

SECTOR BRIEFING

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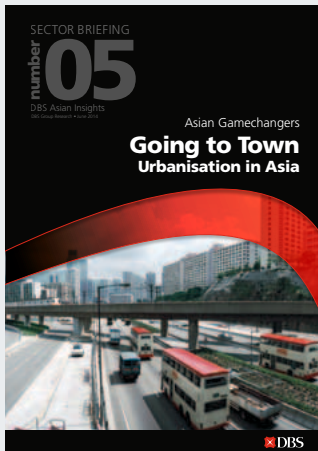
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Asian Gamechangers

Going to Town Urbanisation in Asia



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Asian Gamechangers

Going to Town

Urbanisation in Asia

Executive Summary

Asia's cities are bigger, busier, and wealthier than ever. They dominate economic activity, lifting citizens out of poverty and elevating impoverished economies to middle-income status.

Urbanisation, the process driving this transition, is a worldwide phenomenon. But it has particularly profound implications for Asia, whose expanding cities are shaping as the engines of global growth for decades to come.

Many of these cities – the likes of Shanghai, Beijing and Mumbai – are already household names and will continue to make headlines. Others are less familiar, but could have an even bigger impact on future growth. Across Asia, citizens and governments alike increasingly view thriving cities as keys to modernity and prosperity.

To be sure, there are pitfalls aplenty. Many cities can't cope with their rapid growth. They are blighted by urban sprawl and don't deliver decent housing, transport, adequate education and health services, and public utilities to their citizens. Some aren't business-friendly, deterring investment that could deliver desperately needed upgrades.

Cities that find ways to overcome these challenges will be among the top several hundred that are expected to double their GDP by 2025. Their success would transform the lives of millions and the balance sheets of businesses that can adapt to their rise.

Introduction: An Urban World

Most of us live in cities. We take them for granted, enjoy the buzz of urban life and tolerate its inconveniences. Retreating to a rural existence, no matter how idyllic, doesn't seem viable. Cities are where the jobs are, the best entertainment, the biggest opportunities, the money.

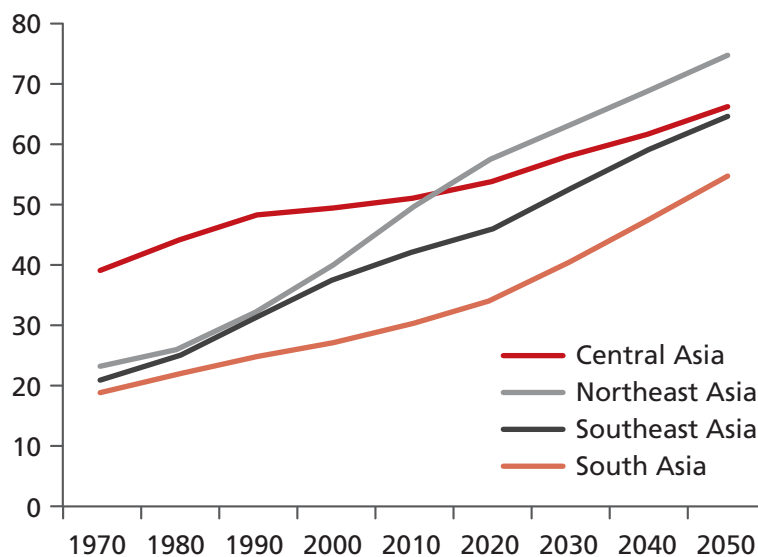
This rationale is driving an increasingly urban world. Globally, cities are expanding by 65 million people each year¹. They already produce 80% of the world's GDP and contain more than half the world's population². For investors, this means not only that cities can't be ignored; they are incontestably the main game.

In 2011, the United Nations predicted the world's urban population would nearly double to 6.3 billion in 2050. That figure is about the same as the world's total population only a dozen or so years ago³. While the highly urbanised developed world will shift even more decisively towards its cities, it's the developing world that will be reshaped most profoundly. Its cities will account for 64% of the total population, up from 47% in 2011. Overall, more than two-thirds of the world's population will be urban by the middle of this century⁴.

The developing world will be reshaped most profoundly

This seemingly inexorable trend is driven by organic population growth, migration, and the absorption of rural areas into expanding cities. Growing cities draw the talent and energies of an entrepreneurial class keen to improve and enjoy their lives. Some cities are growing so big they qualify as "megacities", and sometimes these megacities overlap to form "mega-regions". Most of the world's employment and wealth derive from the commerce bred in these hothouses of growth.

1 Rates of urbanisation in Asia %



Source: UN World Urbanisation Prospects, 2007 revision

In Asia, the northeast is urbanising fastest, often assisted by government policies that have encouraged rural migration to cities. South Korea, where industrial policies convinced many rural citizens to relocate from farms to better-paid city jobs during the 1970s and 1980s, is now 83% urban⁵.

South Asia, where a massive rural hinterland remains an idealised way of life for many millions, brings up the rear.

But even there, the urban share of its huge population has risen by 10% to nearly one-third since 1970 and is forecast to reach half by 2050⁶. Indeed, there isn't a single part of Asia that hasn't in some way felt the impact of supercharged, city-led growth. ❌

Asia – The New Centre of Gravity

Asia's cities are growing by 44 million people each year⁷. That amounts to more than 120,000 new urbanites every day. In about a decade from now, half the region's population will live in its cities⁸.

This reshaping of Asia's demographic map signals a back-to-the-future moment. Before 1500, Asia reigned supreme as the world's economic centre of gravity, accounting for two-thirds of GDP⁹. Then came the Renaissance, which opened Europe to science and progress; and later the Industrial Revolution, which spurred a cycle of urbanisation and anointed Europe and the US as new economic superpowers.

Urbanisation has tipped the balance of economic power back towards Asia. Bigger cities have spawned unprecedented opportunities for job and wealth creation, building middle classes that are transforming economies and putting pressure on governments to deliver better infrastructure and services.

The economic clout of Asia's cities is rising, albeit unevenly. All but three of the top 20 cities in a recent global ranking by the Economic Intelligence Unit (EIU) of the economic strength of cities, were in the Asia-Pacific. Nine were in China, and another seven in India, where the likes of Chennai, Bangalore, Pune, Hyderabad and Ahmedabad stand to reap gains as tens of millions of people with middle class aspirations move from rural areas to cities¹⁰.

To be sure, urbanisation has been happening on and off for centuries. But its modern incarnation is happening faster, creating more wealth, and spawning new businesses and ways of doing business. China's economic transformation from urbanisation and industrialisation is happening ten times as fast as the UK's centuries ago¹¹.

Urbanisation has tipped the balance of economic power back towards Asia

2 Urban populations by major area, selected periods, 1950-2050

Major Area	Percentage urban					Rate of urbanisation (%)			
	1950	1970	2011	2030	2050	1950 - 1970	1970 - 2011	2011 - 2030	2030 - 2050
Africa	14.4	23.5	39.6	47.7	57.7	2.47	1.27	0.98	0.96
Asia	17.5	23.7	45.0	55.5	64.4	1.52	1.57	1.10	0.74
Europe	51.3	62.8	72.9	77.4	82.2	1.02	0.36	0.31	0.30
Latin America and the Caribbean	41.4	57.1	79.1	83.4	86.6	1.61	0.80	0.28	0.19
Northern America	63.9	73.8	82.2	85.8	88.6	0.72	0.26	0.22	0.16
Oceania	62.4	71.2	70.7	71.4	73.0	0.66	-0.02	0.05	0.12

Source: UN World Urbanisation Prospects, 2011 revision

3 Total, urban & rural populations by major area, selected periods, 1950-2050

Major area	Population (millions)					Average annual rate of change (%)				
	1950	1970	2011	2030	2050	1950 - 1970	1970 - 2011	2011 - 2030	2030 - 2050	
Total population										
Africa	230	368	1,046	1,562	2,192	2.35	2.55	2.11	1.69	
Asia	1,403	2,135	4,207	4,868	5,142	2.10	1.65	0.77	0.27	
Europe	547	656	739	741	719	0.91	0.29	0.01	-0.15	
Latin America and the Caribbean	167	286	597	702	751	2.69	1.79	0.85	0.34	
Northern America	172	231	348	402	447	1.49	0.99	0.76	0.53	
Oceania	13	20	37	47	55	2.16	1.57	1.25	0.8	
Urban population										
Africa	33	87	414	744	1,265	4.82	3.82	3.09	2.65	
Asia	245	506	1,895	2,703	3,310	3.62	3.22	1.87	1.01	
Europe	281	412	539	573	591	1.92	0.65	0.33	0.15	
Latin America and the Caribbean	69	163	472	585	650	4.29	2.59	1.13	0.53	
Northern America	110	171	286	344	396	2.21	1.26	0.98	0.70	
Oceania	8	14	26	34	40	2.82	1.56	1.30	0.91	
Rural population										
Africa	197	282	632	818	927	1.79	1.97	1.35	0.63	
Asia	1,158	1,629	2,312	2,165	1,833	1.71	0.85	-0.35	-0.83	
Europe	267	244	200	168	128	-0.45	-0.48	-0.93	-1.34	
Latin America and the Caribbean	98	123	124	116	100	1.13	0.03	-0.36	-0.73	
Northern America	62	61	62	57	51	-0.11	0.05	-0.40	-0.59	
Oceania	5	6	11	13	15	0.82	1.62	1.12	0.50	

Source: UN World Urbanisation Prospects, 2011 revision

China's economic transformation is happening ten times faster than the UK's centuries ago

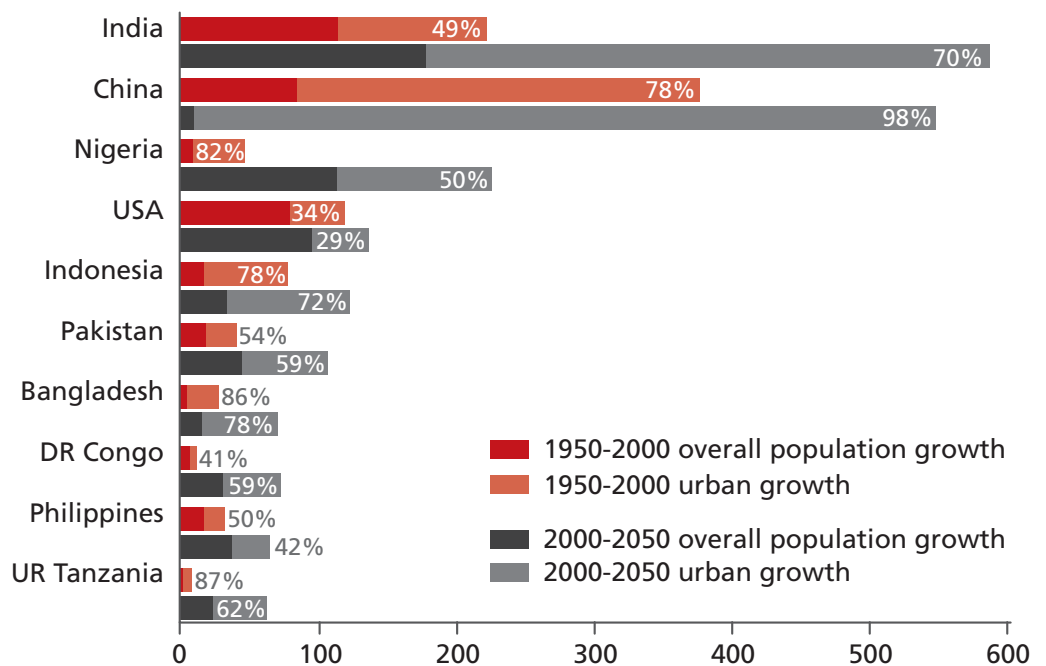
As the demographic pendulum swings to cities, lives are changed. Two out of every ten people lifted from poverty in East Asia and the Pacific over the recent decades were elevated by the power of urbanisation¹². Urban productivity is more than five times higher than in rural areas, creating vast new opportunities for wealth and job creation¹³. China, which sees urbanisation as a key tool to reduce poverty and create jobs, has at least doubled its urban population since 1980¹⁴ to well over half the total by 2012¹⁵.

China isn't the only catalyst. Southeast Asia has followed suit, while South and Southwest Asia are also unmooring from rural roots – and are now 45% and 35% urban, respectively. In fact, the number of city-dwellers has increased, at varying speeds, in nearly every country in the region since 1980¹⁶.

This trend will almost certainly gather momentum particularly in the developing world in the coming decades. By mid-century most of the world's urbanites will live in Asia, and its city populations will swell to more than 3 billion people¹⁷.

Put simply, Asia will drive global urbanisation. China and India alone are expected to provide 37% of the 1.4 billion more urbanites worldwide by 2030¹⁸. In these and other developing countries, urbanisation is led by the growth of their city populations rather than an overall increase in the national population.

4 **Contribution of demographic and urban growth to urbanisation**
 Urban population change, millions



Source: UN World Urbanisation Prospects, 2011 revision

This can bring benefits but also costs that are felt faster and more keenly than ever in a globalised and digitised world. Developing regions like Asia, Latin America and Africa aren't the only ones poised to feel the impact. Developed countries like the US will be affected too as some of its megacities lose business to Asia while others thrive on the competition.

Whether cities win or lose will depend on how well they cope with the strains of urbanisation. Asia has much to gain, as it comes from a low-income base with higher and younger populations. But it has much to lose if its cities fail to cope. ❌

A New Global Cityscape

Going beyond national borders, which cities will drive Asia’s growth? Some, like Chongqing in China, Karachi in Pakistan, Manila in the Philippines and Mumbai, the Indian commercial hub, are already well known to business. But the next few decades will witness the rise of smaller, less recognised cities with room to expand.

That’s because urbanisation is about more than just megacities.

In fact, the highest rates of urbanisation are found in the poorest and least urbanised countries where citizens often relocate to the nearest hub of opportunity rather than en masse to the biggest metropolis. Partly as a result of this, most of the region’s urbanites live in small and medium-sized towns and cities.

These places are fuelling a large measure of the economic growth we’re seeing across the region. Worldwide, cities with fewer than 1 million inhabitants account for 61% of the urban population¹⁹. That share is expected to fall as these cities grow, often linking up with other expanding hubs to form new or potential megacities. The future urban population is likely to live in cities of at least 1 million people, and megacities with over 10 million people will see the greatest increase in inhabitants²⁰.

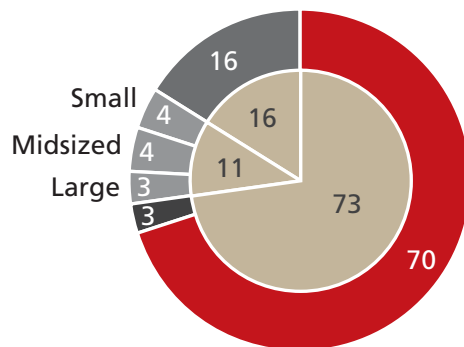
Middleweight cities

But cities with relatively pint-sized populations of 150,000 – through to those with 10 million people or fewer – will punch above their economic weight. These “middleweights”

5 Contribution to GDP and GDP growth by type of city %

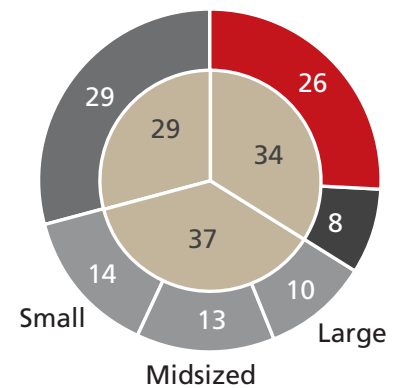
GDP, 2007

100% = \$55.5 trillion



GDP growth, 2007-2025

100% = \$54.9 trillion



- Developed economies
- Emerging market megacities
- Emerging market middleweight cities
- Emerging market small & rural areas

Source: McKinsey Global Institute Cityscope 1.0

6 Population of urban agglomerations with 10 million inhabitants or more (millions)

2011			2025		
Rank	Urban agglomeration	Population	Rank	Urban agglomeration	Population
1	Tokyo, Japan	37.2	1	Tokyo, Japan	38.7
2	Delhi, India	22.7	2	Delhi, India	32.9
3	Ciudad de Mexico (Mexico City), Mexico	20.4	3	Shanghai, China	28.4
4	New York-Newark, USA	20.4	4	Mumbai (Bombay), India	26.6
5	Shanghai, China	20.2	5	Ciudad de Mexico (Mexico City), Mexico	24.6
6	Sao Paulo, Brazil	19.9	6	New York-Newark, USA	23.6
7	Mumbai (Bombay), India	19.7	7	Sao Paulo, Brazil	23.2
8	Beijing, China	15.6	8	Dhaka, Bangladesh	22.9
9	Dhaka, Bangladesh	15.4	9	Beijing, China	22.6
10	Kolkata (Calcutta), India	14.4	10	Karachi, Pakistan	20.2
11	Karachi, Pakistan	13.9	11	Lagos, Nigeria	18.9
12	Buenos Aires, Argentina	13.5	12	Kolkata (Calcutta), India	18.7
13	Los Angeles-Long Beach-Santa Ana, USA	13.4	13	Manila, Philippines	16.3
14	Rio de Janeiro, Brazil	12.0	14	Los Angeles-Long Beach-Santa Ana, USA	15.7
15	Manila, Philippines	11.9	15	Shenzhen, China	15.5
16	Moskva (Moscow), Russian Federation	11.6	16	Buenos Aires, Argentina	15.5
17	Osaka-Kobe, Japan	11.5	17	Guangzhou, Guangdong, China	15.5
18	Istanbul, Turkey	11.3	18	Istanbul, Turkey	14.9
19	Lagos, Nigeria	11.2	19	Al-Qahirah (Cairo), Egypt	14.7
20	Al-Qahirah (Cairo), Egypt	11.2	20	Kinshasa, Democratic Rep. of the Congo	14.5
21	Guangzhou, Guangdong, China	10.8	21	Chongqing, China	13.6
22	Shenzhen, China	10.6	22	Rio de Janeiro, Brazil	13.6
23	Paris, France	10.6	23	Bangalore, India	13.2
			24	Jakarta, Indonesia	12.8
			25	Chennai (Madras), India	12.8
			26	Wuhan, China	12.7
			27	Moskva (Moscow), Russian Federation	12.6
			28	Paris, France	12.2
			29	Osaka-Kobe, Japan	12.0
			30	Tianjin, China	11.9
			31	Hyderabad, India	11.6
			32	Lima, Peru	11.5
			33	Chicago, USA	11.4
			34	Bogota, Colombia	11.4
			35	Krung Thep (Bangkok), Thailand	11.2
			36	Lahore, Pakistan	11.2
			37	London, United Kingdom	10.3

Source: UN World Urbanisation Prospects, 2011 revision

Rising middleweight cities could deliver half of global growth by 2025

will include cities that many people couldn't spot on a map, like Huambo and Fushan in China, Kochi in India, and Medan, Indonesia's fourth-largest city. We can expect to hear a lot more about them in coming years.

On household size and incomes, these middleweights often outperform megacities. Shenzhen in China, for example, already outpaces most megacities in terms of growth in household numbers and incomes²¹. In all, these rising cities could deliver half of global growth by 2025, gaining share from the megacities of today²².

Several middleweights will become megacities in their own right. Asia currently has 13 megacities, the most of any region. Still, the developed world dominates global growth, with 380 of its biggest cities accounting for half of global GDP in 2007 – more than 20% come from 190 North American cities alone. The 220 largest developing world cities delivered just 10% of global GDP, with China and Latin America both contributing 4%.

But over the next decade or so, these metrics will change dramatically as Asia's cityscape transforms²³.

As many as 136 new cities will enter the top 600 by 2025 and generate nearly two-thirds of global GDP

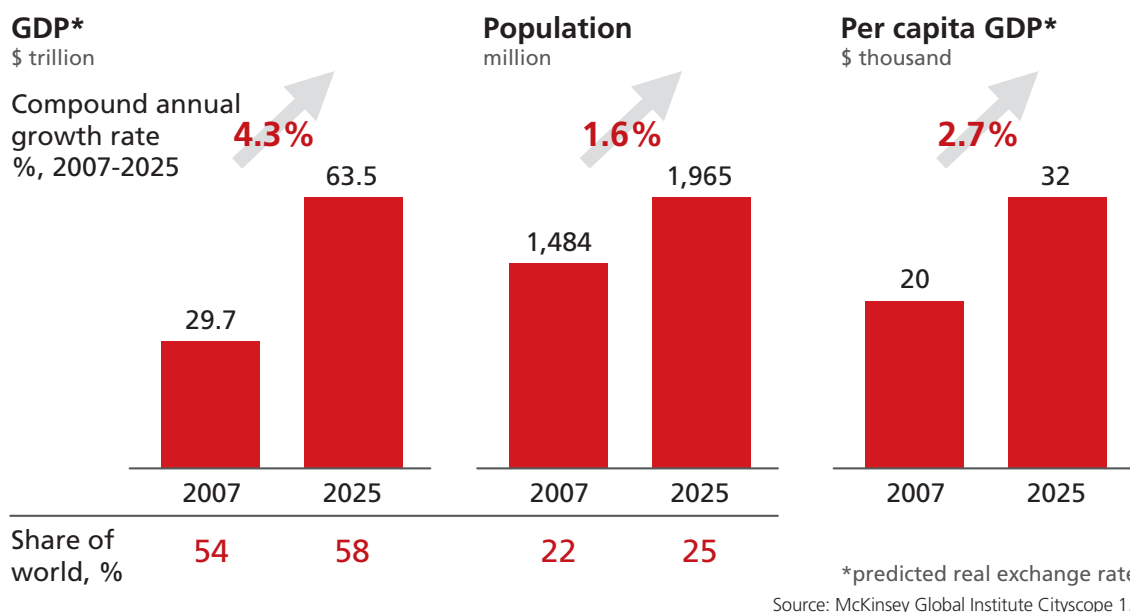
By 2025, there will be 37 megacities, by one reckoning²⁴, 22 of them in Asia and six in Latin America. As many as 136 new cities will enter the top 600²⁵, generating just under two-thirds of global GDP. All will hail from the developing world, and predominantly from China where Harbin, Shantou, and Guiyang are just some of the newcomers expected to make a mark. Likewise, Hyderabad and Surat in India will emerge as new growth engines. The top 100 of these up-and-coming cities will generate more than a third of GDP growth in just over a decade from now²⁶.

Many cities are already asserting themselves on the global stage. Between 2007 and 2010, the GDP of large Chinese cities increased from 20% to 37% of that of large cities in the US²⁷. Indonesia's robust growth rate of 6% is dwarfed by the 14% growth at its capital Jakarta²⁸. Manila, long considered a lost cause, is gradually putting its economic house in order and climbed 12 places on competitiveness in the EIU ranking of global cities²⁹. By 2030, the economy of the city of Delhi in India will be bigger than what Malaysia's entire national economy is today³⁰. Dhaka, the capital of Bangladesh, has a per capita GDP of \$3,000 – around three times greater than that of the country itself³¹.

These trends will accelerate. The GDP produced by the top 600 cities is expected to double by 2025, contributing nearly 60% of the world's GDP growth. An influx of nearly 500 million new citizens will help to drive per capita incomes in these cities from \$23,000 in 2007 to \$38,000³².

As many as 13 cities will likely cross the 10 million population threshold to become megacities – seven of them in China, as well as Jakarta in Indonesia, Lahore in Pakistan, and Chennai in India.

7 Top 600 cities' growth



Across Asia and other regions, many of these cities will spread into each other's territories to form mega-regions. The result: Contiguous urban networks that will spur exponential growth by creating new efficiencies of scale. The Seoul-Busan corridor in South Korea already has nearly 50 million people and produces an estimated \$500 billion in local regional product³³. The mega-region engulfing Tokyo-Nagoya-Osaka-Kyoto-Kobe in Japan will have a population of 60 million by 2015, while the city of Bangkok in Thailand is expected to expand by 200 kilometres by 2020³⁴.

Why and how will these megacities and mega-regions fuel the world's growth? There's a chicken-and-egg debate about whether urbanisation does in fact spur growth. Some scholars argue that the causality runs in the other direction – from growth to urbanisation³⁵.

For now, however, the bet is that the more urbanised a country, the richer and more successful it will be. Successful cities deliver a network of reinforcing advantages across a range of areas including transport and infrastructure, intellectual capital and innovation, technological prowess, economic clout, and environmental sustainability. In a recent ranking of successful cities by PwC, eight of the top ten were from the developed world, and the other two were among the most developed Asian cities – Hong Kong and Singapore³⁶.

China wants its cities near the top of such rankings, and reckons urbanisation can make that happen. It recently announced a new urbanisation agenda hinged on an immense construction programme of new transport networks, urban infrastructure, and residential real estate until 2020. The declared aim is to lift the urbanisation rate to 60% by that time, still about 20 points below the standard urbanisation rate in developed countries³⁷.

China aims to lift its urbanisation rate to 60% by the end of the decade

Such policies put a lot of faith in urbanisation, with good reason. Urbanisation has – more often than not – led to new concentrations of investment and employment, thereby clustering productive activities. This process acts as a spawning ground for new ideas, innovations and better uses of technology. Delivery of basic services like water, housing and education improves, and can be up to 50% cheaper³⁸. Businesses can share infrastructure and labour, cutting their costs. The upshot? Better jobs, high profits and bigger salaries, otherwise known as the good life.

Demographics

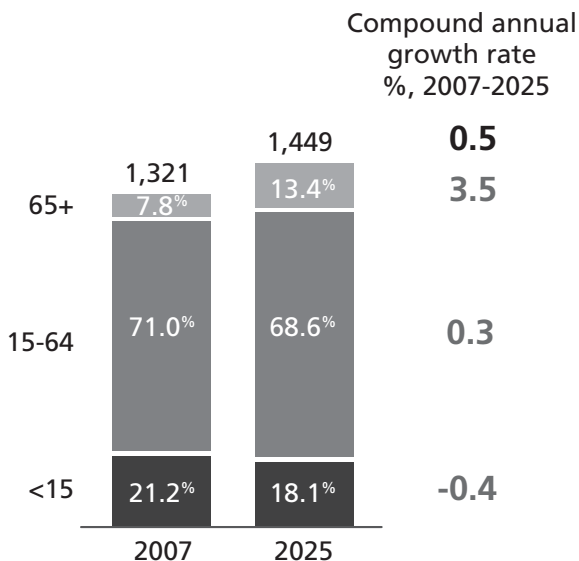
Just as people move to cities for a taste of the good life, companies go there in search of profits. As populations of educated workers grow, so too do the markets of affluent potential consumers. The top 600 cities are expected to host a quarter of the world’s working-age population by 2025, 15% of its children (aged below 15) and 35% of the older generation (aged 65 and above)³⁹.

But it’s not all about population growth. The real impact of urbanisation is about what the population does with its productive time. Rising per capita GDP is the driving force for broader economic growth, and this is fuelled as the biggest and most prosperous cities lure investment and talented workers.

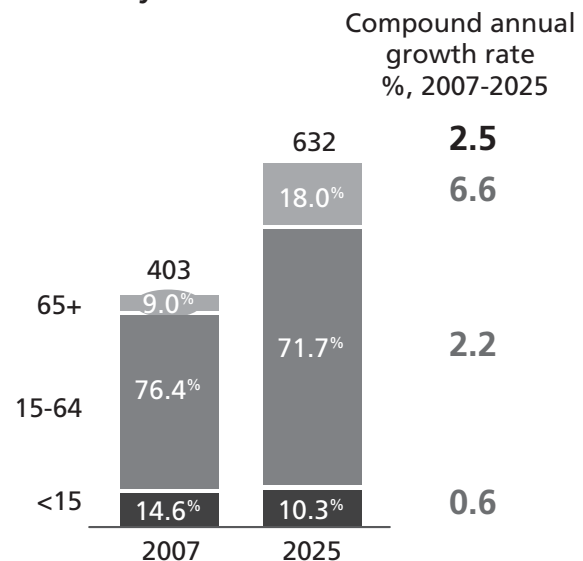
Two-thirds of the expected increase in the world’s working-age population will happen in the leading cities of China and South Asia⁴⁰. By 2030, for example, cities will provide 70% of the jobs in India⁴¹. This brain drain away from rural areas will concentrate the energy, ideas, and ambitions of educated young people who want to make it big in the Big Smoke.

8 Population by age group
 %; million

China
 excluding Hong Kong & Macau



216 Chinese cities in the City 600



Source: United Nations, McKinsey Global Institute Cityscope 1.0

9 **Top 25 hot spots by 2025**

Rank	GDP ²	Per capita GDP ²	GDP growth ²	Total population	Children ³	Total households	Households with annual income over \$20,000 ⁴
1	New York	Oslo	Shanghai	Tokyo	Kinshasa	Tokyo	Tokyo
2	Tokyo	Doha	Beijing	Mumbai	Karachi	Shanghai	New York
3	Shanghai	Bergen	New York	Shanghai	Dhaka	Beijing	London
4	London	Macau	Tianjin	Beijing	Mumbai	Sao Paulo	Shanghai
5	Beijing	Trondheim	Chongqing	Delhi	Kolkata	Chongqing	Beijing
6	Los Angeles	Bridgeport	Shenzhen	Kolkata	Lagos	New York	Paris
7	Paris	Hwaseong	Guangzhou	Dhaka	Delhi	London	Rhein-Ruhr
8	Chicago	Asan	Nanjing	Sao Paulo	Mexico City ⁵	Mumbai	Osaka
9	Rhein-Ruhr	San Jose	Hangzhou	Mexico City ⁵	New York	Delhi	Moscow
10	Shenzhen	Yosu	Chengdu	New York	Manila	Mexico City ⁵	Mexico City ⁵
11	Tianjin	Calgary	Wuhan	Chongqing	Tokyo	Rhein-Ruhr	Los Angeles
12	Dallas	Al-Ayn	London	Karachi	Cairo	Paris	Sao Paulo
13	Washington, D.C.	Edinburgh	Los Angeles	Kinshasa	Lahore	Kolkata	Seoul
14	Houston	Charlotte	Foshan	London	Sao Paula	Lagos	Chicago
15	Sao Paulo	San Francisco	Taipei	Lagos	Kabul	Osaka	Milan
16	Moscow	Durham	Delhi	Cairo	Buenos Aires	Dhaka	Mumbai
17	Chongqing	Ulsan	Moscow	Manila	Luanda	Tianjin	Cairo
18	Randstad	Washington, D.C.	Singapore	Shenzhen	London	Shenzhen	Hong Kong
19	Guangzhou	Boston	Sao Paulo	Los Angeles	Los Angeles	Moscow	Taipei
20	Mexico City ⁵	Belfast	Tokyo	Buenos Aires	Colombo	Chengdu	Randstad
21	Osaka	New York	Shenyang	Rio de Janeiro	Baghdad	Cairo	Shenzhen
22	Philadelphia	Grande Vitoria	Xi'an	Tianjin	Shanghai	Rio de Janeiro	Istanbul
23	Boston	Canberra	Dongguan	Paris	Paris	Wuhan	Delhi
24	San Francisco	Seattle	Mumbai	Jakarta	Jakarta	Los Angeles	Buenos Aires
25	Hong Kong	Zurich	Hong Kong	Istanbul	Istanbul	Buenos Aires	Madrid

Developing regions Developed regions¹

1. Developed regions comprise the United States and Canada, Western Europe, Australasia, Japan and South Korea
2. In predicted real exchange rates
3. Population below age 15
4. In purchasing power parity (PPP) terms
5. Mexico City, Metropolitan Region

NOTE: For metropolitan regions, we use the first name of the region. e.g. New York for New York-Newark

Source: McKinsey Global Institute Cityscope 1.0

Older consumers have needs that can be just as profitable to fulfill

Inevitably, these energies will lead to more children. By 2025, McKinsey expects about 13 million more children in the top 600 cities than there were in 2007, with more than half of them in China despite the country's declining birth rate⁴². This matters, because many of these children will be born into affluent households. In fact, prosperous families in developing countries will breed ten times as fast as counterparts in the developed world over the next decade or so⁴³.

Meanwhile, most of the growth in aged populations over the next decade will occur in developing parts of the world. China's top 200 or so cities will produce 80 million older citizens, with Shanghai possibly home to twice as many older people as New York⁴⁴. Though companies often focus on the younger demographic in the quest for new markets, these older consumers have needs that can be just as profitable to fulfill.

Housing

Where will all these people – young and old – live? Housing is already taking off in the developing world as cities struggle to cope with the influx of migrants. The number of households in the world's leading cities is expected to grow at least twice as fast as global population growth, with the leading 600 cities accounting for 250 million new households⁴⁵.

Many rapidly urbanising Asian cities, like Beijing and Tokyo, have been feeling the squeeze on housing supply for decades. Demand is now rising as well in Malaysia, Singapore and Thailand as their cities expand. (See Cashing In.) ❌

The New City State

We are conditioned to think in terms of nationalities. In the future, however, it will matter more which city you're from. That's because the future of the world economy lies in its cities, not its countries. Consider the following statistics: Even now, the world's top 600 metropolises contain 20% of the world's population, and generate around half of its GDP⁴⁶. The combined population of these cities is rising 60% faster than the global average⁴⁷.

Welcome to the age of the global city – the 21st century version of the old city-state. The rise of these global cities is propelled by the globalised economy, which requires specialised skills that happen to be concentrated in cities.

This centralisation is also spurred by privatisation and deregulation, which shifts some governance responsibilities to the corporate sector, which is most often located in cities. Digitisation of nearly everything means that economies can't really function without access to the best digital infrastructure, which is again located in cities. In fact, the emergence of digital technology and globally mobile capital has reduced the capacity of national governments to regulate key economic sectors⁴⁸.

The future of the global economy will hinge on how well these global cities coordinate their commercial interests and trade policies. In the past – and to a certain degree the present – such matters were the purview of the nation state. Soon, the economic interests of global cities will rival if not overtake those of sovereign states.

Think of it this way. Do the names Catalonia, Prussia, Rhodesia, or the Urjanchai Republic mean anything to you? Perhaps not. They disappeared from world maps decades ago.

National boundaries shift like ripples on a lake. Not so long ago there was no North and South Korea – there was just Korea. The Soviet Union seemed unbreakable, until it broke apart. More than 30 new countries have been created since 1990.

But the cities inside these countries and ex-countries have shown staying power. Pyongyang in North Korea and Seoul in South Korea are still there despite being obliterated during the Korean War. Moscow remains the epicentre of Russian power, despite the end of the Soviet empire. Belgrade, Zagreb and Sarajevo still exist, even though the boundaries of their host nations have changed dramatically over the past couple of decades.

City versus country

Countries come and go. Cities endure. Up until the last few decades, however, most of them haven't had the scale to qualify as economic powerhouses in their own right.

The globalised economy has changed all that. Though rural markets can be important profit centres, most investors invest in a country's cities, rather than in the country itself. That's where most of the economic activity is taking place, and it's increasingly where businesses and investors cluster in search of profits.

The economic interests of global cities will soon overtake those of sovereign states

The emergence of huge contiguous urban markets and mega-regions will exacerbate this trend. Most big cities are located at the centre of clusters of smaller cities, their networks reinforcing efficiencies and boosting productivity. Shanghai, for example, is surrounded by a group of large urban centres at the Yangtze River Delta; their proximity allowing them to feed off each other's markets⁴⁹. Incheon in South Korea has in recent years evolved into a commercial, business, logistics and leisure hub for all of Northeast Asia, particularly the nearby cities of northern China⁵⁰.

Trade pacts

Huge metropolises are integrating economically, even if they sit on opposite ends of the planet. Often they have more in common with each other than with cities and towns in their own countries. Cities within the Pacific Alliance nations of Mexico, Peru and Chile are growing faster than their national economies, and are liberalising their trade policies and expanding ties with Asia through the Trans-Pacific Partnership in search of higher growth⁵¹.

This is changing the global economic landscape. Expect to see more trade agreements between cities rather than countries such as the Chicago-Mexico City partnership inked last year. This deal committed both cities to a series of joint initiatives in trade, innovation and education to boost employment, develop advanced industries and improve their global competitiveness⁵².

Huge metropolises often have more in common with each other than with cities and towns in their own countries

Such arrangements aren't yet standard operating procedure in Asia but they will be eventually. For the investor, this means shifting focus from the countries that may have dominated their calculations in the past, to the cities within those countries.

Old-world attitudes still prevail, however, especially when politics intersect with economics. The Chinese city of Wuhan, for instance, is expected to generate ten times the GDP growth of Auckland over the next decade or so. Yet most countries have far fewer diplomats there than they do in the New Zealand city⁵³.

Businesses have to move faster than that if they want to capitalise on the opportunities presented by our urbanising world. A properly positioned portfolio won't simply take into account national dynamics. It will examine which cities are driving those dynamics. And importantly, which cities are the best fit in terms of potential business tie-ups and investments. Therein lies the real challenge facing global business. ❌

Could It All Go Wrong?

Hollywood's vision of a future city often dwells on the negative. The dystopia portrayed in Blade Runner and other films shows an urban world gone horribly wrong. Poverty, squalor and violence proliferate while affluence is gained through exploitation rather than innovation.

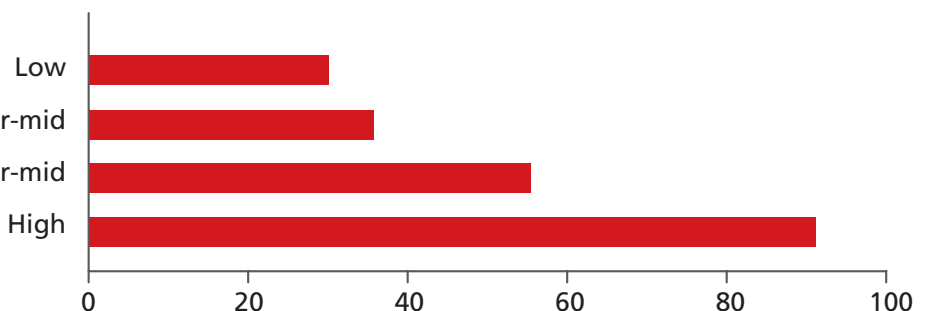
Is this Asia's urban future? Visitors to Asia's biggest cities are all-too-familiar with the problems often attendant to urbanisation. It will come as no surprise to residents of smog-plagued cities like Beijing that 11 of the world's 20 most polluted cities are in Asia. The polluted air their residents inhale contributes to the premature deaths of half a million people in the region each year⁵⁴.

About a quarter of Asia's urban population is poor⁵⁵ and nearly 200 million Asians live in slums⁵⁶ that perpetuate poverty and breed disease. Traffic jams are endemic in many Asian metropolises as citizens shift to automobiles for urban transport. In China alone, the number of registered vehicles increased from 1 million in the early 1990s to 61 million in 2010⁵⁷.

Urban planning

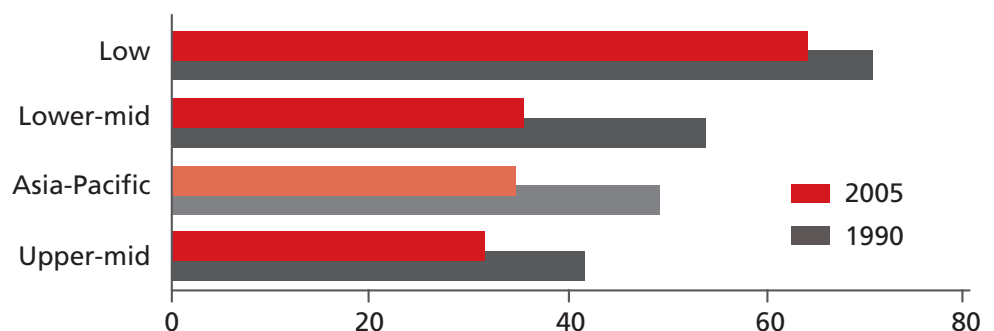
Chaotic urbanisation makes these problems worse. If urban planners don't get it right, expanding cities can breed income inequality, a restive middle class, shoddy and costly infrastructure, and environmental degradation.

10 **Urban population in Asia and the Pacific by income grouping**
% of population, 2012



Source: United Nations ESCAP

11 **Urban slum population, Asia and the Pacific by income grouping**
% of urban population, 1990 and 2005



Social tensions can arise from the co-existence in Asian cities of slum dwellers and affluent urbanites. Failure to deliver efficient public services to the middle class or to alleviate the misery of slum life, could lead to the kind of instability, violence and crime that has bedevilled many Latin American cities in recent decades.

Social policy

If migrants can't earn a decent wage, some might decide to return to their rural homes, partially reversing the tide of urbanisation. This is a worry in China, where many rural migrants to cities don't qualify for welfare benefits such as health and education, under the national household registration system known as *hukou*⁵⁸. Making urban life even more precarious for some are risks from climate change including severe water shortages, extreme weather-causing natural disasters and flooding of coastal areas bringing disease⁵⁹.

These problems will persist unless governments at all levels anticipate and plan for urbanisation. The goal should be to deliver compact, energy efficient, safe and liveable cities⁶⁰. Urban sprawl can be averted by pricing property sensibly and building appropriate infrastructure; mass transit systems can minimise excessive traffic, cutting pollution; energy efficient buildings and water re-use and recycling will curb waste; illegal slums could be upgraded through land titling and re-planning⁶¹.

Asia's slum population has fallen faster than the global average due largely to strong economic growth

These are just some of the measures that could shore up the social and political stability – and economic competitiveness – of Asia's cities. Their track record so far has been patchy. But there are promising signs that bigger can be better, among those cities that appreciate how much is at stake.

Going green

Asia's slum population has fallen faster than the global average due largely to strong economic growth. The pace of decline has been pronounced in India and Indonesia as governments come to grips with the problem⁶². Some countries are exploring ways to make future cities sustainable and able to cope with the massive strains of rapid urbanisation. Japan has introduced the "Eco-Compact City" concept as a top urban policy priority. Shanghai has unveiled plans to double its metro lines by 2020 to ensure that communities aren't totally reliant on automobiles as they become wealthier⁶³.

Singapore, where a liberal immigration policy is boosting the population, has minimised road congestion through a range of motor vehicle taxes⁶⁴. In South Korea, where space is at a premium, the "future city" of Songdo is taking shape on reclaimed land near Incheon International Airport. It opened in 2009 with its green technology making it the first district in Korea to be awarded the global green building certification LEED (Leadership in Energy and Environmental Design)⁶⁵. This kind of forward thinking, also reflected in gigantic infrastructure investments, made Incheon the second biggest mover up the EIU's ranking of competitive cities⁶⁶.

China, the locomotive for much of Asia's urbanisation, has flagged changes to the *hukou*

Much of Asia's urbanisation remains haphazard but the region has the benefit of changing course relatively early in its urbanisation drive

system in an effort to make it easier for rural migrants to sustain urban lifestyles. It plans to extend *hukou* status to 100 million rural migrants by 2020⁶⁷. Moreover, China has been the world's largest producer of green technology products since 2008, an indication of how seriously it takes low-carbon growth⁶⁸. Hanoi, the capital of Vietnam, aims to have half its citizens using public transport by 2025 as it grapples with a forecast rise in its population to 8 million people from over 6 million today⁶⁹.

Such visionary policies and projects are more the exception than the rule, and much of Asia's urbanisation remains haphazard. Still, Asia has the chance to change course relatively early in its urbanisation cycle. The challenge is to ensure this imperative isn't overwhelmed by populist policies that target growth over sustainability. ❌

Cashing In

Targeting Geographies

How can companies navigate this new landscape? Gone are the days when they could look at a country's national accounts for a 360-degree view of how investments might perform.

The key is to seek new growth markets rather than growth in existing markets

Companies looking to penetrate Asian markets need to look beyond country profiles. But they should also look beyond the usual suspects when it comes to the biggest cities. The key is to seek new growth markets rather than growth in existing markets. New markets in the right areas can generate two-thirds of revenue growth⁷⁰, and most of these growth markets will be located in emerging cities.

Which cities? Cities with fewer than 10 million people are well placed to deliver the kind of growth over the next decade or so that will fill out the balance sheets of companies that nail their entry strategies.

As noted earlier, such cities could deliver half of global growth by 2025, gaining share from megacities. Cities with larger populations will still generate returns, but their rate of return is expected to slow somewhat as they enter a more mature phase of urbanisation. In fact, their share of global GDP is expected to slip from 14% in 2007 to 13% in 2025⁷¹.

Emerging economies

Most new growth centres will be in emerging economies. Today, the top 400 or so emerging market cities generate around 15% of global GDP. By 2025 that share will rise as high as 45%. Developed economies will still account for a good portion of global growth, but mostly concentrated in North America where the largest cities will generate around 10% of the total⁷².

To gain from this shift, companies will have to do more than compare urban market sizes. By this conventional measure, those megacities that are already household names will dominate most target markets. But lots of good opportunities in lesser-known markets would go begging.

Moreover, it's important to remember that target cities may be at different stages of the urbanisation process. The likes of Shanghai are at a more mature stage and more likely to produce consumers who might buy high-end Gucci bags. But other cities are just starting to urbanise, their citizenry only beginning the jump from agrarian lifestyles into manufacturing⁷³. Demand will still be there, but it may be for a very different type of product.

Smart companies will immerse themselves in the distinct characteristics of each urban area. Though located in the same country, urban growth pockets can differ vastly in terms of demographics, industry and consumer profiles, household trends and incomes. These are vital data sets for companies looking to tailor their product to the right kind of consumer.

Once digested, these data could be used to pursue a segmented market entry approach.

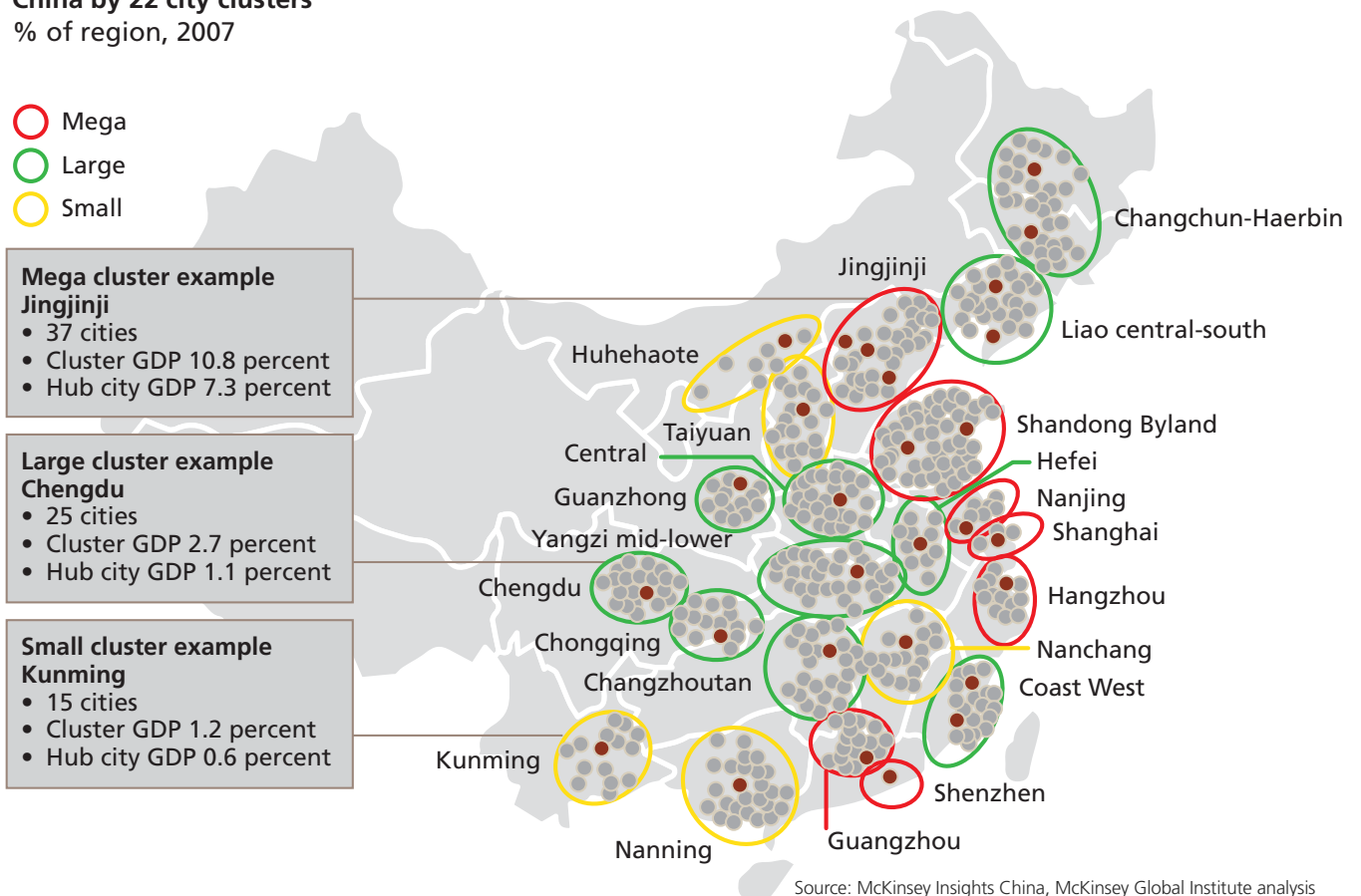
Clusters Geographic clusters including large and small cities and possibly rural areas in the vicinity – usually within a range of 200-500 kilometres – can give companies a good idea of the returns they can expect. Clusters can vary in size and are led by at least one hub city that drives growth for the rest of the region.

China, for example, has as many as 22 city clusters, many of them vastly different from each other that it's hard to believe they inhabit the same economy. Consumers around the Liao central-south cluster are three times more sensitive to price, for example, than consumers in the Yangzi mid-lower cluster⁷⁴.

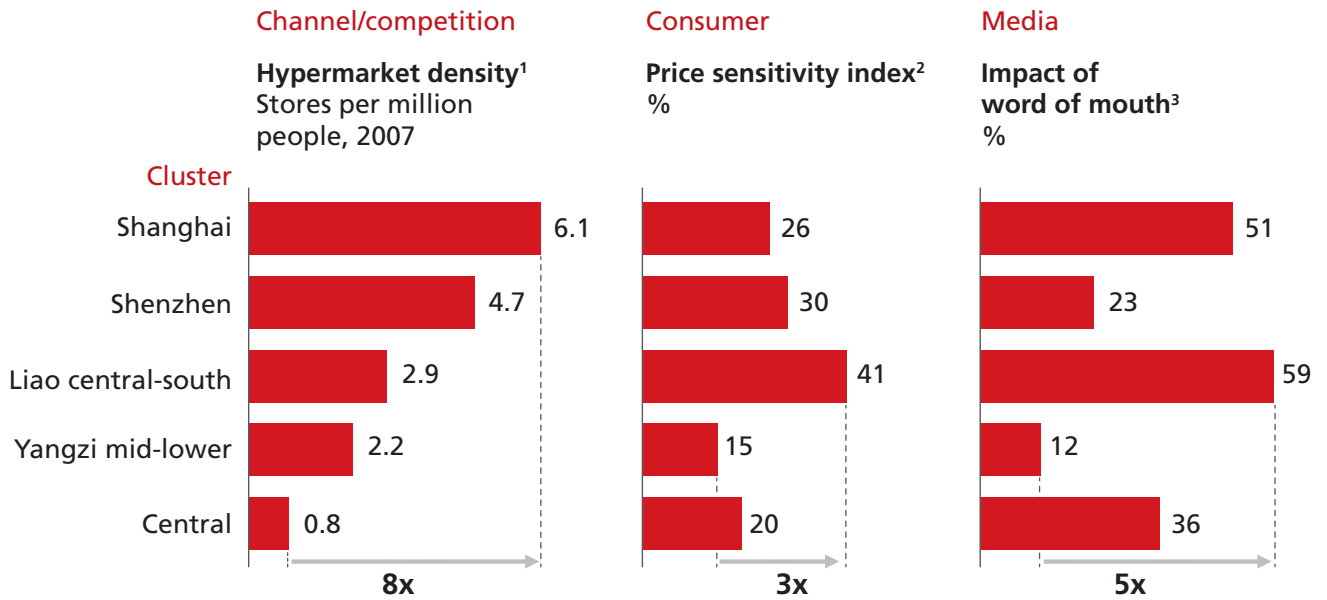
Similarly, India should be treated as a cluster of diverse markets rather than a monolithic opportunity. Though India is at an earlier stage of urbanisation, clusters formed around 14 of its cities could provide access to 17% of its urban and rural population and 40% of its huge market⁷⁵.

Delhi's proximity to the market opportunity in the huge neighbouring state of Uttar Pradesh makes it a potential investment gateway as well as a tempting target in its own right as it is forecast to be the world's most economically powerful city by 2025⁷⁶.

12 **China by 22 city clusters**
 % of region, 2007



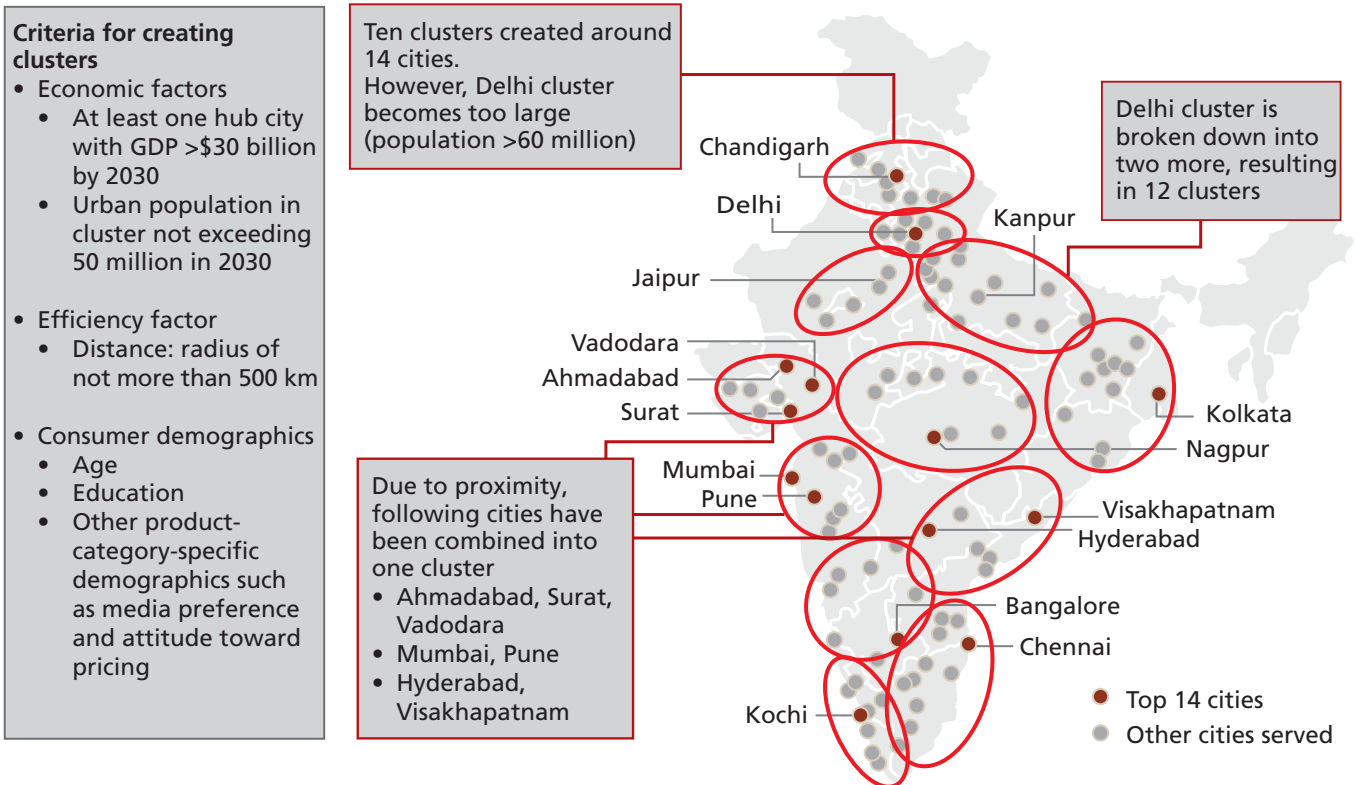
13 Chinese cluster market dynamics



1 Leading hypermarkets (totalling 19)
 2 Includes only samples with monthly household incomes of 3,000 to 8,000 renminbi, to eliminate influence of income difference
 3 Percentage of respondents who received product or service information from family or friends in the past two months, see sources as credible, and will pay attention to the information

Source: McKinsey Insights China

14 Clusters around top 14 cities in India



Source: McKinsey India Urbanization Econometric Model

Too often, however, these strategies lie fallow as companies rush headlong to the megacities, drawn by the prospect of endless double-digit growth. The problem with this approach is that megacity markets can become saturated. The quest for growth may then take a company to smaller capitals, perhaps surrounded by satellite towns. The truly adventurous will venture further into even smaller cities where few foreign companies fear to tread and which are therefore dominated by local suppliers⁷⁷.

Still, these smaller markets can yield outsized rewards for companies that do their homework. Consumers there may have more basic needs but are often willing to spend more on selected products. But as local competitors are often entrenched, foreign companies need to deeply consider their go-to-market strategies before taking the first steps.

Smaller markets can yield outsized rewards for companies that do their homework

This may involve determining to the last decimal point where and how demand for product will evolve in the targeted market. An accurate data set will allow companies to prioritise target cities and map out growth plans. Cogent models are needed for different types of cities for the nuts-and-bolts of business – distribution relationships, local partner management, logistics and customer service. Finally, companies must be prepared to constantly update their strategies to reflect the fast-changing nature of existing markets and the emergence of new ones⁷⁸.

Targeting Sectors

Once established in a market, growth can occur in many ways. But the strongest demand in emerging market cities is likely to be for the basic requirements of a middle class lifestyle – decent housing, reliable infrastructure and efficient transport options.

One billion extra consumers are expected to enter the global middle class by 2025⁷⁹.

This won't mean immediate stellar growth rates for all products. In fact, certain products take off sooner, while others later, in the urbanisation cycle. Smaller, cheaper household products like shampoos and clothing will take off earlier than luxury products.

But the trend is clear. By 2025, world cities will need to double the current \$10 billion in physical capital investments if they hope to cope with the influx of new residents⁸⁰.

India spends less now than China on infrastructure, but that only means it needs to spend more in future

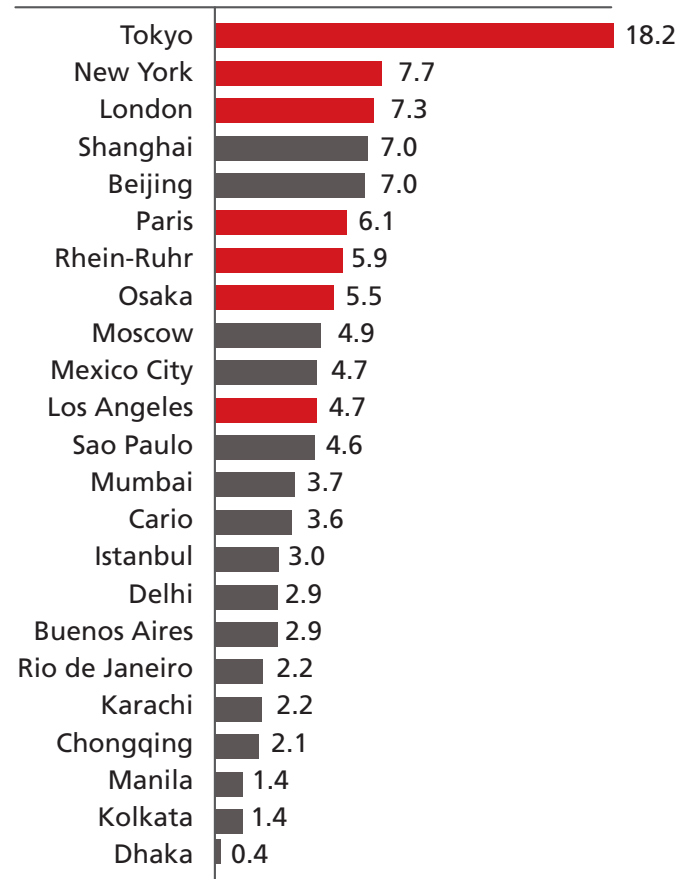
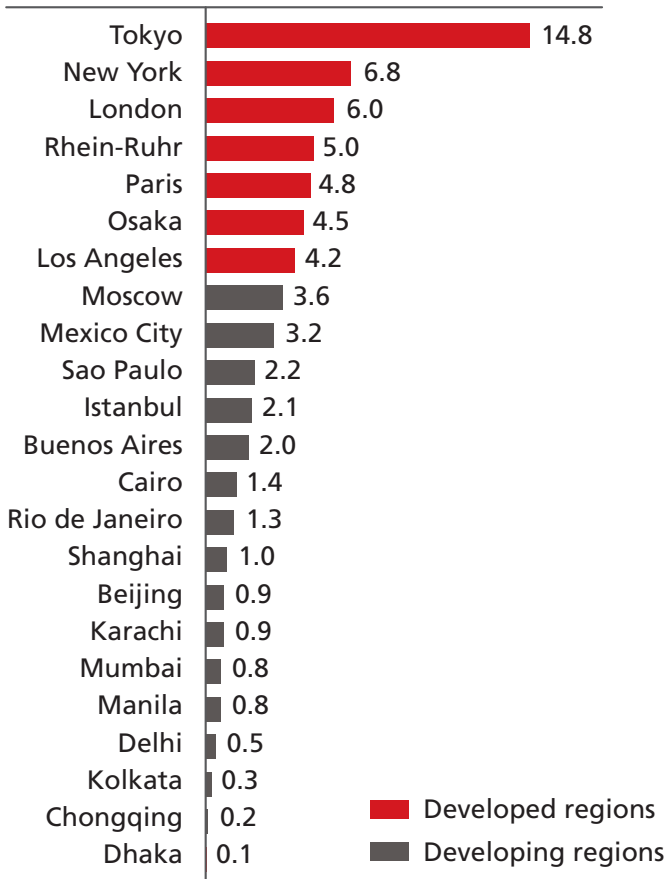
China's and India's role

Driven largely by China and India, Asia will generate much of that investment. China alone will account for half the 250 million new households required in the 600 biggest cities by 2025. India spends less now than China on infrastructure, but that only means it needs to spend more in future. The total bill by 2025 could tally \$1.2 billion as India upgrades its installed infrastructure to world-class levels⁸¹.

15 Megacities in terms of number of households with annual income above \$20,000 at PPP million households

In 2007, developed region megacities dominate the top of the list of households in the higher middle-income segment

By 2025, Shanghai and Beijing will have broken into the top of the list



Source: McKinsey Global Institute Cityscope 1.0

Transport & housing needs

Transport and housing are two sectors likely to take off. India might need as much as 900 million square metres of new residential and commercial floor-space every year until around 2030. China will likely need double that amount of space, and more than triple the 400 kilometres a year of new metro rail and subways that Indian cities will need to compete in the global economy⁸².

Housing is a fundamental chapter in the story of any urbanising city, and should be top-of-mind among businesses targeting new urban growth markets.

That's because a housing boom can trigger a virtuous cycle of investment and growth that can transform an economy and a balance sheet. Across the developing world, the size of households is shrinking, spurring demand for new households as people choose to live in nuclear rather than extended family arrangements.

A housing boom can trigger a virtuous cycle of investment and growth that can transform an economy

People buying houses want appliances and furnishings to put inside them, heating or cooling units to stay comfortable, and so on. They will also want cars to put in their new garages. As well as providing opportunities for carmakers, the demand for new cars helps drive further urbanisation as they make sprawling suburbs easier to reach.

This dynamic has helped spur a housing boom in China and in other parts of the region that doesn't look like it's running out of steam anytime soon.

China builds as much housing in a year as there exists in all of Spain⁸³, so you might think that a bubble is building. But though there are frequent warnings of a correction in the offing, Chinese cities and incomes are growing so rapidly that it probably wouldn't amount to much more than a speed bump.

As long as this trend holds up, real estate investment in China is expected to surge. Unencumbered by a national property tax, residential floor space per person in urban areas could reach 41 square metres by 2020, up from 30 square meters in 2008⁸⁴.

This has implications for iron ore producers and steel makers, as demand for their product could rise by 40%. Energy prices could rise similarly. Interestingly, much of this demand is happening away from febrile coastal growth markets and increasingly in cities further inland⁸⁵. China is well on the way to delivering its targeted 35 square metres of living space per head by 2020, with citizens of many interior cities already benefiting from more elbow room⁸⁶.

16 **Projected increase in urban residential building stock in China compared with existing residential building stock in selected European cities**

Forecast net increase in urban ¹ residential building stock, 2011-2020 (m sq metres)		Existing residential building stock (various years; m sq metres)	
Chongqing ²	1,109	Poland	807
Chengdu	447	Greece	494
Zhengzhou	396	Portugal	424
Tianjin	389	Sweden	411
Beijing	350	Czech Republic	369
Xi'an	279	Romania	366
Changsha	272	Switzerland	352
Shanghai	271	Hungary	319
Shenzhen	265	Austria	318
Dongguan	234	Denmark	282

1. Figures are for urban areas within referenced prefecture/municipality
2. Chongqing municipality's unusually large increase partly reflects its large size compared with other prefectures

Source: National Bureau of Statistics (China), UNECE, Economist Intelligence Unit forecasts

Businesses able to tap these less familiar markets stand to profit from the housing boom.

Urbanisation is having a similar impact on housing in other Asian countries. Singapore, where 90% of citizens own their homes, has been taking steps to prevent a bubble forming in the face of strong demand.

Housing has not kept pace with the city-state's rising population. Singapore's resident population grew from 3.4 million in 2004 to 3.82 million in 2012, while the non-resident population nearly doubled to tally nearly 1.5 million⁸⁷. Puny by Chinese standards but a big enough bounce to send the country's housing market into a spin.

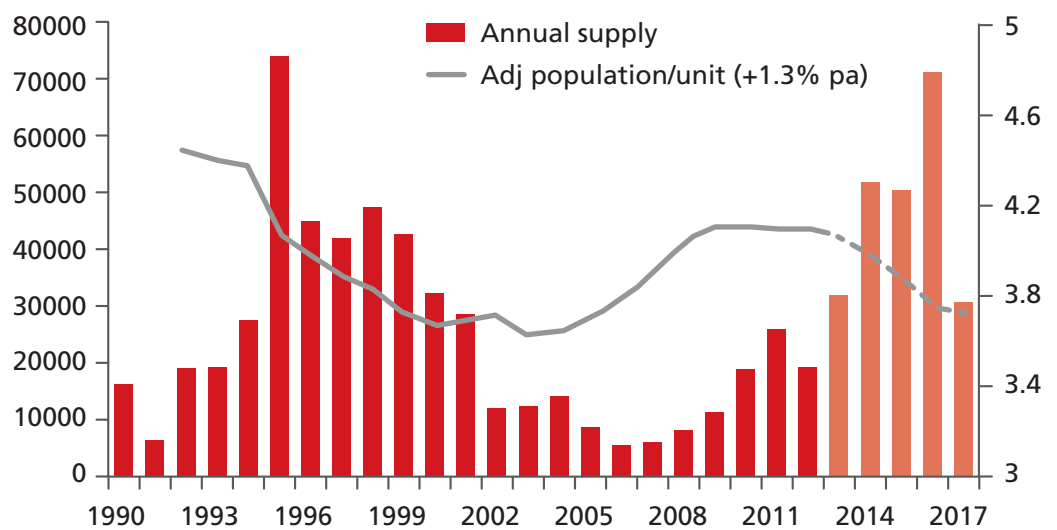
Prices have spiked in recent years, leading more residents to live under the same roof until they stabilise. That day appears to be coming, as the government's efforts to meet demand for public housing through to 2017 start to bear fruit.

Singapore's population could hit nearly 5.7 million by then, creating new demand for more houses estimated at between 85,000 and 110,000 units⁸⁸.

In Malaysia, urbanisation has driven housing demand especially among a young and increasingly cashed-up demographic that nowadays includes working women.

Urbanisation has spurred a decrease in household sizes as people opt to buy homes rather than live in extended family arrangements. Housing prices have risen as supply fails to meet demand⁸⁹.

17 **Population per housing stock vs annual supply**



Source: HDB, URA, DBS Vickers

Urbanisation means smaller household sizes as people opt to buy homes rather than live in extended family arrangements

Kuala Lumpur's evolution as a city is reflected in plans for a new high-speed rail to Singapore. If the project is completed – and linked with Thailand, Laos, Vietnam and several cities in China as planned – it could nurture a future mega-region. In the process, housing prices will be re-rated as visitor numbers swell⁹⁰.

Thailand's housing sector also faces big changes due to urbanisation. An influx of people to its cities coupled with changing middle class lifestyles have helped to spur strong growth in condominiums over recent years. With condo sales buoyant in cities across the country, several developers are expanding into major provincial markets such as Pattaya, Hua Hin, Chiang Mai and Kon Kaen⁹¹.

Policymakers' Role

A city's ability to harness the benefits of urbanisation depends greatly on the quality of its management and the policies underpinning its growth. Getting this right is a gigantic task, as businesses will shy away from cities that can't provide investment opportunities at competitive cost.

Sustainable cities provide businesses with the certainty they need to enter a market. They also generate the buzz and excitement that attracts an entrepreneurial class keen to improve their prospects. To deliver, cities need far-sighted planning that is best done by the levels of government closest to their people, on the understanding that they have a better grasp of their real needs⁹².

Affordable access to land, water and energy for residents will mean affordable access to these inputs for businesses, as will efficient mass transit systems and an embrace of technological innovation. Incentives to migrate to second- and third-tier cities rather than the major business hubs will make life more liveable for citizens while also providing new markets for business⁹³.

Examples abound of visionary efforts to reach these goals. Investment in high-speed inter-city mass transit has cut the commute between Japan's two biggest cities, Tokyo and Osaka, to less than two-and-a-half hours, integrating their labour and housing markets, and boosting productivity⁹⁴.

In South Korea, planners built high-rise residential buildings to house a growing urban population, along with diverse transport options including highways, rail networks and subway lines⁹⁵. Construction of this type of infrastructure is a business opportunity in itself, and delivers compounding benefits in terms of employment, better connections and cost savings to citizens and businesses.

This kind of forward thinking might end up saving megacities from environmental catastrophe.

Curbing pollution

Carbon dioxide emissions are responsible not just for Asia's smoggy city streets, but also play a big role in global warming that threatens environmental ruin for countries and economies. It's often pointed out that cities are responsible for 70% of CO2 emissions⁹⁶, and that developing economies don't invest enough in green technologies that will cut their contribution.

On the surface, the statistics are damning for Asia. Between 2000 and 2008, per capita average greenhouse gas emissions climbed by 97% in Asia, compared to just 18% globally⁹⁷. Dependence on energy sources like coal to drive economic growth is largely responsible, especially in South Asia where greenhouse gas emissions have risen by about 3.3% annually since 1990⁹⁸.

Megacities are often blamed. But if they get their planning right, they can be part of the solution. Liveable cities will be high in density, which means more efficient energy use and lower CO2 emissions as residents rely on low-carbon mass transit rather than cars.

Policymakers need to prioritise energy efficiency and conservation to cut urban energy consumption

People in cities also tend to use cleaner fuels in their cars and their stoves. Around 70% of people in developing countries have access to cleaner cooking fuels than coal or wood, compared to just 19% in rural areas⁹⁹. What's more, green initiatives are easier to scale up at cities. More than a decade ago, Delhi's choking smog prompted moves to replace its entire diesel bus fleet with more than 10,000 vehicles running on compressed natural gas, which emits fewer pollutants¹⁰⁰. More recently, Dhaka in Bangladesh followed Delhi's lead by converting over 40% of vehicles to natural gas, thereby saving an estimated 2,000 premature deaths from breathing polluted air, not to mention \$400 million in lower energy bills¹⁰¹.

Such interventions, however, will remain a drop in the ocean until cities adopt a holistic approach to green growth. For that to happen, policymakers need to prioritise energy efficiency and conservation to cut urban energy consumption. A key to this will be modern mass transit systems, which are more efficient and cleaner than private cars. Guangzhou in China is one city that has experienced this first hand. Its new rapid transit bus system cuts emissions, but also saves 30 million passenger hours a year¹⁰².

Success stories

The most successful cities deliver the goods, not just on a few of the prerequisites, but on all of them. Singapore, according to PwC, ranks third on its global ranking of successful cities partly because it understands the importance of infrastructure in a city's development and the welfare of its citizens. But it also scores well on technology, health and safety, liveability, and ease of doing business. Hong Kong, ranked eighth, has similar attributes, while Seoul partly makes up for low sustainability and liveability scores with high marks for technology and infrastructure¹⁰³. ❌

Impact and Implications

Urbanisation is here to stay. It will happen at different rates in different parts of Asia. Cities will urbanise until they reach a mature stage of growth, and then the urbanisation trend will take hold at another megacity in waiting. Big, prosperous cities will continue to expand into each other's territories, creating mega-regions that will drive the economic growth of entire nations.

To capitalise, companies need to move early and establish enough scale to make a difference to their balance sheet. However, too many companies still don't see cities in the same way they see countries – as the locomotive behind global growth. One survey found that less than one-in-five executives made important business decisions at the city rather than national level. Nearly two-thirds described cities as not relevant to their strategic planning¹⁰⁴.

Cities need to make themselves more attractive to investors

Perhaps this attitude would change if cities made themselves more attractive to investors. Just as too many businesses don't recognise the power of cities, too many cities don't realise the potential gains. Cities should have decent housing and efficient transportation, they should be business friendly, and enough finance should be available to support effective public services and world-class infrastructure¹⁰⁵.

Their expanding populations will demand as much. Failure to deliver could result in slowing growth and social and political tensions. Headwinds like unemployment, stretched public finances and global competition will make the job even tougher. Some cities will fail to measure up. Others will prosper.

There is no one-size-fits-all solution for Asia's cities in dealing with urbanisation. Each must find its own way to a sustainable future. How well they do that will determine whether they reap the benefits of urbanisation and deliver dividends to businesses around the globe. ❌

Notes

- 1 McKinsey, *Urban World: Mapping the Economic Power of Cities*. p. 1.
- 2 UN Global Monitoring Report 2011, p. 8
- 3 UN World Urbanisation Prospects: The 2011 Revision, p. 3.
- 4 UN World Urbanisation Prospects: The 2011 Revision, p. 2.
- 5 ADB, *Realizing the Asian Century: A New Approach to Urbanisation*, p. 63.
- 6 ADB, *Realizing the Asian Century: A New Approach to Urbanisation*, p. 64.
- 7 ADB, *Realizing the Asian Century: A New Approach to Urbanisation*, p. 63.
- 8 The ADB sees this happening by 2025, while UNESCAP reckons it will occur five years earlier.
- 9 McKinsey & Company. *Urban World: Cities and the Rise of the Consuming Class*, p. 3.
- 10 Economist Intelligence Unit, *Hotspots 2025: Benchmarking the Competitiveness of Cities*, 2013, p. 2. The economic strength ranking was one category in a broader overall ranking of the cities on their global competitiveness.
- 11 Ibid.
- 12 UN Global Monitoring Report 2011, p. 10.
- 13 ADB, *Green Cities, Urbanisation and Municipal Development in Asia*, 15 August 2012, <http://www.adb.org/features/12-things-know-2012-green-urbanisation-asia>
- 14 The UN Global Monitoring Report (p. 9) puts China's urban population at 49% in 2010, and 21.5% in 1980. McKinsey (p. 18) says Chinese urban populations "more than doubled" from 1980 to 2005. UNESCAP (p.12) says it "more than tripled" from 190 million to 669 million between 1980 and 2010.
- 15 UNESCAP, *Statistical Handbook for Asia and the Pacific 2013*, p. 11.
- 16 UNESCAP, *Statistical Handbook for Asia and the Pacific 2013*, p. 12.
- 17 UN World Urbanisation Prospects 2011 Revision, p. 12. It puts Asia's share of the world's urban population at 53% by 2050, compared to Africa's 20%.
- 18 UN World Urbanisation Prospects 2011 Revision, p. 13.
- 19 UN World Urbanisation Prospects 2011 Revision, p. 5.
- 20 The UN World Urbanisation Prospects 2011 Revision (p. 5) forecasts that the number of people living in cities of 10 million or more inhabitants will rise from 359 million in 2011 to 630 million by 2025. Those living in cities with fewer than 500,000 people will rise from 1.3 billion in 2011 to nearly 2 billion by 2025.
- 21 McKinsey, *Urban World: Mapping the Economic Power of Cities*. p. 15.
- 22 McKinsey, *Urban World: Mapping the Economic Power of Cities*. p. 4.
- 23 McKinsey, *Urban World: Mapping the Economic Power of Cities*. p. 1.
- 24 The UN World Urbanisation Prospects 2011 Revision pp. 5/6.
- 25 McKinsey expects these top 600 cities to contain one-fifth of the world's population and generate 60% of global GDP by 2025.
- 26 McKinsey, *Urban World: Mapping the Economic Power of Cities*. pp. 1/2.
- 27 McKinsey & Company. *Urban World: Cities and the Rise of the Consuming Class*, p. 4.
- 28 Naqvi A, 'Cities, not countries, are the key to tomorrow's economies', *Financial Times*, 25 April 2014.
- 29 Economist Intelligence Unit, *Hotspots 2025: Benchmarking the Competitiveness of Cities*, 2013, p. 17.

- 30 ADB, Green Cities. <http://www.adb.org/green-cities/index.html>
- 31 Kalan, J, 'Megacities', *Think Again*, May/June 2014, p. 70.
- 32 McKinsey, Urban World: Mapping the Economic Power of Cities, p. 10
- 33 ADB, Realizing the Asian Century: A New Approach to Urbanisation, p. 64.
- 34 ADB, Facts and Data about Cities and Urbanisation in Asia.
- 35 Hofman A, Wan G, 'Determinants of Urbanisation', *ADB Economics Working Paper Series*, no. 355, July 2013, p. 21. Hofman and Wan contend that growth causes urbanisation, rather than vice versa, arguing that attempts to show that urbanisation spurs growth have been largely unsuccessful.
- 36 PwC, *Cities of Opportunity 6*, p. 8. <http://www.pwc.com/us/en/cities-of-opportunity/2014/pdf-download.jhtml>
- 37 Anderlini J, 'China reveals blueprint to expand urbanisation', *The Financial Times*, 17 March 2014. The plan aims to deliver standard rail and express roads to all cities of more than 200,000 people, with every city of more than 500,000 people will get high-speed rail links.
- 38 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 11.
- 39 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 5.
- 40 Ibid.
- 41 ADB, Green Cities. <http://www.adb.org/green-cities/index.html>
- 42 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 6.
- 43 Ibid.
- 44 Ibid.
- 45 Ibid.
- 46 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 5.
- 47 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 11.
- 48 Sassen S, 'Global Cities: A Challenge for Urban Scholarship', <http://www.columbia.edu/cu/21stC/issue-2.4/sassen.html>
- 49 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 11.
- 50 Economist Intelligence Unit, Hotspots 2025: Benchmarking the Competitiveness of Cities, 2013, p. 7.
- 51 Naqvi A, 'Cities, not countries, are the key to tomorrow's economies', *Financial Times*, 25 April 2014.
- 52 <http://www.brookings.edu/blogs/the-avenue/posts/2013/11/18-chicago-mexico-city-liu-donahue>
- 53 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 2.
- 54 ADB, Green Cities, Urbanisation and Municipal Development in Asia, 15 August 2012, <http://www.adb.org/features/12-things-know-2012-green-urbanisation-asia>
- 55 ADB, Issues, Challenges and ADB's Approach in Urban Development. <http://www.adb.org/themes/urban-development/issues>
- 56 United Nations. Resources for Speakers on Global Issues. <http://www.un.org/en/globalissues/briefing-papers/cities/vitalstats.shtml>
- 57 ADB. Facts and Data about Cities and Urbanisation in Asia. <http://www.adb.org/features/12-things-know-2012-urbanisation-asia>
- 58 Anderlini J, 'The Fragile Middle: China's migrant workers test urbanisation drive', *Financial Times*, 14 April, 2014.

- 59 ADB, Realizing the Asian Century: A New Approach to Urbanisation, p. 68.
- 60 ADB, Realizing the Asian Century, p. 4.
- 61 ADB, Realizing the Asian Century: A New Approach to Urbanisation, p. 65.
- 62 UNESCAP notes that the percentage of slum dwellers in these two countries has fallen more than 20 percentage points since 1990. In 2009, half a billion people in the Asia-Pacific lived in slums, 30% of the urban population, down from nearly 50% in 1990. P. 13.
- 63 ADB, Realizing the Asian Century: A New Approach to Urbanisation, p. 67.
- 64 Inland Revenue Authority of Singapore: <https://www.iras.gov.sg/irashome/page.aspx?id=5676>
- 65 <http://www.songdo.com/songdo-international-business-district/the-city/master-plan.aspx>
- 66 Economist Intelligence Unit, Hotspots 2025: Benchmarking the Competitiveness of Cities, 2013, p. 16. It ranked number 43, up 17 places.
- 67 Anderlini J, 'The Fragile Middle: China's migrant workers test urbanisation drive', *Financial Times*, 14 April, 2014.
- 68 ADB, Green Cities, Urbanisation and Municipal Development in Asia, 15 August 2012, <http://www.adb.org/features/12-things-know-2012-green-urbanisation-asia>
- 69 ADB. Facts and Data about Cities and Urbanisation in Asia. <http://www.adb.org/features/12-things-know-2012-urbanisation-asia>
- 70 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 1.
- 71 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 12.
- 72 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 17
- 73 Yale School of Management, 'What Should we Understand about Urbanisation in China?', <http://insights.som.yale.edu/insights/what-should-we-understand-about-urbanisation-china>
- 74 All the information in this paragraph taken from: McKinsey, Urban World: Mapping the Economic Power of Cities. p. 33.
- 75 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 35.
- 76 Economist Intelligence Unit, Hotspots 2025: Benchmarking the Competitiveness of Cities, 2013, p. 10.
- 77 Boston Consulting Group, 'Winning in Emerging Markets. A Guide to the World's Largest Growth Opportunity', p. 12. <http://www.bcg.com/documents/file60078.pdf>
- 78 Boston Consulting Group, 'Winning in Emerging Markets. A Guide to the World's Largest Growth Opportunity', p. 12. <http://www.bcg.com/documents/file60078.pdf>
- 79 McKinsey & Company. Urban World: Cities and the Rise of the Consuming Class. P. 1.
- 80 McKinsey & Company. Urban World: Cities and the Rise of the Consuming Class. P. 8.
- 81 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 24.
- 82 McKinsey, Urban World: Mapping the Economic Power of Cities. p. 24.
- 83 Economist Intelligence Unit, 'Building Rome in a day: The sustainability of China's housing boom', p. 2.
- 84 Economist Intelligence Unit, 'Building Rome in a day: The sustainability of China's housing boom', 2011. p. 1.
- 85 Economist Intelligence Unit, 'Building Rome in a day: The sustainability of China's housing boom', 2011. pp. 9-12.
- 86 Economist Intelligence Unit, 'Building Rome in a day: The sustainability of China's housing boom', 2011. p. 8.

- 87 DBS, Inflexion Point: Singapore's Property Market Outlook. October 2013, p. 14.
- 88 DBS, Inflexion Point: Singapore's Property Market Outlook. October 2013, p. 14.
- 89 DBS, Malaysia Industry Focus - Property, 16 October 2013, pp. 3-4.
- 90 DBS, Malaysia Industry Focus - Property, 16 May 2013, p. 6.
- 91 DBS, Thailand Industry Focus: Property Sector - Residential. 8 January 2013, pp. 2-5.
- 92 '*Population Dynamics in the Post-2015 Development Agenda*,' Report of the Global Thematic Consultation on Population Dynamics, United Nations Population Fund, United Nations Department of Economic and Social Affairs, UN-Habitat, International Organization for Migration, 2012, p. 12.
- 93 Ibid. p. 13.
- 94 Project Syndicate, '*Getting Cities Right*', 26 February 2013. <http://www.project-syndicate.org/commentary/managing-urbanisation-in-developing-countries-by-mahmoud-mohieldin-and-zoubida-allaoua>
- 95 Ibid.
- 96 Kalan, J, 'Megacities', *Think Again*, May/June 2014, p. 71.
- 97 ADB, Green Cities, Urbanisation and Municipal Development in Asia, 15 August 2012, <http://www.adb.org/features/12-things-know-2012-green-urbanisation-asia>
- 98 World Bank, South Asia's Greenhouse Gas Footprint. <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21641942~pagePK:146736~piPK:146830~theSitePK:223547,00.html>
- 99 Kalan, J, 'Megacities', *Think Again*, May/June 2014, p. 71.
- 100 Larkin J, 'India Sets Pace on Cleaner Air', *Wall Street Journal*, 22 November 2004.
- 101 Kalan, J, 'Megacities', *Think Again*, May/June 2014, p. 72.
- 102 ADB, Green Cities, Urbanisation and Municipal Development in Asia, 15 August 2012, <http://www.adb.org/features/12-things-know-2012-green-urbanisation-asia>
- 103 PwC, *Cities of Opportunity* 6, p. 8. <http://www.pwc.com/us/en/cities-of-opportunity/2014/pdf-download.jhtml>, pp. 8-9.
- 104 McKinsey & Company. *Urban World: Cities and the Rise of the Consuming Class*. p. 10.
- 105 Ibid.

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