

MAIN THEMES

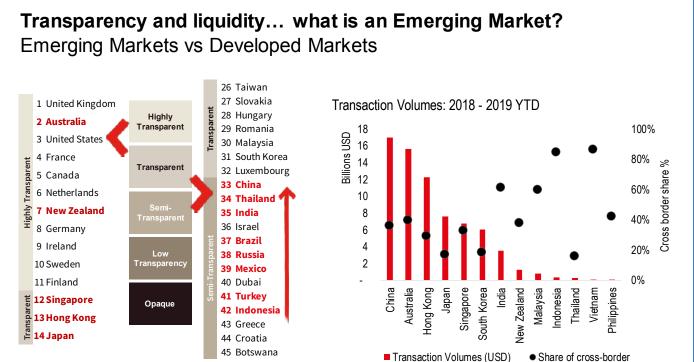
BLURRED LINES: The traditional divide between emerging and developed economies in Asia is weakening as markets in the region's emerging cities become deeper and more liquid, and political upheaval in the West makes them less attractive as investment destinations. Meanwhile, emerging asset classes may present an opportunity to reap developingmarket returns in mature cities.

POWER HOUSE: Changes in how and where people live are driving the evolution of housing markets worldwide, with the most dramatic changes taking place in Asia. In the future, technology will be a key driver of investment in the residential sector.

CHINA CRISIS? The trade war between the United States and China is creating both risk and opportunity, but the currently frosty relationship is likely to have longer-term negative effects. Nonetheless, China's emergence as a tech giant will serve to drive new investment opportunities.

DEVELOPING LOGISTICS:

The logistics sector remains a target of investors in the Asia Pacific, and its next tech-led iteration could be a dramatic departure: look out for drone deliveries!



As Asia's real estate markets continue to develop rapidly, the line between mature and emerging markets is becoming increasingly blurred, making it ever more important for investors to focus on cities. As one delegate put it, "There's a new language and new vocabulary with regard to emerging sectors and emerging asset classes."

Traditionally, a key factor that defines a mature market is transparency. In the Asia Pacific region, the JLL Transparency Index has consistently placed Australia and New Zealand at the top of the tree in this regard, with the mature markets of Singapore, Hong Kong, and Japan scoring slightly lower than Australasian, North American,

and western European destinations.

Though China might lag all these markets in terms of transparency, its first-tier cities now reached the same depth and liquidity as their developedmarket counterparts. Indeed, in the first quarter of this year, JLL data ranked Shanghai as

the second-largest real estate investment market in the world. behind London and ahead of both New York City and Paris. Beijing and Shenzhen also made it into the top 10.

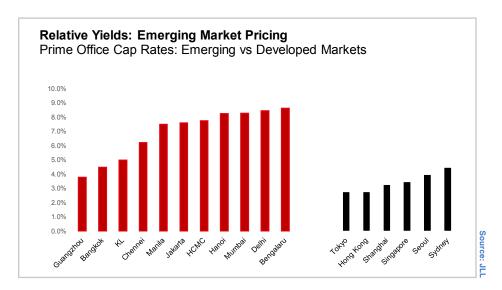
That the biggest Mainland China cities are now regarded as top-tier investment destinations was underlined when forum delegates were asked to discuss the nature of emerging and developed markets and identify differentiating factors that global investors look for when placing capital in any given market. These included: the economic and demographic outlook, infrastructure, government planning, transparency, rule of law, predictability, social stability, and domestic liquidity. In Asia, forum participants said these factors could be most easily found in Singapore, Hong Kong, Australia, Japan, South Korea, and - crucially - China.

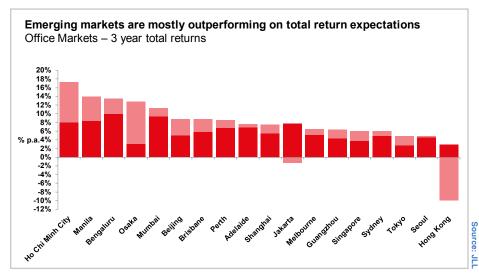
Participants agreed that India remains something of an outlier in that it lacks many of the differentiating factors global investors generally look for. Nonetheless, it has become too important to ignore. In this respect, India is similar to China a decade ago, when investment risks were outweighed by growth potential. As one investment broker commented, "In Beijing 20-odd years ago, investors would factor in currency and country risk to their required yield calculations, so yields at that time were 9 to 10 per cent. Today, prime assets are trading at 3.5 to 4 per cent."

Meanwhile, smaller Southeast Asian developing markets remain at an earlier stage of

development, as shown by the preponderance of foreign capital in major real estate transactions. Returns are unsurprisingly higher in such markets, although there remains a shortage of investment opportunities and risks are elevated. Vietnam, in particular, was singled out by

a number of participants, with several suggesting it might be a beneficiary of the U.S.-China trade war as both domestic and international manufacturers look for locations with cheaper labour, strong demographics, and a lower risk profile.





"Developed markets are becoming more like emerging markets, and emerging markets are becoming more like developed markets," said one investment manager. "Politics, particularly in the U.S. and Europe, is getting more polarised and policymaking is getting more extreme, so it's becoming harder to differentiate between the developed and emerging markets in terms of the certainty of your operating environment. The difference today comes down much more to the depth of the market and liquidity. We feel people should be looking more at gateway cities with good infrastructure as opposed to trying to look at things on a country level."

EMERGING ASSET CLASSES

The forum also considered the growing appeal of alternative real estate sectors, such as data centres, student housing, and coworking facilities. Participants tended to agree that, in core markets, alternative assets classes now offer higher returns, whereas in emerging markets, core assets such as central business district offices offer a lower risk/return profile.

Beyond that, there was a clear expectation that real estate investors will allocate capital to alternative asset class portfolios on the basis of two key factors: scale and management expertise. As one investment manager noted, "Across the board, people are being pushed into higher-risk investments for their returns, leading to more operationally intense investments. So we need

to focus much more on superior operations and management. How tight can your turn the screws?" In this regard, Asia Pacific markets often lag their counterparts in the West. As the investor observed: "In many markets around Asia, we just don't have the depth of real estate skills that we do in more developed economies."

The co-living and coworking sectors, meanwhile, continue to be viewed with a measure of scepticism. One described coworking as "just a behaviour", while another questioned whether co-living was "just a phase while assets are expensive". For coworking, the difficulty for operators is to match their long-term fixed costs with short-term revenues. The example of serviced office group Regus, forced to seek Chapter

11 bankruptcy protection in the United States after the dot-com crash in 2000, made several participants cautious about coworking operators' claims to be recession-proof. However, there was agreement that demand for flexible space would remain, regardless of what it is called.

Opportunities in Living – emerging to traditional? Traditional Student Multifamily Traditional Serviced Co-living Senior Living/ Housing **Aged Care** Residential Hotel Apartment 1 ve **Hong Kong** India Australia China Singapore Japan Several operators 3 startups focus on Cross over of student accom Experimentation stage; an Dozen operators with Lagging the trend; Singaporeconvert apartments and hotels into co-living operating out of Gurgaon, and 2 and co -living with Ascott operator in Melbourne aims to bring together young creatives in a rooms 15 to 60 sqm 20 based Hmlet has raised US\$1.5M to grow co-living CapitaLand's wholly owned serviced residence arm, unveiling co-living experiment dormitory rooms based out of Chinese cities the lyf brand last year with Demand for expansion of Bengaluru Rise of private rented Existing Japan multi family Large residential development sector Singapore Management University to field test co-living purpose built student housing sector backed by sector - strong investor Interest in developing a multi China government for sale new homes concepts family sector

FIVE MAJOR HOUSING MARKET TRENDS



CITIES OVER COUNTRIES:

People continue to migrate to cities, increasing urban density and the need for compact living guarters. By 2030, the number of people living in cities with more than 1 million residents will increase by more than 20 per cent to 3.8 billion.



DEMOGRAPHIC CHANGES AND THE SHARING ECONOMY:

Family sizes are shrinking and the world's population is ageing, increasing interest in smaller living spaces, often in developments with shared facilities. By 2030, 43 percent of households worldwide will consist of just one or two people, increasing demand for smaller living quarters.



GREENER HOUSING:

Consumer demand for sustainability, together with regulatory restrictions on energy consumption, are spurring production of more ecofriendly housing options. In 2018, 88 countries had guidelines for building-related energy consumption or greenhouse gas emissions, up from 38 in 1994.



AFFORDABILITY:

Rising asset prices caused by years of ultra-low interest rates have priced many aspiring buyers out of the residential markets, resulting in increased demand for rental properties. At the same time, however, rent increases continue to outstrip wages, creating a global shortage of affordable housing. Cities are trying to boost affordability through density, modern building technologies, and infill development.



TECHNOLOGY DISRUPTERS:

What people look for in their homes is changing. More than half the world's population now has internet access, while in developed countries, some 65 per cent of millennials and generation Z members interact more via digital devices than they do in person. Such trends are increasing consumer interest in remote work, home office, smart home, and shared living facilities.

EVOLUTION AND REVOLUTION IN RESIDENTIAL

Another focus of the forum was the impact of demographics and technology, which have today become major changes in residential real estate markets.

Multifamily residential has long been an important sector for real estate investors in North America as well as a number of European markets, but remains relatively underdeveloped in the Asia Pacific region, with the notable exception of Japan. This is unlikely to change soon given the low yields associated with residential assets in the region. In China, however, the emerging multifamily sector should be a buy, one China investor said, because it is "government led, and it always pays to be on the right side of change in China". It was suggested, however, that the government might have to make land available at a lower cost to encourage investment in for-rent residential assets given the enduring problem of low returns.

One of the biggest challenges across the Asia Pacific in both social and economic terms remains housing affordability for members of the younger generation, who continue to flock to the cities in waves of urbanisation. "There is new demand, particularly in that more mobile part of the population, the younger generation, which also suffers from the affordability gap," one investor noted. "So meeting that demand is probably key in the medium term."

Another forum participant pointed out that land accounts for 70 per cent of the cost of a home in Asia's crowded cities, so addressing high land prices is crucial for governments, though this also creates the danger that landowners may be disenfranchised in a rush to make housing cheaper.

A whole suite of residential real estate products now exists for investors to choose from – including multifamily, co-living, senior housing, and serviced apartments – each offering a different risk/return profile. In China, for example, the government's backing for the rental housing sector has supported the reemergence of the landlord class, with international capital now involved in a number of prominent rental platforms

Forum participants agreed that real estate as a sector has lagged others when it comes to willingness to adopt new technology. However, with innovation rapidly changing the way housing is built, many developers are now starting to integrate new types of tech into their construction operations — including in particular robotics,

drones, and building information modelling (BIM) systems.
"Perhaps technology can be used more in the design as well as construction phases," one participant said. The question will be: "How do we embed technology to be able to take four to six months off the time to bring residential real estate to market?"

Increasingly, residential developers are now using factory-prefabricated building components to improve productivity and reduce costs. In India, for example, where the demand for affordable housing is enormous, construction companies are using prefabrication as a way to combat high prices for raw materials, which are today up to three times what they were in 2005.



CHINA: OPPORTUNITIES AND RISKS

It seems a characteristic of China that investors are always cautious about the short-term but confident that long-term development and growth will shine through. This was certainly the case at the forum, where concerns over short-term factors not limited to the China-U.S. trade war – were balanced by a positive longer-term outlook.

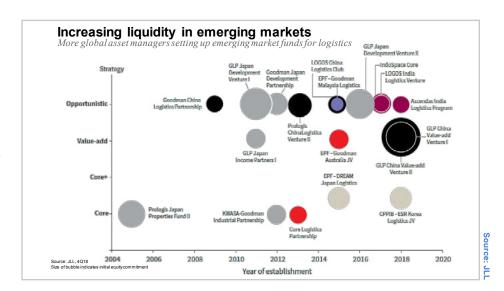
The first half of 2019 has been characterised by lack of confidence amongst Chinese companies – even the emerging tech giants responsible for millions of square metres of office take-up last year. "What we have seen, including in some of our own portfolios, is that office leasing demand was pretty weak," one China investor said.

Nonetheless, the tech sector is seen as a long-term positive for China, and in particular the "innovation cities" such as Shenzhen and Hangzhou (home to companies such as Tencent and Alibaba) that are seeing huge leasing demand. Venture capital investment in some of these cities is higher than in the United States.

The retail sector is another cause for short-term concern: retail sales keep rising, but the component of online sales is rising faster. One investor suggested that sales at major malls were flat in the first quarter of 2019, which was described as "scary" in the context of 9 per cent retail sales growth overall last year. Forum participants thought the retail fallout would be worst for lower-grade shopping centres, in line with the experience in the United States, where "25-year-old malls are basically doomed", as one investor put it. However, malls that have a community element and a strong food and beverage or entertainment offering should continue to thrive.

A number of private equity investors expect opportunities to appear from China's distressed assets, as well as mainland "capital dislocations", noting a

steady stream of repossessions by domestic banks. One China investor joked that investors should be thankful to U.S. President Donald Trump because the trade war's effect on the Chinese economy was forcing Beijing to boost liquidity and accelerate plans to increase domestic consumption.



LOGISTICS AND DATA CENTRES

The logistics sector has grown in popularity over recent years, a trend that shows no sign of changing. Logistics facilities in China's first-tier cities are a particular favourite, but there has also recently been a wave of platform investments in emerging markets such as India and Vietnam.

Online shopping has been a major driver of this trend, and with Chinese shoppers now increasingly seeking sameday delivery, a new category of logistics infrastructure has emerged as online sellers build facilities to offer last-mile services.

In another tech-driven development, participants suggested delivery drones could soon be part of the picture. As one investor asked, "If you are building an office building in the future, do you have a portal or a window or a door that will allow drone deliveries someplace where a drone can drop the package off securely?" It was suggested that because buildings with car-parking facilities will need less such space in the age of sharing and autonomous vehicles, this could be repurposed for use by drones. In western China, drone airfields are already

being developed for logistics companies that need to deliver to mountainous regions. This requires large drones that can carry a tonne of cargo, but which also require a landing strip like that used by a light airplane.

Data centres have also become increasingly interesting for real estate investors, though some participants still think they are better classed as infrastructure than as real estate. The crucial component for any data centre

is access to power. "Data centres are still great business if you want to invest," one investor said. "There is definitely more demand than supply, but it is limited by the amount of power that's available."

That appetite is only going to grow as 5G networks are rolled out, because they will require more power than all previous generations of mobile networks combined. The investor added: "I don't think right now there is enough attention being paid to

how much power we're going to need to make for our future societies and the future dreams that everybody is talking about work."

Another characteristic of 5G is the need for distributed data centres to ensure lower latency and higher speed, which participants suggested could see the development of mini data centres in cities.









PARTICIPANTS

FORUM COCHAIRS

Tim Wang

Head of Real Estate China and Senior Managing Director, Blackstone, Hong Kong

Tom Arnold

Global Head of Real Estate, Abu Dhabi Investment Authority, Abu Dhabi

ATTENDEES

Anthony Bertoldi

Senior Portfolio Manager – Asia Pacific, Abu Dhabi Investment Authority, UAE

Harry Ip

Senior Portfolio Manager, Abu Dhabi Investment Authority, UAE

Brian Chinappi

Partner, Head of Asia Real Estate, Actis, Hong Kong

François Trausch

Chief Executive Officer, Allianz Real Estate, Germany

Rushabh Desai

Head of Real Estate, APAC, Allianz Real Estate, Singapore

Jon Tanaka

Managing Director, Angelo Gordon International LLC, Japan

Graeme Torre

Head of Non-Listed Real Estate, Asia, APG, Hong Kong

Laurent Jacquemin

Head of Asia-Pacific, Real Assets, AXA IM -Real Assets, Tokyo

Charles Lam

Managing Director - Real Estate, Baring Private Equity Asia Pte. Ltd., Hong Kong

Owen Thomas

Chief Executive Officer, Boston Properties, U.S.

Stuart Mercier

Senior Vice President and Head of Asia (Real Estate), Brookfield Asset Management, China

Puah Tze Shyang

CIO, CapitaLand Asia, Singapore

Lynette Leong

Chief Sustainability Officer, CapitaLand Group, Singapore

Alex Crossing

Region Head Asia Pacific, CBRE Global Investment Partners, Australia

Carrie Liu

Managing Director, China Life, China

Managing Director, China Life, China

Christopher Wu

Managing Director - Investment & Development, Chongbang Development Group, China

Jimmy Phua

Managing Director, Head of Real Estate Investments Asia, CPP Investment Board Asia Inc., Hong Kong

Peter Ballon

Managing Director & Global Head of Real Estate Investments, CPPIB, Canada

Rov March

Chief Executive Officer. Eastdil Secured. U.S.

Alex Gong

Executive Director and Head of Real Estate, Fosun Group, China

Matthew Guo

Vice President, Fosun Hive, China

Daniel Cashdan

President, HFF Securities, U.S.

James Morrison

Senior Managing Director, Hines, China

James Wond

Executive Director, Hon Kwok Land Investment Co., Ltd, Hong Kong

Junho Pok

Managing Director, IGIS Asset Management- South Korea, South Korea

Richard Bloxam

Global CEO, Capital Markets, JLL, Singapore

Stuart Crow

CEO, Capital Markets Asia Pacific, JLL, Singapore

Hei Ming Cheng

CEO, Kailong Investment, China

Ralph Rosenberg

Global Head of Real Estate, KKR, New York

John Pattar

CEO Asia, KKR Asia Limited, Hong Kong

Christine Chan

Chief Investment Officer (China), Link Asset Management, Hong Kong

Chiang Ling Ng

CEO, Asia Pacific, M&G, Singapore

Danny Krefman

Principal, M3 Capital Partners (HK) Limited, Hong Kong

Susan MacDonald

Head of Retail, Mirvac, Australia

Ko lwahori

Deputy General Manager, MITSUBISHI ESTATE CO., LTD., Japan

Louise Kavanagh

Managing Director, Nuveen Real Estate, Hong Kong

Ariel Shtarkman

Founder, Orca Capital, Hong Kong

Benett Theseira

Head of Asia Pacific, PGIM Real Estate, Singapore

Wei Wand

Managing Director, Ping An Group, China

Matthew Strotton

Global Director, Capital, QIC, Australia

Andrew Heithersay

Managing Director, Capital, SC Capital Partners, Singapore

Vincent Lo

Chairman, Shui On Holdings Ltd., Hong

Jürgen Fenk

CEO, SIGNA Holding GmbH, Germany

Alison Cooke

Managing Director, Starr International Investment Advisors (Asia) Limited, Hong

Gwendel Tung

Managing Director, Temasek Holdings Pte Ltd, Singapore

Simon Treacy

President, Hawaii, The Howard Hughes Corporation, U.S.

Wayne Ratkovich

President and CEO, The Ratkovich Company, U.S.

Thomas Toomey

President and CEO, UDR, Inc., U.S.

OBSERVERS

Gwyneth Cote

President, Americas, Urban Land Institute

Phillip Horne

President and Chief Advancement Officer, ULI Foundation, Urban Land Institute

Mike Terseck

CFO, Urban Land Institute

Cheryl Cummins

Global Governance Officer, Executive Office, Urban Land Institute

URBAN LAND INSTITUTE LEADERSHIP

Ed Walter

ULI Global CEO, US

Nicholas Brooke

ULI Asia Pacific Chairman

John P. Fitzgerald

Chief Executive Officer *ULI Asia Pacific*

Pauline Oh

Senior Vice President, ULI Asia Pacific

May Chow

Senior Vice President, Marketing and Communications *ULI Asia Pacific*

Colin Galloway

Vice President, Content *ULI Asia Pacific*

Project Staff

Mark Cooper

Author

James A. Mulligan

Senior Editor

Lawreane Jamie De los Santos

Lead Graphic Designer *ULI Asia Pacific*

