

Emerging Trends in Real Estate[®]

Asia Pacific 2017





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A publication from:





Emerging Trends in Real Estate®

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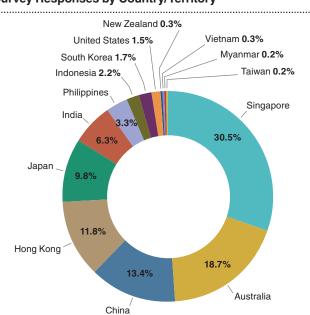
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Executive Summary

For the last several years, real estate markets across the Asia Pacific have been shaped by a number of external forces that are continuing to drive capital toward particular types of asset classes and geographies. On the one hand, as bond rates sink ever lower, real estate becomes increasingly attractive as a means to deliver returns that fixed-income markets can no longer deliver, driving up prices of core assets and creating intense competition in what is now a crowded field. On the other, fund managers with a mandate to deliver a certain level of return are being forced into uncharted waters as they seek out yield.

The main takeaways from this year's *Emerging Trends* report include the following:

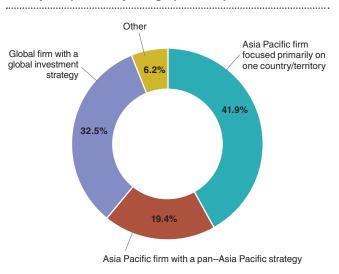
- Low transaction volumes in the first six months of 2016 . reflect a shortage of available assets in major markets, in particular Tokyo, as owners opt instead to refinance properties at lower rates instead of selling them. In general, investors are reporting fewer overall transactions but bigger ticket sizes.
- At the same time, yields continue to fall, although at a ۲ slower rate. Looking forward, while most investors see potential for some further compression-mainly as a result of the sheer weight of new capital being pointed at the sector-the trend may be reaching its limit, especially given weak rental growth prospects in most regional markets (Australia excepted).
- Core assets continue to be the favored asset class, • although product is becoming increasingly hard to source. One way around this is for investors to assume development risk by pursuing "build-to-core" projects. Although these are not traditionally considered a core strategy, many core investors are now willing to adopt this approach, especially when it involves buyers such as insurance companies that are likely to be long-term holders of the end product.
- Investors with a mandate for higher return strategies . continue to migrate up the risk curve, both in terms of sectors—pursuing niche strategies such as sub-logistics facilities or data centers-and geographically, with emerging markets such as India drawing increasing attention.
- Investments in metropolitan areas have become a popular . theme given ongoing trends of urbanization, land shortages in city centers, and low returns from central business district projects. Cities across the Asia Pacific including Sydney, Shanghai, Mumbai, and Jakarta are engaged in major transportation construction projects that link suburbs or satellite towns to city centers.
- In line with markets in the West, Asia is embracing the • shared economy. The last 12 months have seen huge growth in the adoption of shared workspaces, either as standalone businesses that rent open-plan office facilities



Survey Responses by Country/Territory

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

Survey Responses by Geographic Scope of Firm



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

to individual or corporate users, or on a corporate basis, as large companies scrap conventional office layouts and embrace hot-desking and collaborative working environments. On the residential side, shared spaces are also becoming more prominent as rising prices continue to shrink apartment footprints.

In terms of capital flows, Asia has seen a continuation of the huge outbound movements of cash that began in earnest

about three years ago. Some of this is dispatched to other countries in the Asia Pacific (in particular Australia), but most of it is finding its way to the West, especially the United States. Large amounts also continue to migrate to London, despite Brexit.

The main reason for surging outflows is the need to find an investment home for the vast reserves of capital held by local insurance companies, pension funds, and sovereign wealth entities. Given the size of their reserves and the extent to which they remain underallocated to real estate, Asian capital will continue to migrate abroad in coming years in quantities that will be large enough to change the dynamics of real estate investment globally. Institutional capital is now being augmented by cash from private sources—either domestic developers (in particular from China) or corporate and high-net-worth players.

While the lion's share of these outflows still originates in China (despite government efforts to slow it down), Japanese institutions, which have currently some of the biggest stockpiles of capital in the world, are about to join the exodus. Fund managers reported some early activity by Japanese institutional capital in global real estate equities markets, primarily in the United States.

In the capital markets, meanwhile, regional banks continue to provide the majority of funding required by Asian real estate investors. There seems little change in banks' willingness to lend, although some movement around the margins has occurred, with Australia in particular seeing some tightening in local credit markets. That said, bond markets have continued to grow rapidly, especially in China, where local currency bonds have become a major funding channel for local developers, who have moved to refinance their debt portfolios to take advantage of the cheaper capital. Regional real estate investment trust (REIT) markets have continued to grind upward during the year, helped by falling base rates and growing consensus among investors that interest rates are unlikely to see significant upward momentum over the near-to-medium term. Recent progress has also been seen in some emerging markets as they move to establish their own REIT frameworks, particularly in India, where many investors are now anticipating the first REIT listings, possibly before the end of 2017.

This year's Investment Prospects survey shows a strong shift away from last year's favorites, which featured core markets in Japan and Australia, in favor of emerging-market destinations, including in particular India, Vietnam, and the Philippines.

This reflects investors' growing disenchantment over the prospects of sourcing available core assets in gateway cities, together with a pressing need to identify assets that will meet return expectations. However, while these markets undoubtedly offer opportunities that would provide the desired yields, the same old problems persist—most emerging-market cities have neither sufficient tenant demand for new product, nor a critical mass of investable assets to accommodate the volume of capital that investment funds have available to deploy.

Other major survey findings include steep declines in the popularity of gateway cities (with the exception of Shanghai, which has held its own). In particular, Singapore—an investor favorite just a few years ago—has sunk to near the bottom of the rankings as it struggles with overcapacity, falling demand, and a slump in its residential sector.

Meanwhile, ongoing structural shortages of modern logistics facilities continue to boost end-user demand throughout the Asia Pacific region, making it perhaps the most favored of all asset classes regionally.

Notice to Readers

A trends and forecast publication now in its 11th edition, *Emerging Trends in Real Estate® Asia Pacific* is one of the most highly regarded and widely read forecast reports in the real estate industry. *Emerging Trends in Real Estate® Asia Pacific 2017*, undertaken jointly by PwC and the Urban Land Institute, provides an outlook on real estate investment and development trends, real estate finance and capital markets, property sectors, metropolitan areas, and other real estate issues throughout the Asia Pacific region.

Emerging Trends in Real Estate® Asia Pacific 2017 reflects the views of individuals who completed surveys or were interviewed as a part of the research process for this report. The views expressed herein, including all comments appearing in quotes, are obtained exclusively from these surveys and interviewes and do not express the opinions of either PwC or ULI. Interviewees and survey participants represent a wide range of industry experts, including investors, fund managers, developers, property companies, lenders, brokers, advisers, and consultants. ULI and PwC researchers personally interviewed 94 individuals and survey responses were received from 604 individuals, whose company affiliations are broken down below.

Investment manager/adviser	21.8%
Real estate advisory or service firm	20.8%
Private property owner or developer	13.8%

Equity REIT or publicly listed real estate property company10.7%	
Homebuilder or residential land developer	
Private REIT or nontraded real estate property company 5.9%	
Institutional equity investor	
Bank lender2.4%	
Institutional lender 0.3%	
Other entities12.5%	

Throughout the publication, the views of interviewees and/or survey respondents have been presented as direct quotations from the participant without attribution to any particular participant. A list of the interview participants in this year's study who chose to be identified appears at the end of this report, but it should be noted that all interviewees are given the option to remain anonymous regarding their participation. In several cases, quotes contained herein were obtained from interviewees who are not listed. Readers are cautioned not to attempt to attribute any quote to a specific individual or company.

To all who helped, the Urban Land Institute and PwC extend sincere thanks for sharing valuable time and expertise. Without the involvement of these many individuals, this report would not have been possible.

Seeking Yield in a Yieldless World

"Rates are going to stay lower for longer, and whether you're institutional or high net worth or whatever, **YOUR reaction is the same**—either you don't do anything and hold on to the cash, or you bid up what you think is high-quality core and stick it in the drawer, or you say I'll put less money in the market and go high risk."

Real estate's appeal as an institutional asset class has never been based on its reputation as a flashy performer. Highly leveraged and structured deals aside, your staple prime office asset is normally seen as a stodgy offering with a saved-for-a-rainy-day flavor. But with sovereign bond yields across the world inching toward and sometimes below zero, fixed-income investors are casting an envious eye at the neighboring tables of their real estate peers. A menu of increasingly compressed cap rates may seem slim pickings to real estate professionals agonizing over risk-adjusted returns, but to bond traders contemplating a diet of NIRP (negativeinterest-rate policies), it has all the makings of a bounteous feast.

Such is the mentality these days in global capital markets, where pricing dynamics in any given asset class—and real estate in particular—are driven increasingly by powerful external forces that are hard to predict and even harder to control. And it applies with all the more force in Asia, where diners from the fixed-income table have been joined by an army of well-heeled local institutions bearing hefty checkbooks and an agenda to place cash in yield-driven investments sooner rather than later. Unsurprisingly, this wave of new capital is

2014	2015	1H 16	Metro area	Sales volume (US\$ millions)	YOY change
1	1	1	Tokyo		8,628 -52%
3	3	2	Hong Kong		6,822 17%
7	7	3	Singapore	4,194	35%
2	2	4	Sydney	2,996	-50%
5	5	5	Shanghai	2,421	-63%
4	4	6	Melbourne	1,830	-67%
6	6	7	Seoul	1,602	-17%
9	9	8	Osaka	1,385	-55%
10	10	9	Brisbane	1,198	-58%
68	68	10	Chongqing	1,064	816%
8	8	11	Beijing	1,050	-45%
11	11	12	Nanjing	824	-58%
19	19	13	Mumbai	818	182%
17	17	14	Perth	696	41%
12	12	15	Taipei	549	66%
38	38	16	Manila	496	99%
18	18	17	Fukuoka	458	12%
23	23	18	Kyushu	394	n/a
20	20	19	Kuala Lumpur	364	-53%
36	36	20	Shenzhen	302	9%

Exhibit 1-1 Most Active Asia Pacific Commercial Real Estate Markets, First Half 2016

Source: Real Capital Analytics.

having an impact on both pricing and availability of those stodgy core assets, and indeed just about everything else.

Nor is this simply a story about yield. In 2016, real estate has also been drawing attention because of its reputation as a safe haven. As one fund manager interviewed for this report observed: "There's a general air of unease at the moment. Political risks are at a post–Cold War high. You have economic risk—headline figures look pretty good, but income inequality is going ballistic and you're seeing no employment or wage growth. Finally, you have markets that in most cases are at precrisis highs. Put all that together, and while nothing terrible has happened it feels like we're really reaching the top of most things."

This confluence of cross currents between risk and profit is dividing investors for the most part into two camps. First, those with a safety-driven mentality, who look for assets that will serve as stores of long-term value, primarily in gateway cities such as Tokyo and Sydney. Second, those aiming to outperform in a market already priced to perfection—"seeking yield in a yieldless world," as one interviewee put it.

Transactions Sink

Logically, the currently high demand for assets should lead to increased deal flow. But Asia Pacific transaction volumes actually fell in the first half of 2016, with market analysts Real Capital Analytics (RCA) reporting a 39 percent year-on-year decline in U.S. dollar terms.

Oddly, according to RCA, the only places able to buck the softening trend were the same ones that investors had until recently been avoiding, usually because of pricing concerns. In Hong Kong, a wave of incoming capital from mainland China has been picking up office properties both big and small, while in Singapore a single big purchase has boosted transacted values from an otherwise low base. The big three Asia Pacific markets of Australia, China, and Japan, meanwhile, saw volumes decline 48 percent year-on-year—a substantial falloff even when adjusted for the strengthening U.S. dollar.

That said, transaction figures from other sources paint a more positive picture. Among them, brokers Jones Lang LaSalle recorded "moderate" Asia Pacific transaction declines of just 4 percent over the same period—a minor decline in the context of the record sales volumes in the 2013–2015 years. According to one regional analyst, the only real weakness in the Asian figures related to declining sales in Japan, with Tokyo building owners opting to refinance rather than sell after the Bank of Japan (BOJ) introduced NIRPs at the start of the year: "My version of reality is that markets are more stable than you might expect," said the analyst. "We have a massive weight of capital looking to get into the region, occupiers are demanding space and paying up for it, and Asia is still the engine of global growth—so if there has been a shortfall, it's not because of any underlying problems in the market."

According to investors interviewed for this report, the main change in 2016 has been a fall in the overall number of transactions, together with an increase in big-ticket purchases, generally at the behest of deep-pocketed institutional buyers, and often in the form of platform or club deals. At the same time, yields continue to shrink and there is a growing shortage of assets available to trade—a deficit caused partly by the tapering of a recent wave of selling by funds that had bought assets before the global financial crisis and partly by the fact that, in the age of NIRPs, property owners have little incentive to sell. According to one fund manager: "The thought process of most Asian owners is: 'All I can see is low interest rates, and if I look at the return on cost of my asset, almost everything is performing out of its skin because values and rents have gone up so much. When almost everyone is well into double-digit return on cost, why would I sell? What would I do with the money?'

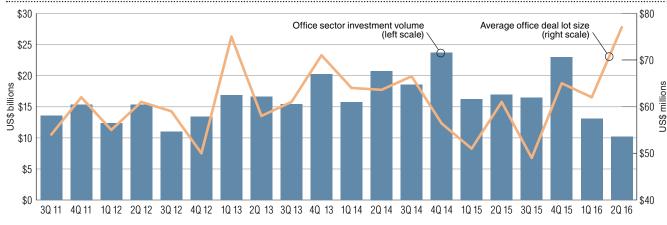


Exhibit 1-2 Office Deals Analysis, First Half 2016

Source: Real Capital Analytics.

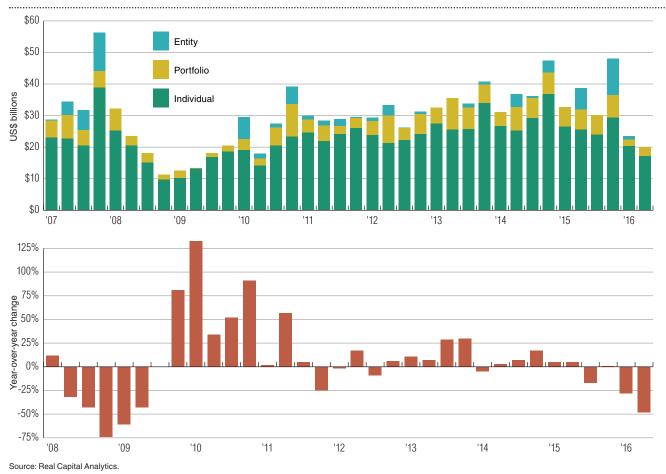


Exhibit 1-3 Volume by Transaction Type, Asia Pacific

This combination has made life harder for anyone unwilling to pay top dollar for assets. As one private-equity investor observed: "First and foremost, everything is really expensive. So you're looking at yields and you're weighing up country risk, political risk, economic risk, and you think, 'Why would I even bother doing a deal in China or the Philippines to get 5 percent or 4 percent gross [yield]?' And probably 2 percent to 3 percent net at a time when rents are really high as well and economic growth is coming off—so it's very hard intellectually and emotionally to pay those prices." Perhaps unsurprisingly, industry profit expectations have taken a hit, with our survey projections sinking to their lowest level since 2013.

Allocations Are Rising . . .

The relatively slow pace of recent buying contrasts with the ever-growing flows of capital now targeting Asian real estate. While no accurate way exists to measure just how much new money is being pointed at property assets regionally, interviewees agreed that allocations continue to grow, especially from sovereign and institutional players.

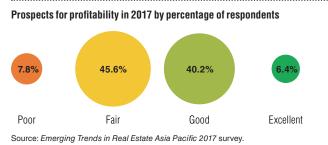
According to one investor: "Generally speaking, allocations historically have averaged high single figures, roughly 8 percent to 10 percent for Western insurance companies. But there's been a lot of talk about pushing that up to 10 percent to 15 percent, which is huge—in nominal terms, it's a doubling of real estate as a percentage of the portfolio." Given that allocations at Asian institutions are currently either much lower or nonexistent, the pressure to get capital into the market is all the greater. As another consultant commented: "Real estate is up there now as probably the number-one option compared to other places you could put your money. All the funds we're dealing with are increasing allocations—this only puts more pressure on markets where there's already a lot of liquidity."

Given the scarcity of suitable assets, much of that new money is now accumulating on the sidelines, even as more incoming capital looms on the horizon. According to a manager at one large fund group: "I think the pile of money will only increase, because the trend line is definitely more money being allocated."



Source: Emerging Trends in Real Estate Asia Pacific surveys.

Exhibit 1-5 Firm Profitability Forecast for 2017



One obvious reason for increased allocations is that Asian

institutions in particular now have that much more money to invest. Diversification is another theme—both for local institutions that have traditionally invested little, if any, capital in real estate, and for international funds that have long been underallocated to emerging markets.

Perhaps the most important factor, though, is the widespread perception of a secular shift in markets as investors and developers come round to the view that U.S. base rates are unlikely to move significantly higher. As one fund manager observed: "A lot of the U.S. corporates loaded themselves [with debt] and refinanced their balance sheets. But their top line is not moving, so if interest rates go up, there's a major problem. Everybody starts talking about the housing market when interest rates go up, but that's not the place to focus because what is pushing the U.S. economy is literally the top-ten market cap companies."

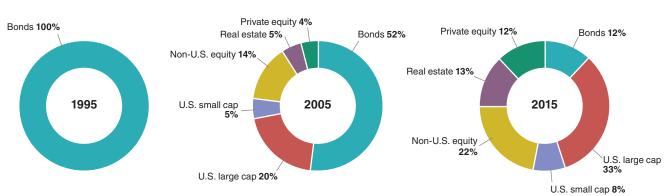
As long as U.S. base rates stay low, sovereign bonds globally will probably continue to underperform real estate. This thinking applies especially to Japan, where huge amounts of institutional capital are just beginning to rotate from government bonds into alternative asset classes. "It speaks to the lower-for-longer theory," said one fund manager. "Lower returns and lower interest rates for a much longer period of time—and I think in general that's now the base case, with the risk being to the downside rather than the upside."

The low-interest-rate scenario translates directly to higher demand for real estate generally and core assets in mature markets in particular. As another fund manager put it: "It's defensive—basically you're agreeing with the fact that rates are going to stay low for a long time, real estate is a proxy for a bond, and, okay, maybe I'll get less than historical benchmarks, but honestly who cares about historical benchmarks? I've got cash today and there's no way I can take a negative real return."

... But Are Also Distorting Markets

The arrival of such huge amounts of new capital creates issues, however. For one, it helps push cap rates to alarmingly low levels of risk-adjusted returns, especially compared with those seen in supposedly safer markets in the West. On a total-return basis, benchmarks are proving more resilient, although they have registered significant declines in China, Hong Kong (where mainland capital is active), and Singapore (which is in a cyclical downturn). According to one fund manager: "It's a subject that doesn't have a clear answer, but I do think that more people are starting to question the relative risk/ return. It's a sentiment issue. When China was the [regional] growth engine, you were probably fine on a risk-adjusted





Source: Callan Associates.

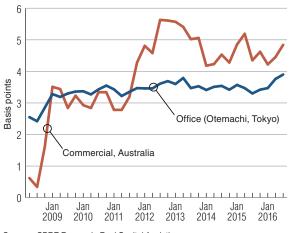


Exhibit 1-7 Yield Spreads Widen in Tokyo and Australia

Sources: CBRE Research, Real Capital Analytics.

basis, but now that's become questionable and a bit of the luster has come off—probably rightfully so. Basically, what you're saying is that 'I don't think my upside is so good,' and I think that makes sense. My downside is still the same as before."

While the oft-cited justification for sinking cap rates is that prices can be benchmarked by reference to the spread between yields on real estate and sovereign bonds (which are currently at ultra-low if not negative levels), the rationale begins to break down in the current environment because it fails to address the risk that yields may spike if bond investors calculate that holding debt at zero or negative rates is not only unprofitable, it's downright dangerous.

According to one fund manager: "In many markets, with the exception of China, you have relative spreads to bond yields that look quite attractive. But you could argue that bond yields are just artificially low and don't really reflect 'risk free,' which is what you're trying to base your spread on. And if you're starting at ten-year bond yields of 30 basis points [bps] and they rocket to the stratospheric levels of 2 percent, which historically is still [an] incredibly low cost of capital, the capital value of that change is huge—those bonds have lost an enormous amount of value, and you'll still only get 30 bps for holding them. If that happens, your 3.5 percent to 4 percent cap rates—and, in some cases, in Japan, 3 percent cap rates—look pretty anemic."

This may be why investors are reluctant to chase cap rates lower even as the yield spread to sovereign bonds continues to widen. Another reason, however, is that ubiquitous rental incentives in various major markets in Asia create a misleading impression of what rents are really worth. This applies in particular to Australia, where, in the words on one Sydneybased fund manager, "the reality is that you have incentives of between 27 percent and 30 percent in the [office] market, and once you layer these in, together with your cost of debt, your effective spread to the base rate is probably only about 1 percent." Other major office markets offering significant (though not quite so generous) incentives include Tokyo and Seoul.

A further issue created by higher allocations is that private equity funds are now being regularly muscled aside by sovereign and Asian institutions that enjoy generally lower hurdle rates and cost of funding. "I think people's mattresses are by now pretty full," lamented one private equity manager. "There's a big difference between international investment funds and the sovereign and domestic institutions. For people like us, it's a pretty tough investment environment-pricing is high, so whether you're value-add or opportunistic or core, it's quite difficult to underwrite to the target returns your investors are looking for, given where your entry prices are. There's definitely no low-hanging fruit, and I can't see any obvious market calls where you say, 'O.K., we can go into China, for example, and buy office.' At the same time, buying other income-producing property types is eye-poppingly expensive, and we're now well into the rental-growth cycle."

Can Cap Rates Squeeze Lower?

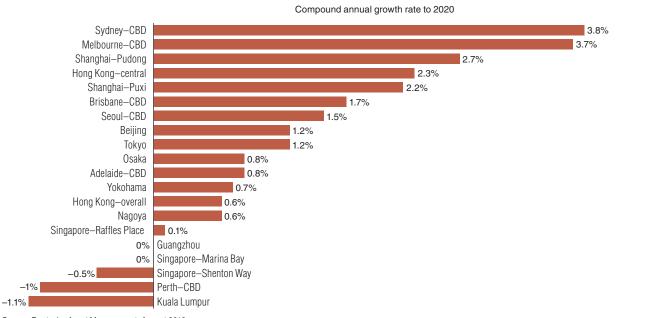
In 2015, expectations for further cap rate compression in Asia were framed mainly in terms of expectations for rental growth. Twelve months later, those increases have been more or less realized, but the prospects for significant further near-term gains on commercial sector rents have dimmed. Interviewees from Japan ("a little bit in the tank, but it's slowing") to China ("a little, but pretty asset-specific and not much better than inflation") to Hong Kong ("no real momentum") and Singapore ("rents off significantly and I think continuing to fall") suggested moderate, if any, upward rent adjustments. Sydney is the exception to this pattern, with rents expected to "provide double-digit rental growth over the next few years," mainly on the back of supply shortages.

With cap rates everywhere in Asia now below historical norms, and with the added caveat that the above-mentioned yieldspread thesis may no longer apply when interest rates turn negative, finding a rationale for further compression is becoming harder. Of course, that does not mean that values can't rise anyway, as they have for the last several editions of this report, often in defiance of investor expectations. That indeed seemed to be the gut feeling of most interviewees this year, although some found it hard to admit.

How low they might go is an open question. One Japanbased fund manager suggested that "a lot of people have rationalized [office yields] down to 3.2, and if you are a certain core investor they're O.K. if there's no growth—if there's no downside risk, they'll hold for stability. I don't know how they

Exhibit 1-8 Projected Office Sector Rental Growth, Fall 2016 to Fall 2020

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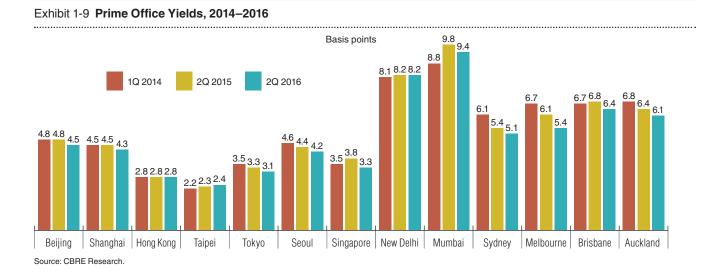


Source: Deutsche Asset Management, August 2016.

calculate the hedging cost, the interest rate, and so on, but I think it's safe to say that the macro Japan is saying there is no significant interest rate hike coming in the next five years." The same manager also suggested that very high-end retail yields in Tokyo's Ginza district could sink below 2 percent in 2017. In addition, a sub–3 percent environment for office yields was certainly on the minds of several Tokyo-based interviewees.

Certainly, the sheer weight of local institutional capital seems to militate in favor of more compression, especially given that most Asian players enjoy the luxury of cheaper capital and (probably) lower targeted returns. Making that case to an international investor base may prove a tougher sell, though even here perspectives are beginning to change. As one institutional fund manager observed: "There are clearly some—though definitely not all—institutions in Europe and the United States that are now willing to buy or invest in core returns in Asia as a growth play, and not necessarily as an income play."

Another investor commented: "I think in time—especially on the core side—cap rates will come down, unless investors take this decision that they'll just stay in cash. But everything you read and see from our U.S.-based investors is that there's clearly a shift to both core and noncore in the international space, that they're really looking at it as diversification, and maybe their expected returns are now a bit lower, though they're not necessarily publishing that."



8

Core—Can't Get Enough

With so much institutional capital in circulation and so many investors now adopting a defensive stance, appetite for core assets continues unabated. This translates to ongoing demand in the Asia Pacific region's two main core markets, Tokyo and Sydney—a situation that is unlikely to change soon. According to one Sydney-based fund manager: "It's difficult to see a reversal of appetite in a setting where we're in a riskoff environment with liquidity."

As much as demand is strong, however, supply of core product is thinner than ever. According to one analyst: "There's plenty of liquidity, but there aren't many assets to trade. What's more, there's a mismatch between pricing and product quality—you want to buy prime, and you're seeing Grade-B buildings."

In part, this simply reflects the norm of Asian landowners retaining the best buildings for themselves. As one investor said: "The good assets are so closely held it's really a distorted market, so you're not going to see much two-way flow in core because the owners here are not portfolio rebalancers, they're just long-term holders."

Another, more recent, reason, however, is that ever-sinking interest rates have removed incentives to trade even for owners willing in principle to do so. Instead, they simply refinance their deals and hold on. Several interviewees suggested this as the main reason for the overall softness in regional transactions in the first half of 2016. As one interviewee put it: "People are thinking they can earn more by cutting their interest costs. Also, people are thinking that if they sell their assets, they don't know how to redeploy their capital. Beyond that, they also believe that Asian real estate markets still have room to run in terms of capital growth." These problems in accessing core product probably account for the steep decline in popularity of Tokyo and Sydney in this year's ULI investment prospect rankings (see chapter 3).

One result of this tightness in core supply is that investors are looking again at assets in Hong Kong and Singapore that had previously been off the radar because of their high prices. Hong Kong commercial transactions rose some 17 percent in the first half of the year, according to RCA, with buying driven mainly by mainland Chinese corporate players, often on the hunt for trophy assets rather than pure investments. Some international investors also voiced renewed interest in Hong Kong assets; but with more mainland buyers rumored to be lining up for major single-building acquisitions if and when they appear, competition will be stiff.

The beaten-down core space in Singapore also has seen revived interest, although prices have yet to fall enough to attract serious buyers. As the only major market in Asia cur-

Exhibit 1-10 Importance of Various Issues for Real Estate in 2017

	1	2		4	5
	No importance	Little importance		Considerable importance	
	Econom	ic/financia	al issues		
	Interest rat	es and cost (of capital	4.19	
	Jo	b and incom	e growth	3.99	
Macroeconomic is	sues (inflatio	on, currency	volatility)	3.91	
	Glo	bal economi	ic growth	3.74	
Tax	policies and	financial reg	gulations	3.48	
	nstability	2.98			
		economy	2.95		
		nequality	2.69		
			I		

Social/political issues

Terrorism/war/epidemics National fiscal deficits/imbalances Immigration Provincial and local budget problems Japan's Abenomics Social inequality



Real estate/development issues Land costs 4.15 Infrastructure/transportation 3.76 Vacancy rates 3.70 Construction costs 3.67 Future home prices 3.60 Refinancing 3.49 Affordable/workforce 3 4 4 Deleveraging 3 25 Environment and sustainability 3.24 2 1 3

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

rently in a down cycle, funds are looking for reasons to invest there, but for the most part aren't finding them. According to one fund manager: "Everyone's looking out for it, everyone's expecting to see deals, but I'm still struggling to find them, to be honest—there's a lot of supply of everything." Still, supply is the one thing lacking in almost every other market, so there may be some early takers. As another fund manager said: "When you take a step back and look at all the economies in Asia, the one place that has strong long-term potential, I think, is Singapore. So if I can get a good asset at a reasonable price in that market, that's probably one of my number-one picks." Chinese investors were rumored to be looking in Singapore and may be early buyers given their relatively low level of price sensitivity.

China: Key Themes

China continues to be something of an enigma in investment terms, with a multitude of cross currents muddying the waters for foreign investors looking in from the outside.

As usual, those with experience in navigating the idiosyncrasies and latent inefficiencies of China's markets can still realize sometimes-outsized profits. It is probably fair to say, however, that opportunities for arbitrage are becoming harder to find, and while plenty of international capital remains interested in putting money to work there, it is not the imperative it once was. As one veteran Chinawatcher put it: "Certainly over the last year or 18 months, I've heard more people saying the challenges in China are even greater than they anticipated—I just don't think there's quite the love affair with commercial real estate that there used to be."

Various reasons for this exist. First, the economic backdrop has deteriorated. While Chinese GDP growth of 6.7 percent remains far higher than that seen in developed economies, momentum has slowed even as macro risk (particularly in the form of corporate debt levels) is growing. Second, pricing levels have been distorted by the enormous amounts of domestic capital now seeking a home in real estate assets, both from private individuals and companies and from domestic institutions, which are overflowing with cash and remain chronically underallocated to the sector. As a result, residential markets in first-tier cities have soared to dizzying heights, land values have gone through the roof, and commercial property prices continue to grind northward. As one fund manager commented: "If they can't get their capital offshore and the banks and stock markets don't have appeal, they put it into real estate. It's the same story as in every other market in the world, but for different reasons. So you get into this domestic value trap. When you feel like that, you end up trying to buy the best possible properties, and the incremental dollar you pay to get that asset is secondary."

The current tightness in Chinese markets has done little to deter local investors, whose faith in capital-value growth emboldens them to accept yields that, anecdotally, are even lower than those cited in published data. The impact on foreign investors, however, has been more nuanced. Certainly, a large (and arguably growing) component of international capital has taken issue with valuations, especially when already-thin pickings are further eroded by deal-structuring problems that can generate higher taxes and cash-flow repatriation problems.

At the same time, however, a significant base of foreign investors continues to view China favorably. As one investor said: "China is getting bad press, and people are generally quite nervous about it. But I think people who are here in the region are reasonably comfortable."

The New Core

One way for core investors to source assets in such a thin market is to redefine what is meant by core investing. According to one interviewee: "Core money wants to be more active, and I think there's a frustration in many cases it can't find a home. So the risk profile is changing, moving into markets that a couple of years ago they would have said were too opportunistic and moving to product that has a greater risk profile to it."

This can mean different things to different people, but is a generally controversial idea given that this "new core" tends to come with decidedly noncore levels of risk. According to one core fund manager: "I don't think we should go down this road. I think if you start chasing returns and adding risk, then you shouldn't be in an open-end core structure. If you're lucky and that works for you, it can help to accelerate the start of a core open-ended program because people will focus on the returns and not the risk. But if it goes wrong and you've taken inappropriate levels of risk for a core strategy, you're dead in

the water—it'll take you another cycle or more to get back to the level where people have got confidence to allocate capital to you again."

At the same time, situations exist where even conservative managers are willing to bend convention. In Asia, this applies most notably to build-to-core projects, which generally feature levered returns in the area of 13 to 15 percent. One opportunistic fund manager involved in developing core projects noted a "sea change" over the last 12 months among potential institutional partners "in terms of the willingness to take the types of risks we're taking for the returns that we're generating."

It is a strategy that many core investors are now eyeing seriously, therefore, in particular for projects in Australia, where it has "has provided some really good outcomes for investors." As one fund manager observed: "If you're an insurance company or a sovereign fund investing in core assets and your view is that you are willing to take risk today to secure those assets and not sell them because you have long-term liability streams, then would I be willing to take development risk or

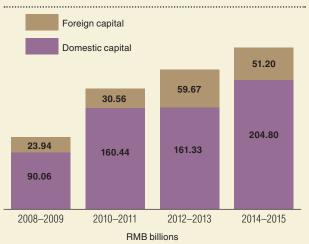


Exhibit 1-11 Commercial Real Estate Transaction Volumes in China

Source: JLL.

On the core side, Shanghai has seen a resurgence in foreign investment over the last couple of years, despite high prices. In part, this is because many Western institutions that remain underallocated to Asia see it as a natural target for diversification, and in part because the emergence of Chinese insurance companies and other big domestic players has transformed the city into "a true institutional market," especially for those willing to take development risk.

For opportunistic investors, the landscape has changed radically in recent years, as China's markets become

leasing risk on high-quality locations with good-quality developers? I think you can suggest that's a core-type strategy. Likewise, if [I'm] building to suit for an identified end user, am I really taking that much risk? Clearly it's not core risk. But if I want to sell on completion and there's an insurance company or a sovereign or pension fund in the wings, is it a good way to access core stock? It's probably better than paddling in the ocean to buy it from the developer."

South Korea was identified by one investor as a particularly good market for a build-to-core strategy due to use of an unusual standard development model whereby construction companies generally provide guarantees of project success. The result is that new stock is generally strata-sold in order to provide protection for builders, which in turn has created a chronic shortage of *en bloc* buildings. Investors willing to devote equity on a build-to-core basis are therefore likely to end up with a core product with a ready audience of institutional buyers upon completion.

increasingly fragmented and difficult to navigate. According to one opportunistic fund manager: "Over the last decade, the way everybody made easy money was in residential joint ventures. But we've seen that waning for several years now, and I think the sweet spot in that space is gone. Margins are too thin, and if you look at land sales prices, they're now multiples of current ASPs [average selling prices]; we don't see that kind of growth going forward."

Until recently, smaller third- and fourth-tier cities offered high returns and were structurally undersupplied. Today, they suffer from major (though to be fair, improving) oversupply issues and are, generally speaking, too unsophisticated to offer scope for niche strategies. At the same time, high prices preclude opportunistic returns in the biggest cities (i.e., first-tier cities). This has left many opportunity funds gravitating to second-tier locations in search of deals.

Still, China is a big place and probably unique among Asian markets in terms of its potential for true opportunistic returns. Ongoing themes of developer consolidation; an overall lack of experience in project planning and asset management; and volatility in asset pricing, the economy, and availability of capital all serve to create gaps in the market that can be exploited by experienced managers. These issues are not about to go away—indeed, volatility may be set to increase, according to one fund manager, who forecast that future cycles would be shorter and more localized than the previous five-year norm.

Otherwise, core investors are moving up the risk curve by migrating to new destinations or asset classes, preferably in markets that have developed economically to the point where risks are moved lower. Most obviously, this includes Shanghai, now considered, according to one analyst, a "completely core market" for international investors, who see it as a regional gateway with less exposure to short-term cycles. This is a far cry from just a few years ago, when most foreigners considered its 4 percent yields a bridge too far in terms of risk-adjusted returns. Since the beginning of 2014, however, 35 percent of all Shanghai prime office transactions—and 65 percent of those valued at more than US\$100 million—have involved foreign buyers, according to Jones Lang LaSalle.

Leverage is another way for core investors to boost returns. Levered core, therefore, has become an option in Tokyo, where the availability of fixed-term sub–1 percent bank debt has instilled more confidence that highly levered deals can ride out short-term downturns.

Japan: Key Themes

While the Japanese economy does little to inspire confidence, most investors remain positive about Japan as a real estate destination. The depth and liquidity of the commercial property market in Tokyo single it out as Asia's biggest core market, although in reality most core assets there are picked up by Japanese REITs (J-REITs) and other local players who are often willing to outbid foreign buyers. International funds therefore tend to adopt other strategies, which are fortunately abundant. As one fund manager said: "I'm not seeing in Japan any slowdown in foreign investment—it's phenomenal what's happening, really strong."

The current appeal of the Japanese market lies in its positive yield spread between real estate assets and the cost of capital. One reason for this is the Bank of Japan's ongoing bond repurchase program, which has soaked up most of the Japanese government bonds that are held by domestic banks or otherwise available on the open market. Banks are left with few investment alternatives than to lend to real estate at "ridiculously cheap" rates.

With seven- to ten-year fixed-rate lending commonly available, investors are able to structure highly leveraged deals at very low cost. While most investors opt to lever at around 60 to 70 percent, banks have been willing to lift this as high as 90 percent. Many investors are gun-shy about this strategy given the disastrous outcomes of similar bets taken before the global financial crisis, but in principle it means, as one foreign opportunistic manager said: "If you buy in Japan at a 4.5 percent yield and finance it at, conservatively, 1 percent, you can set yourself up for a 7 percent return cash-on-cash without doing anything."

Residential is currently the sector of choice for this strategy because high occupancy levels and stable rents make for a "quite bond-like" income stream. While stiff competition for assets has pushed residential yields down to 4 percent or less, lower borrowing costs mean that levered yields have remained constant. Potential for modest rental growth gives this strategy obvious appeal, although the field has recently become crowded and assets are now harder to source.

Office assets have been a perennial investor favorite in Tokyo, but the sector has lately fallen out of favor amid fears of an upcoming supply glut and soft absorption as companies adopt a wait-and-see approach over the impact of the rising yen on exports. Current expectations are that vacancies may rise and rents stagnate or decline after several years of double-digit growth. As a result, there was a reluctance to buy office among many interviewees. As one interviewee said: "I always like office in Japan provided

Platform Deals Tap Land Banks

Another aspect of the growing appeal of build-to-core strategies is that they are contributing to rising land prices in gateway cities across the Asia Pacific. According to one fund manager: "When you look at what people are bidding for land sites now, you can see that's what they're thinking. The returns on development are going down because people are bidding more and more for the land—everyone wants to do this now."

This, in turn, is boosting the already growing appeal of platform deals because it allows investors to get access to land owned by target companies that would not otherwise be available, or if so, only at higher prices. Shanghai, for example, recently saw international pension funds invest in one prominent local developer as a means to access to its development pipeline.

While such deals generally involve healthy target companies, they are also occurring at the other end of the spectrum, where distressed developers become interesting investments because of their land banks. This is happening in particular in China, which has plenty of cash-strapped developers and a real shortage of affordable land. Generally, foreign investors will use their local partners to pursue such deals rather than do so directly. Although transactions can be merger-and-acquisition (M&A) style takeovers, opportunistic investors are generally interested in projectlevel acquisitions. According to one such fund manager: "In the past, you'd talk to your [local] partners [in China] about going in and refurbishing older office buildings or even taking over failed residential projects. But they never wanted to do it because it was easier just to buy land from the government. But where land prices are going now, it's forcing our partners to be more creative, and even banks are funding them to go look at stress or distress. We haven't seen a lot of it yet, but we know some of our partners have pipelines and we say, 'If it seems to make sense, bring it to us and we'll take a look.' It's a way to get cheaper land."

India is another market where there is "huge opportunity" to buy good-quality land from financially stressed developers at a time when authorities are pushing banks to fix their balance sheets. According to one institutional fund manager: "We are seeing opportunities to get very high-quality real estate that was never for sale before because developers aren't able to you can get it at the right entry price. The entry price today is not great."

Retail also has been a strong sector in recent years, at least partly because the falling yen has attracted high-spending tourists, especially from China. Today, though, the yen has strengthened and the tourists are spending less. The sector has lost much of its appeal as a result.

Tokyo transaction volumes were surprisingly low across the board in the first half of 2016. This is partly because J-REITs have found it difficult to make accretive acquisitions given their rising share prices, and partly because many owners who were expected to sell their assets have instead chosen to retain and refinance them after interest rates fell. Cap rates continue to compress steadily. Although J-REITs may be buying at 3 percent, most good-quality centrally located assets now sell at around 3.5 percent.

Going forward, more domestic capital is expected to enter the market as Japanese institutions seeking to diversify from previously bond-dominated portfolios look to reallocate their capital. This is likely to put pressure on prices and may force down cap rates, though opinions on this varied among interviewees. Still, given currently healthy yield spreads, it seems a plausible scenario. Interest rates are not expected to rise significantly for the foreseeable future. However, some interviewees suggested that major Japanese banks might cut back on lending to real estate since they have "reached a threshold" in terms of sector allocation. Still, while the bigger banks may now become more discriminating, it is hard to imagine that debt will be unavailable given the current high levels of liquidity in the economy.

With prices continuing to rise in Tokyo, many investors have opted to invest in Japan's secondary cities instead, at yields of about 4 to 4.5 percent. Osaka has been popular in recent years, although supply issues are looming for office assets. Fukuoka and Nagoya also received positive reviews from interviewees. As one investor said: "We like these metro areas because we think there's a chance of better rent growth than in Tokyo. Part of that is that they're coming off a lower base—they went down further than Tokyo, so you have more room to come back up." That said, secondary cities are seen as traditionally risky investments: "There's a very shallow market in those regional cites and cycles are very rapid, so there's a risk of oversupply and a softening of the market taking hold very quickly."

refinance, and the banks are unwilling to hold on their books for extended periods of time."

Diversifying across Asset Classes

The theme of diversification is not restricted just to core strategies; it also applies more generally as investors branch out looking for yield. It can mean, firstly, that investors have to be more enterprising in identifying deals, often by tapping pre-existing relationships with banks or corporates with existing interests in real estate. As one fund manager said: "Our view is that 80 percent of the capital is chasing 20 percent of the deals, so if you're looking through that prism, there's too much capital chasing too few deals. But we also think there is another 80 percent of opportunities in the market that 80 percent of the market has not seen or is not able to execute on, and in that instance you can still get very high-quality real estate with very good returns without competing with 80 percent of the other people in the market."

Diversification can also mean exploring unconventional asset classes. According to one opportunistic fund manager: "I sense that people are not doing as many deals generally, and

that everyone's now looking at funky sectors, for things that have fallen into cracks in the market, or for things that have been overlooked. So every second meeting you have is about student dorms or worker dorms or millennial housing—everyone's talking about these things."

Until recently, investors spent a lot of time looking at niches but did little actual buying, mainly because they involve often obscure businesses that are outside their core competencies. As one investor said: "My personal view is that these niche strategies are a sign of boredom and you're just trying to justify what you want to do. If we were to do something niche, we'd maybe go as far as student housing, but would we go to hospitals, data centers, or elderly housing? No, it's just not our expertise. I mean, what do we know?"

Despite this, a general sense existed among interviewees that niche strategies are today investable, and that more niche deals are being done. As one fund manager put it: "Had you asked me nine months ago, did we have a strategy to pursue them, I'd have said, 'No, not at all.' In the past, we were more thematic: urbanization, middle class, focus on the housing sector. But it's very hard to be thematic in China now. It sounds a bit of a cop-out that you have to be more opportunistic, but that's the reality. So we are definitely seeking these things out. We're saying, 'That's quite attractive, let's dig into it and see if it's interesting."

Niche options mentioned by interviewees included the following:

- Sub-logistics centers. While the rapid growth of e-commerce retailing and ongoing shortages of modern warehouses continue to earmark the logistics sector as a favored asset class for many interviewees, the problem with building major strategic facilities (apart from their being the preserve of specialists and institutional investors) is that "everybody is now doing them, which means pricing is being driven pretty aggressively." However, the growth of e-commerce fulfillment is now also creating demand for a subsector of smaller units designed to cater to last-mile deliveries, often based in conveniently placed Grade-B buildings in downtown areas. As one investor said: "People are looking for instant delivery within a couple of hours, so you have to have a series of subcenters as well as the big modern warehouses-that's attracting quite a lot of attention."
- **Student housing.** This sector has already become a discrete asset class globally, with institutional investors active mostly in the United Kingdom and the United States. As opportunities in those markets begin to fade, however, interest is turning to other destinations, mostly in mainland Europe, according to a recent study by brokers Savills. In the Asia Pacific region, student housing investments have been seen mostly in Australia, where it is now a US\$15 billion industry. Opportunities elsewhere in Asia are relatively unexplored, but have obvious potential in cities with strong academic reputations such as Hong Kong, Singapore, and Tokyo.
- Data centers. Until recently, data centers were another area where investors looked but did not touch. There have been several recent instances of investors taking the plunge, however. One example involved an international fund backing a Chinese data center operator focused on wholesale build-to-suit infrastructure, aiming to create long-term cash flow and monetize into the core market. While such projects involve plenty of red tape in China, obtaining land for them is relatively straightforward because they are regarded as priority projects. In addition, "data centers in a lot of other markets are highly commoditized, so it's hard to get the returns-in China, we think there are outsized returns because it's quite complicated and heavily restricted." Currently, data-center investments have added appeal because many governments are now in the process of nationalizing network infrastructure out of concerns about disclosure risks for data held out-of-

country. Localization is also being driven by bandwidth considerations, as huge amounts of data continue to be shifted to the cloud from end-user computers.

- Senior housing. Australia apart, this is another option • that historically has seen more talk than action, as investors cast around for a viable business model in a cultural context where parents have traditionally been cared for by their children. There is no questioning the fundamental and long-term demand, however, which will require investment on a scale that would appeal to institutional investors needing to place large amounts of capital. Various formats are emerging. In particular, Japan recently introduced a framework of health care REITs dedicated, among other things, to senior housing. So far, however, their appeal has been limited. According to one Japan-based fund manager: "We looked but couldn't find any good opportunities. [The ones we found] are generally too small. Stock prices of listed senior housing J-REITs are also not performing well, so they're not so attractive." Another model under trial in more mature markets such as Hong Kong, Singapore, and Japan incorporates an "aging in place" model whereby retirees purchase a lifetime interest in a property built primarily as a home but redesigned with an aging person in mind. Targeted returns are in the 8 to 10 percent range. Again, however, the model has yet to gain traction, mainly because the reversionary interest in the property goes back to the developer upon death. According to one investor: "I think the model needs tweaking or fine-tuning for that particular element, but otherwise potentially it's a way forward throughout Asia." China, meanwhile, is struggling to come up with a regulatory framework that will encourage private investment in what is a completely new asset class for that market. While cultural and affordability issues continue to deter investment, there is hope that cash-rich domestic life insurance companies may be persuaded to invest in assets that would be a suitable match for their long-term liabilities.
- Multifamily. Though currently an outlier, this is an area • worth watching. While multifamily (i.e., residential rental properties) has never been a favored sector in Asia (Japan excepted), some interviewees saw it as a potential growth area following the boom in the U.S. multifamily sector, which has created around 7 million new renter households since 2006, mainly on the back of the foreclosure crisis and ongoing demand for downtown living. Given that steep residential price increases in most Asia Pacific markets have made homeownership a distant dream for many younger workers who therefore have little choice but to rent, the case for institutionalizing demand from a captive audience seems strong. "Everyone's talking about it now, particularly in Australia," said one investor. "It's been here for years in Hong Kong, where [the big developers] have

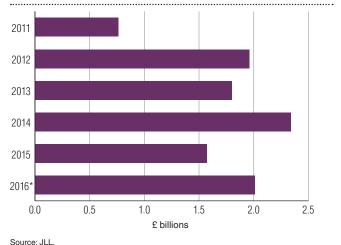
got lots of blocks they keep for rent, basically like a private REIT sector. It's not been considered so much a tradable asset in the past, but now people are looking at creating one." Currently low yields for residential properties, potentially high management costs, an unfavorable tax framework, and the absence of available *en bloc* assets in most markets will likely prevent rapid adoption of such a strategy. However, according to one Australia-based fund manager: "You would have to say we are ripe for that initiative. The investment capital is there if it can see a pipeline that is as lucrative as a build-to-sell product, so I think you'll see developers stepping into that space and investment capital following it. I would expect some activity in the next 12 months—you'll be looking at offshore funds coming in with probably a lower cost of capital."

Currency Speculation and Hedging

Past experience makes most fund managers reluctant to underwrite assumed currency upside into real estate deals, but the current dearth of investment options has left at least some investors more willing to take a view on exchange rate movements, especially where currencies have seen big moves or are trading outside historical norms. Japan, for example, was mentioned by one interviewee as a destination for Hong Kong capital looking to borrow in yen, lever up, and "play the yield gap game," with an assumed upside in yen appreciation.

Currency speculation is more likely to feature in investments by local high-net-worth (HNW) capital, which generally adopts a less disciplined approach to investment. Brexit, for one, has been seen as a golden opportunity by some to lock in long-term value in London property. According to one Hong Kong-based interviewee: "A lot of Asian opportunistic capital,

Exhibit 1-12 Mainland and Hong Kong Chinese Investment in Central London Real Estate



*Through September.

•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••		
		Foreign currency							
		AUD	JPY	CNY	EUR	GBP	USD		
	AUD	—	2.1%	-2.4%	2.1%	0.9%	0.8%		
ž	JPY	-2.2%	—	-4.6%	0.0%	-1.2%	-1.3%		
currency	CNY	2.3%	4.4%	—	4.4%	3.2%	3.2%		
13	EUR	-2.2%	0.0%	-4.6%	_	-1.2%	-1.3%		

-3.4%

-3.3%

1.2%

13%

0.1%

-0.1%

Exhibit 1-13 Average Current Currency Hedging Costs per Annum, 2011–2015

Sources: Deutsche Asset Management; Bloomberg, March 2016.

1.2%

1.3%

GBP

USD

Home

-1.0%

-0.9%

especially high-net-worth and family offices, are using Brexit as a catalyst to invest in the U.K., mostly looking at residential. Partly it's a pure currency thing, but if their kids are studying there they save so much in tuition fees they feel they might as well buy a property."

There have also been inbound Brexit-inspired deals involving institutional or private equity capital, although these are not generally driven by currency considerations. According to a manager at one large fund group: "A number of our Asian funds have already spent time looking at who might be under pressure to sell in the U.K. and positioning themselves in a way that if some of the [U.K.-based] funds find themselves under pressure to sell because of redemptions, they're able to pick up those assets—they're not necessarily looking to buy at a discount, it's just an opportunity to buy assets that wouldn't otherwise be available."

In addition, ongoing exchange rate volatility in most emergingmarket economies has led to a growing focus on hedging, most notably in jurisdictions where investors have not previously opted to hedge. This is another reflection of the predominantly defensive stance that many investors have adopted and has in general "become a challenge," as one fund manager put it, "especially now that you're having to mark to market more regularly as well."

In China, for example, hedging has recently become the norm due to a growing consensus that the renminbi will depreciate going forward, bucking a long period when it moved only in the opposite direction. According to one interviewee: "From 2004 to 2015, foreign buyers would be laughed at if they hedged; now, every offshore investor is saying you need to be careful." This has added an extra layer of complexity to China trades given that lack of capital account convertibility means such deals must be done as offshore nondeliverable swaps a relatively illiquid and volatile market.

Otherwise, hedging continues to be the norm for foreign investors in Australia, where the government would probably

prefer to see the currency drop further. This can be problematic because the high cost of doing so "really eats into your returns," said one fund manager. "It means you're going to be a core or core-plus investor—you can't be opportunistic in that market." Hedging costs in South Korea are similarly high, while very low costs in Japan have been one factor in Tokyo's longstanding popularity among international investors.

Metro and Satellite Areas

Investments in suburban locations have become an increasingly popular theme, especially in gateway cities. There are a number of reasons for this. Most obviously, metro areas offer generally higher cap rates than do central business districts (CBDs). In addition, owners of buildings in CBDs see little upside to selling assets in the current environment in the absence of a pressing need to liquidate (such as fund expiration). This means there are often more deals to be done in the metro area.

Finally and perhaps most important, demographic trends favor ongoing migration to urban areas that geographically restricted CBDs cannot physically accommodate, creating a long-term structural shift in favor of non-CBD sites. Multiple interviewees noted the proliferation of deals in decentralized parts of Shanghai, Sydney, Mumbai, and Jakarta premised on the basis of upgraded transportation infrastructure that is creating high-speed corridors into city centers. Singapore is another city where this process is ongoing, although ready supplies of land make decentralization there less problematic.

In Shanghai, land prices anywhere near the city center have mushroomed to levels described by interviewees as "ridiculous," "unjustified," and "unsustainable"—a problem due in general to "cross currents of liquidity, low interest rates, and a shortage of quality assets," and in particular to buying by large state-owned enterprises for whom the site's actual development value is a secondary consideration. The municipal government's long-term master plan aims to address this by limiting population growth in the inner city while simultaneously shifting new demand to satellite cities (in particular Hangzhou and Suzhou) connected to Shanghai by high-speed rail. As a result, there is a long-term drift in development and investment activity to these locations.

Japan has a curious twist on this theme in that there is less inclination for investors to migrate outward to Tokyo's metro areas than to buy assets in secondary cities. At present, Osaka's office sector is considered by many to be fully priced, but Japanese regional cities in general offer good yields and some of the best yield spreads over local sovereign bonds in Asia. A broad range of assets in various other Japanese provincial cities also is attracting investor interest. City-center and station-front locations seem always in demand. Nagoya was mentioned frequently, as was Fukuoka. In Sydney, demand has also shifted to suburban areas. "I think an investment strategy well placed to leverage the [transport] infrastructure spend that will happen here over the next ten to 20 years is really important and a huge opportunity as well," said one fund manager. As part of this, Chinese investors have now begun diversifying away from their initial CBD-oriented strategies, investing recently in development sites in Sydney's southwest suburbs. They have also been "aggressive" investors in Melbourne's suburban nondiscretionary retail centers, buying at 5 percent yields, according to one investor active in the sector. In general, he added, "every other city about 100 kilometers from the capital cities is doing pretty well and we'd buy there." Internal rates of return (IRRs) of 8.5 percent and yields of 6 to 7 percent are the norm.

The migration to the suburbs is also consistent with the increasing use of development models featuring mixeduse projects allowing residents to live and work in the same neighborhood—a huge bonus in the growing number of Asian cities where road congestion can mean spending hours in traffic jams commuting to and from work. To be successful, such projects need critical mass in order to draw people in, one interviewee suggested, although another view was that the same result could be replicated on a smaller scale in line with many residential projects being built in the United States, which incorporate small, equipped offices built on lower floors for use by residents.

Developing Markets

The turn in sentiment in favor of markets and assets that offer higher returns is nowhere better illustrated than in this year's ULI investor prospect rankings, which saw higher-yielding emerging-market cities top the standings. These include in particular cities in India (which hitherto had languished at the other end of the table) as well as Ho Chi Minh City and Manila.

With the caveat that sentiment is one thing and actually placing capital is another, there could be no clearer indicator of how investor perspectives are changing as interest migrates away from conventional destinations in the quest for yield. In the words of one Hong Kong–based consultant: "All the investors we deal with are now looking for opportunity outside their traditional markets."

The meteoric rise of **India** up the rankings is predicated mainly on the belief that it offers early entry the type of long-term growth that has already occurred in China. More immediately, it is also due to efforts by the current administration to improve transparency and efficiency by overhauling outdated tax structures and implementing pro-investor legislation. In particular, the introduction of a Government Standard Tax (GST) should significantly boost logistics operations by cutting red tape and lowering taxes, while the passage of the landmark Real Estate (Regulation and Development)

Transparency level	Market	2016 rank	2016 score	2014 score	2012 score	2010 score	2008 score
High transparency	Australia	2	1.3	1.4	1.36	1.22	1.15
	New Zealand	6	1.4	1.4	1.48	1.25	1.25
Transparent	Singapore	11	1.8	1.8	1.85	1.73	1.46
	Hong Kong	15	1.9	1.9	1.76	1.76	1.46
	Japan	19	2.0	2.2	2.39	2.30	2.40
	Taiwan	23	2.1	2.6	2.60	2.71	3.12
	Malaysia	28	2.3	2.3	2.32	2.30	2.21
Semitransparent	China–Tier 1	33	2.5	2.7	2.83	3.41	3.34
	India–Tier1	36	2.6	2.9	3.07	3.11	3.44
	Thailand	38	2.6	2.8	2.94	3.02	3.21
	South Korea	40	2.7	2.9	2.96	3.11	3.16
	Indonesia	45	2.7	2.8	2.92	3.46	3.59
	Philippines	46	2.8	2.8	2.86	3.15	3.32
	China–Tier 2	55	3.1	3.0	3.04	3.38	3.68
Low transparency	Vietnam	68	3.5	3.6	3.76	4.25	4.36

Exhibit 1-14 Real Estate Transparency Scores: Asia Pacific

Source: JLL, The Global Real Estate Transparency, 2016.

Act (RERA) in March 2016 promises to transform residential development by imposing more transparency and accountability on an industry often notorious for long delays. A new REIT framework currently in the pipeline now promises better exit strategies, although this may prove harder to implement than many expect.

In terms of activity on the ground, most foreigner investors active in India are currently sovereign, institutional, and large private equity funds looking for big-ticket transactions. Early entrants came to market around five years ago, targeting investments in business parks that provide office space to India's booming offshoring industry, especially in Bangalore. These have proved extremely successful. One investor in the office space reported rental growth of 15 to 20 percent per annum, adding that "you can develop to 12 to 14 percent yield-on-cost in India on the office side if you get the right land."

With much of India's limited stock of established incomeproducing commercial property having been snapped up already, attention is turning to taking equity-level stakes or establishing platforms with local developers to pursue development projects. Some institutional players have allocated capital to local funds to invest on a separate account basis. Providing structured debt to domestic residential developers also remains a popular play, with cost of capital now standing at 16 to 18 percent, compared with the low 20s a few years ago.

Cap rates, meanwhile, have compressed steadily from levels north of 10 percent a year ago to about 9 percent today. They continue to head down. In one upcoming deal, a large Indian developer was negotiating with foreign investors for the sale of a portfolio of prime commercial assets at a cap rate of around 7 percent, according to one India-based interviewee, who commented that this was "approaching the red line—at that level, I think things are beginning to look a little tough going forward." While that may be true, there may still be takers at these prices.

Vietnam is another emerging-market play that is drawing a lot of attention. As one investor put it: "I think if you asked in terms of any of the emerging markets, Vietnam will be well ahead of the pack from virtually all investors' perspectives." Economically, the story is similar to China's. The course it is charting covers similar ground, with a multitude of lightmanufacturing facilities producing goods for export. Growth in Vietnam is likely to accelerate primarily because it is seen as an ideal alternative to manufacturing in China, where costs are

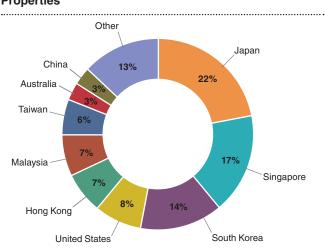


Exhibit 1-15 Foreign Investors Looking to Buy Vietnam Properties

Source: CBRE Research, fourth quarter 2015.

Australia: Key Themes

The longstanding appeal of Australia as a destination for both domestic and international core investors remained undiminished in 2016—a result of a transparent, mature market and relatively high yields across multiple asset classes. Australia is seen increasingly as a safe haven by foreign investors seeking to avoid rising risks (such as Brexit) in other developed markets. At the same time, the acute shortage of investable assets that has been such a theme across the region this year applies even more so to Australia because of its small size relative to peers such as Japan, and because it is a market so focused on core product. According to one locally based fund manager: "The amount of capital looking for opportunities vastly outweighs the opportunities available because the universe of institutional-quality real estate is small. Managers are holding onto quality assets because where else are we going to invest?"

Meanwhile, the divergence in fundamentals between cities traditionally reliant on commodities exports (Perth, Brisbane) and those focused more on the professional services (Sydney, Melbourne) remains. In part, this reflects positive GDP growth driving absorption in the biggest cities. In addition, it speaks to constrained supply in Sydney due to the end of the current development cycle (in particular at Barangaroo), together with a wave of residential conversion projects and an ongoing lightrail construction scheme that will remove some 360,000 square meters (or 6 to 8 percent of current stock) from the market. Projected double-digit rent growth over the next three or four years made Sydney's office sector the number-one pick of most Australia-based interviewees. Further gains are also expected from declining incentives, which are likely to fall from a current 30 percent to around 23 percent by the end of 2017. Melbourne should also see rental growth, albeit at a somewhat lower level.

Given especially the decline in cash base rates, most interviewees expect cap rates to tighten further, although on a net basis they are already somewhat lower than they appear due to the impact of incentives. Office yields are especially tight at just over 5 percent. Given that, many investors are switching their focus elsewhere.

The new areas of focus include build-to-core projects, buying into Grade-B assets (although yields here are also compressing), and investing in non-CBD areas, especially in Sydney, where a huge infrastructure construction program now underway promises to transform outlying areas over the next ten years (notably in the western suburbs).

In addition, logistics centers have now become popular targets, especially among domestic and Singaporean institutional investors. Currently trading at yields "north of 7 percent," they offer "more of an institutional market compared to Singapore, with longer-term commitments, good-quality buildings, and good credit," according to one Singapore-based REIT manager. They are also generally yield-accretive for already high-yielding REITs. Many big local investors are also building greenfield facilities, so the space is crowded.

rising and the business environment has become more challenging for foreign investors.

In the past, most international investors in Vietnam targeted the residential sector, with a focus typically on mid- to high-end developments. But with the condominium market currently "saturated" and the economy seeing rapid growth, "the commercial market is now definitely one to watch in Vietnam, especially the Ho Chi Minh City office market, which is very strong at the moment—that's where we're looking actively." There also is a nascent market for institutional investment in completed offices in both Hanoi and Ho Chi Minh City. Pricing is high, with yields at around 7 to 8 percent, although "there's not too much supply coming on past the next couple of years," according to one fund manager. The market is popular with the Japanese and also the big integrated developers out of Singapore and Hong Kong. Rapid industrialization in Vietnam suggests that there should be scope for investments in logistics and business parks, but so far these sectors have yet to see significant momentum.

Indonesia was the first of the Southeast Asian markets to enjoy widespread popularity in ULI surveys, but while interest remains, the city's ranking has slipped. One particular problem is a huge amount of oversupply in the office sector, just as demand has dropped from oil and gas companies in line with falling resource prices.

Cumulatively, this has led to soaring vacancies, together with a flight-to-quality scenario. "People are looking to move because rents have fallen 50 percent in some prime buildings," said one locally based fund manager, who noted that cap rates have moved out from about 6.5 percent to 10 percent or more. The bigger problem, however, is that "there are no real transactions. So it's a wait-and-see game now—if you're in a good location, you'll be okay over the long term, Retail is another sought-after area. The big regional shopping centers currently yield more than the local office sector, a reversal of the historical norm. This provides "potential for significant upside in the space over the next 12 months," according to one local fund manager, although it may be hard to realize (other than investing in a REIT) given that this type of asset rarely comes to market. Beyond this, low-growth and subregional centers are proving problematic due to the threat from e-commerce, but higher-growth regional malls nearer to big cities offer good potential for redevelopment as department stores retrench. This has become a major theme as landlords move to reposition and generally refresh their holdings.

Residential markets continue to generate concern in some quarters as prices rise ever higher. With Sydney now ranked as the second-least-affordable housing market in the world by analysts Demographia (Melbourne is at number six), banks have tightened lending requirements for both developers and retail homebuyers, especially from abroad. Population growth remains a strong theme, however, both in terms of strong immigration patterns into Australia from abroad, and high rates of internal migration as the commodity boom fades and workers move back to cities from outlying areas. This provides capacity to soak up a currently large residential supply pipeline, especially for areas with good access to city centers, which remain in high demand.

Large amounts of foreign capital continue to arrive in Australia looking for deals, although 2015 was the first in many years where domestic purchases were the largest component of investment-grade acquisitions. This reflects pressure from the huge weight of capital held by Australia's domestic pension funds, which continues to grow as individual contribution requirements rise and as funds move to reallocate assets to real estate in preference to domestic stocks and bonds.

Major global investors in the first half of 2016 include the United States (US\$2.2 billion) and China (US\$1.4 billion), according to CBRE. Chinese developers continue to focus on residential development, including city-center conversions from Grade-B office to high-end residential. Some problems have emerged, however. According to one interviewee: "A number of [Chinese] groups have paid some massive prices for assets on the basis that they can double their floor space over and above the current planning regime, then realized that that's not necessarily the case because the regime is fairly rigid. So some of those will be pushed into the next development cycle." With the number of suitable assets dwindling, the conversion play may fade going forward.

While the lack of familiarity with the local market means that foreign investors are generally reluctant to migrate away from the CBD, a lack of available stock means they often have little choice if they want to place capital. In particular, Chinese buyers have been reported buying suburban sites in Sydney, both for their land banks and for residential developments, generally in areas with good schools.

but if you're in an area with little or no infrastructure and your building has poor amenities, you're kind of doomed."

Perhaps unsurprisingly, Jakarta was mentioned as a potential source of distress in the future: "Not the distressed kind of Asian financial crisis stuff, but certainly it could potentially be a very good cyclical point of entry."

The Philippines also continues to appeal to foreign investors, with good growth in just about every sector, especially the office-oriented business process outsourcing (BPO) market. The biggest challenge currently is accessing land, together with increased competition for deals.

The real problem in the Philippines for international funds, however, is that the market has always been hard to access because it does not have much need for what foreign capital has to offer. According to one locally based developer: "The reality is that while foreign investors like the Philippines, there aren't many specific deals they can do or players to work with. Real estate assets are not being actively traded or sold here, and the exit strategy is also unclear—buildings mostly are built and held by developers for income generation."

A foreign fund manager's perspective was along much the same lines: "We like it as a market, but we're very partner driven and we just haven't found the right confluence over the last five years of partner opportunity and pricing. So we've stayed away."

Affordable Housing Boom

Because residential developers generally make more money making high-end homes, it is natural that a disproportionate amount of investment in emerging markets, where strong demand exists at all price points, is funneled into luxury housing. That is beginning to change, however, partly at the behest of local governments, but also because of emerging oversupply issues.

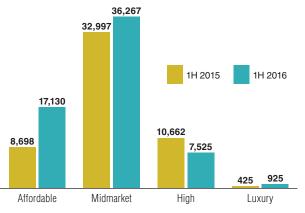


Exhibit 1-16 Indian Affordable Housing Construction (number of units)

Source: Cushman & Wakefield.

China was the first Asian country to actively promote largescale development of affordable housing, kicking off a scheme in 2011 that has generated construction starts of some 5 million units per year. Margins are thin to nonexistent, however, so projects are unlikely to interest private-equity investors, although to a certain extent they are unavoidable because a fixed percentage of most land auctions is usually compulsorily dedicated to affordable housing.

In Indonesia, according to one Jakarta-based fund manager, recent weak sales of mid- and high-end housing contrast with strong demand for lower-priced homes (i.e., selling for under US\$40,000). Affordable housing schemes are now drawing institutional interest from international funds and "offer mid-20s IRR and a two-times multiple—you can also exit quite quickly because construction techniques are very simple."

Featuring a huge demand/supply gap, India is another market where affordable housing is now a strong policy-backed theme. Recent tax breaks have created realistic development margins that have now begun to attract foreign investor interest. While the sector has long been stymied by land shortages and bureaucratic inertia, the Modi government has acted to jump-start low-cost housing construction, with new starts doubling in the first half of 2016 compared with the same period of the previous year, according to brokers Cushman & Wakefield. Given that mid to high price points are currently stalled, more investors are now being drawn to a sector that offers long-term cash-flow opportunities.

Other emerging markets where government policy may soon promote affordable housing initiatives include Vietnam and the Philippines.

Prices Rise, Homes Shrink

Low interest rates, strong demand, and ongoing housing shortages continue to drive residential prices up in most Asian markets. For several years, the regulatory response of governments across Asia (with the exception of Japan) has been the steady rollout of tax-based and other restrictive policies aimed at deterring speculative home purchasing. Most recently, these responses have targeted foreign, and in particular Chinese, buyers.

Reacting to continuing price increases in Australia, therefore, various state governments there have introduced tax surcharges in 2016 on foreign purchasers that range from 3 percent (Queensland) to 4 percent (New South Wales) to 7 percent (Victoria), with more to come in 2017. Of greater importance, in April Australian banks cut off new lending facilities to foreign homebuyers who are neither citizens nor residents, ostensibly on the basis of widespread income documentation fraud. This has had a debilitating impact on foreign buyers and created a spike in settlement risk as foreign off-plan buyers scramble to find finance. Combined with an upcoming wave of apartment completions in Sydney and Melbourne and the recent introduction of Chinese government policies restricting the flow of outbound capital from China, this has created, in the words to one locally based developer, "a perfect storm" for foreign buyers. So far, he said, this storm has "not manifested in a broader market sentiment dropmost of the sales in existence at the moment have all made good money, so there's a good incentive for people to settle." However, while the full impact will probably take time to appear, it is noteworthy that Chinese homebuying activity in other regional markets has experienced steep declines after the introduction of similarly restrictive rules in those jurisdictions.

Home prices in China, meanwhile, remain notoriously volatile. Supply gluts in smaller cities are slowly being worked off and sentiment generally has rebounded sharply in 2016, with prices in the top 100 cities rising 17 percent year-on-year from their trough in August 2015 (compared with 24 percent in the top ten cities), according to data supplier CRIC.

This has resulted in the most intensive round of regulatory tightening since 2011, with new measures ranging from higher downpayment requirements to bans on out-of-town buyers. Even then, as of the end of September, "demand and sentiment are such that the measures don't seem to have had as much effect as Beijing would like," said one interviewee. A particular problem in the big cities is now a lack of supply, with inventories in Shanghai and Beijing down to "unheard of" low levels of just three to four months. As a result, "anything that

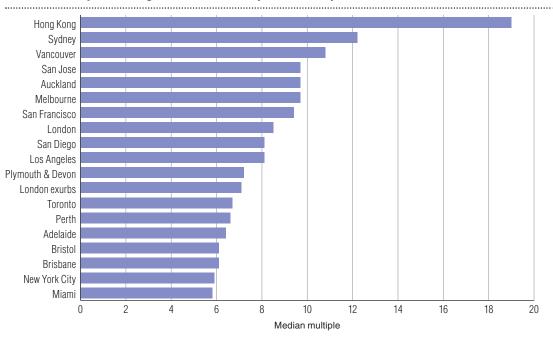


Exhibit 1-17 Major Housing Markets Ranked by Affordability, 2015

Source: Demographia.

Note: Affordability is determined by home price divided by household income.

can be bought is being bought." More tightening measures in individual markets seem inevitable.

While Hong Kong has registered a small decline from peak pricing reached in the second half of 2016, buying momentum picked up in the second half of 2016, although mainly for new-build properties that offer high loan-to-value developer financing. This leaves Singapore as the only major market where house prices appear to have been effectively contained. Even then, however, price declines for mass-market homes in each of the last five years have been modest, with larger declines restricted to higher-end properties.

The conclusion appears to be that in the absence of a higher-interest-rate regime, Asian property markets are likely to remain robust. In general, values rise in spurts and show little inclination to fall. One result of this is that, in order to provide affordable products, home sizes are continuing to shrink, sometimes to barely believable levels. Some new developments being sold as "youth apartments" in Shenzhen and Shanghai (where recent home price rises have been the strongest in China) are barely 130 square feet in size. In Hong Kong, this trend has also taken off in a big way, with at least one major development strategy, focusing on apartments with footprints of just over 160 square feet.

Millennials and the Sharing Economy

Another way to look at the gradual shrinking of residential footprints in Asia is that—in line with emerging models in the United States—it reflects demand from a younger generation of millennial occupiers willing to accept less personal space as long as they also have access to shared social facilities such as gyms, kitchens, living areas, and even office space within the same building. This has to some extent been recognized by local developers and designers, who are increasingly including more and better shared spaces in new residential and office projects.

While it is questionable whether this is really a choice that millennials make willingly, several interviewees noted that changes in millennial living habits are likely to have a longterm impact on the design of living spaces around the Asia Pacific. Ever-smaller footprints are only one aspect of this. As one Japanese interviewee noted: "My employees are the same, but people in their 20s and 30s don't buy their own houses anymore, they don't buy cars or drive." The result, he suggested, was a probable increase in family-type apartments, presumably on the basis that children will opt to remain living with their parents. From an even longer-term perspective, questions arise over the need for parking spaces as the growth of shared transport services such as Uber eats into car-ownership rates.

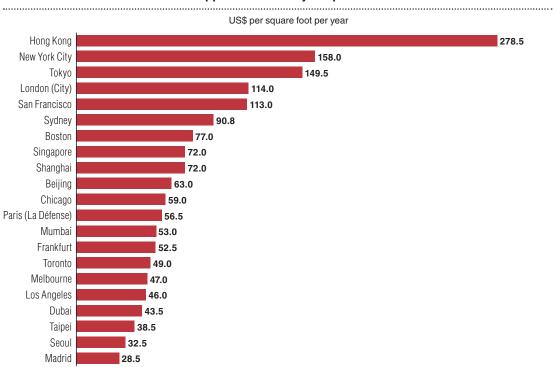


Exhibit 1-18 Prime Office Rents for Upper Floors in Skyscrapers

Sources: Knight Frank, Newmark Grubb Knight Frank, Sumitomo Mitsui Trust Research Institute.

Shared Workspaces Take Off

For now, the impact of the sharing economy in Asia is seen mostly in the office sector, where the concept of the shared workspace—barely on the radar even a year ago—is gaining rapid recognition and acceptance. Shared workspaces provide subscription-based, community-oriented office facilities with open-plan layouts and shared amenities ranging from free coffee (or beer) to fast wi-fi.

Originally conceived to appeal to a younger demographic of freelancing millennials and entrepreneurs, the advantages of using coworking space are becoming increasingly apparent to larger companies, too. Multinational firms struggling to get to grips with rising volatility in regional staffing needs are therefore turning to these shared facilities as a way to provide scalability and convenience without the need for expensive long-term leases and fit-outs. In one recent example, a major bank leased more than 300 spaces for its digital development teams from a newly opened coworking office provider in Hong Kong.

Recent uptake in Asia by both coworking and by more conventional serviced office operators has been remarkable. In Hong Kong, for example, they accounted together for some 250,000 square feet of leased space in the first six months of 2016 alone, according to Colliers. Singapore's emerging role as a hub for tech startups and Beijing's and Shanghai's long track record in tech innovation also make them logical targets for coworking operators.

The shift toward less conventional workplaces is also reflected in moves by many banks and finance companies to embrace hot-desking and activity-based working models in their own offices. This provides the twin advantages of lower costs and collaborative working environments. The trend is especially evident among office tenants in Australia, Hong Kong, Singapore, Beijing, and Shanghai, according to a recent CBRE analysis.

One result of this is that the designs of many newly developed buildings are changing. According to a manager at a large Sydney-based unlisted fund: "We've been doing a lot of research looking at what our tenants and occupiers are going to want in five or ten years, and we're about to commence a couple of developments [based on that]. So a lot of the new buildings being developed these days provide what's now a very efficient floor plate. The densities are much higher and the space they need is lower, even though the rent they're paying is higher—it means they can reduce their occupancy costs through using the floor space much more efficiently."

Another way for large companies to cut leasing costs is by farming out administrative and back-office functions to cheaper locations. This applies especially to the most expen-

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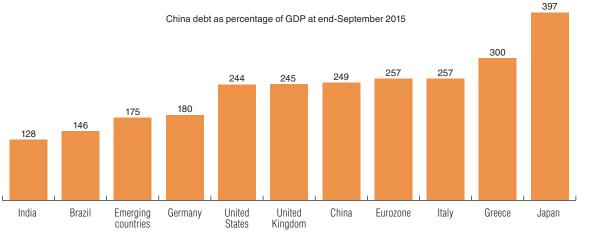


Exhibit 1-19 China Debt-to-GDP Ratio

Source: Bank for International Settlements.

sive cities such as Shanghai, and (in particular) Hong Kong, which has by far the highest CBD office rents in the world. With the city's CBD continuing to draw significant numbers of mainland Chinese finance companies, many foreign banks are now dispatching their back-office functions to decentralized locations such as the new CBD2 business district in East Kowloon. Sydney and Melbourne appear to be exceptions to this trend, with a number of banks now recalling back offices to their original CBD sites, according to one interviewee.

Monetizing the Coworking Trend

For investors, the rapid emergence of new workplace strategies in Asia raises the question of how to monetize the trend. For now, the coworking industry remains dominated by specialist players with a standard business model that takes long leases (ten to 15 years) of multiple floors in appropriate buildings and charges individual users monthly "membership" fees. A lack of familiarity with operational aspects of such businesses means that for now, landlords who open a coworking facility prefer to outsource management to thirdparty players. This is sometimes done on a revenue-sharing basis, but no set model has emerged.

According to one fund manager: "People are thinking about it, but no one's worked out how much money you can make from it. I have some empty office space [in one of our buildings], and I was thinking maybe we could stick some coworking in there. But then, who's going run it? I'm not, and if I find someone else, they're going to want a discount on the rent and they'll take the profits. As a landlord, how do you capture that?"

Workspace strategies are also starting to feature in valueadd plays, where investors may now look to differentiate their products by dedicating one or two floors of an office renovation to open-layout coworking spaces, together with high-tech meeting rooms and perhaps storage space. According to one value-add investor: "We're not trying to compete with the serviced-office operators or the up-and-coming [coworking companies], but it turns out that we've done a number of projects that are quite similar to what they do. We don't give free beer, but by creating smaller suites and giving people a shared suite of meeting rooms you can definitely achieve much higher rentals than you can from a [very] standard Hong Kong landlord offering of poor space, no furniture, no meeting rooms. So it's a business model we will use."

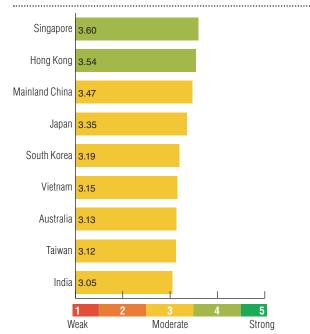


Exhibit 1-20 Level of Impact of Global Economic Concerns

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

Chines Risk Remains Contained

China's high levels of corporate and state-owned industry debt have been on the radar for so long that there is an element of risk fatigue in raising the issue again. Nonetheless, interviewees continue to rate the prospect of a systemic crisis in China as the region's biggest potential concern. Liabilities have continued to mount, with total debt reaching about 250 percent of gross domestic product, according to the Chinese Academy of Social Sciences. And with debt accumulating at about twice the rate of economic growth, that figure is set to rise to 321 percent of GDP by 2020, according to Hong Kong–based investment bank CLSA.

Government efforts to ring-fence the state banking sector are today driving demand for new borrowing into the arms of China's booming shadow-banking industry—a loosely regulated collection of lenders who package debt as bonds, trusts, peer-to-peer loans, and "wealth management" products (often sold by banks themselves as off-balance-sheet assets). These products are sometimes levered in an effort to amplify returns. While the shift toward shadow-bank finance has helped reduce the exposure of state banks, it has also shifted the onus for lending to new players whose finances (and, in some cases, integrity) are often opaque, making the issue more difficult for the government to control. At present, shadow-bank lending amounts to 53 percent of Chinese GDP, according to CLSA estimates.

Meanwhile, the true extent of bad debt within the Chinese financial system remains an open question. Officially, the ratio of state-bank nonperforming loans (NPLs) to GDP stands at less than 2 percent. Even the central government accepts this figure is inaccurate, however, and independent estimates suggest a much higher figure. CLSA puts it at between 15 and 19 percent of GDP, while Fitch Ratings has suggested a range of 15 to 21 percent. At the same time, according to a recent International Monetary Fund report, a "marked run-up in payables debt throughout supply chains [including in the real estate sector] strongly suggests widespread and rising corporate stress." Given that corporate profits are declining and that recent growth in Chinese borrowing is led by a surge of wealth management products offering returns north of 14 percent, the likelihood of an increase to the bad-debt ratio seems high.

However, the mere fact that rising debt is worrying in the context of a Western economy does not mean that the same criteria apply in China. In part, this is because state banks have access to large pools of customer deposits to fund their activities. This is a much more reliable source of funding than for banks in the West, which rely on interbank markets for liquidity. A Lehman Brothers–style liquidity crisis is therefore unlikely to materialize in China. In addition, Beijing's ability to decree policy to the mainland's ostensibly private banking sector means that it can effectively dictate how any individual crisis is intermediated, either by throwing cash at it from one source or another or, for example, by defraying bad-debt write-offs by boosting bank profits via China's already high interest rate spreads.

This does not mean, of course, that China can simply wish away its high levels of debt. In the end, current policies reflect chronic systemic inefficiencies that result ultimately in slower growth, lower earnings, and reduced productivity. These seem more likely consequences of high levels of unresolved debt than the more common suggestion of a cathartic financial crisis.

Real Estate Capital Flows

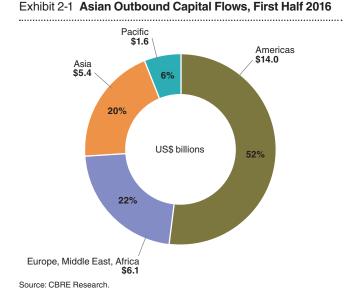
"European and American funds are looking to up their real estate allocations to 15 percent; and from what we see, Chinese insurance companies are around 1 percent allocated to real estate. If they were to share the same view as in the USA, getting to 15 percent would mean US\$240 billion coming into the sector."

In recent years, real estate capital flows out of the Asia Pacific have been characterized by the huge amounts of new capital coming to market from regional institutions, beginning in earnest about three years ago and sourced mainly from China, Singapore, Hong Kong, and South Korea.

Inbound capital, meanwhile, has continued to grow steadily in recent years, although it remains at less than half pre–global financial crisis levels.

Outbound Capital Rises

The flow of Asian capital into global real estate continued to accelerate in 2016, registering US\$27 billion in the first half of the year according to CBRE, up from US\$19 billion for the same period in 2015. Of this, some 60 percent originated from China, and around half of that came from domestic insurance companies. Outflows of real estate capital from Asia are currently ten times the level they registered in 2010. Perhaps surprisingly



given the volumes of cash held in its pension system, Australia is not a large exporter of capital, managing some US\$4 billion in the first half. "Prior to the global financial crisis, there was a significant proportion of capital coming out of Australia; in fact, it was as much as 84 percent of the Asia Pacific total in 2007," said one Australian-based analyst. "But by 2012 it was 1 percent, and it's never really come back from that."

In general, most outbound Asian capital targets assets in either Europe or the United States, with the latter emerging last year as the dominant market. Some US\$14 billion in outflows, or 52 percent of the total, was directed to the United States in the first half of 2016, with US\$6.1 billion (22 percent of the total) targeted at European assets, primarily in London. While gateway cities such as New York and London remain the biggest draw, Asian investors are increasingly willing to move to less traveled areas both in mainland Europe and across North America.

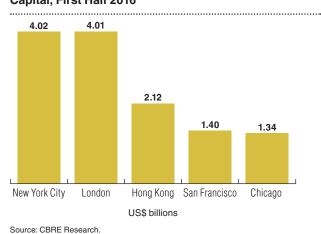


Exhibit 2-2 Top Destinations for Asian Outbound Capital, First Half 2016

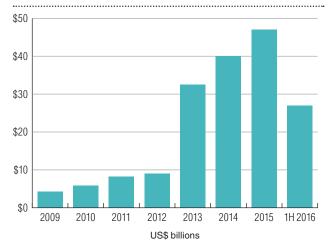


Exhibit 2-3 Asian Outbound Global Real Estate Investment

Source: CBRE Research.

The main reason for the rapid growth in the outflow figures has been the acute need for Asian domestic institutions to find an investment home for the vast reserves of capital continuing to build in regional economies, where investable assets are in short supply and returns are anyway already low. In particular, these institutions include sovereign wealth funds (SWFs), pension funds, and insurance companies. As one international fund manager said: "Chronically low interest rates mean portfolios of institutional capital aren't able to meet their return profiles with traditional allocations of fixed income and equities, so there is more pressure to move into high-yielding defensive stocks like real estate."

Asian Institutions Just Getting Started

As impressive as recent growth in Asian institutional outflows has been, however, in many ways these are only the beginning. For one, Asian insurance companies, and especially those in China, are likely to export ever-larger amounts of

Exhibit 2-4 Change in Availability of Equity Capital for Real Estate in 2017, by Source Location



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

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Company	Assets under management (US\$ billions)	Real estate assets under management (US\$ billions)	Percentage in real estate
China Life	321	3.2	1.0%
Ping An	220	6.3	2.9%
China Pacific	117	1.1	1.0%
New China Life	92	0.3	0.5%
Taikang Life	72	0.5	1.0%

Exhibit 2-5 China's Largest Insurance Companies

Source: JLL ICG Research.

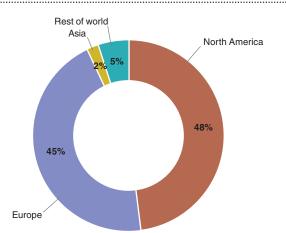
capital as they struggle to raise allocations to something approaching international norms. In the first half of 2016, therefore, outward flows from Chinese insurance companies reached some US\$8 billion—more than the total from the previous three years combined, according to CBRE. Insurers from South Korea and Taiwan have also made major foreign investments.

These are only a drop in the ocean, though, compared with what is to come. According to one locally based analyst: "At the moment, Chinese insurers are around 1 percent allocated to real estate. If they were to target the same 15 percent figure seen in the U.S., that would involve investing around US\$240 billion of deployable capital." Although that would undoubtedly be a multiyear exercise, the scale of the task is evident when that figure is compared with current total global real estate transaction volumes totaling around US\$730 billion.

Nor is institutional capital the only source of Chinese outflows. More recently, it has been joined by an exodus of cash contributed by Chinese developers, midsized state-owned enterprises, and high-net-worth (HNW) sources. All are looking to achieve higher returns to diversify internationally, or to hedge currency volatility. Outflow growth, in fact, has been so strong that some 61 percent of all real estate investment involving Chinese capital took place outside the country in the first half of 2016, according to Jones Lang LaSalle.

One Shanghai-based interviewee suggested that the weight of Asian capital in the pipeline is currently so great that it may alter global return expectations: "We are expecting to see a new paradigm in terms of global return because of Asian capital, which over the last five to ten years has been used to lower returns than you see in gateway cities in the West. So a lot of people have asked me if we are now at the bottom of the market, and I always say we're expecting a bit more—we may see a completely new return structure that could go even below 2 percent."





Source: Pregin Real Estate Online.

Government Restrictions Slow Chinese Flows

The remarkable recent growth of Chinese outbound capital has been a source of increasing concern to the government because of the threat it represents to the stability of the Chinese currency and to its stockpile of foreign currency reserves. Authorities therefore moved to impose restrictions on the amounts of capital that could be sent abroad in the middle of 2015.

Gauging the impact of these restrictions is difficult, not least because they can change rapidly. But anecdotal recent reports suggest that the long delays experienced in the months immediately after restrictions were introduced have now subsided. They can still create significant holdups, however, the extent of which vary according to the size and political connectedness of the investor. Institutions and other big investors generally receive approval faster than midsized and smaller players, especially if they are privately owned.

According to one analyst: "The urge to go out is still there, but [Chinese authorities] are now giving the capital they had [previously] been allocating to second- and third-tier guys to the big insurance companies—so we've seen bigger ticket size but fewer buyers." As of mid-2016, approvals were supposedly taking around eight weeks to secure, down from around six months in 2015.

This is still a long time, however, and particularly so in the United States, where deals tend to close quickly. As a result, some sellers in the West have become reluctant to engage with Chinese buyers out of concern not only that deals will be delayed, but that they may not happen at all if approval is not

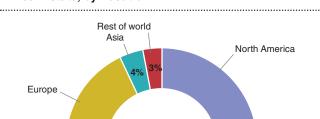
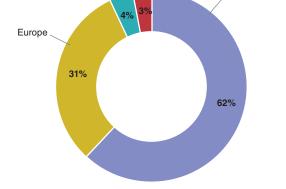


Exhibit 2-7 Proportion of Public Pension Funds Investing in Real Estate, by Location



Source: Preqin Real Estate Online.

forthcoming. This, in turn, has had an impact on how investments are being structured. In particular:

- Buyers are now seeking as much leverage as possible in order to minimize capital outlays.
- Deals are being priced at lower cap rates, reflecting the extra time needed for Chinese buyers to obtain capital.
- Buyers are increasingly resorting to club deals or fund platforms to make investments.

Deal Structures Evolve

The initial wave of outbound capital—whether from China or elsewhere in Asia—was directed mainly at high-quality, single-building core assets in major cities. Given global cap rate compression in recent years, these investments have for the most part been successful.

Since those early days, however, investment strategies have diversified. The need to achieve scale has led to a proliferation of portfolio and platform deals. These amounted to 36 percent of the total in the first half of 2016, up from 29 percent the previous year. There also is a trend toward entering markets in partnership with local players familiar with their hometown environments, much the same as many foreign funds choose to operate in Asia.

Capital from South Korea, meanwhile, prefers to invest via funds. According to one fund manager: "Korea is the biggest, most consistent pool of institutional capital targeting fundtype or co-mingled investment structures in Asia. They take comfort in numbers and like to invest together in clubs, but the focus is on income, on visibility. So they go for debt-oriented, income-oriented investments and also visible portfolios as opposed to blind pools."

As Asian investors gain more experience working internationally, and as the next wave of investors—primarily Chinese developers and HNW money—has become increasingly prolific, the approach has changed again. Chinese developers in particular are focused on buying land, often with a focus on building facilities for use by Chinese tourists or expats. Unsurprisingly, residential projects and hotels in gateway cities have been priorities.

While analysts in markets where Chinese investors are active often comment that Chinese buyers have overpaid for their investments, the value of any given project to an Asian investor is not necessarily measured in terms of its dollar returns. According to one interviewee, Chinese investors "are learning what to do, understanding subcontractors, how to create relationships, how to order materials and deal with local governments." In addition, said another, "I think they are looking in China at the slowing economy and the depreciation of the [renminbi] and are thinking, 'Where can I go somewhere safe?' On that basis, if they can earn somewhere between 3 and 5 percent, they're okay with that."

Japanese Money Looms on the Sidelines

Institutional funds in Japan are notoriously conservative in their investment strategies, and have rarely ventured abroad since some ill-judged forays during the 1980s. That is now set to change, however. Although previous predictions of the imminent arrival of Japanese institutional capital on global markets have proved premature, the reality is that the big domestic players have little choice but to make the move. Local pension funds, led by the mammoth US\$1.3 trillion Government Pension Investment Fund (GPIF), have the largest pool of assets under management (AUM) of any country in the world, but with yields from Japanese government bonds (JGBs) turning negative, they are now forced to seek higher returns elsewhere. Given the small size of Japanese markets relative to AUM, this inevitably means that funds will have to export capital to international markets.

The GPIF and its local peers announced as long ago as 2014 an impending shift to a 5 percent allocation to alternatives, and have hired real estate asset managers to oversee it. So far, however, interviewees reported no indication of any significant international activity in terms of direct purchasing, although there has been some activity on the equities side, principally in the United States and (looking regionally) in Australia. According to a fund manager at a large global fund: "We've seen predominantly [Japanese] corporate pension fund inflows to European and global core funds, but not direct investment. While individual investment is not huge, it's building quite nicely."

According to a Tokyo-based fund manager: "There have been some recent moves by Japan Post to gravitate toward the alternatives area, but I think that type of capital is going to take baby steps—it's going to start in more mature markets in the West and will probably involve private equity investments before we see direct stakes in assets. Their real estate side

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Rank	Fund	Country	Туре	Assets as of June 2016 (US\$ billions)	Assets as of June 2015 (US\$ billions)
1	Social Security Trust Funds	United States	National pension	2,813.0	2,789.5
2	Government Pension Investment Fund	Japan	National pension	1,264.0	1,149.7
3	Government Pension Fun–Global	Norway	Sovereign wealth fund	850.0	873.0
4	China Investment Corporation (CIC)	China	Sovereign wealth fund	813.8	746.7
5	Abu Dhabi Investment Authority (ADIA)	United Arab Emirates	Sovereign wealth fund	792.0	773.0
6	Kuwait Investment Authority (KIA)	Kuwait	Sovereign wealth fund	592.0	592.0
7	SAMA Foreign Holdings	Saudi Arabia	Sovereign wealth fund	582.4	685.6
8	SAFE Investment Company	China	Sovereign wealth fund	474.0	541.9
9	Federal Retirement Thrift	United States	Public pension	469.9	443.0
10	Hong Kong Monetary Authority Investment Portfolio	Hong Kong	Sovereign wealth fund	456.6	427.7
11	Stichting Pensioenfonds ABP	Netherlands	Public pension	444.4	440.0
12	National Pension Service of Republic of Korea	South Korea	National pension	408.7	439.3
13	GIC Private Limited	Singapore	Sovereign wealth fund	350.0	344.0
14	Qatar Investment Authority	Qatar	Sovereign wealth fund	335.0	256.0
15	CalPERS	United States	Public pension	203.0	304.1

Exhibit 2-8 Largest Pension and Sovereign Funds

Source: Sovereign Wealth Fund Institute.

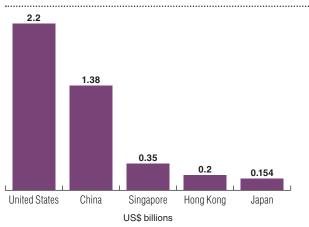
just hired someone, and I wouldn't be surprised to see them start buying by the end of this year [i.e., 2016]."

Bank earnings in Japan are also suffering in an environment of near-zero interest rates, prompting a similar migration to international markets. According to a manager at one large developer: "On the debt side, domestic Japanese lenders outside the mega-three banks are starting to lend to international borrowers. And that is new. A lot of it has to do with the fact that the margins they were getting in Japan—because they only wanted to lend to Japanese—were 15 to 25 bps in a market elsewhere that's north of 90 bps. So it's the first time we've seen in our lines regional banks participating with an international borrower."

Brexit a Dud

Many investors in Asia had expected the United Kingdom's Brexit vote in the first half of 2016 to have an impact on Asian capital flows, most likely in the form of an increase in incoming European capital originally earmarked for the U.K. finding a safe haven in Asia. Although one interviewee noted anecdotally an increase in German open-ended funds buying in Sydney, safe-haven activity has in general failed to materialize. Indeed, if anything, Brexit-related flows in the immediate aftermath of the vote have been moving in the opposite direction, with interviewees reporting significant amounts of Asian HNW capital aimed at the United Kingdom following the steep depreciation in U.K. currency. At the same time, more risk-averse institutional flows from Asia to the United Kingdom appear to have fallen off.

Another potential source of regional capital-flow volatility relates to a potential decline of investing by Middle Eastern SWFs given the steep cuts in oil prices over the last couple Exhibit 2-10 Inbound Capital Flows, Australia, First Half 2016



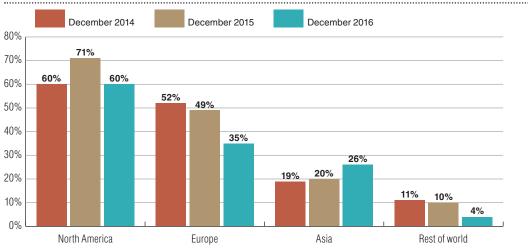
Source: CBRE Research.

of years. As the recent purchase of Asia Square Tower I in Singapore by the Qatar Investment Authority suggests, however, buying appetite among Middle East SWFs has remained strong, according to interviewees watching their activity in local markets.

Incoming Flows Remain Steady

Global flows of capital coming into the Asia Pacific region US\$9.6 billion in 2015, and seem on course to match that figure in 2016, according to CBRE data. Several locally based fund managers were positive about the prospects for an increase in flows moving from the West to Asia, mainly as part of diversification strategies. Capital flow statistics, however, suggest fairly tepid growth over the last few years, and although this impression is perhaps magnified by the fact





Source: Preqin investor interviews, June 2016.

that increases in incoming funds pale in comparison to what is heading out, the reality is that the level of inbound money remains well below pre–global financial crisis levels.

While this may in part be because available levels of institutional-grade stock are lower in Asia than they are elsewhere, the bigger factor is more likely related to a belief that risk-adjusted returns in Asia are uncompetitive with what is currently on offer in the West. As one fund manager commented: "If you look at the relative opportunity once you adjust for tax and currency, net returns still look pretty good in your home market. So it's much more a diversification play than it is to say, 'I feel I'm going to be hugely paid for taking that incremental tax and currency risk, plus the market risk, obviously.'"

This probably accounts for today's relatively low levels of enthusiasm among foreign investors for placing capital in China (with the exception of Shanghai). According to one fund manager: "Asia has become a much more permanent fixture in people's global asset allocation, but I think looking from the U.S. and Europe, the desire is to do that in a low-risk fashion. What we're seeing is that from a relative-value standpoint, investors are concerned they're not getting paid for China risk. They'd rather put money into a market where they can sleep at night, like Japan or Australia, in segments that are growing, versus taking a bet in China."

In terms of cross-border investment within Asia, Australia remained the Asia Pacific region's biggest recipient in the first half of 2016, attracting some US\$4.7 billion of international capital, according to CBRE, with Singapore ranking a close second, albeit largely on the back of a single US\$2.8 billion deal.

Institutional Investors Now Dominate

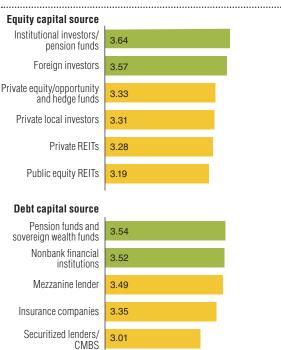
Over the last several years, one of the biggest ongoing themes in the region has been the gradual rise of institutional capital, which has risen steadily as a component of the whole.

This is partly due to a fall in the volume of opportunistic investment in Asia. More importantly, though, it reflects greater amounts of institutional money being allocated to real estate, together with a rise in global institutional capital targeting the region, especially from the Middle East. These funds have either set up their own operations, or established separate accounts with locally based funds. Either way, the amount of international institutional capital in Asia as a proportion of all cross-border investment has risen from 9 percent in 2012 to 47 percent at the end of 2015, according to CBRE. That figure is likely to rise to almost 60 percent by the end of 2016.

Fundraising Still Tough

As usual, interviewees reported that raising capital remained difficult. According to one institutional fund manager: "There's

Exhibit 2-11 Change in Availability of Capital for Real Estate in 2017



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

Large

decline

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Decline

Stav

the same

Increase

5

Large

increase

Commercial banks

exponentially more capital among LPs [limited partners] to invest in real estate, so that should be a positive. But the flipside is that there are also exponentially more options for those LPs to invest in—funds, JVs [joint ventures], syndicates, direct deals. So it's hard from that perspective. And because LPs are spoilt for choice, they are naturally much more detailed and specific about what they want and what they can get for deployment of capital."

Meanwhile, the trend favoring a "barbell" strategy—whereby LPs place capital either with the largest, most established funds or with smaller specialist vehicles, continues: "The big [funds] are attracting a lot of money for [various] reasons good track record, stable teams, and alignment of interest. It's easy for LPs to take that to their committees because no one is going to question investing in a [big fund] strategy—it ticks the right boxes and it's a safe way to deploy capital. On the other hand, there are small niche players that meet the needs of people who want to tactically allocate to certain places—so very high-quality niche strategies with good managers, good track record, stable [platforms] and [those] who have alignment of interest are also very successful. The ones struggling

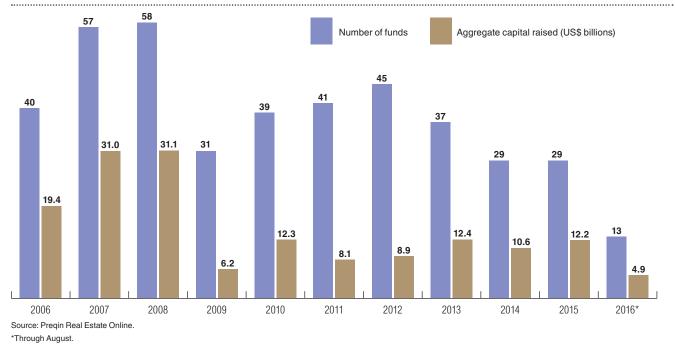


Exhibit 2-12 Annual Primarily Asia-Focused Closed-End Private Real Estate Fundraising, 2006–2016

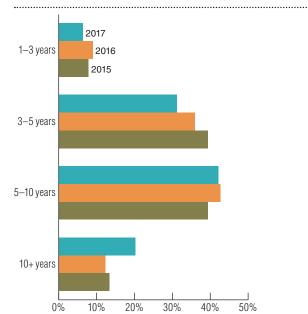
are the ones in the middle—they have a little of both, but nothing specific for anyone."

Despite the huge increase in Asian capital now circulating in the region, so far very little of it has gravitated to international investment managers. This is beginning to change, however, if only around the margins. According to a manager at a large global fund: "Typically, they'll say they just don't need foreign investment funds to invest in their own markets. But that's starting to change, for a couple of reasons. One, there's an awful lot of scrutiny about the motivations for some investments—i.e., [in China], the corruption clampdown. And then also there's also a realization amongst some, what I'll call 'enlightened,' institutions that they should focus on their core business and let professionals run their investment assets."

Certainly, international funds welcome such opportunities when they arise because—apart from anything else—local capital tends to be less demanding in its return expectations. According to the same manager: "Strategically, for our business it's important to find a match between the returns on offer in the market and the capital that we've got to invest in it. Because you might be able to raise 20 percent [return] capital, but if you can't find 20 percent investments, then what's the point?"

Investors Ready for Riskier Strategies

In terms of investment strategies, survey rankings show value-add plays as the most popular this year, followed by three others that were closely grouped: core-plus, developExhibit 2-13 Time Horizon for Investing



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

ment, and opportunistic. Apart from these, the low ranking of core strategies is perhaps surprising given the proliferation of investors in the region looking for core assets. The reason is perhaps that, as popular as a core strategy is in principle, actually buying core assets in the current environment is more difficult.

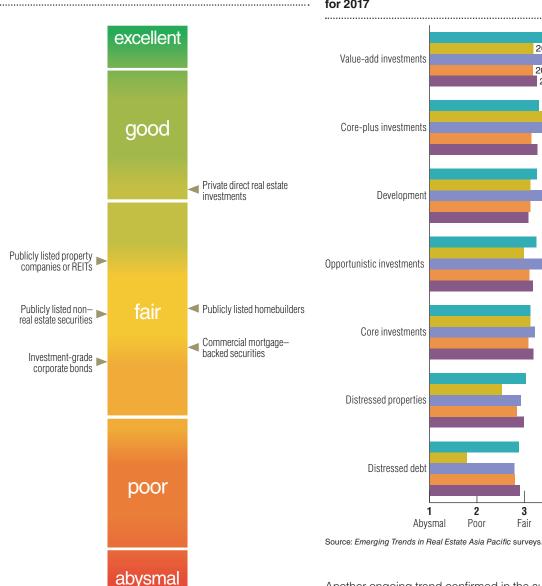


Exhibit 2-14 Investment Prospects by Asset Class for 2017

Exhibit 2-15 Prospects by Investment Category/Strategy for 2017

> 2017 2016

2015 2014 2013

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

Opportunistic strategies gained in popularity this year as investors embraced higher-risk strategies to meet return targets. The number of active foreign opportunistic investors has therefore dwindled in recent years, although to an extent this has opened the field for the rest. As a fund manager at one such fund commented: "There are definitely fewer opportunity-fund players than in the past, certainly on a pan-Asian basis. But we've done plenty of successful deals using this strategy and nowadays the competitors down here are so weak compared to Europe and the U.S."

Another ongoing trend confirmed in the survey results was a preference for longer investment timelines. This reflects the higher proportion of institutional capital in today's market looking for long-term plays, together with a general reluctance to pursue fast-money strategies. The results include in particular a steep increase in ten-year and over strategies, again reflecting the emergence of an institutional buy-and-hold mentality. In some ways, this has provided justification for the supercompressed yields that are now the norm at the top end of the market. As one fund manager commenting on a recent SWF deal said: "I wouldn't pay what they paid. I suppose if they're talking about extremely long term that's fine, but if you have a five- to seven-year private equity fund, or even a REIT, there's no way you can make that work."

3

Fair

4

Good

5 Excellent

Exhibit 2-16	Policy	Interest	Rate	Changes
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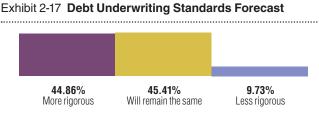
Market	End of June 2016, %	Number of rate cuts in 2Q 2016	Change in 2Q 2016		
Australia	1.75	1	—25 bps		
China	4.35	0	0 bps		
Hong Kong	0.57	0	0 bps		
India	6.50	1	—25 bps		
Indonesia	6.50	1	—25 bps		
New Zealand	2.25	0	0 bps		
Singapore	0.93	0	—25 bps		
South Korea	1.25	1	—25 bps		
Taiwan	1.375	1	—12.5 bps		
Thailand	1.50	0	0 bps		

Sources: CBRE Research; various central banks and monetary authorities, July 2016. Notes on policy interest rates: Australia = cash rate; China = one-year lending rate; Hong Kong = three-month HIBOR; India = repo rate; Indonesia = Bank of Indonesia key rate; New Zealand = official cash rate; Singapore = three-month SIBOR; South Korea = base rate; Taiwan = discount rate; Thailand = one-day repo rate.

Local Banks Still Offering Cheap Debt

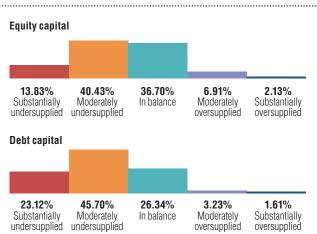
Traditionally, demand for real estate finance in Asia has been intermediated by regional banks, and that remains the case today, with debt finance in general easily available and cheaply priced. As one investor said: "I think [next year] is going to be pretty much the same as 2016. I don't think anything's fundamentally changing year on year, but clearly banks are better positioned now and are able to lend. It's not difficult to get financing for senior debt with short duration from banks as well as senior debt with slightly longer duration from insurance companies." Loan-to-value (LTV) ratios also remain largely untouched.

Some changes are taking place around the margins, however. In Australia, banks have recently tightened up lending requirements in some categories. Lending facilities to foreign homebuyers were suspended in April, and development loans were restricted in some submarkets, primarily Melbourne, Brisbane, and Perth, according to one interviewee. In general, too, leverage has fallen and lending margins have increased, opening up new opportunities for mezzanine lending (see below). In other ways, however, Australian local borrowing facilities have recently improved. In particular, local banks responding to moves by foreign competitors are now more willing to provide seven- to ten-year facilities, compared with the three- to five-year terms offered in the past. According to one locally based fund manager: "Offshore banks are still probably more competitive in terms of offering facilities with that longer tenure, but the Aussie banks are now realizing they're having to compete in the market, probably more on a seven-year facility-that's been a huge benefit."



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.





Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

In Japan, the big banks have become more conservative in facilitating highly leveraged deals and in lending to new clients from overseas. This has again created scope for a more active mezzanine market, which local players—including opportunistic and private equity funds—are moving to fill.

Western banks, meanwhile, continue to have issues competing with the locals. This has more of an impact on occupancy trends than it does local lending markets, with international investment and commercial banks reducing their office footprints in various cities including Tokyo, Hong Kong, Beijing, and in particular Singapore, where divestments by foreign banks are contributing to oversupply in the local office sector, according to one Singapore-based interviewee

New Debt Sources Step Up

For most purposes, local bank financing fits the bill. Again, however, there are changes around the margins. Multiple interviewees noted how Japanese banks are now more active in lending internationally, given low returns available at home. In addition, one fund manager operating in the Australian retail sector reported activity by new sources of capital now available in the domestic market, including overseas banks, U.S.

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Market	LTV	Reference rate	QOQ change	Spread	QOQ change in lending rate
Australia	60%-65%	3-month bank bill swap rate: 1.96%	—30 bps	172–225 bps	Down
China	50%	5-year base lending: 4.75%	0 bps	50–120 bps	Flat
Hong Kong	40%	3-month HIBOR: 0.57%	+ 1 bps	230–280 bps	Flat
Japan	60%-80%	3-month TIBOR: 0.07%	—3 bps	40-200 bps*	Down
Singapore	50%-70%	3-month SOR: 0.77%	-4 bps	175–300 bps	Down
South Korea	60%-70%	3-month CD: 1.37%	—24 bps	205–255 bps	Down
Taiwan	60%-70%	1-year deposit: 1.04%	-9 bps	170–240 bps	Down

Exhibit 2-19 Typical Commercial Property Lending Terms, Second Quarter 2016

Sources: CBRE Research; S&P Capital IQ; and various central banks and monetary authorities, second quarter 2016. *Interest rate spread for borrowers that have strong relationship with banks.

private placements, domestic bonds, and domestic equity placements.

China is another market where nonbank finance has boomed in recent years as the government cuts back borrower access to the state banking industry in an effort to insulate it from potential bad-debt shocks. China's shadow-banking sector has morphed through various iterations as it seeks to outpace regulator controls. These include the trust sector, the peer-to-peer lending industry, and most recently asset-management plans (AMPs), which have become the fastest-growing component of a domestic shadow-banking sector currently valued at some US\$7.5 trillion, according to Moody's Investors Service.

While growth in this market is apparently beneficial to China's formal banking sector, banks may be less insulated from systemic risk than they appear given that many of them are participating anyway in the shadow-bank boom via off-balance sheet vehicles and that the industry itself remains generally opaque and under-regulated.

Limited Market for Mezzanine

With bank finance so readily available, demand for mezzanine debt remains limited. As one banker said: "Mezz as a play generally across Asia is still hard. There are funds that are being raised, but it's going to be hard to place [them]." Demand exists, though, in some markets on a case-by-case basis, in particular in markets where banks have pulled back from some types of lending.

In Australia, for example, private equity players are putting together finance packages "that take a first-mortgage position and provide a combination of both senior and subordinate debt, but obviously at a commensurate price—we're hearing stories of combined debt at 11.5 percent to 12 percent, and mezzanine-only debt at 18-plus percent, although you have to question the viability of a project at that level." In addition, self-managed superannuation funds (SMSFs) also are providing facilities, "looking at the preferred-equity model rather than subordinate debt." SMSF funding to the Australian real estate sector currently totals in the A\$2 billion to A\$4 billion range, or about 0.5 percent of all SMSF assets, according to press reports. Japan also is a growth market for mezzanine lending.

India, meanwhile, has historically been the biggest regional market for mezzanine financing. But while a few years ago Indian mezzanine offered returns exceeding 20 percent, the market has now "shifted dramatically," with banks and nonbank financial companies today offering 12 percent to 14 percent terms for construction debt and 16 percent to 18 percent for land acquisition, according to one Delhi-based consultant.

Finally, China is another market with scope for mezzanine deals, although local rules requiring mezzanine debt to be sourced offshore raise questions about priority vis-à-vis onshore equity interests and make Chinese mezzanine debt effectively worthless in the event of a bankruptcy. As a result, "It's not really mezz," as one banker commented.

China Bond Market Booms

Corporate bond issuance throughout Asian emerging markets continues to grow steadily, although bonds still take a back seat to bank debt as a means of financing real estate and other deals. The size of the local currency (LCY) corporate bond markets in East Asia (excluding Japan) reached US\$3.7 trillion as of mid-2016, up 7.5 percent on the year, according to the Asian Development Bank. Of this, China contributes the lion's share, with US\$2.2 trillion, up 14.2 percent year-on-year on a local currency basis. Notably, while China's share of the Asian LCY bond market is by far the largest in the region, issuance as a percentage of gross domestic product (GDP) is still relatively small at some 30 percent (see exhibit 2-8).

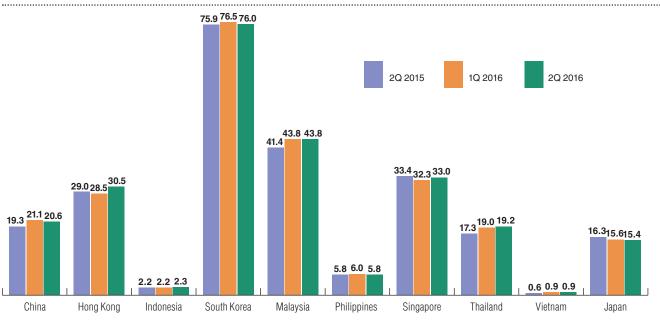


Exhibit 2-20 Size and Composition of Corporate Local Currency Bond Markets (Percentage of GDP)

Source: Asian Development Bank.

China has taken active steps in the last three years to liberalize and expand its bond markets. This is in line with the need to develop capital markets generally, but also relates more particularly to attempts to alleviate pressure on the banking sector, which traditionally has done the heavy lifting in terms of distributing capital within the economy.

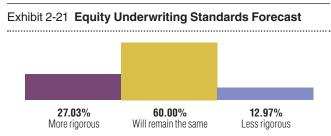
Until recently, most Chinese corporate bonds were foreign currency (FCY) issues sourced in Hong Kong. However, the status quo changed in mid-2014 when the government opened up the LCY bond markets, allowing both listed and unlisted developers to issue domestic bonds. Because of strong demand, LCY bonds have been priced at much lower yields than FCY equivalents, creating an immediate boom in bond issuance as developers rushed to refinance debt portfolios. According to a consultant based in Hong Kong: "Currently, the cheapest way to raise money [for Chinese developers] is via renminbi [Rmb] bonds in China—we've just raised Rmb4 billion at between 5 percent and 6 percent after banks refused to roll over existing loans." Prices for equivalent FCY debt would likely be several hundred basis points higher.

Most analysts see the expansion of the LCY market as a positive step in principle, because, as one commented: "For most of the big liquid property companies, it means their cost of debt capital has been coming down. Before, most of them were going to interesting extremes to access financing because the government was restricting what they could and couldn't do. So some of them were issuing perpetual convertible securities, which they were treating as equity but really look more like debt at very high rates. Now, though, pricing is coming down across the board for all sorts of different products. So actually one of the positives for Chinese developers has been this ability to refinance expensive debt."

That said, doubts have emerged as to whether low-cost LCY bonds are accurately pricing real levels of China risk. According to a report issued by the International Monetary Fund in April 2016, "the surge in [bond] issuance comes amid high and rising corporate leverage, while the pricing of credit risk is significantly distorted in overcapacity sectors (largely due to perceived implicit state guarantees) despite some tentative evidence of widening spreads." The report went on to note that this issue poses "a potentially serious challenge for financial stability" in China. This is especially so given that the government is now allowing growing numbers of bonds to default, with more than 30 default events recorded as of June 2016, according to Chinese data provider Wind.

Total debt of 119 Chinese developers rose 30 percent yearon-year at the end of June 2016, according to Bloomberg, with developer sales of LCY bonds rising to Rmb458 billion, up from Rmb443 billion for all of 2015. According to one investment bank survey of Chinese developers conducted in mid-2016, access to local bond financing had tightened due to the rising number of recent defaults. Over time, bond yields seem likely to trend upward as the market comes to terms with the fact that default risk is not purely theoretical.

As a result of these issues, China moved recently to restrict the number of companies entitled to issue LCY bonds. Rules introduced in October 2016 now prohibit bond issues from



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

companies that are unlisted, government-controlled, or not among the top 100 developers in the country. If tightly implemented, the rules will operate to prevent bond sales by the many smaller (and usually cash-strapped) developers in thirdand fourth-tier cities, where overbuilding has been a problem.

On the equities side, many Chinese developers have opted in the past to pursue initial public offerings (IPOs) in Hong Kong in order to tap foreign currency financing, especially given the challenges in obtaining approval for mainland Chinese listings. The problem today, however, is that—unlike in Shanghai—Chinese developers listed in Hong Kong trade at very large discounts to net asset value (NAV), effectively denying them access to follow-on offerings. As a result, growing numbers are now seeking to delist from Hong Kong with a view to relisting across the border, where shares trade on average 30 percent higher than for corresponding listings in Hong Kong. At least ten listed mainland companies have announced privatization offers in the first half of 2016 with this goal in mind. That's not to say they will be successful, however. Chinese authorities are currently reluctant to allow IPOs, especially for developers, and with an 800-strong waiting list, the chances of getting to market within at least the next three years appear slim. That still leaves the possibility of a backdoor listing, but even then regulatory approval may be problematic. In addition, the steep cost of this option—currently in the US\$1.5 billion range—may be hard even for a large developer to swallow.

Corporate Governance Hits Share Prices

Another issue that relates to listed real estate companies in Asia is corporate governance, which continues to generate concern given the high number of developers that remain controlled by founding families or are otherwise subject to influence by small groups of shareholders with vested interests.

Describing the issue as the "elephant in the room," one interviewee spoke of how equity prices for some listed developers in Hong Kong and Japan had been eroded by a perceived unwillingness on the part of management teams to make decisions based on return on equity considerations. Describing it as "a major problem," the interviewee noted how shares of many developers trade at big discounts to NAV, and advocated share buybacks as an appropriate response, adding: "They seem to think there is a conflict between what equity investors want and the largest shareholders want—I don't know why they don't see that having a higher share price would be good for everyone."

Asia Pacific REITs Regain Momentum

While the amount of new equity raised by real estate investment trusts (REITs) across Asia dropped to just US\$7 billion in

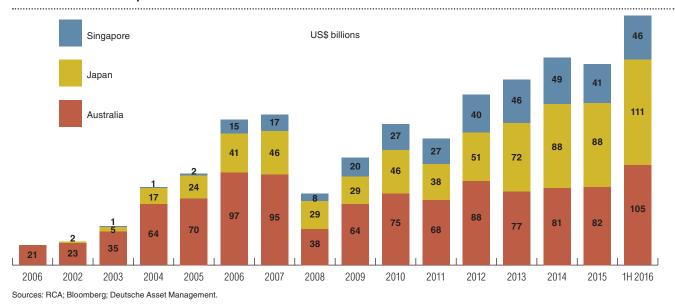


Exhibit 2-22 Market Capitalization of Listed REITs in Asia Pacific

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2015, it spiked again in 2016 as interest rates in the three main Asian REIT markets fell. Lower interest rates are beneficial because REITs provide bond-like revenue streams and therefore trade in line with fixed-income assets. In addition, they reduce the cost of borrowing used to finance new purchases and also filter through directly to the bottom line by increasing dividend yields. Throughout the Asia Pacific region, listed REITs currently account for approximately 25 percent of all commercial property transactions, according to Real Capital Analytics.

Japan

Japan's J-REITs have been big beneficiaries of the ongoing quantitative easing policies of the Bank of Japan (BOJ). Not only, therefore, did the J-REIT index surge following the announcement of negative interest rate policies at the start of 2016, but the industry continues to benefit from a government campaign mandating purchases of some US\$865 million worth of J-REIT shares annually. While front running the BOJ's regular purchasing exercises has long been an easy source of profit for some, J-REITs have now become richly priced, with shares trading at a premium to NAV of around 25 percent. That contrasts to share prices of local developers, which currently trade at an average 30 percent discount to NAV.

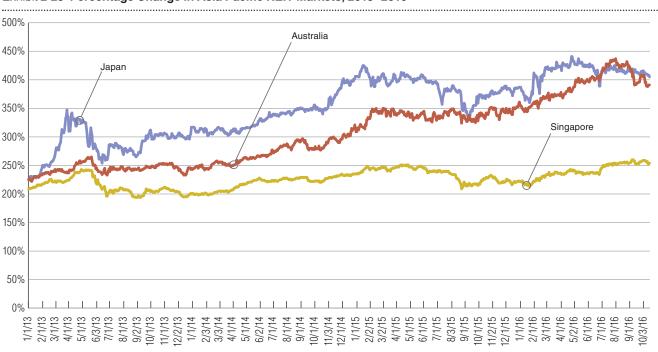
Distribution yields of a little over 3 percent make J-REITs among the priciest in the world, although they still offer a decent yield spread given the negative interest rates payable on government bonds. At the same time, however, finding accretive acquisitions at that level has become problematic. As a result, J-REIT asset purchases—so long a mainstay of the Tokyo core sector—have fallen, although some J-REITs continue to buy assets from their sponsors. J-REITs are also issuing less equity, with follow-on capital falling 42 percent year-on-year in the first half of 2016, according to CBRE. Several interviewees mentioned the possibility of larger J-REITs buying out smaller competitors whose share prices have lagged the market.

Singapore

Despite the ongoing downturn in Singapore commercial real estate, local REITs have taken precautionary measures and seem in general ready to ride out the storm. In particular, most Singapore REITs (S-REITs) have locked in cheap financing by issuing longer-duration bonds (up to 15 years), providing protection against future interest rate increases. Office REITs, meanwhile, have moved proactively to negotiate with tenants to renew expiring leases, therefore sidestepping a looming glut of office space.

At the same time, however, retail-related S-REITs are suffering amid a glut of retail assets. In addition, some REITed malls are undergoing renovation work that has disrupted earnings. In the industrial sector, vacancies have risen and rents continue to decline.

In 2015, the Singapore government introduced rules capping REIT leverage at 45 percent of total assets. While all S-REITs





Source: TR/GPR/APREA

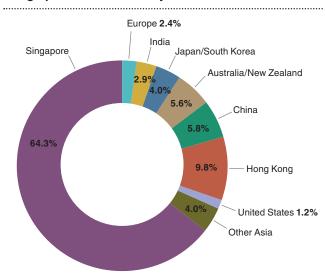


Exhibit 2-24 Singapore-Listed Property Assets: Geographical Distribution by Asset Value

Sources: company annual reports; DBS.

currently operate well below that limit, any significant increase in interest rates or decline in asset values might function to raise their gearing above current levels. As a result, the industry is looking at ways to address gearing profiles. One way to do this is by issuing perpetual securities, which are treated technically as equity and therefore comply technically with the regulations. Other S-REITs may simply sell assets. According to one local REIT manager: "With as much liquidity as there is in the market now, there might be the potential for trading assets, lowering debt off that, and then acquiring assets that will be higher yielding—it's a strategy a lot of REITs are taking."

With S-REITs carrying hefty average distribution yields of some 6.5 percent, finding accretive acquisitions locally would be problematic, and for this reason many—and especially the industrial REITs—are looking abroad, focusing in particular on Australia, which offers yields "north of 7 percent."

Australia

Supported by declining base rates, share prices in Australian REITs (A-REITs) rose steadily in 2016, gaining some 6.5 percent year-on-year by the third quarter. Yields average around 4 to 5 percent.

A-REIT pricing has also been supported by good rental growth that averages some 3 percent annually. At the same time, strong demand for core assets is allowing REITs to sell off noncore assets at high prices and then reinvest the proceeds in higher-earning projects. Share prices have also been supported by an overall lack of follow-on offerings, with A-REITs instead relying on bank debt or ongoing disposal programs to fund purchases. Looking ahead, the current shortage of investable assets in Australia could provide opportunities for institutional buyers to buy up smaller REITs as platform deals. In addition, a strong pipeline of new A-REIT listings is now in place, with at least A\$3 billion in new shares coming to market amid strong buyer interest for assets offering 5 to 6 percent dividend yields.

New REIT Markets

Last year, several markets appeared on the radar as potential centers for the establishment of new REIT frameworks. Further progress has been made in some of these during 2016.

In particular, **the Philippines** has made some headway in its longstanding efforts to push a REIT framework through the local legislative process. However, while the new administration appears to have the political will to see a deal completed, the stumbling block over tax exemptions remains. If or when the government is willing to address it remains to be seen.

India, meanwhile, appears to be closer to a solution. Following the removal of various regulatory stumbling blocks, there appears to be real motivation at the central government level to make a deal happen. As ever, however, resolving bureaucratic issues in India can be complex and time consuming. While managers at domestic and foreign investment funds active in India were positive about the prospects for a working REIT framework to emerge within the foreseeable futurepossibly the next 12 months—a raft of issues remains to be addressed. These range from resolving ongoing regulatory disagreements between central and provincial authorities, to overcoming obstacles posed by the standard use of a leaserent discounting model to obtain bank financing, to listing REITs at cap rates that will be appealing for retail investors. Again, how long these will take to resolve remains an open auestion.

Indonesia also has brought about reforms to advance the introduction of a workable REIT framework. In particular, new regulations effective starting in March 2016 reduced seller taxes to 0.5 percent from the previous 5 percent and buyer taxes to as little as 1 percent from a previous 5 percent.

Finally, investors continue to look to **China** to establish a REIT sector. However, while this would doubtless be a positive development for all the usual reasons, there seems little prospect at this time of the introduction in China of a regulatory framework embodying the characteristics required for a properly functioning domestic REIT industry—in particular, tax concessions that ensure pass-through structures for income. So far, the handful of "proto-REITs" that have been set up or approved fail to pass this basic test.

Markets and Sectors to Watch

"In the past, emerging markets and development risk—a lot of what we do—were clearly not 'flavor du jour.' But in the last 12 months, there's been **a sea change** among potential institutional partners in terms of the willingness to take the types of risks we're taking for the returns that we're generating."

If the results of last year's survey—in which Japanese and Australian cities featured as investor favorites—could be seen as a vote for "flight to safety approach," the emergence of four emerging-market destinations as the top choices in this year's results reflects a very different mandate—the "quest for yield."

The apparent shift in favor of the higher-risk strategy reflects changing conditions on the ground. On the one hand, while demand for core assets in gateway cities remains as strong as ever, buyers are having trouble sourcing investable assets at acceptable prices—or indeed at any price. At the same time, as cap rates across the region continue to dwindle, the need to identify investments that deliver higher returns grows ever stronger. Increasingly, those returns are most evident in emerging-market destinations.

That does not necessarily mean—with some notable exceptions—that investment funds are now beating a path to these cities. Apart from anything else, emerging-market destinations lack the scale to accommodate the sheer volume of capital that investment funds collectively need to deploy. Nor do the vast majority of investors have the connections, experience,

	generally poor fair genera	lly good
1	Bangalore	4.08
2	Mumbai	3.71
3	Manila	3.68
4	Ho Chi Minh City	3.61
5	Shenzhen	3.45
6	Shanghai	3.41
7	Jakarta	3.38
8	Bangkok	3.36
9	Sydney	3.35
10	Guangzhou	3.34
11	Beijing	3.31
12	Tokyo	3.28
13	New Delhi	3.26
14	Auckland	3.24
15	Osaka	3.23
16	Melbourne	3.22
17	Seoul	3.14
18	Hong Kong	3.00
19	Kuala Lumpur	2.87
20	China-secondary cities	2.85
21	Singapore	2.84
22	Taipei	2.84
Source:	Emerging Trends in Real Estate Asia	a Pacific 2017 su

Exhibit 3-1 City Investment Prospects, 2017

Exhibit 3-2 City Development Prospects, 2017

	•••••	••••••
	generally poor fair general	ly good
1	Bangalore	4.00
2	Ho Chi Minh City	3.68
3	Mumbai	3.67
4	Manila	3.56
5	Shenzhen	3.46
6	Jakarta	3.35
7	Shanghai	3.31
8	Beijing	3.30
9	Sydney	3.26
10	New Delhi	3.21
11	Bangkok	3.17
12	Melbourne	3.13
13	Guangzhou	3.09
14	Osaka	3.06
15	Tokyo	3.02
16	Auckland	2.86
17	Chinasecondary cities	2.85
18	Hong Kong	2.85
19	Taipei	2.84
20	Seoul	2.83
21	Kuala Lumpur	2.71
22	Singapore	2.57

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

or appetite for risk to easily exploit those opportunities.

Still, the vote is remarkable as a testament not only to current difficulties in placing capital in the more mature Asian markets, but also to how fast economic conditions in several Asian emerging markets have improved—allowing some cities to climb from near the bottom to near the top of the rankings in just a few years.

Nowhere is this more evident than in the rise of two Indian cities—Bangalore and Mumbai—whose prominence mirrors the recent growth of Indian real estate private equity investment, which increased 55 percent to US\$3.96 billion in 2015, according to brokers Cushman & Wakefield. India's ascent was closely followed by that of two other emergingmarket destinations—the Philippines and Vietnam—along with other offthe-beaten-track cities ranging from Shenzhen to Jakarta to Bangkok.

Other top trends from the *Emerging Trends* survey include the following:

- Falling popularity of the major gateway cities. As dramatic as the rise of the emerging markets has been, the fall of former survey leaders, in particular Tokyo (now 12th), is equally noteworthy. Sydney (placed ninth) is another longstanding institutional investor favorite that has fallen from favor. It is notable, in fact, that about half of the cities now in the bottom half of the table are established gateways.
- In particular, **Singapore has seen a steep decline in appeal**. Beset by overcapacity in office space, falling retail sales, and a five-year residential price slump, the city-state has sunk to the foot of rankings it topped as recently as five years ago.

Leading buy/hold/sell ratings for the various asset classes were as follows:

Exhibit 3-3 Historical Investment Prospect Rankings

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Bangalore	1	12	17	20	19	9	10	14	4	12	10
Mumbai	2	13	11	22	20	15	3	8	7	10	17
Manila	3	8	8	4	12	18	20	20	19	19	18
Ho Chi Minh City	4	5	13	19	18	10	11	13	13	8	12
Shenzhen	5	18	19	10	16	—	—	—	—	—	—
Shanghai	6	9	6	2	2	2	2	1	5	1	2
Jakarta	7	6	2	3	1	11	14	17	20	20	19
Bangkok	8	19	16	11	6	14	17	19	18	18	8
Sydney	9	2	4	5	4	3	6	6	14	15	16
Guangzhou	10	20	20	6	15	6	8	12	16	9	7
Beijing	11	14	10	8	7	5	7	3	12	6	9
Tokyo	12	1	1	1	13	16	12	7	1	3	3
New Delhi	13	16	14	21	21	12	5	10	9	13	14
Auckland	14	10	15	17	17	20	18	16	17	14	—
Osaka	15	4	3	9	22	21	19	18	15	4	1
Melbourne	16	3	5	13	10	7	9	9	11	17	6
Seoul	17	7	7	15	14	19	16	4	6	7	13
Hong Kong	18	15	21	18	11	13	4	2	3	5	11
Kuala Lumpur	19	21	12	14	5	17	15	15	10	11	15
China-secondary cities	20	22	22	12	8					_	
Singapore	21	11	9	7	3	1	1	5	2	2	4
Taipei	22	17	18	16	9	8	13	11	8	16	5

Source: Emerging Trends in Real Estate Asia Pacific 2007–2017 surveys. Note: — = no data.

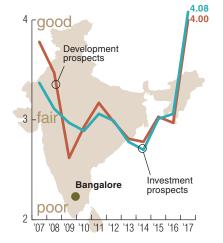
- Industrial/logistics—buy Shenzhen, sell Taipei;
- Residential—buy Bangalore, sell Taipei;
- Office—buy Manila, sell Bangkok;
- Retail—buy Manila, sell China–secondary cities; and
- Hotel—buy Bangalore, sell Guangzhou.

Top Investment Cities

Bangalore (first in investment, first in development). The big story for

investors in Bangalore has long been the city's role as India's main hub for the business process outsourcing (BPO) and, more recently, IT industries, which have driven huge demand for new space as domestic and international companies flock to open both call-in and research-and-development (R&D) centers. An expected supply of some 12.7 million square feet of new space in 2016 is massive by any standards, but is similar to levels delivered in 2014 and 2015, making the city by far the biggest source of office uptake in the country over the last five years. Delivery of new space is expected to decline in coming years, however, with CBRE projecting 9.8 million and 3.9 million square feet in 2017 and 2018, respectively.

There is little doubt that catering to the expansion requirements of the Indian BPO industry has delivered big profits to investors who arrived early on the scene, with the sector delivering annual rental growth of 15 to 20 percent, along with steadily declining financing costs, according to a manager at one such fund. Today it remains a compelling story because "you can still turn up in India and buy fantastic Grade-A office buildings at 9 percent yields with financing rates going down and tenant demand remaining strong." The local

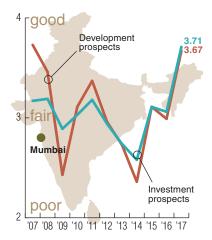


market is now controlled by a top tier of larger local developers with access to institutional capital. According to one interviewee: "The top ten guys have blue water" between them and the second tier, and will likely continue to drive the market going forward.

Still, peak growth in Bangalore is now behind it, and while strong demand from the IT sector is likely to continue, questions over the long-term prospects of the BPO sector have emerged. "There are winds of change in IT outsourcing," said one Delhi-based interviewee, who saw signs that the BPO wave was "not as strong as before" due to slowing growth in a sector now focused increasingly on automation and artificial intelligence strategies. Should these changes be widely implemented, the streamlining of workforces could have a "major impact" on real estate absorption going forward, he said.

Mumbai (second in investment, third

in development). Historically, geographical constraints have prevented easy expansion of Mumbai's metropolitan area, which has made it both the most expensive city in India and the slowest growing. As a result, the local government has committed itself to a major road and rail infrastructure program that will allow easier access to the city center from outlying areas, with most construction scheduled for completion before 2019.



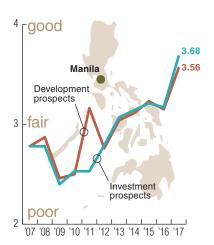
The office sector continues to perform well. Mumbai's high prices mean that transactions tend to be smaller than those in other cities, but the market in general now has a wider base and is no longer dominated by financial sector players. Vacancies remain north of 20 percent, but occupancy problems tend to affect only less desirable buildings, with good-quality assets continuing to see strong demand and rental growth. Although a hefty amount of new supply is now in the pipeline, demand for expansion is expected to grow over the near term as will the number of new businesses, in particular for back-office and e-commerce purposes. For the longer term, attention has switched to the emergence of a new central business district (CBD) belt in suburban areas. Transactions in this belt have recently increased, and a number of new commercial projects are about to be launched there.

Mumbai's residential sector, meanwhile, continues to suffer through hard times. Inventories are high, transaction volumes have crashed, and prices that were rising rapidly for years have recently dipped 20 to 25 percent, according to anecdotal accounts, often via use of incentives. With authorities unwilling to grant approvals, developers are focused on delivering ongoing projects, which they are anyway now bound to complete on schedule following the passage of new consumer protection legislation by the central government. The pain is expected to continue for another two to three years. Meanwhile, "don't expect rising prices," as one interviewee put it.

Manila (third in investment, fourth in development). The Philippines has attracted positive comment for the last several editions of this report, with a vibrant economy led by a booming BPO market and strong remittances from overseas workers.

Today, the fundamentals appear as strong as ever. Demand is resilient, with many buildings precommitted before completion. Vacancies remain low, and office capital values and rents continue to show good growth. Meanwhile, the logistics industry, traditionally a laggard in the Philippines, is also seeing accelerating demand based on increased consumer sales.

Some clouds are on the horizon, however. Overseas remittances are not expected to maintain current levels of growth due to economic problems, both globally and in particular in the Middle East, where most expatriate Philippine workers are based. At home, meanwhile, according to one Manila-based developer: "The market is reaching a very heated point in the property cycle after several years of strong growth. The challenge developers will face next year is sourcing for land, so it will become harder to find new development opportunities."

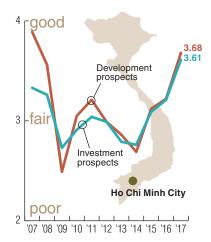


At the same time, the transition to the new administration, together with its announced policy shifts, has raised concerns among investors, although probably more so within the Philippines itself than among foreign real estate fund managers, for whom the bigger issue is actually placing capital into the local market. As one fund manager said: "I would still love to go in and do some office in Makati, but it's a very tightly held market and it's difficult to find institutional-quality partners as well."

Ho Chi Minh City (fourth in investment, second in development). After

several years in the economic doldrums, Vietnam is today one of the fastestgrowing economies in Southeast Asia. According to one investor, it is now "on the radar screen of nearly all the major investors in the region," and is probably the most popular real estate investment destination in Southeast Asia, with capital arriving from numerous sources but in particular from Japan, Singapore, and South Korea. Ho Chi Minh City is the country's main economic engine, featuring gross domestic product (GDP) growth of 7.5 percent year-on-year in the first half of 2016.

Traditionally, the residential market has been the main focal point for foreign investors. However, following a strong rebound from a multiyear slump, oversupply risk is again looming, especially in the condominium sector as sales slow amid a big pipeline of new product.



Landed housing, on the other hand, continues to be a popular purchase and is in generally short supply.

Investor focus is now turning increasingly to Ho Chi Minh City's commercial market, the catalyst once again being economic growth stemming in particular from various regional trade deals and Vietnam's status as a "China plus one" destination. Most investors are looking at development plays, although a nascent market also exists for completed assets, with new buildings being developed for investment purposes as opposed to strata sales. Yields are in the area of 7 to 8 percent.

One investor noted that office rentals are now higher in Ho Chi Minh City than in Bangkok, reflecting an overall shortage of supply that will probably take time to address given that "it's very difficult to get land to develop, which slows down the whole [development] process." Red tape is another longstanding issue in Vietnam that tends to slow down deal making.

Neither logistics facilities nor business parks, on the other hand, have taken off as investment themes, with one fund manager active in Vietnam commenting: "At the moment, volumes are not huge in terms of things moving around to create massive demand for more space."

Shenzhen (fifth in investment, fifth in development). The major recent talking point for Shenzhen has been its residential sector, where prices have soared more than 40 percent year-on-year in the first three quarters of 2016—the fastest in the world.

On the commercial side, office rents have been on a steady upward trajectory for years and are now double their level of 2009. Yields are tight at around 5 percent. Vacancies remain at a fairly constant level of 10 percent, although they are about half that in the most popular areas and buildings. Shenzhen has been affected more than any other large



city in China by a government crackdown on peer-to-peer lending, which has reduced office sector demand in advance of an impending pipeline of new supply. In practice, and with the arguable exception of ongoing development at the massive Qianhai Free Trade Zone, foreign investment in the Shenzhen office sector has remained limited, at least partly because prime buildings are usually closely held, creating a market mainly of strata properties.

More interesting opportunities, therefore, are probably to be found in the greater Pearl River Delta, which hosts a sprawling industrial hinterland that was one of China's first large-scale manufacturing hubs. In line with recent policies aimed at modernizing the Chinese economy, thousands of small factories have been shut down across the delta to make way for a wave of high-tech manufacturing and research facilities. An ongoing transport construction program is also underway, with the aim of better integrating the area around Shenzhen with other parts of the delta, in particular neighboring Hong Kong and relatively untouched areas to the west.

Shanghai (sixth in investment, seventh in development). Described by one fund manager as "Manhattan on steroids," Shanghai continues to be the major draw in China for foreign core investors, offering fast growth, relatively low levels of bureaucracy, a liquid market with an abundance of financial sector tenants, and a critical mass of for-



eign and domestic businesses already in residence. Shanghai also has remarkably high asset prices for a developing country, with cap rates compressed to below 4 percent by an abundance of cash-rich domestic companies looking to set up headquarters in the city, and by local insurance companies with unambitious hurdle rates and a mandate to establish large portfolios of commercial real estate. According to one broker: "The weight of money chasing deals is so profound that you're going to get priced out. It's not a level playing field, and it's not going to become one."

Fund expiries and concerns over the prospect of a weakening local currency have led to a number of sales by foreign funds in 2016, most of which have been picked up by domestic investors. Foreign institutional investors also continue to be active, however.

Rental growth has always been the rationale for Shanghai's ultra-compressed yields. Analysts suggest that rents will continue to rise over the short term, albeit possibly at a slower rate. Oversupply concerns are once more setting off alarms, but surpluses have always been absorbed in the past and there seems little reason to suppose this time will be any different.

Over the longer term, and as land prices in central Shanghai rise to nosebleed levels, willingness to diversify away from the CBD to outlying areas—especially those well served by transport infrastructure—is growing. According to one investor: "The main areas in wellserviced suburbs that have a little of bit critical mass are seeing rents going up—demand is strong."

A number of foreign funds have either bought or developed away from the city center, a trend that will probably continue. In addition, and for the same reason, there is likely to be renewed interest in satellite cities such as Suzhou and Hangzhou. According to one fund manager: "Within Shanghai, it's getting more and more difficult to secure the land. If you look further out, though, you've got a population of 160 million within a three-hour drive of the CBD, so if you're able to secure land within that area, you're going to get good liquidity on exit—you're less likely to lose any money on your land."

Jakarta (seventh in investment, sixth in development). Jakarta has proved to be a popular choice in our survey for the last five years, and while investors have always found it a difficult market in which to place money, prices for office assets have performed exceptionally well over that period. That has recently changed, however, amid a huge pipeline of new supply, combined with ongoing weak demand from tenants in the commodities sector.

Described as "super scary" by one investor and a "bloodbath" by another, the Jakarta office sector will see a total of 2.28 million square meters of new

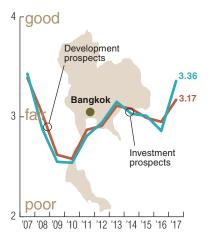


space arrive between 2016 and 2019, or roughly half the total of the city's preexisting office stock. Unsurprisingly, occupancy rates and rents have plunged, although one Jakarta-based investor stated that "things have stabilized now, so I don't see any more downside." Meanwhile, a flight-to-quality mentality has emerged: "People are looking to move because rents have fallen 50 percent in some prime buildings—they just have a lot more options."

Development is the normal strategy for foreign investors given the scarcity of stabilized assets available for sale. Singaporeans are the most active foreign players.

Given oversupply conditions in the office sector, both local and foreign investors are looking elsewhere, and in particular at affordable housing projects. According to one fund manager: "In terms of middle classes buying high-rise apartments, the market is very weak, so the strong fundamentals are now at the bottom of the housing market." In addition, large mixed-use projects would probably generate strong institutional demand, he said.

Bangkok (eighth in investment, 11th in development). After years languishing in the bottom half of the rankings, Bangkok has experienced a rise this year that is probably another reflection of investors' endless quest for yield. Certainly, rents and (especially) capital values have risen steadily over the last

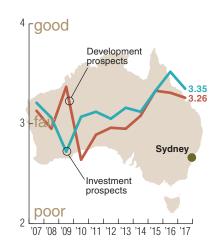


five years and will probably offer good long-term prospects in line with the Thai economy's overall growth trajectory. Both new supply and absorption projections look healthy. At present, Grade-A office yields in Bangkok stand at just under 7 percent, according to Jones Lang LaSalle. That said, and in common with most Southeast Asian markets, few completed assets are available for purchase in Bangkok, so buyers would either have to develop or be content with strata purchases.

One area where foreign capital has been active for many years in Thailand has been the hospitality sector. Although recent transaction volumes have been weak, tourist arrivals continue to rise, mainly due to an increase in visitors from China. Growth in revenue per available room (RevPAR) has also been strong, although this is partly attributable to currency volatility. Valueadd plays continue to be a trend, with investors upgrading old hotel stock.

Political instability has been an issue for investors in Thailand for several years, and there seems currently little prospect of change in that regard, although to be fair the appearance of ongoing crisis seems to have little impact on day-today life or the business community.

Sydney (ninth in investment, ninth in development). Sydney's fall from second in last year's rankings to ninth in 2017 is surprising given its undoubted popularity among core investors in interviews, and is probably because, as one fund manager said, "the amount of capital out there looking for opportunities vastly outnumbers the amount of opportunities available" in what has become a very crowded market. The city continues to appeal to foreign institutional investors, who represented almost half of all transactions in the first half of 2016. Office yields remain attractive even after discounts for incentives are factored in, and "[are] potentially going to provide some pretty strong growth over the next three or four years." In addition, rental



growth should be boosted on a net basis as incentives decline over several years.

Investors are adopting a number of strategies to navigate the lack of available assets. Build-to-core remains a popular route, with institutions partnering with developers or local landowners to create core assets. Chinese developers in particular continue to seek out Grade-B office buildings in the city center for residential conversion purposes, although this opportunity is dwindling as the number of suitable targets declines.

In addition, the local government is engaged in a major long-term infrastructure construction project to create new transport corridors between the city center and outlying suburbs. Many investors are looking to these areas for potential new investment possibilities.

Meanwhile, the housing market is an ongoing cause for concern. Nationwide, real home prices have increased by 45 percent since the middle of 2012, fueled by several recent base rate cuts and in major cities by increasing numbers of foreign (especially Chinese) buyers. Interest from international buyers reportedly declined in the middle of 2016 after banks tightened lending criteria and federal and state governments imposed tax surcharges on foreign buyers. Sydney is currently the highestranked Asian component of the UBS Global Real Estate Bubble Index (which attempts to measure risk in global house prices), rising from bottom place as recently as 2012.

Although investors' opinions on Australia's residential sector continue to be polarized, most interviewees indicated they expect ongoing immigration into Australia to continue to provide sufficient demand to absorb the substantial volumes of new product currently in the pipeline.

Guangzhou (tenth in investment, 13th in development). While

Guangzhou is counted as one of China's four first-tier cities, it is regarded as a relative backwater in investment terms, with most regional financial sector and multinational company activity taking place in nearby Shenzhen. As one interviewee put it: "Guangzhou doesn't have guite the kudos that Shanghai and Beijing have—if there's a poor relation, it's probably Guangzhou." However, the city's inclusion in government plans to improve integration in the greater Pearl River Delta area will see better transportation networks to connect it with areas on both the east and west of the delta and should improve long-term demand in the real estate sector, especially in southern parts of the city.

While rents and property values remain relatively cheap compared with those of its peers, the city has been the subject of considerable investment and expansion since 2013. However, land sales appear motivated more by government desire to generate cash flow than to





cater to actual demand. Poor planning has resulted in many new commercial projects being built in unsuitable locations, while the resulting oversupply has suppressed both rents and, to a lesser extent, capital values. Office vacancies remain high at around 15 percent.

The retail sector currently also suffers from oversupply, partly because of poor planning and partly because of competition from e-commerce. With almost 500,000 square meters of new space due to arrive in 2016—much of it in the core urban area—rents have come under further pressure, especially in nonprime areas.

Beijing (11th in investment, eighth

in development). Foreign interest in buying commercial assets in Beijing has always been strong, but has been frustrated in recent years by a lack of investable stock and by what is perceived to be excessive bureaucracy. In general, Shanghai is seen as a city more focused on business and is the preferred destination for most international funds.

Prices in Beijing have remained extremely resilient over the years, however. The market is dominated by long-term owner-occupiers focused mainly on capital appreciation and not especially sensitive to low yields. Given that values of prime office assets have seen rapid appreciation over recent years, few owners are eager to sell. The city commands the highest office rents



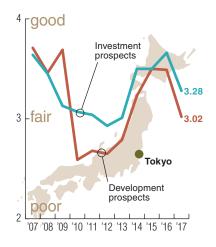
in China, and has been able consistently to absorb large amounts of new stock despite skepticism from naysayers. Vacancies currently stand at a low 4 percent.

Over the longer term, the Beijing municipal government has plans to move its main administrative headquarters out of the city center to a new site at Tongzhou, to the east of the city, in the process transforming the area to a major new residential and business hub. Beijing's goal is to follow the example set by Shanghai to create an outlying series of satellite locations that serve as expansion hubs connected to the capital by high-speed rail. It is likely that investments made in these locations will pay dividends in future.

Tokyo (12th in investment, 15th in

development). Tokyo's fall from first place in each of the previous three years' rankings to 12th place this year is perhaps the most surprising change of all. Although interviewees' opinions of Japan are always polarized, Tokyo continues to appeal to most investors given its liquid markets and wide yield spread, which consistently delivers good cashon-cash returns.

The current negative verdict probably reflects a combination of factors, in particular growing skepticism over the ability of Abenomics to cure Japan's economic ills, together with a lack of willing sellers in the current negativeinterest-rate environment. "Nobody's in



a rush to dispose right now," said one interviewee, but "there's a lot of pressure to buy."

Another concern is over the near-term prospects for office sector rental growth, despite low vacancy levels. According to one fund manager: "The office market is slowly petering out. There's a lot of supply [coming] in 2018, so it should soften sometime next year, in the Class-A market for sure. Tenants are just not going to be biting."

Not all news is negative, however. In particular, residential assets remain a popular play. Providing good cash-oncash returns, high occupancy rates, and reliable rental income streams, they are seen as safe bets in a market where long-term fundamentals are being questioned. At the same time, it has now become a crowded space. According to one broker: "Yields on multifamily are getting very punchy right now, and there are groups that are making that fatal mistake of underwriting rent uplifts in the midmarket residential space."

Investors' opinions are generally negative on the retail sector, although the sweet spot is probably the nondiscretionary area. According to one local investor: "Retail is getting scary because the strong yen doesn't do anything to help tourism. The Chinese spending over the last couple of years has been really helping, but it's now off a bit—the Chinese *are* coming, but they're not spending money like they were. And retail sales generally are down quite a bit. Until you start getting wage growth, you're just not going to get domestic consumption up."

Hotels also have been a hot area given the recent surge in foreign visitors, in particular from China and Southeast Asia. Oversupply issues are building, however, and the situation could change rapidly, depending on the tourism industry. According to one fund manager: "The sector is very interesting as long as Japan continues to see an increase in inbound tourists based on the national policy to become a 'tourism nation.' [But for now] there is no question there is a shortage in the supply of hotels."

Over the longer term, most interviewees indicated fading confidence in Japan's economic prospects. At the same time, however, the huge amounts of new capital expected to arrive in the Japanese real estate sector in the coming years should serve to prop up pricing. According to one locally based fund manager: "Funds like the GPIF [Government Pension Investment Fund] can't put 80 percent of their real estate alternatives in the United States-a majority of that has to stay in Japan. So Japan will still be the recipient of allocations; core money is going to keep stacking, stacking, stacking; and there's still going to be demand."

New Delhi (13th in investment, tenth

in development). Markets in New Delhi continue to be affected by "major pain" in the residential sector characterized by oversupply and generally high levels of leverage among developers. The biggest problems have been seen in Gurgaon, where projects have been delayed as a result of government failure to complete land acquisition requirements-a reflection of India's generally weak legal processes. Delays by developers have been common historically in the New Delhi area, with the result that end users have lost confidence in the system and have become unwilling to pay up for their properties. This creates



a vicious circle in that developers then become weaker financially, while banks become less willing to lend capital, or only at higher rates.

Although this has created an active market for last-mile financing that foreign and domestic investors have moved to exploit, "Delhi developers have acquired a somewhat negative reputation, with the result that southern India tends to be the preferred destination for institutional capital," according to one locally based interviewee.

That said, the story on the commercial side is more positive. Vacancies remain high on paper, but good-quality buildings are usually fully let. Rentals by IT companies are on the rise, e-commerce is booming, and warehousing demand has mushroomed as Delhi (and in particular the National Capital Region) emerges as one of the country's most important logistics hubs. In addition, a significant amount of new infrastructure work is underway, particularly in the form of high-speed railway networks into New Delhi. This bodes well for demand for commercial facilities.

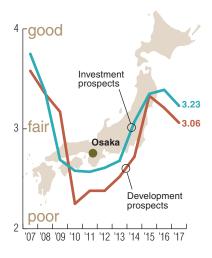
Auckland (14th in investment, 16th in development). New Zealand may seem something of a provincial backwater by greater Asia Pacific standards, but its real estate markets have seen strong growth in recent years and have been the subject of significant investment by foreign institutional investors. On the commercial side, office prices are



up nearly 79 percent since the beginning of 2012, according to Jones Lang LaSalle, with prime office space yielding in the range of 6 percent to 6.5 percent. Vacancy rates at the top of the market remain very tight at just 1 percent, and although a near-term glut of supply exists, demand remains strong and should be adequate to absorb incoming stock.

A chronic shortfall of housing and recent declines in interest rates have led to a five-year surge in Auckland home prices that is comparable to spikes seen in major Australian cities. Home prices rose some 16.1 percent in the year to June 2016, and are up more than 50 percent over the previous three years. Housing affordability has now become a major issue in New Zealand, and the government has reacted by bringing in lending restrictions in July 2016 that require 40 percent deposits for new purchases, with more cooling measures to come.

Osaka (15th in investment, 14th in development). One way for investors to escape Tokyo's increasingly compressed yields is to branch out to provincial locations such as Osaka. This has become a major theme in Japan since 2015, although many investors remain wary of investments in Japanese provincial cities because these markets have a history of turning very quickly. The decline in Osaka's survey ranking from fourth last year to 15th in 2017 is



similar to Tokyo's and probably based on the same reasoning, although market conditions are not necessarily the same.

As far as the office sector is concerned investors continue to be drawn by higher yields. According to one broker: "In the past 24 months, we have sold almost as much Osaka as we have Tokyo. It's a better investment-lease terms are the same, occupier profiles are the same, building quality is the same, but the yield is better-you're buying at 70 [basis points] higher than you would if the same asset was in [Tokyo]." At the same time, concern exists as to potential oversupply, an issue that has afflicted Osaka in the not-so-distant past. According to one investor: "Although prices in Osaka have risen, I don't expect them to continue at this level—I think it's best if owners sell now because there is only so far rents can go, and the number of parties wanting to rent offices in Osaka is limited. They can sell high presently."

As for retail: "I think Osaka retail is still there because the major brands can't ignore [it] and because of that they'll continue to attract people." And in the hospitality sector: "The supply in Osaka will be quite large if all the hotels that are planned are [actually] built. However, I often question how many of the plans can actually be executed; therefore, I don't think the supply will be excessive in the end."

Melbourne (16th in investment, 12th

in development). Just as Sydney's fall in this year's rankings came as something of a surprise, the decline of Melbourne from last year's third place to the current 16th has created some bemusement. Melbourne's appeal is similar to Sydney's, featuring a relatively high cap rate market, strong levels of institutional interest in core assets, large numbers of foreign investors, and projected high rental growth (amounting to 19.3 percent from end of 2015 to 2019, in addition to a likely reduction in incentives, according to Knight Frank).

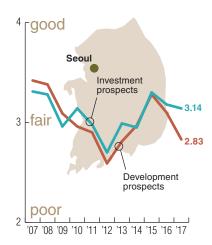


At the same time—and again running parallel with the experience in Sydney transactions have fallen sharply in 2016 as owners either run out of assets to sell or decide to keep them rather than be left with cash they must then find somewhere to invest. Melbourne's relatively higher ranking as a development prospect reflects strong interest in the build-to-core strategy.

One the residential side—and, again, like Sydney-Melbourne is a fastgrowing city currently adding more than 90,000 residents per year. A large number of residents are now also embracing the trend of inner-city living, with many development projects underway involving the conversion of older office blocks to high-end apartments. The pace of population growth should help absorb upcoming oversupply, although the Reserve Bank of Australia recently warned that growth in apartment prices and rents is likely to be constrained in some parts of the city by large numbers of new units arriving on the market over the next two years.

Seoul (17th in investment, 20th in

development). Seoul's popularity has risen dramatically in recent years, reflecting higher investor interest in Asian gateways offering core product. According to one broker: "I love Seoul right now; I think it has bottomed out. Vacancy rates are starting to tighten, and we're seeing a huge pickup in investment inquiry by foreign funds in Seoul." While South Korea is not an



easy place for foreign funds to operate given the monopolistic tendencies of the chaebols, it does offer "some natural inefficiencies" that provide resourceful fund managers scope for profit.

Stabilized assets are thin on the ground, therefore, because of competition from large local institutions. At the same time, assets that require repositioning offer better prospects. One fund manager gave an example of a corporate restructuring where assets come onto the market as part of a sale-andleaseback deal: "In that case, if there's a willingness to either back yourself with the leasing with a good asset management team, or back yourself on doing some refurbishment, it could be a good deal. Obviously a very asset-specific opportunity, but where you believe the fundamentals still support rental growth I think that's an opportunity that perhaps the locals can't always bid for."

Development is not a play traditionally pursued by foreign investors in South Korea, but a build-to-core strategy is also a potentially profitable approach for equity investors given Seoul's lack of *en bloc* buildings.

Logistics is another area where foreign investors are looking for deals in South Korea. This can be a tricky space to break into given that the industry has historically been dominated by local conglomerates who prefer to do business with each other rather than with outsiders. That said, as one fund manager said: "There's a huge need for modern logistics, and none of the big guys are there yet." This leaves scope for foreign opportunistic funds to develop logistics facilities using joint ventures with large local players.

Hong Kong (18th in investment, 18th

in development). Hong Kong's persistently low survey rankings over the last six years are not so much a reflection of problems in local markets as they are a testament to some of Asia's tightest yields (now pushing 2.5 percent), together with a tightly held market where big assets rarely trade. As one broker said: "Great investment market; good luck finding a product."

Notwithstanding that, over the last 12 months Hong Kong has been a target for a long list of mainland Chinese enterprises looking either to buy trophy assets or to secure Grade-A rental space in the CBD. Commenting on recent purchases, one Hong Kongbased interviewee said: "Prices are ridiculous, but [mainland] Chinese are buying every available asset. And it's not for investment or their overseas expansions, they're buying for symbolic reasons. I was talking in China recently to some SOEs [state-owned enterprises] who said, 'Our group just wants a building in Hong Kong'—I think that's the mentality now."

New rental space secured by mainland companies in Hong Kong in 2015 amounted to around 1 percent of all



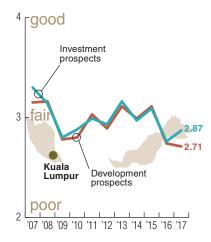
Grade-A and Grade-B office stock in the core and fringe CBD areas, according to brokers Colliers. This is a significant amount given core office vacancies of just under 1.6 percent, and is playing a major role in pushing rents up and established businesses out of the CBD, especially given the preference of mainland tenants for large floor plates. One result of this has been continued migration to Hong Kong's secondary business hub in East Kowloon, where "impending oversupply will make it a very competitive market for the next couple of years." Conversion of outdated industrial stock in this area continues to be an opportunity, despite the end of a government nil-premium incentive scheme.

Meanwhile, Hong Kong's retail sector continues to struggle as mainland Chinese visitor numbers fall, while residential markets—still the highest priced in the world—rebounded in the second half of 2016 following a year of low transactions and declining prices. Activity remains confined mainly to newbuild apartments, where developers are now offering top-up financing facilities that bypass government rules imposing high downpayment requirements.

The government continues to have problems supplying sufficient quantities of land to meet demand for residential properties, and is now looking at a number of different options, including expanding development into relatively unpopulated areas such as Lantau Island. However, recent land auctions have featured a number of sales at record-breaking prices, indicating confidence among developers—including an increasing number from mainland China—that land supply will continue to lag long-term demand.

Kuala Lumpur (19th in investment,

21st in development). Interest in Malaysia remained muted in 2016 as a result of depressed oil prices, looming oversupply problems, and ongoing



concerns over transparency—issues that are expected to continue for the foreseeable future.

Commercial transaction volumes in Kuala Lumpur are down 53 percent year-on-year in the first half of 2016, according to RCA. The lack of oil and gas sector tenants has made for a subdued rental market, although rents for Grade-A properties have remained flat. Total returns in Kuala Lumpur are expected to average around 5.5 percent for the 2016-2020 period, according to Deutsche Asset Management, which forecasts modest price and rental declines over the same period. Meanwhile, an impending oversupply of office assets means there is currently little interest among investors in Kuala Lumpur as a development play.

On the positive side, weakness in the Ringgit and an expected decline in rentals may bring more foreign tenants and buyers into what is already considered a low-priced market. As one Hong Kong– based fund manager observed: "[Apart from Singapore], Malaysia is another one where you're trying to see where the bottom could be."

In addition, Kuala Lumpur is in the process of a major infrastructure construction scheme that will create 140 kilometers of new railway in the metropolitan area by 2022, thereby greatly improving city connectivity.



China second-tier cities (20th in investment, 17th in development). For the last several years, a huge amount of oversupply across all sectors in China's smaller cities has depressed pricing and created stress for an overleveraged developer community. This has changed to an extent in 2016, as many second-tier cities (i.e., still large, but smaller than the big four) such as Tianjin, Suzhou, Nanjing, Chengdu, and Chongging have managed to clear their inventories. Prices in these marketsespecially of residential assets-have rebounded so strongly that local governments have again introduced cooling measures to dampen high prices.

Smaller third- and fourth-tier cities, however, have so far been unable to extricate themselves. According to one interviewee: "They're still sitting on huge inventories, 12 to 24 months' stock in many cases. Their governments are keen to encourage transactions and sales, but because there's so much stock, people have a lot of choice, so prices have moved but haven't moved very much—it's probably a two- or three-year scenario."

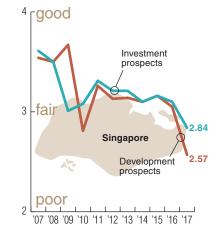
While this has led most investors to keep their distance from these cities, some more experienced players are still happy to develop selectively or to pick up distressed opportunities. In addition, local developers are also working in these cities on the same basis. According to one Hong Kong–based consultant: "They prefer not to, but given that land prices in the major cities have hit ridiculous levels, some developers invariably get outbid [in first-tier cities]; and because they need to keep the machine moving in terms of production, they are now focusing on the top-ranked third-tier cities as an extension of their portfolios."

Singapore (21st in investment, 22nd

in development). A combination of economic weakness, excess supply, declining demand, and a residential market where prices have now fallen for 12 straight quarters has created a perfect storm for Singapore, which is currently the only Asia Pacific market suffering a cyclical downturn.

Office rents in downtown Singapore fell 3.5 percent in the second quarter of 2016, capping five straight quarters of declining rental rates. Occupancy levels have been hit by shrinking demand due to financial sector downsizing, particularly among foreign banks. And with a further 3 million square feet of new office space currently in the pipeline, rents seem set to remain under pressure over the near term. Capital values, meanwhile, have experienced similar declines.

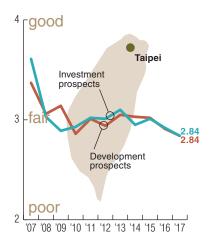
Amid the gloom, many fund managers are now looking for an entry point, and positive indicators are beginning to emerge. First, the sale of the landmark Asia Square Tower 1 in June



2016 has set a benchmark for pricing that should serve as a floor for upcoming deals. In addition, there are recent signs of increasing demand on the occupancy side. According to one local fund manager: "I've spoken to senior people involved with the larger projects, and they are saying that the committed occupancy is there." Anecdotally, achieved rents have been at good levels, though they will include "all kinds of bells and whistles to get the effective rent lower."

Comments from various interviewees currently looking at Singapore markets indicated that most will maintain a watching brief for now. Said one: "It's too early-I think you might wait another year or so before you reach a point you might be comfortable buying." Another commented: "It's whether you catch a falling knife—it's really a question of looking for where the cycle is and getting in at the right price." Finally, and more positively: "When you take a step back and look at all the economies in Asia, and the one place that has strong long-term potential, I think Singapore is the place. So if I can get a good asset at a reasonable price in that market, that's probably one of my number-one picks-we've been waiting a long time to find something that fits, but we're starting to see more over there."

Taipei (22nd in investment, 19th in development). The issue in the Taipei market is similar to that in Hong Kong—tightly compressed yields with





few assets available on the market to buy. Taipei's high prices are a result of government policies that in the past obliged Taiwan's cash-rich insurance companies to buy only in Taiwan's small domestic market, resulting in prices rocketing as institutional buyers competed to build portfolios. Although recent regulatory changes have forced institutional buyers to move offshore, cap rates in Taipei remain at a low 2.4 percent, according to CBRE, although with vacancy rates now moving over 20 percent, many analysts expect prices to soften. Recent buying activity has been subdued in the wake of the recent presidential election.

Residential prices in Taipei are similarly high, almost tripling over the last two decades, boosted in recent years by low interest rates and minimal deposit requirements. Authorities have responded by introducing new real estate taxes, with a tax applied toward foreign enterprise at a 45 percent tax rate on the capital gain from the sale of real estate acquired after January 1, 2016, and held for less than one year (at a 35 percent tax rate if held for more than one year). Transactions have now stalled, although little sign of significant price declines exists.

Property Types in Perspective Industrial/Distribution

Structural shortages of modern logistics facilities in Asia continue to boost end-user demand, making it perhaps the most favored of all asset classes regionally. This is not only because older warehousing stock is both "low tech and in short supply," but also because of the huge growth seen in e-commerce retailing across all of Asia, and particularly in China, with only relatively self-contained markets such as Hong Kong and Singapore lagging the trend. This increases demand not only in absolute terms but also because, in the words of one logistics developer, "you need three times as much logistics space to support ecommerce than you do traditional bricks-and-mortar retail."

Overall demand for logistics infrastructure therefore makes it a favorite in almost every market in Asia. According to one fund manager: "The logistics sector across the region is a buy. So guess what? Everybody is doing it, which means pricing is being driven pretty aggressively. But structurally I think there's still quite a long way to go for that story, particularly, but not only in China. So as long as you don't make really dumb decisions, if you buy or develop logistics properties in the major markets across the region, you'd probably outperform other property types."

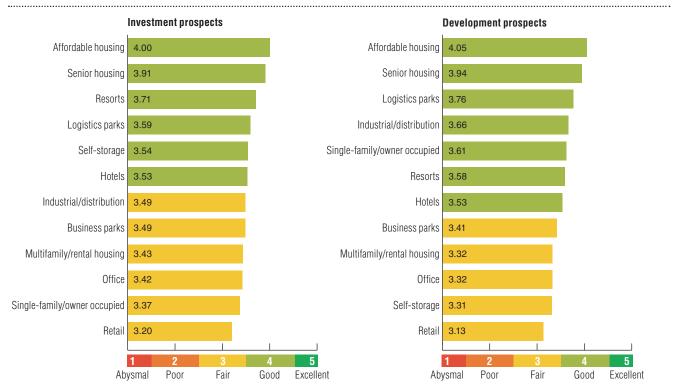


Exhibit 3-4 Prospects for Commercial Property Types in 2017

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

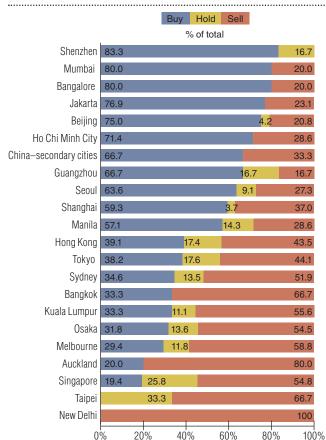


Exhibit 3-5 Industrial/Distribution Property Buy/Hold/Sell Recommendations, by City

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

Historically, logistics in Asia has usually been a development play, either on a project or entity level, because most assets are closely held and there is anyway a shortage of investmentgrade stock. Although that is still the case today, a growing amount of warehouse stock is now available for purchase, partly because more of it has now been built, and partly because the recent trend for manufacturers to outsource their logistics requirements leaves them with surplus facilities they want to offload.

Expected best bets: Chinese markets feature prominently in this year's survey rankings. Shenzhen in particular is ranked first, probably on the basis that the ongoing infrastructure construction improvement in the Pearl River Delta will greatly enhance transport operations and therefore demand for fulfillment facilities throughout that area. Beijing also ranked highly, based most likely on long-term structural undersupply in the capital.

That said, however, while demand for new facilities in China remains strong, the appeal for investors is fading. According to one fund manager: "China, conceptually, is great, but it's

become very hard to get returns in that space for opportunistic investing—they've been driven down too much." Another said: "A couple of years ago, we were talking about [yields in China of] 17 percent. Now we're talking about 6 percent or 7 percent, or even below 6 percent. I wouldn't be surprised if at the end of 2016 you see cap rates for stabilized assets go probably sub–5 percent."

India is another chronically undersupplied market where the logistics industry has recently taken off. The recent passage of the Goods and Services Tax has ushered in a wave of reforms that will abolish old and oppressive tax structures and nearly halve the cost of storing inventory by allowing companies to operate single large warehouses rather than diverse multiple facilities. In particular, the US\$90 billion Delhi–Mumbai corridor is a cornerstone infrastructure project that aims to boost manufacturing and logistics facilities in the northwest of the country.

Finally, Australia has caught the attention of many investors in the space. According to one logistics investor, Australian assets offer a good institutional-grade market, good-quality buildings, good credit, and yields "north of 7 [percent]."

Residential

Housing markets throughout Asia (with the exception of Singapore) remain buoyant in the absence of any sign of higher base rates. Even the introduction in many Asian markets of policies to hike transaction taxes and increase mortgage deposits has failed to rein in markets for very long. For now, there seems little sign of a turn unless markets are brought down by a major economic calamity.

Expected best bets: A collection of emerging-market destinations appears at the top of this year's rankings, including India, Vietnam, and Indonesia. In some ways, these are curious choices because each of the individual cities is currently suffering from oversupply issues.

In Bangalore, according to one interviewee, the residential market "is driven by an ongoing increase in end users as more and more engineers are moving to what is now the top IT destination in India. But oversupply is a problem, so don't expect an uptick in capital values over the next 12 to 18 months."

In Vietnam, according to one investor, the residential sector "has now come good after a number of false starts, particularly if you focus on the local purchaser market." That means, in effect, building smaller units more affordable to local buyers. Overall demand remains strong. At the same time, oversupply issues are building at the higher end of the market, and in particular for condominiums, "where they're approaching peak right now. Massive supply has come on, sales prices have gone up but volume is slowing now, and

			Buy Ho	old Sell					
		% of total							
Bangalore	100								
Ho Chi Minh City	71.4					28.6			
Jakarta	54.5			18.2		27.3			
Shenzhen	50.0			25.0		25.0			
Tokyo	36.4		21.2			42.4			
Osaka	35.0		10.0			55.0			
Sydney	33.3		22.9			43.8			
Bangkok	33.3					66.7			
Manila	28.6					71.4			
China-secondary cities	27.3		27.3			45.5			
New Delhi	25.0					75.0			
Shanghai	23.1	7.7				69.2			
Mumbai	20.0	20.0				60.0			
Singapore	18.8	28.1				53.1			
Seoul	14.3	14.3				71.4			
Beijing	13.6	13.6				72.7			
Melbourne	8.3	45.8				45.8			
Hong Kong	5. <mark>6</mark>	27.8				66.7			
Guangzhou		50.0				50.0			
Taipei	33.3					66.7			
Auckland	25.0					75.0			
Kuala Lumpur	10.0			1		90.0			
0	%	20%	40%	60%	80%	100			

Exhibit 3-6 Apartment Residential (Rental) Property Buy/Hold/Sell Recommendations, by City

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

developers are offering all sorts of sweeteners to try to keep that momentum going."

In Jakarta, meanwhile, the middle- and upper-income housing markets are in the middle of a profound slump. Fundamentals currently strongly favor lower-cost homes.

The common theme across all three destinations is that demand is much stronger at the lower end of the market than at the top, where affordability issues are becoming acute. This is the case not only in the three countries above, but also across most Asia Pacific markets. As a result, large-scale affordable housing programs are becoming increasingly common throughout the region, and have begun to attract interest from institutional investors. In Jakarta, for example, houses costing approximately US\$35,000 are readily sellable and offer good development margins. According to one Jakarta-based interviewee: "For our project, we're looking for a mid-20s IRR and 2x multiple." Large-scale governmentincentivized affordable housing schemes also are underway in India and are rumored to be in the pipeline for Vietnam, the Philippines, and Malaysia. Another market featuring prominently in this year's residential sector rankings is Tokyo. While residential plays in Japan are apparently plain-vanilla investments, the dynamics of the local housing and debt markets can make them appealing opportunistic plays. Featuring high occupancy levels, apparently reliable rental streams, modest rental growth, cap rates at around 4 percent, cost of capital at around 1 percent, and leverage ranging from 60 percent to (for the ambitious) 90 percent–plus, they offer high returns for what is perceived to be low risk. "You can't lose," as one investor put it, perhaps tempting fate.

Office

Emerging markets again win the day in our poll of office sector destinations. This is almost certainly in response to seemingly ever-compressing cap rates that have driven office yields in Hong Kong and Taipei below 3 percent and only a little higher in other markets. After compensating for incentives, office assets in Tokyo and Singapore are also likely to be in the sub–3 percent range, while even the supposedly high-yielding markets in Australia are probably not much higher than 4 percent. Those are slim pickings for investment funds generally looking for far higher returns, especially when prospects for rental growth are far less certain this year than they have been in the past.

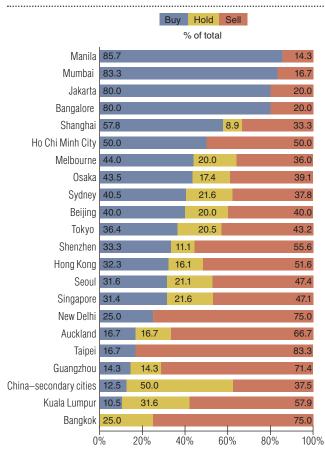
Expected best bets: In many ways, the appeal of the office market in Manila is obvious. Focused mainly on demand from BPO companies that handle outsourced customer service, back office, and IT support for international companies looking to rationalize payroll costs, demand for office space has been high for several years and continues to expand at a rapid clip, with growth of 16 percent expected for 2016, according to ING Bank.

At the same time, however, the BPO opportunity is one available mainly for domestic players. As usual, interest among foreign interviewees remained high, both for acquiring buildings or entering into joint venture development plays. The problem, however, is that there is little need for foreign participation in a market where risk is perceived (by foreigners) to be generally high and where there is already plenty of domestic capital to channel to such investments.

Prospects for office assets in India are based on much the same premise, especially in Bangalore, home to India's largest outsourcing operators. The easy money has already been made in Bangalore, but demand remains strong with yields in the area of 9 percent.

Mumbai, meanwhile, is seen as the nation's main business center—the Shanghai of India, perhaps—whose growth will track that of the national economy. The scope of the opportunity therefore transcends the business park–oriented

Exhibit 3-7 Office Property Buy/Hold/Sell Recommendations, by City



Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

outsourcing market, extending to more general office use. One way in which this theme can be pursued is via development plays that take advantage of the current stress in the India corporate and development sectors to obtain land to develop. As one fund manager currently active in India said: "We think it's a huge opportunity to buy land right now in India. The corporates are still quite stressed. Cash flow is still quite stressed. But many of them own a ton of prime land that you can get title to and develop in the next ten years, which is actually a quite limited asset."

The vote for Jakarta is perhaps harder to understand. Although the city's office rental and capital value growth was very strong in previous years, it hit the wall in 2016 given soft demand from commodities sector tenants and (especially) a huge and ongoing glut of supply that has swamped the market with new space and will continue to do so for the foreseeable future. Even given the well-known difficulties of placing money in Jakarta, few interviewees voiced interest in participating in a market described as "super scary" by one fund manager.

Retail

The retail sector is undergoing profound changes throughout the Asia Pacific region as the rapid growth in e-commerce consumption continues to cannibalize brick-and-mortar facilities, aggravating a preexisting supply surplus in some markets. Landlords have yet to find a formula to reverse the outgoing flow of customers from malls—especially those anchored by department stores—although they are experimenting with various new formats and strategies, including in particular a shift toward more experiential facilities that feature food and beverage outlets. Nondiscretionary retail also has added appeal as a safe haven.

Expected best bets: Manila is once again the top choice in the rankings, a position predicated on growing remittances from an army of expatriate Philippine workers residing around the globe, particularly in the Middle East, together with growing earnings from workers in the domestic BPO industry. Unlike the office sector, there has so far been relatively little investment in local retail facilities, and many are now expecting development focus to switch to this sector. That begs the question, though, of how to make money from this switch. Again, there seems relatively little prospect of international

Exhibit 3-8 Retail Property Buy/Hold/Sell Recommendations, by City

			Buy	/ Ho	ld Sel		
				% of	total		
Manila	66.7						33.3
Ho Chi Minh City	55.6						44.4
Seoul	50.0				7.1		42.9
Jakarta	47.1			5	.9		47.1
Osaka	45.8			16	6.7		37.5
Sydney	40.0			15	5.4		44.6
Bangalore	40.0						60.0
Melbourne	37.2			11.6			51.2
Tokyo	36.6			14.6			48.8
Shanghai	34.1			22.7			43.2
Auckland	33.3			16.7			50.0
New Delhi	25.0		25.0				50.0
Mumbai	20.0		20.0				60.0
Bangkok	20.0		20.0				60.0
Taipei	20.0						80.0
Singapore	19.1	23	3.4				57.4
Beijing	17.6	14	.7				67.6
Hong Kong	17.2	37	.9				44.8
Shenzhen	12.5						87.5
Guangzhou	12.5						87.5
China–secondary cities	11.8	29	9.4				58.8
0'	%	20%	4	0%	60%	80%	6 100%

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

capital participating in a trend that will be dominated by local developers and capital.

The same thinking applies to Ho Chi Minh City, where rapidly rising middle-class incomes are spurring a consumer boom. Vietnam eased restrictions on foreign participation in retail sector activities in 2015. However, the vote in favor of Ho Chi Minh City retail appears something of a rationalization given current levels of oversupply. As one fund manager active in Vietnam commented: "There's already a lot of retail there, so I wouldn't be looking at going into that space." Nonetheless, over the longer term, there seems little question that economic growth in Vietnam will lead to rapidly rising consumer spending.

Among the non-emerging-market destinations, Osaka appears in fifth place, followed soon after by Tokyo. The Japanese retail sector in general has boomed in the last couple of years on the back of rocketing sales to Asian (and in particular Chinese) tourists. While tourist numbers have fallen somewhat due to the rising value of the yen, they are still reasonably strong, though how that will develop in the future remains to be seen. Certainly if the experience in Hong Kong is anything to go by, Chinese tourists are quick to vote with their feet when conditions in a given market turn against them. In addition, recent Chinese tourists in Japan tend to be of the non-big-spending variety, focusing more on cosmetics and everyday items than luxury consumables. A Japanese fund manager summed up the current mood, saying: "We're still a believer in inbound tourism growth, not necessarily luxury brands in Ginza, but there is demand. Right now drugstore sales are booming, and they don't depend on buyer tastes."

Hotels

Activity in regional hotel markets has been subdued in the first half of 2016, with investment transactions down some 43 percent on the year, according to CBRE. Most action is currently focused on core assets and markets in Japan and Australia. Japan in particular has seen a building boom for new hotels in the run-up to the Olympics and to cater to growing inbound tourism from around Asia. Growth in Japanese inbound arrivals reached 29 percent year-on-year in the first five months of 2016, according to CBRE, while RevPAR in Tokyo and Osaka registered growth of 13.5 percent and 20 percent respectively in the first six months compared with the same period the previous year. Regional activity is expected to rebound next year, with most investment again focused on major markets.

Expected best bets: Four emerging-market destinations once more make their way to the top of the rankings, with India again taking the top places. Indian hotels have potential for substantial investment, with occupancy rates in 2015 rising steadily although from a low base of around 60 percent.

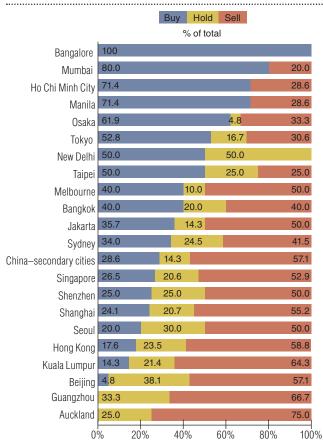


Exhibit 3-9 Hotel Property Buy/Hold/Sell Recommendations, by City

Source: Emerging Trends in Real Estate Asia Pacific 2017 survey.

In particular, Bangalore's hotel facilities have seen significant improvements in the last couple of years, with some 7,000 rooms now in the pipeline for delivery over the next five years, raising existing room count by some 66 percent. Still, capacity and potential absorption in this market remain comparatively small.

In Vietnam, investors continue to show good appetite for hotel assets, with numerous deals completed in 2016. The market tends to be dominated by local groups that have bigger wallets and stronger ties to the local business community. Nonetheless, foreign buyers—especially from Japan and Singapore—are active in major cities and resorts. Singaporean developers are also building new hotels.

Finally, Japanese hotels have seen huge growth as a result of rising inbound tourism. Room rates have risen significantly over the last two years and a huge construction campaign is underway to provide new facilities. Inevitably, talk has turned to the question of oversupply given the fickle tastes of Asian tourists. Nonetheless, many investors remain bullish on the sector, which remains dominated by domestic capital.

Interviewees

AD Investment Management Co. Ltd. Kenji Kousaka

ALE Property Group Andrew Wilkinson

Altis Property Partners Alastair Wright

AMP Capital Tim Nation

Angelo, Gordon Jon Tanaka

Aoyama Realty Advisors Inc. Haruyuki Shinya

BAML Sarah Cooper

BlackRock Rio Minami

The Blackstone Group Stuart Grant

Brookfield Asset Management Niel Thassim

Brookfield Australia Andrew McVeigh

Cache Logistics Trust Daniel Cerf

CBRE Henry Chin Brent McGregor Zoltan Moricz

CBRE Global Investment Partners Alex Crossing

CBRE Global Investors Tetsuya Fujita Richard T.G. Price

Cbus Property Pty. Limited Adrian Pozzo

Challenger Limited Trent Alston

Charter Hall Group David Harrison

Chongbang Group Henry Cheng

Colliers International John Kenny

Daiwa House Industry Co. Ltd. Tetsuo Suzuki

Daiwa Real Estate Asset Management Akira Yamanouchi

DBS Group Holdings Ltd. Eng-Kwok Seat Moey

Deutsche Bank Hugh Macdonald DEXUS Property Group Ross Du Vernet

Diamond Realty Management Inc. Takashi Tsuji

ES-CON Japan Takatoshi Ito

Far East Organization Philip Ng Chee Tat

Fife Capital Allan Fife

Folkestone Limited Adrian Harrington

Fortress Investment Group Akio Yamashita

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Global Logistic Properties Seek Ngee Huat

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The GPT Group Matthew Faddy Nicholas Harris

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IDERA Capital Management Harumi Kadono Takuya Yamada

Ingenia Communities Group Simon Owen

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Invesco Real Estate Investment Louise Kavanagh Saehee Kim

Investa Property Group Jonathan Callaghan

IPC Corporation Limited Patrick Ngiam

IREIT Global Group Adina Cooper Itzhak Sella ISPT Darren Schultz

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JLL Richard Fennell Megan Walters

Kenedix Masahiko Tajima

LaSalle Investment Management Mark N. Gabbay

Mapletree Investments Japan K.K. Norihiro Matsushita

Marubeni Asset Management Tetsuo Saida

Mercer Investments Padraig Brown

Mirvac Group John Carfi Brett Draffen Stephen Gould

Mitsubishi Corp.–UBS Realty Inc. Toru Tsuji

Mitsubishi Estate Tetsuii Arimori

Mitsubishi Jisho Investment Advisor Inc. Takeshi Seki

Mitsui Fudosan Investment Advisors Shuji Tomikawa

Mori Building Hiroo Mori

The Net Group Ramon D. Rufino

Nippon Rescap Investors Ken Fridley

Nomura Real Estate Asset Management Co. Ltd. Naoki Kawahara

PAG Investment Management Limited Naoya Nakata

Pamfleet Andrew Moore

Payce Consolidated Limited Brian Bailison

PGIM Real Estate Benett Theseira

Professional Property Services Group Nicholas Brooke

Property Council of Australia Ken Morrison PT Farpoint Dougie Crichton

Quraz Stephen Spohn

Savills Asia Pacific Christian Mancini

SCA Property Group Anthony Mellowes

Standard Chartered Bank Brian D. Chinappi

Starr International Alison Cooke

Stockland Simon Shakesheff

Third Shift Enterprises Jane Lloyd

TH Real Estate Harry Tan

Tokyu Land Capital Management Inc. Hitoshi Maehara

Touchstone Capital Management Fred Uruma

Valad Property Group Nic Lyons

Varde Real Estate Management Japan K.K. Masayuki Inagaki Takahiro Tokunaga

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Front cover photo: China Resources City Crossing in Shenzhen, China, is a large urban mixed-use complex that transforms the area into a successful development while providing a strong business model. The project, a finalist of the 2012 ULI Global Awards for Excellence, includes facilities such as the 768-unit Park Lane Manor (pictured).

Image: China Resources

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