



Cities are alive and constantly changing. They drive global growth, and this trait is set to increase. In 2011 there were 3.6 billion people living in cities, around 50 per cent of the world's population. By 2030, it is projected there will be five billion, or around 60 per cent of the world's population. By 2050, three-quarters of the people in the world are expected to live in cities. Clearly, cities matter to us, whether we are global citizens or investors looking for long-term growth opportunities.

Unlike nature, where ants, for example, become slower and less productive as their colony size increases, human activity accelerates when the population expands in cities.

The effects of concentrating populations in cities are remarkably consistent. Measures of social activity increase faster than the population does. It has been shown that when a city doubles in size, its economic productivity per capita increases by approximately 15 per cent.

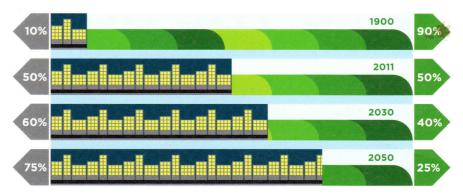
Centres of innovation and culture emerge and attract more likeminded people. At the same time, the supporting infrastructure grows more slowly than the rate of population growth as cities benefit increasingly from efficiencies of scale.

Measures of social activity include all manner of human interaction. In this sense, the effect is not always so positive: Edward Glaeser and Bruce Sacerdote, the political economists, estimate that when a city's population doubles, serious crime increases by an estimated 16 per cent per capita.

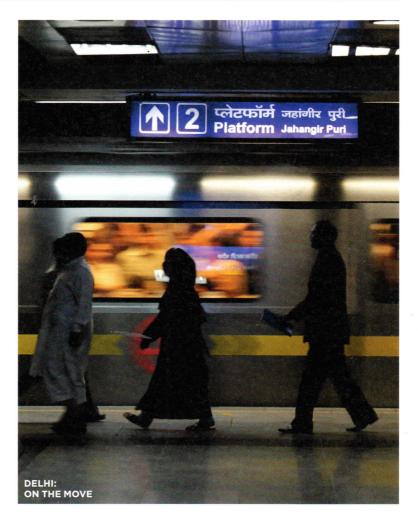
#### MORE EFFICIENCY

But cities grow to become more efficient and more productive places, reflected in – for example – the number of petrol stations, the length of water pipes, or the size of the rail system. Infrastructure acts as a multiplier and the resultant economies of scale provide efficiency.

### PROPORTION OF THE GLOBAL POPULATION LIVING IN CITIES VERSUS COUNTRYSIDE

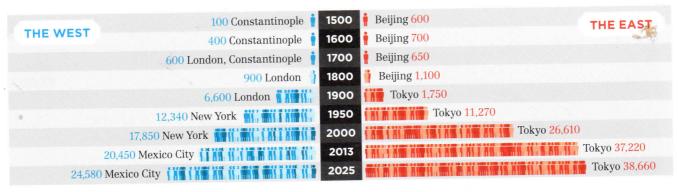


SOURCE: UN World Urbanization Report: 2009 Revision, The World Bank, FT



#### HOW THE EAST IS OVERTAKING THE WEST

The world's biggest cities over time with estimated population in thousands



SOURCE: Goldman Sachs, Ian Morris: Why The West Rules The World, FT, UN Department of Economic and Social Affairs



Cities matter to us as investors. It was in this role that my colleague, Ben Drury, client service manager at Baillie Gifford, attended The Infrastructure Summit: Future Cities. This conference was organised by *The Economist* in London last year with the aim of understanding how cities are evolving. Delegates explored the most ingenious solutions to enable sustainable urban development, focusing on technological innovation, more powerful computing and improved transport. All areas in which we can look for investment opportunities.

Cities will continue to grow in size and number. By 2025, China is predicted to have 128 cities comprising more than one million people each, compared with only a few cities of this size in the UK in 2010.

India, Nigeria and many other countries will show similar rapid growth. In all, it is predicted that in 2025 the world will have 435 cities with more than a million people each, compared with 350 in 2010.

# Three progressive cities



# Bogotá

## INSPIRATIONAL MAYOR MADE THE COLOMBIAN CITY AN EDUCATIONAL LEADER

Bogotá's mayor of 1995–1997 and 2001–2003, Antanas Mockus, introduced a 'culture of citizenship' programme in a city that was plagued by violent behaviour and public insecurity. He drove a period of 'change without violence' to educate and engage citizens in civic reforms. The city has also enjoyed huge investment in its education system, and is now home to numerous universities and libraries. Over time, the city's population will reap the rewards of this financial input in terms of improved workforce standards.



# Copenhagen

#### AN ENVIRONMENTAL CHAMPION

Danish capital Copenhagen has invested substantially in green infrastructure and is now ranked as the most sustainable city in Europe. It is likely to be the first to become carbon neutral. The city has world-class infrastructure for non-automobile transportation, including an extensive and expanding subway system, bus networks and a suburban rail system. All residents live within a quarter of a mile of public transport, and 50 per cent of commuting trips are done by bicycle. It is also well located as part of the global hub for pharmacology known as Medicon Valley.



## Tel Aviv

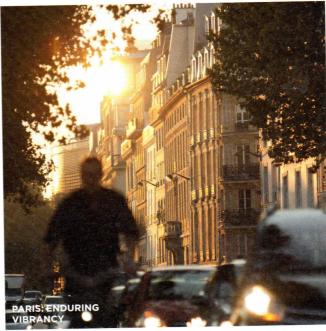
#### **TECHNOLOGY AND INNOVATION HUB**

Tel Aviv in Israel is home to a huge number of start-ups per capita, and Israel itself is second only to the US in absolute terms. Tech clustering is in abundance. There is a vibe about the place where success feeds off success. Investors attract more investors. Entrepreneurs attract more entrepreneurs. Tel Aviv's other big selling point – having the highest number of scientists, university degrees and engineers per capita in the world – is driven by its citizens' willingness to embrace the risk of failure.









# When a city doubles in size, its economic productivity per capita increases by approximately 15 per cent

In 2010, there were 21 megacities (those with over 10 million inhabitants); by 2025, there will be 29. But there won't just be more mega-cities: the pecking order is likely to change too, with some emerging market cities pole-vaulting their way up the list, such as Dhaka and Lagos, which are expanding by about 0.5 million people a year.

For now, however, many well-known capitals retain their position. Well-established cities such as London, New York and Paris have evolved and adapted through

centuries of leadership in particular fields. Their enduring vibrancy, built on the foundations of money, knowledge and stability, should mean they will continue to play a role as mega-cities and engines of globalisation.

#### **POPULATION**

Cities will change and evolve to become more densely populated. However, this depends a little on the definition of density used. For example, 27,000 people live in each square kilometre in London, yet 142,000 work in the same sized area, reflecting London's development as a series of villages and suburbs and the willingness – or need – of its inhabitants to commute. Hong Kong is even more densely packed, with 111,000 inhabitants and 120,000 workers per square kilometre.

For cities to continue to develop at their current pace or faster, they have to become smarter. Mayors and city leaders need to plan for the long term. Copenhagen and Bogotá have introduced cycle-ways on a grand scale to improve infrastructure in an environmentally friendly way. Half the population of Copenhagen – about 600,000 people – commute daily by bicycle. Bogotá now has up to 400,000 people commuting daily by bicycle (see box on page 10 for more on Bogotá).

City leadership and councils also need to focus on the use of energy, social innovation (encouraging citizens to participate in improving where they live) and health. As with investing, those that adopt a longer-term horizon will have a greater chance of success. It is essential to understand what people need socially and culturally from the places where they live and work, and provide infrastructure to support it.

The flexibility to change is vital and already there are good examples of cities that have done so. Singapore rose from a colonial harbour to a world-class city in just a few decades. Dubai was a trading post on a creek, which has been transformed into a super-city in the desert; for example, The Dubai Mall now receives 6 million visitors a month.

Tel Aviv has risen from an ancient port to be home to the largest number of scientists, university degrees and engineers per capita in the world. After an economic slump in the 1960s and 1970s, New York has been cleaned-up and rejuvenated into a vibrant financial city, complete with environmentally friendly infrastructure projects such as the High Line (a public park built on an old freight rail line elevated above Manhattan's streets).

Saskia Sassen, a professor of sociology from Columbia University in the US, sees cities as a "living laboratory" for technologies and management systems, spanning factors such as water, transport, security, waste disposal and clean energy. She argues that these can all be monitored and managed or, as she likes to call it, "censored".

In emerging countries, cities must cope with urbanisation on an unprecedented, even alarming, scale. In contrast, developed cities must tackle ageing infrastructures and stretched budgets. \*A Lagos or a Mexico City will have very

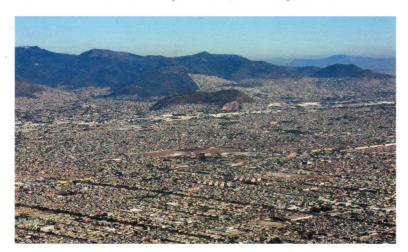
## DUBAI: A SUPER-CITY IN THE DESERT. THE DUBAI MALL NOW RECEIVES 6 MILLION VISITORS A MONTH

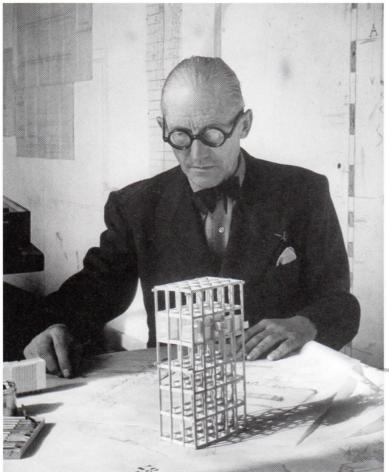




NEW YORK'S HIGH LINE: A PUBLIC PARK BUILT ON AN OLD FREIGHT RAIL LINE ELEVATED ABOVE MANHATTAN'S STREETS

CITIES LIKE MEXICO CITY MUST COPE WITH URBANISATION ON AN UNPRECEDENTED, EVEN ALARMING, SCALE





LE CORBUSIER CRITICISED SKYSCRAPERS IN NEW YORK FOR BEING TOO SMALL AND INDEED HE WAS PROBABLY RIGHT

different challenges and opportunities from a Los Angeles or a London.

#### **CITY POWER**

Assessing the future of countries versus cities, Benjamin Barber, political theorist and author of the book *If Mayors Ruled the World*, offers the view that nation states are doomed to extinction or irrelevance in the modern world. It won't be China or India, Brazil or Russia that are important – it will be Beijing or Delhi, São Paulo or Moscow. A vacuum of effective government will be filled and replaced by city leaders.

Modern problems such as pandemics, immigration or climate change float freely across borders. Collaborative global solutions to these problems are more likely to come from pragmatic, effective, non-ideological leadership at a city level. However, it is countries and their politicians who control revenue streams and they may not be particularly amenable to surrendering these to particular cities.

We may be looking into a vision of the future, but perhaps none of this is new. In his 1961 book, *The City in History*, Lewis Mumford highlighted that "the chief function of the city is to convert power into form, energy into culture, dead matter into living symbols of art, [and] biological reproduction into social creativity".

Earlier still, Swiss architect
Le Corbusier was visionary in how he
saw cities developing. His 1935 book
La Ville Radieuse [The Radiant City]
foretold what ideal cities would look
like in decades to come. He criticised
skyscrapers in New York for being too
small and indeed he was probably right.

The continuing evolution of cities will define the world in which we live. There is no one-size-fits-all policy. What works in London may not be effective in Lagos. Clearly, cities need to become smarter. But, as they do, they will be great places to live and work – and the brightest will be a beacon for investors.