REAL ESTATE PRIVATE EQUITY: MARKET IMPACTS ON INVESTMENT STRATEGIES AND COMPOSITIONS OF OPPORTUNITY FUNDS

By

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Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements for the Degree of

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ABSTRACT

Market forces continually change the landscape of the real estate private equity ("REPE") industry. In the current market, robust capital raising and the emergence of new funds in REPE suggest increasing competition to place capital while the credit crisis has marked the end of an era for cheap debt that was previously used by opportunity funds to enhance returns. Under these changing market conditions, opportunity funds seek to continually deliver above market returns through various investment strategies and composition allocations which have major implications on the risk levels of the funds. This thesis seeks to understand if and how recent market changes have influenced the REPE industry. It identifies the kinds of investment strategies currently being used by opportunistic funds, and in particular, whether the investment compositions of the opportunity fund portfolios are changing in terms of geographic allocation or asset type allocation.

The study finds that opportunity funds have been notably impacted by forces of the credit crisis, but not necessarily by increasing competition. While it is not readily apparent whether investment compositions of opportunity funds have changed due to the credit crisis, several global funds are increasing geographic allocations to emerging markets, such as Asia, to enhance returns. The interviewees generally believe that they will continue to deliver the proposed returns without necessarily increasing portfolio risks due to their flexible investment mandate, which allows them to invest in opportunities that are inline with their expertise and experience. In the short term, most funds expect opportunities to arise from distressed sellers.

This thesis attempts to shed light on some issues involving REPE investing and represents a first attempt to scratch the surface of opportunistic investment portfolio compositions and strategies. Hopefully, readers will gain insight into the workings of this growing and highly proprietary asset class.

Thesis Supervisor: Lynn Fisher
Title: Associate Professor of Real Estate

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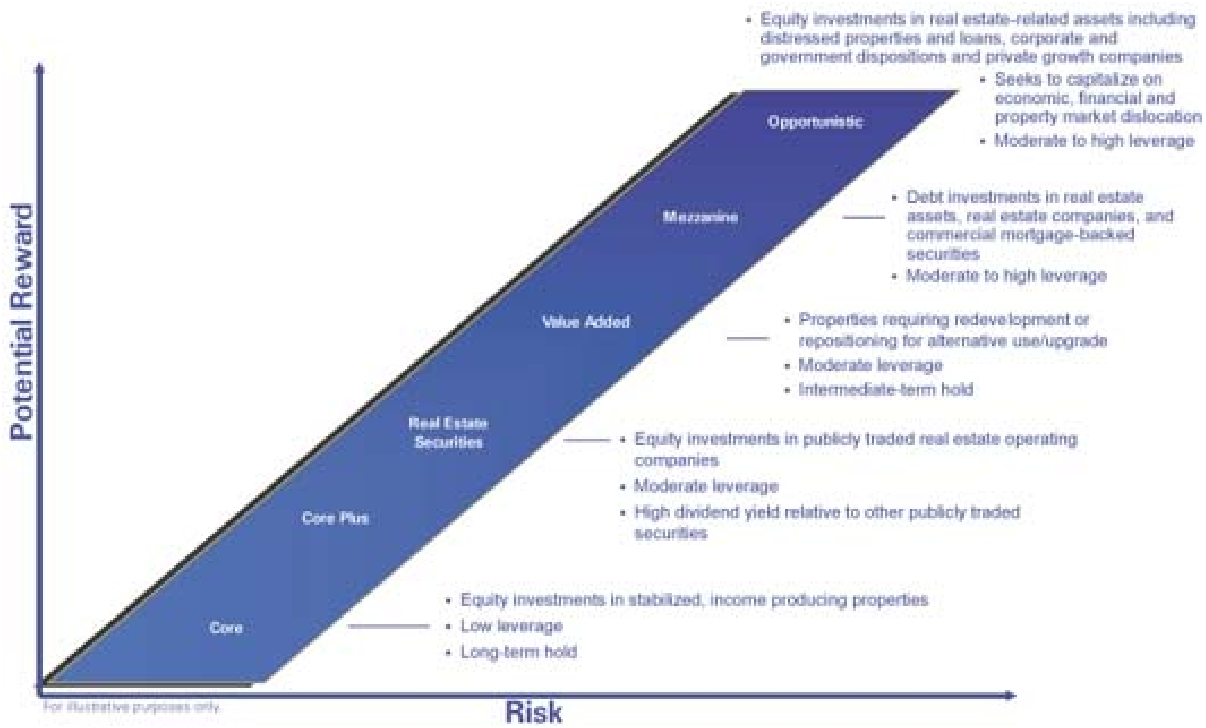
INTRODUCTION

Market forces continually change the landscape of the Real Estate Private Equity ("REPE") industry. In the current market, record amounts of money are still being raised by REPE funds despite the credit crunch emanating from the sub-prime crisis of 2007. In fact, robust capital raising and the emergence of new funds in REPE suggest increasing competition to place capital. The current credit crisis has meanwhile marked the end of an era for cheap debt that was previously used by opportunity funds to enhance returns. Under these market and industry forces, REPE funds face one of three alternatives: 1) incur higher levels of portfolio risks by shifting geographic and/or asset type allocation to meet the required returns, 2) maintain similar levels of portfolio risks by accepting lower returns, or 3) maintain similar levels of portfolio risks while meeting the required returns with alternative market-driven opportunities. In the face of changing market conditions, what kinds of investment strategies are being used by opportunistic REPE funds to deliver proposed returns? How are the investment compositions of the opportunity fund portfolios changing in terms of geographic allocation or asset type allocation? In other words, are the opportunity funds getting riskier as an asset class?

This study reveals that the force of the credit crunch has a notable impact on the investment strategy and performance of opportunity funds, while impacts of increasing competition are not readily apparent. According to the structured interviews of the major players in the industry, most of these funds have not had much change in terms of asset type allocation, but instead are initiating a change in geographic allocation towards Asia and emerging markets. The interviewees do not necessarily agree that opportunity funds are getting riskier as an asset class. Most of them believe the required returns could be achieved, and a couple of them indicated that fund returns may be lower. While the opportunity funds do not typically have systematic ways of quantifying the risks of their investments, opportunity funds are confident in their ability to mitigate risks via prudent research during the process of due diligence and active post-acquisition asset management. Further, the study of the opportunistic funds indicates that despite having broad investment mandates, each of them have a particular focus that is generally reflected on the general partner's expertise and track record. In terms of short-term opportunities in the current market, most of the funds are waiting for sellers to become more distressed.

For purposes of a consistent terminology in this paper, Real Estate Private Equity ("REPE") and Private Equity Real Estate ("PERE"), defined as both the industry and the asset class consisting of debt and equity investments in properties or properties-related assets from private capital sources, are used interchangeably throughout the thesis. REPE funds are commingled real estate investment vehicles, which pool capital from investors to make investments in this asset class. REPE funds are not raised solely by traditional private equity firms, but have also been raised by other real estate investors including developers, investment banks, investment management firms, owner-operators, and property consultants. REPE funds generally follow one of three investment strategies: 1) core-plus, 2) value-added, or 3) opportunistic, each with a different risk-return profile, as seen in Exhibit 1 below. Not all REPE funds are opportunistic. REPE funds that pursue opportunistic investments, also known as opportunity funds, typically seek compounded returns in excess 18% per year and have the highest risk-return profile.[1] In order to deliver high returns, opportunity funds often have a broad investment mandate and varied strategies. The focus of this paper is to characterize the composition of these portfolios and the nature of fund strategies.

EXHIBIT 1: Risk-Return Spectrum for Real Estate Investments



Source: RREEF

Relevance

The study of REPE strategies and investment composition is important in mitigating the transparency issues in REPE investing. The inherent agency problem between the opportunity fund investors (Limited Partners, or "LP") and the fund managers (General Partners, or "GP") as well as the lack of required disclosure of the opportunity funds make benchmarking fund performance difficult. As the industry continues to evolve under

[1] Haas, Ryan. "*Real Estate Private Equity: Structuring the U.S.-Based Opportunity Fund.*" Massachusetts Institute of Technology, Center for Real Estate (2006)

changing market conditions, it is critical for fund investors and managers to understand what changes in the underlying strategies mean for their risk-adjusted returns.

There is a fair amount of study done on REPE from both industry and academia to date. Many follow the trends of the REPE fund performances as a whole and/or identify challenges that they face. However, there is very limited in-depth, systematic study linking the various investment strategies with the associated risks opportunity funds take. By factoring in the impacts of the changing market conditions, this paper intends to build upon the previous research on REPE that had been conducted at the MIT Center for Real Estate. [2] Understanding of the major players and their investment strategies, risk-return expectations, and outlook on the current market will benefit institutional investors, REPE professionals, and individuals interested in the REPE industry.

Research Objective

The thesis has the following objectives:

- Identify the major players in REPE by size and activity
- Examine the major types of opportunistic real estate investment strategies
- Highlight the current market and industry forces impacting the REPE industry
- Show whether and how investment composition has changed over time
- Understand how opportunity fund managers perceive and mitigate risks
- Highlight the reasons for success across different opportunity funds
- Identify opportunities in the current market on a risk-adjusted basis

[2] Namely, Marks (2001), Hahn (2003), Tang (2003), Haas (2006)

Research Methodology

The research methods used in this study were predominantly qualitative. Background information for the study was based on literature from text books, industry research papers, and business articles as listed in the bibliography section. In addition, industry data from proprietary sources was compiled to identify the top players in the industry, both in terms of capital raising and deployment activities. Eight structured interviews with opportunity fund professionals were conducted to help understand opportunity fund strategies as well as to identify potential opportunities that opportunity funds see in the current market. The interviewees included senior management from leading opportunity funds with operations in Asia, Europe, and the U.S. Additionally, industry information and feedback were collected through conversations with two real estate opportunity funds-of-funds managers and a partner of large institutional investor. The results obtained from the interviews and conversations are presented so as to protect the anonymity of the participants.

Sources of Data

- Venture Xpert – database providing information covering venture, buyouts, funds, and private equity (available from the MIT Libraries)
- Real Capital Analytics ("RCA") – provides transactional information for current property sales and financings for commercial real estate
- Private Equity Real Estate Connect ("PERE Connect") – Global Online Service for tracking investors and in Private Equity Real Estate
- Real Estate Alert – offers institutional buying and real estate investing information

Thesis Organization

The thesis is organized into six chapters. Chapter 1 first identifies the major players (firms) in the REPE industry, both in terms of the amount of capital raised and the amount deployed. Chapter 2 defines and explains the major opportunistic investment strategies of the opportunity funds. Chapter 3 provides a literary overview assessing the industry and the market forces that are currently shaping the REPE industry. Chapter 4 seeks to validate the previous chapters by summarizing the structured interviews with opportunity fund professionals. Chapter 5 explains and analyzes the findings of the structured interviews. The thesis concludes with remarks on the study results, thoughts on the outlook and opportunities in REPE, and suggestions for additional studies in Chapter 6.

1.0 CHAPTER ONE – MAJOR PLAYERS IN REAL ESTATE PRIVATE EQUITY

The first step in the study of REPE is identifying the major players in the industry. Based on available data, two methods are used to rank the players in the industry: 1) amount of capital raised and 2) amount of capital deployed. In addition, the comparison of the two rankings served as the basis for identifying the firms to approach for the structured interviews.

1.1 Capital Raised

Private Equity Real Estate, a publication of PEI Media, compiled a list of the largest players in the REPE industry, ranked the amount of private equity real estate direct investment capital raised over roughly the five-year period, from January 1, 2003 to April 2008. According to the press release, the 30 largest private equity real estate firms ("PERE 30") in the world raised more than US$190 billion over the last five years. The Blackstone Group tops the list as it raised almost US$20 billion during the 5 years to April 2008, including the largest PERE fund raised in the world to date, the Blackstone Real Estate Partners VI, which closed in 2008Q1 at US$10.9 billion. Morgan Stanley Real Estate came is second, with close to US$17 billion raised since January 1, 2003. The rest of the top 5 firms include Tishman Speyer, which raised US$11.4 billion, Goldman Sachs Real Estate Principal Investment Area, which raised US$11.2 billion, and Colony Capital, which raised nearly US$11 billion over the five year period. The PERE 30 ranks firms according to the amount of capital raised in dedicated private equity real estate funds over a roughly five-year time period. These investment programs include opportunistic and value-added strategies, but exclude core, core-plus, infrastructure and debt funds.[3] Table 1.1 below shows a list of the top firms by amount raised, firm type, and year the real estate fund business was established.

TABLE 1.1: Ranking of REPE Firms by Capital Raised

TOP PRIVATE EQUITY REAL ESTATE FIRMS

Rank[1]	Firm	Headquarters	Raised Last 5 Yrs ($ bn)[2]	Firm Type[3]	Year Est.[4]
1	The Blackstone Group	New York	19.8	Private Equity	1992
2	Morgan Stanley Real Estate	New York	16.8	Investment Bank	1991
3	Tishman Speyer	New York	11.4	Developer	1997
4	Goldman Sachs - REPIA	New York	11.2	Investment Bank	1991
5	Colony Capital	Los Angeles	11.0	Private Equity	1991
6	Lehman Brothers Real Estate	New York	10.2	Investment Bank	2001
7	The Carlyle Group	Washington DC	9.6	Private Equity	1997
8	ProLogis	Denver	8.8	Owner-Operator	1999
9	Beacon Capital Partners	Boston	8.1	Private Equity	1999
10	LaSalle Investment Management	Chicago	6.7	Service	1999
11	MGPA	London	6.6	Investment Bank	n/a
12	AEW	Boston	5.8	Investment Management	1988
13	Rockpoint Group	Boston	5.8	Private Equity	2004
14	Apollo Real Estate Advisors	New York	5.4	Private Equity	1993
15	CB Richard Ellis Investors	Los Angeles	5.0	Service	n/a
16	RREEF Alternative Investments	New York	4.8	Investment Bank	n/a
17	Grove International Partners	London	4.0	Private Equity	2004
18	Shorenstein Properties	San Francisco	3.9	Owner-Operator	1992
19	The JBG Companies	Chey Chase	3.9	Private Equity	n/a
20	Citigroup Property Investors	New York	3.7	Investment Bank	n/a
21	JER Partners	McLean	3.7	Private Equity	1981
22	Walton Street Capital	Chicago	3.6	Private Equity	1995
23	Heitman	Chicago	3.2	Investment Management	1999
24	Aetos Capital	New York	2.9	Private Equity	2003
25	KK daVinci	Tokyo	2.8	Investment Management	1998
26	Lubert-Adler	Philadelphia	2.8	Private Equity	1997
27	Starwood Capital	Greenwich	2.4	Private Equity	1991
28	Fortress Investment Group	New York	2.4	Investment Management	1998
29	DLJ Real Estate Capital Partners	New York	2.4	Investment Bank	1995
30	RLJ Development	Bethesda	2.3	Hotel Investor	2000

Source: Private Equity Real Estate, Author

Notes:

1. Ranked by amount of capital raised in dedicated PERE funds raised over last 5 years (1/2003-4/2008)
2. Includes opportunistic and value-added strategies, but excludes core, core-plus, infrastructure and debt funds
3. General categorization of the primary business of the parent firm
4. Year of the establishment of real estate fund business, not necessarily the firm; n/a = info not available

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[3] Hughes, Zoe. "*Blackstone, Morgan Stanley top list of world's largest firms.*" PERE Online (May 8, 2008)

The list includes not only opportunistic but also value-added funds, which are generally less risky in nature than the opportunistic funds, but offers higher returns than core/core-plus funds. In general, value-added funds generally invest in direct properties, and less in companies, distressed real estate loans, and development projects.

The firms listed above are not necessarily pure private equity firms.[4] As mentioned in the Introduction, the real estate private equity funds model is readily duplicable and has been adopted by other real estate investors including, real estate arms of investment banks such as Morgan Stanley and Goldman Sachs, developers such as Tishman Speyer, owner-operators such as ProLogis and Shorenstein Properties, and service companies such as LaSalle Investment Management and CB Richard Ellis.

Lastly, the real estate private fund business is a relatively new business, with most of the top firms listed being established in the 1990s. The newest fund on the list, Grove International Partners, was established in 2004. Other prominent global opportunistic real estate investors not mentioned on the list include private equity funds such as Lone Star, Oaktree Capital Management, Warburg Pincus, and Angelo Gordon, and investment banks such as Merrill Lynch, Lazard, and JP Morgan.

1.2 Capital Deployed

In a separate list based on data from RCA as shown in Table 1.2 below, the most active equity funds, ranked by the dollar amount of commercial real estate transactions since 2001, shows

[4] Private equity firms listed herein offer primarily opportunistic funds and are distinguished from investment management firms that generally have broader investment and service offerings.

that the top three buyers are 1) Blackstone, 2) Morgan Stanley, and 3) Tishman Speyer—same as the PERE 30 list. In fact, of the top ten players on each list, seven overlap. The overlap of the names on the two lists suggests consistency in size leadership in the industry. The following table shows the ranking of the top buyers of significant commercial real estate globally since 2001. Number of properties and average price per property are also shown.

TABLE 1.2: Ranking of REPE Firms by Amount Transacted

Commercial Real Estate Acquisitions by Equity Funds since 2001

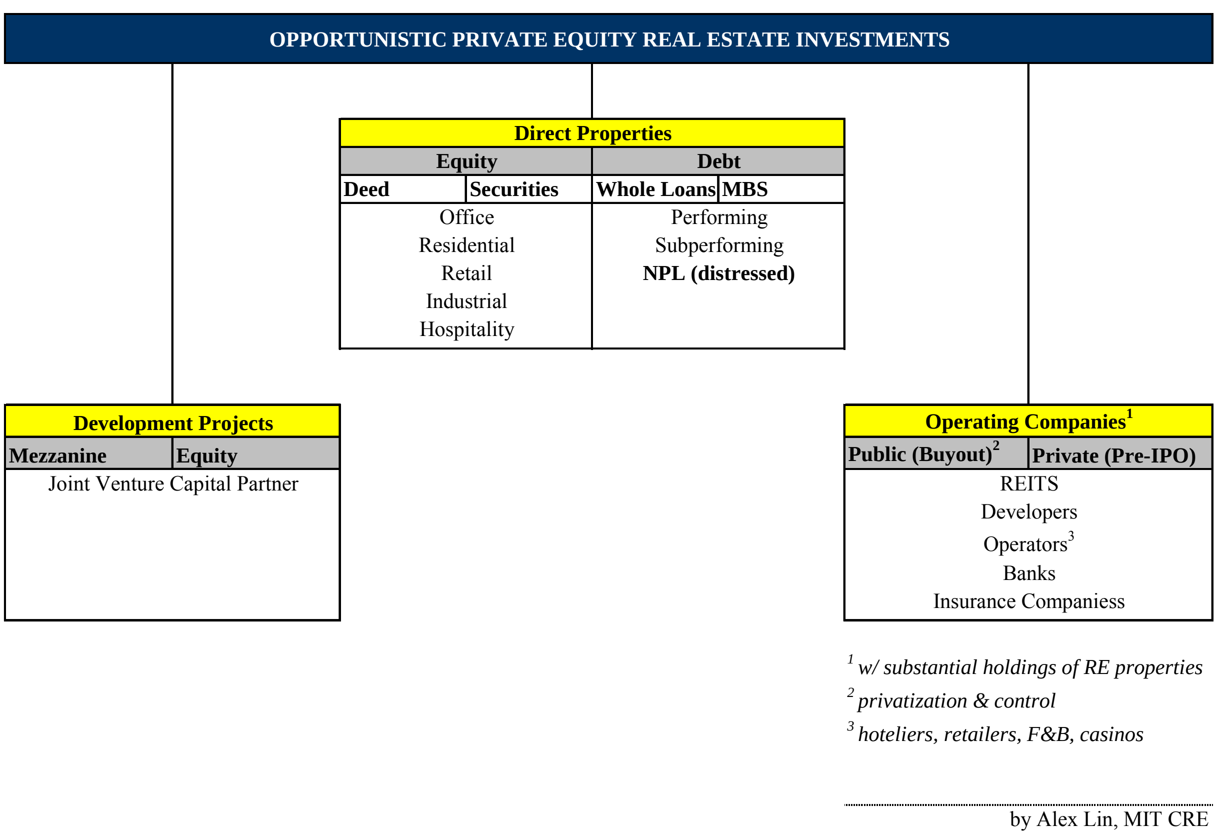
Rank	Buyer	Location	Avg. Price (US$ mn)	# Props	Total Global Acq (US$ mn)
1	Blackstone	New York, NY/ US	44	2,083	91,709
2	Morgan Stanley	New York, NY/ US	85	1,453	50,962
3	Tishman Speyer	New York, NY/ US	103	1,286	49,977
4	Beacon Capital Partners	Boston, MA/ US	197	817	24,185
5	Goldman Sachs	New York, NY/ US	41	713	19,615
6	Colony Capital	Los Angeles, CA/ US	55	595	13,312
7	Carlyle Group	Washington, DC/ US	26	340	12,662
8	Lightstone Group	Lakewood, NJ/ US	13	330	11,345
9	Walton Street Capital	Chicago, IL/ US	37	262	8,375
10	Rockpoint Group	Boston, MA/ US	94	184	6,466
11	Transwestern Investment Co	Los Angeles, CA/ US	36	163	5,980
12	Starwood Capital Group	Greenwich, CT/ US	17	155	5,525
13	JER Partners	Los Angeles, CA/ US	29	131	5,134
14	Babcock & Brown	Sydney/ Australia	31	138	4,570
15	Legacy Partners	Foster City, CA/ US	43	117	3,984
16	Apollo Real Estate Investors	New York, NY/ US	25	112	3,976
17	Angelo Gordon	New York, NY/ US	30	111	3,732
18	Cerberus Capital Management	New York, NY/ US	12	101	3,283
19	Praedium Group	New York, NY/ US	10	93	3,216
20	Rockwood Capital	White Plains, NY/ US	51	92	3,153
21	Crow Holdings	Dallas, TX/ US	14	85	3,022
22	LBA Realty	Irvine, CA/ US	16	82	2,832
23	Arden Realty Inc (GE)	Los Angeles, CA/ US	46	69	2,780
24	Kennedy Wilson		32	77	2,545
25	Pacific Coast Capital Partners	El Segundo, CA/ US	19	78	2,465
26	Essex Property Trust	Palo Alto, CA/ US	28	78	2,393
27	Lubert-Adler	Wayne, PA/ US	8	80	2,255
28	Buchanan Street Partners	Chicago, IL/ US	21	71	2,254
29	RLJ Development	Los Angeles, CA/ US	19	67	2,232
30	Capri Capital Advisors	Chicago, IL/ US	34	67	2,036

Source: Real Capital Analytics

2.0 CHAPTER TWO – MAJOR OPPORTUNISTIC INVESTMENT TYPES AND STRATEGIES

Opportunity funds have broad investment mandates and invest in a wide range of asset types and across the capital spectrum in often highly structured and complex transactions. To systematically study the nature of REPE investments, I have broadly categorized them into three major types: 1) direct properties, 2) development projects, and 3) operating companies, as shown in Exhibit 2.0 below. Since each type has a different risk profile, changes in the investment composition of an opportunity fund may indicate changes in different levels of portfolio risk. Thus, characterizing investment types and strategies of opportunity funds is the next step in determining how the market forces are impacting them.

EXHIBIT 2.0: Types of Opportunistic Real Estate Investments

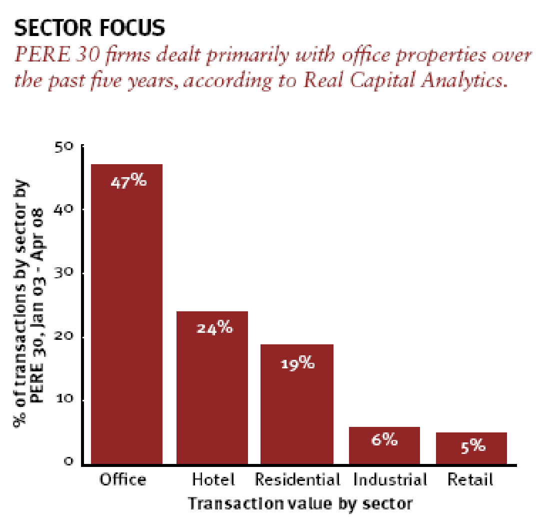


The following descriptions of opportunistic investment types and strategies are from various REPE publications and professionals, and are considered as general knowledge in the industry.

2.1 Direct Properties

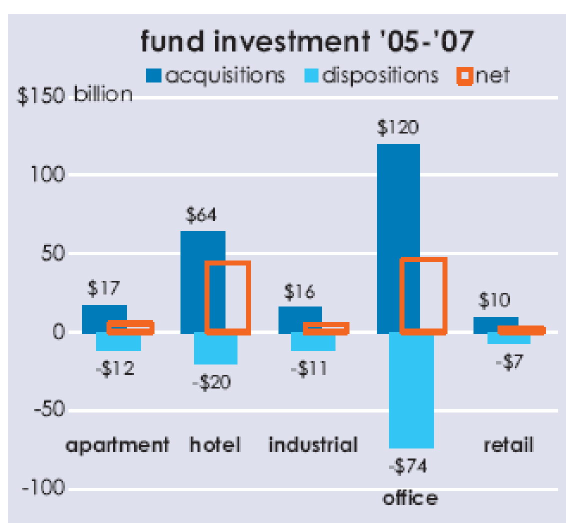
Investments in direct properties, or hard assets, include investments in both equity and debt of properties. Completed buildings are often referred to as "income-producing properties" due to its ability to generate income primarily in the form of rent. Major property types of hard assets that REPE funds invest in are: 1) office, 2) hotel, 3) residential, 4) industrial, and 5) retail. According to PERE and based on data from RCA, the major REPE firms transacted primarily in office properties over the last five years , as seen in Chart 2.1 below.[5] Chart 2.2 below shows that from 2005-2007, REPE funds have acquired a total of US$226 billion of properties in the U.S. and while selling about US$124 billion.[6]

CHART 2.1: PERE 30 Transactions by Sector



Source: PERE

CHART 2.2: Equity Funds Transactions by Sector



Source: RCA

[5] Major REPE firms discussed further in Chapter 2.2 ?
[6] RCA (December 2007)

Property Equity Investments

General strategies for the equity investments in hard assets typically involve active management to increase value, and selling at an opportune time for a gain. To enhance value, REPE funds typically adopt one or combinations of the following strategies:[7]

- Market timing. This strategy involves a play on the macro economic environment, understanding the space market fundamentals of supply and demand trends, or taking advantage of being the first mover.
- Operation enhancement. Different property types warrant different operating expertise, but generally operational enhancements include one or a combination of the following:
  - Raising rents, increasing occupancy ("stabilizing a property"), or decreasing expenses
  - Physical repair, improvement, or renovation
- Repositioning/redevelopment. Changing the current use or tenant of the property to a more suitable and valuable use as the market preference changes. For example, the conversion of an old office building to condominiums for sale when the condo market is favorable.
- Distressed buy. Buying at a discount properties that are distressed (out of favor product positioning, or mismanaged), or from distressed sellers facing capital constraint; value investment (as opposed to growth investment).
- Public-private market arbitrage. Buying and selling between public and private markets when one market values the assets over the other.

[7] Wikipedia: Real Estate Private Equity and various industry publications and professionals

- Disposition to investors with lower cost of funds or yield requirements (i.e., yield-driven investors such as pension funds and insurance companies).
- Going public. Acquire enough properties in the private market for an exit to a REIT.
- Take private. Acquire properties from a public REIT and sell the assets in the private market.

Property Debt Investments

Investments in the debt of properties are investments in mortgages (whole loans) with the underlying property as collateral securing the loan. These secured mortgages could be classified as performing, sub-performing, or non-performing loans ("NPL"). Whereas performing loans are healthy loans which are considered less risky and yield lower returns, NPL are problematic loans in default that are general risky and yield higher returns. Sub-performing loans have risk and return characteristics in between the performing and non-performing loans. Many of the first opportunistic REPE funds emerged from the RTC (S&L crisis) of the late 1980s and early 1990s to invest in the debt of properties that are in distress. Real estate investor Samuel Zell is credited for establishing the first real estate opportunity fund, Zell-Merrill I, which raised US$409 million using a private equity fund structure.[8] Other investors such as Goldman Sachs Whitehall Fund and Morgan Stanley Real Estate Fund soon followed.

Distressed debt investors of the RTC era and subsequently the Asia financial crisis of the late 1990s have made extraordinary returns by purchasing portfolios of NPL from failing financial

[8] Zell, Samuel. "*Real Estate: Past, Present, and Future.*" Wharton Real Estate Review (Spring 2002)

institutions at sharp discounts, which could be anywhere from 20% to 60% of original face value.[9] "On average, over 15% of long-term commercial mortgages in the U.S. end up in facing serious default, and a foreclosure, bankruptcy, or workout situation, at some point before the maturity of the loan."[10] In addition, since NPL are associated with a distressed market, the NPL represent an important asset class for the opportunity funds because NPL allow the funds to continue to deploy capital in a bear market.

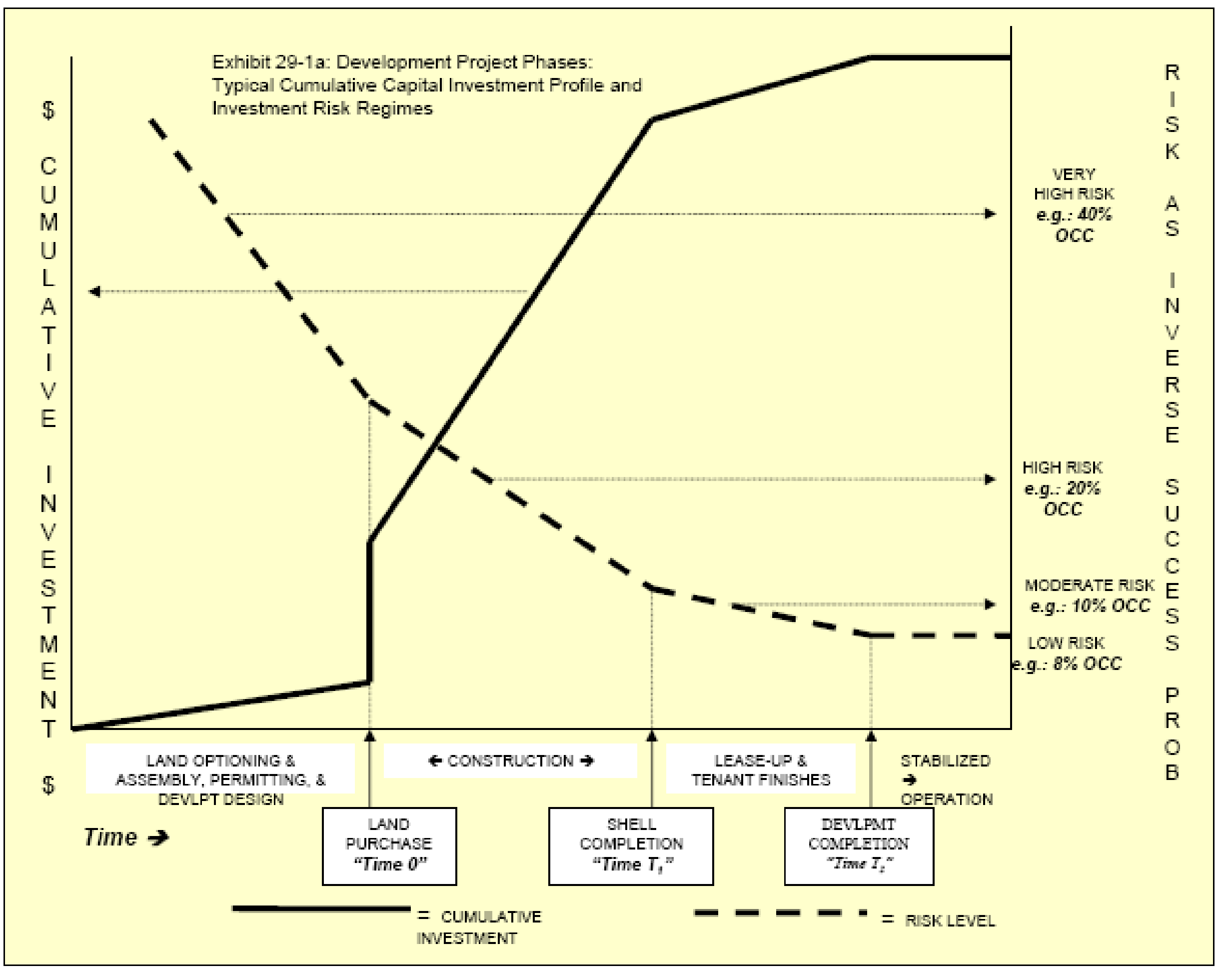
The investors of distressed mortgages possess good knowledge of real estate, as the underlying sources of value of these mortgages are the real estate collaterals. In addition to real estate knowledge, laws and regulations concerning foreclosure and bankruptcy must also be known. In general, strategies to realize the values of NPL could be categorized as being either litigious or non-litigious.[11] Litigious actions involve court and legal proceedings which lead ultimately to foreclosure. However, note holders could also revolve problems without taking litigious actions. Non-litigious actions are considered less adversarial and allow more flexibility in working with the borrower while saving time and costs of foreclosure[12]. When resolving NPL, *special service* managers could take a combination of both litigious and non-litigious actions to recover the most value from the loan.

[9] For example, the founders of Lone Star and Colony Capital, John Grayken and Thomas Barrack, respectively, were notable beneficiaries from the S&L crisis and later replicated their success by buying NPL in Asia during the Asia financial crisis of the late 1990s.
[10] Geltner (2007)
[11] Geltner (2007)
[12] Foreclosure costs, including third-party (legal and administrative) expenses, deterioration of property from neglect, loss of property revenue, negative reputation effects, and violation of reserve requirements from writing down assets, could exceed 25% to 35% of the outstanding loan balance. (Geltner, 2007)

2.2 Development Projects

During periods of economic expansion and significant demand in the underlying space market, opportunistic investors are often invited to participate as capital partners in development projects. The investments in development projects are inherently riskier than the investments in completed buildings due to uncertainties with various phases of the development process prior to building completion. Exhibit 2.1 below shows the various phases of the development project investment process, including the associated major sources of capital as well as risks.[13]

EXHIBIT 2.1: Capital and Risk Exposure Across Phases of a Development Project



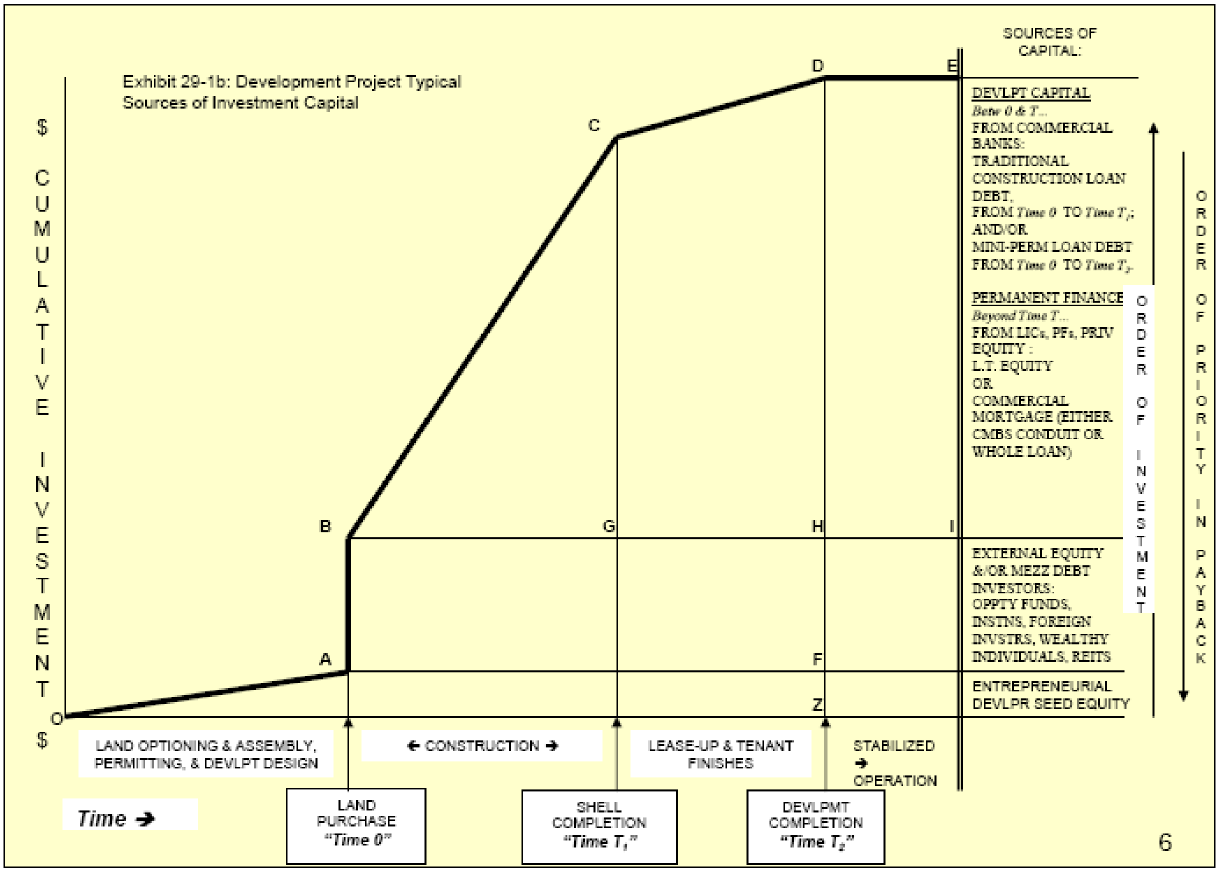
Source: Geltner (2007)

[13] Geltner (2007)

As could be seen from Exhibit 2.1 above, the major phases of a development project include pre-construction (land optioning & assembly, permitting, development design), construction, lease-up, and stabilization. The amount of capital required, as represented by the solid line, increases the most during the construction phase. Meanwhile, the risk is highest during the pre-construction phase and decreases as it approaches stabilization. Opportunity funds typically enter a development project when the land is acquired, after pre-construction activities and before construction, as it is also when the most amount of capital is required. However, the risk during construction is relatively still high, with operating cost of capital ("OCC") required by investors at around 20% in the U.S.

As mentioned previously, opportunity funds typically participate in development projects during the construction phase when it is most capital intensive, after pre-construction services have been completed by the entrepreneurial developers with local knowledge and expertise. A development deal is often structured in the form of an equity joint venture between the developer and the capital partner(s) under a project company, also known as a special purpose company, with a structured waterfall negotiated to accommodate the risk-return preferences for each investor, and where capital partners typically have preferred returns with equity participation in the upside of the project. Depending on the structure of the deal, the capital provided by the capital partner can be structured in the form of mezzanine or pure equity and the order which capital is injected and withdrawn by each party is also subject to negotiation. Exhibit 2.2 below shows that opportunity funds typically invest at the point from 'A' to 'B'.

EXHIBIT 2.2: Cumulative Capital Commitment Across Phases of a Development Project



Source: Geltner (2007)

2.3 Operating Companies

Opportunity funds also invest in companies with substantial holding of real estate properties. These target companies include, but not limited to, REITs, developers, operators (e.g., hoteliers, retailers, restaurants (F&B), casinos), and even financial services companies such as banks and insurance companies. For example, over the past three years, Blackstone has bought hotel properties such as Wyndham International, La Quinta, Boca Resorts, and Hilton, among others. Meanwhile, GI Partners took over nearly 300 pub properties from Punch Taverns. In 2006, Texas Pacific Group (TPG) and Apollo Management made their bid at US$15 billion to take casino operator Harrah's Entertainment private. In the retail space, KKR and Bain Capital bought Toys R' Us in 2005 and invited Vornado Realty Trust into the deal in order to better understand the underlying extensive real estate portfolio. By factoring in the properties, the investor group was able to borrow more and bid higher. A year earlier, Sun Capital, Cerberus Capital Management and Lubert-Adler/Klaff Partners executed a similar strategy when the consortium bought former Target affiliate Mervyns. Since then, the department store chain has announced a number of store closings and site divestitures.[14]

Increasing competition and high prices for commercial properties before the credit crisis led real estate investors such as Apollo Real Estate Advisors to look at operating businesses for their valuable real estate. "It has become so competitive to buy property today that one of the reasons you see [real estate] investors acquiring operating businesses is to get to the real estate," says John Jacobson, a partner at Apollo Real Estate Advisors.

In 2006, JER Partners acquired Behrman Capital's Tandem Heath Care, a provider of long-term healthcare services. JER invested alongside Formation Capital, which is an operator in the senior housing and care industry. JER then separated the real estate from the business and leased it back to the company.

Private equity investments in real estate are not novel. The Blackstone Group's real estate arm dates back to 1992, and Kohlberg Kravis Robert's (KKR) history in properties investments dates to its 1985 buyout of lodging company Motel 6. As private equity firms continue to target the sector and as traditional real estate investors adopt the private equity model, what materializes is that more real estate deals are starting to look like typical LBOs.

[14] MacFadyen, Ken. "*Private Equity's Real Estate Gamble:…*" Rubenstein Public Relations (October 9, 2006)

Broadly speaking, the target companies being acquired could be in either publicly or privately held. Acquisitions of publicly held companies are often referred to as "buyouts", or "privatization." On the other hand, acquisitions of privately held companies are often referred to as "pre-IPO" investments.

Similar to the acquisition of direct properties, the acquisition of real estate operating companies allows for various value-enhancing strategies in addition to general market timing:

- Private-public arbitrage. When public market and private market values assets differently, one could make a profit by purchasing the asset in the market where it is undervalued and turn to sell it in the other market that gives a higher valuation. However, as with all arbitrage opportunities, they exist only for a short time frame.
- Recapitalization. Investments in companies at a bargain when it is in need for equity capital (incurring costs of financial distress from over-leverage).
- Merger. Create value through synergy and cost-cutting. The idea is that two companies combined create more value than separately by themselves. An example of synergy in REPE can be seen in Oaktree Capital's acquisition of Panagaea Capital to expand its Asia real estate portfolio.
- Divestiture. Create value by breaking company's assets apart and selling them piece-meal, when the value of the firm as a whole is worth less than it is in pieces. The recent and prominent example of this strategy is exemplified by Blackstone's acquisition of EOP. According to a report on Bloomberg.com, within two weeks of

closing the US$39 billion deal, Blackstone had already entered into agreement to sell about US$21 billion EOP properties.[15]

The REPE firms that are making investments in operating companies make the opportunity funds they control a broad and flexible asset class. The question is whether the risk and return payoffs make sense, as shall be explored in the next chapters.

15 Taulli, Tom. "*Blackstone's EOP deal: The ultimate financial engineering.*" Bloggingstocks.com (February 23, 2007)

3.0 CHAPTER THREE – INDUSTRY AND MARKET FORCES

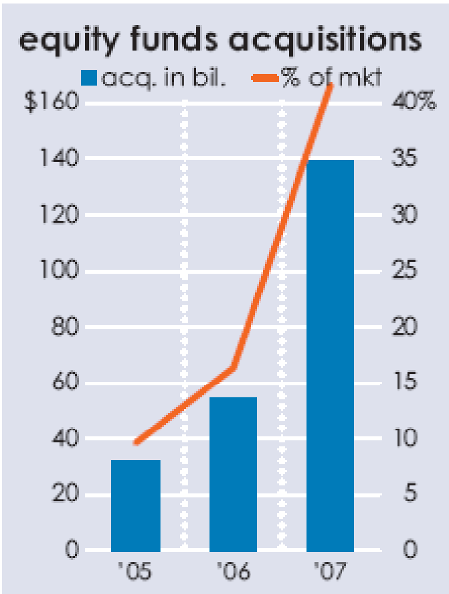
The previous two chapters introduced the major REPE players and investment types of the REPE industry. This chapter builds on the previous by providing a literary overview of the current industry and market conditions and proposes how these forces may impact opportunity funds.

3.1 Current State of the Real Estate Private Equity Industry

Despite the credit crisis sparked by the raising default rates of sub-prime mortgages in 2007, REPE industry continues to grow at a rapid pace. As of first quarter of 2008, Real Estate Alert identified 153 opportunity funds controlling an aggregate of US$128 billion.[16] For the first quarter of 2008, the REPE funds have raised US$25 billion, representing 14% growth over the same period a year ago.[17] In terms of transaction volumes, REPE funds acquired over US$140 billion, or 40%, of all significant commercial properties transacted in 2007[18], which makes REPE arguably the most significant driving force of real estate transactions in the market today. REPE transactions are shown in Charts 3.1 and 3.2 below.

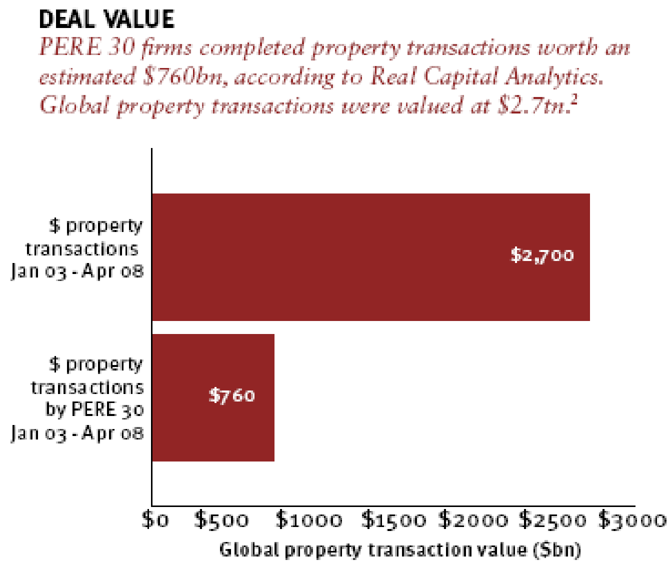
[16] Includes both active and anticipated. See Appendix I
[17] Private Equity Intelligence (March 2008)
[18] Real Capital Analytics. "*Office Capital Trends Monthly.*" (December 2007)

CHART 3.1: Equity Funds Acquisitions



Source: RCA

CHART 3.2: Total Property vs. PERE30 Transactions



Source: PERE

Momentum from the flood of activities in 2006 carried through the first half of 2007. Through the first half of 2007, capital flows to real estate remained strong. According to a survey conducted by Ernst & Young summarized in Chart 3.3 below, more than US$38 billion was raised by REPE funds in 2006 and US$23 billion in the first half of 2007.[19] Additionally, 35 funds were in the process of raising a targeted capital of US$35 billion.

[19] Ernst & Young LLP. "*2007 Market Outlook: Trends in the Real Estate Private Equity Industry*." Ernst & Young LLP (2007)

CHART 3.3: Capital Raised by PERE Funds

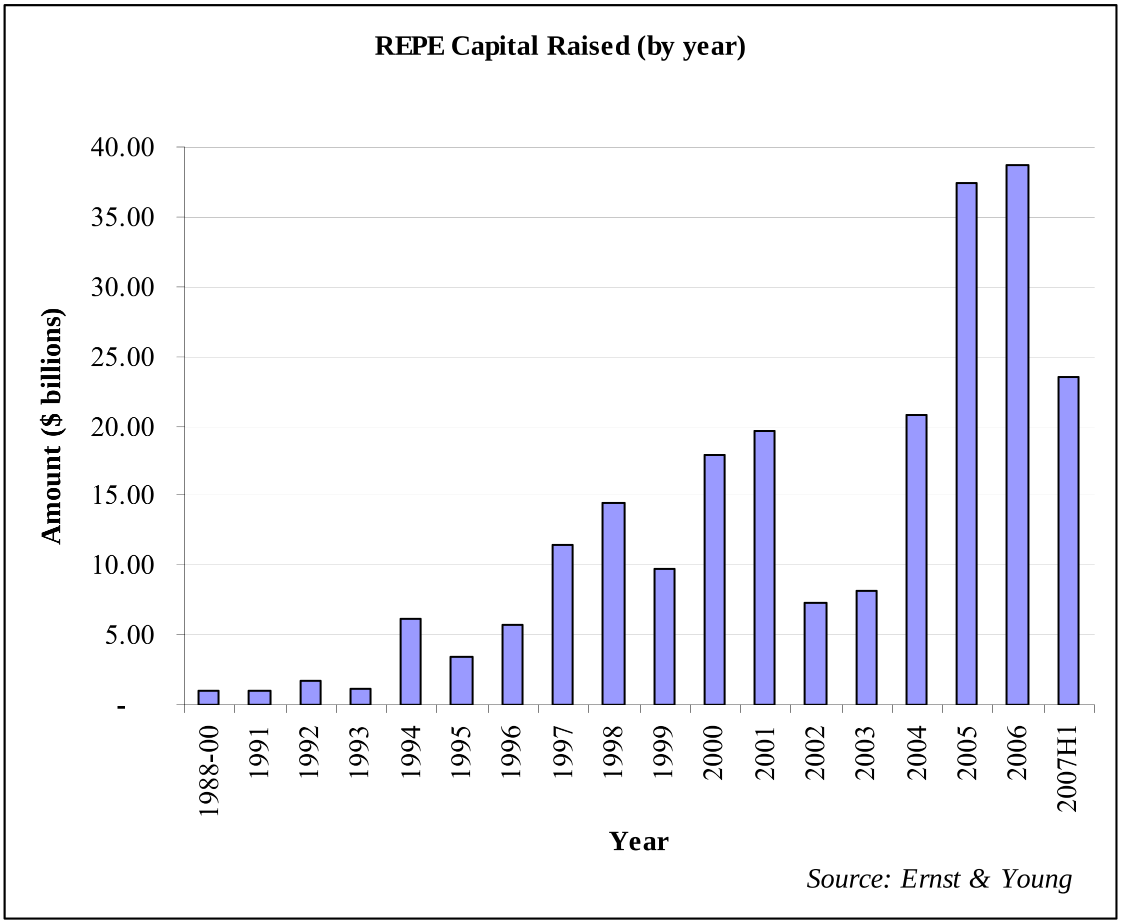


Table 3.1 below shows that the average fund size also increased, from the last peak of US$580 million in 2001 to US$1.07 billion in 2007, reflecting an average year-on-year growth of 11% over the past six years.

TABLE 3.1: Total Fund Equity Raised

Total Fund Equity Raised (by Year)						
(in US$bn)	Total			Cumulative		
Year	# Funds	Amount	Avg Fund Size	# Funds	Amount	Avg Fund Size
1988-00	2	1.03	0.52	2	1.03	0.52
1991	3	1.04	0.35	5	2.07	0.41
1992	7	1.70	0.24	12	3.77	0.31
1993	7	1.14	0.16	19	4.91	0.26
1994	17	6.11	0.36	36	11.02	0.31
1995	15	3.44	0.23	51	14.46	0.28
1996	23	5.71	0.25	74	20.17	0.27
1997	30	11.54	0.38	104	31.71	0.30
1998	33	14.50	0.44	137	46.21	0.34
1999	28	9.70	0.35	165	55.91	0.34
2000	36	17.87	0.50	201	73.78	0.37
2001	34	19.66	0.58	235	93.44	0.40
2002	27	7.31	0.27	262	100.75	0.38
2003	21	8.15	0.39	283	108.90	0.38
2004	37	20.85	0.56	320	129.75	0.41
2005	48	37.35	0.78	368	167.10	0.45
2006	48	38.73	0.81	416	205.83	0.49
2007H1	22	23.56	1.07	438	229.39	0.52

Source: Ernst & Young

In aggregate, REPE funds have raised more than US$229 billion dollars in 438 funds over the past 20 years since 1998, implying an average of US$520 million dollars per fund. The number of new funds being established has also increased. According to the survey by E&Y, 36% of the funds raised between 2006 and first half of 2007 are first time sponsors. Further, developers and other real estate operating companies are also raising funds on their own.

To add to the mix of the competitive landscape, the activities of Sovereign Wealth Funds ("SWF") is also becoming a formidable force in the industry. SWF are sovereign funds investing on behalf of national governments. SWF have existed since the 1950s. The International Monetary Fund ("IMF") estimates that total asset size of SWF at around US$2 trillion to US$3 trillion, and could grow to between US$6 trillion to US$10 trillion by 2013. For example, the Government Investment Corporation ("GIC"), the investment entity for the Government of Singapore, has an estimated investment holding of US$330 billion. GIC Real Estate has over 200 investments in more than 30 countries globally. Other notable SWF include the Abu Dhabi Investment Authority (US$875 billion), the Government Pension Fund of Norway (US$350 billion), Kuwait Investment Authority (US$250 billion), and China Investment Corporation (US$200 billion).[20]

3.2 Current State of the Market – Credit Crisis of 2007

As mentioned previously, the current capital markets crisis originated from the sub-prime residential loans. Due to poor underwriting standards primarily between 2005 and 2006, households that should not have gotten loans have received them. Whereas about 70% of the sub-prime mortgages were locked in at fixed-rates, the remaining 30% did not.[21] The sub-prime loans were packaged into securities which permeated the capital markets. Institutional investors such as pension funds in places far from the U.S. were also exposed.

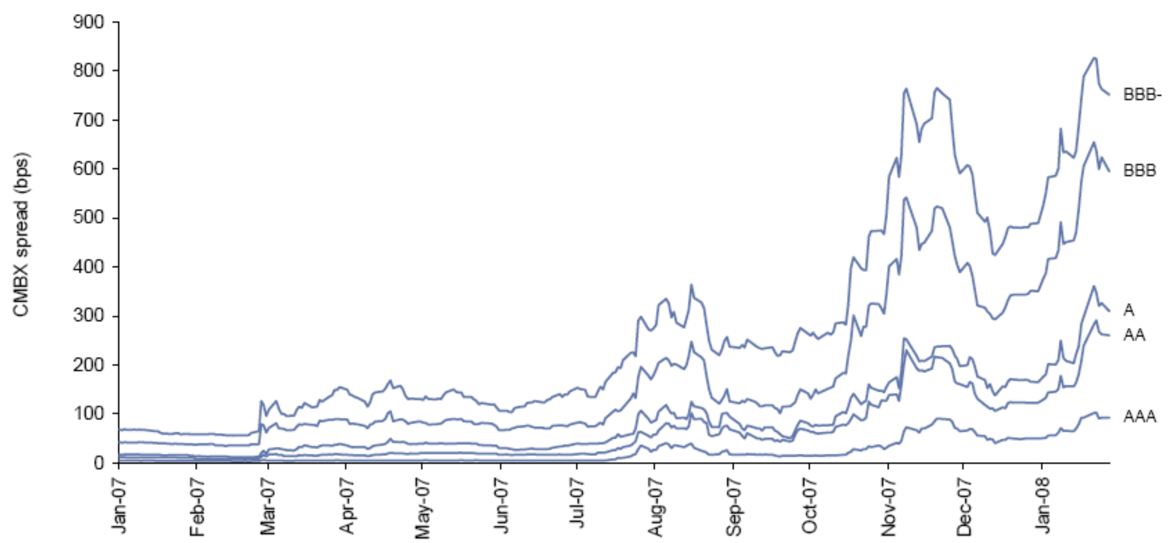
Meanwhile, the rating agencies contributed to the fiasco as they were not accurately assessing the risks of the securitized products, either out of negligence or the inherent bias in the incentive structure of the system as rating agencies get paid by the issuers of these securitized products. Regardless of the reasons, the inability of rating agencies to properly rate the credit risks caused investors to doubt what other credits have been poorly underwritten and overrated. As a result, investors started losing confidence and credit spreads started to widen

[20] Wikipedia: Sovereign Wealth Funds
[21] Linneman, Peter. "*Making Sense of the Current Capital Markets Disarray.*" Wharton Real Estate Review (Fall 2007)

in commercial real estate ("CRE") markets as well as in residential markets, contributing to a downward spiral of asset prices as seen in Chart 3.3 below.

<u>CHART 3.3: CMBX Spreads (2007-2008)</u>

Exhibit 23: CMBX spreads have widened significantly over the last 12 months



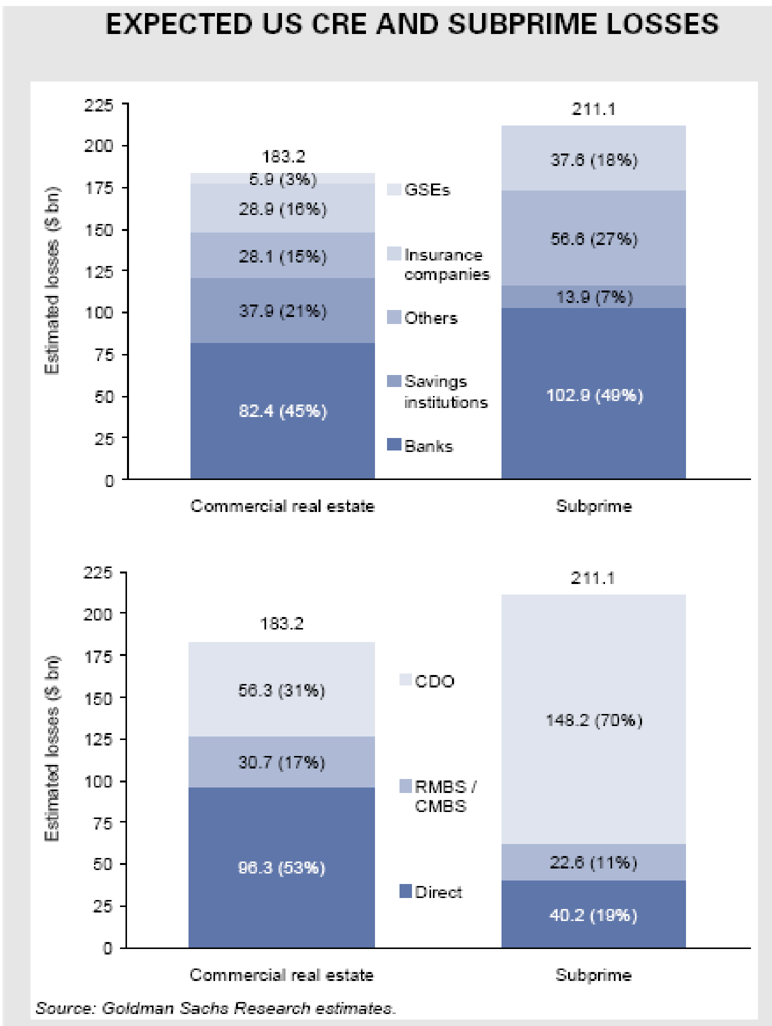
Source: Markit.

Goldman Sachs research estimated that eventual sub-prime losses will be US$211 billion,[22] and of first quarter of 2008, most of them have been written off. However, the impact of the credit crisis on commercial real estate may be more drawn out. According to research by Goldman Sachs (February 2008), "Over the longer term, we expect total CRE-related losses of US$183 bn…While the magnitude of the losses is similar to sub-prime, defaults are likely to spread over a longer time frame, which should limit the short-term capital constraint. We estimate that 95% of subprime default will be realized with five years of origination, compared with 38% for commercial real estate." Chart 3.4 below shows the expected loss in

[22] Ramsden, Richard. "*US commercial real estate: High losses, slow burn.*" Goldman Sachs Research (February 1, 2008)

U.S. Commercial Real Estate and Sub-prime. Losses for CRE will take longer than sub-prime loans because the former has a lower securitization level and longer default profile. Goldman Sachs also forecasts that CRE prices will need to fall 26%, causing total returns to fall 15% in 2008 to revert to long term average returns.

CHART 3.4: Expected Loss in US CRE & Sub-prime



Not only has a lack of confidence with the debt markets impacted CRE, but also a problem of asset-liability mismatches.[23] Most of the assets today are long-term in nature, but are financed with short-term liabilities. When the spreads widen, investors have difficulties meeting margin calls and are forced to sell assets. The more leveraged they are, the more they have to cover the margin calls. This causes another round of distressed sales reinforcing a downward spiral of asset prices in the market.

3.3 Implications for Real Estate Private Equity

Both the industry and the market forces signals challenges for the REPE players. The robust capital raising and the entry of new funds in the industry suggest increasing competition to deploy capital. The abundance of private equity capital raises general concerns that more money is chasing fewer deals which in theory drive down returns. On the other hand, the market forces from the credit crunch poses general concerns about the REPE industry as many participants see it as the end of an era of unreasonably low-cost debt. The lack of low-cost debt capital, which has fueled the real estate market appreciation over the past several years, is expected to slow transaction velocity and lower asset prices (expanding cap rate), according to many industry publications.

Reviewing the past couple of years, 2006 was an active year for REPE industry as it was the second most active M&A sector behind telecom.[24] The momentum carried through the first half of 2007, when the industry was on pace to raise record REPE capital. However, the credit crunch has all but slowed down investment activities since August 2007. In the first

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[23] Linneman (Fall 2007)

[24] Real Capital Analytics. "*Global Capital Trends*." (January/February 2008)

quarter of 2008, the number of property transactions fell by 46% compared to the same period in 2007.[25] Transactions in the Americas and Europe are most affected, with deals down two-thirds and 40%, respectively, according to RCA. In the U.S., office and retail are the worst affected with sales down 81% and 80%, respectively. With REPE funds accounting for a majority of property transactions, the slow down in overall property transactions signals a significant slow down in activities by REPE funds. Year to date in 2008, many funds have been sitting out and there is a large amount of invest-able cash on the sidelines, as evidenced by the low transaction volume relative to the amount of capital raised, waiting for deal terms to improve and more clarity on the direction of the market.[26]

For an opportunity fund, threats and crises also mean opportunities. The threat of increasing competition also presents an opportunity to eliminate inexperience players. The result of this market discourse is also viewed by some industry professionals as a great opportunity to pick up assets at a discount. Many firms have also sought to capitalize on distressed debt opportunities. Firms such as Colony Capital (~US$2bn), Apollo Real Estate Advisors (~US$1bn), and JER Partners have all launched real estate debt funds targeting distressed opportunities in recent months. However, the large number of capital seeking distressed opportunities may outnumber the availability of distressed debt opportunities. Rather than seeking distressed properties, funds are seeing opportunities in distressed holders of debt (e.g., financial institutions).[27] It remains to be seen how much impact increasing competition and the credit crunch have on the opportunity funds. More interestingly, it remains to be seen how the funds are viewing and reacting to the changing market conditions.

[25] Hughes, Zoe. "*Properties deals down by almost half.*" PERE Online (June 9, 2008)
[26] Corrigan, Gerald E. "*A Perspective on Current Market Conditions.*" Goldman Sachs (March 18, 2008)
[27] Poon, Eva. "*Disequilibrium.*" PERE Online (June 9, 2008)

Having set the foundation for an overview of the REPE players, practices, and current conditions, the study will now proceed to understand the impacts of the proposed industry and market forces have on the opportunity funds through the structured interviews with representatives from various leading global opportunity funds in the next chapter.

4.0 CHAPTER FOUR – INTERVIEW SUMMARIES

Discussions were held with various professionals in the industry and eight structured interviews were conducted with the management[28] of real estate private equity firms including, Brockton Capital, Carlyle Group, Colony Capital, Credit Suisse, Goldman Sachs, Lubert-Adler, Morgan Stanley, and RREEF, selected from the author's professional network and the network via the Center for Real Estate at MIT. Collectively, the interviewees' coverage includes regions in the U.S., Europe, and Asia, as well as across various asset types in both niche and broad markets[29]. In the structured interviews, five major questions were asked of each of the interviewees, and supporting questions were asked ad hoc to further clarify points made. The interviewees were generally very response and forthcoming. For confidentiality reasons, the individual comments are not quoted in the thesis. Instead, a summary and discussion of the in aggregate responses from the interviews are presented.

Question 1: What impacts do the increasing competition and the current credit crunch have on your business?

In general, the interviewees indicate that the credit crunch has a negative impact on their businesses while impacts of increasing competition to deploy capital are not apparent, as summarized in Table 4.1 at the end of the section below. The credit crunch resulted in increasing difficulties in getting cheap debt financing and higher underwriting standards. Loan terms are getting stricter in the form of lower leverage levels and higher interest costs. The credit crisis in turn has also dramatically deteriorated asset prices.

[28] Titles of vice-president or above
[29] See Appendix II for the descriptions of each of the firms interviewed.

In addition, the economy is not doing well, and rents are not growing. Thus, hard asset acquisitions are expected to be more difficult as there is a general sentiment of 'flight to quality,' both on the debt and the equity side of the properties market. That is, both the lenders and the buyers prefer quality assets with lower growth potential, but higher income streams and lower risks.

The funds that have ties to major investment banks have been more adversely impacted than the pure private equity funds. One caveat is that the global banks have been more exposed to the credit crunch than the local banks in Asia. The credit crunch has impacted REPE businesses more severely in the U.S. and Europe, and less so in Asia.[30] For example, one of the funds with a presence in Japan does not feel as much of a negative impact from the credit crunch, as its counter-parts in the U.S. appear to. While the underwriting standards of the local banks in Japan (and other markets in Asia) have gotten tougher, bank financing is still more readily available than it is in the U.S. Overall, however, "without the availability of large volumes of low cost debt, equity needs to be re-priced," according to one interviewee.

In terms of competition, the story is more complex. Increasing competition from the emergence of new players during the recent years has been felt in varying degrees throughout different parts of the world. Since the U.S. is more or less a homogeneous market, notes one interviewee, there is greater competition in the United States than in Asia, where various markets such as Japan, China, and India are both large and distinct. Asia is a big and diverse

[30] KPMG, FTSE Group, APREA. "*Real Estate Investment in Asia Pacific: Migrating capital.*" KPMG (2008)

market. The players in Asia have their niches and the market is not yet saturated, so competition to deploy capital is felt less keenly there.

One of the funds interviewed enters markets where it can establish long term presence and is able to scale the business. Prior to entering a market, the fund seeks to establish relationships with the local government and partners, which allows it to source off-market deals. Therefore, the firm does not need to participate in open auctions where the competition is the greatest.

For emerging markets such as China, more and more players have entered the market during the past two to three years. Pricing in the tier 1 and tier 2 cities has gone up. Therefore, current players that invested in these cities are players with lower yield requirements and lower cost of funds, such as sovereign wealth funds and local funds. The opportunity funds have been pushed to look for opportunities in riskier tier 2 and even tier 3 cities. At the same time, due to both market and regulatory reasons, it has gotten much more difficult to get debt in these markets. Therefore, many good deals no longer provide the same returns after leverage as in the recent past. Lastly, for the foreign investors, the bar has been raised by the investment committees within funds, which compares opportunities throughout the world when approving deals. For example, an investment opportunity in China presented by the Asia investment team of a global fund would be competing more intensely for capital with opportunities presented by the team in the U.S.

One firm notes that competition is also increasing in India, where the developers have more choice of capital sources to fund their projects in the presence of many funds. At the same time, however, the entry of different types of capital with different cost of funds has helped increased liquidity for the opportunity funds by improving fund's ability to exit their investments.

While both the credit crisis and competition may have adverse impacts on returns, the reality, as one interviewee sees it, is more complicated. The forces in question have had a greater adverse impact on larger funds as opposed to smaller funds. While the mega funds have grown larger and larger, as measured by assets under management, they are not necessarily scaling their operations by the same factor. In other words, the headcounts at opportunity funds are not growing proportionally with the assets under management. This phenomenon implies that these mega funds must do larger deals (put out more money per transaction) in order to put all the capital raised to work. Since there are a limited number of large deals, most of which are take-private deals, the competition to place capital has increased for the larger funds. Further, because of difficulties in debt markets, some of these large deals are not getting closed.

Other experts in the field have also indicated more favorable trends for the smaller funds. At the PERE Forum: Europe 2008, Nori Gerardo Lietz, advisor to some of the largest PERE funds in the world, predicted an increase in the number of specialized regional funds as opposed to global real estate vehicles because institutional investors want to choose where to deploy their capital.

However, some interviewees expect deteriorating market conditions to negatively impact some funds that do not have sufficient capital base or resources. In effect, the credit crunch may decrease competition in the near term. Some interviewees expect many funds will either not be able to deliver returns, or will go out of business completely (liquidate) in the next three to five years. One interviewee even predicts that there will be a noticeable decrease in number of funds or players by 2009.

Only one interviewee noted that his/her business has not been significantly impacted. Due to the reputation of its firm, credit is still available, although at a higher cost. In fact, it is precisely under a turbulent market condition like the current one, where there is confusion, that the opportunity funds thrive.

TABLE 4.1: Summary of Responses to Question 1

Question 1: Impacts of Forces on Fund Business

Firm	Increasing Competition	Credit Crunch	Overall
1	Not Much	Negatively Affected	Depends
2	Not Affected	Somewhat Affected	Not Much
3	Negatively Affected	Negatively Affected	Negatively Affected
4	Negatively Affected	Negatively Affected	Depends
5	Negatively Affected	Negatively Affected	Negatively Affected
6	Not Much	Negatively Affected	Negatively Affected
7	Not Much	Negatively Affected	Negatively Affected
8	Not Much	Negatively Affected	Depends

Source: Structured interviews conducted in June 2008

Question 2: What are the allocation percentages and risk-return expectation for each of the investment types in the latest fund and how has that changed over the previous fund? Why?

Most of the interviewees see the credit crunch as having a negative impact on their businesses, although in varying degrees, and agree that the opportunity funds will react in one of three ways: 1) raise the risk profile by investing in riskier asset types or regions in order to maintain high return levels, 2) maintain the same risk profile by accepting lower returns, or 3) maintain both the risk profile and required returns by exploiting market opportunities.

Six out of eight interviewees believed that the same return expectations could be delivered in the current market. Of these six interviewees, four believed that the returns could be achieved without incurring additional risk. The interviewees indicated that the credit crisis creates dislocation in the market which means more opportunities for opportunity funds. Also, they argue that the flexible mandates of opportunity funds, unlike the core and value-added funds, allow them to quickly capitalize on opportunities in the current volatile market. The question of whether these opportunities would continue to deliver the high returns (alphas) also depends on another important variable: the short-term direction of asset prices, as one interviewee pointed out. Simply, if the asset prices fall enough within the next 12-18 months, the opportunity funds may be able to deliver the returns by buying low and selling high. So far, however, the interviewees have not yet seen the asset re-pricing or the bottoming out of the market.

One interviewee who believed that both the risk profile and the required returns could be maintained indicated that opportunistic fund investments by nature are never ‘plain vanilla’ and require complex workouts and asset management in addition to precise market timing to generate opportunistic returns. Thus, in the current market, its portfolio risk is not necessarily getting higher. The interviewee noted that recently raised global funds will have greater investment allocation for the U.S. as many expect the U.S. property market to become more distressed. In terms of investment types, there will be more opportunities in distressed debt investments, particularly in U.S. and Europe. However, other GPs from the IMN Real Estate Opportunity and Private Fund Investing Forum in 2008 mentioned that the while distressed assets may yield higher returns than in previous years, it is uncertain as to whether there are enough distressed assets for all the capital that is being raised to acquire them.[31] Thus, competition for these assets may be an important issue for distressed debt funds.

Two interviewees believe that the same returns could be achieved by taking on higher risk in the form of greater geographic allocation towards emerging markets and greater asset type allocation towards investments in development projects and operating companies as opposed to hard assets. Table 4.2 below shows a sample of the change in allocation from one of the firms interviewed:

TABLE 4.2: Sample Change in Allocation

	Previous Fund (2006)	Latest Fund (2008)
Direct Properties	60%	40%
Development Projects	30%	40%
Operating Company	10%	20%

Source: Structured interviews conducted in June 2008

Acknowledging that development projects and operating companies are inherently riskier, the interviewee suggested that the portfolio of the latest fund could indeed be riskier than the previous. Further in search for returns, the latest fund is also venturing out to seek

[31] Poon, Eva. "*Disequilibrium.*" PERE Online (June 9, 2008)

opportunities in emerging markets such as India, which will add to the new fund's risk profile. Another interviewee agrees that in order to boost returns, the firm is going to pursue less direct property investments in the portfolio and engage in more development projects.

The two remaining interviewees believe that their portfolio investment compositions would not change, but the required return and leverage level would decrease for their latest fund. The interviewees do not expect a change in asset type allocation between direct properties, development projects, operating company purchases, but do foresee a greater geographic allocation toward Asia and parts of Europe. However, other global funds do not anticipate expect much change in terms of geographic allocation, with a typical allocation of 35% in U.S., 35% in Europe, and 30% in Asia.

The general sentiment from the perspective of fund managers on whether the industry is getting riskier is more or less mixed. While some interviewees suggest that opportunity funds may be getting riskier, others suggest otherwise. One interviewee held out the fact that many funds have walked away from deals or are sitting out for much of this year as a sign of investment discipline. However, the interviewee was also quick to point to several recent deals as examples where funds may have overpaid and therefore may miss return targets. Overall, it appears that the experience and the track record of the opportunity fund managers are still the most important determinants of a funds' risk because the timing, execution, and management of investments in critically important in this market. This topic is investigated further in the next Table 4.3 below shows a summary of responses to question 2.

TABLE 4.3: Summary of Responses to Question 2

Question 2: Allocations and Required Return Expectations

Firm	Geography	Asset Type	Risk-Return Expectations
1	No Change	No Change	Same Risk, Same Return
2	More U.S.	More distressed debt (NPLs)	Same Risk, Same Return
3	No Change	No Change	Same Risk, Same Return
4	n/a	n/a	Same Risk, Same Return
5	More Asia	No Change	Same Risk, Lower Return
6	More Asia/Europe	No Change	Same Risk, Lower Return
7	More India	More development/corporate	Higher Risk, Same Return
8	No Change	More development/corporate	Higher Risk, Same Return

Source: Structured interviews conducted in June 2008

Question 3: What types of investments provides the best risk-adjusted return in the current market? How does your firm quantify and mitigate these risks?

When asked of the types of investments that provide the best risk-adjusted basis, each of the interviewees cited different favorites. To the different firms, the risk-adjusted investment depends on how the firm is best able to mitigate its risk and play to their teams' strengths. Thus, the response of each of the firms corresponds with its expertise and track record. Examples include:

- A firm traditionally focusing in redevelopment opportunities in the U.S. finds similar redevelopment opportunities in Asia as having the best risk-adjusted returns
- Another firm known globally for being distressed debt specialists is seeking distressed opportunities in the U.S.
- Global firm with asset management teams dedicated to managing wholesale and industrial properties believes that wholesale and industrial properties are the best investment opportunities

- The Asia team of a global fund that has closed senior housing deals in Japan is continuing to find it an attractive property type on a risk-adjusted basis

When asked how risks in an investment deal are quantified, only one of the respondents is currently creating a database to track historical volatility. For deal teams operating in emerging markets in Asia where there is virtually no historical data, risk assessment is based largely on intuition and experience. While most firms could qualitatively identify the components of major risks to each investment, quantifying the corresponding risk premiums is based largely on feel. Also, it appears that since every deal structure is different, there is no systematic way to assign risk premiums to opportunistic investment deals. One interviewee said deals would be considered as long as the returns are over the cost of funds, or a hurdle of say 20% IRR, without mentioning how risk premiums are determined within this return range.

Most of the interviewees said that they mitigate risks through rigorous due diligence and active post-acquisition asset management. Another firm said that with a global network and research team, they could perform a "top-down" (macro economic and market) research and hedging strategies, as well as a "bottom-up" (via local networking) research to compare the deal risks around the globe. Another firm said risk mitigation is all about two key elements: 1) negotiating the deal structure and 2) identifying the right local partner. The firm tries to reduce idiosyncratic risk as much as they can through these strategies in order to focus on the market risk, such as leasing and selling of units).

Question 4: What are the strengths, weakness, opportunities, threats ("SWOT") for your firm?

Strength

Some of the competitive strengths that the interviewees identify include:

- Diverse skill set of the team. A couple of the interviewees stated that their advantage lie in having a team of professionals with diverse background and deep knowledge about real estate. This is reflected in their fundamental approach to the valuation of real estate assets. For example, when doing Pre-IPO, entity-level deals, they would use method akin to an NAV valuation as opposed to multiples valuation method or use financial instruments such as convertible bonds that are used by some of their competitors with corporate finance background to bypass the valuation of the underlying real estate.
- Global network, broad platform. Two interviewees expressed that having a large global platform means being able to draw resources and information globally. Having a global presence and reputation allows them to establish the relationships and network to source deals on a proprietary basis, select good local partners, and obtain favorable loan terms from banks.
- Being Small. Interestingly one interviewee said being a small fund frees them of the pressure of needing to put large amounts of capital to work since the most attractive deals on a risk-adjusted basis in the market now are smaller deals at around US$10-30 million. Being small also allows them to be more nimble and flexible.
- Back-office support. Another interviewee pointed out the strong back-office support as a competitive advantage. As the portfolio of the funds increases, it is important to

have a functional back-office, including information technology, accounting/tax, and sometimes legal teams to help review and monitor the performance of assets.

- Local presence. Particularly in real estate, having headcount "on the ground" is a competitive advantage. Several interviewees indicated that having professionals in every region they invest in, as oppose to managing investments remotely, is a crucial necessity to their success. Further, some of the limited partners also seem to favor funds with local presence.

Weaknesses

It is not easy to get interviewees to discuss their weaknesses. For those that answered, the weaknesses, or areas for improvement include:

- Growing Pains. Several interviewees expressed that managing organizational and portfolio growth as an area for improvement. This included adding the correct number and mix of professionals and staffs. Growth should not come at the expense of efficiency, which presents a challenge for the management of opportunity funds. Lastly, when operating a global team, management is striving for consistency and standardization in terms of business execution across different markets, for ease of management.
- Expensive cost of capital. The cost of capital for the funds is the targeted returns to their limited partners, typically in the range of 20% IRR. REPE funds are competing not only amongst themselves but all other RE investors, including the SWFs, which have a much lower cost of debt. However, this also means extra liquidity for the funds that are looking to exit.

- Regulations against foreign ownership. In countries such as China, there are strict regulatory guidelines for foreign ownership, which puts non-China opportunity funds at a disadvantage. These regulations include but are not limited to a higher registered capital (lower leverage ratios), higher tax rates, extra regulatory approvals that could take more time and effort.
- Independence. One interviewee noted that as part of an investment bank, the real estate investment team may not be perceived as being independent from their investment banking division. As many deals are sourced by real estate investment bankers, the investment team may not be presented with the deals from other real estate investment bankers fearing that confidential information may be disseminated to its own investment banking division.

Opportunities

Please see Question 5 below.

Threats

As one interviewee stated, "threats are anything that we cannot control." Several interviewees noted the macro economic environment as their biggest threat, which included the impacts of credit crisis as well as the general inflationary pressures from high transportation and energy costs (e.g., record high oil prices) throughout the world. Government regulations, especially frequently changing ones such as in China, are another major threat to opportunity funds with businesses outside of the U.S. Changing regulations significantly influences the funds ability to close deals as they must re-underwrite with changing assumptions.

However, one interviewee noted, once again, that these threats also create opportunities. For example, high transportation costs may signal a long term trend for population to congregate toward city centers, increasing city density. Several large funds are studying the potential impacts of high transportation and energy costs, as well as ways to capitalize on it.

Question 5: What are the opportunities do you foresee in the next 12-18 months? How are you planning to exploit these opportunities?

Nearly all of the interviewees indicated that the opportunities within the next 12-18 months will be from distressed sellers (e.g., poorly capitalized developers) needing liquidity or additional equity as current debt ratios fall. While the properties themselves may not be distressed providing the property fundamentals are sound, the property owners are expected to be distressed. Currently, many of the sellers' expectations are still too high, said several of the interviewees. Many of the REPE firms are currently sitting out and waiting for the opportunity to buy and sell, both in the U.S. and in Asia.

While one interviewee indicated that the U.S. has not bottomed out yet, another believed that the impact of the current crisis is not permanent, with recovery expected in the next one to two years. Distressed debt in the residential sector in the U.S. and the U.K. will be the primary focus for one of the interviewees.

In terms of markets, one domestic opportunity fund is currently seeking global expansion. Another fund in Asia is looking to other growth markets such as Vietnam and Thailand, as deals are more difficult to do in highly regulated regimes such as China. Another strategy that opportunity funds in Asia seek in the short-term is continuing to establish partnerships via joint ventures.

Another interviewee with niche strategies says that they still target wholesale and industrial space in markets that have high barriers to entry for the repositioning opportunities. Yet another says hotels and other operating entities in Asia, as well as infrastructure in emerging markets such as India, present attractive opportunities. Several of the funds interviewed said they are bullish in Japan. One interviewee said that while they are bullish on the long term prospects in China, they have to be more selective. Table 4.4 below shows the areas where the interviewees expect opportunities in the next 12-18 months.

TABLE 4.4: Summary of Responses to Question 5

Question 5: Opportunities seen in the next 12-18 months

Firm	Short-Term Opportunities
1	Waiting for price reduction
2	NPL is the US; Operating Companies in Asia
3	Waiting for distressed sellers
4	Waiting for distressed sellers
5	n/a
6	Distressed residential in US/UK
7	Distressed sellers
8	n/a

Source: Structured interviews conducted in June 2008

5.0 CHAPTER FIVE – ANALYSIS OF RESULTS

Several conclusions could be made through the structured interviews and thoroughly examining the hypotheses. First, of the two forces, increasing competition from robust capital raising in the industry and the lack of cheap debt from the credit crisis in the market, the negative impact of the latter on the REPE business is evident, while the negative impact of the former is not as obvious. From the responses gathered, however, most of the interviewees find the current business environment more difficult than when they raised their last fund.

Second, given that the negative impact of the credit crunch on the opportunity fund business is apparent, the structured interviews further shed light on how the opportunity funds are reacting to the changes in market conditions. Most of the fund managers interviewed believed that their required returns in their latest funds would be achieved without incurring additional risk[32], as compared to their previous fund. A few believed portfolio risk would be higher or returns would decrease. In terms of investment strategy and composition, most of the opportunity funds do not expect asset type allocation to change. Instead of changing the asset type allocation by investing in riskier asset classes, some increase their risk-return profile by investing in the same asset types in riskier geographic regions.

Third, the opportunity funds intend to deliver the returns through strategies that are largely based on their respective firms' competency. When asked what the interviewees see are the best risk-adjusted investments currently in the market, the interviewees' answers correspond to their respective expertise and track record. This appears to be intuitive as firms play to

[32] Based on the reasoning that opportunity funds with their flexible mandate will always seeks ways to make money despite market conditions.

their strengths in order to mitigate risks and optimize the investment value of the targeted assets. Interestingly, while most of the opportunity funds say they mitigate risks via prudent due diligence and active post-acquisition asset management, only one is developing a systematic way of quantifying risks for each investment type. Especially in the emerging markets where the historical data is rare, many of the investment decisions are made based on "intuition" and "experience" of the fund managers.

The SWOT analysis provided an interesting perspective on how the opportunity funds view themselves within the environment in which they invest. The SWOT analysis of various firms also allows for comparing and contrasting between competing firms. Some of the common strengths identified by the interviewees include having a local team with broad expertise, as well as having the reputation and the global network to source and execute deals. The interviewees find it difficult to discuss their weaknesses, with most of them citing managing growth as an area for improvement. Threats that worry them are systematic risks that are beyond their control. These include changes to the macro economy as well as changes to the regulatory environment in the regimes in which they invest.

Lastly, most of the firms are currently sitting out and waiting for asset owners to become distressed within the next 12 to 18 months. The lack of activity by the opportunity funds for much of this year suggests investment discipline by the fund managers. On the contrary, funds that invested heavily at the peak in 2007 will be under a lot of pressure as asset prices continue to fall. Overall, the REPE fund business is here to stay and will likely thrive during turbulent times like this by staying ahead of the curve, as the opportunity fund managers are confident in their abilities to continue to deliver the returns in any market condition.

6.0 CHAPTER SIX – CONCLUSION

This paper covered a wide range of topics in the area of opportunistic real estate private equity investments. It began by identifying the major players in the real estate private equity industry using two different industry data sets. Next, it systematically categorized the major opportunistic investment types and discussed the general investment strategies for each type. Having set the foundation for understanding the players and the practices of the industry, the study then proceeded to illustrate the current industry and market conditions based on research from literature and proposed hypotheses on how market forces are impacting opportunity funds. Structured interviews with representatives from various leading global opportunity funds were conducted to explore the hypotheses.

The study found that the opportunity funds have been negatively impacted by forces of the credit crisis, but not necessarily by increasing competition to deploy capital. Based on the results of the interviews, it is not clear whether the investment compositions of opportunity funds by asset type have changed due to the credit crisis. Yet several of the global funds are increasing geographic allocations to emerging markets such as Asia to deliver the proposed returns. The interviewees generally believed that they will continue to deliver the high returns without necessarily adding risk to the portfolios, due to their flexible investment mandate and current market volatility, which will allow them to pursue opportunities that are inline with their strengths and experience.

There appears to be a consistent message across observers and participants that opportunity funds are here to stay. The current credit crisis will serve to bring fundamentals and discipline back to the market, thereby strengthening the industry as a whole. Looking forward, opportunity funds will need to be more selective in order to continue to generate the high returns. In the short term as the global economy is still recovering, the industry should expect to see increasing REPE capital flow into distressed assets around the world. Further, as the Asian economies continue to grow relative to the more severely impacted economies in the U.S. and Europe, more capital is expected to be allocated to Asia, especially in large and emerging economies such as China and India.

This thesis is only the first attempt to scratch the surface of opportunistic investment portfolio compositions and strategies. It raises new questions as it attempts to answer old ones. Suggestions for further research include more in-depth understanding of how various investment types perform differently under changing market conditions. Also, are the mega-funds or the boutique (niche) funds better at generating above-market "alpha" returns? Further research in determining the "optimal platform" can shed light on how REPE firms should continue to develop in order to deliver above-market returns in the face of new challenges in the market.

The results of this study on the investment composition of opportunity funds also have significant implications for REPE investors, including institutional investors and high network individuals. While the management team expertise has been the focus in assessing the risk of the asset class, REPE investors should start to pay more attention to the changes in the investment compositions as they continue to put more money into the asset class. This could be facilitated by increasing transparency, detailed data collection, and standardized reporting.

The study intends to mitigate some of the transparency issues involving real estate private equity investing. Through this paper, the readers will gain in-depth knowledge into the workings of the growing, but highly proprietary asset class.

APPENDIX I – Currently Active and Anticipated Opportunity Funds

REAL ESTATE OPPORTUNITY FUNDS - ACTIVE AND ANTICIPATED
As of 3/18/2008
Source: Real Estate Alert

No.	Company	Fund Name	Amount ($ Millions)
1	Aetos Capital	Aetos Capital Asia Fund 3	2,500
2	AEW Capital Management	AEW Partners 5	686
3	AIG Global Investments	AIG Asian real Estate Partners 2	497
4	AIG Global Investments	AIG European real Estate Partners 2	750
5	Alcion Ventures	Alcion Real Estate Partners	202
6	Alcion Ventures	Alcion Real Estate Partners Master Fund	303
7	American CityVisita, Saybrook Capital	CityView LA Urban Land Fund	150
8	Amstar Global Advisors	Amstar Global Fund 1	300
9	Angelo, Gordon & Co.	AG Asia Realty Fund	525
10	Angelo, Gordon & Co.	AG Realty Fund 7	1,250
11	Apollo Real Estate Advisors	Apollo Real Estate Fund 6	1,000
12	ARA Group	ARA Asia Dragon Fund Opportunity 1,800.0	1,800
13	Arminius Advisors	Arminius Real Estate Opportunity Fund Opportunity 380.0	380
14	Ascendas	Ascendas India Development Trust Opportunity 325.0	325
15	Athena Group	Athena Real Estate Partners 3 Opportunity 125.0	125
16	B+B Investment Group	B+B Investment Fund Opportunity 300.0	300
17	Benson Elliot Capital Management	Benson Elliot Real Estate Partners 2 Opportunity 500.0	500
18	Big Rock Partners	Big Rock Opportunity Fund 2 Opportunity 350.0	350
19	Black Creek Group	Mexico Residential Fund Opportunity 400.0	400
20	Black Creek Group, Equity International	Mexico Retail Properties Opportunity 222.0	222
21	Blackstone Group	Blackstone Real Estate Partners 6 Opportunity 10,000.0	10,000
22	Blackstone Group	Blackstone Real Estate Partners Europe 3 Opportunity 3,000.0	3,000
23	Blue Vista Capital Management	Blue Vista Sponsor Equity Fund 2 Opportunity 242.0	242
24	BlueStone Real Estate Capital	BlueStone Equity Partners Sponsor Equity 2 Opportunity 200.(	200
25	Broe Group	(Not yet named) Opportunity 300.0	300
26	Bryanston Realty Partners	Bryanston Retail Opportunity Fund Opportunity 150.0	150
27	Carlson Hotels, Lotus Hotel	Lotus Hotel Investment Fund Opportunity 1,000.0	1,000
28	Carlyle Group	Carlyle Asia Real Estate Partners 2 Opportunity 1,000.0	1,000
29	Carlyle Group	Carlyle Europe Real Estate Partners 3 Opportunity 3,300.0	3,300
30	Carlyle Group	Carlyle Latin America Partners Opportunity 500.0	500
31	Carlyle Group	Carlyle Realty Partners 5 Opportunity 3,000.0	3,000
32	Cedar Hill Real Estate Partners	Cedar Hill Real Estate Fund Opportunity 100.0	100
33	Cherokee Investment Partners	Cherokee Investment Partners 4 Opportunity 1,200.0	1,200
34	Cheswold Capital Group	Cheswold Realty Partners 1 Opportunity 100.0	100
35	CIM Group	CIM Real Estate Fund 3 Opportunity 1,750.0	1,750
36	Citigroup Property Investors	CPI Capital Partners Asia Pacific Opportunity 1,290.0	1,290
37	Citigroup Property Investors	CPI Capital Partners Europe Opportunity 1,538.0	1,538
38	Citigroup Property Investors	CPI Capital Partners North America Opportunity 603.0	603
39	CLSA Capital Partners	Fudo Capital Opportunity 430.0	430
40	Colony Capital	Colony Investors 8 Opportunity 4,000.0	4,000
41	Colony Capital	Colyzeo Investors 2 Opportunity 1,570.0	1,570
42	Congress Group	Congress Fund 2 Opportunity 115.0	115
43	Cronus Capital	Cronus Real Estate Fund Opportunity 150.0	150
44	CrossHarbor Capital Partners	CrossHarbor Institutional Partners Opportunity 445.0	445
45	Cypress Real Estate Advisors	Cypress Realty Fund 6 Opportunity 425.0	425
46	Dewan Housing Finance	DHFL Venture Capital Fund Opportunity 250.0	250
47	Doughty Hanson & Co.	Doughty Hanson & Co. Euro. Real Estate 2 Opportunity 711.0	711
48	Dunmore Capital	Dunmore Capital Fund 1 Opportunity 200.0	200
49	Eight Capital	Eight Capital India Infrasturcture Fund Opportunity 300.0	300
50	eRealty Fund	US Value Fund 1 Opportunity 150.0	150
51	Europa Capital	Europa Emerging Europe Fund Opportunity 300.0	300

REAL ESTATE OPPORTUNITY FUNDS - ACTIVE AND ANTICIPATED (Cont.)
As of 3/18/2008
Source: Real Estate Alert

No.	Company	Fund Name	Amount ($ Millions)
52	Europa Capital	Europa Fund 3 Opportunity 1,100.0	1,100
53	Gateway Capital	Gateway Capital Real Estate Fund 2 Opportunity 800.0	800
54	GEM Realty Capital	GEM Realty Fund 3 Opportunity 360.0	360
55	GI Partners	GI Partners Fund 2 Opportunity 1,450.0	1,450
56	Glenmont Capital Management	Fund 3 Opportunity 300.0	300
57	GoldenTree InSite Partners	GoldenTree InSite Real Estate Opp. 1 Opportunity 508.0	508
58	Goldman Sachs	Goldman Sachs Dev. Markets RE Funds Opportunity 2,142.0	2,142
59	Goldman Sachs, Perry Real Estate	Caribbean Real Estate Opp. Fund 2005 Opportunity 472.0	472
60	Greenfield Partners	Greenfield Acquisition Partners 5 Opportunity 1,000.0	1,000
61	Grosvenor Investment, Vega Properties	Grosvenor Vega China Retail Fund Opportunity 500.0	500
62	Grove International Partners	Redwood Grove International Opportunity 2,000.0	2,000
63	Harbert Management	Harbert European Real Estate Fund 2 Opportunity 305.0	305
64	Harrison Street Real Estate Capital	Harrison Street Real Estate Partners 2 Opportunity 300.0	300
65	Heitman	Heitman Russia Property Partners Opportunity 150.0	150
66	HG Capital	HG Capital 8 Opportunity 60.0	60
67	Highcross Group	Highcross Regional UK Partners 2 Opportunity 611.0	611
68	Hunter Chase & Co.	Hunter Chase Real Estate Opportunity Fund Opportunity 250.(	250
69	Hutensky Group	Hutensky Capital Partners 2 Opportunity 150.0	150
70	ICICI Venture	(unnamed real estate fund) Opportunity 2,000.0	2,000
71	IL&FS Investment Managers	IL&FS India Realty Fund 2 Opportunity 750.0	750
72	Indochina Capital	Indochina Land Holdings 2 Opportunity 250.0	250
73	ING Real Estate Investment Management	ING Real Estate China Opportunity Fund 2 Opportunity 700.0	700
74	Invesco Real Estate	Invesco Asia Real Estate Fund Opportunity 300.0	300
75	IREO Investment	IREO Fund 2 Opportunity 1,060.0	1,060
76	J.P. Morgan Investment Management	J.P. Morgan Greater China Property Fund Opportunity 775.0	775
77	J.P. Morgan Investment Management	J.P. Morgan India Property Fund Opportunity 361.0	361
78	JER Partners	JER Real Estate Partners 4 Opportunity 1,500.0	1,500
79	JER Partners, Alfa Capital Partners	Marbleton Property Fund Opportunity 321.0	321
80	KABR	KABR Real Estate Investment Partners Opportunity 75.0	75
81	Kenwood Investments	(not yet named) Opportunity 100.0	100
82	Keystone Property Group	Keystone Property Fund 3 Opportunity 300.0	300
83	Kimpton Hotel & Restaurant	Kimpton Hospitality Partners 2 Opportunity 300.0	300
84	Kotak Mahindra Investment	Kotak India Real Estate Fund 2 Opportunity 500.0	500
85	LaSalle Investment Management	Japan Logistics Fund 2 Opportunity 831.0	831
86	LaSalle Investment Management	LaSalle Asia Opportunity Fund 3 Opportunity 3,000.0	3,000
87	Lehman Brothers	Lehman Brothers Real Estate Partners 3 Opportunity 4,000.0	4,000
88	Lexin Capital	Lexin-Amtrust Real Estate Partners Opportunity 72.0	72
89	Limetree Capital Partners	Emerging Beachfront Land Investment Fund Opportunity 150.(	150
90	LNR Property	LNR Land Development Fund Opportunity 1,000.0	1,000
91	Lone Star Funds	Lone Star Real Estate Fund 1 Opportunity 1,500.0	1,500
92	Lubert-Adler Partners	Lubert Adler Real Estate Fund 6 Opportunity 2,600.0	2,600
93	Macquarie Global Property Advisors	Macquarie Global Property Fund 3 Opportunity 3,500.0	3,500
94	Magna Hospitality	Magna Hotel Fund 3 Opportunity 75.0	75
95	McAlister Co.	JM Texas Land Fund 6 Opportunity 67.0	67
96	Merrill Lynch	Merrill Lynch Asian Real Estate Opportunity Opportunity 2,00	2,000
97	Merrill Lynch, Pegasus Capital	Pegasus Real Estate Fund 1 Opportunity 210.0	210
98	MIL Equity Partners	MIL European Balanced Equity Fund Opportunity 250.0	250
99	Moorfield Group	Moorfield Real Estate Fund 2 Opportunity 780.0	780
100	Nauerz & Noell	NN Advanced Property Fund Opportunity 3,000.0	3,000
101	New City Corp.	New City Asia Partners Opportunity 1,000.0	1,000
102	Northwood Investors	Northwood Real Estate Partners Opportunity 1,000.0	1,000

REAL ESTATE OPPORTUNITY FUNDS - ACTIVE AND ANTICIPATED (Cont.)
As of 3/18/2008
Source: Real Estate Alert

No.	Company	Fund Name	Amount ($ Millions)
103	O'Connor Capital Partners	O'Connor North American Prop. Partners 2 Opportunity 750.0	750
104	Oaktree Capital Management	OCM Asian Real Estate Opportunities Fund Opportunity 700.(	700
105	Oaktree Capital Management	OCM Real Estate Opportunities fund 4 Opportunity 1,000.0	1,000
106	Orbis Real Estate Advisors Partners	Orbis Real Estate Fund 1 Opportunity 75.0	75
107	Orion Capital Managers	Orion European Fund 2 Opportunity 608.0	608
108	Page Mill Advisors	Page Mill Properties 3 Opportunity 500.0	500
109	Paladin Realty Partners	Paladin Realty EurAsia Investors Opportunity 300.0	300
110	Paladin Realty Partners	Paladin Realty Latin America Investors 3 Opportunity 500.0	500
111	Path of Growth Fund	Path of Growth Fund Opportunity 100.0	100
112	Patron Capital	Patron Capital Fund 3 Opportunity 1,350.0	1,350
113	PCCP	California Smart Growth Fund 4 Opportunity 750.0	750
114	Perella Weinberg Partners	Perella Weinberg Real Estate Fund 1 Opportunity 1,500.0	1,500
115	Perseus Realty Capital	Perseus Realty Partners 2 Opportunity 250.0	250
116	PFH Investment Advisory	Horizon International Fund Opportunity 300.0	300
117	Phoenix Advisors	Phoenix Asia Real Estate Investments 3 Opportunity 350.0	350
118	Prosperitas Capital	Prosperitas Real Estate Partners 2 Opportunity 600.0	600
119	Prudential Real Estate Investors	PLA Residential Fund 3 Opportunity 1,500.0	1,500
120	Red Fort Capital	Real Estate India Fund 2 Opportunity 500.0	500
121	Restoration Capital Partners	Global Restoration Fund Opportunity 300.0	300
122	RREEF	RREEF Global Opportunities Fund 3 Opportunity 3,000.0	3,000
123	Rutley Capital Partners	Rutley Indian Property Opportunity 300.0	300
124	Rutley Capital Partners	Rutley Russia Property Fund Opportunity 500.0	500
125	Schuster Group	Schuster Realty Partners Opportunity 100.0	100
126	Secured Capital Japan	Secured Capital Japan RE Partners Asia Opportunity 758.0	758
127	Shamrock Capital, Hostmark Hospitality	Shamrock-Hostmark Hotel Fund Opportunity 100.0	100
128	Soundview Real Estate Partners	Soundview Real Estate Partners 2 Opportunity 125.0	125
129	South Africa Property Privatization Fund	South Africa Property Privatization Fund Opportunity 100.0	100
130	Spear Street Capital	Spear Street Capital 2 Opportunity 325.0	325
131	Stonelake Capital Partners	Stonelake Real Estate Opportunity 150.0	150
132	Stratford Co.	Stratford Land Fund 3 Opportunity 400.0	400
133	Sun Apollo Ventures	SUN-Apollo India Real Estate Fund Opportunity 630.0	630
134	Sunburst Hospitality	Colesville Partners Opportunity 300.0	300
135	Tano Capital	Tano India Real Estate Fund Opportunity 300.0	300
136	Tata Realty and Infrastructure	Tata Realty Initiatives Fund 1 Opportunity 750.0	750
137	Thayer Lodging	Thayer Hotel Investors 5 Opportunity 500.0	500
138	Thor Equities	Thor Urban Operating Fund 2 Opportunity 500.0	500
139	Tishman Speyer	Tishman Speyer Brazil Fund Opportunity 600.0	600
140	Tishman Speyer	Tishman Speyer India Fund Opportunity 350.0	350
141	UBS Global Real Estate, K Raheja Corp.	UBS K Raheja Corp. India Real Estate 1 Opportunity 400.0	400
142	UBS Realty Investors, Gerndale	UBS Gemdale China Real Estate Fund Opportunity 300.0	300
143	Unitech Realty Investors	Unitech International Realty Fund Opportunity 500.0	500
144	Vision Brazil Investments, Moore Capital	Vision Brazil Real Estate Oppportunities 1 Opportunity 250.0	250
145	Walton Street Capital	Walton Street India Fund 1 Opportunity 500.0	500
146	Walton Street Capital	Walton Street Mexico Fund 1 Opportunity 350.0	350
147	Walton Street Capital	Walton Street Real Estate Fund 6 Opportunity 2,500.0	2,500
148	Warburg Pincus	Warburg Pincus Real Estate 1 Opportunity 1,200.0	1,200
149	White Acre Equities	White Acre Urban Student Housing Fund Opportunity 200.0	200
150	Williams Realty Advisors	Williams Opportunity Fund Opportunity 125.0	125
151	Winnington Capital	Trophy Property Development Fund Opportunity 1,300.0	1,300
152	WP Realty	WP Real Estate Fund 4 Opportunity 150.0	150
153	Xander Group	Xander JV Fund 1 Opportunity 800.0	800

APPENDIX II – Background of Firms Interviewed

Brockton Capital

Brockton Capital ("Brockton") is a classic, single country-focused Opportunity Fund founded in 2005. In 2006, Brockton raised ₤150 million (US$300 million) in equity from 15 Limited Partners. Brockton Capital Fund I focused on UK direct property and UK asset-backed private equity, where fundamental asset management is the key value-driver. Brockton aims to provide Limited Partners with pre-tax, pre-Carry gross levered IRR of 20%+ p.a. and a 2.0x equity multiple of 3-6 years.

Carlyle Group

Carlyle Group ("Carlyle") entered the real estate business in 1997 and has investment more than US$20 billion in over 106 investments since. Currently, Carlyle has nine real estate funds focused on investment opportunities in Asia, Europe, and North America. In the US, Carlyle's real estate strategy is focused on major urban markets and in areas with high barriers to entry for a major new development, such as Boston, Chicago, Denver, Los Angeles, New York, San Francisco, and Washington D.C., in the office, hotel, industrial, and retail sectors. In Europe, the Carlyle team advises investments in commercial property that can be repositioned by updating the existing physical infrastructure as well as improving occupancy rates and rental yields. In Asia, the team seeks value-oriented investments with repositioning or redevelopment opportunities and development projects across China, Japan, and India.

According to RCA, since 2001, Carlyle Group has made acquisitions of $12,662 million, dispositions of $6,122 million. In the past 12 months, Carlyle Group has focused primarily on

Suburban Offices and CBD Offices in the following regions: US (all regions); France; Germany; Italy; London; Sweden.

Credit Suisse – DLJ Real Estate Capital Partners

DLJ Real Estate Capital Partners (“RECP”) is a dedicated team of merchant banking professionals focused on opportunistic real estate investments throughout the world. Formed in 1995, RECP is responsible for Credit Suisse’s global real estate private equity business. The RECP team has investment professionals located in New York, Los Angeles, London, Tokyo, and Hong Kong.

Colony Capital

Colony Capital (“Colony”) is primarily focused in real estate-related assets and operating companies with a strategic dependence on such assets across the globe. Colony achieves attractive risk-adjusted returns by minimizing competition with other capital sources, while maximizing value through intensive post-acquisition management. Three themes defines this strategic approach: 1) Cautious Contrarianism – during downturns or secular changes, investing in out of favor sectors or markets to exploit capital or product misalignments, 2) Exploitation of inefficiencies – capitalizing on information advantages to identify micro-market imbalances and secure investments on favorable terms, 3) Value-added Management to Optimal Exits - creating capital appreciation opportunities through repositioning, restructuring, development, and intensive management.

Founded in 1991 in the Los Angeles headquarters, Colony has successfully invested over US$39 billion in over 8,500 assets since inception. Currently it has expanded to fourteen offices in ten countries with 200-person team dedicated to principal investment and asset management. Colony raised and managed US$12.3 billion of equity capital on behalf of over 200 institutional investors and has generated a 24% annualized IRR for 17 years since inception.

According to RCA, since 2001, Colony Capital has made acquisitions of $13,312 million, dispositions of $5,570 million. In the past 12 months, Colony Capital has focused primarily on Full Service Hotels and Suburban Offices in the following regions: US (all regions); Japan; London; France; Singapore.

Goldman Sachs – Real Estate Principal Investment Area

The Real Estate Principal Investment Area (REPIA) of Goldman Sachs manages a series of global opportunistic funds, known as Whitehall Funds, and other niche products. REPIA, through the Whitehall Funds invests in real estate companies, projects, loan portfolios, debt recapitalizations, and direct property. Whitehall Funds is one of the most established of the real estate private equity funds having started in the late 1980's[33].

[33] Tang (2003)

Goldman Sachs Real Estate Funds	Vintage	Target Real Estate Investments	Fund Size ($mm)
Whitehall 1	1991	Opportunistic	146
Whitehall 2	1992	Opportunistic	805
Whitehall 3	1994	Opportunistic	1,055
GS Emerging Market Real Estate Fund, L.P.	1995	Developing Markets	375
Whitehall 3 Supplemental	1995	Opportunistic	150
Whitehall 4	1996	Opportunistic	1,350
Whitehall 5	1997	Opportunistic	1,625
Whitehall 6	1998	Opportunistic	2,261
Whitehall 7	1999	Opportunistic	1,860
Whitehall Global 2001	2001	Opportunistic	1,994
Whitehall International 2001	2001	Opportunistic	486
GS Core Plus Real Estate Income Fund 2002	2002	Core Plus	145
Whitehall Global 2005	2005	Opportunistic	2,095
Whitehall International 2005	2005	Opportunistic	1,709
Caribbean Real Estate Opportunity Fund 2005, L.P.	2005	Caribbean and Central America	472
Archon Core Plus Real Estate Fund 2005, L.P.	2005	Core Plus	268
Whitehall Global 2007	2007	Opportunistic	4,815
GS Developing Markets Real Estate Fund	2007	Developing Markets	2,103
Total			**23,714**

Source: Goldman Sachs

According to RCA, since 2001, Goldman Sachs has made acquisitions of $19,615 million, dispositions of $20,745 million. In the past 12 months, Goldman Sachs has focused primarily on Full Service Hotels and Suburban Offices in the following regions: US (all regions); Sweden; Japan; China; London; Singapore.

Morgan Stanley Real Estate

Morgan Stanley Real Estate ("MSRE") is comprised of three major global businesses: Investing, Banking and Lending. Since 1991 and as of September 2007, MSRE has acquired $158.1 billion of real estate assets worldwide and managed $88.3 billion (Value-Added/Opportunistic: $67.6B, Core/Core-Plus: $20.7B) in real estate assets on behalf of its clients with 775 professionals dedicated to the investing business throughout the Americas, Europe, and Asia.

MSRE invests through the family of Morgan Stanley sponsored equity funds which include Morgan Stanley Real Estate Funds (“MSREF”) and the Real Estate Special Situations Fund (“RESSP”). MSREF pursues opportunistic real estate investments worldwide while RESSP invests in real estate companies that are either public or planning to go public. The Private Capital Group (“PCM”) was created in 2000 to focus on raising private equity targeting the real estate sector on behalf of both the firm’s proprietary real estate investment funds and for third party clients. MSRE closed MSREF VI International last year at US$8 billion. The latest fund on the road, MSREF VII Global, is targeting to raise US$10 billion. According to documents released by Pennsylvania Public School Employees’ Retirement System, as of December 2007, MSRE funds had produced an aggregate gross IRR of 33% and 2.4x multiple.

According to RCA and since 2001, Morgan Stanley has made acquisitions of $50,962 million, dispositions of $19,546 million. In the past 12 months, Morgan Stanley has focused primarily on Industrial Warehouses and Garden Apartments in the following regions: US (all regions).

Lubert-Adler

Lubert-Adler is a dedicated real estate private equity firm specializing in redevelopments through joint ventures with local operating partners. Founded in 2007, the firm invests in all property types throughout North America and has invested in over US$15 billion of real estate assets. Lubert-Adler’s current fund – Fund VI – commenced in 2008, represents US$2.5 billion of equity which could be deployed globally.

According to RCA, since 2001, Lubert-Adler has made acquisitions of $2,255 million, dispositions of $3,152 million. In the past 12 months, Lubert-Adler has focused primarily on Mall/Other Retails and Garden Apartments in the following regions: US (all regions); Canada.

RREEF Real Estate

RREEF Real Estate acquires and manages investments in commercial and residential property, and real estate securities on behalf of its institutional and private clients worldwide. Its product offering is global and comprehensive, including core, value-enhanced and high yield property investments as well as investments in publicly traded real estate securities. RREEF Real Estate has more than €48.9 billion in assets under management worldwide as of 2008Q1.

RREEF Real Estate is part of RREEF Alternative Investments, the global alternative investment management business of Deutsche Bank's Asset Management division. RREEF Alternative Investments consists of three businesses: Real Estate, Infrastructure and Private Equity. Headquartered in New York, RREEF Alternative Investments employs more than 1,400 investment professionals in 17 cities around the world to help investors meet a wide range of objectives – from diversification, to preservation of capital, to long-term performance. RREEF has €55.6 billion assets under management worldwide as of 2008Q1.

Since 2001, RREEF Funds has made acquisitions of $28,403 million, dispositions of $18,180 million. In the past 12 months, RREEF Funds has focused primarily on Industrial Warehouses and Suburban Offices in the following regions: US (all regions).

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