

Confidential

Real Estate Capital Markets

The University of Chicago Booth School of Business

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Frank E. Schmitz

Managing Principal

Park Hill Real Estate Group

Park Hill Real Estate
Group LLC

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I. Capital Flows and Fundraising

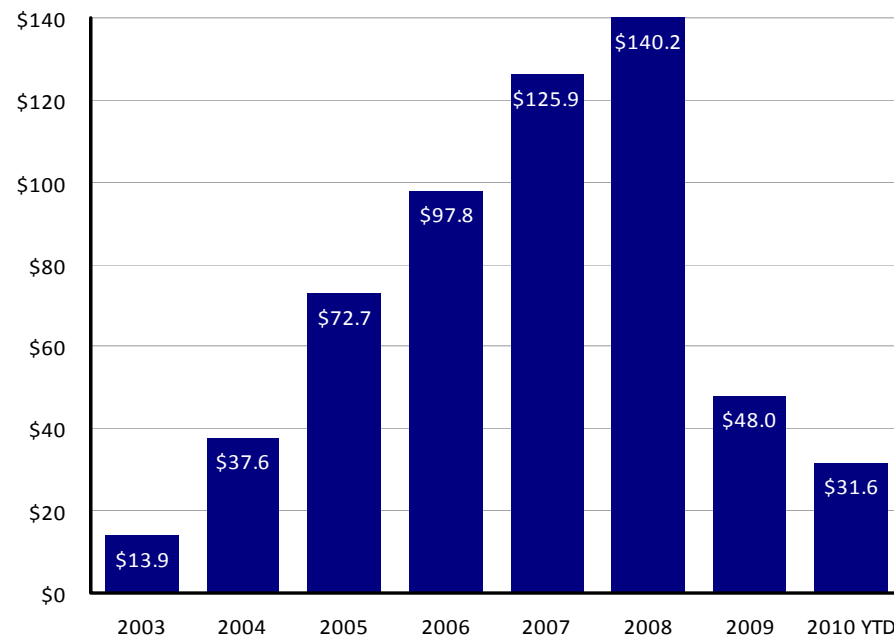
I. Capital Flows and Fundraising

Real Estate Private Equity Capital Raising Environment

- After falling off a cliff in 2009, capital flows to real estate private equity funds remain relatively muted but are showing signs of improvement
- The proportion of capital that has actually been closed versus targeted this year is only half that of 2008

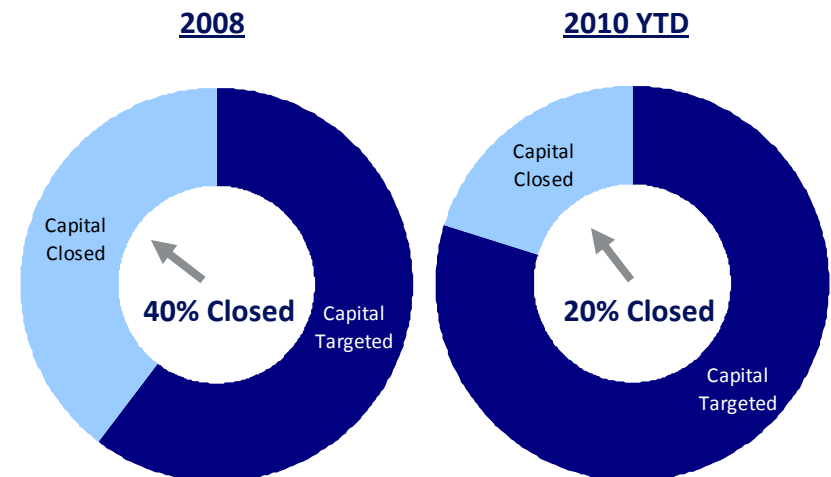
Amount raised by real estate private equity funds

Annual figures, \$ in billions



Proportion of Capital Closed vs. Targeted

Percentages, Capital Targeted = 100%

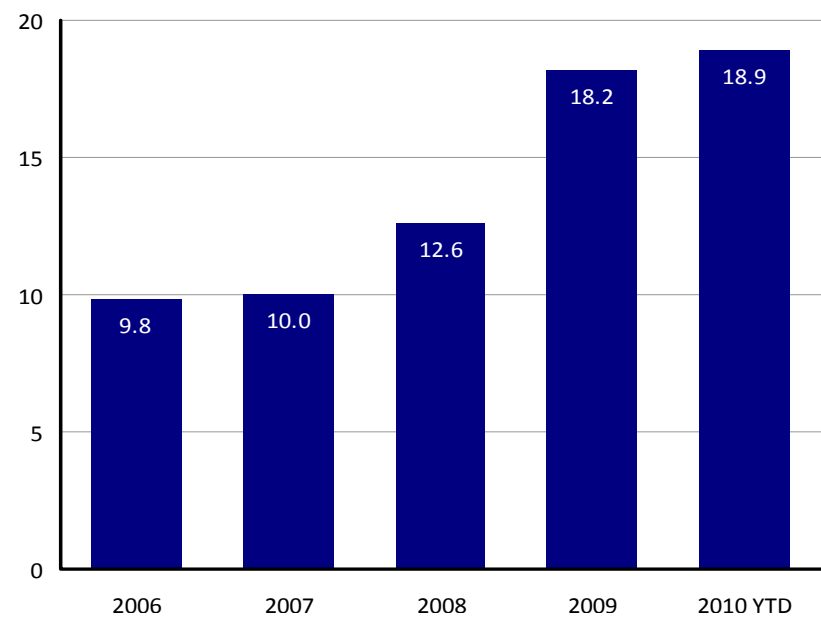


Source: Preqin, November 2010.

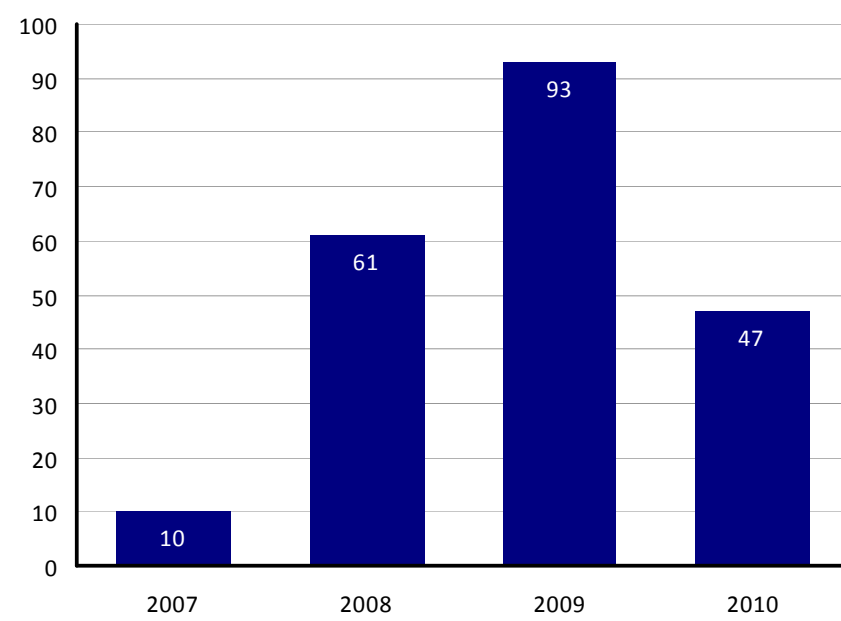
I. Capital Flows and Fundraising
Competitive Landscape

- On average, real estate private equity funds closed in 2010 spent more than 1.5 years in the market – twice as long as in 2006
- Many fund managers delayed or abandoned fundraising efforts altogether over the past few years

Average duration to achieve a final close
Number of months spent on the road



Number of funds abandoned or placed on hold
Annual figures



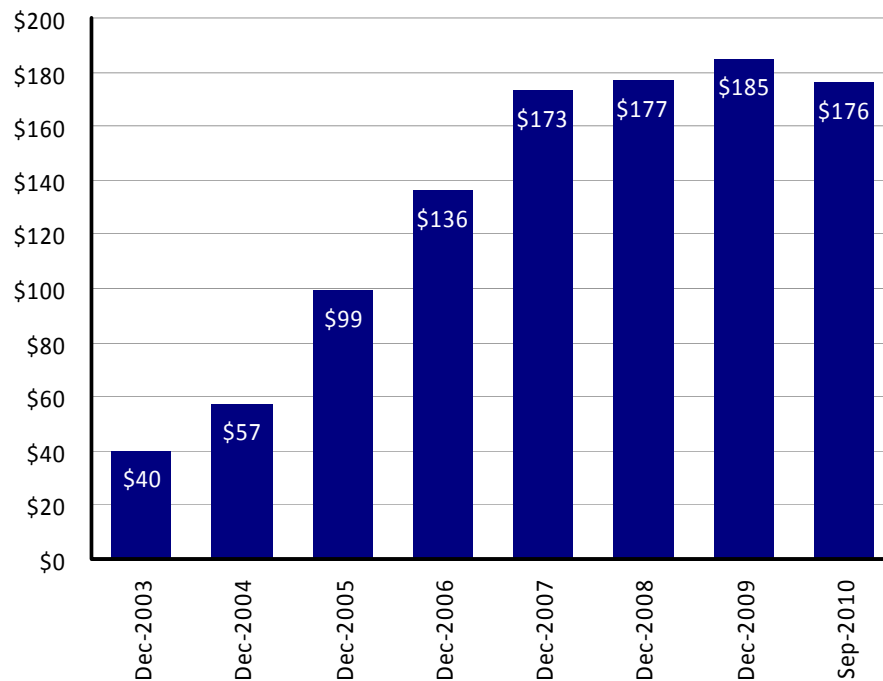
Source: Preqin, November 2010.

I. Capital Flows and Fundraising

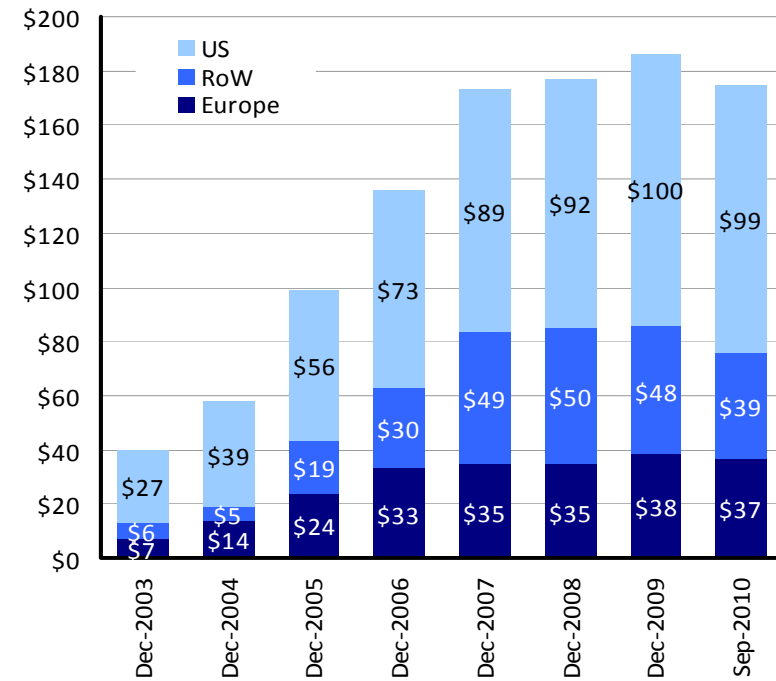
Dry Powder Available

- Despite the sluggish and competitive fundraising environment, real estate private equity funds are sitting on a substantial amount of uncalled capital
- Most GPs have been on the investing sidelines over the past 24 months

Dry powder
\$ in billions



Dry powder by region
\$ in billions

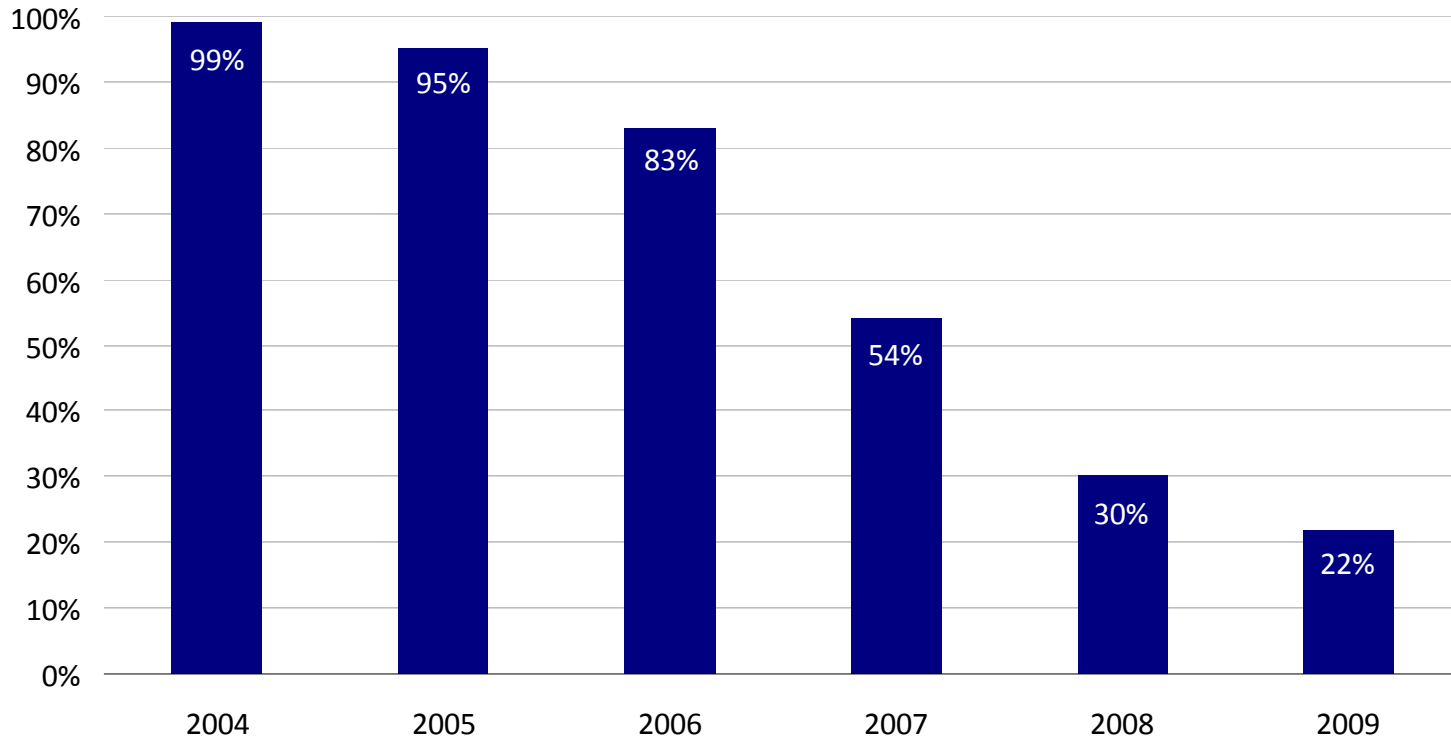


Source: Preqin, September 2010.

Dry Powder Available (cont.)

- Vintage 2006 and 2007 funds are now facing the end of their investment periods and confronting the potential of returning a substantial amount of uncalled capital back to investors
- Vintage 2009 funds called up just one-fifth of commitments during their first year

Proportion of Capital Called Up by Vintage Year



Source: Preqin, May 2010.

- Core
- US debt / distressed
- Emerging markets: particularly Brazil
- What are the key characteristics of successful fund raises?
 - Certainty of first close (“chicken-or-egg” issue solved)
 - Strong relative track record (e.g., positive returns in most recent vintage)
 - Actual executed deals in current environment (action not theory)

II. Core Capital Flows

II. Core Capital Flows

Back to the Future: Core is King!

- Where were you in the late 1980s?
- Queues: a reversal of fortune
- Significant shift in portfolio allocations towards core from US public pension funds
- A reaction to recent industry performance and a desire for:
 - Less risk
 - Lower leverage
 - Greater focus on income
 - More control
 - Improved liquidity
- Are we inflating the next bubble?

Increase in Core Allocations

- 86% of investors cited as having a preference for core vehicles
- Out of \$7.4 billion of publicly announced pension fund commitments in the last 12 months, \$5.4 billion (73%) was directed towards core / core-plus RE investments
 - 20% increase from the previous year

Major Public Investor	Allocation	Core Real Estate Fund
Arizona State Retirement System	\$150 million	AEW Core Open-End Fund
Employees' Retirement System of Texas	\$100 million	LaSalle Property Fund
New York State Teachers Retirement System	\$50 million \$50 million \$150 million \$125 million	Cornerstone Patriot Fund PRISA III PRISA II PRISA I
Ohio Police & Fire Pension Fund	\$294 million \$100 million	Invesco Core Real Estate JP Morgan Strategic Property Fund
Pennsylvania State Employees' Retirement System	\$100 million	Heitman America Real Estate Trust
San Diego County Employees	\$200 million \$50 million \$35 million	JPMorgan Strategic Property Fund PRISA III PRISA II
State of Florida	\$150 million \$145 million	PRISA III PRISA II
Texas Teachers Retirement System	\$400 million \$200 million \$200 million	JPMorgan Strategic Property Fund AEW Core Open-End Fund Heitman America Real Estate Trust

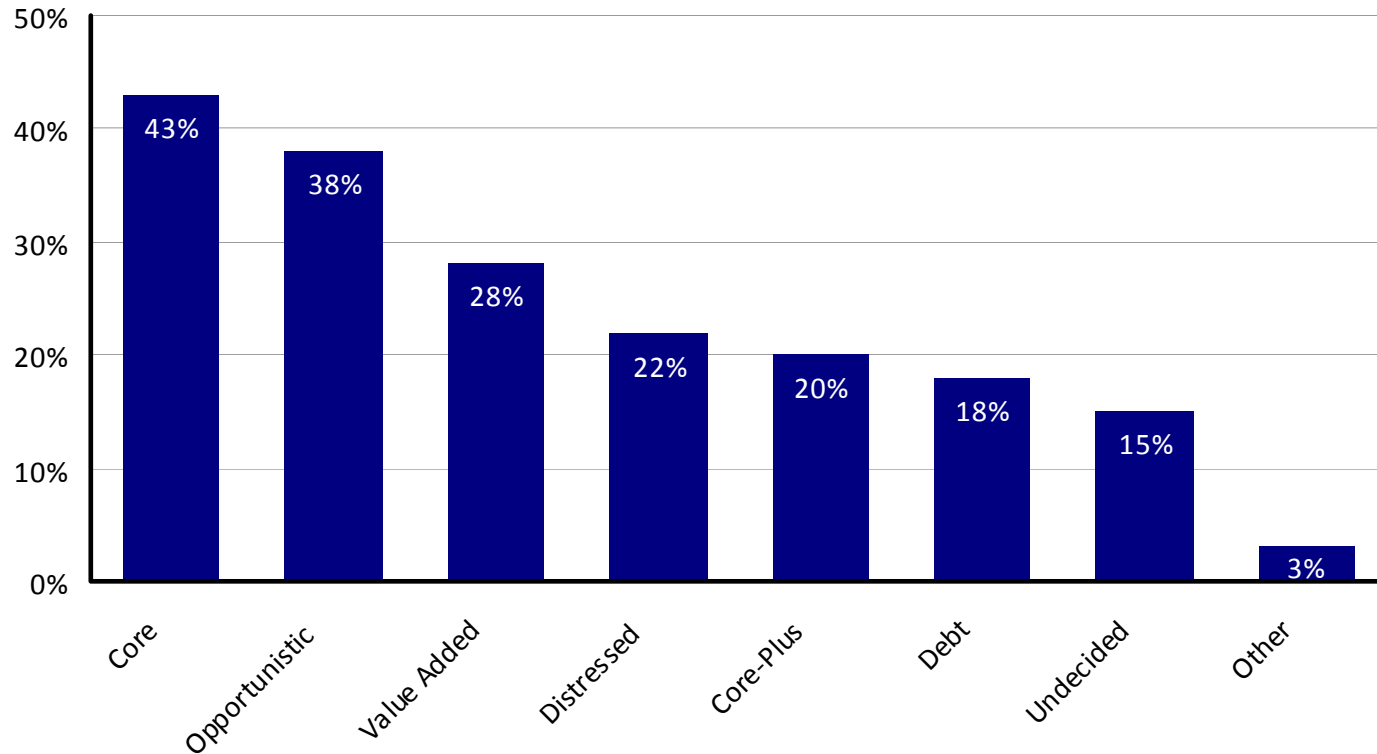
Source: Preqin, IREN.

Increased Appetite for Core Real Estate

- Core and core-plus strategies are continuing to find favor with the LP universe
- 43% of investors committing to real estate over the next year will have a focus towards core strategies

Real Estate Private Equity Strategy Focus of Those Investing in Next 12 Months

Based on proportion of investors



Source: Preqin, September 2010.

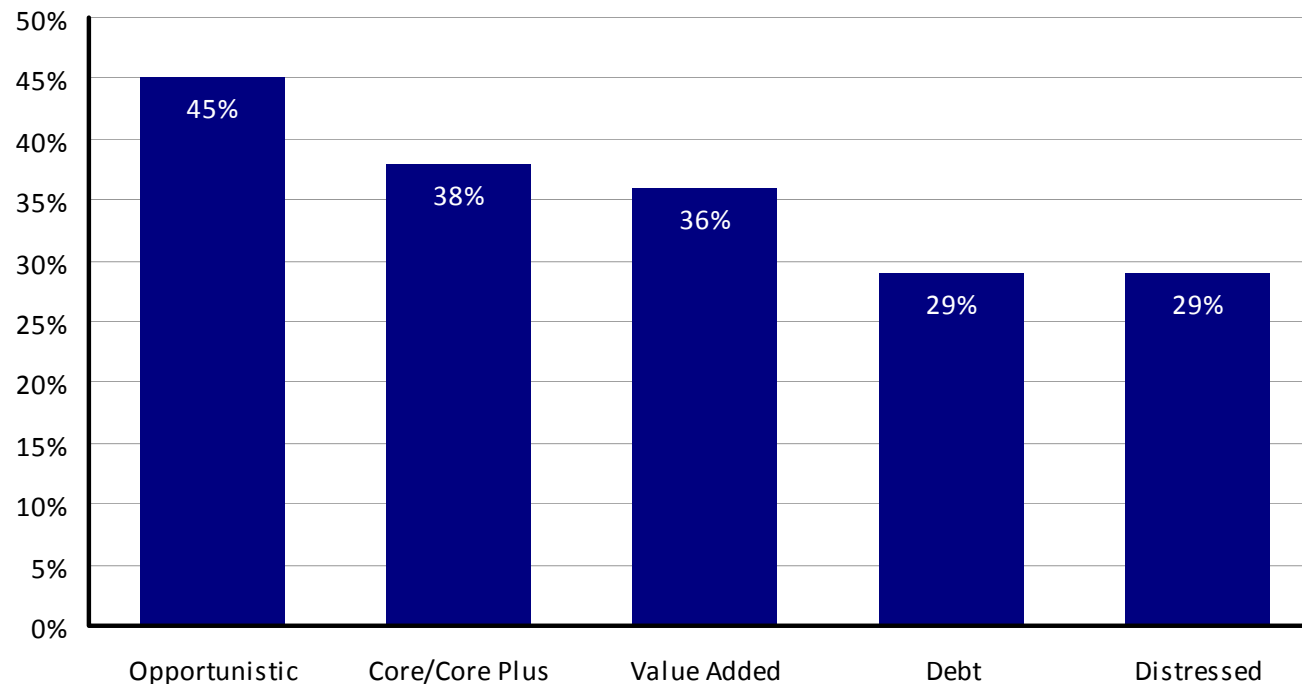
II. Core Capital Flows

GPs Shifting towards Core-Oriented Strategies

- Core/core-plus strategies comprise nearly 40% of 2010 offerings
- Some traditionally-opportunistic-focused fund managers are now carving allocations or shifting their risk profile towards core strategies (e.g., Goldman Sachs/Whitehall)

Strategies Employed by Funds Commencing Fundraising in 2010

Based on proportion of funds



Source: Preqin, September 2010. Above chart reflect the fact that funds may utilize a combination of two or more strategies.

III. “Size Matters”

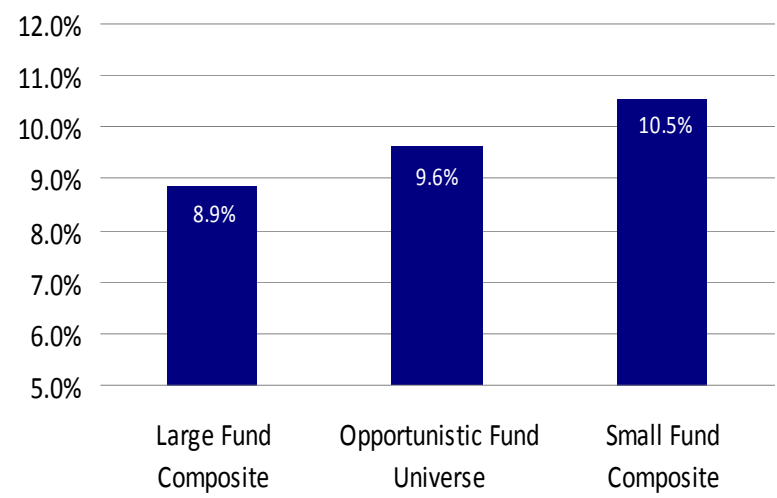
III. Size Matters

Small, Stand Alone Managers Outperform

- Research shows that historically:
 - 1) Small funds have outperformed large funds; and
 - 2) Stand alone managers have outperformed captive managers*

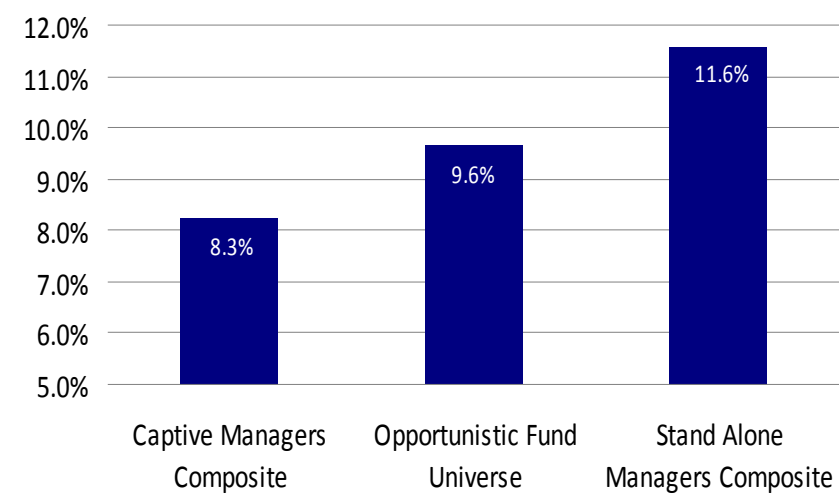
Large vs. Small Funds

Ten-Year Return



Captive vs. Stand Alone Managers

Ten-Year Return



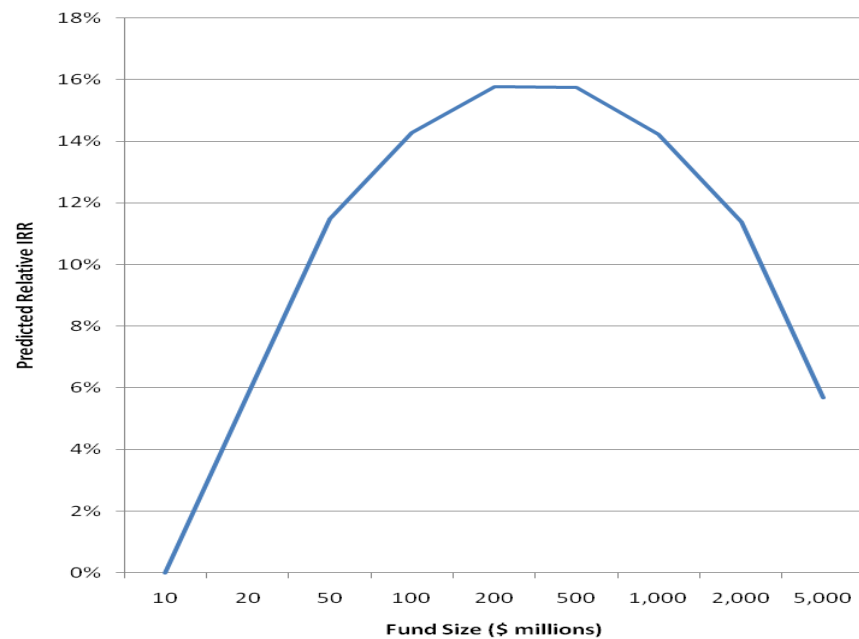
Source: Townsend, September 2010.

* "Captive managers" are real estate managers that are part of a larger institution, such as an investment bank.

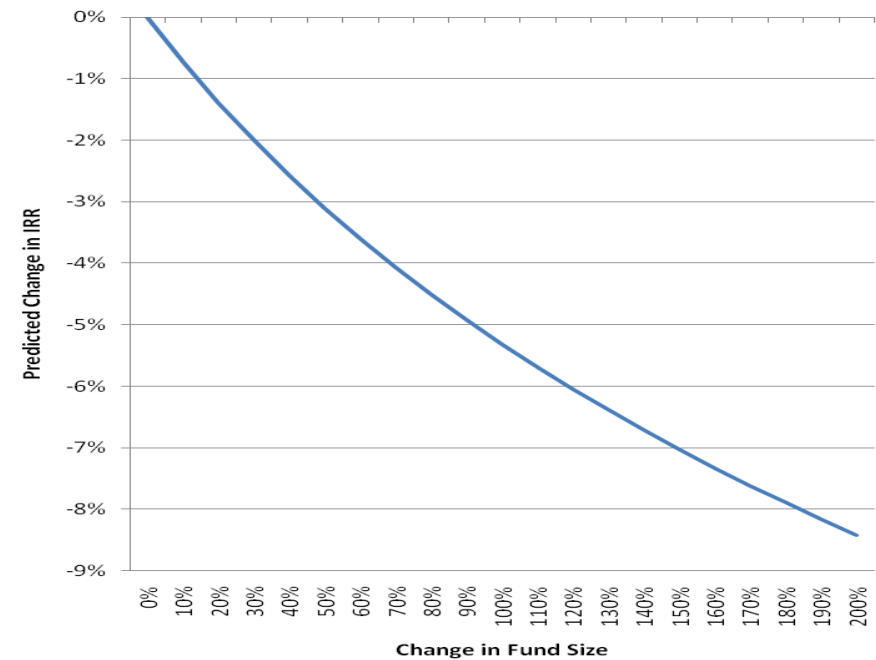
Bigger is Not Always Better

- Research on private equity funds indicates that:
 - 1) A concave relationship exists between IRR and fund size; and
 - 2) An inverse relationship exists between change in IRR and change in fund size for a given firm

Relationship Between Fund Size and IRR⁽¹⁾



Relationship Between Change in Fund size and Change in IRR⁽²⁾



Source: Lerner, Leamon and Hardyman, 2011.

(1) Fund size is measured as capital committed at closing. Regression results control for vintage year and fund category.

(2) Fund size is measured as capital committed at closing. Regression results control for vintage year effect, fund category, and firm fixed effects.

IV. Changing of the Guard

Top 15 Real Estate Managers: Then and Now

- Other than Prudential, none of the top 15 real estate managers from 1990 “survived” in their then-current form (i.e., they have all been sold, restructured or had senior management departures)
- Estimates suggest that 20-30% of PE firms currently in existence will go out of business
- How will the top 15 shake out in the future?

Top 15 real estate private equity firms in 1990

Rank	Manager	AUM in Billion USD
1	Equitable Real Estate	11.6
2	JMB Institutional Realty	11.3
3	Copley Real Estate Advisors	9.1
4	Heitman Advisory	6.5
5	Prudential Real Estate	5.5
6	LaSalle Advisors	5.1
7	Aetna Life	5.1
8	Aldrich, Eastman & Waltch	4.3
9	Yarmouth Group	4.3
10	RREEF Funds	4.0
11	TCW Realty Advisors	4.0
12	Alex Brown Kleinwort Benson	3.7
13	GE Investments	3.7
14	Corporate Property Investors	2.9
15	Boston Co. Real Estate	2.7

Top 15 real estate private equity firms in 2009

Rank	Manager	AUM in Billion USD
1	The Blackstone Group	25.6
2	Morgan Stanley Real Estate	20.2
3	Goldman Sachs Principal Investing	13.6
4	Colony Capital	11.6
5	Beacon Capital Partners	9.8
6	Lehman Brothers Real Estate	9.4
7	LaSalle Investment Management	9.1
8	Tishman Speyer	8.7
9	The Carlyle Group	8.2
10	Westbrook Partners	6.7
11	MGPA	6.3
12	CBRE Investors	6.1
13	AREA Property Partners	6.1
14	Rockpoint Group	5.6
15	Prudential Real Estate	5.4

Source: Partners Group, 2009.

IV. Changing of the Guard

Current Manager Transition

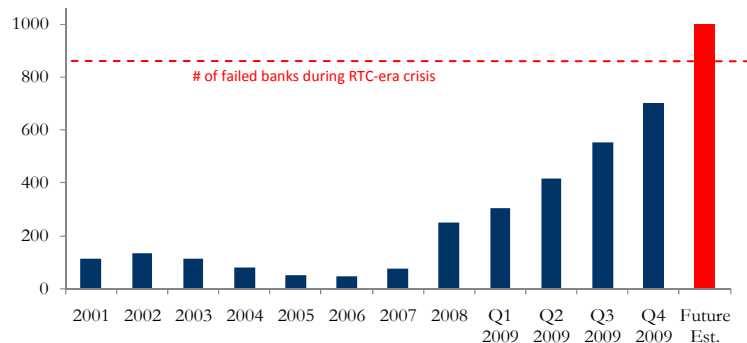
- GPs out of the business (restructured or sold)
 - *Citi Property Investors (“CPI”)*
 - Platform currently being transferred to Apollo Global Management
 - *Lehman Brothers*
 - Silverpeak Real Estate Partners launched as new independent investment advisory business
 - *New City Asia*
 - Purchased by ING Real Estate following financial difficulties
 - *Goldman Sachs/Whitehall*
 - Opportunistic real estate foray has been rumored to be going out of business for over two years
 - *BoA/Merrill Lynch*
 - Transfer of GP responsibilities from Global Real Estate Principal Investments (GREI) division to Blackstone
- New GPs
 - *Apollo Global Real Estate (“AGRE”)*
 - Pending acquisition of CPI platform and funds will give AGRE immediate scalability and AUM
 - *Goldman Sachs Asset Management*
 - Recently launched a new core real estate business
 - *Silverpeak Real Estate Partners*
 - Successor to Lehman Brothers private equity real estate business
 - *GreenOak Real Estate*
 - Formed by former heads of MSREF; currently raising \$500 MM Japan-focused RE fund
- “Up-and-coming” GPs
 - *Northwood Investors, Savanna Investment Management, Prosperitas, Red Fort*
- Zombie GPs

V. Recapitalization of the Real Estate Industry

- Since 2007, 254 banks with \$614 billion in assets have failed, wiping out \$80+ billion from the Deposit Insurance Fund (“DIF”); the DIF now has a \$15+ billion deficit, not including funds for “loss sharing,” on resolutions to date or losses upon future failures
- FDIC “Problem Banks” number 829 with \$403 billion in assets through Q2 2010, up from 416 with \$300 billion in assets for the same period in 2009
- 10.6% of all FDIC-insured banks are “Problem Banks”
- “Problem Banks” and bank failures tend to lag crises and will likely accelerate over the next few years, rising sharply as we approach peak CRE defaults
 - Credit Sights and the Economist estimate over 1,000 banks could fail
 - 9,100 banks failed between 1930-1934, and 818 banks/S&Ls failed in the RTC-era crisis from 1988-1992

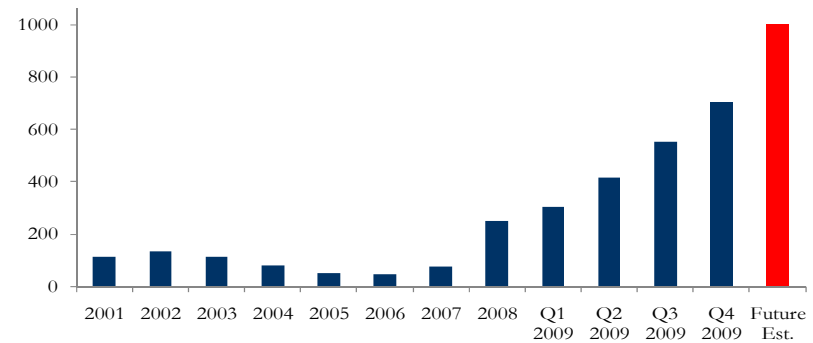
FDIC Problem Institution Watch List

Number of problem banks



FDIC Problem Assets

\$ in billions



Source: FDIC Quarterly Banking Profile Q2 2010. According to the FDIC, “problem” institutions are those with financial, operational, or managerial weaknesses that threaten their continued viability, based on FDIC composite ratings.

V. Recapitalization of the Real Estate Industry
Banks Burdened by Real Estate Distress

- Most failures will be concentrated across small regional banks, which collectively have over \$2.5 trillion in assets
- The top 100 banks have different asset profiles, which will result in distinct capital needs as debt matures
- The two largest U.S. bank asset categories are not yet at peak default levels:
 - Residential real estate loans: \$2.4 trillion (concentrated in top 3 banks)
 - Commercial real estate and multifamily loans: \$1.8 trillion (concentrated in smaller banks)

U.S. Depository Banks – Asset Composition

The lower 21-100+ banks have significantly more exposure to real estate loans, particularly construction & land development loans

(\$ in millions)	All Depositories		Top 3		4-20		21-100		101+	
		% of Assets		% of Assets		% of Assets		% of Assets		% of Assets
Real Estate Loans										
Residential RE Loans	\$2,386,383	18.5%	\$897,931	14.5%	\$749,728	24.3%	\$230,175	21.7%	\$508,549	19.9%
CRE & Farm	\$1,092,109	8.5%	\$91,782	1.5%	\$295,362	9.6%	\$158,894	15.0%	\$546,070	21.3%
Constr & Land Dev	\$479,059	3.7%	\$50,139	0.8%	\$145,969	4.7%	\$74,662	7.0%	\$208,289	8.1%
Multifamily	\$202,890	1.6%	\$51,241	0.8%	\$37,692	1.2%	\$42,027	4.0%	\$71,929	2.8%
Foreign Office R/E	\$83,112	0.6%	\$69,857	1.1%	\$9,860	0.3%	\$3,329	0.3%	\$65	0.0%
Total Real Estate Loans	\$4,243,552	32.9%	\$1,160,951	18.8%	\$1,238,611	40.2%	\$509,088	47.9%	\$1,334,903	52.2%
Other, Non-RE Loans	\$2,546,221	19.8%	\$1,124,703	18.2%	\$854,999	27.7%	\$160,571	15.1%	\$405,948	15.9%
Securities & Other Assets	\$6,097,822	47.3%	\$3,896,768	63.0%	\$990,240	32.1%	\$392,825	37.0%	\$817,988	32.0%
	<i>% of All Depositories</i>		<i>% of All Depositories</i>		<i>% of All Depositories</i>		<i>% of All Depositories</i>		<i>% of All Depositories</i>	
Total Assets	\$12,887,595	100%	\$6,182,422	48%	\$3,083,850	24%	\$1,062,484	8%	\$2,558,839	20%

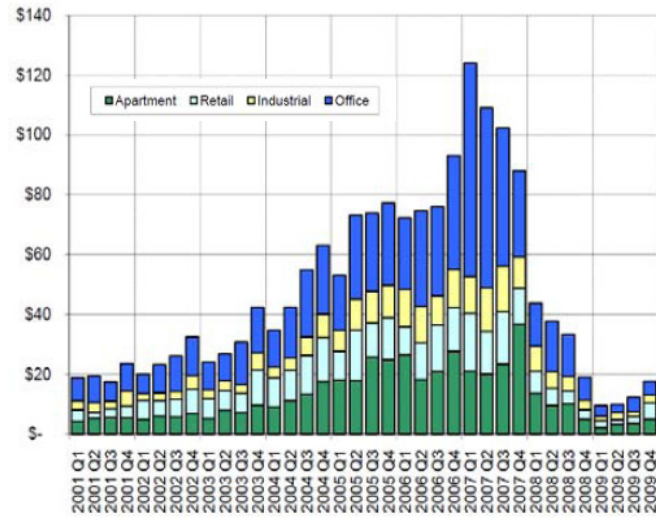
Excludes 19 BHC, non-depositaries, foreign and specialty banks with \$4.6B in aggregate assets

V. Recapitalization of the Real Estate Industry
The Need for Recovery Capital

- Distress continuing within U.S. banks devoid of the necessary infrastructure to address issues
- Growing foreclosure and workout pipeline
- Market “de-leveraging” has created large refinance shortfalls
- Deteriorating collateral/property fundamentals
- Banks “cannot afford to sell” troubled assets
- Staffs are overwhelmed by balance sheet issues and asset management challenges

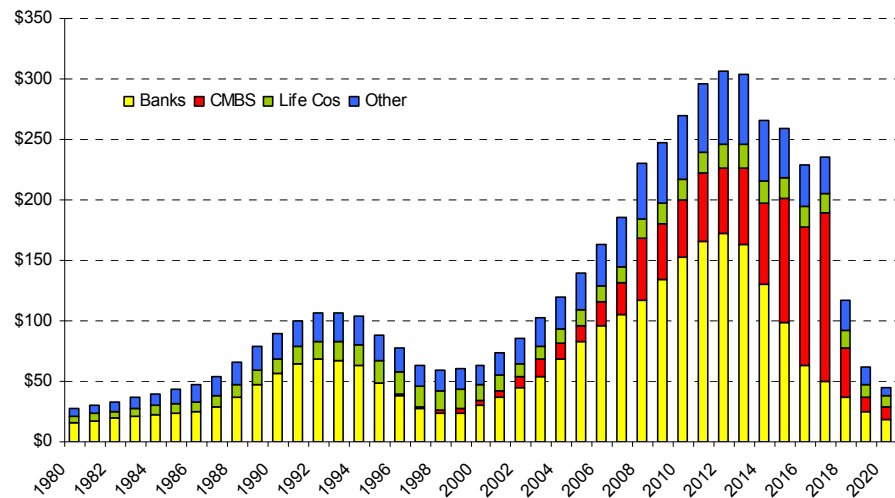
Commercial Property Sales: Lack of Liquidity

\$ in billions



Maturity Profile of U.S. Commercial Mortgages: Replacement Capital Needed

\$ in billions



Sources: MBA, Real Capital Analytics; Deutsche Bank, Foresight Analytics, Wall Street Journal, and Real Estate Roundtable

Available Near Term Capital Does Not Meet Needs

Capital Raised⁽¹⁾

- Over \$260 billion raised for N. America debt, distressed and opportunistic funds in 407 funds by 181 different managers (84 managers raised multiple funds) from 1991 to 2010 YTD with the top 10 managers accounting for ~46% of the capital
- With the financial system collapse and broad economic turmoil, funds with debt/distressed strategies have been on the rise—of the \$260 billion, \$114 billion has been raised since 2007
- Given typical fund investment periods, it is estimated that there is likely \$45-60 billion of “dry powder” available from the above referenced funds
- Estimates also indicate that there is approximately \$1-2 billion of available capital in the public commercial mortgage REIT space
- There are also ~150 funds in the market raising capital for debt, distressed and/or opportunistic strategies with ~\$64 billion aggregate target capital
- Between mortgage REITs and private funds, it is estimated that \$70-100 billion of capital will be available for near term investment

Capital Needed

Estimated Maturity Profile of U.S. Commercial Mortgages (\$ billions)²

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Banks	135	155	162	170	160	126
CMBS	43	50	55	55	66	64
Life Cos	14	14	14	18	19	17
Other	52	50	55	64	57	57
Total	244	269	286	307	302	264

- Over \$1.1 trillion of commercial mortgages, excluding construction loans, are expected to mature between now and 2013
- Bank loans, construction loans, mezzanine positions and corporate RE should further increase capital need by \$1.2+ trillion over next 3 years⁽³⁾
- Assuming ~50% of the maturities between now and 2013 are distressed, the capital need is over \$1.2 trillion

Near-Term Capital Needed vs. Available (\$ billions)

	<u>Low End</u>	<u>High End</u>
Existing Funds	45.6	60.8
New Funds	19.2	38.4
Mortgage REITs	1.0	2.0
~ Capital Available	65.8	101.2
~ Capital Needed	1,200.0	1,200.0
~ Capital Available / Needed	5.5%	8.4%

Sources:

(1) Preqin and Institutional Investor. Assumes 30-60% of funds in the market will successfully raise capital.

(2) Deutsche Bank, Foresight Analytics, Wall Street Journal, Real Estate Roundtable.

(3) SNL. Est. based on \$480 billion of construction loans, \$200 billion of multifamily and estimated over \$500 billion of non-CMBS real estate loans held by U.S. banks.