NCREIF Fall Conference 2024

Hollywood, Florida – Diplomat Resort

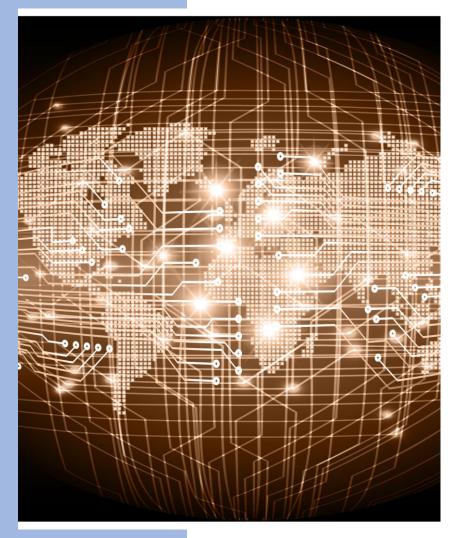


STANDARDS AND PERFORMANCE GONE GLOBAL

October 16, 2024









Agenda

- Global Products Presentation by INREV, ANREV, and NCREIF
- The Journey of Establishing Global Standards and Creating Global Data Products
 - Presentation Moderated by: Rosellen Bounds, PMC Chair
 - Panel Discussion Moderated by Candice Todd, NCREIF Board Chair
 - Panelists:
 - Constantin Sorlescu, Director of Professional Standards, INREV
 - Amélie Delaunay, Sr. Director of Research and Professional Standards, ANREV
 - Alvaro Jaramillo, Managing Director, LAREV
 - Bryan Dragoo, Managing Director, LAREV

Polling question

Does your firm currently invest in non-US markets?

- 1. Yes
- 2. No

Global Data Products









Global Data Products Presenters



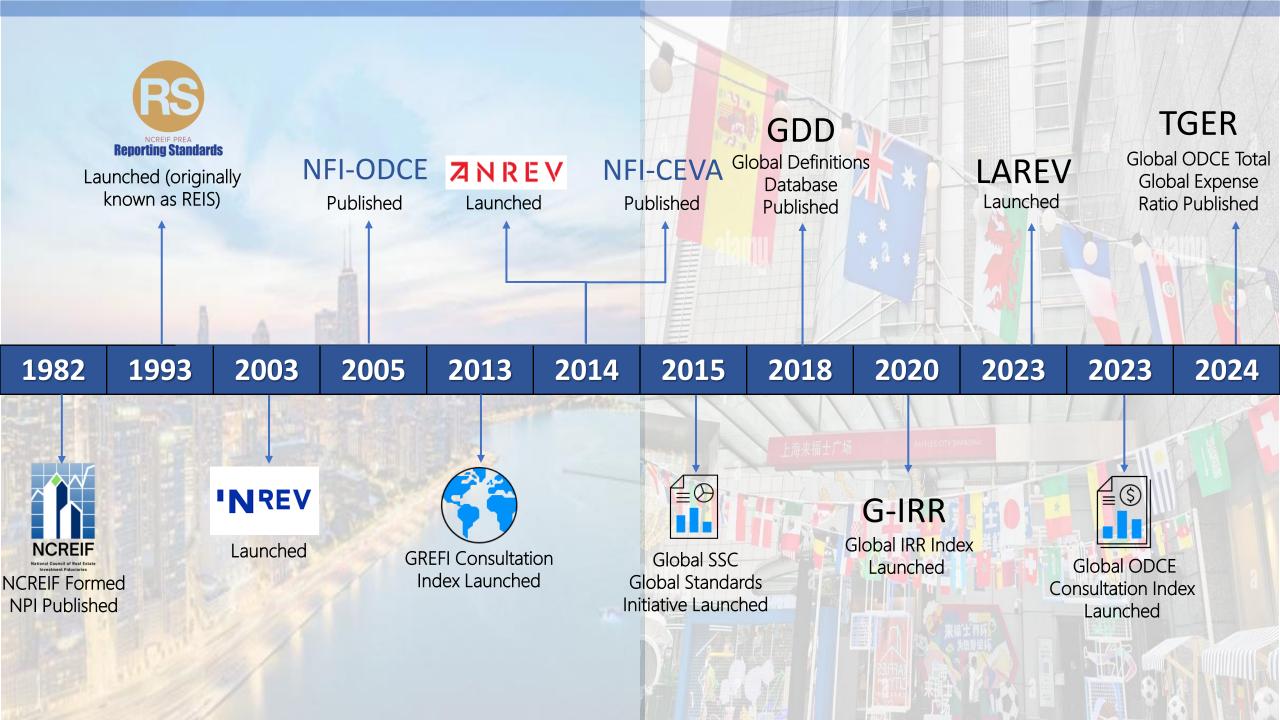
Joe D'Alessandro, Director of Real Estate Performance Measurement, NCREIF

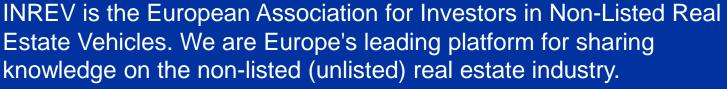


Amélie Delaunay, Senior Director, Research & Professional Standards, ANREV



INREV







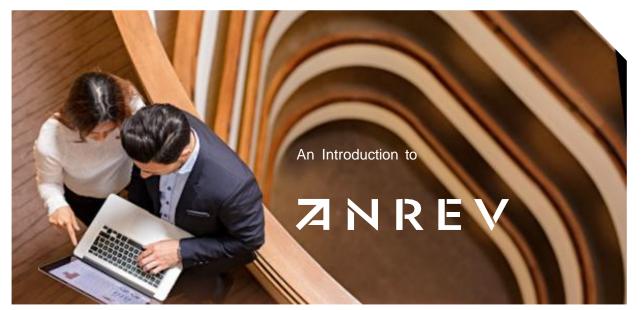
We represent

- More than **500 institutional members**
- 120 of the largest investors, including pension funds & insurance companies
- 40 of 50 largest fund managers
- + Service providers
- + Fund of Funds / multi-managers
- + Academics / research
- + Investment banks

INREV

ZNREV

Asian Association for Investors in Non listed Real Estate Vehicles



We are the leading platform for investors in the Asia Pacific non-listed real estate industry, with the goal of improving transparency and best practice across the region.

Our agenda is driven by our members, who contribute directly to our data and research help to grow the quality and quantity of information available across the market. This ensures investors have the tools to make informed decisions for their Asia Pacific real estate portfolios.

Mission statement

ANREV was established to serve as a platform for institutional investors and to address key issues facing the Asia Pacific non-listed real estate funds industry. ANREV is committed to providing a forum for investors their managers and service providers operating in the sector to support its long term development as a competitive sustainable asset class.

We represent more than 236 institutional members including 49 institutional investors 126 investment managers And 61 service providers and academics.

What we do:

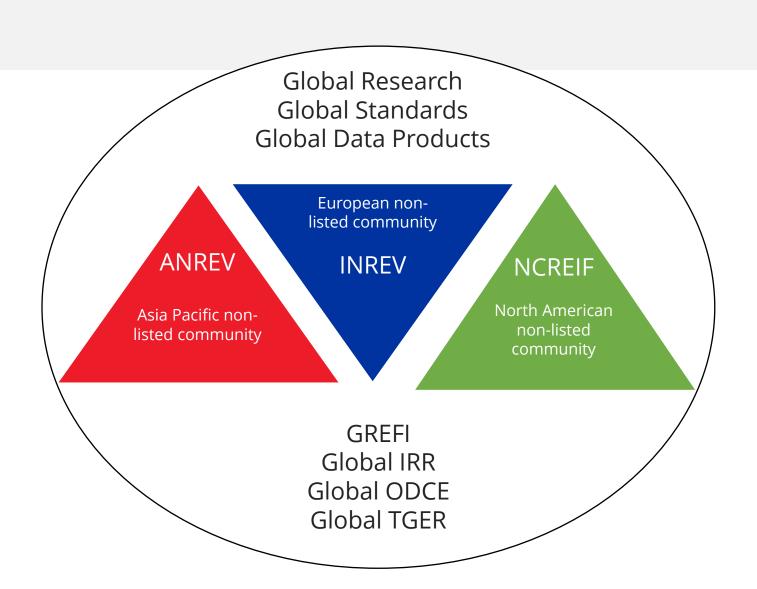
Market information 6 evergreen surveys

Performance measurement 7 regional indices 3 global indices

Professional Standards and best practices

Events
5 regional conferences
50 events

Global collaboration to meet the increasingly global needs of our members



Global Alliance Mission Statement

The Global Alliance advances the global agenda of transparency, accessibility and professionalism to increase harmonization across the non-listed real estate industry globally.

Global Definitions Database

 Purpose: To achieve consistency of terminology and meaning within the non-listed real estate industry.



 Access the database: www.reportingstandards.info/global-standards



The Global Definitions Database (GDD) is the leading global source of definitions for the non-listed real estate sector

Global definitions are an important step towards producing global standards and aligning the INREV Guidelines with the NCREIF PREA Reporting Standards. The GDD provides a common glossary of non-listed real estate terms. Many terms have been agreed to globally, while others are specific to Asian, European and North American standards, guidelines and data products. This has been indicated in the source.

A common set of terms is a critical component of the global standardisation initiative and our interactive online tool makes them easily accessible. This provides the industry with one unique depository of definitions that will help increase transparency and align the industry globally.







SHOW ALL DEFINITIONS

Most viewed

Net Initial Yield (NIY)

The passing rent or net operating income divided by the gross property value including notional acquisition costs.

Net equivalent yield

A time-weighted average of the net initial yield and reversionary yield, representing the return a property will produce based upon the timing of

Reversionary yield

The estimated rental value as a percentage of gross property value.

Latest updates

Vintage Year

A vintage year of an investment vehicle may be determined by using the following two methods: 1. The year when the first committed capital

Redemption Queuing Mechanism

The order in which outstanding redemption requests/ investor requests to redeem or sell their shares or units in the investment vehicle are prioritise.

Subscription queuing mechanism

The order in which outstanding subscription requests/ incoming investment requests from potential investors are prioritised by the Investment Manager ...

Global Products

- GREFI
 - Global Real Estate Funds Index
- Global IRR
- Global ODCE
 - Open-end Diversified Core Equity
 - Total Global Expense Ratio (TGER)
- Global Other
 - Research Insights
 - Capital Raising Survey
 - Fund Manager Survey

Comparison of Global Index Products

	GREFI	Global IRR	Global ODCE		
Level	Fund	Fund	Fund		
Structure	Open & Closed-end	Closed-end	Open-end		
Style	Core & Non-core	Value-add & Opportunistic	Diversified Core		
Metric	TWR, After Fees & Expenses	IRR, Net of Fees & Expenses	TWR, After Fees & Expenses		
Aggregation	Value-weight	Equal-weight Vintage Year basis (since 2000)	Equal-weight		
Delivery	PDF & Excel	PDF & Excel	PDF & Excel		
Launch	2014	2020	2023 (data since 2016)		
Release Timing	12 weeks > QE	15 weeks > QE	11 weeks >QE		
Size	Size 439 funds \$896 B		49 funds \$\$350 B		

Global Real Estate Fund Index (GREFI)





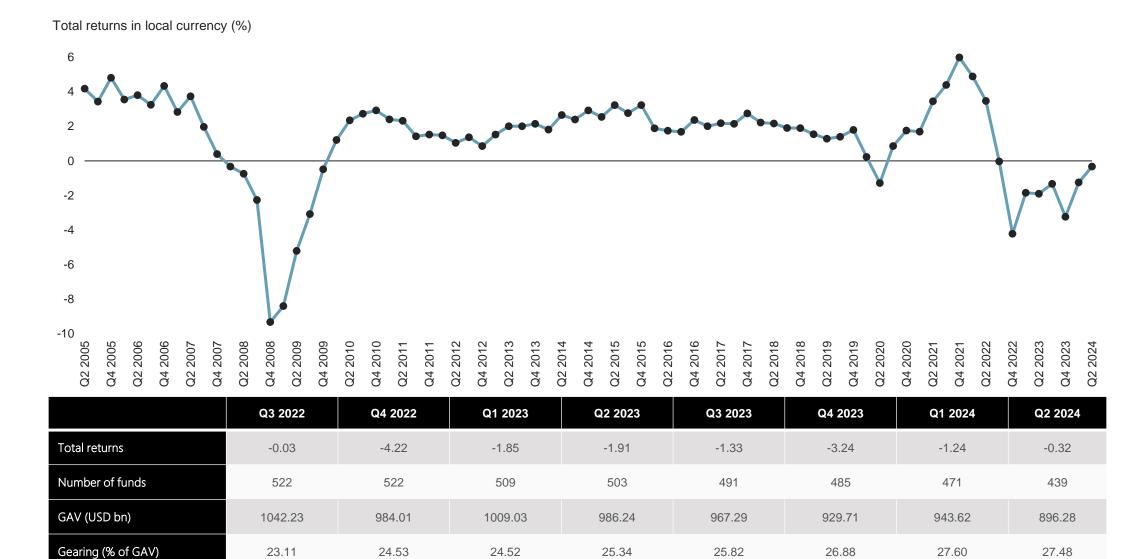




GREFI | All Funds Index



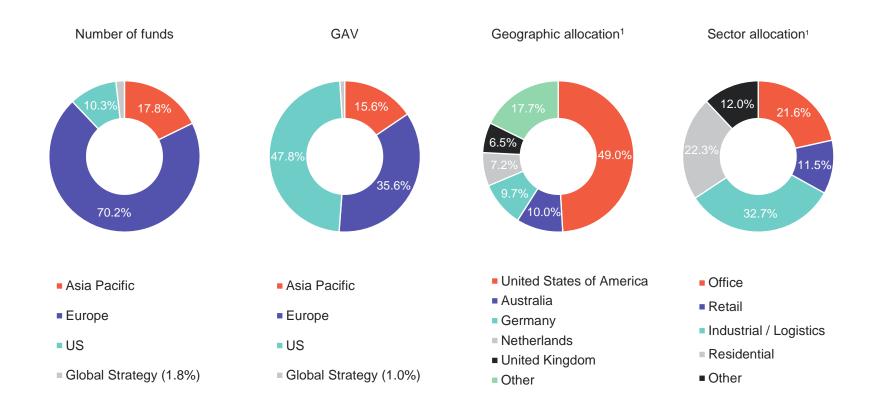








GREFI All Funds Index | characteristics



Note:

1. Allocation by % of real estate portfolio

Global IRR Index



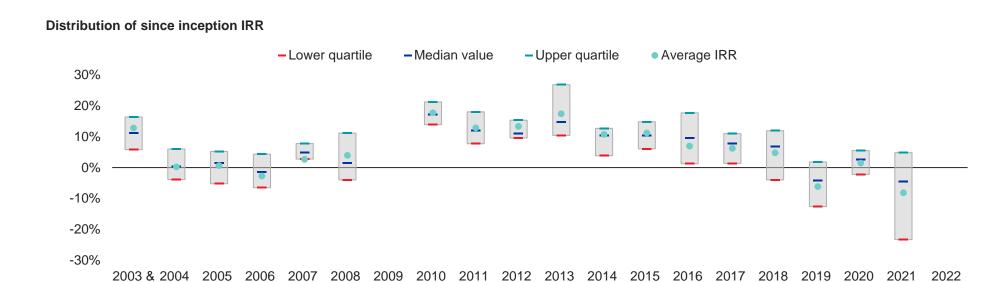






Global IRR | All Funds By Vintage Year





Year of first closing

	2003 & Prior	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of funds	38	15	31	33	33	23	2	11	23	18	13	24	30	20	18	18	14	8	11	5
Average IRR	12.8%	0.2%	0.6%	-2.7%	2.6%	4.0%	-	17.8%	12.9%	13.3%	17.4%	10.7%	11.2%	6.9%	6.2%	4.8%	-6.1%	1.5%	-8.2%	-
Standard deviation	12.1%	7.9%	10.7%	10.6%	10.2%	10.2%	-	4.8%	8.2%	6.5%	9.7%	13.5%	9.1%	17.2%	10.4%	8.2%	10.3%	6.0%	16.5%	-
Upper quartile	16.4%	6.0%	5.2%	4.4%	7.8%	11.2%	-	21.3%	18.0%	15.3%	26.9%	12.7%	14.8%	17.8%	11.0%	12.0%	1.8%	5.5%	4.8%	-
Median	11.2%	0.3%	1.4%	-1.4%	4.9%	1.5%	-	17.2%	12.0%	11.1%	14.9%	10.4%	10.4%	9.5%	7.7%	6.9%	-4.1%	2.7%	-4.4%	-
Lower quartile	5.8%	-3.9%	-5.2%	-6.5%	2.8%	-4.0%	-	13.9%	7.7%	9.6%	10.4%	3.9%	6.1%	1.3%	1.4%	-4.0%	-12.7%	-2.2%	-23.3%	-

Results shown as of Q2 2024 released October 2, 2024.

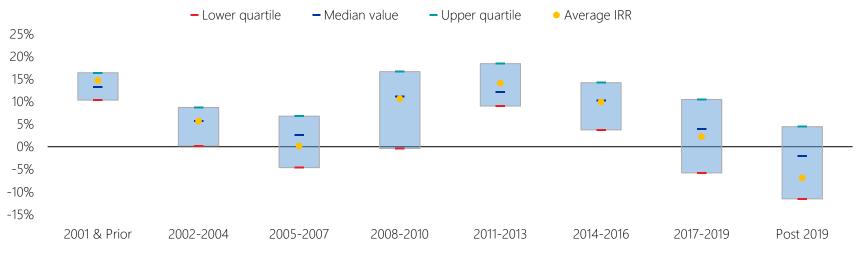
Prior

Global IRR | All Funds By Vintage Groups





Distribution of since inception IRR



Year of first closing

	2001 & Prior	2002-2004	2005-2007	2008-2010	2011-2013	2014-2016	2017-2019	Post 2019
Number of funds	21	32	97	36	54	74	50	24
Average IRR	14.7%	5.7%	0.2%	10.7%	14.1%	9.9%	2.2%	-6.9%
Standard deviation	9.4%	12.8%	10.7%	15.7%	8.3%	13.2%	11.0%	16.1%
Upper quartile	16.4%	8.7%	6.8%	16.7%	18.4%	14.2%	10.5%	4.4%
Median	13.3%	5.6%	2.6%	11.2%	12.2%	10.3%	4.0%	-2.1%
Lower quartile	10.3%	0.1%	-4.6%	-0.4%	9.0%	3.7%	-5.8%	-11.6%

Results shown as of Q2 2024 released October 2, 2024.

Polling question

Do you have foreign investors?

- 1. Yes
- 2. No

Global ODCE Fund Consultation Index





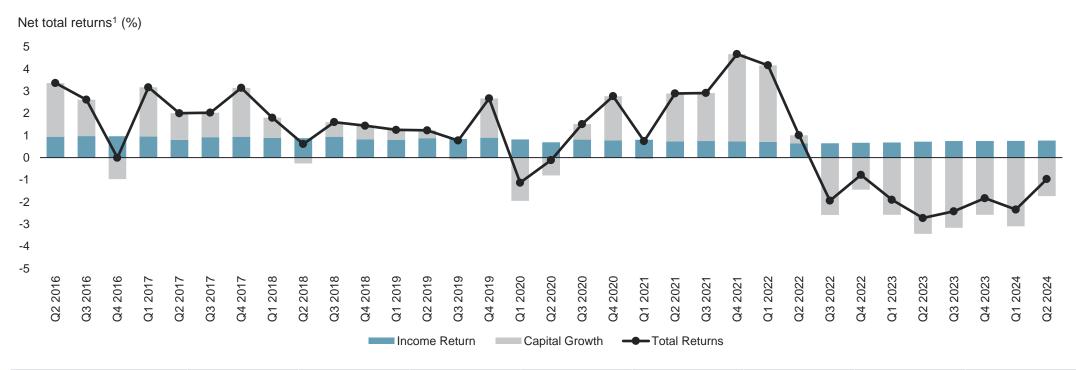








Global ODCE | equal weight



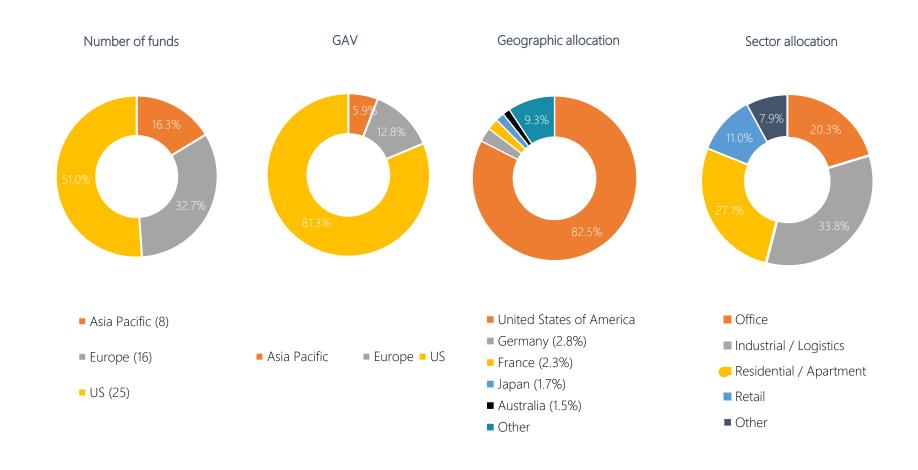
	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024
Total returns (%)	-1.94	-0.78	-1.90	-2.73	-2.42	-1.83	-2.34	-0.97
Capital growth (%)	-2.59	-1.45	-2.58	-3.44	-3.17	-2.58	-3.10	-1.74
Income returns (%)	0.65	0.67	0.68	0.71	0.74	0.75	0.76	0.77
Number of funds	50	50	50	49	49	49	49	49
GAV (USD bln)	422.3	412.2	403.0	387.5	375.7	365.2	355.8	349.7
Gearing (% of GAV)	25.2	25.9	26.3	26.5	26.9	27.8	28.2	28.1

Results shown as of Q2 2024 released September 4, 2024 and measured on an accrual basis, net of fees and other costs..





Global ODCE | characteristics by % of real estate portfolio



Polling question

Why do you invest in real estate? Please check all that apply.

- Inflation Hedge
- Enhance Returns
- Diversification benefits for a multi-asset portfolio
- Income Return
- Risk Adjusted performance over other asset types
- Other



First Global ODCE Total Global Expense Ratio (TGER) Comparison

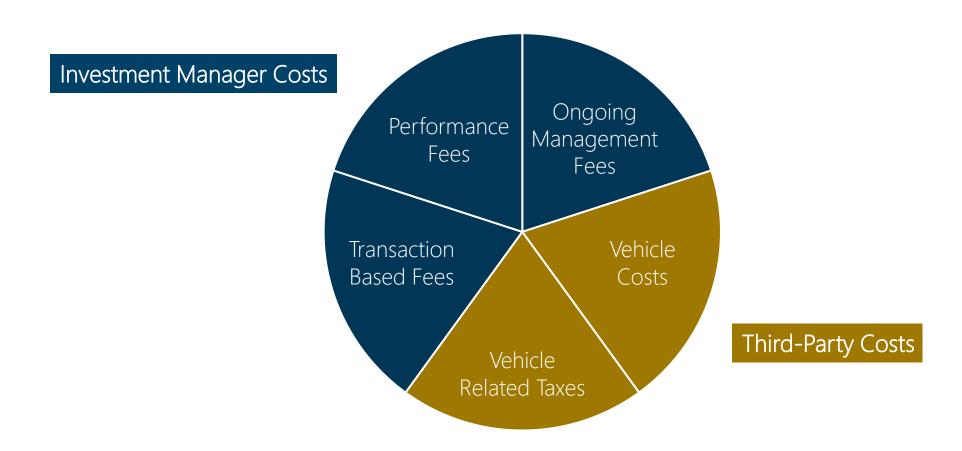
Released September 2024

Total Global Expense Ratio Calculation

Required ratio

Recommended ratio

TGER Numerator Components



Detailed Fee and Cost Matrix: *Included*

Ongoing Management Fees	Transaction-Based Management Fees	Performance Fees
Management fee	Wind-up fee	Performance fees
Fee reductions or transaction offsets	Financing fee	Incentive fees and promote
Fee waivers	Subscription fee	Carried interest
Distribution fees	Project management fee	Other performance fees
Commitment fees	Property acquisition fee	
Redemption fee	Property disposition fee	Performance Fees Transaction Based Fees Ongoing Management Fees

Detailed Fee and Cost Matrix: *Included*

Vehicle Related Costs Charged by Third Parties

Audit costs Securities handling charges

Bank charges Staff costs (if applicable)

Custodian costs Vehicle administration costs

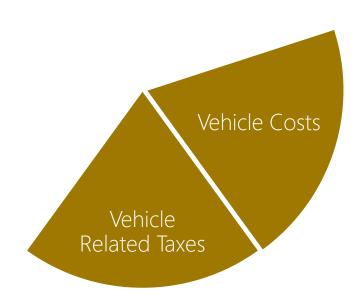
Debt arrangement costs Vehicle formation costs

Placement agent costs Transfer agent costs

Professional service costs Dead deal costs

Vehicle Related Taxes Charged by Third Parties

Tax structure expenses



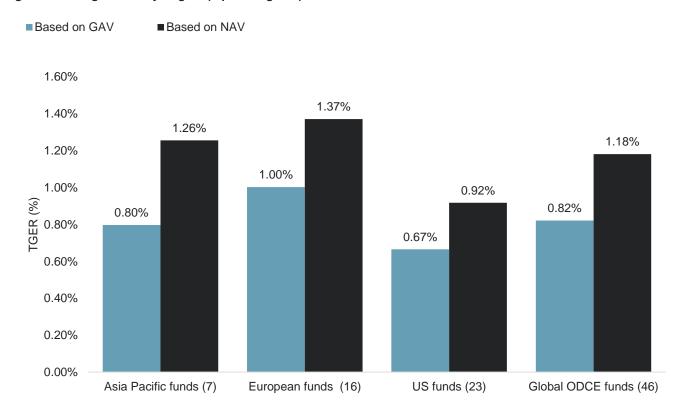
Detailed Fee and Cost Matrix: *Excluded*

Property Related Fees Charged by Manager	Property Related Costs Charged by Third Parties
Internal leasing commissions	CAPEX/tenant improvements
Property management fee	External leasing commissions
Development fee	Property acquisition costs
	Property disposition costs
	Property insurance costs
	Property management costs
	Utilities, repair and maintenance costs
	Owner property taxes



- The average reported Total Global Expense Ratio (TGER) for Global ODCE funds for 2023 was 0.82% based on GAV and 1.18% based on NAV
- TGER and vehicle costs are lower for US funds which are generally larger and invest in a single country
- Performance fees are not commonplace amongst ODCE funds, with only a handful of funds reporting using them in 2023

Figure 1: Average TGER by Region (equal-weighted)

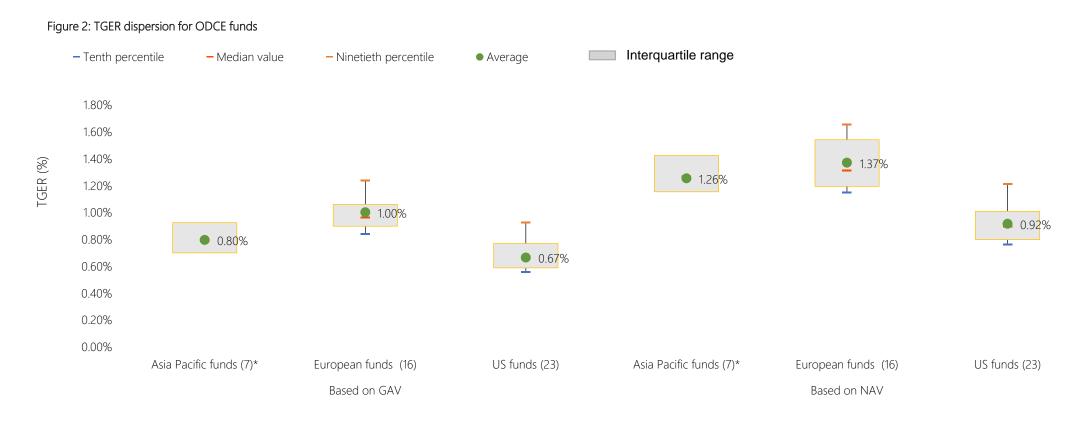


The study includes the TGER for 46 funds out of the 49 funds included in the Global ODCE Index, representing a total gross asset value (GAV) of USD 359 billion (98% of the Global ODCE Index's GAV) as of the end of 2023.





- US ODCE funds exhibit lowest Total Global Expense Ratios (TGER).
- Little dispersion in TGERs amongst ODCE funds at a regional level.
- ODCE funds show narrow TGER ranges with respective interquartile ranges within their regions, indicating relative homogeneity in fees and vehicle costs.



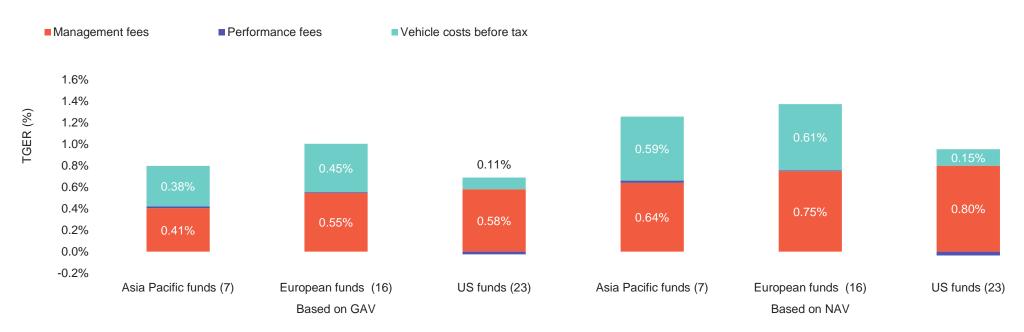
^{*}Percentile ranges are displayed only when the sample size includes 8 or more funds.





- Vehicle costs drive regional differences in the average TGERs.
- Management fees are the largest component of TGERs across all three regions.
- The vehicle costs as % of GAV are more comparable between the ODCE funds in Asia Pacific (0.38%) and in Europe (0.45%), as both operate in multiple countries across their respective regions and are generally smaller in size.

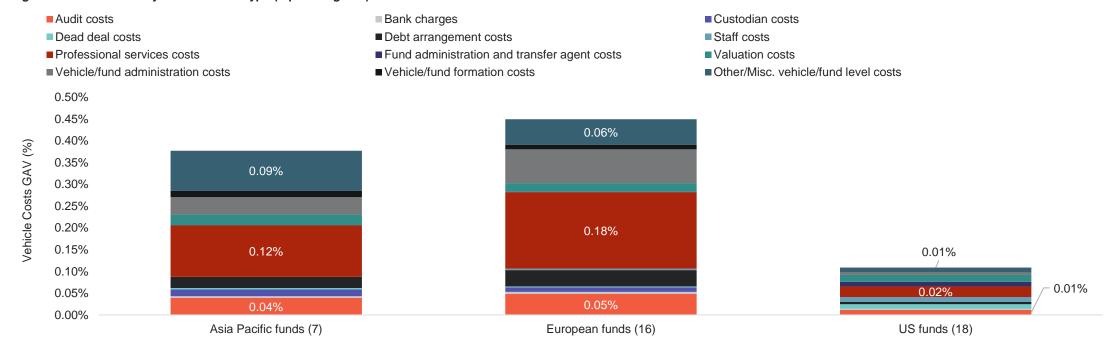
Figure 3: Fees and vehicle costs for ODCE funds (equal-weighted)





- Professional services represent the highest vehicle cost component for ODCE funds in all regions.
- Audit costs are the only other vehicle cost that account for more than 10% of GAV in all three regions.
- Other costs, such as valuation costs, show more consistency (0.02% of GAV) at an absolute level across all different regions. The size of the funds does seem to influence certain vehicle costs as well as overall vehicle costs.

Figure 4: Vehicle costs by detailed costs type (equal-weighted)*



The Journey of Establishing Global Standards and Creating Global Data Products

A Panel Discussion

Polling questions

Given the restrictions many US investors are facing (such as liquidity), do you anticipate your investor base to expand to include new or additional foreign investors?

- 1. Yes
- 2.No

Global Panelists











Introduction to LAREV





Bryan Dragoo, Managing Director, LAREV

2024

Global Context

The opportunities and challenges of understanding the Latin American commercial real estate market as a region.



CRE Universe

Gross Asset Value 2Q2024

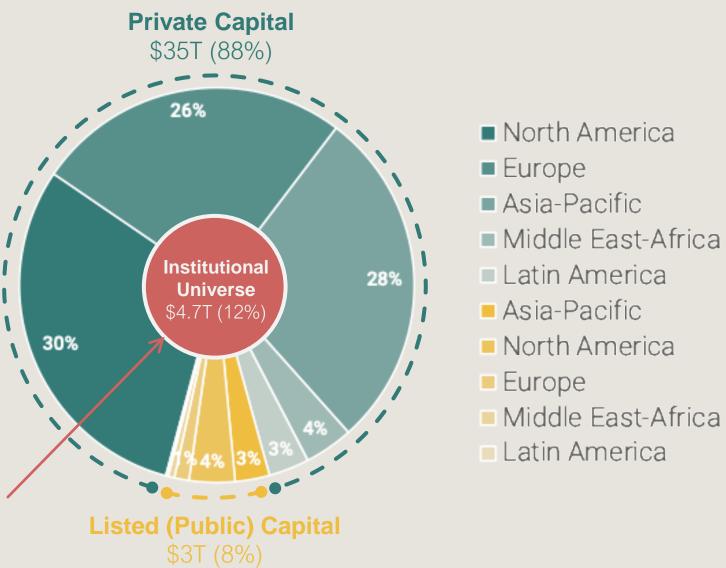
\$38 USD Trillion

(EPRA top-down estimate methodology)

Globally, 92% of commercial real estate investments are in private capital markets, via direct investments or through institutionally regulated investment vehicles.

Institutional Capital Universe

Regulated Investment Vehicles (PERE Funds & REIT equivalents)



& LAREV

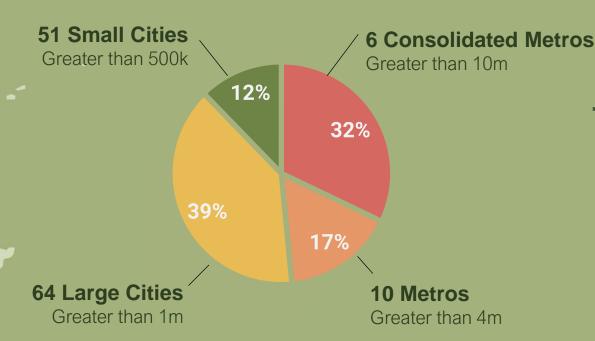
Latin America & Caribbean

Real Estate Markets

307 million

Zealand

Population in Major Urban Areas, 2025 projected



LAREV Tier 1 Focus

Mexico



Source: UN World Urbanization Prospects 2018, LAREV Classification

State of the Art Data

Regional Data for Institutional Private Real Estate Investment Vehicles

USA

NCREIF

Institutional Database

USD \$890B GAV

2Q2024

1 country

12,800 assets

300 vehicles

500+ members

Focus: Private Capital Since 1982

RF US univers

CRE US universe CRE EU \$11,483B GAV \$10

Europe



Institutional Database

USD \$503B GAV

2Q2024

27 countries

6,900 assets

578 vehicles

500 members

Focus: Private Capital Since 2003

CRE Europe universe \$10,742B GAV

Asia Pacific



Institutional Database

USD \$139B GAV

2Q2024

18 countries

na

78 vehicles

235 members

Focus: Private Capital Since 2009

CRE APAC universe \$11,508B GAV **Latin America**



Target Institutional DB

~ USD \$100B GAV

~ est 2Q2024

7 countries (tier 1)

~ 1,500 assets

T200 vehicles

T100 members

Focus: Private Capital

Since 2023

CRE LatAm universe ~ \$1,444B GAV (tier 1)

Sources: NCREIF, INREV, ANREV, LAREV reports and EPRA for global CRE universe estimates

Background

2021

A small group of Latin
American real estate
investment vehicles
comes together to
collaborate, share
information and develop
knowledge, to jointly
address the volatility and
liquidity risks caused by new
regulations for listed real
estate investment vehicles in
Colombia and shocks in the
global socio-economic
environment.

2022

The LatAm market was analyzed in contrast to global best practices. Industry leading GPs and LPs agree on a three-pillar initiative:

- 1. Strengthening the identity of real estate vehicles as an alternative asset class.
- 2. Developing sectorspecific standards.
- 3. Deepening education to promote professionalization of the real estate sector.

2023

LAREV is born as a regional organization modeled to participate in the global standardization efforts for real estate investment vehicles, via local trade charters and alongside its counterparts in the United States (NCREIF), Europe (INREV), and Asia (ANREV).

In 2023 LAREV begun to develop the first edition of its regional Standards Manual and substantially completed the classification chapter.

2024

As a joint-initiative more than 30 companies (GPs, LPs, trade associations, and professional service firms) are participating in the peer review and development of the Standards Manual.

LAREV has advanced on the analysis of regional research indexes based on globally-aligned classification and calculation methodologies, as it continues to develop the reporting, valuation and performance chapters.



Participants

Currently, over 50 participants from more than 30 investment management firms (GPs), institutional investors (LPs), trade associations, and professional real estate service firms are actively engaged in the development process of the LAREV Standards.

























































2024

Research Metrics

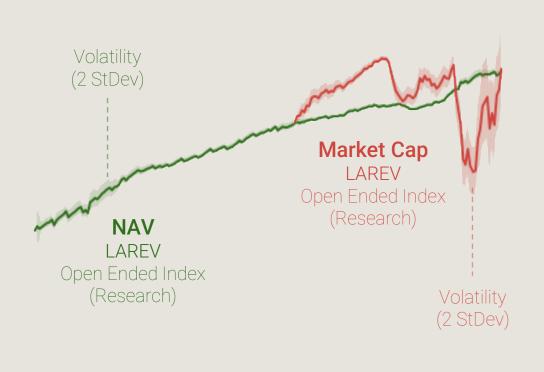
During 2024 the LAREV team began to test the regional classification system by measuring key benchmarks and indicators aligned to global alliance metrics used by NCREIF, INREV and ANREV.



A comparison of valuation methodologies | NAV vs MarketCap

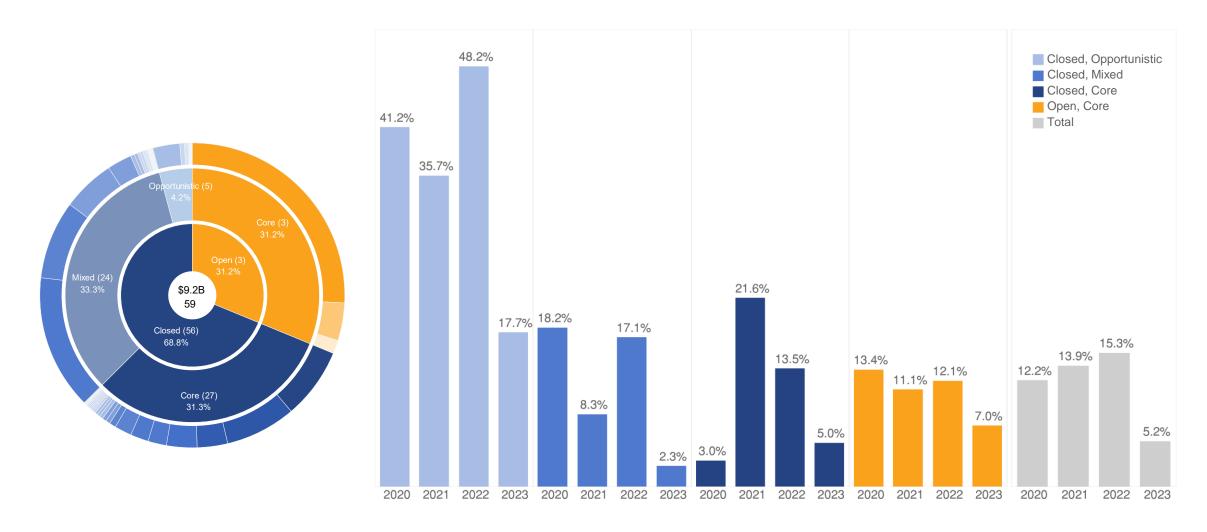
USA Colombia





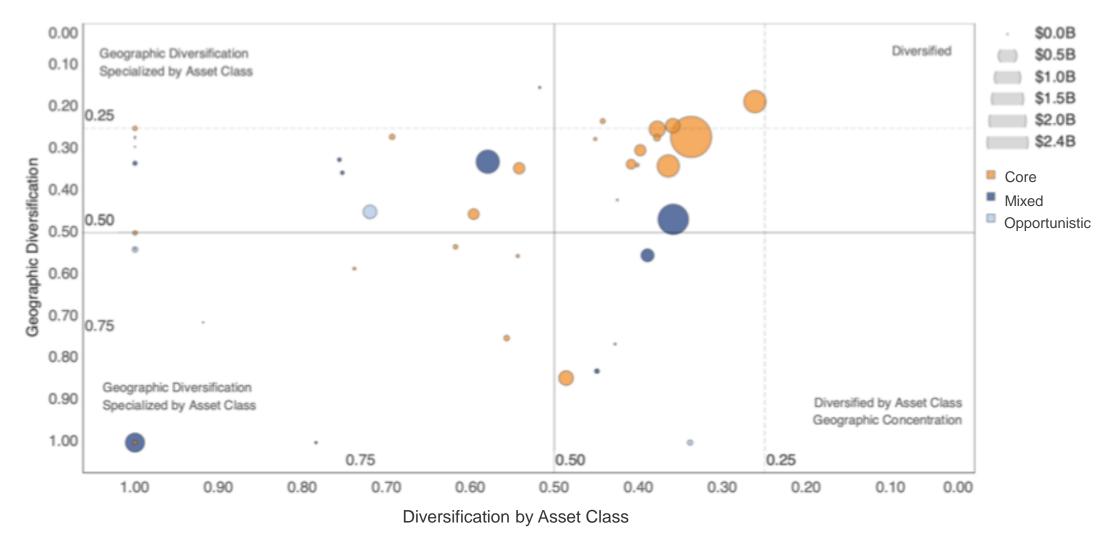


Colombia: AUM Growth By Investment Strategy



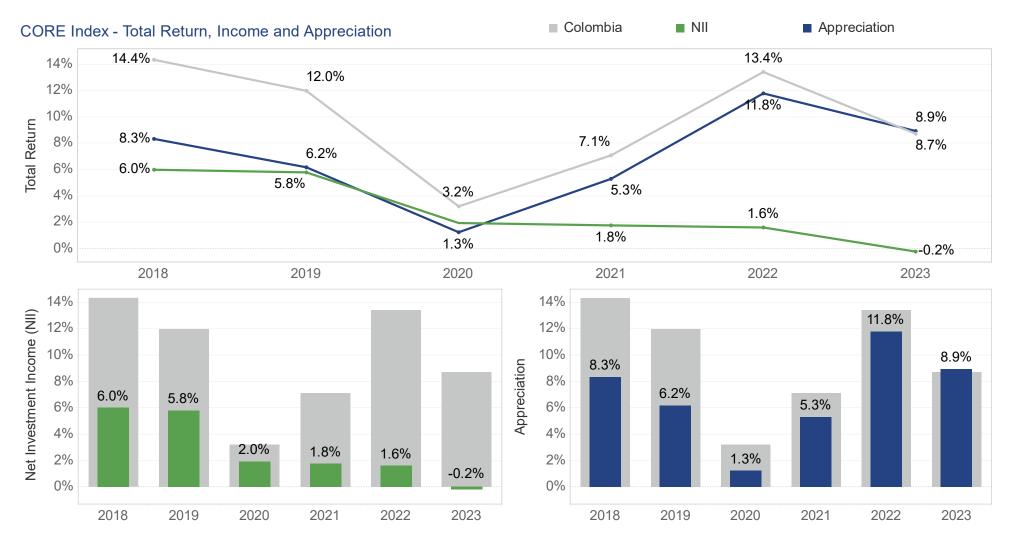


Colombia: Classified Diversification by Asset Class and Geography





Colombia Core Index | Total, Income, and Appreciation Returns



Global Panelists



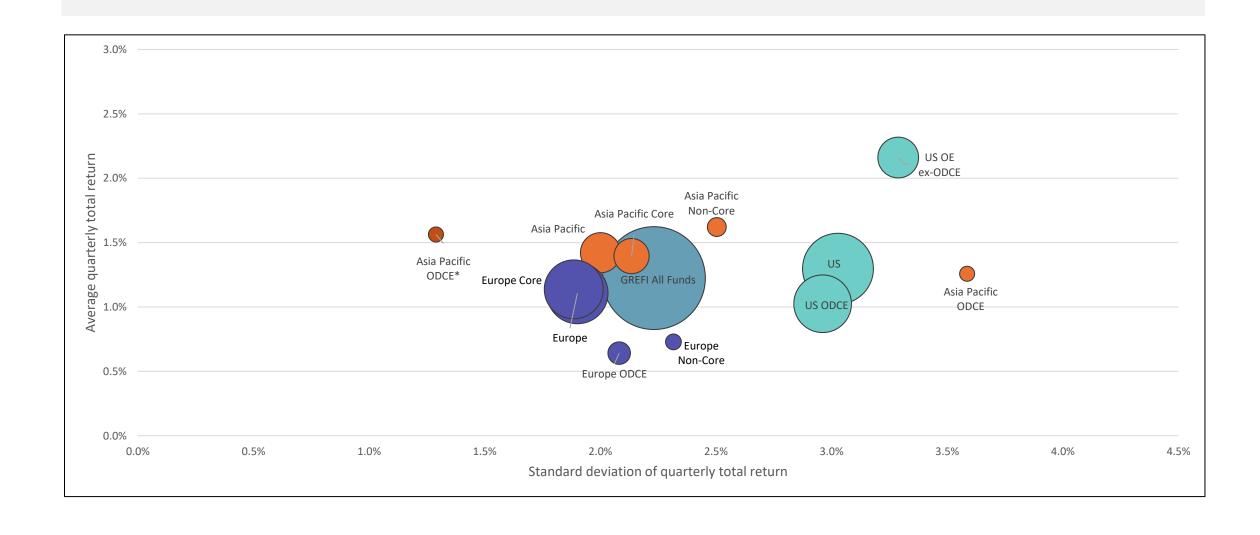








Global Risk Return Analysis



THANK YOU! CONTACT US!

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Other Global Information

APPENDIX









Global Market Insights July 2024

Anticipating recovery:
Navigating regional
complexities across markets

ANREV, INREV & NCREIF Fund Manager Survey suggests need for nuance

STRONG DECLINE IN CAPITAL RAISING

2023 has experienced a sharp decrease in capital raising activity. In 2023, investment managers surveyed raised a minimum of US\$129 billion of new capital for investment into the non-listed real estate market, down 51% year-on-year.

This is reflective of 2023 market conditions where interest rates picked which impacted directly real estate returns and the attractiveness of the asset class for institutional investors.

During the year, the capital raised for each of the

regional strategies also declined compared to the previous year, especially for North American strategies.

Capital raised from North American strategies has dropped by 57% year-on-year from US\$90.9 billion to US\$38.9 billion.

Capital raised from European strategies also declined by 54% from US\$69.3 billion to US\$31.7 billion.

Capital raised for Asia Pacific strategies have somehow declined less in percentage than other region: -36% year-on-year from US\$34.3 billion, maybe reflective of better economic conditions in the region.

Global strategies have decreased too from US\$68.3 billion to US\$36.7billion, a -46% drop. All in all, the largest drop is experienced for North American strategies which may also serve as an indicator of weakest market sentiment among regional strategies.



■ North American ■ Global ■ South American

Figure 2.1 - Capital raised for non-listed real estate 2012-2023 by regional strategy

■ Asia Pacific

European

Note: The source of the data for years 2012 to 2015 is INREV

Global real estate assets under management fall as values drop and capital raising activity dries up

The total global real estate assets under management (AUM) was at US\$4.1 trillion at the end of 2023 from 96 investment managers contributing to the survey, a 2.5% decline on the US\$4.2 trillion reported at the end of 2022, marking a second consecutive year of contraction from the US\$4.7 trillion historic peak in 2021.

The decrease is reflective of a smaller sample of fund managers who participated in the

survey as well as falling values, driven by the high-interest-rate environment and diminished capital raising activity. Capital raising in 2023 has recorded its lowest level since 2016, with only a minimum of US\$129 billion raised for investment in non-listed real estate globally, according to the ANREV/INREV/NCREIF Capital Raising Survey 2024.

The total AUM of the top 10 managers exceeded US\$2 trillion, with an average of US\$209.3 billion per manager.

The top 10 managers by size now represent 51% of the total AUM in 2023, compared to 47% in 2022 which continue to see increasingly more concentration of AUM towards the largest managers. All managers in the top 10 reported total real estate AUM of above US\$100 billion, with Blackstone reporting more than US\$520 billion of real estate value of assets under management while Brookfield and Prologis reported AUMs of above US\$200 billion.



