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FOR THE WORLD'S PRIVATE REAL ESTATE MARKETS



The 2018 Macquarie Capital Real Estate Investments

GLOBAL INVESTOR 50

A PERE special magazine





Transformative ideas. Reshaping residential living.

At Macquarie Capital Real Estate Investments
we're investing in the future of real estate



Shifting demographics, urbanisation and evolving customer expectations are reshaping real estate at an unprecedented speed. Like multi-residential housing, which is now emerging in markets beyond the US as a residential solution to meet the growing demand in big cities.

So how do you navigate an environment that is changing faster than ever before?

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By partnering with leading specialist real estate investors, developers and operators like Greystar in Asia-Pacific, Stonehenge NYC and RHP Properties in the USA, we're creating residential solutions around the world – and transforming opportunity into reality for our clients and partners.



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Trending now

In every walk of life, trends of one ilk or another impact us. But latest fads are often fleeting – they appear on the scene, there is much chatter about them for a while and then they are gone in the blink of an eye. There is, though, something more fundamental at play in the private real estate world right now – megatrends.

The message that has come across loud and clear in much of *PERE*'s special report coverage in 2018 is that these megatrends are deeply occupying the thoughts of institutional investors and their managers. And the compelling discussions with investors in this year's *Global Investor 50* report certainly reveal this too; one contributor highlights no less than 10 that influence investment decision-making, including demographics, urbanization, technological advances and environmental considerations.

What marks out these trends as special is that, far from being here today, gone tomorrow, they will have a profound and long-term structural impact on the real estate of the future as they reshape what occupiers and tenants need and demand from the buildings they live, work and play in. Here are just a few examples: urbanization coupled with low wage inflation means there is greater requirement for affordable housing in major cities; smaller office spaces are likely to become in vogue in the future as technology makes it easier to work from home; as shopping increasingly moves online, there is more need for warehouse space and less need for traditional bricks and mortar retail.

Investors must navigate these rapidly shifting sands of time, working out how to allocate capital now to assets and locations that will be relevant and attractive to future tenants and buyers in years to come. It is a conundrum and certainly requires an element of crystal ball-gazing to position portfolios that will deliver returns and be competitive. So it may not come as a surprise to see there is a degree of caution detectable from the world's biggest investors when it comes to acquiring assets in the current environment. Data provided by Real Capital Analytics for this report show acquisitions among the top 50 ranked investors at \$36.8 billion at the time of publication with a net buying figure of \$5.7 billion, compared with \$65 billion and \$22 billion respectively at the end of 2017.

Add to this a heady mix of geopolitical risks, looming trade wars, possible rising interest rates and the challenges for private investors are only going to continue to ramp up. We look forward to seeing how things play out in 2019.

Enjoy the report,

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By Marine Cole



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Data from Real Capital Analytics reveal that while the *Global Investor 50* are still net buyers, many are in the mood to sell this year





Cities are growing: the industrial sector is a key beneficiary

Looking through the cycle

Investment strategies focused on long-term structural themes and defensive cashflows are set to outperform across cycles, write **Rod Cornish** and **David Roberts** of Macquarie Capital

Solid global GDP growth and tightening labor markets are supportive of healthy near-term real estate fundamentals across regions. Although growth has diverged somewhat this year, with the eurozone slowing from multi-year highs, key developed markets continue to grow above their 10-year averages. Solid rental growth will underpin investment performance for the rest of this year and into the next, particularly in the fiscally stimulated US market.

Over the medium term, the combination of faster than expected US rate rises alongside the withdrawal of European monetary stimulus is likely to be the trigger for the next pricing downswing early next decade, presenting a short window of opportunity for investors.

Shifting investment strategies

Long-term structural trends – urbanization, globalization, technology and demographics – will continue to impact how and where real estate space is used and located over the coming decades. By investing in these long-term themes, investors will be well positioned across cycles.

Industrial and mid-market rental housing will continue to be key beneficiaries of big cities getting bigger, stretched housing affordability for first-time buyers in gateway markets, millennials moving into their peak spending years as they progress with their careers and start families over the coming decade, and the ongoing shift to e-commerce spending as consumers become comfortable with purchasing a wider variety of goods across different platforms.

Technological gains are supporting the latter, with automation of logistics facilities and real-time GPS tracking speeding up the delivery of goods to consumers. Over the longer term, the introduction of driverless trucks will reinforce these trends.

“Portfolio positioning now will ensure investors are well placed to take advantage of any pricing dislocation early next decade”
Macquarie Capital

Retail strategies are also evolving. Forward-looking owners are supplementing their traditional store activities by increasing their exposure to services retailers, food and beverage offerings, click, collect and return facilities, and boosting their last-mile distribution capabilities to take advantage of the shift to online spending.

By geography, fundamentals of population

and economic growth remain crucial in driving investment returns. In advanced economies, we look to regions and markets with solid GDP growth prospects and, importantly, strong population growth supported by a combination of urbanization and/or net overseas migration.

In emerging economies, we prefer markets with robust demographics and economic growth potential, alongside low macro volatility and political stability.

Positioning through cycles

Real estate investments focused on sectors supported by long-term structural themes and defensive cashflows will outperform for the rest of this cycle and into the next.

Macquarie Capital has anticipated these global long-term themes for some time by partnering with world-class logistics and rental housing management teams in developed and emerging markets where these trends are most pronounced.

As these platforms prepare their portfolios for a through-cycle period, including taking advantage of any softening of development sites and core asset pricing early next decade, we expect these sector specialists will continue to attract the interest of key investors with a focus on gaining cross border exposure.



Cornish: despite tight cap rates, investors continue to put capital to use

Global transactional activity

Despite tight cap rates, investors continue to put capital to use. Annual global sales of commercial real estate assets, excluding development sites,

have remained elevated at around \$900 billion over the past 12 months. Increasingly, large investors are looking offshore for access, scale and diversification. Cross-border now represents in excess of 30 percent of global real estate sales, having recovered steadily from post-crisis 2009 lows.

With dry powder for closed-end private real estate funds rising to all-time highs of \$294 billion in 2018, compared with \$250 billion in 2017 and \$176 billion in 2009, global transactional activity is expected to remain solid into next year as managers deploy cash.

Unlike the 2010 to mid-2015 period though, where transaction volumes recovered more or less to the same extent, investment activity is shifting across markets and sectors.

Globally, industrial and multifamily activity has lifted at the expense of secondary shopping centers and non-prime high-street locations. This is clear for cross-border investors, which are increasingly favoring beds and sheds investments given the positive structural drivers of underlying demand.

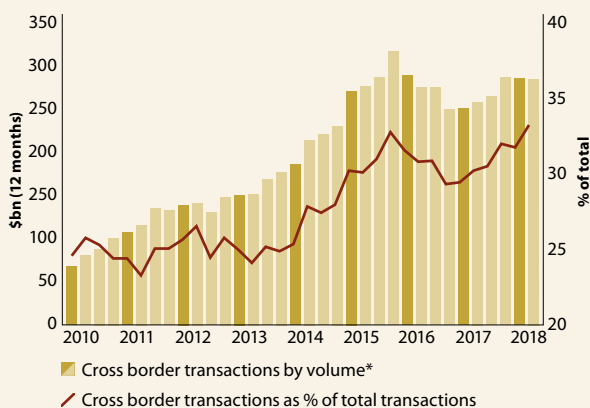
By geography, US transactions remain well above historical averages but volumes have cooled from recent peaks, largely driven by a pullback in secondary retail and CBD office in oversupplied gateway markets. Liquidity remains solid in other US sectors and geographies.

Following Brexit-related disruptions, UK activity has recovered supported somewhat by a rebound in transactions outside London and a number of large trophy office sales to Asian-based investors in the capital. Broadly, ongoing strength of the industrial and build-to-rent sectors is offsetting subdued investment activity in the office and retail sectors.

Elsewhere in Europe, volumes have lifted, supported by

Going global

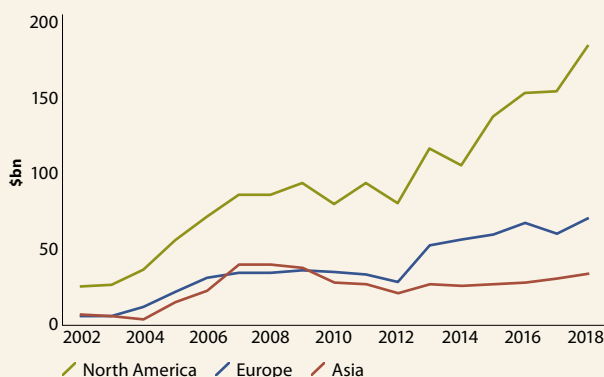
Cross border capital is increasingly important in global markets, influencing pricing and activity



*excluding development sites

Plenty of fire power

Dry powder of closed-end private real estate funds is at an all time-high in North America and Europe



Source: Macquarie Capital, Preqin, RCA



Roberts: transactions in China are volatile, but the long-term trend is positive

an improving macro environment, strengthening fundamentals and easing credit conditions. Low interest rates and elevated cap-rate spreads against local government bonds are also supporting activity.

In Asia, transactions in China are volatile but the long-term trend is positive. Recently, controls on outbound capital have boosted activity. Sales of Chinese development sites continue to rise sharply, accounting for just under 90 percent of global sales

over the past 12 months. In South-East Asia and India, cross-border investment is boosting sales with investors attracted to the relatively strong growth potential in these markets.

Transaction volumes have stabilized at above-average levels in Australia over the past 12 months supported by a combination of domestic capital and cross-border investors looking for yield spreads relative to other Asian markets.

Conviction on the cycle

With large investors increasingly allocating capital across asset classes and markets, shifts in global interest rates impact relative investment returns.

Consistent with previous cycles, we think that financial centers around the world are set to come under some pricing pressure early next decade. The combination of faster than expected US rate rises and gradual reduction in European Central Bank balance sheets (as a percent of GDP) is likely to impact pricing and liquidity of risk assets, including commercial real estate.

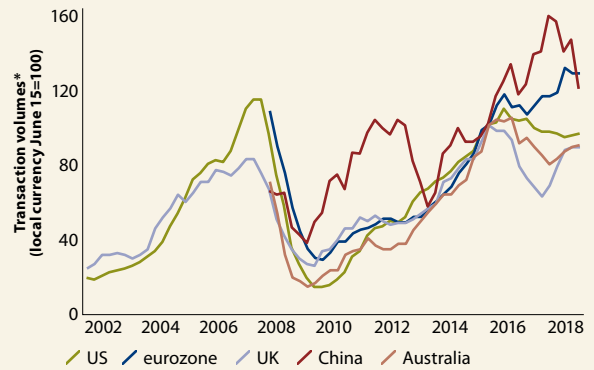
With manageable property leverage, private credit growth modest relative to previous upswings and banks holding more capital against loans, any downswing is likely to be relatively subdued. Elevated real estate spreads over government bonds and high levels of dry powder will also cushion any softening of cap rates.

Nevertheless, any pullback will present a short window of opportunity for investors to acquire core assets and development sites. Portfolio positioning now will ensure investors are well placed to take advantage of any pricing dislocation early next decade.

Of course, if the Federal Reserve judges that US GDP growth will slow sharply as a result of elevated financial volatility or slowing growth (for example, driven by trade disputes and increased geopolitical tensions), then its tightening cycle may be delayed or even reversed. This would potentially provide another leg up for real estate pricing and delay any downswing. □

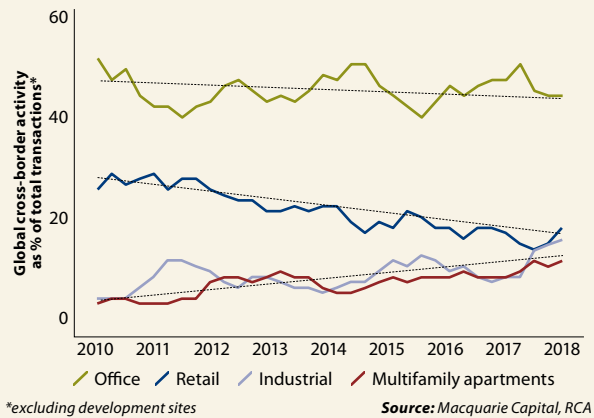
Global activity solid

Transactional volumes in key markets remain elevated relative to averages



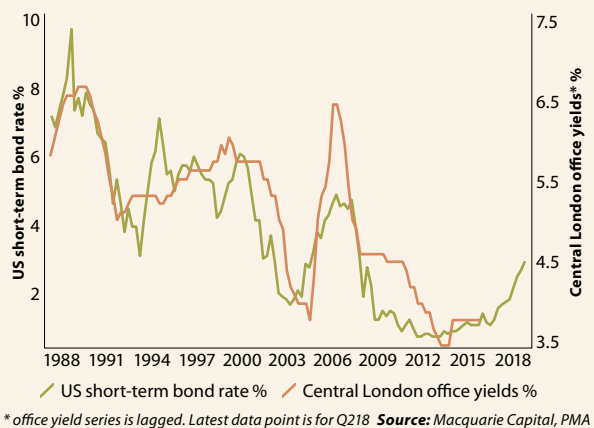
Beds and sheds

Sectoral shift toward logistics and rental housing



US rates important for local pricing

Global markets are likely to be impacted by US rates over the medium term, given historical lags



Leading lights

PERE's 2018 ranking of the biggest private real estate investors

This is the second year that PERE's ranking of the world leading investors has hit the 50-player mark, and what stands out above all else is stability, particularly in the top 30, with many of the same names featuring as in 2017. The world's largest pools of capital have increased their commitments again in 2018 at \$991 billion, compared with \$896 billion a year ago. The commitment of the leading 30 investors has also increased from \$719 billion in 2017 to \$794 billion.

Looking geographically, North American investors make up almost half of the list with 24 ranked. European investors fare less well this year, occupying 16 spots, down two from 2017. Europe's loss is Asia-Pacific investors' gain; the region is represented seven times in this year's list, compared to five last year. There is no change in the number of MENA-based investors – only three again – but it is worth highlighting that two of those are in the top ten.

Abu Dhabi Investment Authority continues to be in a league of its own, refusing be nudged off the number one spot it has held for several years now. The investor's capital commitment has increased to \$62.1 billion from \$46.9 in 2017.

Europe's star triumvirate – Stichting Pensioenfonds ABP, which invests in property via APG Asset Management, Allianz and AXA – continue to dominate the top five, albeit with some position trading between them; Allianz moves up from fourth to second place. The biggest change in the top five is the absence of Qatar Investment Authority, which falls to eighth place from third in 2017; its capital commitment has decreased from \$42.1 billion last year to \$35 billion in 2018.

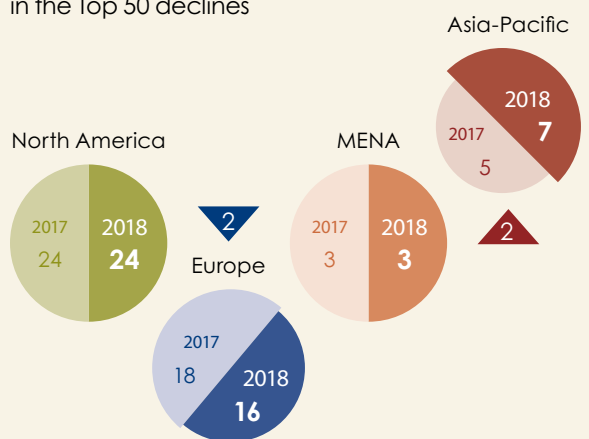
US investor TIAA Global Asset Management/Nuveen is in 5th place, up from 7th last year.

The star movers in the 2018 rankings are Italy's Assicurazioni Generali and Washington State Investment Board, which have moved up six places to 15th and 21st spots respectively.

Finally, a number of new entrants make it on to the list this year; six in total, half of which are headquartered in Asia-Pacific: Taiwanese insurer Cathay Life Insurance; the Hong Kong Monetary Authority and the Korean Investment Corporation. □

Asia-Pacific investors gain ground

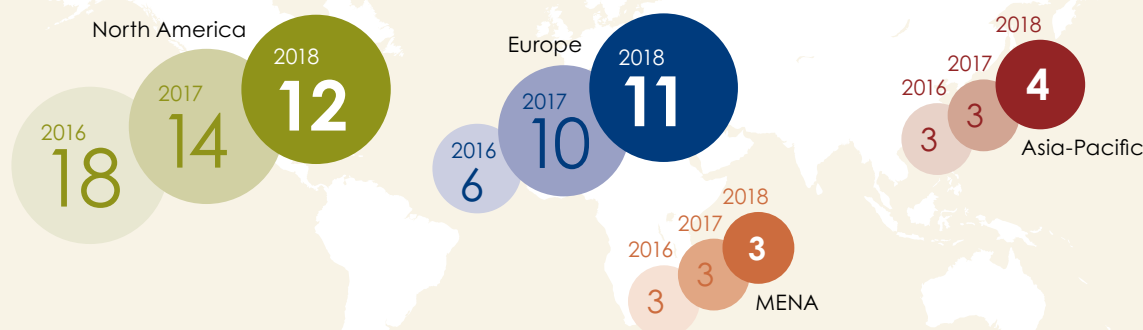
But the number of European investors in the Top 50 declines



Source: PERE

Geographical split

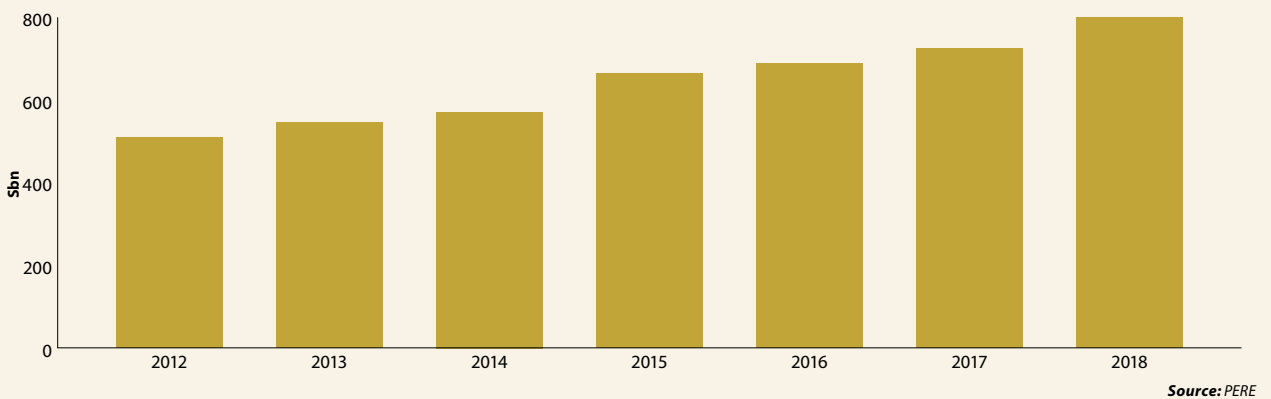
The changing base of the top 30 investors in the Global Investor 50



Source: PERE

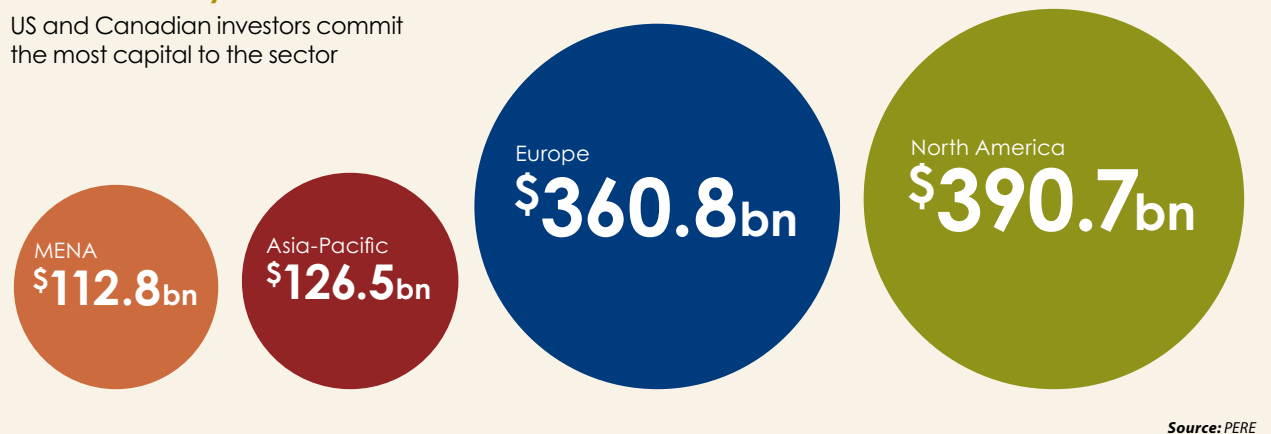
Going up

The total capital commitment of the top 30 investors just keeps growing

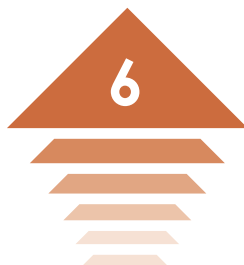


West side story

US and Canadian investors commit the most capital to the sector



Assicurazioni Generali and Washington State Investment Board are the star movers this year, both jumping six places in the ranking from 2017



The position Abu Dhabi Investment Authority would occupy in the ranking based on its increased capital commitment of \$15 billion alone between 2017 and 2018



Amount by which CPPIB is planning to boost its overall allocation to emerging markets by 2025

What makes a top 50 investor?

The methodology for deciding what qualifies – and disqualifies – firms from making the final list

In covering private real estate we have been continually asked by investors and fund managers a seemingly simple question: who are the industry's largest investors? Ranking the largest institutional real estate investors in the world requires rules, judgment and a willingness to dive into the gray areas of a non-transparent asset class.

Hence we have based the *Global Investor 50* on the market value of investors' private real estate investment portfolios both through third-party managed investment vehicles and direct property investments. The ranking excludes investments in REIT or real estate company stocks as well as mortgages or mortgage-related securities. The ranking also excludes real assets, such as infrastructure or energy assets, and assets managed on behalf of third-party investors as can be the case with certain insurance companies.

What counts?

- **'Private real estate':** The definition of private real estate, for the purposes of the *Global Investor 50* is property used for commercial/business purposes such as offices, hotels, retail, industrial and numerous other niche property types, as well as multifamily/apartment properties. It may include portfolios of single family houses, assembled via an institutional platform.
- **'Market value of private real estate portfolio':** The market value of the investment portfolio covers capital definitively invested in real estate either directly or indirectly. In the case of direct investments, it means equity invested in a property or properties. In the case of indirect investments, it means equity invested via a private real estate investment vehicle operated with discretion by a third-party such as a separate account, joint venture, commingled fund or other structured vehicle. We count capital drawn down by the third-party manager for investment in real estate and not commitments made by the investor that are yet to be drawn down. It does not count capital allocated to but not committed to non-discretionary vehicles managed by third-parties, such as open-ended joint ventures whereby the discretion lies solely with the investor. In such cases it is deemed that no capital has in fact been committed.

What does not count?

- **REITs and real estate company stocks:** We consider these to be stock investments and part of an institution's equity portfolio, regardless of how an individual institution may classify it.
- **Individual single-family homes:** These are rarely owned by institutional investors; more often they are owned by their occupier.
- **Mortgages and mortgage-related securities:** Similarly, we consider these to be fixed-income investments and representative of that portfolio.
- **Structured debt:** Again, these instruments, such as collateralized bond obligations and collateralized debt obligations, would be considered fixed-income investments and representative of that portfolio.

What does not count as 'committed and/or invested capital'?

- **Committed capital not yet drawn-down:** We do not count capital that has been committed to a private real estate fund but not yet drawn down by the fund manager.
- **Expected commitments:** No matter how confident an institution is about its investment goals and/or allocation, we do not count pending or future commitments and investments or the uncommitted portion of an institution's target allocation.
- **Opportunistic capital:** An institution that has the ability to opportunistically invest in real estate deals as part of a larger allocation but does not have a dedicated allocation or personnel for doing so is not considered for the rankings. In other words, an institution that has the ability to invest \$2 billion in alternatives will not be counted unless that capital has been segregated into a specific program for real estate and/or assigned a dedicated real estate professional that is actively scouting for investments. □

Global Investor 50 Ranking 2018

PERE's ranking of the largest institutional real estate players

Rank	Institution Name	City	Country	Capital committed (\$m)
1	Abu Dhabi Investment Authority	Abu Dhabi	United Arab Emirates	62,100.0
2	Allianz Real Estate	Munich	Germany	48,234.4
3	Stichting Pensioenfond ABP	Heerlen	Netherlands	42,963.4
4	AXA Investment Managers	Paris	France	41,324.1
5	TIAA Global Asset Management/Nuveen*	New York	United States	40,654.6
6	Temasek Holdings**	Singapore	Singapore	37,587.4
7	Canada Pension Plan Investment Board	Toronto	Canada	35,640.4
8	Qatar Investment Authority	Doha	Qatar	35,000.0
9	California Public Employees' Retirement System	Sacramento	United States	31,379.1
10	Swiss Life	Zurich	Switzerland	29,953.0
11	Norges Bank Investment Management	Oslo	Norway	28,604.6
12	California State Teachers' Retirement System	Sacramento	United States	27,590.0
13	Caisse de dépôt et placement du Québec	Québec	Canada	27,248.5
14	GIC Private Limited	Singapore	Singapore	24,080.0
15	Assicurazioni Generali	Trieste	Italy	23,349.3
16	National Pension Service of Korea	Jeolla-bukdo	South Korea	23,279.0
17	Prudential (UK)	London	United Kingdom	23,114.6
18	Ontario Teachers' Pension Plan	Toronto	Canada	20,281.2
19	Bayerische Versorgungskammer (BVK)	Munich	Germany	19,248.4
20	Public Sector Pension Investment Board (PSP Investments)	Ottawa	Canada	18,033.2
21	Washington State Investment Board	Olympia	United States	17,218.0
22	Teacher Retirement System of Texas***	Austin	United States	16,789.0
23	BCI (formerly British Columbia Investment Management Corporation)	Victoria	Canada	16,370.7
24	Kuwait Investment Authority	Kuwait City	Kuwait	15,720.0
25	Cathay Life Insurance	Taipei	Taiwan	15,456.8
26	Aviva Investors	London	United Kingdom	14,853.2
27	Pensioenfond Zorg en Welzijn	Zeist	Netherlands	14,668.6
28	Metropolitan Life Insurance Company	Morristown	United States	14,600.0
29	Aberdeen Standard Investments	Edinburgh	United Kingdom	14,448.1
30	SBA / Florida Retirement System Pension Plan	Tallahassee	United States	14,106.4
31	New York State Common Retirement Fund	Albany	United States	14,103.2
32	Zurich Insurance Group	Zurich	Switzerland	14,076.0
33	bpfBOUW	Amsterdam	Netherlands	10,988.6
34	Ontario Municipal Employees Retirement System	Toronto	Canada	10,827.3
35	Alberta Investment Management Corporation	Edmonton	Canada	10,812.8
36	Manulife	Toronto	Canada	10,632.1
37	Dai-ichi Life Insurance Company	Tokyo	Japan	10,436.8
38	Healthcare of Ontario Pension Plan	Toronto	Canada	10,349.3
39	Virginia Retirement System	Richmond	United States	10,153.0
40	Munich Re/MEAG	Munich	Germany	10,107.6
41	Oregon State Treasury	Portland	United States	9,763.0
42	Legal and General Investment Management***	London	United Kingdom	9,600.6
43	New York State Teachers' Retirement System	Albany	United States	9,071.7
44	North Carolina State Treasury	Raleigh	United States	8,689.5
45	American International Group	New York	United States	8,639.7
46	Hong Kong Monetary Authority	Hong Kong	Hong Kong	7,896.4
47	Korea Investment Corporation (KIC)	Seoul	South Korea	7,777.8
48	New York City Retirement Systems	New York	United States	7,777.0
49	BT Pension Scheme	London	United Kingdom	7,674.5
50	MPK Migros Pensionskasse	Schlieren	Switzerland	7,660.8

*Includes AUM of affiliated real estate accounts ** Figure includes allocation towards real estate and consumer *** Real assets allocation

1 Abu Dhabi Investment Authority

\$62.1 billion
HQ: Abu Dhabi, UAE

NO CHANGE



Arnold: stepping into the role of global head of real estate

The undisputed heavyweight champion of global real estate investing, Abu Dhabi Investment Authority stands head and shoulders above other global investors with \$62.1 billion of capital allocated to the sector. That represents an increase of more than \$15 billion in the past year and puts ADIA nearly \$14 billion ahead of second-ranked Allianz Real Estate. To add further context, this year's increased capital commitment – if taken as a separate

entity – would rank 26th on this year's *Global Investor 50*.

ADIA invests the oil wealth of Abu Dhabi, the largest of the United Arab Emirates, and is one of the world's largest sovereign wealth funds, with total assets under management estimated to be around \$800 billion. ADIA maintains a real estate allocation of 5-10 percent but does not publish its AUM data.

This year, Bill Schwab stood down as head of global real estate after nine years in the position and was replaced by Tom Arnold, his deputy. During Schwab's stewardship, ADIA substantially expanded its in-house real estate capabilities, quadrupling the team to 200 staff. In 2009, 70 percent of assets were managed externally; that figure dropped to 55 percent this year. Earlier this year, portfolio manager Harry Ip told the *PERE* China Forum that ADIA planned to capitalize on China's deleveraging policy and was targeting the logistics, residential and office sectors. It has also been a substantial investor in India and in August was reported to be selling State Tower Namsan in Seoul, for \$531 million. □



Abu Dhabi: home to the world's largest investor in real estate

2 Allianz Real Estate

\$48.2 billion
HQ: Munich, Germany

2



Growing in China: the firm has invested in the office and residential sector

Allianz Real Estate has continued its aggressive expansion, committing a further \$7.6 billion of capital to the sector and rising two places in the *Global Investor 50* this year. In 2016, chief executive Francois Trausch declared his intent to grow the business 25 percent by 2020 and he achieved this target 18 months ahead of forecast. Growth could be sustained by a recent decision to raise third-party capital for the first time in Allianz's history. Previously, the Munich-based group only raised capital from its own insurance businesses. External capital-raising will be initially focused on German investors and limited to Allianz's real estate debt programme, which has a European loan book of more than \$8 billion.

Asia-Pacific has played a key role in the group's growth this year; it is on target to reach €1 billion of real estate assets under management in China this year, after buying its first office building there, and in April moved into student housing in the region with a \$191 million investment into a club vehicle managed by Australian group Scape. It also committed \$185 million to e-Shang Redwood's latest Japan logistics fund.

Despite this and a growing business in the US, European assets still account for 68 percent of the German company's portfolio. It has continued to invest in Europe, making forward purchases of assets for the first time and opened an office in Vienna in March, its 18th in the world. □



Trausch: raising third-party capital for the first time in the firm's history

3

Stichting Pensioenfonds ABP

\$42.9 billion
HQ: Heerlen, Netherlands

1

Although still ranked in the top five, the Dutch pensions group has fallen a single place in the *Global Investor 50* after lowering capital committed to real estate by just over \$2 billion. However, that may change in the medium-term as Patrick Kanters, head of real estate at in-house manager



Kanters: looking to up the allocation to real estate

APG, would like to see an increase in the allocation to 15 percent from its current range of 10-12 percent. The group continues to favor large direct investments in joint ventures and club deals. A truly global investor, Stichting Pensioenfonds ABP is notable for its commitments to Indian real estate. □

4

AXA Investment Managers

\$41.4 billion
HQ: Paris, France

1



Data control: AXA takes ownership of data center operator DATA4

French insurer AXA Investment Managers has risen one place in the ranking this year and committed a substantial \$7.3 billion of additional capital to real estate. The firm solidified its position in a number of sectors in 2018, including taking full control of European data center operator DATA4 and forming a \$400 million US industrial joint venture with Bixby Land. In June, it sold Ropemaker Place, a prime City of London office block, to Singapore's Ho Bee Land for £650 million (\$864 million; €737 million). □

5

TIAA Global Asset Management/ Nuveen

\$40.6 billion
HQ: New York, US

2

TH Real Estate, the real estate investment arm of the Teachers Insurance and Annuity Association of America, had no shortage of activity in 2018. Transactions include the acquisition of ownership interests in three US regional malls from Brookfield Property Partners in August and the purchase of EDGE Olympic in Amsterdam, kicking off a strategic partnership with local technology real estate company EDGE Technologies, with the goal of amassing a



EDGE Olympic: launched a new technology real estate partnership

€1 billion European office portfolio in the next three to five years. The manager also furthered its global real estate strategy with a first close in May on its £500 million (\$653 million; €566 million) Global Real Estate Debt Partners – Fund II. □

6

Temasek Holdings

\$37.58 billion
HQ: Singapore

1

Singaporean investor Temasek continues its push into global real estate markets. As of end March, the investor had 16 percent of its portfolio invested in the consumer and real estate sectors combined. In October, Mapletree Investments, Temasek Holdings' real estate investing arm, made one of its biggest deals outside Asia-Pacific by acquiring a 16.5 million square feet logistics portfolio, spread across the US and Europe, for \$1.1 billion from Prologis. Michael Smith, the firm's regional chief executive for Europe and US said the deal was in line with Mapletree's strategy to venture beyond Asia. □



Logistics expansion: part of Mapletree's global investment strategy



Post Oak Central: one of many assets CPPIB acquired through the Parkway take private transaction

Off the beaten path

Erin Ledger-Beaupré talks with CPPIB about its real estate portfolio growth in a mature cycle and why partnering with specialist managers is critical, especially in niche sectors. *By Marine Cole*

The Canada Pension Plan Investment Board increased its real estate holdings by C\$16 billion (US\$12.38 billion; €10.69 billion) globally in the past three years, with investments in the US contributing heavily to that growth. In a conversation observed by *PERE*, Erin Ledger-Beaupré, managing director at Macquarie Capital Real Estate Investments, discusses CPPIB's recent investments and

its take on the current market with three CPPIB real estate professionals: Hilary Spann, managing director and head of real estate investments for the Americas; and Lora Gotcheva and Pamela Thomas, both directors in CPPIB's real estate group.

Growth of CPPIB's portfolio

Hilary Spann: The US contributions to our growth over the last three years have been facilitated by strategic investments. One I would highlight is the acquisition of Parkway Inc, where we took a US office REIT private last year. We also achieve scale through significant joint-venture relationships, including in the student housing sector and the industrial sector, where we've been able to align with our partners and build high-quality portfolios very quickly.

Lora Gotcheva: Our acquisition of Parkway was the first public-to-private transaction that CPPIB has led globally. The company was a publicly traded REIT and it owns a fairly concentrated portfolio of about nine million square feet of Class A office assets in Houston. It was a very complex execution. Certainly, it was a lot harder than buying assets, but asset-level liquidity was limited and buying the company allowed us to get a scalable investment in a market that was, and still is, experiencing severe dislocation.

The importance of partnerships

Pamela Thomas: The vast majority of our investing is done through strategic joint ventures. We were able to form a very strategic joint venture in the student housing space and scale very quickly. We found a like-minded capital partner with GIC and a very resourceful private operator in the Scion Group. Mostly through portfolio acquisitions, we've grown our portfolio to a gross asset value of over C\$5 billion in just a couple of years.

Erin Ledger-Beaupré: Can you talk about the challenges you face in a less traditional asset class like student housing, and coming in and creating scale quickly?

PT: There wasn't a lot of institutional capital in the space at the time we entered, so we were able to scale pretty quickly. And



Thomas: retail is not dead

we were attracted to the space by the outsized returns. That dynamic – limited capital, good risk-adjusted returns – began to attract a lot of new capital to the space. I think the challenge in specialty sectors is to get in and get to scale before other capital enters, compresses the returns and prices you out. Returns have compressed 50-100 basis points since we started investing in the



Ledger-Beaupre: exploring current hot topics in the market

sector, and this compression in yields has slowed our pace of deployment.

ELB: When was Scion?

HS: We closed on the joint venture with Scion in early 2016.

ELB: I'm interested in the time progression. It all happened relatively quickly when you look at it over a three-year period of time or less.

HS: Getting scale over a quick time period is critical in a sector like student housing where there

are synergies that stem from having a larger platform. We identified at the time of our entry that the ownership of student housing was extremely disaggregated and ripe for consolidation. There was a big shadow market. There was a big local ownership market. By virtue of committing significant capital to that institutionalization of the sector, we attracted the notice of other investors and they joined the process. The window to achieve scale was very short.

LG: Having great partners helps us achieve scale quickly when it's desirable. It's part of our business model to partner with the best-in-class across every sector. Those are the most knowledgeable operators in the market. They're able to unearth attractive opportunities in a variety of different market conditions. That really helps us.

Rethinking retail

PT: Retail is not dead but it is changing really rapidly. There are niches of retail that are actually doing pretty well, growing and performing well at this point. It's the players like Sears, which have failed to keep up with the pace of change, that have suffered the most. They haven't had the capital to invest in their business models, and they have just failed to keep up with the rapid change.

HS: While painful for the retail industry, I think it is healthy for retailing. The companies that are innovators in the space are thriving. The companies that have failed to innovate continue to struggle in this shake out.

ELB: If you look at your own retail portfolio now, versus where you thought it was going to be maybe two or three years ago, has it been better or worse? Has it been the apocalypse?

PT: We have a large mall portfolio. It's become more capital intensive in recent years but our malls still generate very strong, very stable cashflows. If you strip out the noise



Spann: we see opportunity where others may see risk



Gotcheva: capital expenditure is not being talked about enough

around the sector, as a stream of cashflow, our investments are very high quality.

HS: The increasingly capital-intensive nature of retail assets is a market-wide phenomenon. Historically, one of the things that favored retail as an asset class was that it was less capital intensive than some others. That gap in capital expenditures as a percentage of NOI between retail and other sectors, like

office, is closing.

Tight cap rates

ELB: Looking at the overall market, what are some of the hot topics?

HS: One topic that has received a lot of attention this year is public-to-private transactions. These transactions can be really compelling opportunities; but buyers shouldn't go into it thinking that every company can be acquired at a significant discount to NAV, because that outcome would be contrary to the objectives of the board that is acting on behalf of its shareholders. If you think it's a good value and business plan at NAV, the transaction could be a good one. If you need a significant discount to NAV to execute your business plan, you should proceed with caution.

ELB: Conversely what are some themes that haven't received enough attention?

LG: I definitely think that capital expenditure is not being talked about enough. We're seeing consistently across sectors that older assets really struggle to compete with new developments and recently renovated projects. Bringing them up to standard can be really expensive, if it's even possible, because in some cases the physical characteristics of the older assets will never allow them to be Class A products. An example is the amenity packages at multi-family buildings and office buildings, where the market standard has significantly shifted over the last five-to-seven years. The increases in capital spent on these items is having a material impact on returns.

ELB: What's been the most surprising thing in the market in the last 12 months?

PT: That cap rates haven't moved more in the face of interest rates changing.

HS: But we think they will. Spreads have been compressing for the last 12 months or so, but can't compress forever. Cap rates will eventually have to move in response. Since we can be unleveraged buyers, we see potential opportunity in the rise in rates – the market should have less competition from leveraged buyers. So we see opportunity where others may see risk. □

7 Canada Pension Plan Investment Board

\$35.64 billion
HQ: Toronto, Canada

1

Canada Pension Plan Investment Board's global real estate activities in 2018 were largely concentrated in the residential and industrial sectors. Between June and August, the pension plan made significant allocations to logistics partnerships in China, Korea, the US and Brazil, the largest of which was an additional \$1.4 billion commitment to an existing China logistics joint venture with Australian industrial property group Goodman Group. In January, CPPIB announced residential partnerships targeting more than \$4 billion in aggregate equity commitments in the UK and US, most notably an alliance with Australia's Lendlease to initially target £1.5 billion (\$2.68 billion; €1.69 billion) in the UK build-to-rent sector. □



CPPIB: an active year in logistics and residential

8 Qatar Investment Authority

\$35 billion
HQ: Doha, Qatar

5

QIA has featured prominently in *PERE*'s rankings for many years for its high-profile deals, including the landmark Asia Square Tower 1 purchase in Singapore in 2017. However, the lack of



Doha: headquarters of QIA

buying momentum this year, judging by public announcements and news reports, has led to the Middle Eastern investor dropping from third to eighth position. Qatar's diplomatic crisis with some other members of the Gulf Co-operation Council, which began last year and is yet to be fully resolved, has led the market to speculate QIA is liquidating foreign assets, including real estate. The uncertainty about QIA's global investment program continues, especially since the fund's chief executive, Sheikh Abdullah bin Mohamed bin Saud al-Thani, vehemently denied the asset sales in a *Reuters* interview in April. □

9 California Public Employees' Retirement System

\$31.38 billion
HQ: Sacramento, US

NO CHANGE

For the California Public Employees' Retirement System, 2018 was yet another challenging year to deploy capital in real estate. As of April 30, the pension plan had invested only 25 percent of the \$4.2 billion it had allocated to the asset class for the fiscal year ended June 30. "We're not the only ones



Mouchakkaa: continues to face 'spiraling' prices

chasing those investments and properties, and pricing has continued to spiral upwards," Paul Mouchakkaa, CalPERS' head of real assets, told *PERE* in August. Despite this, the pension plan also set aside \$4.2 billion in real estate commitments for fiscal year 2018-19, of which more than \$1 billion each went to Boston-based GID and Los Angeles's Commonwealth Partners. □

10 Swiss Life

\$29.95 billion
HQ: Zurich, Switzerland

2

Swiss Life remained active in real estate in 2018, striking its latest merger and acquisition with the purchase of Berlin-based real estate investment manager BEOS in August. Then, in October, Swiss Life Asset Managers, through which Swiss Life invests its own insurance equity alongside third-party capital, agreed to acquire 80 percent of a French housing portfolio from ICF Novedis, a subsidiary of French railway company SNCF Group. There is more to come: also last month, Stefan Mächler, Group CIO of Swiss Life, said the insurer planned to launch new pan-European funds, including a European healthcare property fund, in the coming months. □



Mächler: plans to launch new pan-European funds

11 Norges Bank Investment Management

\$28.6 billion
HQ: Oslo, Norway

3

After diving to 14th in 2017's ranking, the world's largest sovereign wealth fund has risen again. The announced focus on real estate relative to expanding into other asset classes has been carried out. And proof of that was a landmark investment completed in Japan, where NBIM made its debut



Investing in Tokyo: NBIM has acquired stakes in office and retail assets in the city

in Asia via an acquisition of a 70 percent interest in a portfolio of five Tokyo office and retail assets. Out of \$1.02 trillion total assets under management, 2.64 percent was in unlisted real estate as of the end of June 2018, a share increase from 2.58 percent since the end of 2017. □

12 California State Teachers' Retirement System

\$27.5 billion
HQ: West Sacramento, US

2

The investor manages \$228 billion, administered by a 12-member teachers' retirement board that ensures benefits will be paid to its more than



Sustainability: CalSTRS selected eight managers with an ESG focus in 2018

914,000 members and benefit recipients. The system provides retirement benefits to the state's public school educators and is currently the largest public teachers' pension fund in the US. CalSTRS has been vocal in its support of sustainable and socially responsible investments, establishing its first written policy to navigate ESG issues in 1978. In February, it announced the selection of eight ESG-focused managers to execute specific investment strategies. The pension system has allocated 12.95 percent of total investment assets to real estate as of August 31. □

13 Caisse de dépôt et placement du Québec

\$27.2 billion
HQ: Quebec, Canada

NO CHANGE

Real estate investments accounted for 11.5 percent of CDPQ's overall portfolio at the end of 2017. Geographically, the institutional investor had greater US real estate exposure than domestic real estate holdings. US properties accounted for 45.2 percent of the portfolio in 2017 compared with the 32.2 percent and 13.9 percent committed to Canadian and European real estate assets. Real estate investment subsidiary Ivanhoe Cambridge, which makes real estate investments on behalf of CDPQ, acquired private real estate firm Callahan



CIBC Square, Toronto: asset in Ivanhoe Cambridge's, CDPQ's investment subsidiary, portfolio

Capital Properties in September. Ivanhoe Cambridge, acquired by CDPQ in 1990, has a portfolio with stakes in more than 1,000 assets across the residential, office, retail, industrial and logistics property types. □

14 GIC Private Limited

\$24.08 billion
HQ: Singapore

3

The preeminent Singaporean sovereign wealth fund had 7 percent of its portfolio allocated to real estate investments as of March 2018, the same allocation as a year before. One of GIC's highlight deals this year was the formation of a China value-add fund with the global logistics giant GLP in September. GIC's "significant stake" in GLP China Value-Add Venture II, with \$2 billion in assets under management, was its first after selling shares in GLP as part of its privatization. Meanwhile in the US, the investor continued to expand its student housing exposure with Canada Pension Plan Investment Board with a \$1.1 billion portfolio purchase in January. □



Logistics: main investment strategy of GIC's latest value-add fund with GLP

15 Assicurazioni Generali

\$23.34 billion
HQ: Trieste, Italy

6

The real estate investment arm of Italian insurer Assicurazioni Generali climbed back up the ranking after new chief executive Aldo Mazzocco made his impact. In 2018, new investments in the real estate sector continued to be mainly oriented toward European markets. Among the acquisitions



Mazzocco: new chief executive is making his mark

were Generali's Danish debut with a high-street retail asset in Copenhagen. Office assets were the top pick on the shopping list, with three in Paris, as well as one each in Brussels and Warsaw. The real estate investments made up 4 percent of €351 billion total assets under management by the end of June 2018, up from 3.8 percent since the end of 2017. □

16 National Pension Service of Korea

\$23.28 billion
HQ: Jeolla-bukdo, S Korea

1

South Korea's National Pension Service has seen a fair share of commotion with resignations among senior investment officers. The vacancies included that of chief investment officer since July 2017, until Hyo-Joon Ahn was appointed as a lasting solution in October 2018.

The revolving door has left some alternative asset managers frustrated with longer response times involving NPS transactions. However, the size of checks written by the world's third-largest pension fund never loses appeal, and the firepower has not been any less mighty. The \$1.5 billion purchase of London's Plumtree Court is a case in point, while new manager mandates have been appointed. □



Year of change: NPS suffered a number of resignations this year, but the appointment of a new CIO brings stability

17 Prudential (UK)

\$23.1 billion
HQ: London, UK

NO CHANGE

London-based pension fund manager Prudential made its debut in the ranking last year and has managed to hold the same position this year with an acquisitive global investment strategy.

The year started with Tony Brown being named as the head of M&G Real Estate, Prudential's investment arm. M&G Real Estate went on to make one of its biggest deals in Asia in August when it tied up with two Korean institutional investors to acquire Seoul's Centropolis Towers for \$1.05 billion. Other investments this year include a €15 million care and assisted living home in Sweden and a €42 million office asset in Brussels, among others. □



Brown: now leads M&G Real Estate's global operation

18 Ontario Teachers' Pension Plan

\$20.2 billion
HQ: Toronto, Canada

2

Canada's largest single-profession pension plan reported nearly \$194 billion in net assets at the end of June. Approximately 14 percent of its portfolio has been dedicated to real estate investments, which are managed

by Cadillac Fairview, a real estate owner and operator the Ontario Teachers' Pension Plan acquired in 2000. Investments are made primarily in Class-A retail and office properties on behalf of 323,000 active and retired school teachers. The pension plan's real estate portfolio is valued at approximately \$29 billion and includes major developments such as the Deloitte Tower and Toronto-Dominion Centre. □



Toronto Dominion Centre: part of OTPP's \$29 billion portfolio

19 Bayerische Versorgungskammer

\$19.25 billion
HQ: Munich, Germany



Bayerische Versorgungskammer planned to slow its US real estate investing in 2018 amid rising hedging costs and interest rates, Rainer Komenda, head of real estate investment global, told *PERE* during the MIPIM property conference



Komenda: still targeting sizable investment in the US

in Cannes in March. Despite this, Germany's largest pension fund is still targeting a sizable amount of investment activity in the US as part of a larger goal to invest €2 billion globally in real estate equity this year. Indeed, BVK was part of a consortium that purchased 100,000 square feet of vacant office space at 685 Fifth Avenue in New York in August. □

20 Public Sector Pension Investment Board

\$18.03 billion
HQ: Ottawa, Canada



Public Sector Pension Investment Board deployed a total of C\$2.5 billion (\$1.92 billion; €1.66 billion) during its fiscal-year 2018, primarily in US retail and multifamily, and industrial properties in Europe, the US



Crestpoint, Vancouver: a recent PSP property acquisition

and Mexico. Investments this year included the development of an Amazon industrial asset in the Salt Lake City area with USAA Real Estate, and the acquisition of a portfolio of 12 office and industrial buildings in British Columbia, Canada, in partnership with Toronto-based investment manager Crestpoint Real Estate Investments. Following the opening of its London office last year, PSP expanded its Europe-focused real estate team to seven professionals as of March 31. □

21 Washington State Investment Board

\$17.2 billion
HQ: Olympia, US



The state investment board manages 17 retirement plans on behalf of the state's public employees, teachers, school employees, law enforcement offices, firefighters and judges. The board also makes investments on behalf of five state insurance funds and 13 permanent and other trust funds. Of the \$17 billion put toward real estate investments, 29.3



Residential: sector made up almost 30 percent of the \$17 billion Washington put toward real estate

percent was allocated to residential, 24 percent to Industrial, 14.6 percent toward retail and 9.6 percent toward healthcare. Other real estate strategies included office, storage, debt, land, and hospitality at smaller percentages. The Washington State Investment Board reported more than \$130 billion in total assets under management as of June 30. □

22 Teacher Retirement System of Texas

\$16.7 billion
HQ: Austin, US



With \$150 billion in assets under its belt as of June 30, the Teacher Retirement System of Texas is the largest public retirement system in the state. It targets a 14 percent allocation to



Texan giant: TRST is the largest public retirement system in the US state

private real estate, focusing on core, opportunistic, value-add and special situations investment strategies. It has previously committed capital to real estate managers such as Square Mile Capital, Tricon Capital Group, Banner Oak Capital Partners and Madison International Realty. Twenty percent of its private investments are principal investments, which are managed internally, and 80 percent are directed to external managers. In June, it was considering opening an office in Singapore to create a local presence in Asia. The system has committed nearly \$17 billion to real estate in 2018. □



Going direct in Asia: PFA recently invested in China logistics with LOGOS, an Asia-Pacific logistics specialist property group that counts Macquarie as a shareholder

Going global in a changing world

Macquarie Capital Real Estate Investments' Zahar Mejanni seeks insights from PFA's Michael Bruhn on how to construct a worldwide investment strategy in a rapidly evolving market

Over recent years PFA's "global assault" has transformed it from a domestic core investor to a global player with \$10.4 billion of real estate assets under management. The past 12 months have seen the Danish pension fund strike a diverse range of big deals around the world, including buying \$1 billion of core German residential, taking a stake in the landmark Devonshire Square office scheme in the City of London and establishing a venture to develop logistics in China. Danish pension PFA's head of real estate Michael Bruhn and Macquarie Capital Real Estate Investments' head of EMEA private capital markets Zahar Mejanni discuss the strategies, headwinds and structures shaping the investor's allocation to the sector.

Designing a global strategy

Michael Bruhn: You cannot just export a strategy that works for core investments in a small country like Denmark and expect it to work around the world. Examining global megatrends provides us with help and guidance as to what investments we should look at. In determining our strategy for 2018 we identified 10 megatrends: demographics, economics, consumption, technology, health, transportation, food, energy, environment and globalization, as well as a number of sub-trends within those areas that will impact real estate. We then cross-referenced that with an index of how rich and developed countries are. For instance, the aging population is a

megatrend that is obvious in India, as well as in Europe, but doing serviced senior living is not really for India because the country is not developed enough for there to be the available wealth to do that kind of scheme. Once we have identified the megatrend and sub-trend that supports an asset class we look at the available opportunities across the risk classes we invest in. For instance, the value-add segment in logistics in China does not really exist. It is core or it is opportunistic. Either you have developed something and let it on a long lease, or you are developing it.

Zahar Mejanni: Structural tailwinds also underpin our investment strategy and play a large part in determining the sectors and geographies in which we invest and the specialist real estate managers that we partner with. Whether we are investing ourselves or advising select third-party clients, we look for opportunities that are supported by the adoption of new technology, rapid growth in e-commerce, urbanization and shifting demographics. We're creating opportunities that benefit from these structural changes and outperform through cycles. That is why we particularly like the logistics and multifamily sectors and markets like Australia, which

has strong population growth forecasts even when compared with emerging markets. The US is another example where population growth is relatively strong in comparison to other developed markets.

MB: One of the managers we work with divides strategies up into those that are driven by GDP

"Examining global megatrends provides us with help and guidance as to what investments we should look at"

Michael Bruhn



Bruhn: comfortable with residential because people will always need a place to live

growth and those driven by necessity – like medical offices, retirement living or student housing. With the latter, instead of the growth in the investment coming from factors like rental increases it comes from undersupply. If you look at mainland Europe where GDP growth is not very high maybe that is something you should have in mind: German residential could be seen as necessity driven because there is such a shortage of housing in the seven biggest German cities.

Meeting the challenges of a changing investment landscape

ZM: We are both strong believers in the long-term benefits to be gained from investing in the logistics and multifamily sectors. Globally, industrial sector activity continues to strengthen at the expense of retail. What is your view of the market sentiment on retail? Do you think the sell-off is an over-reaction or is it justified given the growth of e-commerce?

MB: We only have one relatively small shopping center investment in Denmark, but I have seen how much effort and investment it takes to adapt that asset to the trend for more experience and convenience-based shopping. Where you have flagship stores high-street retail is different, but I am still a little concerned about the long-term viability of those assets because even some of the biggest high-street retailers are having to reinvent themselves and that may mean they will occupy fewer city center stores. The pace of change in the sector is exponential. We could see as much change in the next two years as we have over the past 10, which is a little scary.

ZM: I think change also creates opportunities. As customer expectations evolve, more assets are shifting towards accommodating services or are linking themselves to e-commerce through click and collect or even becoming part of the last mile delivery network. It is not easy to implement and not for everyone, but in the last year or so we have seen a small uptick in retail transactions. Some experienced retail managers willing to ride the wave for the next few years will take advantage of opportunities to buy mispriced assets where they can drive value.



Mejanni: more focused on structural drivers across regions

“We’re creating opportunities that benefit from structural changes and outperform through cycles”

Zahar Mejanni

MB: My biggest concern is how we should react to the magnitude and speed of the technological changes that will impact real estate. Will tenants still want to occupy the current generation of logistics buildings when the next generation of robotics are designed and installed? With the developments in artificial intelligence, is a big office block with a 10-year lease to a prominent accounting firm or a bank a good bet, or will they make half their employees redundant in a few years? That is why I am comfortable with residential because people will always need a place to live. It is also one of the most important reasons why we bought a 45 percent stake in Devonshire Square in the City of London. Not only is it occupied by WeWork, but it is right next to Liverpool Street station with the new Crossrail link due to open soon. It has been there for the last 150 years and we think that asset will still be attractive in 100 years. In spite of Brexit, we are making that bet because we think it is an asset for the long haul.

ZM: People will continue to want to live, work and play in areas that are proven and being so close to a major transport hub should give you comfort for the long run especially with a strong existing tenant, because occupiers will always want to be in these locations.

Striking a balance between investors and managers

ZM: Over your career you have worked as both an investor and manager. How important is having seen things from the manager side been in your current role leading a pension fund’s allocation to real estate?

MB: If you want to have a long-term relationship there has to be a balance between what the investor is getting out of the mandate and what the manager is getting. We have managers that perform very well and provide strong returns, and of course we like to back them. The problem is the really good managers can attract a lot of capital and that makes the discussion when it comes to fees more difficult. The allocator model is the less preferred route for us, although sometimes it is the only way to get into an asset class and region. We like to do more direct investments because we like to have more control over decision-making and because of cost. If we go with a manager we definitely prefer club deals or joint venture structures that have a handful of investors so that more of the decision-making sits with the investors. If you are looking at an asset that sits slightly outside the strategy and you have to decide if you should buy it anyway, it is easier to do that if you are part of a small group of like-minded investors. In a big commingled fund it is much more difficult to maneuver. □

23

BCI*

\$16.3 billion
HQ: Victoria, Canada

5

BCI began providing investment services on behalf of British Columbia's public sector in 2000 under the Public Sector Pensions Act. Today, 85 percent of its clients are pension plans, including the Municipal Pension Plan, Public Service Pension Plan, Teachers' Pension Plan and College Pension Plan, among



Lopez: global CEO of Quadreal, the real estate arm of the investment firm

others. In March, BCI reported the management of \$145.6 billion in assets, \$21.1 billion (14.5 percent) of which was allocated to real estate. In 2016, BCI created QuadReal Property Group, led by Dennis Lopez since last year, to manage its real estate holdings. Since its inception, the company has highlighted sustainability as a focus, and 26 buildings in the QuadReal Property portfolio received ENERGY STAR certification in Canada in May. □

* formerly British Columbia Investment Management Corporation

24

Kuwait Investment Authority

\$15.7 billion
HQ: Kuwait City, Kuwait

1

Kuwait's sovereign wealth fund has over \$520 billion in assets under management, according to the Sovereign Wealth Fund Center. With \$15.7 billion committed to real estate, the Middle Eastern investor has inched up one spot in this year's ranking. One of KIA's prominent investments in the US is 10 Hudson Yards, a 53-story, 1.7 million-square-foot tower. This May, KIA and the German insurer Allianz were joined by the State Teachers Retirement System of Ohio in the project, with the US pension fund reportedly committing over \$400 million. Increasing investment exposure in emerging markets such as China, India and Brazil and diversifying the portfolio is next on the radar, KIA's group chief executive, Farouk Bastaki told Reuters in May. □



Kuwait: the country's SWF is targeting investments in emerging markets

25

Cathay Life Insurance

\$15.45bn
HQ: Taipei, Taiwan

NEW ENTRY

One of the most prominent Taiwanese insurers, Cathay Life Insurance has been consistently building an overseas real estate investment portfolio, with some major trophy buys in London, including the Woolgate Exchange building, ever since regulators permitted Taiwanese life insurers to acquire real estate abroad in 2014. As of March 2018, the insurer, which makes investments via its subsidiaries, had around \$14.8 billion allocated to what it terms as investment properties,



Taipei: home base of Cathay Life Insurance

versus around \$14.6 billion the same time a year before. Overall, 1.5 percent of its portfolio is invested in alternative investments, including real estate and private equity, according to PERE data. □

26

Aviva Investors

\$14.85 billion
HQ: London, UK

NEW ENTRY

In May 2018, the London-based asset management business of UK insurer Aviva agreed to sell both its real estate multi-manager platform and its interest in the Encore+ open-ended pan-European fund series to LaSalle Investment Management. The disposal of the multi-manager business was a means to focus the firm on operating assets. The sale of Encore+ to then-partner LaSalle also pointed to Aviva wanting greater control of the investment management chain. Following the disposal, David Skinner, managing director strategy and fund management, stated that the real estate business is in a growth mode, investing heavily over the next few years both in terms of people and infrastructure. □



Skinner: Aviva's managing director strategy and fund management

27 Pensioenfonds Zorg en Welzijn

\$14.67 billion
HQ: Zeist, Netherlands

4

PGGM, which oversees Pensioenfonds Zorg en Welzijn, the pension plan for Dutch healthcare workers, made a big bet in European retail in the past year. In April, the Dutch pension fund service provider announced the launch of Urban Retail Ventures, a €550 million European commercial real estate joint venture with Amsterdam-based retail real estate investment



Promenade Sainte-Catherine: an Urban Retail Ventures property in Bordeaux, France

manager Redevco. In November 2017, PGGM also unveiled the formation of a separate account program with Houston-based real estate firm Hines, targeting high-street retail, office and mixed-use value-add developments in Milan. PGGM will initially commit €155 million of equity to the account. □

28 Metropolitan Life Insurance Company

\$14.6 billion
HQ: Morristown, US

2

The investor managed \$421 billion in assets as of August 31, \$14.6 billion of which was dedicated to real estate equity investments. Another \$47.1 billion was put toward commercial mortgage loans. Real estate investments are managed by MetLife Investment Management, which seeks investment in high-quality properties in the top 30 US markets. MIM also invests in build-to-core strategies along with real estate debt, core, value-add and opportunistic. In August, the asset management platform for MetLife announced a co-lending agreement with financial services and bank holding company State Street Corporation. MIM and its affiliates will originate and service up to \$2 billion in commercial mortgage loans to State Street and its affiliates. □



Hooking up: MetLife entered a co-lending agreement with State Street

29 Aberdeen Standard Investments

\$14.45 billion
HQ: Edinburgh, UK

NO CHANGE

The investment firm created by the 2017 merger between Standard Life and Aberdeen Asset Management launched new vehicles in 2018. February saw the launch of a global private markets fund with £138 million (\$203 million; €156 million) in seed capital from a Standard Life pension fund. The open-ended fund includes real estate in its alternative assets mix. In March, a pan-European residential property fund raised the first €350 million from eight European investors with a €1 billion assets



Edinburgh: Aberdeen Standard Investments is based in the Scottish capital

target. Investments have been made in France, Denmark and Austria. The asset management arm had \$51 billion in real estate assets by July 2018, including equity invested for Standard Life's insurance business. □

30 SBA/Florida Retirement System Pension Plan

\$14.1 billion
HQ: Tallahassee, US

11

Florida's state board of administration manages more than 30 funds, including the state's retirement system pension plan and hurricane catastrophe fund. The Florida Retirement System Pension Plan is its largest client, holding more than 80 percent of the state board of administration's assets. The board committed \$100 million to Landmark Partners, a new manager for the investor, during the second quarter of 2018. Previously it has invested with managers such as JPMorgan Asset Management, The Carlyle Group, Blackstone, BlackRock Real Estate and Starwood Capital Group. The state board of administration targets a 10 percent allocation to real estate out of the more than \$202 billion of funds under management. As of July 31, real estate investments were underweight with an 8.9 percent allocation. □



Florida's pension fund: the investor committed \$100 million to its new manager Landmark Partners this year

31

New York State Common Retirement Fund

\$14.1 billion
HQ: Albany, US

1

NYSCRF, the third largest US public pension plan, currently allocates 6.7 percent of its total value of \$207.4 billion to real estate, but with a target of 8 percent it has been looking to up its commitment to the sector this year, primarily through investing in funds. Logistics has been a particular focus: the investor committed \$300 million to the Prologis Targeted US Logistics Fund and \$200 million to Exeter Europe Value



Focus on logistics: NYSCRF has made a number of commitments to the sector in 2018

Ventures III, a value-add fund investing in European logistics. NYSCRF also backed the open-ended Blackstone Property Partners to the tune of \$200 million and invested \$150 million in alternative real estate assets through Heitman Value Partners IV. □

32

Zurich Insurance Group

\$14.08 billion
HQ: Zurich, Switzerland

11

At MIPIM this year Cornel Widmer, head of group real estate, confirmed that the Swiss insurer's appetite for the asset class remains unsated. He told *PERE* the company planned to buy \$1.5 million of real estate globally in 2018 and to re-enter the French market with an equity investment of \$300 million-\$400 million. The investor has focused on growing its AUM through direct acquisitions, including three substantial mixed-use assets: 500 East Morehead in Charlotte, North Carolina, The East in Frankfurt, and the Konrad hotel and residential development in Hamburg, leaving its allocation to real estate standing at 7.4 percent in May. □



Widmer: the head of group real estate told *PERE* the investor was looking to re-enter the French market after a 14-year absence

33

bpfBOUW

\$10.99 billion
HQ: Amsterdam, Netherlands

3

The Dutch construction industry pension fund's allocation to real estate stands at around 15.6 percent. Those investments are administered by Amsterdam-based investment manager Bouwinvest, which handles three international mandates on bpfBOUW's behalf of €1.1 billion in North America, a similar sum in Europe, and €778 million in Asia-Pacific.

Bouwinvest is seeking to grow its North American platform to €1.5 billion by 2020 through investments in listed and unlisted real estate funds, joint ventures, co-investments and club deals.



Hudson Yards: bpfBOUW has a stake in The Spiral skyscraper located in the New York development

In May, it was one of several limited partners to take an equity stake in the development of Tishman Speyer's 314-meter The Spiral skyscraper in New York, investing \$100 million of bpfBOUW's capital. □

34

Ontario Municipal Employees Retirement System

\$10.83 billion
HQ: Toronto, Canada

11

Canadian pension fund OMERS invests in the sector through its real estate arm, Oxford Properties, which saw a change of leadership in 2018 as Michael Turner, formerly head of its Canadian business, replaced Blake Hutcheson, who moved to OMERS as chief pensions officer. Despite falling down the ranking 11 places this year, Oxford says it is on a "strong development push," including committing \$2 billion to transform an old freight terminal at Hudson Square on Manhattan's West Side into a 1.3 million-square-foot office building. The firm is also competing with Blackstone to take private Australian REIT Investa Office Fund, in a \$3.6 billion deal. □



Chasing REITs: the Toronto-headquartered investor is looking to take private Australia's Investa Office Fund

35 Alberta Investment Management Corporation

\$10.81 billion
HQ: Edmonton, Canada

2

Institutional investment fund manager AIMCo manages C\$103.7 billion (\$79.1 billion; €68.6 billion) on behalf of Alberta pensions, endowments and government funds, around 13 percent of which is allocated to real estate. In 2018, the investor has grown its property portfolio through direct investments and joint ventures. In July, it teamed up with fellow



Docks Brussels: the investor purchased a major new shopping center in the Belgian capital

Canadian investor CPPIB and WPT Industrial REIT to aggregate a portfolio of US industrial properties through a value-add and development investment strategy. Another notable investment this year was the purchase of the newly developed Docks Brussel shopping center in Brussels for €300 million. □

36 Manulife

\$10.63 billion
HQ: Toronto, Canada

4

The Canadian insurance company operates in the property sector as John Hancock Real Estate in the US and Manulife Real Estate in other parts of the world. It owns, develops and manages



Victoria Harbour, Melbourne: Manulife made its first investment in Australia with the acquisition of 800 Collins Street

a portfolio consisting primarily of office and industrial properties, as well as some retail and multi-family residential in metropolitan centers throughout Asia, Canada and the US. The investor made its first foray into the Australian market in January 2018 by acquiring the 800 Collins Street office tower in Melbourne. While Manulife usually focuses on direct investments, the firm told *PERE* in May that it was looking at potential investment opportunities in pan-Asia core funds. □

37 Dai-ichi Life Insurance Company

\$10.44 billion
HQ: Tokyo, Japan

2

Like many Japanese investors, insurer Dai-ichi Life jettisoned most of its overseas real estate holdings during the 1990s, so the company's announcement in October 2017 that it would be making a cautious return to the asset class outside the domestic market through a ¥10 billion (\$89 million; €77 million) investment in funds of funds was greeted with



Tokyo: home to the Japanese investor

some fanfare. There has been no news of further real estate investments since then, albeit in June the company did commit £70 million (\$92 million; €79 million) to become a lead investor in the open-ended M&G Infrastructure Loan Fund, providing finance for railways, schools and hospitals in Europe. □

38 Healthcare of Ontario Pension Plan

\$10.35 billion
HQ: Toronto, Canada

NEW ENTRY

One of this year's new entrants, the Ontario healthcare workers pension plan provider allocates more than 17 percent of its investment portfolio to real estate. Under the leadership of vice-president for real estate Stephen Taylor, HOOPP invests in US, Canadian and European property through funds, direct investment and development, with its investments in the asset class returning 11.9 percent in 2017. In September, the investor landed Amazon as the first tenant at its 57-acre Delta iPort logistics park in Vancouver. It is also funding the development of the 33-floor Vancouver Center II tower in the British Columbian city's downtown. □



Amazon: the global giant now occupies HOOPP-owned Delta iPort logistics park



Pace of change: the GDP of some Chinese cities is now larger than that of many countries

A China story

CPPIB's Guy Fulton speaks with Michael Chan of Macquarie Capital Real Estate Investments about its current investment strategy in China. **Mark Cooper** listens in

Canada Pension Plan Investment Board is one of the largest investors in global real estate, with a total of C\$46.2 billion (\$35.2 billion; €30.6 billion) of assets under management in the sector. It is also one of the biggest investors in developing markets. China, where CPPIB has invested close to C\$28 billion, is a crucial part of the group's strategy, so Michael Chan, head of Asia at Macquarie Capital Real Estate Investments, took the opportunity to talk with Guy Fulton, managing director, Real Estate Investments Asia at CPPIB, about the group's strategy there, with *PERE* in earshot.

Michael Chan: How does the China real estate portfolio fit with CPPIB's overall strategy? We increasingly hear a number of concerns about where we are in the cycle and the potential effect of rising global interest rates; how concerned are you about this and how does it affect your approach to investments?

Guy Fulton: CPPIB recently announced plans to boost our overall allocation to emerging markets to around one third by 2025, with a significant amount of the overall portfolio to be in China. This allocation makes sense when you consider

the scale of the market: there are now 14 cities in China with an annual GDP of more than 1 trillion yuan (\$144 billion; €125 billion), larger than many countries. Each of these are cities with large-scale diversified economies, which will drive China's future growth.

We have positioned our China portfolio around the theme of consumption and linked it to fundamental demand. So our retail

assets are positioned as mid-market, our logistics portfolio is in the non-bonded sector and the residential developments we've invested in have mainly been mid-market. We've sought to align to that fundamental demand, which we believe is still structurally supported and less vulnerable to cycles.

Our China portfolio is also relatively conservatively geared. We frequently stress test our assets and look at coverage ratios under various scenarios. We also look at our partners' balance sheets. Having said that, you talk about raising interest rates, but, if anything, in China we're seeing loosening of monetary policies. However, we recognize that globally we are at the late point in the cycle.

Talking sectors

MC: Let's talk a little about some of the sectors you invest in; in June CPPIB announced a \$817 million partnership with Longfor Group, one of your existing partners in the retail sector, which will invest in for-rental residential. How did you approach this investment into what is a new sector in China?

GF: We had some exposure to for-rental residential through our mixed-use projects, which allowed us to dip a toe in the water and learn a little bit about it. We obviously also take comfort from the government policy tailwinds in the sector. It is the third leg of the government's housing policy and a critical one. Throughout the recent history of property investment in China, having support from the government for a sector has been a huge driver of growth. Another supporting factor for us is that we have big rental housing portfolios in the US, so we have in-house expertise. Obviously, what applies in the US does not necessarily apply in the China market. However it is very useful to have in-house sector experience and knowledge.



Chan: domestic institutional capital in China is increasing rapidly

MC: Logistics has been a major sector for CPPIB in China through your partnership with Goodman Group. How large is your commitment now and what are your thoughts on that sector?

GF: We recently announced an increase in the allocation to our partnership with Goodman, now \$5 billion in total. When you look at the data on logistics supply in Chinese cities compared to US cities, it is clear China still has a long way to go and continues to be structurally underserved. However, not all markets are growing equally in China. We see much stronger rental growth in the major consumer centers, the first and major second-tier cities. Growth is, however, slower in some smaller cities, particularly those where there is some short-term oversupply. China logistics is fundamentally a play on consumption and we are continually shown just how broad and diverse that consumption pattern has been.

MC: Continuing the theme of consumption, you've also been in retail for a long time in China and worked with a couple of major partners in that space. Across the globe, retail has suffered strong headwinds, particularly given the adoption of e-commerce. How have you positioned your retail portfolio for this and what's your view on the outlook for China retail?

GF: The big picture, again, is very positive because demand for retail property will continue to be driven by increasing consumption. What's interesting about the retail sector in China is that it has been ahead of most of the world with regard to e-commerce, because the online format came of age in China at the same time as the mall format. China malls were created with more experiential retail, more F&B, more children's entertainment, all the factors needed to attract footfall today. Retail sales also continue to grow in China, unlike in many other markets around the world where e-commerce sales are taking a much bigger share of a static pie.

Management is a big differentiator in retail and we've had two strong major partners in the sector: CapitaLand and Longfor. A good manager can attract brands and make an asset work even in a market with challenges. Some cities in China have faced oversupply issues in recent years and strong management makes all the difference between the winners and losers in this environment.



Fulton: pace of change is something to always watch in China

"We have positioned our China portfolio around the theme of consumption and linked it to fundamental demand"
Guy Fulton

Partnering wisely

MC: Looking at CPPIB in China, we see that you have done a lot with a very select group of partners. How much work goes into selecting that

partner? What are the most important factors in partner selection?

GF: Sector expertise in a given market is key. Secondly, we try to spend a lot of time with the management team prior to doing the first deal. The first deal is the toughest one to get done. Then, as the relationship grows, the subsequent deals become easier as the two parties come to understand each other better.

We've invested with both overseas and local partners; the local players clearly have become bigger and bigger since we started investing. They're a much larger part of the market now, so we want to work with them to grow our business. As these companies have become bigger, they've also become more sophisticated as they've dealt with more partners. Particularly interesting are companies that are developing investment properties, as opposed to the pure developers. I think if you're developing investment properties, that will lead you to a longer-term mindset.

MC: The pool of domestic institutional capital in China is increasing rapidly, so we now have around \$2.5 trillion of insurance capital. This represents a great opportunity for selling assets but is it also a challenge, due to increasing competition, to your investment programs?

GF: It's a bit of both, but more domestic capital being allocated to real estate is an inevitable consequence of a maturing market. Look at the Australian market, for example. There's a lot of local capital that invests into the Australian real estate market, but we still invest successfully there. We expect more domestic institutions to invest in the Chinese market and in some cases we'll partner with them. The process of institutionalization also means more mature capital markets, with products such as REITs available, and this is all positive.

Challenges and surprises

MC: What would you view as the biggest challenges facing the real estate sector in China and for your investment program in particular? What have you seen that surprises you?

GF: The pace of change is something to always watch in China. Cities are developing quickly. Infrastructure can change and supply can change. The pace of consolidation in the market has also surprised us, so there are now fewer developers, but they are larger and better capitalized.

There's also willingness from the consumer in China to try new things, especially when it comes to trying new app-enabled and technology-enabled experiences. The ability to deal with and profit from technological changes will be a differentiator going forward; the managers and the developers that survive will be the ones that embrace technology and make it work for them. The ones that don't will suffer. □

39 Virginia Retirement System

\$10.15 billion
HQ: Richmond, US

5

The US public pension fund has climbed five places in the ranking in a year that has seen its commitments to real estate, currently standing at 13.4 percent of total assets under management, rise well above its target allocation of 8 percent. VRS followed up a \$150 million commitment to the Asian market via Blackstone's Real Estate Partners Asia II fund in 2017 by allocating a further \$52 million to New York-based



Richmond, Virginia: HQ of the pension, which has exceeded its target allocation of 8 percent to real estate

Fortress Investment Group's Fortress Japan Opportunity IV debt strategy this year. Meanwhile, on the domestic front, it invested \$75 million in North American opportunistic strategy Artemis Real Estate Partners Fund III. □

40 Munich Re/MEAG

\$10.11 billion
HQ: Munich, Germany

NEW ENTRY

Munich Re makes its debut in the ranking this year. Asset manager MEAG handles €251 billion of investments on behalf of the German reinsurer and its primary insurance arm, ERGO, including a 4 percent allocation to real estate. The investor focuses on core property with most of its existing holdings located in the main German and western European cities. Recent acquisitions in the German market have focused on the high-street retail, residential and logistics segments, while in January 2018 Munich Re closed one of its biggest overseas deals by purchasing the Washington Building, an office asset in Washington DC, for around \$250 million. □



Washington DC: Munich Re made one of its biggest overseas investments in the US capital this year

41 Oregon State Treasury

\$9.76 billion
HQ: Salem, US

3

Although the state public employee's pension slipped a few spots compared with last year, it increased its real estate holdings by just under \$1 billion in the same time frame. This



Breault: senior real estate investment officer at Oregon State Treasury for 12 years

past year has been one of restructuring: it committed to hiring 27 new investment staff last August, and has already recruited one, just before terminating a North America debt-focused separate account with Talmage. But that did not signal retreat for the \$102 billion retirement fund, which followed up with \$550 million in commitments to various western Europe and global-focused real estate vehicles. □

42 Legal and General Investment Management

\$9.6 billion
HQ: London, UK

8

One of the few entrants on our list this year whose real assets decreased overall, the London-based Legal and General has spent the past 12 months re-orienting its focus around social value and contribution toward communities where its investments sit. In February, the £951.1 billion (\$1.2 trillion; €1 trillion) pension fund committed to giving 20 percent of its portfolio a 'Social Value Score' in the next four years, and making that publicly available. It has simultaneously made some high-profile deals, including the £46.95 million acquisition of Birmingham's Broadway Plaza. □



Hughes: head of LGIM Real Assets

43 New York State Teachers' Retirement System

\$9.07 billion
HQ: Albany, US

10

Although the \$115.5 billion public pension fund decreased its holdings in real estate from its \$11.25 billion last year, NYSTRS has been far from idle. Committing \$200 million to Blackstone's second Asia fund in November 2017 and an additional \$150 million to the Cabot Industrial Core Fund II, the New York pension appears to be diversifying out of



The Beltway Southwest Business Park: a 100 percent occupied four-building industrial campus in Houston that NYSTRS has an indirect stake in through Cabot Core II

its primary focus on opportunistic/value-added funds – the Cabot investment marked NYSTRS first investment in core real estate funds since 2015. At this rate, the pension, the second largest in the state of New York, might just surpass its previous \$11.25 billion by the end of 2018. □

44 North Carolina State Treasury

\$8.69 billion
HQ: Raleigh, US

3

It has been a busy year for the North Carolina public pension fund. Although sliding down three slots from last year, its real estate holdings increased from \$8.01 billion to \$8.69 billion, specifically through investments like its \$200 million commitment to the Landmark Real Estate Partners VIII Co-Investment funds, and a \$250 million commitment to the Landmark Real Assets Fund II. According to the fund's quarterly report, real estate is one of the few assets making above its 7 percent target return. However, the pension fund is still looking to decrease its management fees as part of a plan to reduce its \$15 billion unfunded liability. □



Harvard University: NCST backed the Landmark fund that bought \$1.6 billion of real estate secondaries from the university's endowment last August

45 American International Group

\$8.64 billion
HQ: New York, US

5

Making an impressive jump from the number 50 slot last year, the insurance company's real estate holdings increased by \$1.45 billion in the past 12 months. While the numbers indicate AIG remains committed to real estate and long-term strategies despite facing larger problems of revenue



Tymins: president and CEO of AIG Global Real Estate since 2010

and liabilities, the New York-based AIG has simultaneously been relatively quiet on its specific commitments this year. It might be cooling its momentum for the coming year, as in April the investor was seeking to sell a portfolio of private markets fund stakes worth as much as \$2.3 billion. □

46 Hong Kong Monetary Authority

\$7.9 billion
HQ: Hong Kong

NEW ENTRY

Making an impressive debut on the *Global Investor 50*, the Hong Kong Monetary Authority has also been enjoying quite high returns on its private equity and real estate investments thanks to the recent volatility of the market.

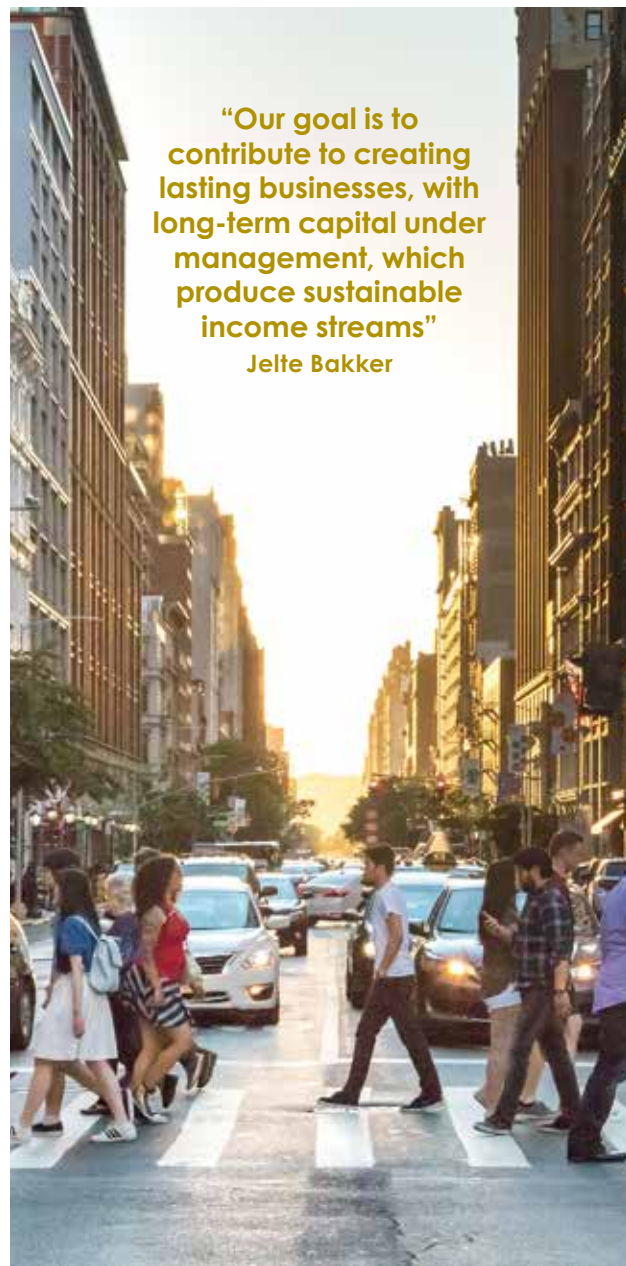
Although concerned about the ongoing trade war between the US and China, the government banking authority remains committed to working with "experienced and trusted partners" to grow its portfolio. The sovereign wealth fund also reshuffled its management in the past year, but remains focused on the Asia-Pacific market for now. □



Debutante: the \$522.6 billion sovereign wealth fund makes its first appearance in the GI 50

Principally speaking

Brett Robson and Jelte Bakker of Macquarie Capital explain to *Jonathan Brasse* why the firm's move into real estate principal investing was an opportunity to be embraced



“Our goal is to contribute to creating lasting businesses, with long-term capital under management, which produce sustainable income streams”
Jelte Bakker

Spotting the trend: MREI looks at how megatrends like urbanization are likely to change real estate in the long term

Formally naming Macquarie Capital's real estate principal investment business Macquarie Capital Real Estate Investments (MREI) simply articulates a strategy that in reality has been an important part of Macquarie Capital's activities for a long time now. MREI naturally evolved from sourcing institutional money and making the connection to transactions, to harnessing its capital raising expertise and using its own balance sheet to partner with specialist real estate platforms and help them scale up.



Robson: investing in best-in-class specialist real estate platforms

Closer to the action

According to MREI's global head, Brett Robson, the evolution of MREI was driven by a desire to get involved with specialist real estate managers at a more grassroots level and at an earlier stage in their lifecycle, bringing with it strategic oversight and allowing the managers to leverage Macquarie's financial markets expertise, global industry network and corporate infrastructure. The business had also

been keeping a watchful eye on what institutional investors were up to.

“As investors grew larger and more sophisticated, we noticed they were more willing to provide LP capital to smaller specialist groups with a high level of expertise. We positioned our business to seek out these specialist businesses and match them with sophisticated LP capital,” explains Robson.

The transition was never going to be a huge leap. As a market-leading capital arranger, the firm already had deep relationships with real estate platforms. Securing skin-in-the-game was a logical next step.

“What we enjoyed most in our capital advisory and arranging capacity was our ongoing relationships with these groups, so why not align ourselves further by investing our own money and sharing in the value we help to create for them? We wanted to be the principal investor at an early stage in these platforms, helping them build their core skills, and source and create new assets,” says Robson.

“It makes sense for the clients and also gives us an efficient entry point into owning significant stakes in what we anticipate down the line will become sizeable, high-quality real estate platforms that are institutional grade and can attract further capital from third-parties to take these businesses to the next level.”

Creating sustainable value

Playing an integral role in the development of new real estate assets is clearly a focus for the firm at a time when

many managers and passive investors are struggling to source, buy and create value from standing assets. However, helping platforms acquire existing assets is not overlooked completely. Jelte Bakker, MREI's head of principal investments, says: "Our role is often to help a developer fund assets and get their operations up and running before we invest the capital. Many of the groups we partner with are used to a private equity model, where investors are focused on creating value to sell. Our goal is to contribute to creating lasting businesses, with long-term capital under management, which produce sustainable income streams."

But the skills of acquiring and creating assets are symbiotic, according to Bakker.

"LOGOS, for example, has a core strategy and acquires existing assets, but its ability to do this is augmented by its development expertise. In our experience, groups with the ability to create assets are generally better placed to underwrite the acquisition of existing assets."

Eye on the megatrends

MREI is heavily focused on future value, having sought out investments in specialist platforms with best-in-class management teams operating in sectors supported by global

"What we enjoyed most in our capital advisory and arranging capacity was our ongoing relationships with these groups, so why not align ourselves further by investing our own money and sharing in the value we help to create for them?"

Brett Robson

megatrends – technology, e-commerce, changing demographics and urbanization – early on, before they became hugely popular. The firm identified how these trends had the potential to impact and reshape real estate and the long-term value opportunity presented for investors.

The penetration of e-commerce in the retail space, for example, is upping demand for logistics assets. Rapid urbanization, particularly across Asia, means there is an urgent need to build more affordable

accommodation with the millennial generation in particular looking to the rented sector. MREI has partnered with multifamily specialist Greystar in Asia-Pacific to develop and manage rental residential properties throughout the region.

"We're also working with a group in the US, RHP Properties, to acquire small independent operators in the manufactured housing sector with the aim of building out a high-quality institutional-grade portfolio of assets," says Robson.

"We can unlock the opportunity for them to achieve scale and attract institutional capital. Over time, we think institutions will come to appreciate the return profile from that long-term income stream, particularly in the hands of high-quality management."

Talking numbers

According to Robson, principal investing brings in a sizeable portion of MREI's earnings – impressive for a relatively new part of the business.

"Collectively, the managers we have made investments in have an AUM of more than \$20 billion. These businesses are quite development heavy. If you look at their business plans and with the capital they've got, they are targeting to be \$50 billion in the next five years. MREI draws on the Macquarie Group balance sheet. Our access to the group balance sheet enables us to commit large individual sums, although we generally like to have a horizon over time where that single deal exposure comes down," says Bakker.

Robson explains that MREI aims to own around 50 percent of these platforms, although emphasizes there is no golden rule on this, nor is there a specific timeframe to exit an investment.

"Ultimately, there is a point in time where that may end up being the outcome. But we don't invest on that basis as we take a long-term view. Our focus is on assisting growing high-quality specialist businesses with sustainable operations and income. There may be a point that it may make sense to change the capital structure at which point Macquarie may realize value for its investments."

Deal spotlight: LOGOS

- Vertically integrated group with an in-house development and management capability focused purely on logistics real estate in Asia-Pacific
- >A\$9.8 billion (\$7 billion; €6 billion) of target AUM*
- > 3.2m sq m of logistics real estate owned and under development in LOGOS ventures
- >145 employees
- Operations in Australia, China, Singapore, Indonesia, Malaysia, India and New Zealand
- MREI invested in 2014

* Based on full deployment of existing ventures





Bakker: groups with the ability to create assets are generally better placed to underwrite the acquisition of existing assets

Looking to the future

Growth economies, supported by structural tailwinds, are attractive markets for the firm's principal investing strategy going forward, says Robson, and on that basis MREI is likely to further build exposure to markets such as China and India across sectors including logistics and multifamily. The firm is currently investing in logistics warehouses in India and China through its partnership with LOGOS, and is not shy of looking at other opportunities in

the market. Together with Greystar, it is looking at multifamily across Asia-Pacific with Shanghai a particular hot spot.

Japan, where there is an established rental housing market, is on the radar too. "There we are looking to have more of a core-plus strategy where it is more about leveraging management expertise to create greater value across the rental housing sector," says Robson.

"While most of the groups we have invested in are early stage, we're also investing in more mature platforms like Investa, a specialist Australian office manager, that we think is well-positioned to outperform and grow over the long-term as the only major Australian office sector specialist," says Robson.

MREI's investing momentum is gathering speed. □

Deal spotlight: Investa Office Management

- Australia's largest specialist integrated office management platform
- Track record of delivering some of Australia's leading office developments
- >A\$12 billion AUM in Australia's key CBD markets
- 38 assets
- >200 employees
- >760 tenants
- MREI invested in 2018



Deal spotlight: RHP

- Partnered with RHP Properties, the largest private owner and operator of manufactured housing assets in the US, with a long track record of value creation
- >\$5 billion target total AUM*
- >2,780 current households
- MREI invested in 2017

*5-year target



Deal spotlight: PLP

- Specialist developer, manager and owner of UK logistics real estate
- PLP senior management team averages over 20 years of logistics development experience
- Strong development pipeline of 7.5 million sq ft of logistics space with a completed value of £760 million (\$993 million; €861 million)
- Exclusive access to Peel Group's consented land bank of over five million sq ft of developable logistics space
- MREI invested in 2015



47 Korea Investment Corporation

\$7.778 billion
HQ: Seoul, South Korea

NEW ENTRY

The Seoul-based sovereign wealth fund makes a strong debut this year with an impressive \$7.78 billion portfolio in real assets. This is part of the fund's larger drive to increase its assets under management to \$200 billion by 2020 – an



Egmont I and II: KIC will launch a separate real estate fund investing in the two office buildings that house the Belgian Ministry of Foreign Affairs

ambitious goal from its current \$134 billion portfolio. As the South Korean fund searches for a new president (with IMF director Choi Hee Nam as the favored nominee), KIC is also seeking to increase its allocation to alternative assets to 19 percent in the next two years, up from its current 14.4 percent. □

48 New York City Retirement System

\$7.777 billion
HQ: New York, US

6

An amalgamation of five New York public pension funds, the \$194 billion NYC Retirement System returns for its second year on *PERE's* Global 50. The various funds under its umbrella were searching for some small-cap investment managers for some smaller portfolios earlier this year, and in June the System's CIO of four years left, launching an ongoing search for a replacement. But in the past year, the System made a \$450 million investment in affordable housing, and has committed to seeking partnerships with early-stage and first-time funds for investment going forward. □



Nelson: NYCERS's head of real estate has been with the pensions system since 2005

49 BT Pension Scheme

\$7.675 billion
HQ: London, UK

4

In keeping its real estate portfolio relatively stable, the London-based pension fund slipped four slots this year. In the midst of a 13-year recovery plan to pull out of a \$14 billion deficit,

the \$67.8 billion fund has committed to de-risking its portfolio over time, with the BT Group pledged to commit £4.5 billion (\$5.9 billion; €5.1 billion) by 2020. BT also sold 60 percent of its stake in investment manager Hermes Fund Managers, (originally BT's in-house asset manager) in April, retaining a 30 percent stake. With new chief executive Morten Nilsson appointed in October, it is unclear what this will mean for BT's real estate investments going forward. □



New boss: appointed CEO in October, Morten Nilsson is setting the direction for future investments

50 MPK Migros Pensionskasse

\$7.661 billion
HQ: Schlieren, Switzerland

1



Ebisquare in Ebikon, Lucerne: one of MPK's residential real estate projects that finished construction in 2017

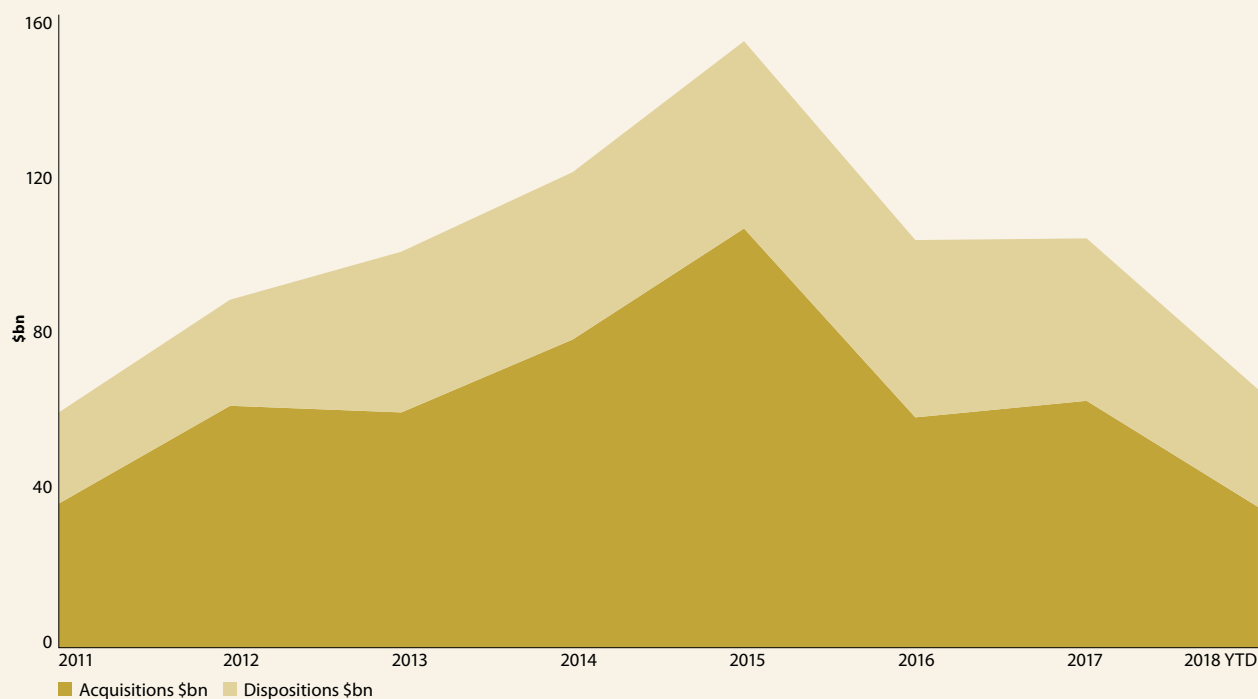
The cut off for inclusion in *PERE's* top 50 global investors has increased by half a billion dollars this year, with the Swiss MPK Migros Pensionskasse just making it. In its second year on the list, the \$23.7 billion public pension fund has one of the highest allocations to real estate at 31.3 percent, totaling \$7.3 billion, and currently invests about \$200 million per annum. In the past year, MPK has also made waves by rolling out ESG standards for all external managers, which seems to be paying off with a 9 percent return on its assets in the past year. □

Spending habits

Data from Real Capital Analytics reveal that while the Global Investor 50 are still net buyers, many are in the mood to sell this year

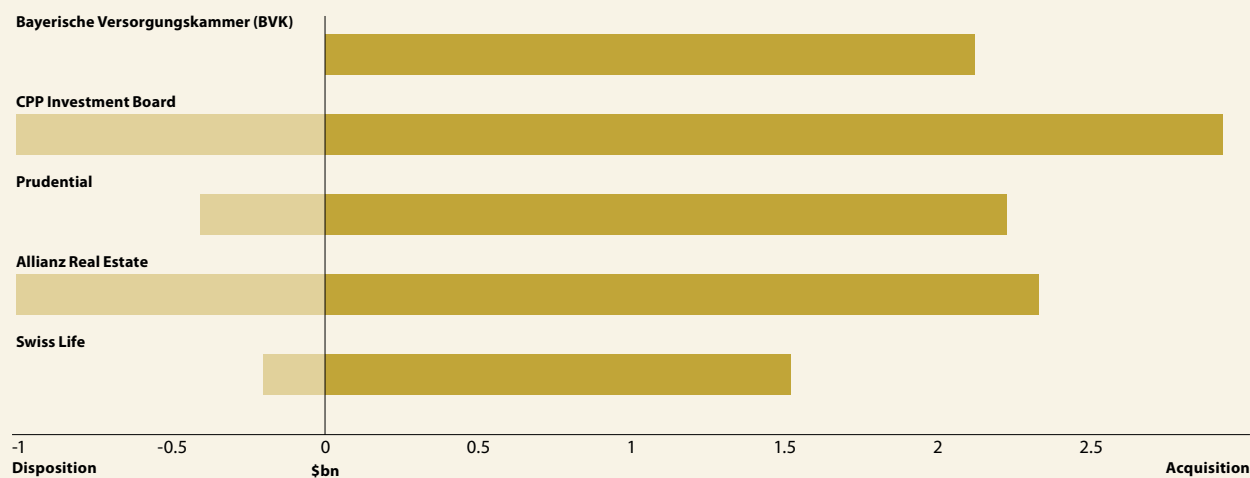
Trending downward

Deal volume among the Global Investor 50



Inclined to spend

Top five net buyers (YTD 2018)





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