Pension Real Estate Quarterly Newsletter

The Survey of Plan Sponsor Research Interests: A New Direction for Applied and Academic Researchers

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The Survey of Plan Sponsor Research Interests: ***A New Direction For Applied and Academic Researchers.***

The report was written by Barry Ziering, PhD, Vice President, Prudential Real Estate Investors and Elaine Worzala, PhD, Assistant Professor, Colorado State University. However, this research would not have been possible without the significant assistance of the NCREIF Research Committee whose members spent many hours designing the survey questionnaire. Special thanks to James Carter, Managing Director, Phoenix Mutual for his tireless *assistance in the design and administration of the survey. Finally, thanks to NCREIF, PREA and the Real Estate Research Institute for their mutual support of this project.*

The real estate industry has suffered a tremendous loss **of credibility** over **the past** five **years,** particularly in light of the broken promises of the 1980's: **relatively** high **returns,** good inflation hedge, and low volatility. Instead, the capital appreciation component of the NCREIF Index has not **registered** a **positive** return since 1986. Commercial real estate values **have fallen between** 20% **and 40%, and up to 50%** in the case of some office properties. **Some of the largest financial institutions have been** humbled as a result of troubled real estate **portfolios, and many smaller ones have disappeared.** Against this back drop, real estate has, in a sense, become **a pariah asset class. The challenge** ahead becomes one of re-establishing credibility **among plan sponsors. Toward that end,** PREA and NCREIF recently joined forces to survey the plan sponsor community in **order to** determine where the industry's research priorities **should be.**

The Survey of Plan Sponsor Research Interests, the results of which were presented in Dallas at the joint PREA/NCREIF conference in March, 1993, represented the first critical step in the process. The objective of the survey was twofold: 1) identify what the plan sponsor community regards as the most important issues confronting the asset class and, 2) assist the NCREIF Research Committee, the Real Estate Research Institute and the academic community in focusing their research efforts on topics which will benefit plan sponsors.

In total, 685 plan sponsors, including **government, corporate and** Taft-Hartley plans, with **gross assets in excess of $500 million were surveyed. A total** of 171 funds responded for a **response rate of 25%. The sample consisted primarily of** Corporate (45%) and Government **(40%) respondents. In terms of size of fund, 31% of respondents** were funds **below $1 billion in gross assets; 38% were funds between $1 and 4.9 billion; and 31% were funds over $5 billion.**

The survey identified II broad research areas which are of potential importance to plan sponsors. In the first section of the survey, respondents were asked to identify and **rank order the 5 broad research areas they believed were most important.** Results were classified as either ***Most important*** (rank of *1),* **Top Three** (rank of 1, 2, or 3), or ***Top Five*** (any rank of 1-5). In the subsequent sections of the survey, respondents rank ordered more detailed sub-topics within each of the 11 areas.

With respect to salient results among broad areas, Real Estate's Role in a Mixed Asset Portfolio was clearly seen as the issue of greatest significance. Almost one-third (31%) of the 171 respondents ranked this topic as the most important research issue facing the industry (the topic area that came in a distant second as the most important was Performance Measurement of Real Estate Assets and Portfolios - 13.5%). In addition, more than half the respondents (52%) view the issue of Real Estate's Role in a Mixed Asset Portfolio as one of the top three most important and 61% rank it as one of the top 5 most important research topics (see Exhibit 1). An analysis of the subtopics within this category reveals that plan sponsors are fundamentally asking "How much real estate is appropriate?".

While the broad topic of Performance Measurement of Real Estate Assets was ranked as most important by only 13% of the respondents, 41% indicated it was in the top three and more than two-thirds (67%) identified it as one of the top 5 most important research topics (see Exhibit 2). Similarly, only 7% of respondents ranked Diversification of Real Estate Portfolios as the most important. However, 39% ranked it as one of the top three and more than half (52%) ranked it as one of the top 5 most important research topics. Finally, slightly more than half the respondents indicated that Alternative Real Estate Investment Vehicles/Strategies was among the top 5 most important research topics.

Exhibit 1

Real Estate's Role In **a** Mixed **Asset** Portfolio

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Top Three
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Top Frve

Exhibit 2

Performance Measurement of Real Estate Assets
and Portfolios

% of R"PonderAn
100%

80%

60%

40%

20% 1

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Top Three
lmp"uwwo Catoprim

Top Frm

The remaining broad topic areas, with the cumulative percentage of respondents assigning any importance ranking between 1 and 5, are presented as follows:

- Macro-Economic Forces Affecting Real Estate -- 46.8%
- Demographic Changes Affecting Real Estate -- 46.2
- Property and Portfolio Risk Management -- 41.5%
- & Micro-Economic Forces Affecting Real Estate -- 31%
- Technological Changes Affecting Real Estate -- 24.6%
- Regulatory/Public Policy Changes Affecting Real Estate -- 17.5%
- International Real Estate's Role in a Pension Portfolio -- 16.4%

When the broad topic areas are divided into more detailed sub-topics, a number of interesting research areas are highlighted as important areas for future research. Since there were fewer sub-topics for each broad category, respondents were asked to rank order only their top 3 choices with results classified as either *Most Important or Top Three.* The following subtopics (the broader topics under which each sub-topic falls is shown in italics) were ranked as *Most Important* by the greatest percentage of respondents:

- Tax Factors Affecting Real Estate (45%) – *Regulatory/Public Policy*
- Real Estate Cycles and Their Predictability (37%) -- *Macro-Economic Forces*
- How Much Real Estate in a Mixed Asset Portfolio (35%) -- *Real Estate's Role in a Mixed Asset Portfolio*
- Role and Impact of International Real Estate (34%) -- *International R.E.*

A somewhat different set of critical subtopics emerged when items ranked in the top 3 are included. However, the issue of Real Estate Cycles and their Predictability still leads the pack with almost 80% of the respondents ranking it as one of their top three picks (see Exhibit 3). Real Estate Pricing in a Capital Market Context (74%), Effects of a Changing Labor Force (72%) and Environmental Regulations on Toxic Substances (72%) were the next most frequent sub-topics ranked in the top 3

ELWB It 3
The Existence and Predictability of
Real Estate Cycles

% Of PANPmdonto
100%
80%
W%
40%
20%
0%

MOM Important Top 3

The fundamental issues addressed above need to be addressed by applied and academic researchers alike. At a time when the industry is rapidly changing and real estate fundamentals will be determined by a changing demographic, sociological and technological landscape, the answers to these issues will have a profound effect on our industry going forward.

As indicated above, Performance Measurement was highlighted as an important research category. In particular, measuring real estate risk and the effect of valuation practices on portfolio returns were rated in the top three by 66% and 67%, respectively, of the respondents. While real estate has historically been touted as an investment having relatively low volatility compared to other asset classes, just how low has been the subject of some recent research (Miles, Cole and Guilkey, 1991). In their study, Miles et. al. used sales data from properties that comprise the Russell-NCREIF index to generate a transactions driven commercial real estate return series. Comparing the volatility of this series to stock market volatility, the authors found a risk-ratio of 0.66 (i.e., the volatility of the commercial real estate transaction driven series was 66% of the stock market volatility). Using the NAREIT "Equity Index, risk ratios ranging between 0.59 and 0.71 were found, while comparison with the Russell-NCREIF index resulted in risk ratios between 0.14 and .06, depending on the time period covered. The true volatility of real estate most likely lies somewhere between the two extremes. Finally, is the standard deviation of returns the most appropriate measure of risk for real estate given what we know about appraisal smoothing? Some researchers have suggested that measures of liquidity or duration should be a component of the overall risk.

With respect to valuation, problems associated with appraisal based returns have been well documented, but the lack of a continuous auction market for real estate makes appraisals a necessary and important tool. However, the potential smoothing effect from appraisals has significant implications with respect to asset allocation models since the mean and standard deviation of the returns are critical inputs. In addition, the appraisal lag effect (appraised values lag the market in a rising market and lead the market in a declining market) can have a significant effect on the correlation of real estate returns with the returns of other asset classes. This is important since intercorrelations of returns between real estate and the other asset classes also represent critical inputs to asset allocation models. The concern over appraisal bias is reflected by the fact that 50% of the survey respondents ranked it as one of the top 3 most important issues in the area of Performance Measurement.

Under the broad topic area of Demographic Changes Affecting Real Estate, the changing labor force and its implications for real estate performance was rated as one of the top 3 most important areas for investigation by over 70% of the survey respondents. With the babybust of the 1970's currently reaching young adulthood, the 18-34 age cohort will shrink by approximately 5 million during the first half of the 1990's. The resulting effect on institutional grade property type performance could be dramatic since this is the age group that provides entrants to the labor force and creates demand for office space. This is also the age group that creates residential demand since they become renters and buyers of apartments and condominiums. Ultimately, they become the business and leisure travelers who create demand for hotels. Gaining a better understanding of demographic trends and their influence on property type performance will allow institutional investors to develop portfolio strategies tailored to the changing market conditions.

Associated with understanding demographic trends is insight into the effects of regional and local migration patterns on real estate (over 60% of survey respondents rated this sub-topic as one of the top three important areas for investigation). For example, one or two generations ago, we witnessed people moving to where the jobs were. Today there is a stronger emphasis on quality of life which creates the opposite trend -- jobs are more likely to move to where people go. The migration to the sunbelt illustrates this trend. On a more local level, the "malling" of America during the 1970's set the stage for the rise of suburban nodes, or so called "Edge Cities" (Joel Garreau). What this trend portends for center city office and retail space in many major metropolitan areas should be of tremendous importance to the major institutional investors.

Finally, there has been a growing interest in the effects of structural changes in employment demand (almost 40% of respondents ranked this sub-topic as "Most Important"). For example, technological advances, having obviated the need for close proximity, have made it possible for some employees to "telecommute". While it is not clear what effects telecommuting will have on office space demand, it is clear that the technological boom is still in its infancy . Similarly, the trends of decentralization of staff, job sharing, flex time and home office use all seem to be increasing. While the potential effects of these trends on real estate demand and performance have yet to be charted, there is clearly an interest in additional research in this area.

The discussion above provides some preliminary insight into the most salient issues as identified by the survey respondents. Additional information is being "wrung out" from the survey results by looking at differences in response by size and type of fund. Clearly, this more in depth analysis will potentially help advisors better understand the needs of their various clients. Some brief examples of the preliminary findings include:

- Smaller **finds** (less than $1 billion) tend to be significantly more interested in the Diversification within Real Estate" issue than the larger funds.
- The largest funds ($5 billion and over) see the issue of "Regional Demand Analysis" and "Demographic Changes Affecting Real Estate" as significantly more important than the smallest funds (less than $1 billion).
- Smaller funds (less than $1 billion) are significantly more interested in the issue of open-ended vs. closed-ended vs. separate accounts than are the largest funds (over $5 billion).

The results of these cross-tabulations are interesting and important. A manuscript is currently being drafted for publication in a professional or academic journal which will provide more detailed analysis of the segmented groups.

Going forward, these survey findings should be used to guide the type of research done over the near-term, as well as a benchmark to document how research interests are changing over time.

Of course, that implies an on-going survey program where plan sponsors are intermittently surveyed, rather than just a one time event.

Side Bar Note: It is important to recognize that there has been a great deal of research on many of the salient topics identified by this survey. Why then do plan sponsors cite them as primary areas of investigation? We believe there are several reasons. First, much of the academic research appears to be highly specialized (i.e., answers only a small part of a much broader issue) and only marginally relevant to public and private real estate practitioners who make investment decisions. Second, much of the research which is relevant has very low "readability" (i.e., contains statistical notation notable mostly for an abundance of greek letters) and, therefore, fails to educate the consumer the way it could. As a result, there is little translation of academic findings into practical implications. Finally, there currently is no mechanism which helps to ensure that key research finds its way to the consumers who need it most. For example, the Institute of Chartered Financial Analysts intermittently publishes for its members a book of selected readings relating to the various asset classes. A publication similar in format and purpose is needed to clearly communicate the practical implications of important real estate research findings to the plan sponsor community. We believe that addressing these issues, while challenging, is an important aspect of helping to reestablish the credibility of the asset class.