

## The urban age

### AT A GLANCE

- More than 60% of the global population is expected to live in a city within the next two decades
- Increased urbanisation in emerging markets requires significant investment in core infrastructure
- Much of the urban infrastructure in the developed world is decades – if not more than a century – old and in need of upgrade
- Stimulus plans enacted in response to the economic slowdown allocate significant resource to infrastructure investment
- The vast investments requiring to be made into infrastructure will necessitate greater use of private sector funding
- There are a rich variety of sectors and listed companies that give investors access to the infrastructure story

Within the next two decades, the entire US population will move into China's cities. Alright, not the US population, per se. But 350 million people will leave behind their rural life in a secular move expected to provide a massive impetus to China's urban economy<sup>1</sup>. China is not alone. All across the developing world, cities are acting as a magnet for economically-motivated populations.

And, while many of us in the developed world may want to leave the city behind and return to the country – and there is a growing army of us doing just that – there will still be enough left behind to mean that more than 60% of the world's population are likely to live in a city by 2030<sup>2</sup>.

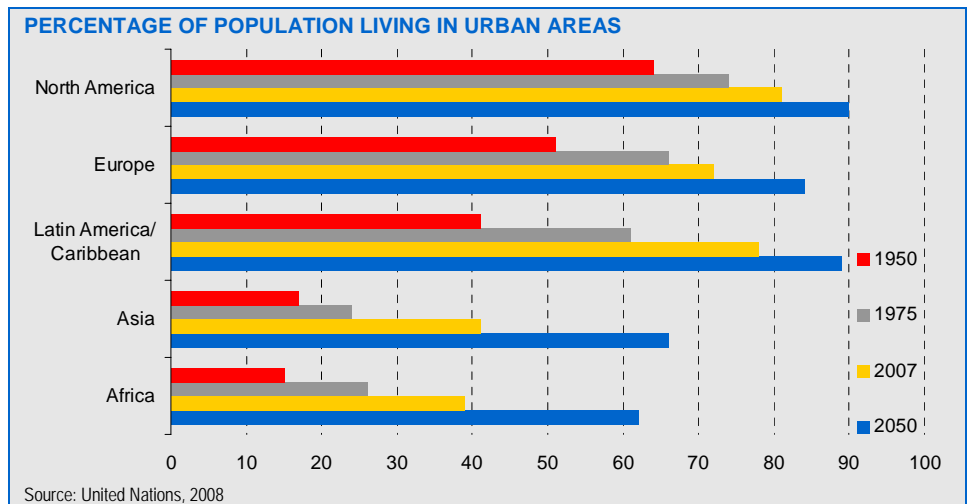
Such concentration of the population puts the national – and, more specifically, city – infrastructure under pressure. The developed world needs to upgrade its ageing electricity grids, water mains and transport links. The developing world needs to put many of these services in place in the first place. Billions of dollars need to be invested. Traditionally, government would have shouldered the cost but, with rising spending demands from the healthcare, education and security sectors, the role of the private sector is growing. With that financing shift, comes a variety of ways for the private investor to become involved.

### TWO'S COMPANY, THREE'S A CROWD, 25 MILLION IS....?

In 1950, fewer than one-in-three people lived in a city. By 2007, that had increased to more than half of the world's population<sup>3</sup>. The move towards urban life seems unstoppable. It is estimated that, by 2030, 4.6 billion people – 60% of the global population – will live in cities.

In Europe and North America, the busiest decades of urbanisation were the 1960s and 1970s. With the transition from rural to urban living largely complete in these developed world countries, it is in emerging markets that the effects of the urban age are now becoming more evident. Back in 1950, there was just one "megacity" with a population of more than ten million – New York. Now there are at least twenty – 15 of which are in emerging markets<sup>3</sup>. By 2025, the McKinsey Global Institute believes China alone will have 15 of these megacities, with an average population of some 25 million each<sup>1</sup>.

Increasing urbanisation is a trend that's seen across all of the emerging markets. The United Nations forecasts that the urban population of Asia will grow by 1.8 billion by 2050. In the same time, Africa will see nearly one billion people join city life, while 200 million from Latin America and the Caribbean will leave their rural homes behind<sup>3</sup>. They won't all head for the megacities, however. China may have 170 cities with a population of over one million but most urbanisation is likely to occur in towns and urban areas of less than one million people. However, let's face it, one million people still makes for a pretty built up area.



## THE GROWING IMPORTANCE OF THE URBAN ECONOMY

Millions of people are migrating to the cities to fill jobs created by the dramatic economic expansion that has characterised emerging markets like China over the last decade or so. It is often educated young adults who make the move from the country. One quarter of Shanghai's labour force has a college education, while the city is also able to attract expatriate talent to its burgeoning business district<sup>1</sup>.

However, there has also been a massive growth in the number of factories taking advantage of cheap, abundant and easily controlled labour in cities across the poorer countries of Asia. The development of export-led manufacturing has created considerable demand for low and medium-skilled labour.

As a result of these trends, over the last decade, the most dynamic sectors in national economies have been largely urban-based activities. Much of this comes down to the fact that new investment tends to be directed in the first instance towards cities. It is often in the cities that the strongest financial incentives are offered to promote inward investment. We see that in both the developed and developing world. Inward investment can create a virtuous cycle that serves to attract more investment in the future as perceived investment risks diminish and new opportunities to support the local business community begin to prosper.

It is no wonder that urban environments have therefore been proven to deliver higher productivity and wages and, again, as you'd expect, a wider range of employment opportunities as agriculture and small-scale local industry gives way to modern, globalised industry and urban commerce.

Once more, the growing economic significance of urban areas is well represented by the case of China. Through the process of much increased urbanisation, it is expected that, in time, more than 90% of China's GDP will be generated by its urban economy<sup>1</sup>.

## THE URBAN MULTIPLIER

One of the most notable impacts of urban life is the retail revolution that accompanies it. While rural dwellers might rely on their own land to feed themselves, city inhabitants don't have that luxury. Supermarkets and other food stores take the place of the farm and local barter system.



**SHOPRITE** commands a market leading position across the African continent. It is a low-cost retailer operating in a competitive void. The company benefits from increased consumption by the low-end consumer. It is expanding aggressively outside its South African base. Ex-South Africa, profits have grown more than 50% and there is potential for top line growth of 15-16% over the next few years. Customer numbers are growing roughly 9% per annum<sup>4</sup>.

Beyond the food retailing sector, the higher wages generated in cities translate into higher disposable incomes for urban workers to spend on consumer discretionary items. It is partly through this consumption trend that cities can boost GDP levels through a multiplier effect.

- People move to the cities and earn higher wages.
- They spend those higher wages on consumer goods.
- The increased demand for those goods requires more people to manufacture them.
- The jobs on offer draw more people to the city...

As this pattern repeats, it becomes easier to understand how studies forecast that urban China, for example, will come to have disposable incomes and consumption demand twice that of Germany by 2025<sup>1</sup>. Already urban incomes in China are estimated to be three times those of the rural population<sup>1</sup>. It's no wonder, then, that the growing middle classes come to be concentrated in cities.

Studies suggest that China's GDP will multiply fivefold by 2025<sup>1</sup>. That progress is, in no small part, due to the increasing urbanisation of the country.

## PUTTING THE BASICS IN PLACE

But dense population concentrations in cities pose major infrastructure demands far beyond that of simply providing an organised retail sector. Mass transit systems are required to move the population around. Clean water and waste management systems are required to keep disease at bay. Power grids are required to supply the residential and commercial communities.

One OECD study in 2007 proposes 3.5% of world gross domestic product needs to be invested each year into electricity, road and rail transport, telecoms and water networks, the bulk of which is needed in the developing world as decades of underinvestment have left basic services wanting<sup>5</sup>. One Chinese official suggests the influx of 350 million people into their cities will lead to at least one trillion yuan (almost US\$150 billion) of annual investment opportunities in building water supply, waste treatment works, heating and other public utilities<sup>6</sup>. Asia as a whole could invest US\$400 billion annually. Meanwhile, Europe looks on track to spend around US\$200 billion each year, with the US just slightly behind, at US\$180 billion<sup>7</sup>.

*“China needs to invest more in its railways and highways. Installed power capacity in terms of megawatts per person is also still very low in China and other emerging Asian countries. Thus, further infrastructure development is a necessity as the region grows. This investment not only adds to current demand but, in turn, fuels job creation, increases household incomes and then ultimately boosts consumption.*

*“I see us being in the early stages of a multi-year cycle and believe there are plenty of stocks worth buying that offer strong long-term prospects because of this need for new infrastructure.”*

**Allan Liu, Portfolio Manager**

## INVESTING FOR THE FUTURE

How that infrastructure investment is apportioned can have profound effects on an economy. The World Bank estimates that a 1% increase in infrastructure stock can lead to a 1% increase in GDP. But, studies of the period 1970 – 1990 found that more than 40% of the growth differential between high-income and low-income countries could be attributed to the quantity and quality of infrastructure at the economy’s disposal<sup>8</sup>.

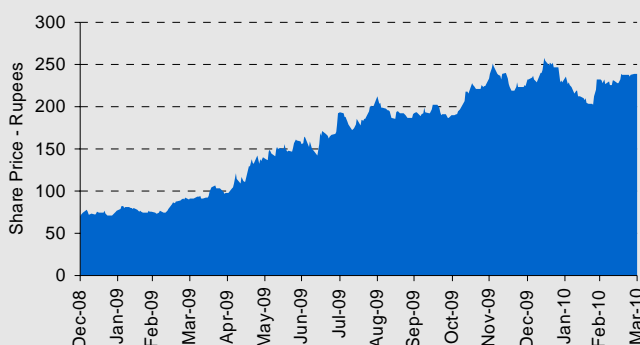
Much of the most imminent infrastructure spending will come as a result of government stimulus plans announced in response to the recent economic slowdown. China and India are among the developing nations that have announced major stimulus plans centred on infrastructure investment.

### POWERING INDIA

India may be one of the fastest-growing economies in the world but its infrastructure has failed to keep pace. Not one city in India has a clean drinking water supply 24 hours a day. The average turnaround time at an Indian port is 3.85 days – versus 10 hours in Hong Kong. Peak power shortages remain in double digits – at 12%<sup>9</sup>.

The Indian government is committed to raising infrastructure investment, with various studies suggesting US\$500 billion needs to be spent to bring the country up to standard. The power and transport sectors are expected to attract around 60% of that money. Gas supplies are forecast to double over the next five years. With a large power supply deficit and low per-capita power consumption, it is the government’s intention to increase generation capacity by 80,000MW by 2012.

**RURAL ELECTRIFICATION CORPORATION** is a government-owned company with the objective of financing and promoting rural electrification projects all over the country. As a financier, its asset growth is expected to trace the growth in the power sector.



Source: Datastream, 31.03.10

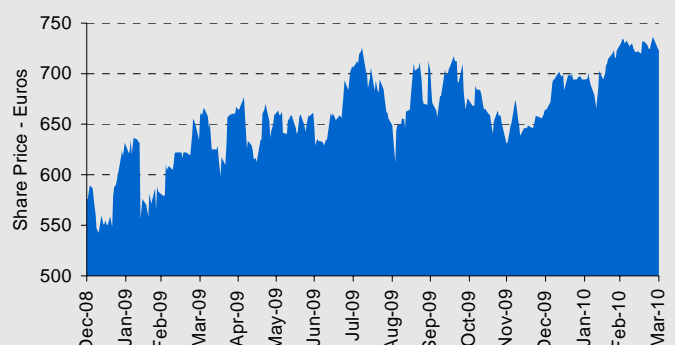
### KEEPING CHINA ON THE MOVE

China will experience the largest urban migration ever seen over the coming decades as up to 70% of its population moves from the country to urban areas. 350 million people will move into China’s cities. That would take China’s urban population over one billion.

As many as 170 Chinese cities could require mass transit systems by 2025<sup>1</sup>. This could create one of the greatest booms in mass transit construction in history. Outside of the cities, a massive rail network is being built to connect the cities to rural areas.

China Railways has been adding track to the network at about 1,000 kilometres a year. This will rise to 10,000 kilometres per year by 2012<sup>10</sup>. To put that in context, the entire German rail network is the longest in Europe and is just 34,000 kilometres.

With decades of experience in developing cutting-edge high-speed trains, the French rail sector is thriving. **FAIVELEY** makes high-tech train parts such as couplings, air conditioning systems and doors, and is seeing increasing trade with China.



Source: Datastream, 31.03.10

**References to specific names are for illustrative purposes only and are subject to change without notice. They should not be construed as a recommendation or advice to transact in the securities.**

Investment on such a large scale in emerging market infrastructure is made possible because, over the last decade or so, many countries have benefited significantly from strong global growth and the rise in commodity prices. Many countries that had been running large current account and balance of payments deficits in the 1990s are now running surpluses. These surpluses are being freed up to fund infrastructure projects at a time when the financial crisis has meant that debt markets are less available to private investors.

In addition, in some countries, surpluses have been placed into Sovereign Wealth Funds with the explicit purpose of investing across a spectrum of assets in such a way that they will improve – and then sustain – a better quality of life for citizens of these countries. Infrastructure investment is a core consideration for these funds, helping governments to deliver the much-needed improvement in services.

## UPGRADING WHAT'S THERE ALREADY

While emerging markets must build out their core infrastructure from scratch, in the developed world, much of the infrastructure in place has been there for decades and, sometimes, more than a century. This infrastructure is now ageing and in need of replacement.

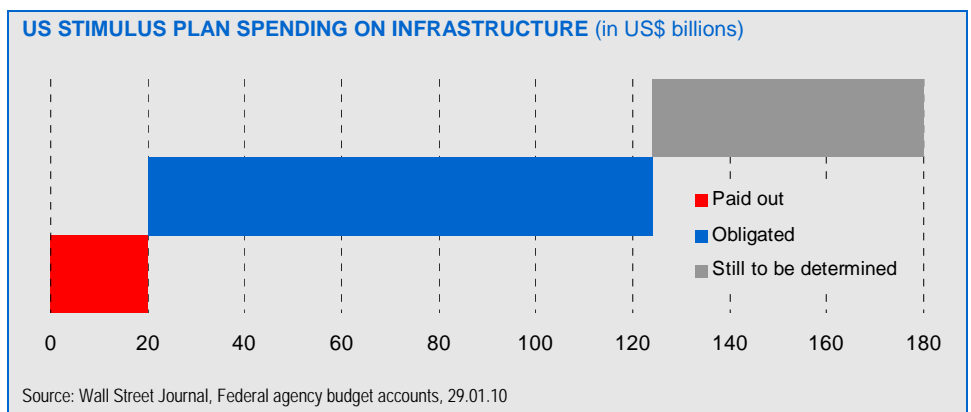
To remain competitive in a world that is increasingly influenced by the economic might of the developing world, the developed world must invest heavily in its infrastructure stock. Failure to make significant progress towards upgrading the basic infrastructure of the West could prove costly in terms of congestion, unreliable supply lines and growing environmental issues, not to mention the implications for standards of living and quality of life.

In response to this challenge, the OECD estimated in 2007 that investment in electricity transmission and distribution would double by 2030, as would road construction, while the water supply and treatment sector would see investment rise by almost 50%<sup>5</sup>.

However, the global recession of the last two years brought with it plans for massive stimulus injections for the economy, much of which was directed at rebuilding that infrastructure much sooner than the OECD may have expected. Roads, renewable power and rail projects will see major investment in the months and years ahead.

*"We will build the roads and bridges, the electric grids and digital lines that feed our commerce and bind us together."*

So said President Obama in his inaugural address in January 2009. He went on to commit around a third of his US\$825 billion stimulus package to new infrastructure projects, including US\$150 billion to be spent over the next ten years on clean energies. But more than a year later, much of the investment has still to be made. That leaves private industry ample opportunity to become involved through public-private sector finance initiatives.



*"One of my highest conviction ideas this year stems from the lagged impact of the stimulus programme. In the US, only a fraction of the stimulus spending outlined by President Obama back in January 2009 has actually hit the economy. The stimulus will likely be spent towards the end of the year and should be positive for construction, transportation, energy and infrastructure stocks."*

## Amit Lodha, Portfolio Manager

But opportunities exist beyond the bounds of the stimulus plan. A 2008 report by the Battle Group suggests that upgrading the US power grid alone would cost in excess of US\$880 billion<sup>11</sup>. With that grid already in private hands, investors will undoubtedly have a role to play – and should be well rewarded in the process through generous regulated returns.

On the other side of the Atlantic, a forecast from the International Energy Agency suggests it will cost the EU at least US\$650 billion to upgrade Europe's power grid<sup>11</sup>. Again, both public and private money will have a role to play. Europe also has to invest to achieve greater energy independence. That will come through investment in its gas and electricity connections and in renewable energy sources.

Investment in green technologies will be a particular focus for many developed world countries as they try to reduce their carbon footprint and meet new emissions targets. It's an area that's ripe for private investment alongside the subsidies and incentives of government-sponsored schemes.

## A PUBLIC-PRIVATE AFFAIR

As we have said many times already, the need for such massive investment is beyond the reach of government alone. The private sector has the opportunity to play a significant role. Across the world, a large proportion of infrastructure is already in private hands. Since the 1980s, more than US\$1 trillion of assets have been privatised in OECD countries<sup>4</sup>. The telecoms sector leads in this respect but power generation and railways are also to be found in the private sector in a growing number of countries. It is likely that more private money will flow into these activities as emerging market countries embrace the idea of private ownership of their national infrastructure. Already, the private sector supplies 20-25% of infrastructure financing in the developing world<sup>12</sup>.

A multitude of private companies will be well-placed to benefit from the increasing demand for new infrastructure build or infrastructure management and ownership. Developed market capital goods providers (like Faiveley) and contractors are tapping into the opportunity to bring their expertise to the developing world (while continuing to find demand for replacement infrastructure in developed markets). The surge in new business that they are seeing from emerging markets is likely to be sustained for many more years.

Meanwhile, new home-grown champions are also forming in the emerging markets. Emerging market private sector firms are diversifying into infrastructure provision or, in some cases, ownership. These companies, with their local connections and understanding, are becoming meaningful competitors and/ or partners to the developed market players.

## CREATIVE FINANCE

The vast needs for infrastructure spending and the growing private financing needs of the infrastructure sector could lead to the expansion of, and innovation in, the local capital markets of both the developed and developing world. Domestic debt markets, in particular, play a key role in fund raising efforts. Bond markets are well suited to the regular cash flows from roads, utilities, water systems, airports, and other properties.

The credit crisis saw bond financing become more difficult but now, with markets and economies recovering, that may begin to change. Despite economic and financial pressures, most available evidence suggests that infrastructure investment remains a viable long-term proposition, still providing investors with opportunities to directly invest in lower-risk asset-backed enterprises while, at the same time, meeting increasing global infrastructure investment needs. The lead-participation of governments through the stimulus programmes provides much-needed reassurance that projects have the requisite backing and impetus to succeed.

## CONCLUSION

A country's economic goals are often intertwined with the path to urbanisation. The great centres of civilisation, commerce and administration have been urban – from ancient Rome and Constantinople to London, New York and Tokyo today. The opportunities to be found in cities acknowledges their role in generating demand growth, industrial activity, real estate development and retailing but also in their need for more robust infrastructure and unique financing.

The benefits of urbanisation critically depend on having the infrastructure in place to house, educate and transport the masses. The emerging markets require these basics to be put in place. Investment is required in water supply, sewerage, sanitation, urban transportation, telecoms, power, roads, rail and airports. In the developed world, these networks are in place but are creaking through a combination of old age and greater demands from a still-growing population.

As governments invite assistance from the private sector to meet these demands, the sectors which stand to gain most include construction, materials, capital goods and transportation – and, of course, finance. The opportunities, however, will be much broader in time.

An investment in the urban age is an investment in the future of the majority of the world's people and an investment in the future growth of its economy. It's an opportunity like no other.

Sources:

1. "Preparing for China's urban billion", McKinsey Global Institute, March 2009
2. "Rethinking Urbanisation", Michaels, Rauch, Redding, January 2009
3. "World Urbanisation Prospects", United Nations, 2008
4. Fidelity estimates, April 2010
5. "Infrastructure to 2030: Mapping Policy for Electricity, Water and Transport", OECD, 2007
6. "Architecture & Urban Planning in China", October 2009
7. CIBC World Markets, February 2009
8. "The World Development Report 1994: Infrastructure for Development", World Bank, 1994
9. Credit Suisse, March 2010
10. Fidelity estimates, July 2009
11. Money Morning, February 2009
12. Goldman Sachs, April 2008



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