

Real Estate: Assessing the Risks and Opportunities and Integrating Real Estate Investment Vehicles into High-Net-Worth Portfolios

John A. Kilpatrick, Ph.D., MRICS
Greenfield Advisors LLC
www.greenfieldadvisors.com

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Good Morning. I'm John Kilpatrick. I head up Greenfield Advisors, a 31-year-old boutique firm headquartered in Seattle. There's a good chance you're never heard of us, and if you haven't, then congratulations may be in order.

Let me explain. Our firm was founded as a single-client investment advisor specializing in real estate, spun off from Weyerhaeuser to provide analytical services and investment

advice as they were segueing into active real estate development. Of course, today, they are a major west coast real estate investor.

Since then, we've advised private clients and institutions on real estate investment issues. While we're headquartered in Seattle, our clients span the entire U.S., and indeed I'll spend most of this month in the eastern and central time zones on various projects. We've also recently handled in projects in Holland, Japan, China, Argentina, and the Caribbean.

The reason I congratulate you if you've never heard of us is because lately we've become better known as problem solvers, with a particular bent toward dispute resolution. For example, we're currently working to help straighten out the sale of a nine-figure family-owned real estate trust which has now become litigious. I've made 16 trips to New Orleans since Hurricane Katrina assisting a consortium of 28 law firms down there on real estate disputes. We just helped two major University endowments in a dispute involving shares of a private real estate trust. I was in San Francisco last week consulting a reorganization of a land-rich, cash-poor division of a publicly traded corporation. As you can guess, a disproportionately large number of law firms have Greenfield Advisors on speed-dial.

Greenfield is also recognized within the real estate research community as something of a think-tank. We have eight Ph.D.'s in real estate related fields on the payroll, and as such get called for pure-research much like academic departments. We're recently advised the Japan Real Estate Institute on valuation standards. We're currently running some tests for a major automated valuation service provider to assess the accuracy of their models. We're working

with others to find solutions for direct investment in U.S. real estate assets by Asian investors which don't run afoul of the Foreign Direct Investment rules. We advise the U.S. General Services Administration on adaptive reuse of complex Federal-owned real estate assets.

Real Estate Investments of the Rich and Famous

Previously:

Presented to the American Real Estate Society annual meetings, San Francisco, April, 2007

Portions presented at the Asian Real Estate Society annual meetings, Macao, July, 2007

Journal of Wealth Management, Spring, 2007



Members of our firm publish probably two dozen or more academic or practitioner real estate, finance, economic, or urban planning pieces a year and deliver an equal number of peer-reviewed scholarly symposium papers.

But the reason I'm here today is focused entirely on our heritage as a real estate investment advisory firm. The genesis for this talk was a paper published in the Journal of Wealth Management back in the Spring. This piece was also used as the basis for a presentation I made to the American Real Estate Society's annual meetings, and was mentioned in a presentation I

made in Macao in July to the Asian Real Estate Society.

My talks at those academic meetings was somewhat different from what I'm saying today.

Specifically, we're furthering the academic dialog on how we measure, value, and teach real estate portfolio construction in a rapidly changing world in which investors might not all be net present value maximizers in a mean-variance Markowitz-type portfolio. You might think that academic groups would recoil at such suggestions, and indeed if I was an untenured young assistant professor, I'd tread lightly in such atheistic waters.

In fact, there is a bit of a paradox in the way academic research is conducted. The most productive researchers and writers are shooting for tenure – which is true in nearly every academic field – and are very severely penalized for thinking too far outside the box. As a result, we have a tendency to grant tenure to people who come up with solutions to yesterday's problems, not to people who focus on today's issues. I don't want to dwell on that subject, and mind you I'm not complaining – this tenure tradition has given America the finest higher education system in the world. Nonetheless, you have to get a few grey hairs in your head before they let you think outside the box.

Real Estate Investments

"why"... with a little bit of "how"

Real Estate Investments

Poking a dead racoon with a stick is not "research" –

-- Bart Simpson



Real Estate Investments

Prince and Grove (2004) forecast by 2008:

1.9 million "exceptionally wealthy" families in the world (+ 72% from 2004)

US\$154 Trillion in aggregate holdings (+68%)



suite of services. My focus is entirely on real estate here – I think that the non-real estate investment community is much more aggressive in developing new investment vehicles.

Fortunately, at my age, I get to focus my attentions on multidisciplinary problems, complex issues, and solutions that may not fit into yesterday's orthodox dogma. My Journal of Wealth Management article was stimulated in part by a 2004 book on Family Offices written by Prince and Grove. This problem – how to invest all of this money – is really growing in orders of magnitude faster than our university textbooks are growing in methodology. In short, we may be using 20th century boxes to store 21st century piles of money, and those boxes may not be big enough, complex enough, or offer the appropriate

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Prince and Grove (2004):

95% of super-wealthy families got that way through the accumulation of business assets, as opposed to celebrity or speculation

of family offices investing in real estate partnerships is expected to double in the short-term



But let me return to that Prince and Grove book, and elaborate for a minute or two on the scope of the problem. You would think that a doubling of demand for real estate partnerships would be a good thing. However, demand without supply creates what the market microstructure literature calls price pressure, and prices lose their relationship to underlying fundamental values. In an efficient market, prices correct in a reasonable amount of time. However, real estate is notoriously inefficient, and divergence between fundamental values and prices can take on a life of its own.

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Why Real Estate? -- What are the goals?

- Portfolio diversification
- Business-enabling investments
- Behavioral characteristics



So to get at the heart of this, why do you and your clients invest in real estate? I would posit three motivations: portfolio diversification, business enabling investments, and behavioral characteristics. The overwhelming majority of academic research, and most of your own investment training, is focused on the first area. The second area has been a quiet secret of the self-made wealthy probably since the very first caveman realized that owning a cave near the path where the antelope crossed the river every day was probably a good thing. The increasing globalization of commerce has put this on the

front page. Note that Americans own more foreign real estate than foreigners own here, and American real estate has been owned by foreigners ever since Peter Minuet paid \$24 for this island we now stand on back 1626. However, in a post-9/11 world, and particularly as foreign direct investment in both directions skyrockets to enable global commerce, we find increasing attention and scrutiny on the topic.

Our moderator, Jean Brunel, has opined extensively on the third topic. High net worth portfolios increasingly have behavioral characteristics which transcend simple risk/reward curves, and many real estate decisions fall short of the traditional hyperbolic Markowitz-type efficient frontier which is taught as so much dogma in our MBA finance classes. And this isn't just an "assistant professor chasing tenure" problem -- something like half of the Nobel prizes in economics in the last generation have gone to research designed to confirm Markowitz and Sharpe and all the rest of the capital asset pricing model fraternity. It's clear that the portfolio needs of high-net-worth investors work on a more complex set of dimensions than can be explained by two-variable calculus.

Real Estate Investments

And a bit of the "how"...

→ *Direct investments*
 → *Securitized (and also private equity)*



Traditionally, real estate is owned in two forms – direct and securitized. I'm lumping private equity into the securitized category, and perhaps a bit unfairly. Real estate researchers think about securities such as REITs. In my July talk in Macao, I discussed how private equity could be used to facilitate business-enabling investments, and indeed Blackstone has recently put together a \$3 Billion Chinese private equity pool. Following my Macao talk, one very senior American researcher simply couldn't intellectually deal with the direct foreign investment issue. He argued that such direct foreign investment was


inefficient. However, business-enabling investments continue to require cross-border real estate investment, and increasingly we see cross-border portfolio investments, as well.

However, private equity and REITs tend to look at real estate very differently. Historically, REITs were a place to park long-term holdings of income producing property, while private equity usually has a much shorter-term horizon and a much more operational characteristic. Historically, direct investments tend to be facilitated by the real estate brokerage community while securitized investments are facilitated by Wall Street. Of course, even this distinction is breaking down. Most if not all of the big real estate brokerage houses realize that their futures

lay not in pure brokerage or property management but also in understanding the investment side of the game.

Real Estate Investments

	Direct	Securitized
Portfolio	X	X
Business	X	
Behavioral	X	~maybe~



As you can see from this table, direct investments can be used to satisfy any of the three demand drivers. Securitized investments satisfy the first, and under some circumstances the third, although these circumstances are tenuous at best. Indeed, direct investments are clearly better suited to meet behavioral needs.

So what are the considerations for a purely portfolio-driven real estate holding? Twenty-five years ago, when I was first teaching finance, a surprisingly small portion of institutional holdings were in real estate, and these tended to be concentrated. Private portfolios owned real estate, but usually either as a collectable item or as a business-enabling asset. Unless you were "in" the real estate business, you probably weren't "in" the real estate business. Today, of course,

that's all changed. Studies consistently show that a 20% - 30% holding of investment-grade real estate is needed in today's world in order for that portfolio to be mean/variance efficient. I would also stress that this needs to be *investment grade* real estate, and not collectable, personal assets, or purely estate holdings.

Real Estate Investments

Portfolio Considerations --

- *The efficient portfolio (in a Markowitz sense)*
- *Geltner & Miller (2001) – about 1/3 of U.S. investable capital is real estate*
- *Chun (2000) and Booth (2002): 20% - 30% real estate position for the portfolio to be efficient in a mean/variance context*



Now, we noted that both direct and securitized real estate satisfies the mean/variance portfolio needs. Does one do this better than the other?

There's an ongoing debate about this in the industry. I'll go ahead and admit to you that my company, Greenfield, has been engaged in talks with the National Association of Real Estate Investment Trusts about exploring the issue of REITs in portfolios. I say that simply to let you know that I have a horse in this race. However, right now, the current state of the academic literature would come down on the side of direct investments for pure mean/variance considerations. REITs have a greater tendency to be correlated with the S&P 500, and hence don't provide the variance attenuation that can be

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Portfolio Considerations --

- *Publicly traded REITs vs. Private Equity*
- *Ling & Naranjo (1998) find that REITs are correlated with the S&P 500 (0.722) while direct holdings (NCREIF Index) is uncorrelated (0.052).*
- *Liquidity, risk-adjusted ROI, are other considerations*



gained with direct investment. The latter are nearly totally uncorrelated with the S&P, and hence immediately bring an attenuation to the systematic risks in the portfolio.

Real Estate Investments

Portfolio Considerations (Black, 2004) --

- Higher return for a given level of risk or lower risk for a given level of return
- Private R/E equity: lower volatility & covariance
- Higher up the efficient frontier (higher risk, higher return), then use REITs
- Black cites 20% - 30% R/E in the portfolio



On the other hand, if liquidity is a consideration, REITs may be superior. You MIGHT be tempted to think that REITs belong on the lower risk tolerance strata, but just the opposite is true. Higher risk-tolerant portfolios gain from REIT ownership, while direct investments in investment grade real estate actually provide superior results for lower risk tolerant portfolios.

I'll give you an example. A couple of years ago, I was speaking to the Seattle Society of Financial Analysts. Seattle was just coming out of an alarming real estate market freeze, precipitated

as an indirect result of the NASDAQ meltdown. If you're not familiar with the west coast, San Jose was the epicenter of that particular earthquake, but Seattle was second on the hit list. Both markets had seen stratospheric rises in real estate prices, and then a total freeze in real estate activity with Class "A" vacancies rippling through downtown. I commented – and this was in December, 2005, that if I had bought the most overpriced office building in downtown Seattle at the height of the dot-com run-up, and had ridden that pony all the way down to the bottom of the market, I would have lost less money, on a percentage basis, than I lost in Merck stock in one day that year. And then I paused for effect, and reminded them that, "...and one of YOU guys recommended Merck."

Real Estate Investments

Within the R/E Portfolio --

- Lee (2003) – diversification within the portfolio increases efficiency
- Williams (1996) – geographic diversification by business cycle
- Mueller (1995) – *The Market Cycle Monitor*



So what tools do we use to evaluate direct investments? Obviously, a full exploration of that topic is well beyond the 15 minutes I have here, and as you can guess also has a portfolio-specific nature. However, there are three things I consider important for any of these. First, subtype diversification within the portfolio increases efficiency. Second, most large portfolios seek geographic diversification, and generally this is achieved over time by buying into markets during business cycles. There's an old adage that you make money in real estate when you buy and not when you sell, and this is a clear example of how and when that works. Finally, at

least domestically, Glenn Mueller out of the University of Denver has one of the better means of tracking cycles by geographic market and by property sub-type that I've ever seen. As long as Glenn stays alive and healthy, I don't see any reason to invent my own metric. However, I'm keeping close track of his work and, for that matter, Professor Mueller's annual physical exam results.

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Within the R/E Portfolio --

- Note that active diversification does not imply active trading
- Timing decisions made on acquisition and disposal



Note that active diversification does not mean active trading. Naturally, properties need to be managed and monitored, and generally we find that well-acquired properties need to be examined for potential repositioning somewhere in the 5 to 10 year range. That doesn't necessarily mean selling, but let me give you an example. A brand new, investment grade suburban apartment community may be a fine investment under the right circumstances. However, after a few years of wear and tear, the apartment may lose its investment-grade characteristics and will be valued using very different metrics – different cap rates, different

discount rates, different expense assumptions, different per-square-foot values, etc. Hence, what used to be a top-of-the-line investment may show a decline in value over time due to what might be curable items. Active management of the investment monitors for these factors and anticipates a “fix up or sell” decision well in advance of the inevitable.

Real Estate Investments

Business Enabling Investments

- Kilpatrick (AsRES, 2007)
- Portfolio management is often a function of major life changes
- Frequently optimum to separate business assets from realty assets



Now, I want to take just a minute to talk about business enabling investments. Generally portfolio managers get involved in this aspect when an asset-heavy estate has a major life change event, such as retirement, death of the scion of the family, or reorganization of the family's core business. Often, these families own core businesses which are not real estate related, but may own large real estate holdings to facilitate the core business.

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Business Enabling Investments –
Challenges

- Tax and estate implications of divestiture
- Simple mechanisms (1031, TICs) may not suit more complex portfolios
- Frequently leads into Behavioral portfolios



Generally, it's helpful to be able to segregate the business and the real estate holdings. This may facilitate the reorganization of the business and can, in many circumstances, turn what were originally business-enabling investments into portfolio-oriented investments, particularly if the underlying real estate is investment-grade. Note that there are a plethora of simplistic solutions, many of which do not suit the complex, large portfolio. Legal and accounting advisors are usually at the table at this point, but they frequently don't bring an understanding of real estate fundamentals with them in order to find the optimum solution.

Real Estate Investments “Behavioral” models

Gray (2004): Common Themes of high-net-worth Investors:

1. *Complexity (interlocking needs)*
2. *Control (money = power)*
3. *Connections (have & need)*
4. *Capital (money defines the person)*
5. *Charity*



Finally, I want to talk about behavioral drivers of real estate investing. Please note that this would be a great topic for it's own symposium, and there are other authors who have written extensively on this topic, generally with better gravitas that I bring to the subject. Nonetheless, Gray suggests five themes which permeate high-net-worth investment portfolios: complexity, need for control, need for connections, the realization that money (or capital) defines the person, and finally charity. To a certain extent today, the fourth and the fifth are intertwined with one another.

Real Estate Investments “Behavioral” models

Portfolio Considerations:

1. *Wealth enhancement (rather than wealth creation)*
2. *Intergenerational transfers*
3. *Asset protection*
4. *Charitable giving*



Sadly, it doesn't stop there. A study last year out of Japan shows us that not only are the needs of the high-net-worth investors very, very different, they come to the table with a set of investment strategists who may not speak their language. The Japanese study, done for Nomura, begins with four problems faced by what they call the “suddenly rich” – lack of knowledge and experience, inadequate options, lack of ability on the part of investment institutions, and lack of linkages to get advise and assistance.

So where does this take us? The behavioral character of the high-net worth portfolio have for implications – wealth enhancement, intergenerational transfers, asset protection, and charitable giving. These, as noted, have to be taken in a world of mean/variance portfolio decision making as well as the increasing need, on a global scale, for business-enabling assets.

Real Estate Investments

Research Paradox (for ARES):

If the real estate investment criteria of the high-net-worth portfolio differ from the traditional “dogma”, are we studying the wrong things?



It's a bit of an aside, and perhaps not germane to the topic here, but my talk at the American Real Estate Society meetings in the Spring centered around one major paradox – if the real estate investment criteria of the high-net-worth portfolio differ from the orthodox dogma, then are we studying the wrong things? In short, does the real estate orthodoxy know how to deal with your clients? Are the real estate faculty of the world teaching the right things to our MBA students?

I frankly think my colleagues in academia do a pretty good job, but don't really have enough

opportunity to impart the knowledge to their students. If real estate occupies – or ought to occupy – 20% to 30% of a portfolio, then I'll bet the typical finance MBA student doesn't spend 20% to 30% of his or her time, even among the investment training, learning about real estate.

Real Estate Investments “Behavioral” models

Morrison (1996): Categories of investors

Geltner & Ling (2006): Behavioral characteristics (“value” might not be unique across investor types)

→ Arbitrage opportunities?



We are, in fact, studying the problem. We're coming to grips with the fact that there are different categories of investors, which implies that “value” might not mean the same thing across these categories. Does this imply arbitrage opportunities? Actually, it always has – we've always known that real estate markets only work if an asset has more utility to one investor than it has to another. Identifying these situations is an important component of advising on the real estate component of the investment portfolio.