs of the labour market, and cities that are still adjusting to the global economy.

Climate Change and Raw Materials

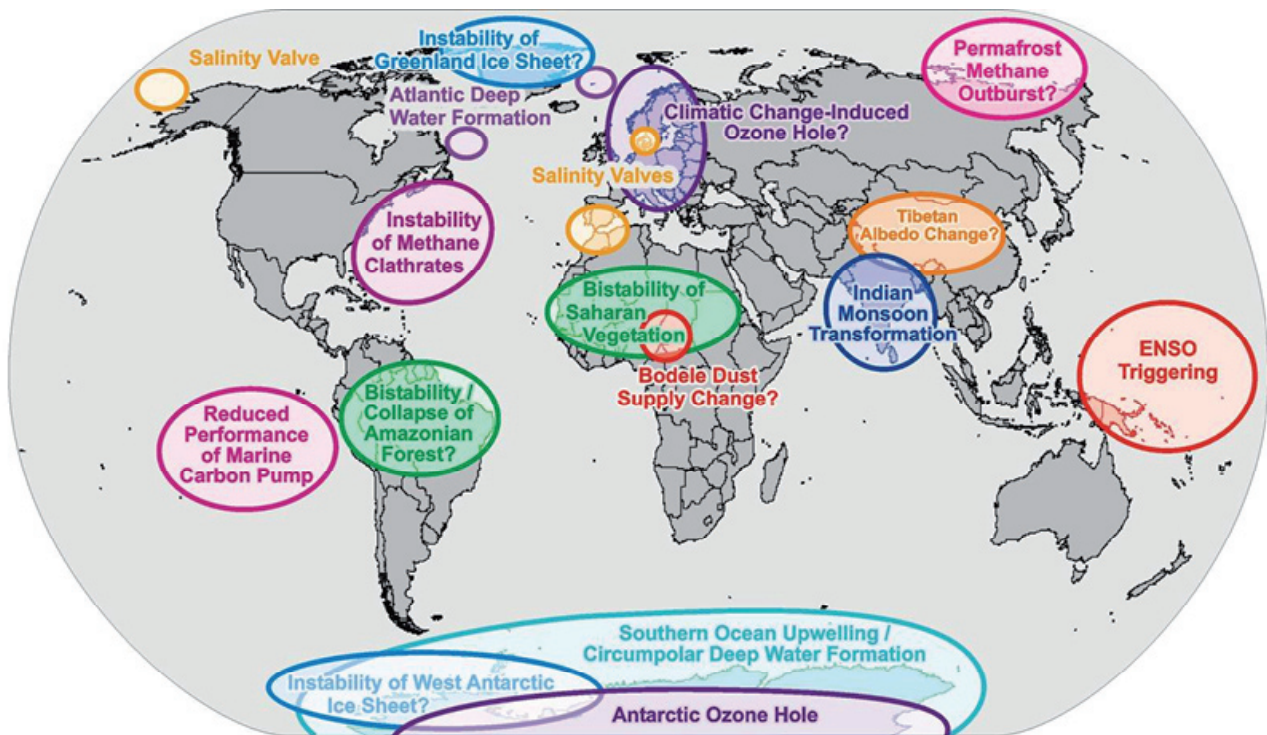
Climate change is one of the most pressing issues facing the world and the global economy, and there is increasing pressure on governments to take steps to tackle global warming. Climate change has risen as an issue over recent years, and there is a growing consensus that it is caused by human activity.

The latest evidence by the International Panel on Climate Change predicts that global average temperatures will rise by between 1.5°C and 4.5°C if human activity doubles the amount of CO₂ in the atmosphere. This raises challenges both for **adaptation** and **mitigation**. The latest UK Climate Projections estimate an increase in mean summer temperatures of between 2.4°C and 2.9°C in the North East².

Globally, methane, carbon dioxide and temperature have been increasing over the last 20,000 years. Current levels were last seen 120,000 years ago. These levels raise the possibility of the world reaching a 'tipping point' – which could change the dynamics of the world climate system. These could be events such as salinity valves opening, changing ocean flows, ozone holes allowing more solar energy to reach earth, the release of methane in large quantities from the Russian tundra, and the burning up of the Amazon rainforest, reducing the earth's capability to manage its atmospheric carbon. The map overleaf shows where some of these potential tipping points could occur.

It is impossible to know for certain whether or when these events will occur, or the effects which would then ensue. One effect which has been widely discussed is the impact on Northern Europe if the Gulf Stream were diverted away – this would leave the UK with a climate akin to Greenland.

Climate Change Tipping Points



Source: Schellnhuber 2007

One effect we already see is the increasing frequency of extreme weather events, and their increased impact as people move into areas previously less settled. The Association of British Insurers has estimated the cost of wind-related extreme weather events across Europe to increase by 5 percent by 2080, and flooding by a factor of 15.

Governments – particularly in Europe – are likely to introduce a number of regulations aimed at reversing the trends of carbon in the atmosphere. However, even if these regulations are sufficiently stringent, they are unlikely to take real effect in the next twenty years, and we can expect climate change trends to continue.

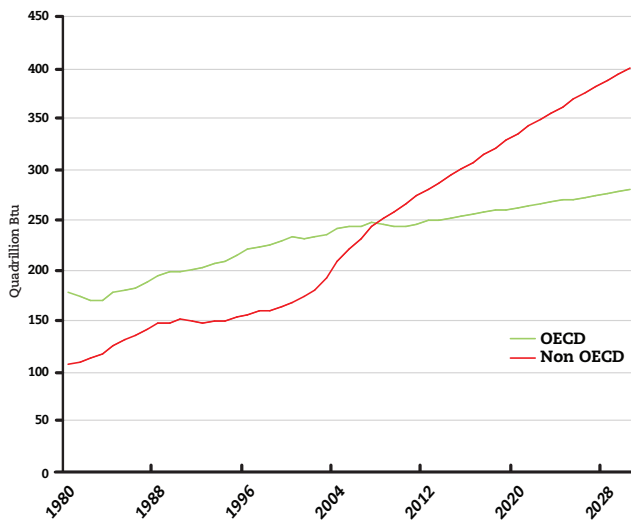
Nevertheless, while the outcome of new regulatory approaches on the global climate will take time to come through, the impact of regulations will be felt by businesses and individuals in our cities.

Raw Materials

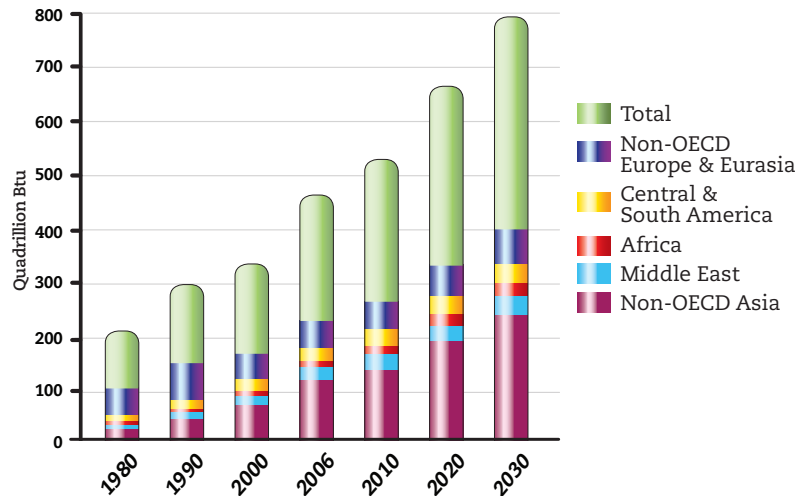
We are seeing a changing balance between demand and supply of raw materials. Demand for energy is rising, in particular in non-OECD countries. As shown in the charts overleaf, the projected rise in Asia is equal to all other regions put together.

Global food prices have risen since 2000, due to population growth and rising living standards in emerging markets. The UN expects them to remain high over the next decade. While food prices have not risen as much as other raw materials, such as oil and metals, the impact on the population is more serious.

World Marketed Energy Consumption, 1980-2030



Marketed Energy Use in the Non-OECD Economies by Region, 1980-2030



Source: DOE/EIA May 2009. Sources: History EIA International Energy Annual 2006. Projections: EIA World Energy Projections Plus (2009)

What questions does climate change raise for UK cities?

What challenges does climate change raise in terms of changing work practices?

- For cities, climate change is likely to create both costs and opportunities.
- Many national and local policymakers are increasingly focusing on the potential for 'green jobs' to provide new sources of employment and prosperity.
- However, not all of these will necessarily be high volume, or high value – cities need to understand whether and where they can compete to attract green jobs, which need to be matched by appropriate local skills and expertise.

What are the implications of climate change for planning and cities' infrastructure needs?

- Climate change creates several new challenges for cities' infrastructure. For example, the costs and benefits of retrofitting existing housing stock to improve energy efficiency will have to be assessed, and new incentives used to improve transport use.
- Continued pressure on energy prices could eventually lead to changing patterns of behaviour, travel and working practices. In particular, there is likely to be a bigger role for electronic communications.

What kinds of business and employment opportunities might arise from climate change?

- There will be new opportunities for business, e.g. new energy technologies, opportunities around waste, etc.
- However, while there is a clear need to tackle the sources of climate change, there is a risk of environmental technologies becoming a new fad in economic development, not always matched to cities' economic strengths.
- An assessment needs to be made as to whether opportunities for particular places lie in a focus on raising employment or improving growth and productivity in a niche area.

Technology

Technological change has been a key driver of globalisation in recent decades, and has changed the way we live and work.

Technology creates opportunities to resolve important issues, such as developing new food strains that increase yields, finding alternative energy sources, or developing new materials that reduce our need for metals. It is impossible to predict what technological developments will occur over the next twenty years, but this note looks in more detail at two important areas: information and communication, and bio-technologies.

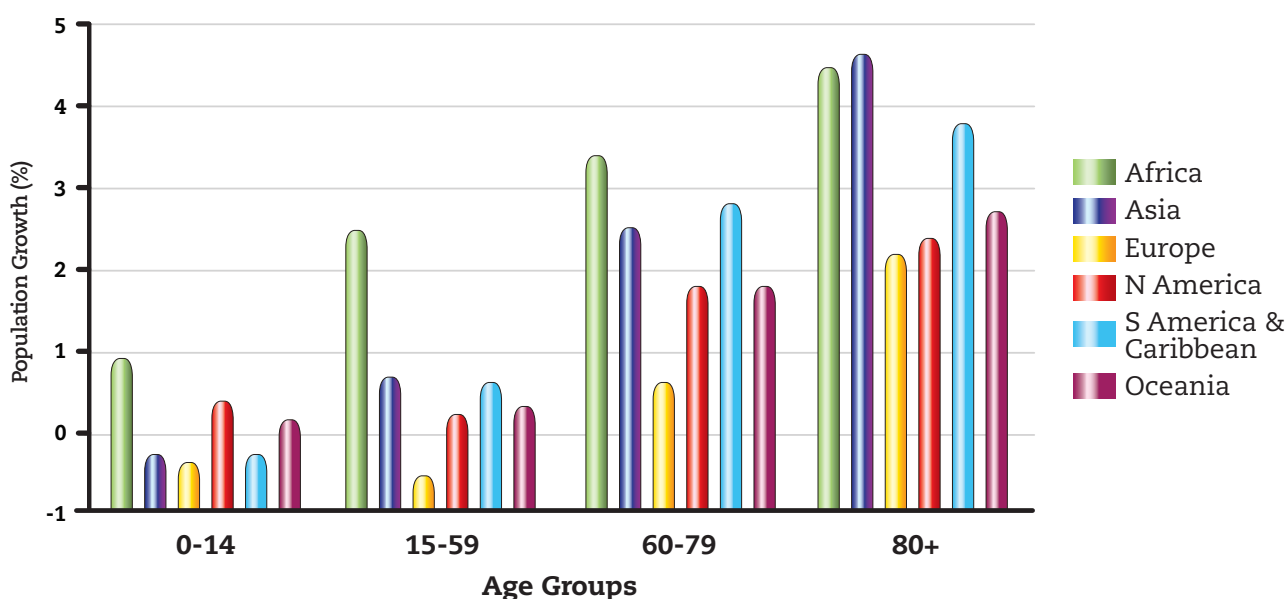
In IT, Moore's Law famously describes a million-fold increase in processing power over 50 years. Processing power is predicted to be almost free by 2020 – but the limitations on its impact are human, coming from our ability to programme effectively. But what we cannot forecast is how people will use new technology – e.g. will the use of avatars or other forms of automation provide a real alternative to humans for many service jobs, such as in contact centres? Where will technological change alternatively create opportunities, destroy existing jobs, or enhance productivity and capacity?

Technology and demography

One of the biggest changes facing the UK and UK cities over the next twenty years is the rise in the number of elderly people. Advances in public health have driven this in recent years, but in the future, extensions to life expectancy will come from technological developments such as specific medical or biotech capabilities, such as replacement organs and more powerful drugs.

In European countries, this ageing occurs at the same time as shrinkage in the numbers of people under the age of 60, posing real questions for public policy in areas such as pensions, health care affordability, and other support for the aged. Demand will grow in these areas at the same time as the ageing population also affects fiscal revenue.

Projected average annual population growth by region and age-group, 2000-2050



Source: UN Population Division

What questions does technology raise for UK cities?

What effect might technological trends have on cities' labour markets?

- The need for IT skills is pervasive, and will soon be required through the economy. The labour market will continue to evolve to adapt to new uses of technology, in ways that are difficult to foresee.
- Having the right IT infrastructure also creates the need for complementary skills in the local population. For example, technological developments may increase the importance of 'soft skills', such as customer service, adaptability and dependability.
- New and innovative uses for technology also support new forms of public service delivery, e.g. healthcare, creating different public sector employment needs.

What might ICT and other technological trends imply for cities' planning, transport and infrastructure needs?

- IT infrastructure is increasingly necessary to compete in the global economy – basic broadband provision is already seen as essential for competitiveness of locations. IT infrastructure demands are constantly growing, and cities need to stay at the forefront.
- The new, flexible, working practices that are enabled by technology do not remove cities' infrastructure needs – but they do change them.
- In many areas, the UK is already not as advanced as other countries – to remain competitive there is a need for technological catch-up.
- Technological developments create new opportunities to tackle urban economic challenges, e.g. smart solutions, and road-user charging.

What kinds of challenges and opportunities does technological advance raise for city economies?

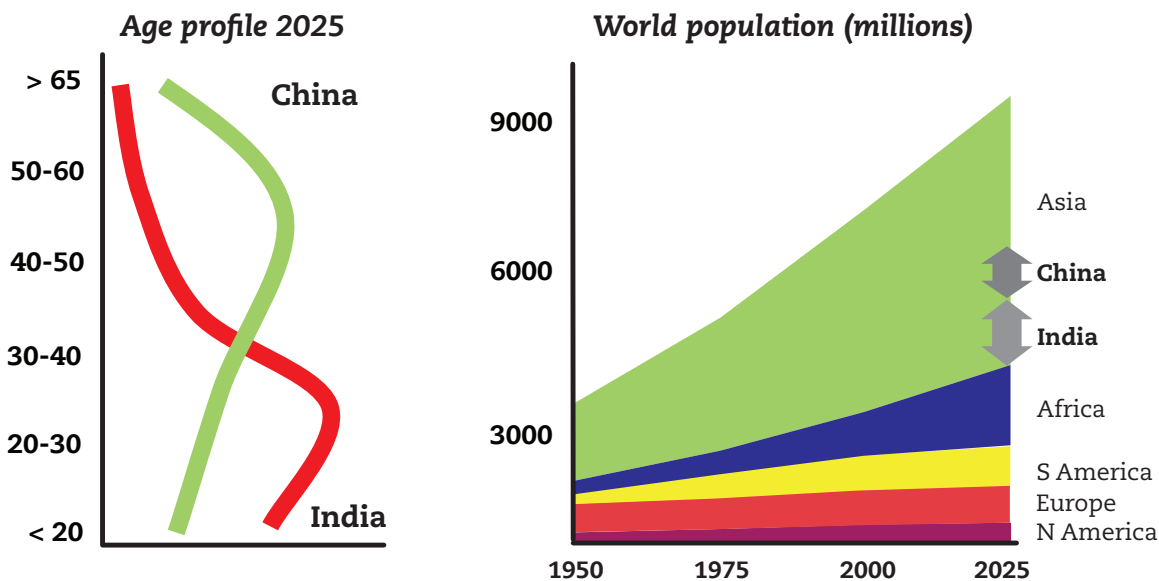
- New technologies create opportunities for new service delivery models. The private sector has so far moved faster than the public sector in taking advantage of these, but increased fiscal pressures over the years ahead make it important for the public sector to be proactive.
- Technology facilitates the disaggregation of production chains. In doing so, it enables the creative element of production to be separated from the manufacture. This has implications for the labour market and skills requirements necessary to attract high-value activity. (This is happening already – for example with Nissan- the Design functions are centred in Bedfordshire and the assembly is in Sunderland.

People

The population is changing – both globally and in the UK. The population balance between countries and the population within them is in flux, and this will have implications for the balance of economic activity and changing competitiveness across the world.

Globally, the world's population is changing, and the balance is moving East. By 2025, more than half the population will be in Asia. You could envisage changing the description of the world to a new five groupings: 1) East Asia, 2) South East Asia, 3) South Asia, 4) America, and 5) Europe / Middle East / Africa – each would have about 2 billion people. This has clear implications for where economic power will lie.

It is also important to remember that the picture is not uniform – the demographic profile for India is similar to that for many developing countries, with a peak in people entering the workforce in about 2025. Conversely, China, Japan, America and Europe have ageing populations, with fewer people coming into the workforce. In the UK, as elsewhere in Europe, the baby boomer generation is reaching retirement age, and this combined with increased life expectancy, improved public health and declining fertility, creates policy challenges as we adapt to an older population profile. By 2032, those aged 65 and over will account for nearly 23 percent of the population, and those above aged 85 and over are projected to more than double, to 4 percent of the population³.

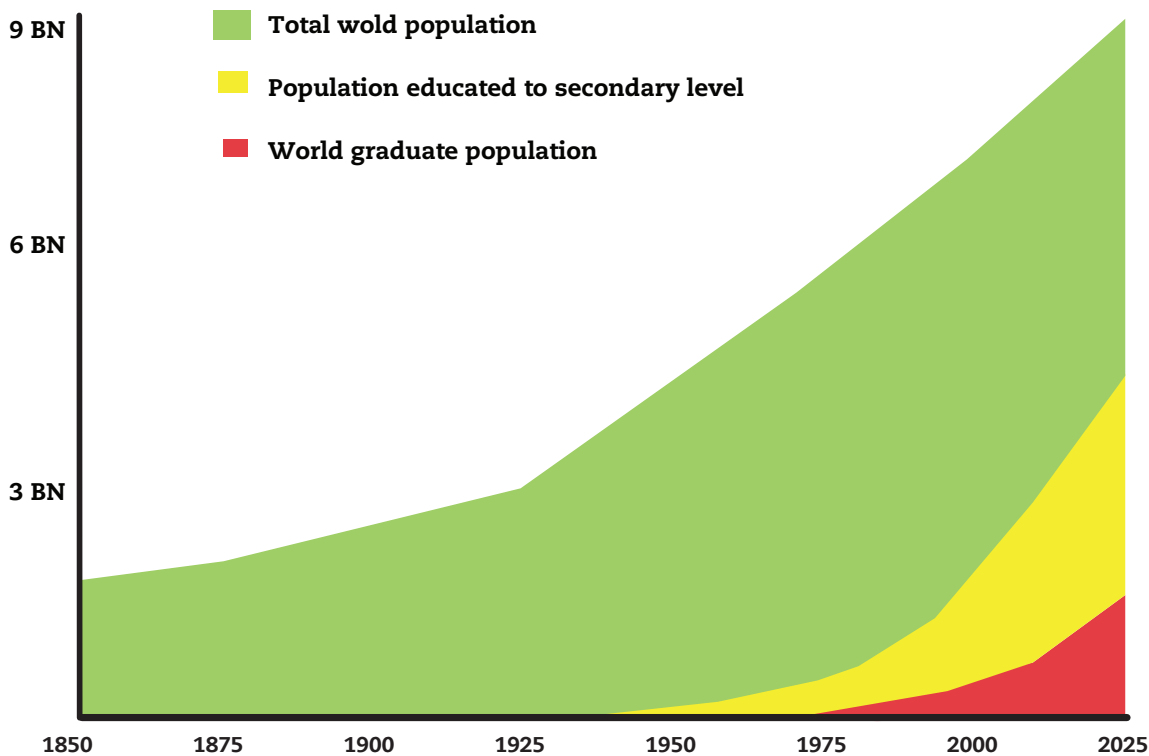


Source: SAMI Consulting

And people and economies are connected in this world. The rich nations have 15 percent of the world's population and 90 percent of the wealth. The industrialising nations have 25 percent of the world's population and 9 percent of the wealth. The poor nations have 60 percent of the world's population and less than 1 percent of the wealth. But this picture is not static – it is changing through links and trade between nations.

Education facilitates mobility

Education is a major force for change. But the balance of skills between countries is changing – by 2025 nearly half the world’s population will be educated to secondary level, and there will be a billion graduates. The location of economic activity could be affected by the increased mobility of jobs and people.



Source: SAMI Consulting

This puts in context the UK’s ambition to educate 50 percent of the population (i.e. 30 million people) to degree level. As the UK faces competition from an increasingly skilled labour force in emerging markets, how can the UK change in order to continue to compete?

In addition, as education and literacy levels rise, mobility increases. We are already seeing greatly increased migration trends into Europe, and between Asian countries, and these will continue to evolve.

Urbanisation

The world’s urban population is increasing. Many migrants move to cities in search of new opportunities, so this trend is reinforced. Urbanisation is also linked to rising incomes, and therefore larger consumer markets. For the first time in history more than 50 percent of the world’s population now live in cities, with implications for health care, family structure and size, and education. In particular, as women become more educated and move to cities, family sizes fall. There is much uncertainty, but this may imply that the world population may peak at about 9 billion by about 2050.

What questions do population trends raise for UK cities?

What kinds of labour market and diversity challenges might migration patterns raise for cities?

- As cities' populations age, their ageing labour force will have different capabilities. In addition, new skills will be required to meet the demands of older people, e.g. in healthcare, social care and transport provision.
- Since Accession, migration from the A8 countries has had largely positive impacts, filling labour market shortages. However, as the UK and the rest of Europe experience tougher economic times, this is changing – and will continue to evolve.
- Population change and migration is disruptive, and will require policymakers to respond. Nevertheless, the disruption can be beneficial, and create new opportunities.

What infrastructure challenges might labour market trends create for cities?

- As the global population becomes more skilled and more mobile, quality of place will become more important, and cities will need to work harder to attract the workers they need. This includes e.g. transport infrastructure and connectivity in a city.
- Cities also need to be aware of the impact of internal migration on house prices and affordability, and planning and city development will have to respond to meet the needs of local economies.

What will make UK cities attractive in 2025?

- Cities need to understand the populations they want to attract, and their varying needs. Young professionals, families, creative individuals, will be attracted by different types of amenities and locations.
- Some cities have local assets that can attract people; others will need to use investment smartly to create new assets.

Summary

This note has provided an overview of some of the global trends facing places, organisations and people in the future. Flexibility to respond many of the trends above will be needed to best position UK cities for the future.

Some of the key implications of the trends focus on the challenges facing labour markets in UK cities. As jobs are increasingly mobile, and there is a growing premium on talent and skills, cities need to become more proactive in attracting and retaining the economic activity to enable their populations to benefit from the global economy.

There is also a need for a greater understanding of cities' likely roles in the future economy and their changing infrastructure needs. This needs to be based on a realistic assessment of their key assets and competitive positions.

SAMI's analysis shows that today, and increasingly in the future, people and economies are interconnected. The trends set out here, and the questions identified at the workshop discussion, together provide a framework for policymakers to discuss future challenges. They are not intended to be a definitive list, or predict the future, but to enable an awareness of how the environment in which cities operate may evolve.



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