Real Estate Investment Trusts

Taking a Public and Private Look at Real Estate Allocations

November 2016

REITs: The Public and Private Side

Overview

- **Publicly traded REITs are unique in that they are said to operate in two markets:**
  - **Public Markets:** Exchange-traded debt and equity markets
  - **Private Markets:** Tangible, physical, underlying real estate space (aka the "space market")

- **Comparisons are often made between the Public and Private Real Estate Markets**

REITs: The Public and Private Side

Overview

- Distortions and misunderstandings are rampant when comparing the Public and Private Real Estate Markets
- So we will look at the “Private Side,” then turn to the “Public Side” of real estate investing

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Some key questions about the underlying real estate...

- What is the size of the US institutional-grade commercial real estate market?
- How do capital market conditions influence property valuations?
- How do investment constraints/objectives influence investors’ risk-return preferences?
- Property markets —what are the different risk profiles?
- Property styles —what are the different risk profiles?

US Commercial Real Estate

What is the size of the investment universe?

- **US institutional-grade commercial real estate**
  - $6.8+ trillion total property value
  - 220,000+ unique properties
  - Properties vary by risk/return profiles (market and style)

- **Property valuations are driven by conditions in the**
  - Capital markets
  - Space markets

Source: NCREIF, Prudential Real Estate Investors, SNL Real Estate

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How do capital market conditions influence property valuations?

- **Real estate competes for funds in the capital markets with other asset classes (e.g., stocks, bonds, etc.)**

- **Real estate allocations depend on investors**
  - Constraints: liquidity, time horizon, legal/regulatory, taxes, and unique needs
  - Objectives: return and risk tolerance

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How do investment constraints/objectives influence preferences?

- **Investors constraints and objectives help to target an appropriate**
  - Property market: Gateway, primary, secondary
  - Property style: Core, core plus, value add, opportunistic

- **Because, given the constraints and objectives, certain property markets and styles are more suitable than others**

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Property markets —what are the different risk profiles?

- **A <u>property market</u> is typically referred to as a gateway, primary, secondary, or tertiary market**
- **This classification is based on risk factors such as**
  - Total market value
  - Liquidity (e.g., transaction volume; lender participation)
  - Entry barriers (e.g., investment size, supply constraints)

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Property markets —what are the different risk profiles?

- **Gateway Markets**
  - Large, supply constrained institutional-grade markets
  - Allow investors to allocate a large amount of capital
  - Provide the best liquidity
  - Investors generally have lower risk/return objectives
  - Examples: New York, Washington DC, Los Angeles, Chicago, San Francisco, Boston

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Property markets —what are the different risk profiles?

- **Primary and secondary markets**
  - Still relatively large, institutional-grade markets
  - Often good liquidity
  - Investors generally have higher risk/return objectives
  - Examples: Atlanta, Austin, Dallas, Houston, Seattle
- **Tertiary markets**
  - Typically are not institutional-grade markets

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Property styles —what are the different risk profiles?

- **Knowing the type of property market (gateway, primary, secondary, tertiary) helps investors understand the “property style”**

- **Property styles help investors summarize the property’s risk/return profile**

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Property styles —what are the different risk profiles?

- **Property styles consist of**
  - *Core:* low expected risk/return
  - *Core Plus:* low-to-moderate expected risk/return
  - *Value Added:* moderate-to-high expected risk/return
  - *Opportunistic:* high expected risk/return

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Property styles —what are the different risk profiles?

- **Property styles are defined by key risk factors**
  - *Property market:* Gateway markets are less risky
  - *Location:* Prime locations in a market are less risky
  - *Property type/characteristics:* Hotels have riskier leases
  - *Property lifecycle:* Existing is less risky than development
  - *Occupancy:* High occupancy is less risky

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Property styles —what are the different risk profiles?

- **Key risk factors continued…**
  - *Tenancy:* High-quality, diversified tenant base is less risky
  - *Leasing:* Low near-term/total lease rollover is less risky
  - *Leverage:* Lower leverage is less risky
  - *Deal structure:* Strong incentive alignment is less risky

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Property styles —what are the different risk profiles?

- **These key risk factors influence investors return expectations**
- **Investors with a lower risk tolerance expect a lower return (core and core plus properties)**
- **Investors with a higher risk tolerance expect a higher return (value added and opportunistic properties)**

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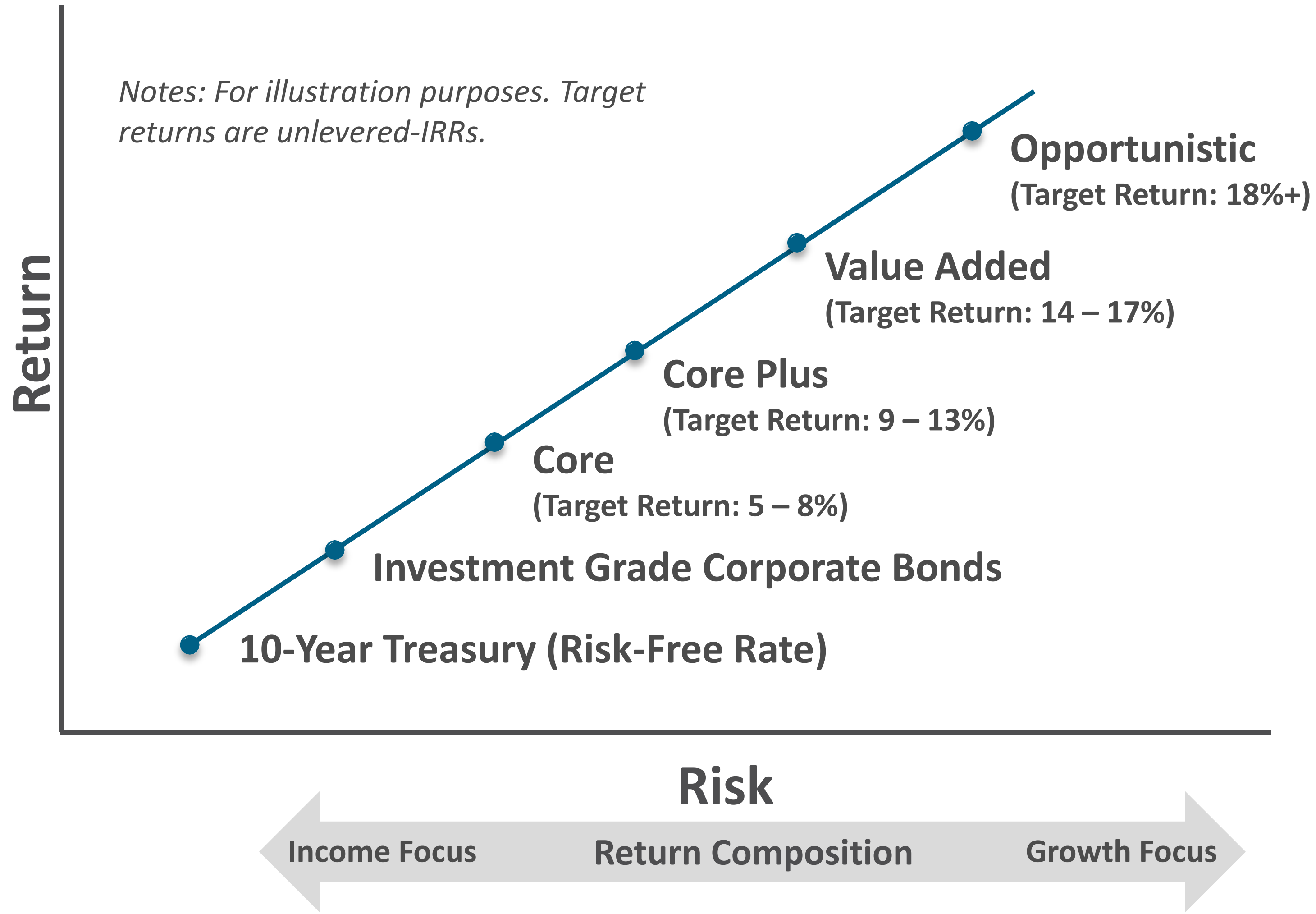
Property styles —what are the different risk profiles?



Comparing Private and Public Real Estate

A side-by-side comparison

		Private	Public
Characteristics	Underlying investment	Investment in real estate assets through direct whole (or partial) ownership, pooled investment vehicles, etc.	Investment in a portfolio of institutional quality assets via a public-traded REIT (typically NYSE or NASDAQ listed)
	Management	Investment manager allocates funds and manages property portfolio	Investment manager allocates funds and manages property portfolio
	Management Fees	Higher	Lower
	Transparency	Limited portfolio transparency	Higher (e.g., transparency consistent with requirements for listed securities)
	Investor time and resource requirments	Variable depending on investment vehicle	Low
Diversification	Geography and sector	Limited	Broad
	Product type	Limited	Highly customizable
	Product liquidity	Illiquid - subject to purchase and sale restrictions and transaction minimums	Highly liquid
Liquidity	Access to Capital	Variable	High
Returns	Source of returns	Pooled rents and partnership share appreciation	Dividends (income) and Growth (capital gains)
	Return characteristics	Idiosyncratic - highly subject to property market, specific location, property type, manager skill, and other risk factors	Generally systematic (i.e. index based) and in-line with direct real estate returns over the intermediate to longer-term
	Valuations	Periodic pricing. Pooled appraisals, capitalization rates, replacement cost	Instantaneous pricing – typically in large liquid markets with many participants

Comparing Private and Public Real Estate

Do the Public and Private Real Estate Markets correspond?

- Due to the low correlations between Public (e.g., NAREIT Index) and Private (e.g., NCREIF Index) Real Estate Markets, many investors jump to the conclusion that REITs do not necessarily reflect the underlying real estate… is this true?
- Not really...In the short-run, public and private real estate valuations can differ drastically (e.g., there is a low correlation in asset prices)

Comparing Private and Public Real Estate

Do the Public and Private Real Estate Markets correspond?

- However, the low correlation is linked to the infrequency of the appraisal-based property valuations (e.g., quarterly or annual appraisal updates) used in the Private Markets (whereas Public Markets have instantaneous pricing)
- Private Market appraisals typically do not reflect current market conditions because of this "lag effect"
- Thus, over the longer term, the "lag effect" is smoothened and the variability between Private and Public Real Estate Valuations converge

Comparing Private and Public Real Estate

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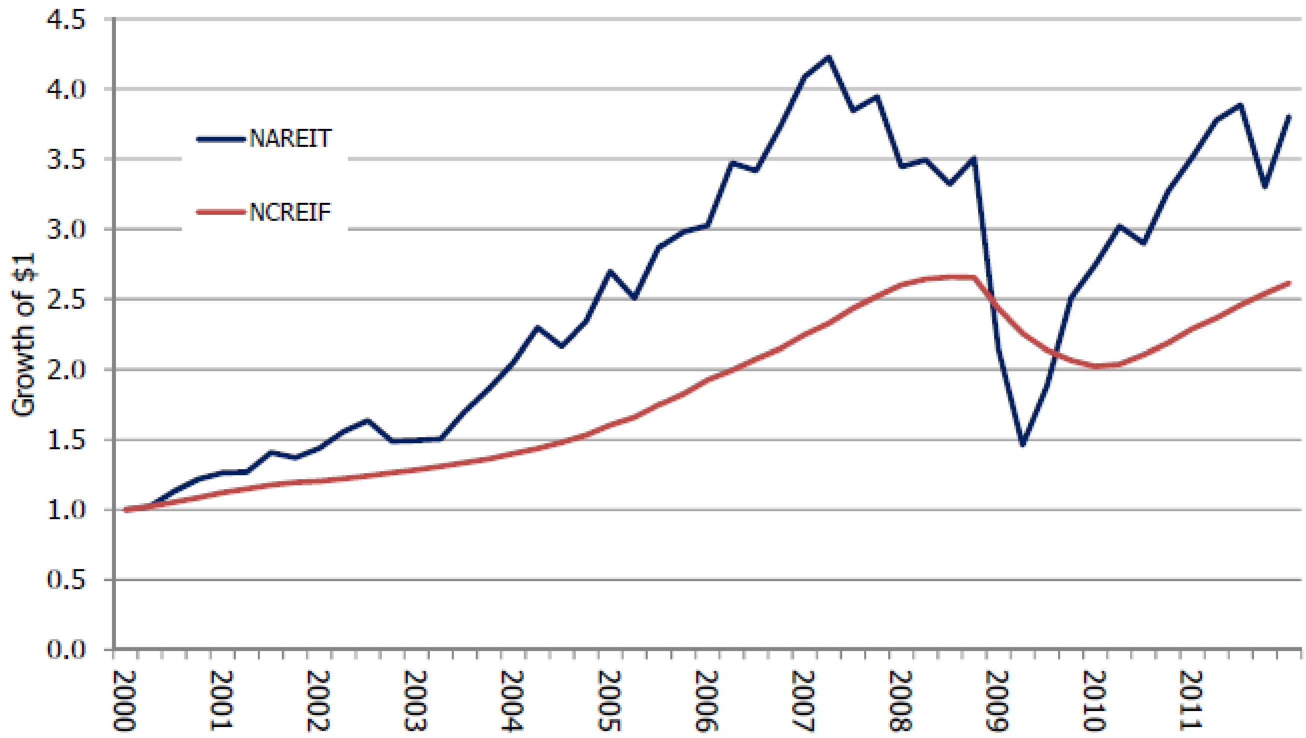
Return Characteristics

Comparing Private and Public Real Estate

Growth of $1 investment Public (NAREIT) vs Private (NCREIF) Market from 2001Q1 to 2011Q4



Source: D. Keim, Wharton School, 2012

Return Characteristics

Comparing Private and Public Real Estate

	1 Year	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	30 Yrs
Public Real Estate	18.1%	17.8%	5.5%	11.6%	8.8%	11.1%	11.8%
Private Real Estate	10.8%	14.4%	-1.1%	6.7%	8.1%	8.1%	7.1%
Outperformance in bps	726	348	657	493	70	301	475

As of December 31, 2012
Source: NAREIT, NCREIF

- Public Real Estate is represented by the FTSE EPRA NAREIT Equity REIT Index.
- Private Real Estate is represented by the NCREIF Fund Index-Open-End Diversified Core Index

Concluding Remarks

- Over intermediate to longer-term horizons, the Public and Private Real Estate Markets tend to converge
- Public Real Estate (REITs) has some notable benefits:
  - **Total returns:** The Public often outperforms the Private (evidenced by the prior slide)
  - **Liquidity:** Public Real Estate has liquidity; Private Real Estate is typically illiquid (e.g., higher transaction costs and longer to liquidate)
  - **Diversification:** Public Real Estate can provide greater diversification (e.g., geographic and property type diversification)
  - **Investment size:** Public Real Estate allows investors to tailor their exposure with a much smaller investment size

Concluding Remarks

- **Is there a place for Private Real Estate investing?**

- **Of course there is...it depends on the:**
  - Investor’s objectives and constraints
  - Current market conditions
  - And other unique circumstances