



NCREIF Research Committee

**NCREIF Virtual Summer
Conference 2020**

July 15, 2020

NCREIF Research Committee Meeting

July 15, 2020 Online Meeting Agenda

- Welcome & Intros
- NCREIF in a Nutshell & Research Committee Mission
- Initiatives Grid – quick updates, call for volunteers
- Analytics Advisory Taskforce
- New NCREIF Products
 - Rent Tracker
 - Global Fund IRR Data
- Next Quick Hits
- Open discussion



NCREIF History

“Give me the equivalent of the S&P 500!”

- Established in 1982
- Beginnings date back to the mid-1970s
 - Pension funds first began allocating capital to private commercial real estate
- Formed as a not-for-profit industry association with specific objective:
 - To develop a standard measure of investment performance reporting on privately-owned commercial real estate assets owned in a fiduciary environment
- NCREIF formed *specifically* to respond to institutional investors needs for a measure of real estate performance
- Prior to NCREIF, no data sources were reporting on privately owned real estate historical risk and return
 - Lack of informational transparency
 - High information costs
 - Practitioners wanted it that way!
 - Sought to capitalize on the market inefficiencies!



NCREIF Today

- Initial support by Frank Russell Company and 14 real estate investment managers
 - NPI start date: December 31, 1977
 - Number of properties: 233
 - Market value: \$581 Million
- Today, membership includes institutional investors, real estate investment managers, consultants, academics, CPAs and other service providers
 - NPI: First Quarter 2020
 - Number of Properties: 8,445
 - Market Value: \$683 Billion
- **Then:** Tax-exempt pension funds and their investment advisors
- **Now:** Broad range of institutional investors, investment advisors, academicians, consultants, CPAs and other service providers
- **Then:** Only data needed to calculate investment performance
- **Now:** More data per property to allow for more analyses on the derivations of risk and return



NCREIF Mission and Market Position

Mission: NCREIF is a member-driven, not-for-profit association that improves private real estate investment industry knowledge by providing transparent and consistent data, performance measurement, analytics, standards and education.

Market Position: NCREIF is uniquely positioned as an information steward and intermediary in its role as a non-partisan collector, processor, validator and disseminator of highly confidential property and fund specific investment information.



Standing Committee Philosophy

“Our Committee Structure is the Organization’s Backbone”

- NCREIF’s Mission is achieved through its committee structure;
- Members meet to address industry concerns and to agree upon and implement consistent reporting methodologies;
- Working sessions to provide industry white papers, guidance and manuals;
- Everyone is welcome and expected to participate in the meetings!



Joining & Participating on Committees

Active participation and involvement by its members is critical to the success of NCREIF.

Committee meetings are the principal means of participation in the organization. It is expected that during meetings members will:

- **Bring your knowledge and your firm's perspective**
- Keep an open mind to all points of view
- **Share your knowledge:** Give and don't just Take
- Show respect for the opinions of others
- **Take your newly gained knowledge back to your firm**



Standing Committees

RESEARCH

Committee Co-Chairs		Committee Vice Chairs	
Mark Fitzgerald, USAA Real Estate Company Mark.Fitzgerald@usrealco.com	Margaret Harbaugh, Morgan Stanley Margaret.Harbaugh@morganstanley.com	Paul Briggs, BentallGreenOak Paul.Briggs@bentallgreenoak.com	Joshua Kaye, at large / DROK Consulting JoshuaKaye@roadrunner.com

Research Committee Mission Statement – **should we update or revise this? any volunteers?**

To promote research which expands the understanding of institutional real estate as an asset class, by providing ongoing validation of the NCREIF Indexes, by sponsoring academic research on the investment attributes of the asset class, by providing guidelines for interpreting the Index and disseminating results to the membership, by reviewing current micro- and macro-economic research that relates to institutional property markets, by identifying databases and text retrieval systems useful to institutional real estate researchers and by the publication of articles or other papers resulting from any of these activities.



Standing Committees, continued

ACCOUNTING	VALUATION	PERFORMANCE MEASUREMENT
<p>Benay Kirk, Alter Domus US Robert Fraher, KPMG Hunt Holsomback, Alvarez & Marsal</p>	<p>Jeff Walker, US Realty Consultants Brian Velky, Situs RERC Ed Turner, MetLife Real Estate</p>	<p>Brandon Millen, Intercontinental Real Estate Corp. Erik Gilliland, Invesco Real Estate Gabe Glass, CBRE Global Investors</p>
<p>To enhance the consistency, transparency, and verifiability of accounting and reporting for institutional real estate assets held in a fiduciary setting.</p> <p>In order to accomplish this, the Accounting Committee reviews, develops, documents and promotes standards for accounting and reporting of these real estate assets (both individually and at the portfolio level) with the intention to supplement and in some cases, clarify, but not replace other established standards from authorized bodies, including but not limited to US GAAP. Member involvement with the standard-setting and updating process is encouraged. The Accounting Committee also monitors the actions of applicable standard-setting and supervisory agencies and works with the Reporting Standards Council to ensure the entire organization is aware of these agencies' activities and as appropriate assists the Reporting Standards Council in communication with these agencies.</p> <p>Finally, the Accounting Committee provides members with tools and/or resources created through the collective efforts of the membership, and supports the activities of other NCREIF committees by supplying information and research when appropriate.</p>	<p>To represent the various member constituencies in the promotion of credible valuation standards and techniques for the appraisal of institutional real estate, both foreign and domestic, by working with industry associations and industry professionals who respectively set such standards and follow generally-accepted techniques, and by publishing and disseminating information useful to the industry in the valuation of such investments.</p>	<p>The mission of this committee is to promote the consistent application of performance measurement methodologies and performance disclosure standards for the real estate asset class.</p> <p>This mission is accomplished by evaluating existing measurement and reporting practices, by reviewing, interpreting and evaluating guidelines and standards established for multiple asset classes, by analyzing evolving industry practices, by reviewing investor information disclosure requirements, and by preparing recommended positions on performance measurement methodologies and performance disclosure standards.</p> <p>The Performance Measurement Committee endeavors to provide members with the education, tools and resources regarding performance measurement methodologies and disclosures guidelines.</p> <p>The work of this Committee is integrated with the relevant efforts, work products and perspectives of the Accounting, Research, Valuation and other NCREIF committees.</p>



Standing Committees, concluded

FARMLAND	TIMBERLAND	DAILY PRICED	PLAN SPONSOR	INFORMATION MANAGEMENT
<p>Rich Matheson, Utah Retirement Systems Griffin Moag, Cottonwood Ag Management, LLC</p>	<p>Jason Whisenant, Resource Mgmt Service Jackson Casstevens, Forest Investment Associates</p>	<p>Sarah Gal, Callan LLC Meighan Phillips, Principal Real Estate Investors</p> <p>Interact with all NCREIF Standing Committees and cooperate with other industry organizations for the advancement of knowledge and understanding of Daily Priced Private Real Estate. This group will leverage the procedural standards, specific knowledge, existing framework and accepted methods of other committees toward the education, standardization and application of private real estate in a daily pricing environment</p>	<p>Greg Arendt, CalSTRS Ted Nelson, Utah Retirement Systems</p> <p>NCREIF's Plan Sponsor Committee is dedicated to offering a forum for employees of Plan Sponsor member firms to gather and openly discuss and exchange ideas on topics and challenges they face within their sector of the industry. The Committee also regularly participates in educational programs and sessions that are specific to their needs.</p>	<p>Maritza Matlosz, MetLife Ronald Singh, PGIM Real Estate Timothy Kuhn, Altus Group</p> <p>The mission of the NCREIF Information Management Committee is to provide leadership and guidance in the administration and use of real estate investment information.</p> <p>The mission will be accomplished through programs and goals that will:</p> <ul style="list-style-type: none"> • Increase awareness of the value and benefits of effective information and data governance to facilitate investment decision making • Provide education and sharing of knowledge among NCREIF members • Collaborative teaming with other NCREIF Standing Committees to understand current business needs, challenges and define data standards • Work jointly with leading technology vendors as their systems evolve to meet the needs of the industry • Pursue opportunities to identify and create initiatives to meet the needs of clients and consultants • Partnership with NCREIF's internal Information Management team



Research Committee 2Q 2020 Webinars / Insights

Insight in a Turbulent Quarter

COVID-19 Impact Webinar	Capital Markets Trends Webinar	Quick Hits / Hot Topics	New Global IRR Report Launch	1Q 2020 NCREIF Indices Review	NCREIF Performance Attribution Report
April 9 th	May 6 th	June 2 nd	April 30 th	May 7 th	June 18 th
Real Estate Performance in Past Recessions & Covid-19 Effects, with Mark Fitzgerald, Jeff Fisher, Michael Cohen & the CoStar team	Global Capital Markets Trends & US Impact, with Simon Mallinson, Jim Costello, Mary Ludgin, Mark Roberts	Current slides of interest on psychological impact of Covid-19 and differentiated sector impacts, particularly Seniors Housing, with Joshua Kaye, Tony Charles, Beth Mace	Global combined non-core fund IRR performance, with Amelie Delaunay (ANREV), Henri Vuong (INREV), and Joe D'Alessandro and Dan Dierking (NCREIF)	Differentiating property sector and geographic area impacts in the first quarterly NPI release since Covid-19 disruption began, with Jeff Fisher, Joshua Scoville and Jay Marling	Primary drivers of the NFI-ODCE total returns through 1Q 2020, as well as property type and leverage contributions, with Joe D'Alessandro and John Ehli

www.ncreif.org/education--webinars



What's Next?

Current Initiatives

In Progress

- Debt Mark-to-Market
- Occupancy Aggregates
 - Guidelines including treatment of properties in lease-up; how to weight the calculations; how to look across multiple property sectors
- Chart of Accounts

Ideas for Future Small Groups

- NCREIF Education
 - Gauging Research interest to get more involved in designing courses
- Real Assets
 - Eg CRE, timberland, farmland + Infrastructure, Data Centers, etc
- Opportunistic Fund Index
 - ODCE, CEVA, _____
- **Others??**



Analytics Advisors Taskforce

New Initiative

Analytics Taskforce

- Review of NCREIF Analytics / Query Tool / API
 - Identify improvement areas
 - Key performance measures that NCREIF should be producing and the platform/product that should be used

Products Associated with Analytics

- Review current NCREIF spreadsheets and reports
 - Identify improvements
 - Recommend discontinuing as needed
 - Identify products that can transition to tools; online vs flat file
 - New products to be developed?



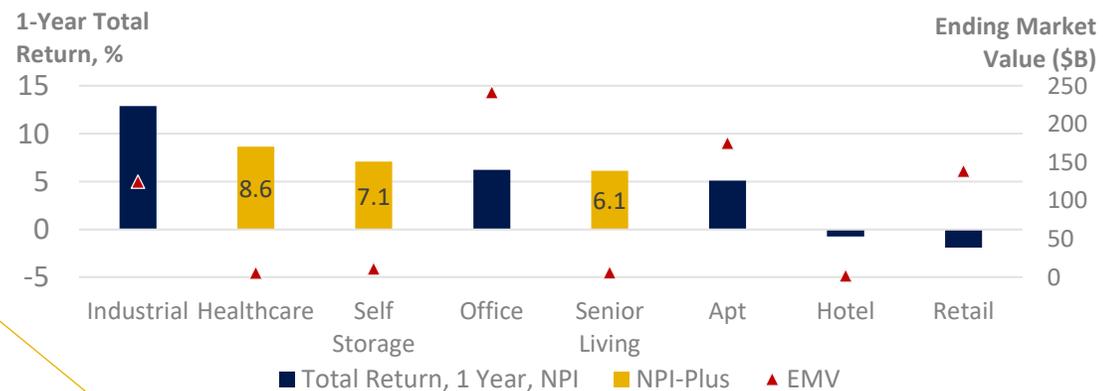
Analytics Advisors Taskforce

New Initiative

NCREIF Indexes Without Supporting Products

- NPI-Plus
 - Is there interest to create products to support these indexes?

NPI and NPI-Plus Sector Returns



Manager / Investor Portfolio Analysis Offering

- Key performance measures
- Benefits
- Users include:
 - Managers
 - Investors



Analytics Advisors Taskforce

New Initiative

Out of Scope

- Review of data collection process
- Expansion of data outside of existing property
- Generation of new NCREIF Index
 - Core-plus, infrastructure, etc.
- Product Training/Documentation
- Global Fund Index



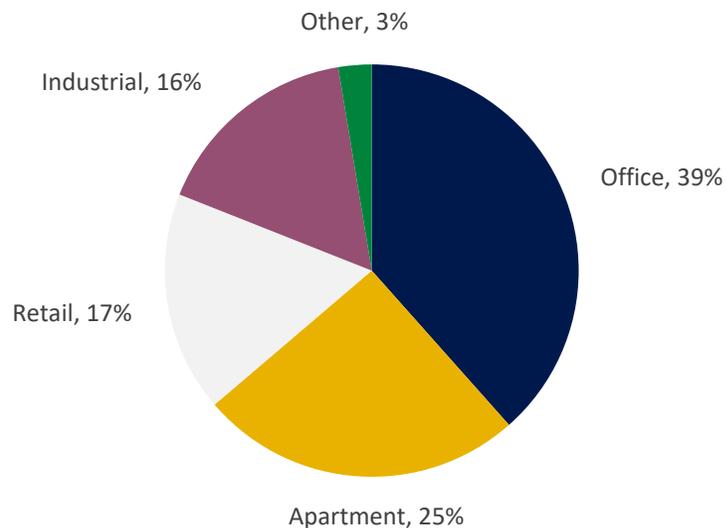
New NCREIF Products

As of June 15, 2020

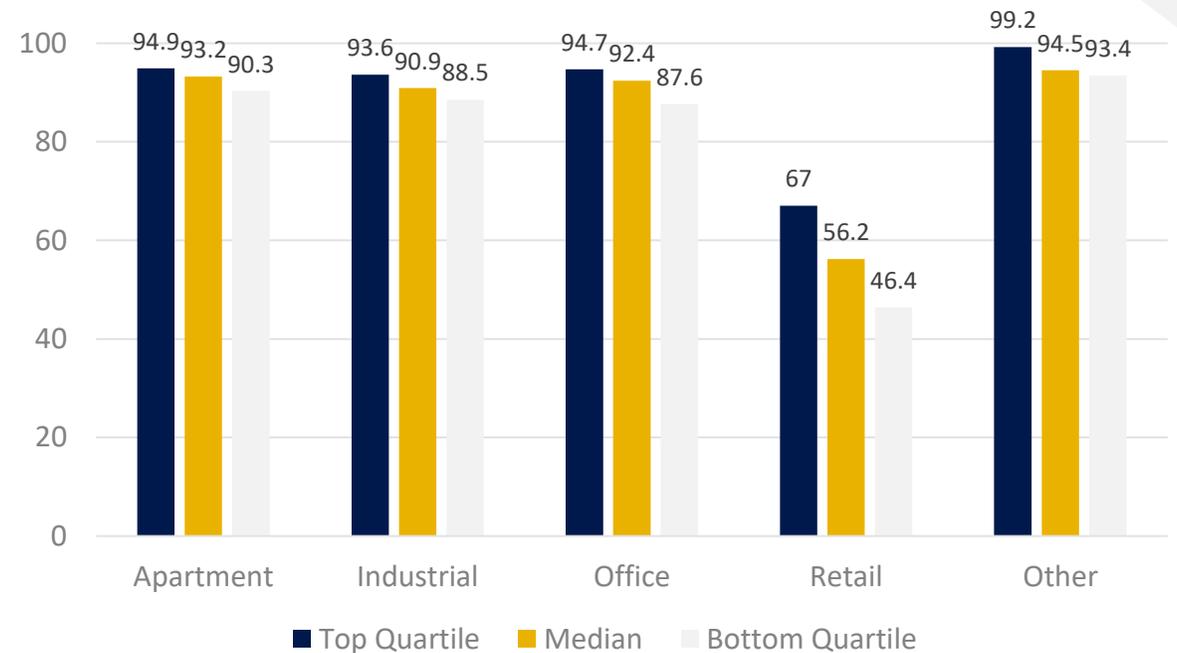
NCREIF MEMBERSHIP ONLY, CONFIDENTIAL, DO NOT DISTRIBUTE

NFI-Open End Fund Index Rent Tracker

Share of all rent due, by sector



Fund Rent Collection Rates



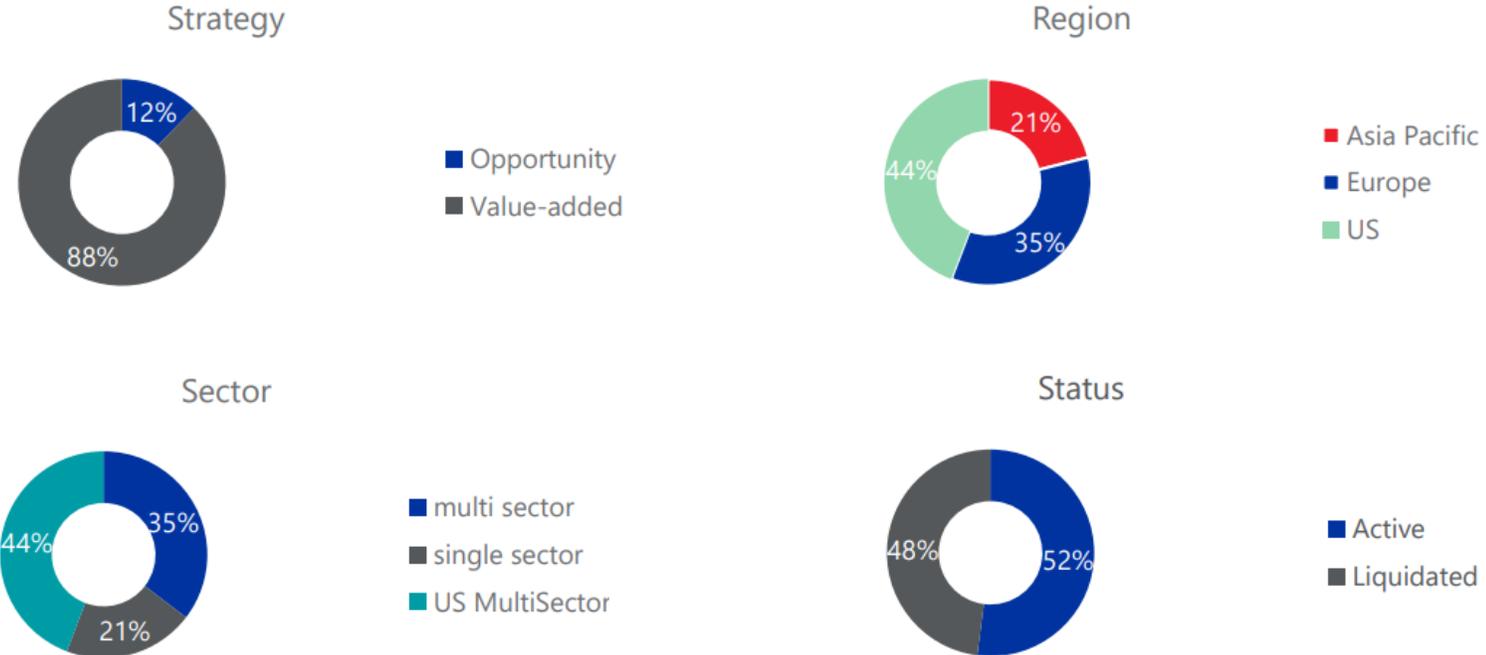
Disclaimer: This informal and impromptu survey is to provide feedback on the current environment as a courtesy to the NCREIF membership only. NCREIF does not guarantee the accuracy of the underlying information provided by the managers



Global IRR Series

New Launch from ANREV, INREV & NCREIF

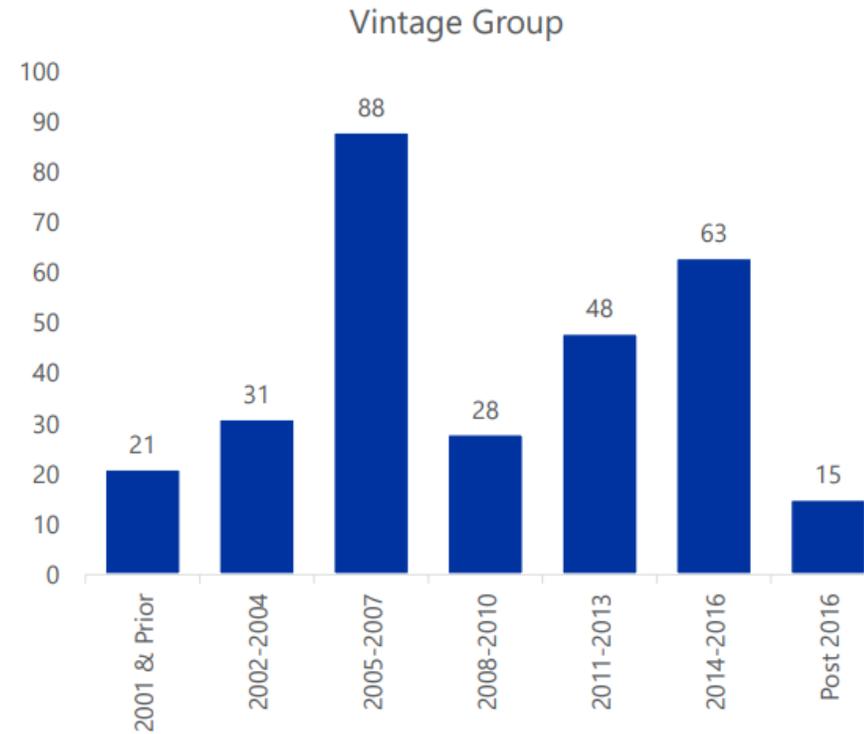
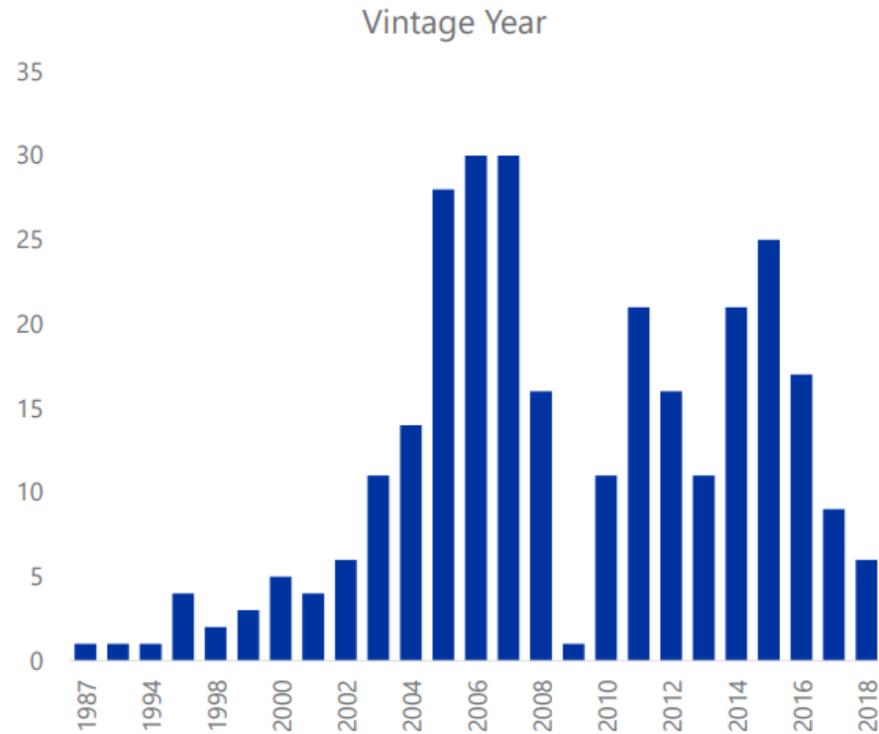
What's in the index? 294 closed end non core funds





Global IRR Series

Distribution of the sample by fund vintage





Global IRR Series

Median & Quartile Performance by Fund Vintage

	Pre - 2004	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of funds	38	14	28	30	30	16	1	11	21	16	11	21	25	17	9	6
Average IRR	13.52%	0.54%	1.35%	-1.02%	3.41%	5.82%	-	17.92%	12.40%	16.30%	18.39%	14.83%	14.31%	14.64%	13.48%	9.04%
Standard deviation	11.00%	8.27%	11.05%	9.51%	8.46%	9.61%	-	4.78%	7.81%	6.99%	7.37%	5.63%	9.17%	11.88%	10.19%	-
Upper quartile	16.40%	6.73%	6.42%	7.17%	7.47%	12.54%	-	21.26%	13.71%	18.25%	26.66%	16.68%	16.34%	20.38%	16.35%	-
Median	11.20%	0.33%	2.16%	-0.40%	4.86%	4.25%	-	18.54%	11.43%	13.76%	14.89%	13.40%	11.25%	15.50%	12.91%	-
Lower quartile	6.74%	-4.76%	-4.12%	-4.69%	2.89%	-2.06%	-	14.04%	7.78%	11.99%	12.93%	11.93%	9.54%	7.95%	6.51%	-

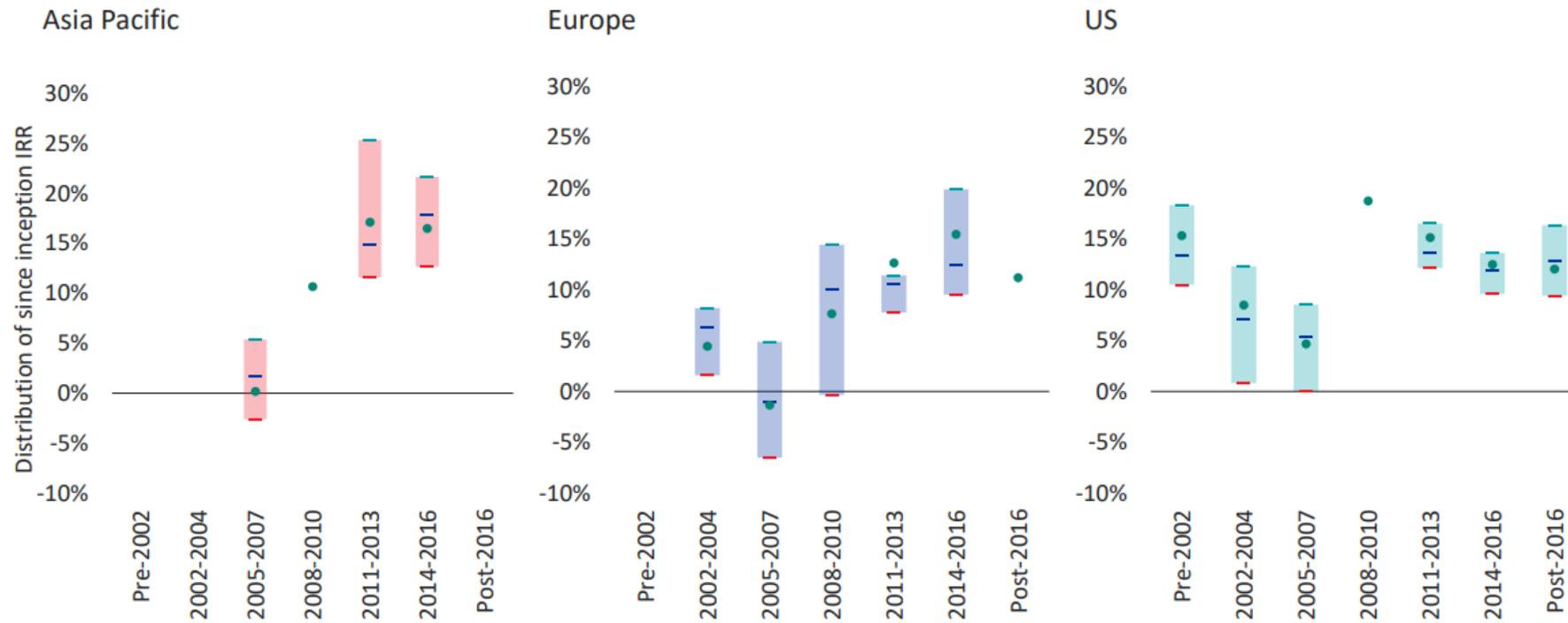
Masking criteria: Performance is shown only when the sample size meets the minimum threshold of 8 funds in given breakdown or aggregate is required to display quartiles and Standard deviation metrics, and a minimum of 6 funds to display composite.





Global IRR Series

Regional Variances Across Similar Vintages



Masking criteria: Performance is shown only when the sample size meets the minimum threshold of 8 funds in given breakdown or aggregate is required to display quartiles and Standard deviation metrics, and a minimum of 6 funds to display composite.

ANREV

INREV

NCREIF

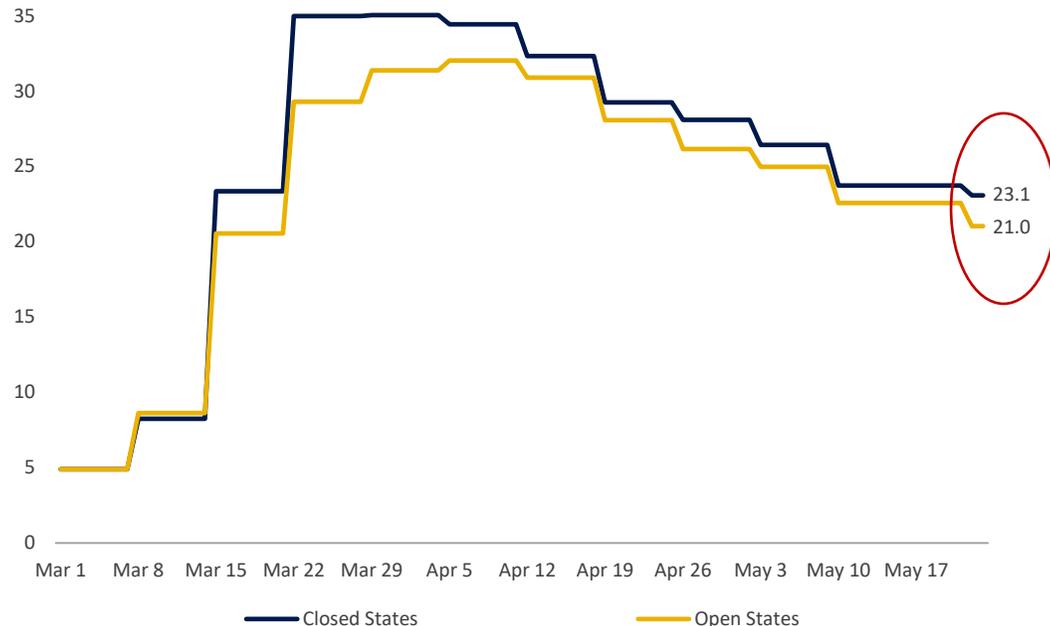


Future Quick Hits / Hot Topics – Ideas

Defined Scope & Multiple Contributors – Ideas Include Office? ESG Trends?

Sample Chart: Office - Who's Back? & When

% of all U.S. workers working from home since March 1st 2020



Source: Morgan Stanley Research, University of Maryland, as of May 23, 2020

Sample ESG Trends

- Environmental – climate risk, TCFD reporting and alignment, how to price out policy risk and MSA-level impact
- Social – stability, resilience, diversity, inclusion, reputation & performance, or is it a distraction?
- Governance – best practices in quantifying the impacts?



Upcoming Events – Ideas

Research Committee Upcoming Speakers/Presentations

- NCREIF Fall Conference – Orlando, November 2-5, 2020
 - Spencer Coutts: “Private Real Estate Returns, Style Drift, & Procyclical Risk Taking” & “Stale Prices, Fragility, & Detrimental Cash: Evidence From Private Real Estate Funds”
 - Wayne Yu & Michael Mandel: New CompStak rent series
- NCREIF Winter Conference – Phoenix, March 15-18, 2021



Education Program

NCREIF offers educational opportunities in support of our mission and industry.
These courses are not found anywhere else.

- NCREIF provides a forum through its conferences and committee structure to allow newcomers to the industry an opportunity to learn from their peers and seasoned veterans.
- NCREIF offers a Professional Certificate Program in Institutional Real Estate that is taught each summer at Southern Methodist University (SMU) in Dallas (**online for 2020**), as well as individual courses periodically attached to NCREIF conferences. The program covers 6 courses in multiple disciplines within our industry.
- NCREIF offers a Performance Returns Calculations Seminar multiple times each year. It is a hands-on course that guides students through standard performance measurement calculations and formulas.



Education Program

Upcoming NCREIF Professional Certificate Program Online Courses

- Investment Vehicles: Key Terms & Fee Structures
 - July 22, July 27, July 29, August 3 – 1-3pm CST
- Space Markets Analysis
 - August 17, 19, 24, & 26 – 6-7:30pm CST
- Introduction to Institutional Real Estate
 - August 31-Sept 4 (Daily) – 10am-1pm CST
- Portfolio Construction & Strategy
 - October 21 (10am-2pm CST) & 22 (2-4pm CST)



Thank You

 Research Committee

 www.ncreif.org