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How Asian cities can survive... and even thrive

The good news is that Asia's city planners are leading the world in implementing smart solutions to sustainability challenges. BY MIN LAN TAN

SIA's economic boom has occurred alongside one of the greatest rural-to-urban migrations in human history. Today, the region is home to 16 of the world's 28 megacities with a population in excess of 10 million people. According to the United Nations, Asia's cumulative population will double by 2030, from its 2010 total. And as our cities grow, commute time lengthens and the impact on our environment worsens, leading to a degradation of the quality of city life which we dearly treasure.

If Asian cities, Singapore included, are to continue thriving through the coming decades and beyond, we must navigate the disruptive forces of technological advancement, social change and resource constraints. That is, we have to become a whole lot "smarter".

What are smart cities?

There's no universal definition of a "smart city".

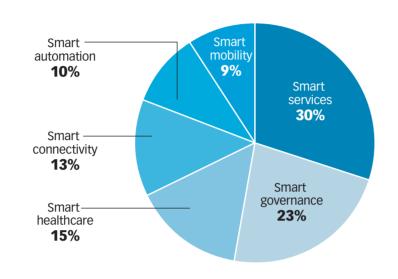
To us, a smart city is one that harnesses the tools of the Fourth Industrial Revolution to optimise economic productivity and life satisfaction in a sustainable way.

"Smart" is more than the clever deployment of automation, connectivity and digitalisation to connect city dwellers with essential goods and services more efficiently. It is also about using new innovations to support growing urbanisation in ways that do not cause a strain on scarce environmental and human resources – even delivering positive social and environmental impact.

We see "smart cities" comprising six major building blocks – smart conhealth and smart mobility. The rollout of 5G networks that permit cutting-edge connectivity at up to 100 Another is telemedicine that provides until 2025.

A US\$800b opportunity by 2025

The smart city addressable market



Note: Forecast market size as of February 2019

Source: Frost & Sullivan, Bloomberg Intelligence, UBS estimates, as of Feb 2019

the convenience and efficiency of remote access to healthcare – especially Asia's economic success has come at useful given the constraints in access- a huge cost of environmental polluing a limited number of general practitioners. A third example is autonomous transport solutions that streamline the daily commute, such as last year's trials of on-demand autonomous shuttles and hands-free ticketing technology in Singapore.

Why Asia needs smart cities more than most

In Asia, 2.7 billion people will move into cities over the next 30 years, the UN estimates, with three quarters of choices mean that buildings still acthe continent's total population living in urban areas, up from half today. If urban migration is to continue yieldnectivity, smart governance, smart ing economic and social benefits as in services, smart automation, smart the past, infrastructure spending The good news is that Asia's city planmust rise sharply, just to keep pace. At today's rate of capital expenditure, the funding gap for the region stands times faster than 4G is a key example. at a staggering US\$2.2 trillion a year

The inconvenient truth is that tion – we are home to 18 of the world's 20 most polluted cities, according to the 2018 World Air Quality

By 2030, Asia is expected to account for a third of the world's transport-related carbon dioxide emissions, as private vehicle ownership is currently doubling every five years in the region's cities. Even in the leading city states such as Singapore and Hong Kong, inefficient architectural count for 90 per cent of national electricity use

Asia is leading the adoption

ners are now leading the world in implementing smart solutions to these sustainability challenges. We expect this trailblazing trend to continue.

smart cities at different stages of development with an estimated market size of 650 billion yuan (S\$129.5 billion). Beijing is driving deeper integration between artificial intelligence (AI) and daily lives, with the goal of building a data-driven smart eco-

In Singapore, the "Smart Nation" initiative launched in 2014 has pushed it to the forefront, topping global spending on smart city infrastructure and technologies. And this capital commitment is bearing fruit - ments. investment in smartphone and

Where are the investment opportunities?

Smart cities aren't just an appealing prospect for their inhabitants -

present and future. We estimate that smart cities busi-In 2017, China alone boasted 500 ness and solutions will swell to a

US\$800 billion investible market by

Most of the investible opportunities lie in smart service and smart governance (See chart) - examples include companies that enable widespread implementation of smart energy grids, digital repositories that allow governments to safely and efficiently store records such as land titles and property rights in a "digital vault", or businesses that provide big data and AI-powered tools to govern-

Thematically, companies exposed fibre-to-home infrastructures has to growth segments such as fintech, pushed Singapore to second in the 5G, smart mobility (electric vehicles IMD World Digital Competitiveness and autonomous driving) and healthtech are in a sweet spot thanks to strong demand and regulatory sup-

> On the downside, those engaged in antiquated urban operating systems are at risk of becoming out-

The case is clear that growing "smarter" is key to the future sustainability of our region's great cities. Asia's economic growth miracle can continue with the correct, deliberate investment in technology, talent and infrastructure.

For investors, the opportunities unleashed by this wave of innovation should be an attractive addition to a well-diversified investment portfolio



■ The writer is head chief investment office APAC, UBS Global Wealth Management.

Diversifying your portfolio with private equity

Investments in private equity should be globally diversified across funds, strategies and most importantly: vintages. BY SALMAN SHAH AND CHEN LIANGZI

FTER a turbulent year in 2018, many investors are looking for ways to reduce risk and diversify their portfolios. Adding alternative investments such as private equity is one of the ways to do this.

Alternative investments are any asset other than stocks, bonds, and cash, and which can act as building blocks to diversifying portfolios. Hedge funds, commodities, and real estate are all considered part of the alternative investments universe, not to mention private equity.

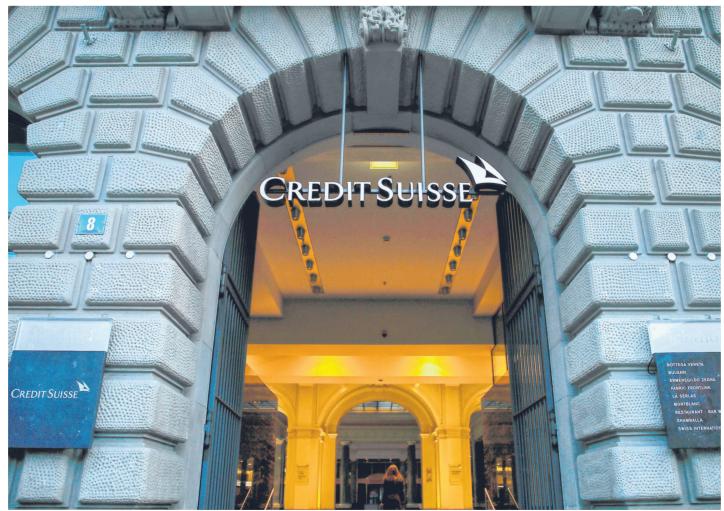
Private equity funds take equity stakes in companies or assets that are not publicly traded and "work" the asset in order to increase its value to be able to sell it again at a higher price. Investors, mostly institutional or accredited investors and high-net-worth individuals, can put their money to work in a different way, as an alternative to buying stocks in companies that are listed on public markets.

The investments can be used to finance startups (venture capital), inject working capital into a growing company (growth capital), acquire a mature company for growth or reshaping (buy-out), or purchase assets or loans that are in distress and need refinancing (special situations/distressed debt).

The potential for generating returns

Private equity tends to outperform public markets. This is driven in particular by the fact that these assets are privately held, allowing managers more time and control to implement value-creation strategies.

An important factor to investors in creating excess return is the selection of best-in-class, hard-to-access fund managers. This, however, requires a disciplined due diligence process and



forming funds. Going one step further, the various strategies under private equity can each present interesting opportunities as well as risk re-

The growing capital allocation into this asset class has enabled the growth of many other strategies on top of the traditional buyout and growth ones. In addition to the traditional buyout strategy, we at Credit Suisse have paid particular attention to Secondaries, Infrastructure as well

ward profiles.

access to a broad network of high-per- as Special Situations strategies too, as a way to diversify our clients' exposure to private equity.

> There is no shortage of experienced managers in each of these strategy spaces, and we continuously are looking for good solutions to complement the clients' portfolios, either in a single fund format or portfolio ap-

Investing in private equity

Investments in private equity should be globally diversified across funds, strategies and most importantly: vintages. The latter refers to the year in which the fund makes the first invest-

Unlike investments in traditional asset classes, the commitment in private equity is gradually drawn over the investment period (anywhere between three and five years) and does not require an upfront investment of the entire amount.

Over time, investors should aim to build a self-financing private equity portfolio that has sufficient distributions to cover future capital calls.

This very concept is behind the creation of an exclusive annual private equity programme at Credit Suisse that allows clients to gain ex-

posure to the private equity space

through a basket of funds. This programme invests in several underlying funds diversified across strategy, geography and vintage and puts together a portfolio of well-performing managers.

Each of the managers tap the respective strategies of private equity, and can offer clients a comprehens-

ive solution without them going through the often tedious process of due diligence themselves. By making it an annual series, the programme is not only able to pace clients' commitment into this asset class, but can also achieve better cashflow over

A common barrier to enter this asset class, given the scale of the investment and funds, is the relatively large commitment size required from investors. While most institutional investors would have no difficulty accessing funds directly, the usual commitment size required could potentially pose a barrier for private clients to participate in.

For this, we have put in place the

feeder structure where the minimum

viction investment ideas that can gen-

erate decent risk-adjusted returns.

We believe that strategies in private

assets, especially private equity,

present good opportunities for in-

vestors who are keen to seek diversi-

fication from the public markets.

private equity commitment size is lowered for our programme clients, usually to a more digestible invests in several underlying funds **Opportunities in the** diversified across private equity space strategy, geography and In the current market environment, it vintage and puts is critical for us to continue to closely together a engage with our clients to help them portfolio of navigate these markets with high con-

managers. BLOOMBERG

well-performing

Credit Suisse's

exclusive annual





alternative fund solutions Singapore; while Chen Liangzi is product Banking Asia Pacific, Credit Suisse

■ Salman Shah (left) is head of specialist; both are from Private