HODES WEILL & ASSOCIATES



Cornell
Baker Program
in Real Estate



2019 INSTITUTIONAL REAL ESTATE ALLOCATIONS MONITOR

Dear Industry Friends,

Cornell University's Baker Program in Real Estate and Hodes Weill & Associates are pleased to present the findings of the seventh annual Institutional Real Estate Allocations Monitor (the "2019 Allocations Monitor"). The 2019 Allocations Monitor focuses on the role of real estate in institutional portfolios, and the impact of institutional allocation trends on the investment management industry. Launched in 2013, the Allocations Monitor is a comprehensive annual assessment of institutions' allocations to, and objectives in, real estate investments. This report analyzes trends in institutional portfolios and allocations by region, type and size of institution.

The 2019 Allocations Monitor includes research collected on a blind basis from 212 institutional investors in 24 countries. The 2019 participants hold total assets under management ("AUM") exceeding US\$12.3 trillion and have portfolio investments in real estate totaling approximately US\$1.1 trillion. Our survey consisted of 24 questions concerning portfolio allocations to the asset class, current and future investments in real estate, investor conviction, investment management trends and the role of various investment strategies and vehicles within the context of the real estate allocation (e.g., direct investments, joint ventures, private funds). We also included questions regarding historical and target returns as well as environmental, social and governance ("ESG") policies.

Key Findings of the 2019 Allocations Monitor

- (1) Target allocations to real estate continue to rise globally, although pace of year-over- year growth is moderating. Average target allocations to real estate increased 10 bps to 10.5% in 2019, up approximately 160 bps since 2013. However, the annual pace of increase appears to be moderating, with 10 bps representing the lowest annual change in six years, during which time the annual change ranged from 20 bps to 40 bps.
- (2) Led by institutions in the Americas and Asia Pacific, growth in target allocations is forecasted to continue in 2020. On average, institutions are expecting to increase target allocations by an additional 10 bps over the next twelve months. This expected increase is being driven by institutions based in the Americas and Asia Pacific, with each region forecasting increases of 20 bps, while target allocations for EMEA-based investors are expected to remain flat.
- (3) While institutions have been actively investing in real estate, the "denominator effect" continues to contribute to portfolios lagging target allocations. Actual allocations remained flat year-over-year, with institutional portfolios 9.4% invested in real estate on average. Overall, institutions are 110 bps under-invested relative to target allocations. Institutions in EMEA and APAC remain significantly under-invested, at margins of 150 bps and 170 bps, respectively. Approximately 50% of institutions overall are under-invested relative to target allocations by an average of 190 bps.
- (4) While actual investment returns declined moderately in 2018, results continue to outpace target returns. As capital appreciation has slowed in recent years, returns have moderated to high single digits. Institutions reported an average return of 8.8% in 2018, down 30 bps from 9.1% in 2017. While institutions continue to express concerns regarding asset valuations and weakening economic growth, operating fundamentals remain broadly favorable which is contributing to a continuation of strong returns for the asset class.
- (5) Investor sentiment increased for the second straight year, reaching a 5-year high. Between 2018 and 2019, our "Conviction Index", which measures institutions' view of real estate as an investment opportunity from a risk-return standpoint, increased from 5.1 to 5.7, the highest reported since 2014. Despite rising investor sentiment, institutions report an increase in focus on positioning portfolios more defensively for a potential market downturn.
- (6) Allocations to third-party managers continued to trend upward in 2019, driving double-digit growth in global AUM for fund managers. Institutions continue to allocate a substantial majority of their new investment allocations to third-party managers. Rising target allocations and an increase in cross-border investing continue to drive the outsourcing of portfolio management.

- (7) Value add strategies remain the strongest preference for institutions globally, while interest in opportunistic strategies declined for the first time in five years. Approximately 91% of institutions reported that they are actively allocating to value add strategies, while 66% are allocating to core strategies and 69% to opportunistic strategies. Opportunistic strategies were the only type of strategy that garnered a decline in interest in 2019, as compared to 2018.
- (8) While cross-border capital flows remain strong, the percentage of institutions investing outside of their domestic region has decreased, led by EMEA-based institutions that are increasingly favoring intra-regional allocations. North America continues to be the largest recipient of capital allocations, followed by Continental Europe. Investor demand remained largely consistent year-over-year with the exception of the UK and Asia. Investors are citing currency exchange rates, uncertainty regarding BREXIT, Hong Kong protests and the impact of global trade wars as significant risks.
- (9) Closed- and open-end private funds remain the preferred investment products for institutions, but popularity has declined slightly after several years of growth. Closed-end funds continue to be the most favored investment product for institutions, although the percentage of investors allocating capital to closed-end funds decreased 13 percentage points in 2019. Appetite for direct investments and separate accounts increased in 2019, led by larger institutions with an objective to maintain greater discretion over their capital (and to lower portfolio management costs).
- (10) ESG policies are increasingly important for institutions, and investment managers are positioning their organizations and product offerings to accommodate their clients' objectives. The focus on ESG policies has continued its trend upwards in 2019. Institutions are showing an increasing preference for investments that not only meet their return expectations but also satisfy their objectives for environmental sustainability, social responsibility, and governance. EMEA-based institutions continue to lead the industry in implementing ESG policies.

The 2019 Allocations Monitor leverages the academic resources of Cornell University and the global institutional relationships and real estate expertise of Hodes Weill & Associates. We hope this report provides unique insight into the institutional investment industry, serving as a valuable tool for institutional investors in the development of portfolio allocation strategies and peer benchmarking of returns, and for investment managers in business planning and product development. With this goal in mind, please feel free to contact us with any comments, questions or suggestions.

We look forward to sharing additional insights and our perspective on the industry with you more directly in the near future. Again, we would like to express sincere appreciation to everyone that participated in this year's survey.

Best regards,

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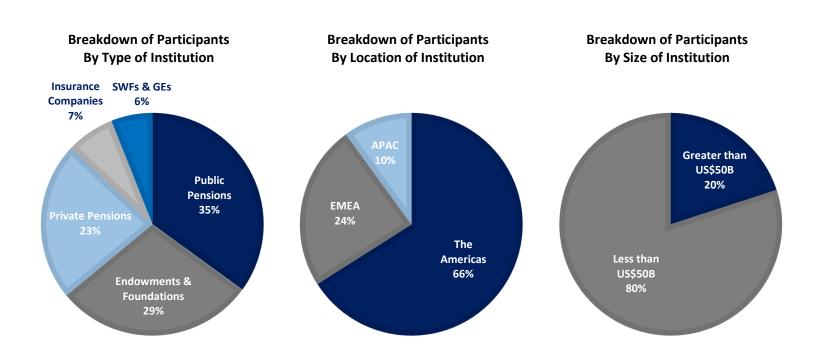
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2019 Global Institutional Participants

212 participants in 24 countries representing US\$12.3 trillion in AUM







Americas

AIMCo

Alan Biller and Associates
Alaska Electrical Pension Fund

Alberta Teachers' Retirement Fund Board American Baptist Home Mission Society

American Electric Power
AR Teacher Retirement System

Arkansas Public Employees Retirement System Austin Fire Fighters Relief & Retirement Fund

Boston Foundation

Bricklayers CalPERS

Campbell Soup Company Pension Plans

Canada Post Pension Plan

City of Fresno Retirement Systems City of Grand Rapids Retirement Systems City of Phoenix Employee's Retirement Plan

Colorado PERA

Consolidated Edison of New York, Inc

Cornell University

CPPIB

Dartmouth College Duke University

Endowment Wealth Management

ERSRI

FCA US LLC Master Retirement Trust Healthcare of Ontario Pension Plan

HighGround Advisors HRM Pension Plan IBM Retirement Funds

Investment Management Corporation of Ontario

LACERA

Los Angeles Fire & Police Pensions

Louisiana School Employees' Retirement System

Missouri Education Pension Trust Mobius Benefit Administrators New England Teamsters Pension Fund New Jersey Division of Investment North Carolina Retirement System

Novant Health

Oklahoma Tobacco Settlement Endowment Trust

Pacific Life Insurance

Pennsylvania State University

PSP Investments

Richard King Mellon Foundation

San Bernardino County Employees' Retirement Association

San Luis Obispo County Pension Trust Seattle City Employees Retirement System

Sempra Energy

SJCERA

State of Idaho Endowment Fund Investment Board

STM Pension Fund

Texas Christian University

Texas Municipal Retirement System
Texas Permanent School Fund (SBOE)

The Church Pension Fund
The Principia Corporation
The Terry Foundation

Tucson Supplemental Retirement System

University of Alberta

University of British Colombia (Endowment Fund)

University of California, San Francisco University of Illinois Foundation University of Nebraska Foundation United Parcel Service Group Trust

Virginia Retirement System

Water and Power Employees Retirement Plan

Wellesley College

Wespath Benefits and Investments

Yale University
Yeshiva University

And 60 anonymous participants

APAC

DIC Pension Fund GIC Real Estate Inc

HESTA

Hostplus Superannuation Pty Ltd

Insurance Commission of Western Australia

QSuper SunSuper TWUSUPER

And 14 anonymous participants

EMEA

ADIA

Alecta

Allianz

Blue Sky Group

BPFBouwinvest

Danica Pension

ERAFP

Gjensidige

Hermes

Kuwait Fund for Arab Economic Development

Medtronic plc

Old Park Lane Management Limited

Retraites Populaires

Said Foundation

The VELUX Foundations
Worcestershire Pension Fund
Zurich Insurance Group

And 32 anonymous participants

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Participation & Methodology

We wish to thank the 212 institutional investors that participated in our survey this year. The survey participants are from 24 countries and represent institutions with over US\$12.3 trillion in total assets and real estate assets of approximately US\$1.1 trillion. The Allocations Monitor continues to be one of the industry's most comprehensive global surveys of institutional allocations and intentions in real estate.

We distributed the survey to over 3,000 institutional investors. Our survey includes only primary allocators to investments, such as pension plans, insurance companies, sovereign wealth funds, and endowments and foundations. Approximately 7% of institutions that were contacted completed the survey, and the participation rate was greater than 5% across a range of regions, investor types and size of institutional portfolios. We believe that this participation rate has resulted in a representative sampling of the real estate institutional investor universe from a statistical standpoint.

Notes to readers regarding methodology:

- We conducted the survey over an approximate six-month period from May 2019 to October 2019.
- Target and projected allocations, actual allocations and the margin between target and actual allocations are presented on a weighted average basis by total AUM. We believe this provides the most relevant presentation of the quantum and directional trend of investable capital.
- To calculate weightings for AUM for each investor, we utilized the midpoint of each investor's AUM range. For example, investors that indicated an AUM range of US\$10 billion to US\$25 billion were counted as US\$17.5 billion. All investors greater than US\$200 billion were weighted at US\$200 billion there were 10 such investors in 2019.
- Unless otherwise stated, all other figures are based on straight averages by number of participants, including figures for investment activity, intentions, target returns and risk/return objectives.



Definitions Guide

"APAC" refers to Asia Pacific and includes institutions located in Asia and Australia

"EMEA" includes institutions located in Europe, the Middle East and Africa

"ESG" refers to environmental, social and governance

"SWFs & GEs" refers to sovereign wealth funds and government-owned entities

"The Americas" includes institutions located in North and South America

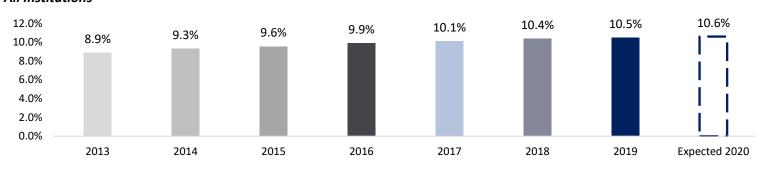
"Larger Institutions" includes institutions with AUM greater than US\$50 billion

"Smaller Institutions" includes institutions with AUM less than US\$50 billion

Target Allocations to Real Estate

Target allocations to real estate continue to rise globally, although pace of year-over-year growth is moderating

Exhibit 1: Weighted Average Target Allocation to Real Estate, All Institutions



Target Allocations to Real Estate

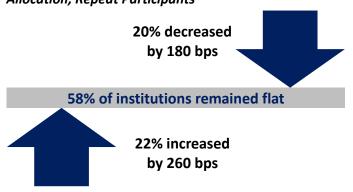
In 2019, institutions reported an average target allocation to real estate of 10.5%, marking the sixth straight year of rising target allocations since we began the Allocations Monitor survey in 2013. Annual increases to target allocations, however, appear to be moderating, as the 10 bps increase in 2019 marked the lowest increase reported since the inception of the survey in 2013. The rate of increase has been in the range of 20 bps to 40 bps over the past five years. The 10 bps increase implies the potential for an additional US\$80 to US\$120 billion of capital to be allocated to real estate over the coming years.¹

Institutions are forecasting a further increase of 10 bps over the next 12 months. This increase is expected to be led by institutions in the Americas and APAC, each of which are forecasting an increase of 20 bps. While EMEA-based institutions are expecting to hold target allocations flat over the next year, the region reported the highest average target allocation to real estate in 2019, at 11.3%. These trends appear to be indicative of late market cycle sentiment. However, it is important to note that institutions remain broadly active on a global basis in allocating capital to real estate strategies and products and, as such, liquidity continues to drive transaction volumes and support asset valuations.

Exhibit 2: Weighted Average Target Allocation, By Location of Institution



Exhibit 3: Year-Over-Year Increase/Decrease of Target Allocation, Repeat Participants



Approximately 58% of institutions held their target allocations flat in 2019, up from 40% in 2018. Approximately 22% of institutions increased their target allocations in 2019 by an average of 260 bps, as compared to 30% and 180 bps in 2018. Twenty percent of institutions decreased their target allocations year-over-year by an average of 180 bps. While the percentage of institutions that decreased their target allocations declined from 30% in 2018 to 20% in 2019, the change in allocation increased meaningfully from 140 to 180 bps.²

¹ Based on Hodes Weill's estimate of ±\$100 trillion of global AUM based on various public disclosures, research reports, and publications.

² Based on "same store" comparison for institutions that participated in the Allocations Monitor survey in both 2018 and 2019.

Target Allocations by Type of Institution

Based on "same-store" participants, target allocations increased for each type of institution, with the exception of Endowments & Foundations, which reported a 10 bps decrease.³ This continues the trend reported in 2018, as Endowments & Foundations have expressed their continued reluctance to allocate capital to real estate late in the cycle. Interestingly, the Yale Endowment, one of the nation's largest endowments and a thought leader amongst Endowments & Foundations, recently announced an increase in their target real estate allocation for 2020 by 50bps to 10.0%, as noted in Exhibit 5 below. The Yale Endowment had consistently decreased its target allocation to real estate since 2013, when it was 22%. Conversely, in early 2019, Norges Bank Investment Management (NBIM), which manages Norway's sovereign wealth fund (\$982 billion of AUM as of September 2019), announced a reduction in target allocation to real estate from 7.0% to 3.0-5.0%. The 7.0% target had been established in 2016 and the reduction was in part a recognition of the challenge that the world's largest sovereign wealth fund has had in achieving its target allocation given its limited real estate resources relative to its scale of capital.4 As we look forward to 2020, it will be interesting to monitor allocation trends for notable institutions. Anecdotally, large institutional investors reported that maintaining their invested allocations in 2018 was "hard work" given the performance of other asset classes and the return of capital from earlier real estate investments.

Target Allocations by Size of Institution

The year-over-year increase in target allocations was led by By Size of Institution, Repeat Participants⁵ Larger Institutions in 2019, which reported an average target allocation of 10.2%, an 80 bps increase from 2018 on a "same store" basis. Interestingly, and likely driven in part by Endowments & Foundations, Smaller Institutions held their target allocation flat at 11.6%. Over the next year, Larger and Smaller Institutions each report an expected increase of 10 bps.

Exhibit 4: Weighted Average Target Allocation,

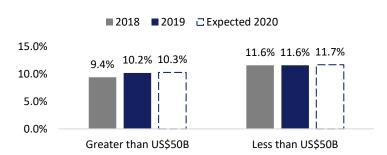


Exhibit 5: Notable Increases/Decreases to Target Allocations⁶

		Target Allocation		
Institution	AUM (\$bn)	Prior	New	Change
California State Teachers' Retirement System (USA)	\$241.3	13.0%	15.0%	↑200 bps
Etablissement de Retraite Additionnelle de la Fonction Publique (France)	\$32.5	10.0%	11.5%	↑150 bps
Teachers Retirement System of Texas (USA)	\$152.5	14.0%	15.0%	↑100 bps
Alaska Permanent Fund Corporation (USA)	\$63.6	11.0%	12.0%	↑100 bps
Yale University Endowment (USA)	\$30.3	9.5%	10.0%	个50 bps
Government Pension Fund Global (Norway)	\$982.2	7.0%	3.0-5.0%	↓200-400 bps
Los Angeles County Employees' Retirement Association (USA)	\$58.4	11.0%	8.0%	↓300 bps
Alaska Retirement Management Board (USA)	\$33.6	8.5%	6.5%	↓200 bps
New York State Teachers' Retirement System (USA)	\$74.4	19.0%	18.0%	↓100 bps
Regents of the University of California (USA)	\$118.7	7.0%	6.3%	↓70 bps

³ Based on "same store" comparison for institutions that participated in the Allocations Monitor survey in both 2018 and 2019.

⁴ Norges Bank Investment Management. GPFG – Real Estate Management. February 7th, 2019.

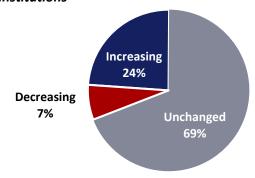
⁵ Based on "same store" comparison for institutions that participated in the Allocations Monitor survey in both 2018 and 2019.

⁶ Based on public disclosures.

Expected Change in Target Allocations

Looking forward to 2020, 24% of institutions report that they expect to increase target allocations over the next 12 months, down slightly from 27% in the prior year. However, the pace of growth appears to be moderating, as these institutions expect to increase targets by only 10 bps in 2020. Approximately 69% of institutions intend to hold their allocations flat over the next 12 months up from 65% as reported in last year's report.

Exhibit 6: Expected Change in Target Allocations, All Institutions



Current Investments

While institutions have been actively investing in real estate, the "denominator effect" continues to contribute to portfolios lagging target allocations

Exhibit 7: Actual vs. Target Allocation, By Location of Institution

■ Actual Allocation Margin vs Target Allocation 11.3% 10.5% 10.1% 10.3% 170 bps -110 bps -70 bps 150 bps 9.6% 9.4% 9.4% 8.8% All Institutions The Americas **EMEA APAC**

Exhibit 8: Actual vs. Target Allocation, By Size of Institution



The percentage of institutional portfolios invested in real estate (i.e., actual "in the ground" allocations) remained flat in 2019. Institutions remained under-invested by 110 bps, consistent with the margin that we have reported since 2013, which has ranged from 88 bps to 110 bps. While institutions have been actively investing in real estate, the "denominator effect" continues to contribute to portfolios lagging target allocations, as most asset classes have delivered strong and consistent investment performance (i.e., appreciation) since the global financial crisis. Moreover, institutions have reported that redeploying capital resulting from investment realizations, particularly from their allocations to private funds, has been challenging at this point in the cycle – further contributing to the lag between actual and target allocations.

Current Investments and Target Allocations by Location and Type of Institution

Institutions across all regions remain under-invested relative to target allocations by meaningful margins, at an average of 110 bps. EMEA-based institutions, while reporting the highest actual allocation at 9.6%, are the most under-invested group, at an average margin of 170 bps below target allocation. Actual allocations for EMEA based institutions declined from 10.1% in 2018 to 9.6% in 2019, suggesting a slowdown in the pace of allocations to new investments over the past 12 months. Institutions in the Americas reported an actual allocation of 9.4%, up 40 bps from 2018. Although investors in the Americas remain 70 bps under-invested relative to target allocations, this was the lowest margin reported by the group since 2014. APAC-based institutions are also significantly under-invested, with actual allocations 150 bps below target allocations, which is up from 120 bps in 2018. This trend may be attributed to geopolitical considerations, as well as an overall slowdown in cross-border capital flows, which have been negatively impacted by hedging costs when deploying capital globally, in particular to US-focused strategies.

The percent invested varies greatly when segmenting by type of institution, with Endowments & Foundations being the least invested at 6.1%, 190 bps short of their target allocation of 8.0%. Public Pensions have the highest actual allocation at 11.2% and remain 90 bps below target.

Declining Under-Investment Year-over-Year

The percentage of institutional investors that are under-invested relative to target allocations has decreased over the past 12 months. Approximately 50% of institutions are under-invested relative to target allocations, down from 60% in each of 2018 and 2017. This is consistent across all regions.

Real Estate Investments

As conviction has increased for two straight years and institutional portfolios have achieved consistent high single-digit returns, the percentage of institutions that report that they are actively investing in real estate has reached a seven-year high of 96%. In addition to rising target allocations, the need to recycle capital from realizations into new investments continues to drive investment activity. Approximately 50% of institutions report an intention to invest the same amount of capital in 2019 relative to 2018, while 23% expect to invest more capital year-over-year. It is expected that a majority of this capital is earmarked for the private markets, as 57% of institutions reported that they are not actively investing in public REITs, despite the strong performance of real estate securities over the last 12 months.

Exhibit 10: Actively Investing in Real Estate,
All Institutions

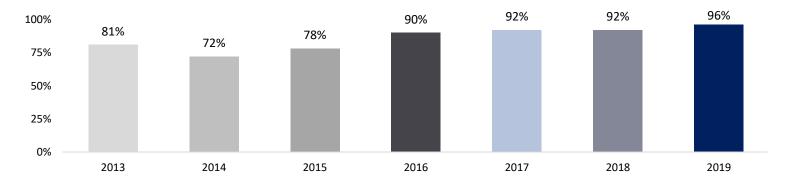
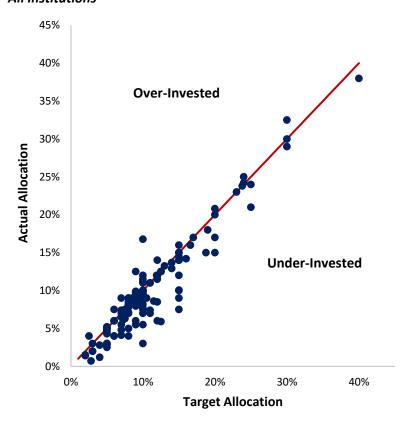


Exhibit 9: % Actual vs. Target Allocation, All Institutions



Historical & Target Returns

While actual investment returns declined moderately in 2018, results continue to outpace target returns

	2018 Target Return	2019 Target Return	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Actual 3-Year Average	Actual 5-Year Average
All Institutions	8.2%	8.3%	11.8%	10.9%	8.7%	9.1%	8.8%	8.9%	9.9%
Ву Туре									
Public Pension	7.6%	7.5%	11.7%	11.4%	8.8%	9.2%	8.4%	8.8%	9.9%
Endowment & Foundation	8.8%	9.7%	13.0%	11.0%	9.1%	8.9%	9.1%	9.0%	10.2%
Private Pension	8.4%	8.3%	12.6%	11.1%	8.2%	8.9%	9.0%	8.7%	10.0%
Insurance Company	8.2%	8.4%	8.3%	9.3%	9.1%	9.9%	8.7%	9.2%	9.1%
SWFs & GEs	7.2%	7.2%	11.4%	9.7%	8.1%	8.9%	9.3%	8.8%	9.5%
By Location									
The Americas	8.5%	9.0%	12.6%	11.7%	8.7%	9.3%	9.2%	9.1%	10.3%
EMEA	7.3%	6.9%	10.4%	9.3%	8.4%	8.5%	7.5%	8.1%	8.8%
Asia Pacific	8.1%	7.6%	9.5%	10.1%	9.2%	9.1%	9.1%	9.1%	9.4%
By Size									
Greater than US\$50 billion	7.5%	7.9%	11.1%	11.0%	9.4%	9.6%	9.2%	9.4%	10.0%
Less than US\$50 billion	8.3%	8.5%	12.0%	10.9%	8.6%	9.0%	8.7%	8.8%	9.8%

The average long-term target return for global institutional allocations to real estate increased slightly from 8.2% in 2018 to 8.3% in 2019.

The year-over-year growth in target returns was largely driven by Endowments & Foundations, which reported a 90 bps increase in target returns, while all other types of institutions remained relatively flat or decreased slightly from last year. Endowments & Foundations continue to favor higher returning strategies, which is in line with the group's decreasing target allocation, increased target return, and shift away from core products. Only 42% of E&F respondents reported an active focus on core strategies. SWFs & GEs have the lowest target return at 7.2%, consistent with their heavy preference for core investments.

After a steep decline in actual returns from 10.9% in 2015 to 8.7% in 2016, returns have stabilized in recent years. As capital appreciation has slowed in recent years, returns have moderated to the high single digits. Year-over-year returns dropped 30 bps to 8.8% in 2018, but still outplaced annual targets. With an 8.8% annual return in 2018, survey participants realized a return in excess of the IPD Global Property Index, which was 7.4% in 2018, on an unlevered basis.⁷ As noted in *Exhibit 11*, the Global Property Index, a global index of unleveraged property returns, also exhibited a slight decrease year-over-year and once again trended in tandem with the results of our survey.

⁷ MSCI – IPD, IPD Global Property Index, 2014 – 2019.

Institutions continue to achieve returns well above their long-term targets, with the 5-year average return for all institutions outpacing target returns by 150 bps. EMEA-based institutions experienced a 100 bps decrease in investment returns, driving the overall decrease of 30 bps. This may be attributed, in part, to meager investment returns for non-listed European real estate funds in 2018, which were down 120 bps in 2018 as compared to 2017 according to INREV's Annual Index.⁹

Returns for institutions in the Americas and Asia Pacific remained relatively flat year-over-year, with investors in the Americas winning the trophy for the highest reported annual return in 2018 at 9.2%, just barely edging out APAC-based institutions at 9.1%. Institutions in the Americas have the highest trailing 5-year average return at 10.3%. Investors in APAC and the Americas have significantly outperformed investors in EMEA over the past three years, with an average return of 9.1% or 100 bps higher than the average for EMEA. A comparison of the trailing 5- and 3-year returns demonstrates how returns have moderated over the past several years, after peaking between 2014 and 2015.

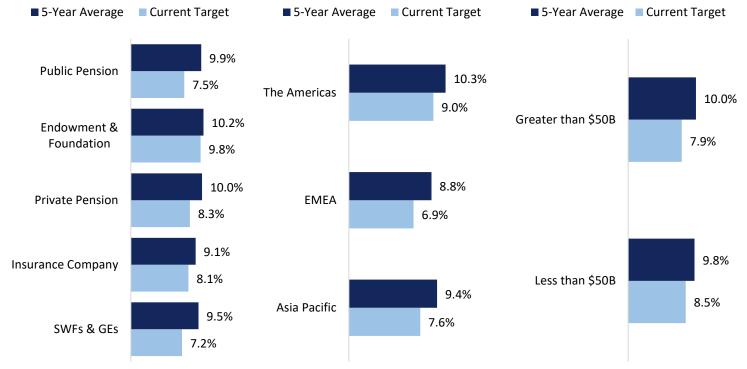
Exhibit 11: Institutional Portfolio Returns vs. IPD Global Property Index⁸, All Institutions



Exhibit 12: Target vs. Historical Returns, By Type of Institution

Exhibit 13: Target vs. Historical Returns, By Location of Institution

Exhibit 14: Target vs. Historical Returns, By Size of Institution



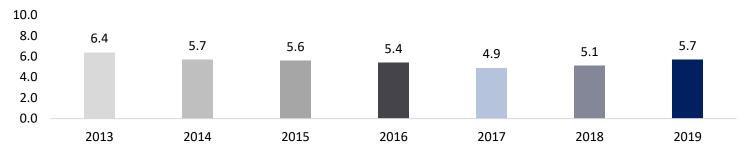
⁸ MSCI – IPD, IPD Global Property Index, 2014 – 2019.

⁹ INREV Annual Index 2018. INREV Annual Index 2017.

Conviction Index

Investor sentiment increased for the second straight year, reaching a 5-year high

Exhibit 15: Conviction Index, All Institutions



The Allocations Monitor asks investors to rate on a scale of one-to-ten their view of the investment opportunity in real estate from a risk/return perspective (one being the least favorable, ten being the most favorable). From 2013 to 2017, the "Conviction Index" (i.e., investor sentiment) steadily declined from 6.4 to 4.9. However, this trend reversed in 2018 with a slight uptick in conviction and continued in 2019 with a 0.6-point increase. In 2018, this increase came as a bit of a surprise, as investors continued to cite concerns regarding rising interest rates, asset valuations, and geopolitical risks, in addition to the perception of being late in the cycle. In 2019, while many institutions have continued to express concerns about asset valuations and weakening economic growth, this increase comes as less of a surprise as institutions continue to realize investment results well in excess of target returns. We believe that, in part, conviction has risen given the consistency of performance despite the age of the recovery. That said, institutions are increasingly focused on positioning portfolios for a potential downturn, by focusing on prudent utilization of leverage and prioritizing allocations to cycle resistant strategies including credit and niche asset sectors.

The Conviction Index for institutions in the Americas is up by the widest margin at 0.9 points to 5.8, which has been slowly rebounding from a low of 4.7 in 2017. This may be attributed to the momentum of operating fundamentals as virtually all property sectors are seeing favorable rental growth and demand trends, while new construction has been generally modest (except for a few urban markets.) Conviction in EMEA also increased for the third consecutive year despite experiencing a 100 bps drop in investment performance in 2018. APAC-based institutions were the only group to report lower conviction in real estate in 2019, which may be the result of on-going geopolitical risk and the strengthening of the US dollar.

SWFs & GEs reported a Conviction Index of 4.3, a number that has decreased considerably since 2016 when the group averaged 6.1. This was the only type of investor that reported a decrease in conviction year-over-year, which is likely attributed to rising asset valuations driving down core returns year-over-year. Private Pensions reported the largest increase of 0.8 points, while Public Pensions have the most confidence in the asset class, reporting a Conviction Index of 6.1.

Exhibit 16: Conviction Index, By Location of Institution

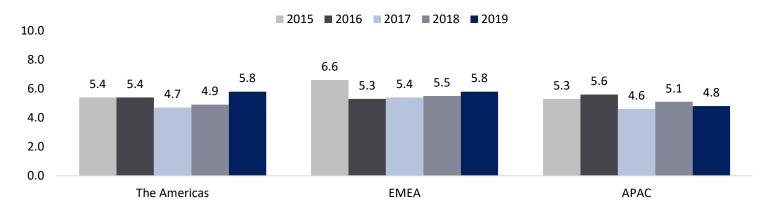
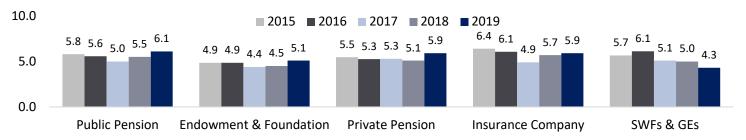


Exhibit 17: Conviction Index, By Type of Institution



"With a few exceptions (geographic and/or property type), supply and demand fundamentals are well balanced. Debt availability, while perhaps loosening, continues to be reasonable, especially from a long-term perspective. While pricing is expensive, the fundamentals support a continuation of moderate returns, absent an exogenous shock."

- Public Pension, The Americas, US\$50.0 to US\$100.0 billion

"The current investment environment is challenging, and we are having a hard time finding attractive risk-adjusted returns."

- Insurance Company, EMEA, US\$50.0 to US\$100.0 billion

"We still feel optimistic about finding attractive real estate investments in the core and value-add space in leading US cities. We are concerned with slowing rental rate growth in the office sector, as well as increases in leasing costs and capex. We are attracted to niche sectors including student housing, life sciences and logistics."

- Insurance Company, The Americas, Greater than US\$200.0 billion

"Real estate investing continues to become more challenging with return expectations reducing."

- Sovereign Wealth Fund / Government Agency, Asia Pacific, US\$10.0 to US\$25.0 billion

"Because our plan is under our current target allocation, we will look to make real estate commitments that are appropriate to reach our target allocation, while also maintaining vintage year diversification."

- Public Pension, The Americas, US\$10.0 to US\$25.0 billion

"The markets are not too hot, not too cold - but almost everything is fully priced, so a bit of caution is warranted, particularly with regard to leverage and exit assumptions."

- Endowment / Foundation, The Americas, US\$50.0 to US\$100.0 billion

Exhibit 18: Range of Conviction Index, All Institutions

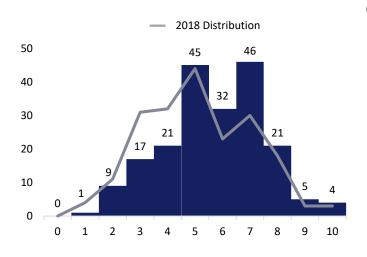
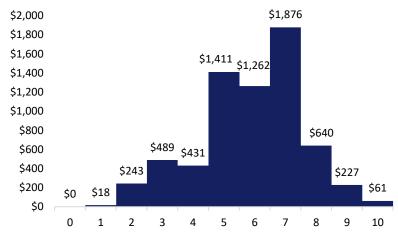


Exhibit 19: Range of Conviction Index, By AUM Midpoint (US\$ Billions)



Third Party Management

Allocations to third-party managers continued to trend upward in 2019, driving double-digit growth in global AUM for fund managers¹⁰

Existing Investments

The percentage of institutions that outsource their entire real estate portfolio to third party managers now stands at approximately 70%. This number has steadily increased year-over-year, while the percentage of investors that manage their entire real estate allocation in-house is 6%, largely driven by Insurance Companies. As we have seen in the past, a significantly larger proportion of Smaller Institutions outsource management of their investment portfolios (75%), as compared to Larger Institutions (49%), which can be largely attributed to a lack of scale, internal personnel and other resources to manage investments in-house.

Future Allocations

Rising target allocations and an increase in cross-border investing continue to drive the percentage of investors that plan to outsource management of their real estate portfolio investments to third-party managers. It is expected that 87% of new investment allocations over the next 12 months will be allocated to third-party managers.

Institutions continue to favor allocating capital to existing manager relationships, with 64% of 2019 investments earmarked for groups with pre-existing relationships. New manager relationships trended down slightly, with institutions expecting to allocate 23% of 2019 investments to these groups, down from 25% last year. Notably, this represents a significant decline from 2013 when 69% of participants expected to allocate capital to new managers. Additionally, 34% of

Exhibit 20: Percentage of Portfolio Outsourced to Third-Party Managers, All Institutions

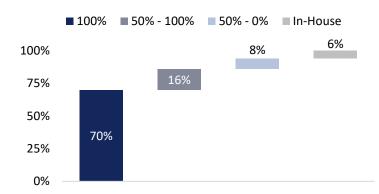


Exhibit 21: Allocations to Managers in 2019, All Institutions

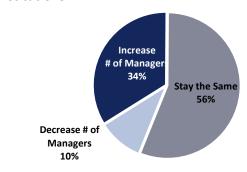
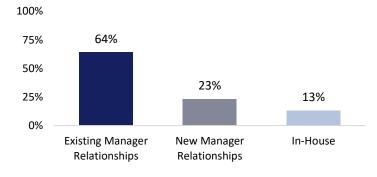


Exhibit 22: Estimated Breakdown of 2019 Investments, All Institutions



participants indicate that they intend to increase their number of manager relationships, as compared to 10% of participants indicating an intention to decrease the number of manager relationships. Institutions' willingness to invest with emerging managers has dropped to 13% amongst all respondents, as investors prefer to allocate capital to established managers at this point in the cycle.

Rise in M&A Activity

The trend of institutions favoring pre-existing relationships has been a catalyst for consolidation in the real estate funds management industry as M&A activity continued at a rapid pace in the first half of 2019. As reported in Hodes Weill's 2019 Mid-Year M&A Market Review, nine real estate manager transactions were announced in the first half of 2019, which was slightly behind the record pace of 2018, which saw 28 transactions reported. The pace of transactions over the past 18 months is significantly ahead of the pace during the 5-year period from 2013 through 2017 in which a total of 30 transactions were announced.

¹⁰ Pregin Data. Accessed 2019.

Risk Preferences

Value add strategies remain the strongest preference for institutions globally, while interest in opportunistic strategies declined for the first time in five years

Exhibit 23: Risk Preference, All Institutions

2015 2016 2017 2018 2019

100%

75%

66%
69%
63%
66%
50%

Core

Value add

Opportunistic

Exhibit 24: Risk Preference, By Location of Institution

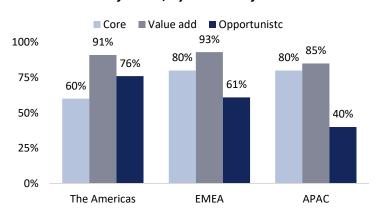
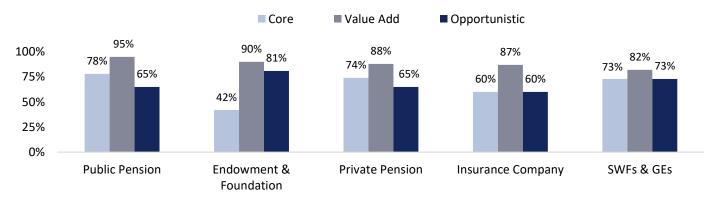


Exhibit 25: Risk Preference, By Type of Institution



Value add strategies continue to be the most favorable investment strategy, with 91% of institutions reporting that they are actively allocating to value add investments. Interest in core strategies increased slightly, with 66% of institutions allocating to core strategies, up from 63% in 2018. Opportunistic strategies were the only type of strategy that garnered a decline in interest in 2019, as compared to 2018. The percentage of institutions actively investing in opportunistic strategies dropped 6 percentage points to 69%. It is noteworthy that a decrease in appetite for opportunistic strategies was reported across the board, by type, location, and size of institution, which highlights the global shift towards more defensive, cash-flowing strategies late in the recovery, as institutions prepare for a potential downturn. We question whether investors are going to be able to execute their allocation strategies given the near-universal interest, and volume of capital, focused on value add investing.

Investor preferences vary by region and by type of institution. The year-over-year increase in interest in core strategies was driven by institutions in the Americas which increased from 50% in 2018 to 60% in 2019. In past years, EMEA- and APAC-based institutions had consistently expressed the most interest in core strategies. This year, however, there was a global shift towards the middle of the risk spectrum, with investors in both EMEA and APAC indicating that value add strategies are the most preferred strategy, followed by core, and then opportunistic. For many institutions, targeting lower leverage serves the twin objectives of de-risking as well as deploying more equity.

When comparing risk preferences by type of institution, the shift towards value add strategies remained consistent for all types of institutions except Endowments and Foundations. As shown above in *Exhibit 25*, the risk preference charts for Public Pensions, Private Pensions, Insurance Companies, and SWFs & GEs all resemble bell curves, while the chart for Endowments & Foundations is skewed right, highlighting a preference toward the higher end of the risk spectrum which corresponds to the increase in their target return from 8.8% in 2018 to 9.7% in 2019.

Geographic Preferences

While cross-border capital flows remain strong, the percentage of institutions investing outside of their domestic region has decreased, led by EMEA-based institutions that are increasingly favoring intra-regional allocations.

Exhibit 26: Geographic Focus, All Institutions

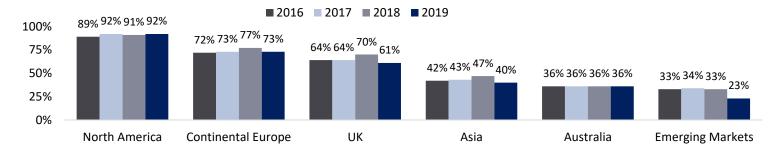
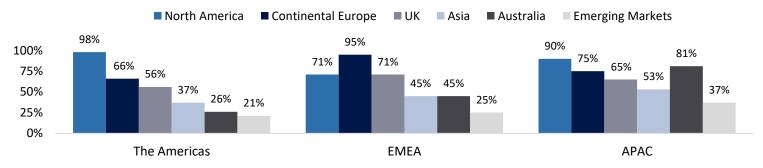
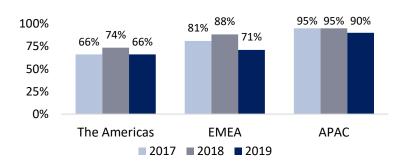


Exhibit 27: Geographic Focus, By Location of Institution



North America continues to be the largest recipient of capital allocations, followed by Continental Europe. Investor demand remained largely consistent year-over-year with the exception of the UK and Asia. In 2018, our survey data showed an increasing number of institutions investing in UK and Asian based strategies. However, after one step forward in 2018, investors took two steps back in 2019 amid the everyday headlines of geopolitical conflicts in both regions. In particular, investors are citing uncertainty regarding currency exchange rates, BREXIT, Hong Kong protests and the impact of global trade wars on China as significant risks. Nevertheless, China itself saw significant transaction volumes driven by both foreign and domestic capital sources.

Exhibit 28: Institutions Investing Outside of their Domestic Region, By Location of Institution



Interest in Emerging Markets declined considerably in 2019, experiencing a 10 percentage point decrease year-over-year. This trend can likely be attributed to institutions' shift away from opportunistic strategies, as investors are de-risking at this point in the cycle. Institutions in the Americas and EMEA continue to show a home market bias in terms of investor preference. While the percentage of institutions investing outside of their domestic region is down globally, the largest decrease is from EMEA-based institutions, which experienced a 17% year-over-year decline. EMEA-based investors turned their focus away from Asian strategies, resulting in a 30% drop in interest to the region year-over-year. In addition, EMEA-based investors' interest in UK strategies was also down significantly, with 71% of investors indicating that they are actively allocating capital to UK-strategies, down considerably from 91% in 2018.

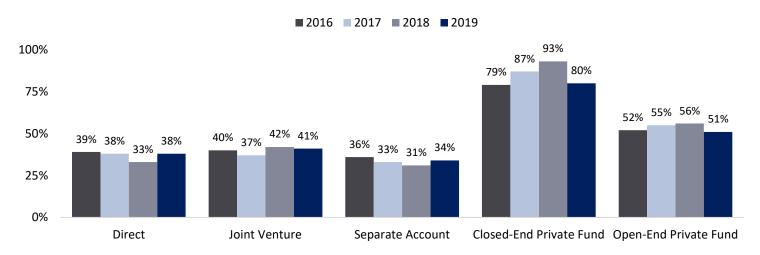
Institutions in the Americas continue to be the least likely to make intra-regional investments, while Asia-based institutions remain the most likely group to deploy capital globally. It is noteworthy that although the breakdown of geographic preferences

for APAC-based investors looks largely the same as it did in 2018, the composition of these investments has changed significantly. APAC-based institutions generated headlines over the past several years by seeking trophy office assets in gateway markets across the US and Europe. In 2019, outbound investment flows from Asia varied by country and institution type, and by risk tolerance and structural preferences. While the actual level of outbound investment activity from Asia has slightly declined in aggregate year-to-year, there has been a more recent increase in announced transactions in Central and Eastern Europe driven by Korean securities companies seeking higher yields. Premiums on Euro-to-Korean won hedging helped fuel this activity. Conversely, Singaporean investors who were the most active Asians in the US and Europe last year, focused more attention on intra-Asian deals this year.

Investment Product Trends

Closed- and open-end private funds remain the preferred investment products for institutions, but popularity declined slightly after several years of growth

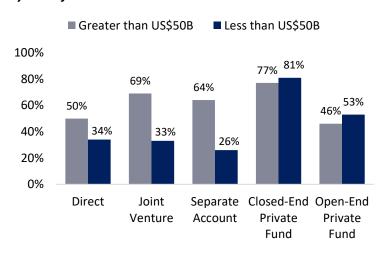
Exhibit 29: Investment Product Preferences, All Institutions



The amount of capital raised for private funds in the first three quarters of 2019 increased 15.6% from the same period in 2018. However, it is important to note that 53% of the capital raised through the third quarter in 2019 was placed with the 10 largest funds, compared to 37% for the same period in 2018. Closed-end funds continue to be the most popular investment product for institutions, although the percentage of investors allocating capital to closed-end funds decreased 13 percentage points in 2019.

Direct investments and separate accounts are the least favored investment product, but appetite for both increased slightly year-over-year. The increased interest in direct investments and separate accounts, along with the reduced focus on both closed and open-end funds, may be a result of institutions shifting towards discretionary investments and co-investments.

Exhibit 30: Investment Product Preferences By Size of Institution



Institutions based in the Americas are the least likely to make direct investments in 2019, with only 27% indicating interest. Approximately 67% of EMEA based investors and 43% of APAC based investors have plans to make direct real estate investments.

As we have seen in the past, interest in direct investing, joint ventures, and separate accounts varies significantly depending on the size of the institution. Smaller Institutions (i.e. less than US\$50bn in AUM), with typically fewer in-house resources to participate in these types of investments, tend to focus on allocating their capital through private funds. Larger institutions, on the other hand, are more likely to have in-house resources and the ability to write large enough commitments to invest directly, or though JVs or separate accounts. Several large investors have announced an intention to shift their focus to these types of programs, as their sizable investments often give them negotiating power with respect to fees and investment discretion. This has also driven demand for "build-to-core" strategies, with longer duration objectives.

¹¹ Pregin data. Accessed October 2019.

Environmental, Social & Governance (ESG)

ESG policies are increasingly important for institutions, and investment managers are positioning their organizations and product offerings to accommodate their clients' objectives

ESG Considerations

As expected, the focus on ESG policies has continued its trend upwards in 2019. Institutions are showing an increasing preference for investments that not only meet their return expectations but also satisfy their objectives for environmental sustainability, social responsibility, and governance. This year, 46% of institutions reported that they have a formal ESG policy, up from 39% in 2018, and 33% in 2015 when we began surveying institutions regarding ESG.

Responses to ESG considerations varied greatly by the type, the size, and the regional location of institutions. Institutions in the Americas have historically been the least focused on ESG matters, which remained the case in 2019. But notably, investors in the Americas showed an increased focus on ESG in 2019, as the number of institutions with a formal policy increased by 9 percentage points year-over-year. APAC-based investors showed a significant increase in the implementation of formal ESG policies, although it is not clear that policies are yet influencing their investment processes. The likelihood of having a formal ESG policy also varies significantly based on the size of the institution. Only 41% of Smaller Institutions have formal ESG policies in place while 63% of Larger Institutions stated that they have established policies. Accordingly, by weight of capital, there is a substantially larger percentage of institutions that is prioritizing ESG matters when deploying real estate allocations and thus the impact on portfolio management and strategy is likely to be greater.

These policies are not always turned into practice, however. When asked if ESG policies influence investment decisions, the responses vary significantly. As seen in *Exhibit 32*, only 45% of APAC-based institutions are influenced by their ESG policies, compared to the 76% that stated they have formal policies in place. EMEA-based institutions continue to lead the industry in turning ESG policies into practice, with 59% of institutions reporting that their investment decisions are influenced by their ESG policies.

We do, however, expect the focus on ESG principles to continue to grow, with the environmental component having an increased risk mitigation aspect given rising sea levels, powerful storms, prolonged droughts and wildfires. Investors and consultants are likely to move beyond a "check the box" mentality to making sure managers internalize these principles. The investment consultant, Mercer, now requires an ESG rating in addition to an investment rating when underwriting managers' offerings. An influential Dutch pension that invests globally includes the mapping of investments in relation to flood plains in their Investment Committee memos. They view ESG principles as a "social imperative". The Global Real Estate Sustainability Benchmark, GRESB, has seen participation increase 58% over the past five years. In addition to investors' requirements, managers are finding that both tenants and employees value these principles as they are an important factor in attracting tenants and retaining talent. It is also worth noting that the increased focus on ESG may dovetail with the desire to make value add investments, particularly older assets that require capital to improve operating efficiencies. We will continue to watch these trends carefully.

Exhibit 31: Formal ESG Polices, by Location of Institution

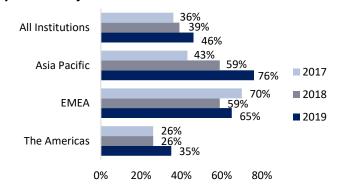
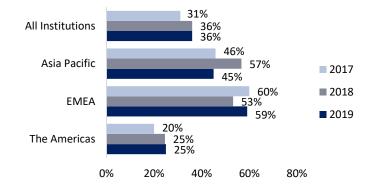


Exhibit 32: Investment Process Influenced by ESG Policies by Location of Institution



¹² Global Real Estate Sustainability Benchmark. 2019 Real Estate Results. Global Real Estate Sustainability Benchmark. 2014 Real Estate Results.





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