QUADRANT
REAL ESTATE ADVISORS

2006

Expanding the Opportunity Set:

The Four Quadrant Approach for Achieving Real Estate Objectives

By: Kurt Wright, CFA

CEO of Quadrant Real Estate Advisors

Introduction

For over 30 years, the U.S. income property market has proven to be a valuable component of institutional mixed asset portfolios. Traditional attributes of U.S. income property market investments that historically attracted investors to the asset class include:

- High, stable current income yield
- Capital appreciation potential
- Inflation hedging potential, and
- Mixed asset portfolio diversification benefits.

The securitization and segmentation of the U.S. income property market over the past 15 years has added the following enhanced attributes:

- Liquidity
- Rapid, efficient placement of capital
- Segmented risk/return characteristics
- Numerous flexible leverage strategies
- Very highly diversified portfolios

The traditional approach to accessing U.S. income properties defines investment strategy in terms of narrow categories that have historically been available. The traditional model typically defines strategy in some combination of:

- Property type
- Geography
- Position in the capital structure (e.g., Equity or Mezzanine)
- Public or Private
- Debt or Equity

As an example, over the past few years a large amount of institutional capital has flowed to narrowly- defined commingled core real estate strategies that are limited to equity ownership of stabilized income properties. The main disadvantage to this type of investment strategy is that the investment manager is motivated to continue to invest in the narrow strategy, even though the window of opportunity may have closed.

A more powerful and strategic approach would be to set investment goals in terms of more classic investment attributes including:

- Risk
- Return
- Cash Flow
- Duration/Time Horizon
- Control
- Call Protection

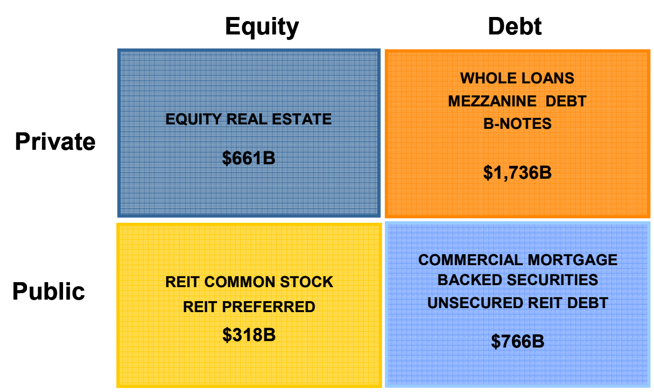
Once the program's goals are set in terms of these attributes, the investment strategy should allow for the widest range of product structures that individually meet these goals. Indeed, the parameters should be so broadly cast as to capture not-as-yet conceived structures that bear similar attributes. For example, B-Notes, which today are one of the most attractive sectors in the middle tier of the capital structure, essentially did not exist three years ago.

This investment approach allows investors to pursue relative value across all investments that meet their desired attributes, and thereby create more efficient risk/return portfolios. Numerous major institutional investors are employing this new paradigm themselves through single-client account mandates. Further, the group of advisors offering such strategies and products through commingled fund formats continues to expand.

Background

Broadly defined, the U.S. income property market offers enormous opportunities for investment. The overall market capitalization of the asset class is approximately $3.4 trillion (see Exhibit 1), rivaling the size of the $3.8 trillion U.S. Treasury market (as reported by NASD). This large universe is segmented into four quadrants and offers many sectors with each offering various risk/return, liquidity and other attributes.

Exhibit 1
U.S. Income Property Market Investment Universe
(Approximately $3.4 trillion)



Sources: 2006 Emerging Trends in Real Estate (Note: Emerging Trends changed their data source in 2006), SNL Financial, CMSA. Data is as of December 31, 2005.

The overall income property market has grown significantly over the past ten years. The expansion is primarily attributable to the growth in the public and private debt quadrants. Namely the securitized sectors (CMBS) and privately placed by-products of the securitized sectors such as mezzanine loans and B-Notes, have been growing rapidly and are offering innovative ways to tailor investment portfolios to match desired risk/return objectives. Conversely, the private equity quadrant has experienced little growth over the past five years, due to the fact that the current over-supply of space has deterred new construction.

Income Property Investment Attributes

Over the past decade, the U.S. income property market has matured dramatically. This maturation, which is a direct result of the sobering experience of the 1988-1992 market depression, is manifested in several ways:

- Securitization
- Liquidity
- Risk/Return Segmentation
- Transparency of Information
- Underwriting Discipline

The result of this is that the market today offers a range of sectors which offer investors an array of positive attributes (see Exhibit 2). In addition, Exhibit 3 demonstrates the high yields and pricing inefficiencies that currently exist between these sectors.

Exhibit 2
Investment Attributes

Liquid Sectors

CMBS
- Attractive current yield
- Senior in capital structure (first mortgage liens)
- Significant diversification
- Call protected
- Strong liquidity
- Good transparency

REIT Preferred
- High current yield
- Conservative position in the capital structure
- Senior to common stock
- Strong liquidity
- Excellent transparency

Unsecured REIT Debt
- Low current yield
- High credit quality
- Strong financial covenants
- Good liquidity
- Excellent transparency

REIT Common
- Low current yield
- High quality real estate
- High liquidity
- Excellent transparency

Less Liquid (Direct) Sectors

Whole Loans
- Low current yield
- Senior in capital structure (first mortgage liens)
- Call protected
- High quality real estate

Mezzanine Debt
- High current yield
- Senior to equity position in capital structure
- High quality real estate

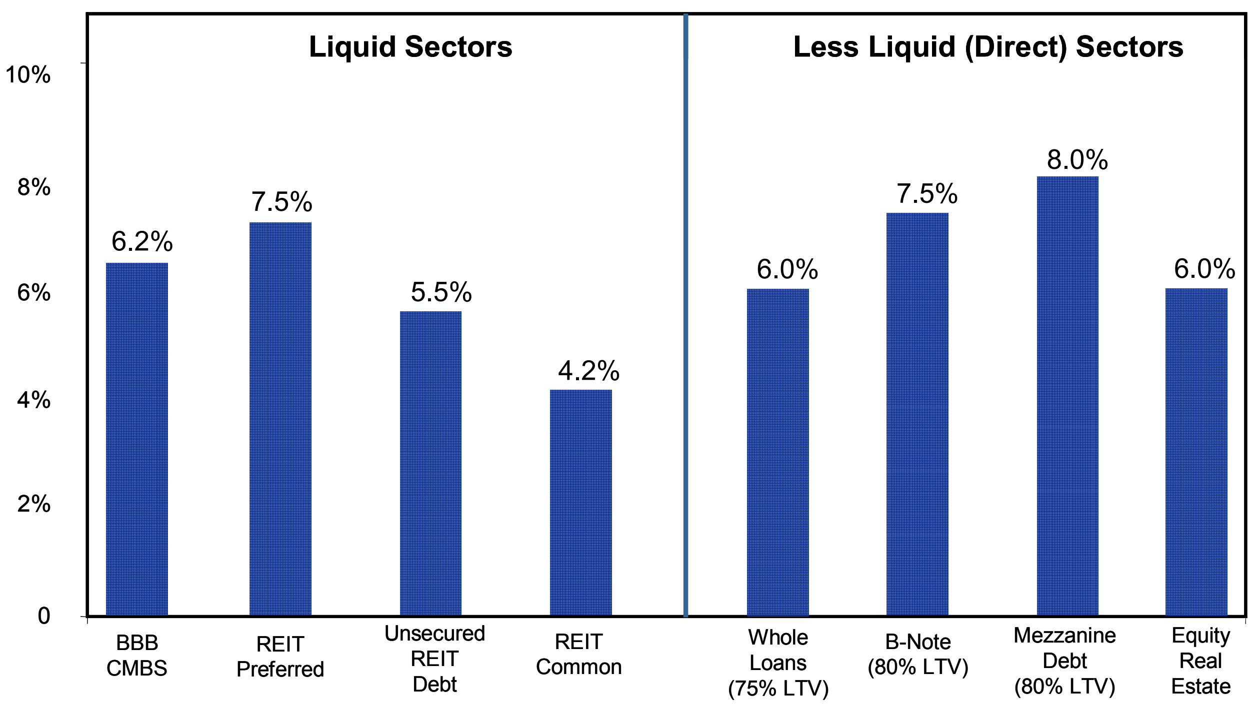
B-Notes
- High current yield
- Conservative position in the capital structure
- High quality real estate

Equity Real Estate
- Low current yield
- Modest to no appreciation potential
- High quality real estate

Sector Performance History

The U.S. income property market has performed extremely well over the past 10 years. This is largely due to the increased discipline that was instilled in the market following the crash of the late 1980's. Exhibit 4 shows an example of how some of the real estate sectors performed relative to the stock and corporate bond markets. What is interesting to note is that not only were real estate sector total returns superior to the broad stock market, the make up of those returns was vastly different. Most of the return for the various real estate sectors came from a stable income return as opposed to price appreciation. This is one of the main reasons why many investors have historically been, and continue to be, attracted to the U.S. income property market. There is, perhaps, no better risk mitigant than a high cash-on-cash yield.

Exhibit 3
Current Yields



Current yields are Quadrant Real Estate Advisors' best estimate of the average Sector Yields available in the market place as of May 31, 2006. Estimated Yields are not a guarantee of future performance.

Exhibit 4
Sector Performance History

5-Year Annualized Return as of 12/31/05

	Equity Real Estate	REIT Common	Whole Loans	BBB CMBS	Stocks	Bonds
Income	7.86%	6.57%	7.02%	6.87	1.69%	5.67%
Appreciation	3.35%	11.81%	0.55%	1.71%	-1.12%	0.20%
Total	**11.40%**	**19.08%**	**7.58%**	**8.68%**	**0.54%**	**5.87%**

Represents performance history of the indices that are representative of those segments of the overall market as follows: NCREIF Property Index (Equity Real Estate), NAREIT Index (REIT Common), Gilberto-Levy Index (Whole Loans), Lehman Brothers BBB CMBS Index (BBB CMBS), S&P 500 (Stocks), and Lehman Aggregate Bonds). The indices are unmanaged groups of investments and assume no deduction of fees and expenses in measuring performance.

Past performance is no guarantee of future performance.

Source: NCREIF, NAREIT, Gilberto-Levy, Lehman Live.

Four Quadrant Investment Strategy

Seeking Alpha

The huge opportunity set available across the entire four quadrant real estate universe has compelled more and more investors to utilize a four quadrant approach in search of alpha. There are several ways one can generate alpha via the four quadrant approach:

1. **Market Fundamentals**: Allocate between property types and regions based upon a strategic research view.

2. **Relative Value**: Invest across the broad array of real estate sectors based upon relative value.

3. **Active Management**: Continually evaluate opportunities to harvest gains and re-deploy into higher risk-adjusted return opportunities.

4. **Leverage**: Utilize conservative leverage when accretive.

Market Fundamentals

Irrespective of the massive securitization wave over the past 10 years, property and market level fundamentals remain the most important driver of investment performance. Whether one is investing in liquid securities or private investments, there remains a need to thoroughly evaluate such fundamentals. Indeed, given that investment decision time-frames have compressed, there is a greater need than ever for efficient analysis.

Relative Value

On the other hand, how one accesses fundamentally sound investments has evolved dramatically. With the recent proliferation of product structures, investors can participate in fundamentally sound markets and property types, based on best relative value (in terms of position in the capital structure) at any point in time. By widening the opportunity set to include the entire four quadrant U.S. income property market investors can apply their expertise on property fundamentals and market technicals to seek opportunities that exhibit characteristics that contribute to the investor's overall objectives, such as risk, return, cash flow, and liquidity. Fundamentals refer to one's view on property type and real estate credit quality. Technicals refer to the key non-fundamental factors such as capital flows and the ability to acquire suitable product. The following examples illustrate how investors can seek relative value along these two dimensions.

Fundamentals

In many geographic markets, hotel fundamentals are stronger today than ever before and represent excellent investment opportunities. That said, many investors are uncomfortable investing in hotels in a private equity position and therefore have shied away from such investments. By applying a relative value approach, an investor would have numerous ways to add exposure to hotels in a portfolio without actually having to buy a hotel. For instance, the REIT market offers other ways to gain exposure either through unsecured debt, preferred stock, or the common stock of hotel REITs. Alternatively, one can gain high yielding exposure to hotels in relatively small denominations through the B-note and Mezzanine sectors. For the most part, investors do not need to commit the capital required to buy a hotel just to participate in the upside offered by an industry in a cyclical recovery.

Technicals

One prime example of this is the below investment grade (BIG) CMBS market after the bond market collapse in October, 1998. At the time, many of the highly leveraged buyers of BIG CMBS were forced out of the market. The few remaining investors gained a sizeable amount of bargaining power over CMBS pools based on quality or diversification. The combination of a lower risk profile and attractive yields created superior risk adjusted return possibilities for the sector. Over the past four years, however, institutional investors have allocated a significant amount of capital to closed-end BIG CMBS funds, far in excess of the available opportunities. The result has been that the window of opportunity has all but closed and negotiating power has now shifted back to the issuer. There are not as many opportunities for instance to remove unwanted loans from CMBS pools. In addition, pricing has gotten expensive with yields on the most risky first loss bonds going from a non-loss adjusted 27% - 30% to 14% - 16%. Conversely, a relatively new sector, B-notes, which in many instances have a similar risk profile to that of BIG CMBS are more attractive on a relative value basis today.

Active Management

To take advantage of this dynamic asset class throughout all cycles of the U.S. income property and capital markets, investors should continually seek to enhance yield or credit quality by re-balancing an investment portfolio when new opportunities emerge or relative value shifts from one sector to another.

Leverage

From time to time, a conservative leverage strategy can help investors achieve superior risk adjusted returns. For example, over the past five years investors have been able to borrow on a floating rate basis at historically inexpensive rates. In addition, the interest rate swap and futures markets make it very easy to convert the floating rate financing to a fixed rate, and hedge the duration of the portfolio down to an acceptable risk level. Furthermore, the securitization of the U.S. income property market has not only increased the number of investment products available to investors, but also increased number of financing options, many with very flexible provisions for increasing and paying off leverage fluidly.

Example of the Four Quadrant Investment Strategy

Putting all of the pieces together, assume that an investor has the following goals and objectives:

- Target 8% or greater cash flow yields
- Target 10% total return
- Moderate risk
- High liquidity, and
- Diversification benefits to overall portfolio.

Toward achieving these goals, we chose an opportunity set that spans all four real estate quadrants, i.e., a 25% static allocation to each quadrant. As presented in Exhibit 5, we believe the indices that most appropriately represent investments across the four quadrants include the Lehman Brothers BBB CMBS Index (Public Debt), NAREIT Index (Public Equity), NCREIF Property Index (Private Equity), and Gilberto Levy Index (Private Debt). We used data from such indices spanning the 5-year period ending December 31, 2005 to create a model portfolio to back test the Four Quadrant Investment Strategy.

Exhibit 5
Four Quadrant Investment Strategy

Investment Quadrant	Sector	Index
Public Debt	BBB CMBS	Lehman Brothers BBB CMBS
Public Equity	REIT Common	NAREIT
Private Debt	Whole Loans	Gilberto-Levy
Private Equity	Equity Real Estate	NCREIF

In Exhibit 6, the correlation matrix demonstrates the diversification benefits of this strategy along two dimensions:

Real Estate Portfolio Diversification

The correlation between the four real estate quadrants in the model is low-to-negative. This highlights the potential to lower portfolio volatility via a multi-quadrant approach. At the extreme, BBB CMBS returns had a -0.26 correlation with REIT common stock and 0.00 correlation with equity real estate. Even within the equity quadrants, private equity and public equity have a low correlation at 0.21.

Exhibit 6
5-Year Correlation

	4 Quadrant Model	BBB CMBS	REIT Common	Equity Real Estate	Whole Loans	Bonds	Stocks
4 Quadrant Model	1						
BBB CMBS (Public Debt)	0.57	1					
REITs (Public Equity)	0.80	**0.00**	1				
Equity RE (Private Equity)	0.17	**-0.26**	0.21	1			
Whole Loans (Private Debt)	0. 44	0.91	**-0.16**	**-0.20**	1		
Bonds	**0.58**	0.95	0.02	-0.19	0.93	1	
Stocks	**0.11**	-0.55	0.58	0.18	-0.07	-0.57	1

The model portfolio assumes an equal weighting to the four real estate investment quadrants using the historical performance of sector indices that best represent those segments of the overall market (25% BBB CMBS; 25% REIT Common; 25% Equity Real Estate; 25% Whole Loans). Performance history was based on the following representative indices: NCREIF Property Index (Equity Real Estate), NAREIT Index (REIT Common), Gilberto-Levy Index (Whole Loans), Lehman Brothers BBB CMBS Index (BBB CMBS), S&P 500 (Stocks), and Lehman Aggregate (Bonds). The indices are unmanaged groups of investments and assume no deduction of fees and expenses in measuring performance.

Past performance is no guarantee of future performance.

Source: NCREIF, NAREIT, Gilberto-Levy, Lehman Live.

Mixed Asset Diversification

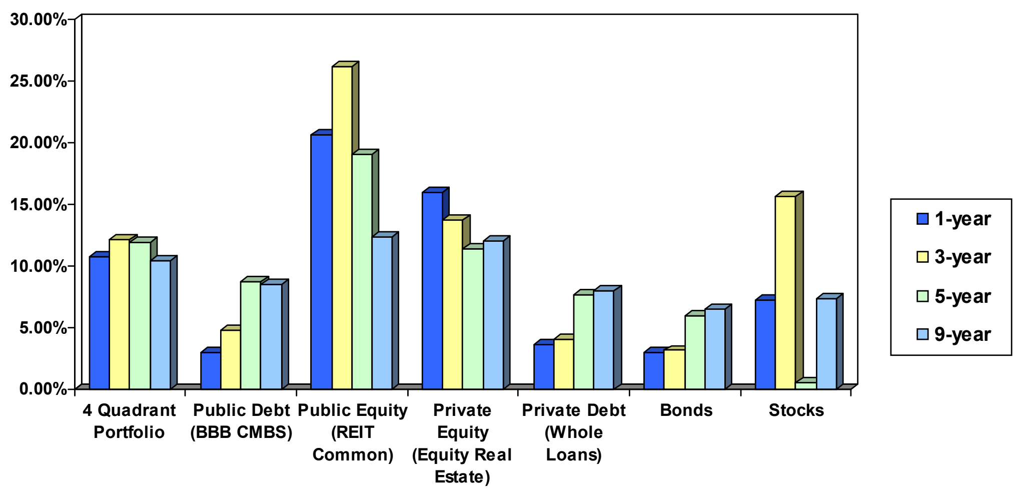
The model portfolio also demonstrates diversification benefits in a broad portfolio mix with low correlations of 0.11 and 0.58 with stocks and bonds, respectively.

Returns & Volatility

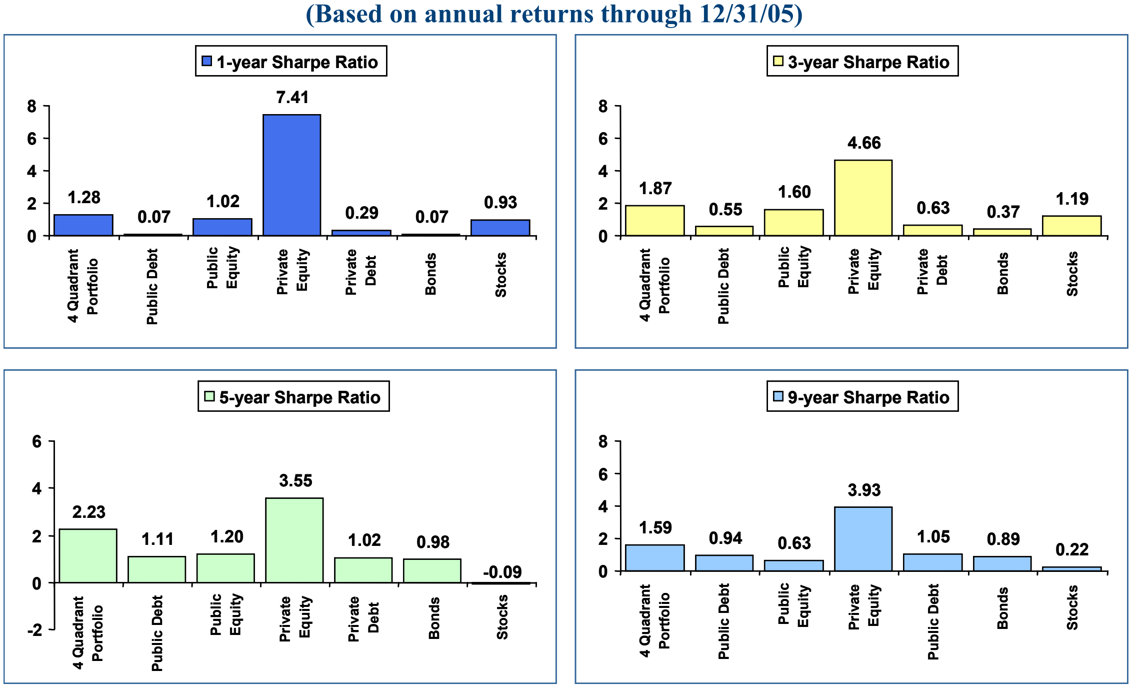
On an absolute return basis, the model portfolio performed well over the 1-, 3-, 5-, and 9-year time horizon. In addition, the benefits of the low correlation between the real estate quadrants in the model are further evidenced in the superior risk-adjusted return calculation, represented by the sharpe ratio (see Exhibit 7). The sharpe ratio measures the excess return per unit of risk. The sharpe ratio for the model portfolio is superior to the individual quadrants that make up the model portfolio (with the exception of private equity due to the appraisal smoothing process), as well as alternative asset classes.

Exhibit 7
Returns and Volatility

Annual Returns
(Based on annual returns through 12/31/05)



Sharpe Ratio Calculations
(Based on annual returns through 12/31/05)



The model portfolio assumes an equal weighting to the four real estate investment quadrants using the historical performance of sector indices that best represent those segments of the overall market (25% BBB CMBS; 25% REIT Common; 25% Equity Real Estate; 25% Whole Loans). Performance history was based on the following representative indices: NCREIF Property Index (Equity Real Estate), NAREIT Index (REIT Common), Gilberto-Levy Index (Whole Loans), Lehman Brothers BBB CMBS Index (BBB CMBS), S&P 500 (Stocks), and Lehman Aggregate (Bonds). The indices are unmanaged groups of investments and assume no deduction of fees and expenses in measuring performance.

Past performance is no guarantee of future performance.

Source: NCREIF, NAREIT, Gilberto-Levy, Lehman Live.

Custom Benchmark

Institutional investors generally require an appropriate benchmark for each particular style of investment. Benchmarks are hypothetical passive portfolios that are designed to evaluate the alpha or value-add of investment strategies with similar investment characteristics and criteria. Common examples of benchmark indices include the Dow Jones Industrial Average and the S&P 500.

Often custom benchmarks are utilized, which are tailored to specific investment strategies such as the Four Quadrant Investment Strategy model portfolio. A well constructed custom benchmark should have the following characteristics:

1. Observable – Data is publicly available or readily obtainable.

2. Investable – A passive investor could invest in the benchmark holdings (or reasonable proxies thereof) efficiently.

3. Relevant – The benchmark is a passive representation of the active investment style under consideration.

Consequently, we believe the benchmark for the Four Quadrant Investment Strategy should mirror a passively managed portfolio that is invested in each of the four real estate quadrants based on the market value of each underlying quadrant. This methodology is similar to that used in computing the S&P 500 – which is based on the market value of 500 underlying stocks.

As presented previously in Exhibit 5, the indices that most appropriately represent investments across the four real estate quadrants include the Lehman Brothers BBB CMBS Index (Public Debt), NAREIT Index (Public Equity), NCREIF Index (Private Equity), and Gilberto Levy Index (Private Debt). To understand how each quadrant affects the index, the market weight (or index weight) is calculated for each quadrant as illustrated in Exhibit 8. This can be done by dividing the market capitalization of each real estate investment quadrant by the total market capitalization of the combined four quadrants. The index weight would determine the appropriate rate to apply to each index return.

Exhibit 8
Custom Benchmark

Investment Quadrant	Index	Market Cap ($Billion)[1]	Market Weight	Annualized 5-Yr Index Return [2]
Public Debt	Lehman Brothers BBB CMBS	$766	22%	8.68%
Public Equity	NAREIT	$318	9%	19.08%
Private Debt	Gilberto-Levy	$1,736	50%	7.58%
Private Equity	NCREIF	$661	19%	11.40%
Custom Benchmark		***$3,481***	***100%***	***9.59%***

[1]Market capitalization for each quadrant is reported as of December 31, 2005. Sources include 2006 Emerging Trends in Real Estate, SNL Financial, CMSA.
[2]Annualized 5-year return of the Index as of December 31, 2005. Sources include Lehman Live, NAREIT, Gilberto-Levy, NCREIF.

The above is one approach to designing a custom benchmark for this particular style of investing in the U.S. income property market.

Market Acceptance

We have observed a material increase in investor acceptance of this approach over the past two to three years. There are numerous examples of investors that have applied this approach in a single account format and advisors offering commingled funds that apply variations of this style. The following are examples of various forms of relative value, multi-quadrant strategies:

- Large State Pension Fund: $100 million single client account which includes BIG CMBS, B-Notes, Mezzanine Loans and REIT Preferred Stock;

- Large Life Insurance Company: $750 million single client account which includes investments in Investment Grade CMBS, BIG CMBS and Mezzanine Loans;

- High-Yield Debt Commingled Fund: $300+ million commingled fund investing in Mezzanine Loans, CDOs, B-Notes, Whole Loans and utilizing a maximum of 80% portfolio leverage;

- High-Yield Debt/Equity Commingled Fund: $500+ million commingled fund investing in Equity Real Estate, BIG CMBS, B-Notes, Mezzanine Loans and utilizing a maximum of 60% portfolio leverage;

- Publicly-Traded Equity Investment Company: $250+ million Investment Company investing in REIT Common and REIT Preferred Stock; and

- Publicly-Traded Debt/Equity Investment Company: $250+ million Investment Company investing in REIT Common Stock, REIT Preferred Stock, and BIG CMBS.

Market acceptance of the multi-quadrant relative value style is growing rapidly. We expect this trend to accelerate given institutional investor acceptance of the real estate asset class, a continued drive for yield, and ability to put capital to work efficiently.

Conclusion

Investors today are presented with a huge array of strategies to invest in the U.S. income property market. However, most of these strategies are narrowly focused and include only certain structural sectors or property types. That said the rapid increase in the sophistication of the market provides investors with more options today than at any other time in the past.

This creates the opportunity for investors to employ a new paradigm for investing in the U.S. income property market that first considers the desired investment attributes, and then identifies all investment products that meet those attribute constraints. This new paradigm allows investor to:

- Target precise objectives in terms of:
    - ◊ Risk
    - ◊ Return
    - ◊ Cash Flow
    - ◊ Duration/Time Horizon
    - ◊ Control
    - ◊ Call Protection

- Create portfolios that are more finely tailored and relatively easily rebalanced,

- Maximize the advisors' opportunity set, thereby creating more risk/return efficient portfolios,

- Better align the advisors' and investors' interests (inasmuch as the advisor is investing using a relative value approach rather than chasing a narrowly defined sector of the market or property type).

Kurt Wright, holds a Bachelor of Arts from Colgate University, a Master of Science in Accounting from New York University Stern School of Business, a Master of Business Administration from Columbia University and has a CFA designation and is a CPA.