

NCREIF Fall Conference 2011

Asset Allocation in Real Estate

**St. Pete Beach, Florida
November 2011**

The Townsend Group

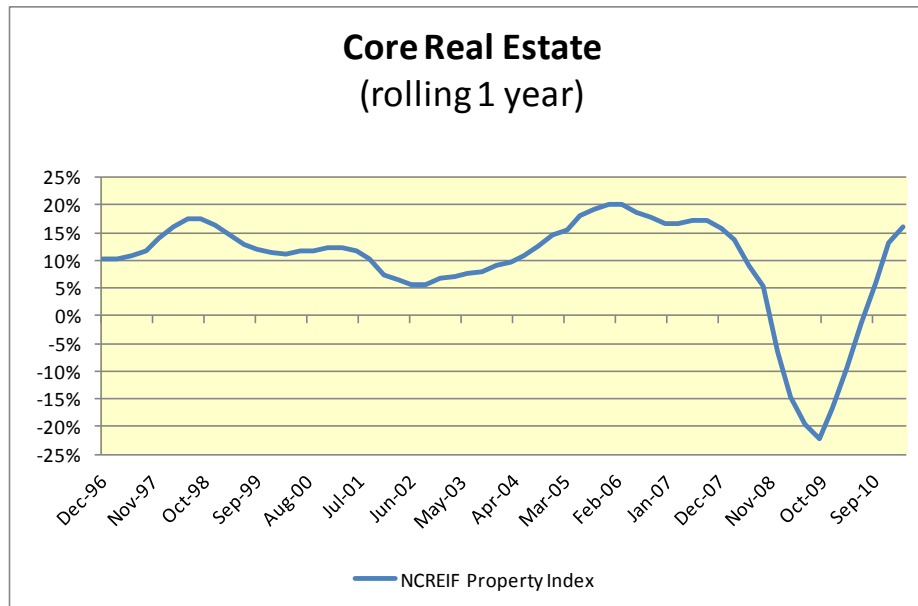
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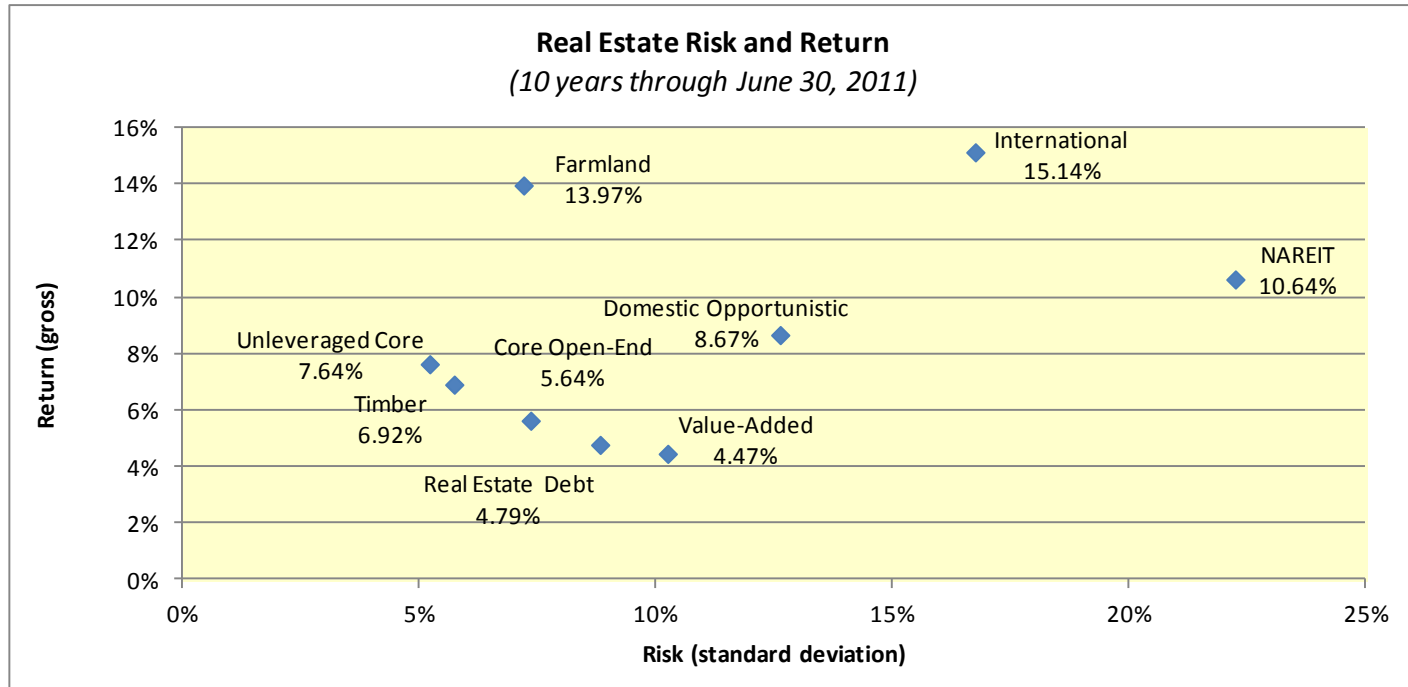
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Why try asset allocation within real estate?

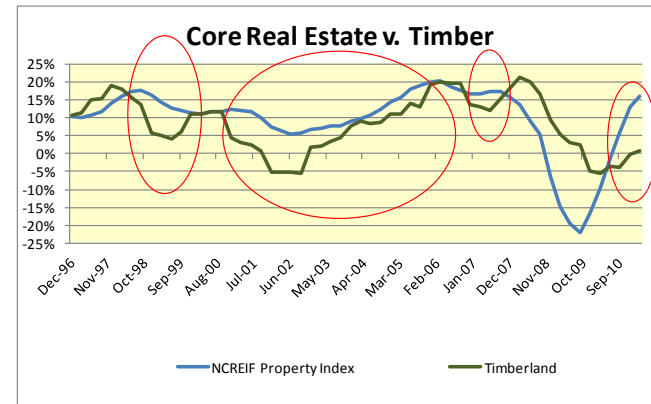
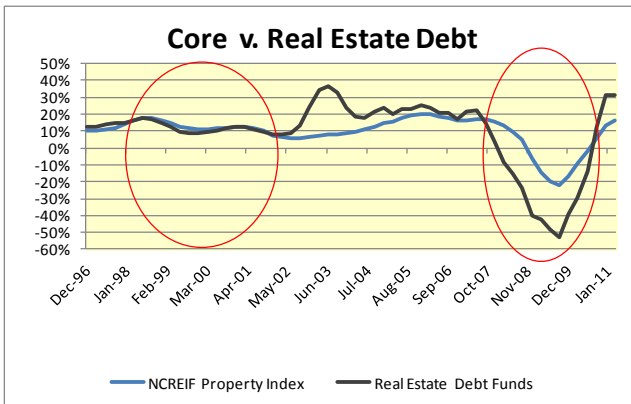
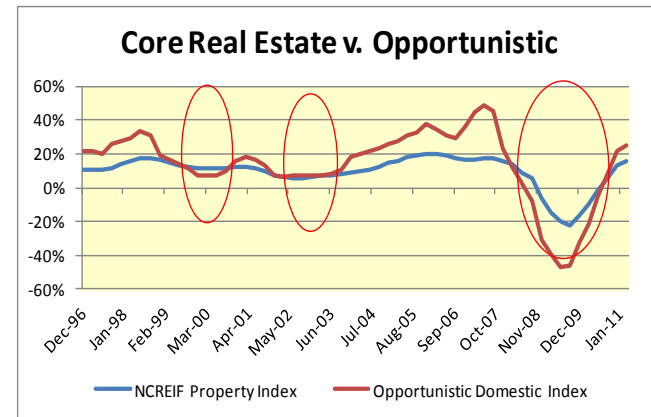
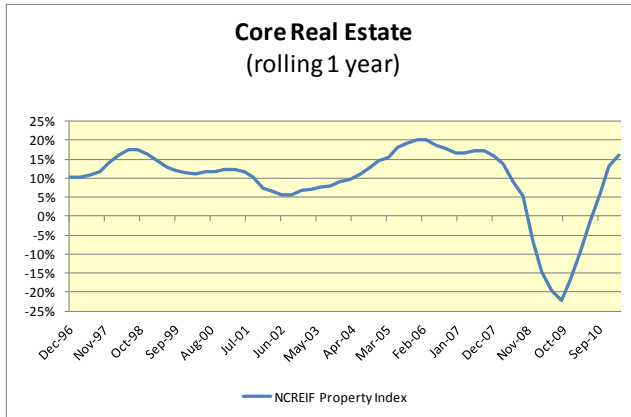
- “Real estate” is richly diverse
- Isolate desired return characteristics
- Tailor programs to achieving individual objectives
- Manage risk and downside potential



Many real estate options—are they worth the risk?



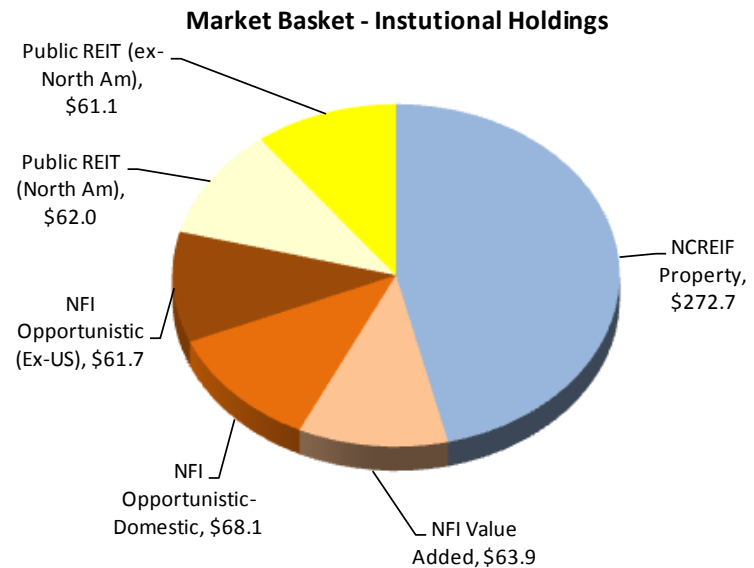
Many real estate options—are they worth the risk?



Traditional asset allocation considerations

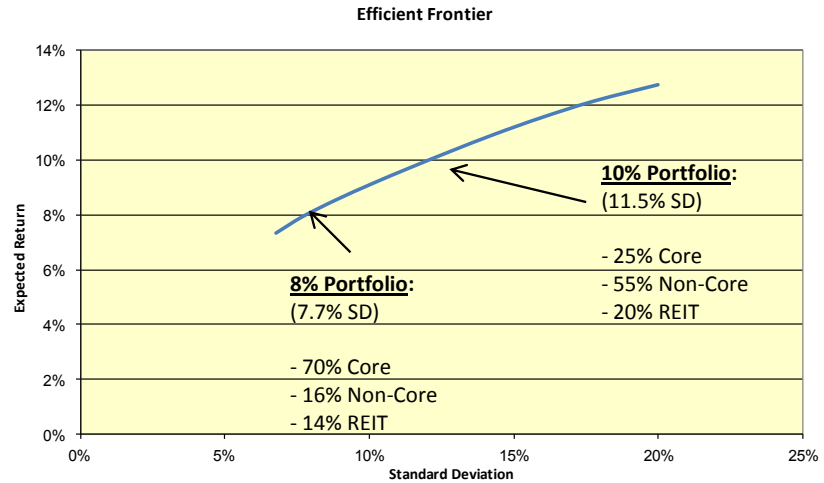
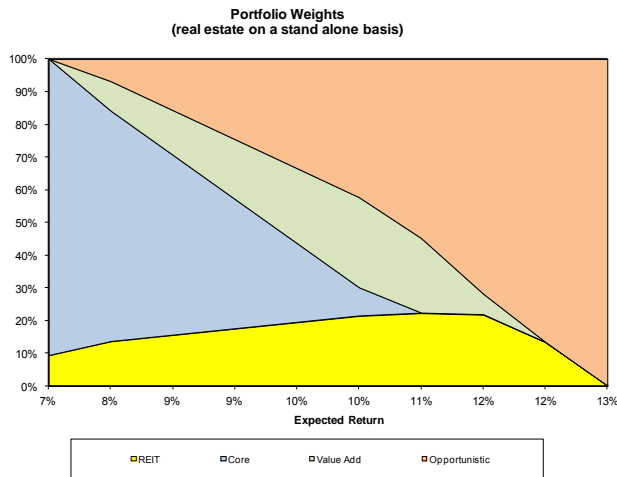
- What is the market basket of opportunities?
- What are peers doing?
- Portfolio optimizer

| Benchmarks: 74 Townsend Clients | | # of clients |
|--|--|--------------|
| NCREIF Property or Open End Funds (ODCE): | | 23 |
| NCREIF Property or ODCE + premium (-25 to 250 bps) | | 34 |
| Other (absolute; CPI; stylized) | | 17 |



Optimal portfolio mix-traditional real estate categories

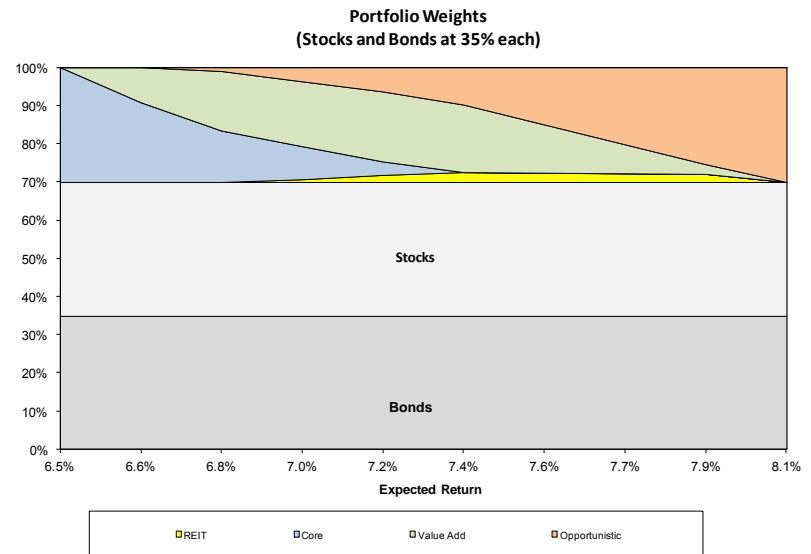
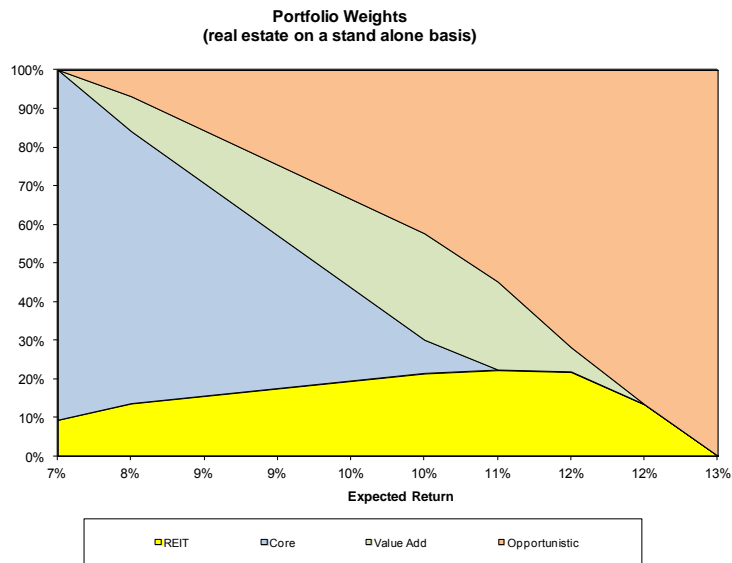
- Optimal portfolios fit investor appetite for risk/return
- 25-75% Core foundation
- REITs 10-20%



| Expected Return | Standard Deviation | REIT | Core | Value Add | Opportunistic |
|-----------------|--------------------|--------|--------|-----------|---------------|
| 7.34% | 6.76% | 9.31% | 90.69% | 0.00% | 0.00% |
| 7.94% | 7.68% | 13.60% | 70.49% | 9.05% | 6.85% |
| 8.54% | 8.82% | 15.56% | 55.02% | 13.68% | 15.73% |
| 9.15% | 10.09% | 17.52% | 39.55% | 18.32% | 24.62% |
| 9.75% | 11.45% | 19.48% | 24.07% | 22.95% | 33.50% |
| 10.35% | 12.87% | 21.44% | 8.60% | 27.59% | 42.38% |
| 10.95% | 14.34% | 22.31% | 0.00% | 22.81% | 54.88% |
| 11.55% | 15.95% | 21.82% | 0.00% | 6.27% | 71.91% |
| 12.15% | 17.76% | 13.35% | 0.00% | 0.00% | 86.65% |

How do REITs fit in a real estate portfolio?

- Real estate “stand alone:” public REITs balance private real estate.
- Real estate within “Total Plan:” public REIT allocations cut in half (0-8%)



Sectors continue to multiply

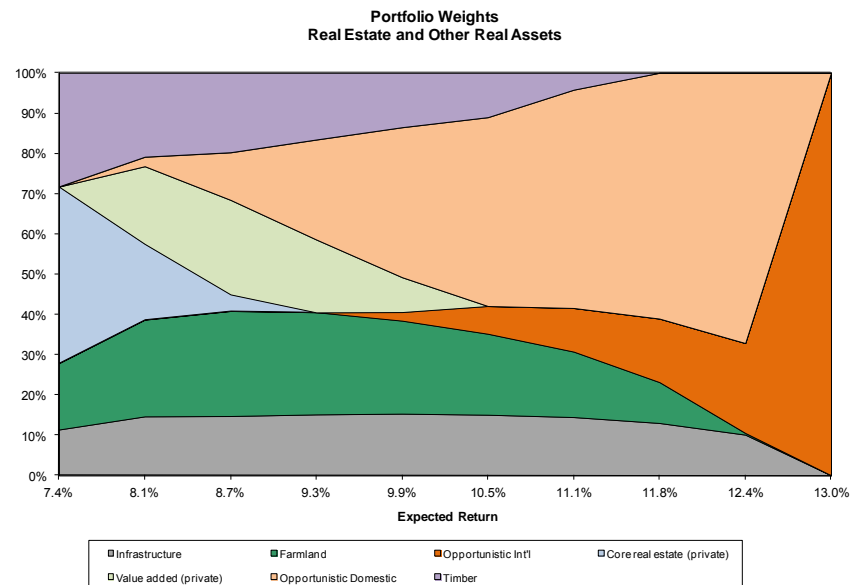
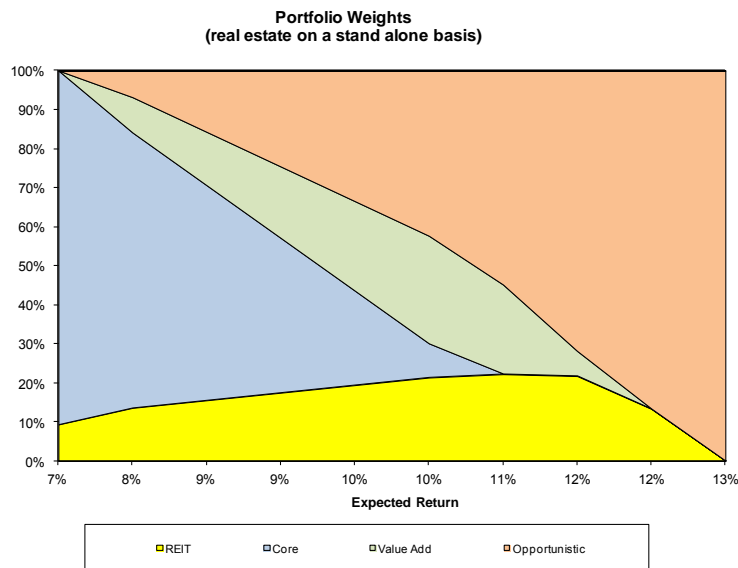
- Diverse real estate sectors:
 - Real estate debt
 - Land
 - Specialized property types (senior housing, public storage, etc.)

- Other “Real Assets:”
 - Timber
 - Agriculture
 - Infrastructure
 - Energy
 - Commodities

- International

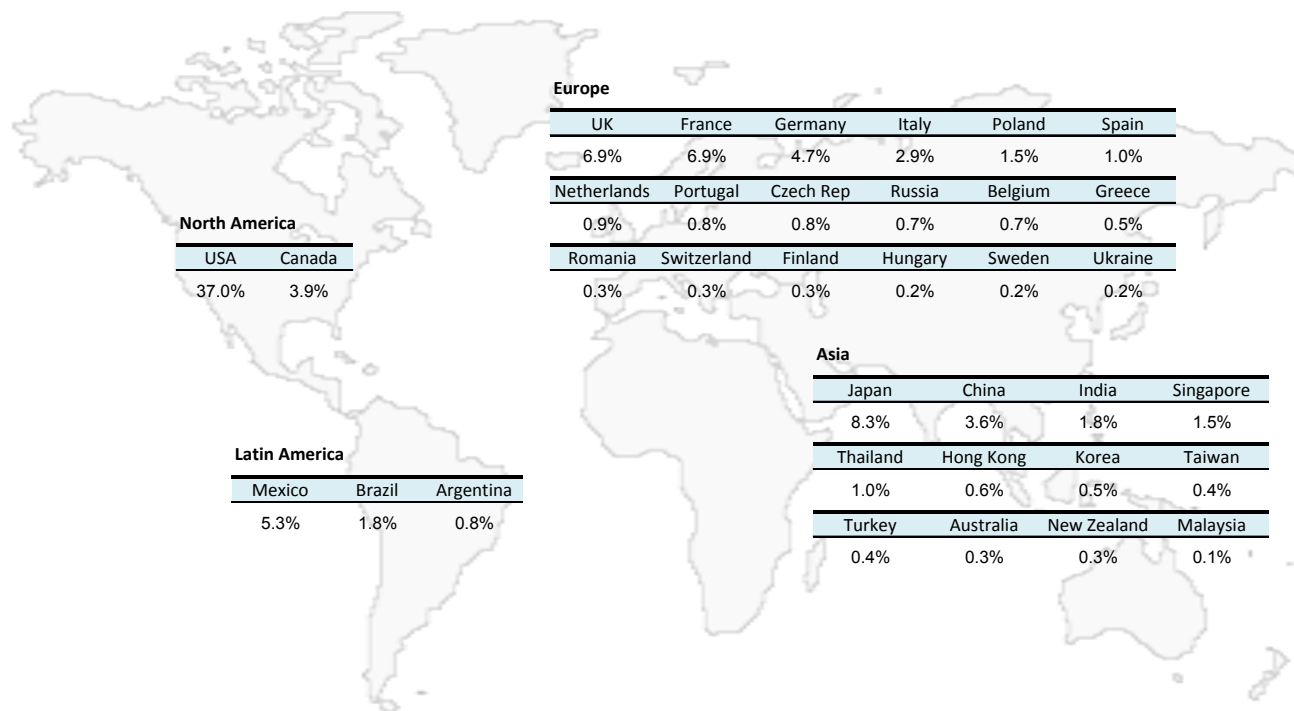
Incorporation of Other Real Assets

- Private markets continue to diversify into less correlated sectors
- Core real estate and REITs diminished
- Potential for enhanced returns increased



How global should investors be in a \$12 trillion asset class?

Investable Universe in Commercial Real Estate



* Based on Invested capital reported by 160 Funds to The Townsend Group