An International Perspective on Real Estate Research Priorities

Executive Summary. *Surveys of real estate research priorities for real estate fund managers in the United States, United Kingdom, Australia and Germany over 2000–03 are examined. Thirty-nine real estate research priorities are assessed, with much closer alignment for real estate research priorities in the U.K., Germany and Australia than seen for the U.S. The role of real estate in a mixed-asset portfolio and real estate and portfolio risk management figure prominently amongst the general real estate research priorities. The top specific real estate research priorities were the impact of capital flows, real estate cycles and real estate portfolio diversification. The underlying general real estate research priorities "dimensions" highlight the strategic issues involved in real estate research, particularly the changing real estate environment, strategic real estate issues and the role of real estate in the portfolio.*

by Graeme Newell*
Elaine Worzala**
Patrick McAllister***
Karl-Werner Schulte****

Introduction

Real estate research has taken on increased importance in recent years in the international arena. The establishment of the regional real estate societies (particularly ARES, ERES, PRRES and AsRES) and their annual conferences have been key catalysts to this expanded real estate research agenda, with much of this research having a strong real estate industry focus. As such, general real estate research areas have been identified by leading real estate academics in the United States and the United Kingdom (Lusht, 1993; Webb, 1997; Jaffe, 1998; Crosby, 2000; Worzala, 2002; and Adair, Crosby, Lim and Watkins, 2003), as well as by leading U.S. and Australian real estate practitioners (Winograd, 1999; Souza, 2000; Parker, 2001; and Steinert and Crowe, 2001).

To more fully assess the real estate research directions and priorities for U.S. institutional investors, extensive real estate industry surveys have been funded by the National Council of Real Estate Investment Fiduciaries (NCREIF) in 1992 (Ziering and Worzala, 1997) and the Pension Real Estate Association (PREA) in 2000 (Worzala, Gilliland and Gordon, 2002), with Newell, Acheampong and Worzala (2002) conducting an equivalent real estate research priorities survey for Australia in 2001. In 2003, equivalent real estate research priority surveys have been conducted in the U.K. (Newell, McAllister and Worzala, 2003) and Germany (Schulte, Newell and Worzala, 2003).

*University of Western Sydney, Australia or g.newell@uws.edu.au.

**University of San Diego, San Diego, CA 92110-2492 or eworzala@sandiego.edu.

***University of Reading, U.K. or p.m.mcallister@reading.ac.uk.

****European Business School, Germany or schulte.ebs@t-online.de.

Given these significant international real estate research developments, the purpose of this research is to compare the results of these four recent major international real estate surveys to examine the real estate research priorities of real estate fund managers in the U.S., U.K., Australia and Germany. Identification of these real estate research priorities will enable the more effective development of a real estate research agenda for real estate researchers in ARES, ERES, PRRES and AsRES, as well as for the emerging real estate societies of AfRES and LaRES.

Methodology

Surveys

Separate questionnaires involving general and specific real estate research topics for real estate fund managers were conducted in U.S. (Worzala et al., 2002), Australia (Newell et al., 2002), U.K. (Newell et al, 2003) and Germany (Schulte et al., 2003). From these four surveys conducted over 2000–03, twelve general real estate research topics and twenty-seven specific real estate research topics were common to all four surveys and form the basis for the survey analysis in this research. For these thirty-nine research topics, only slight changes in wording were used in the four surveys to accommodate differences in local real estate terminology.[1] The earlier 1992 U.S. survey (Ziering and Worzala, 1997) was not included in this comparative study as the twenty-seven specific real estate research topics were not included and only a subset of the twelve general real estate research topics were involved.

Real estate fund managers were asked to assess how important they believed each real estate research topic was. All questions were scored on a five-point rating scale,[2] ranging from 1 = "not important" to 5 = "vitally important."

Exhibit 1 gives details of the survey respondents in these four real estate fund manager surveys. Depending on the survey, 30–79 real estate fund managers participated in each survey, with a total of 227 respondents across the four surveys.[3]

Exhibit 1
Real Estate Fund Manager Survey Respondent Profiles

U.K.

Survey conducted: February 2003

Survey respondents analyzed: 79 fund managers

Total survey respondents: 274, including real estate fund managers, real estate advisors and consultants, real estate companies, real estate academics.

Australia

Survey conducted: October 2001

Survey respondents analyzed: 59 fund managers

Total survey respondents: 96, including real estate fund managers, real estate advisors and consultants, real estate companies, real estate academics.

Germany

Survey conducted: March 2003

Survey respondents analyzed: 30 fund managers

Total survey respondents: 90, including real estate fund managers, real estate advisors and consultants, real estate companies.

U.S.

Survey conducted: Fall 2000

Survey respondents analyzed: 59 fund managers

Total survey respondents: 59

Focused on the research needs of the institutional investor, broader real estate research topics relevant to other groups (*e.g.*, housing, real estate development) were not considered in these surveys.

Statistical Analysis

Average ratings for each of the thirty-nine general and specific real estate research topics were assessed for each of the four countries surveyed. Correlations were used to compare the real estate research priorities from the four country surveys.

To assess the underlying real estate research "dimensions" in the twelve general real estate research topics and the twenty-seven specific real estate research topics, principal component analysis (Everitt and Dunn, 2001) was applied to the four groups of respondents. Principal component analysis (PCA) is a multivariate analysis technique in which the underlying dimensions in the survey data are examined. Typically, a small number of dimensions are extracted that explain a significant

proportion of the total variation. A practical "real estate" interpretation can often be given to these major underlying dimensions, although meaningful interpretations are often not possible for the less significant dimensions.

General Real Estate Research Priorities

Analysis of General Real Estate Research Priorities

Exhibit 2 presents the average scores and respective ranks for the twelve general real estate research topics for the U.S, Australia, Germany and U.K. real estate fund manager surveys.

While differences occurred amongst the four surveys, the top four general real estate research priorities were:

1. The role of real estate in a mixed-asset portfolio;
2. Real estate and portfolio risk management;
3. Performance measures for real estate; and
4. Diversification within real estate portfolios.

In particular, the role of real estate in a mixed-asset portfolio was ranked first in the U.K. and Australia surveys, and was in the top four priorities for the corresponding U.S. and Germany surveys.

The low priority given to the role of international real estate in a portfolio in the U.S., U.K. and Australia surveys was surprising, given the significant recent institutional interest in incorporating international real estate in real estate portfolios, particularly via indirect real estate investments such as real estate investment trusts (REITs) and listed property trusts (LPTs) (Steinert and Crowe, 2001).

The high priority given to the role of international real estate in a portfolio in the Germany survey (ranked second) reflects the more flexible foreign investment legislation (Fourth Financial Market Promotion Act) introduced in Germany in July 2002. This sees the previous restriction on non-European Economic Area investment of a maximum 20% of fund assets replaced by a "currency-risk" ceiling of 30% of fund assets. This has resulted in considerable recent activity by German funds (*e.g.*, Deka Immobilien Investment GmbH and DIFA Deutsche Immobilien Fonds AG) in acquiring commercial real estate in the U.S. (Jones Lang LaSalle, 2002), with over $5 billion invested

Exhibit 2
General Real Estate Research Priorities

General Real Estate Research Topic	U.K.		Australia		Germany		U.S.	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
The role of real estate in a mixed-asset portfolio	**4.06**	**1**	**4.14**	**1**	4.00	4	**3.66**	**3**
Macroeconomic factors affecting real estate	**3.87**	**2**	3.80	6	3.83	6	3.38	9
Real estate and portfolio risk management	**3.85**	**3**	**4.02**	**2**	**4.23**	**1**	3.55	7
Indirect real estate investment vehicles	3.72	4	3.69	7	3.73	8	3.36	10
Regulatory changes affecting real estate	3.69	5	3.51	9	3.20	10	3.06	12
Diversification within real estate portfolios	3.65	6	3.83	4	4.00	4	3.62	5
Performance measures for real estate	3.59	7	**4.00**	**3**	**4.07**	**3**	**4.07**	**1**
Real estate investment strategies	3.45	8	3.83	4	3.37	9	3.52	8
Microeconomic factors affecting real estate	3.39	9	3.53	8	3.80	7	**3.89**	**2**
Demographic changes affecting real estate	3.18	10	3.46	10	3.07	11	3.65	4
Technological changes affecting real estate	3.06	11	3.25	12	3.07	11	3.60	6
Role of international real estate in a portfolio	2.77	12	3.36	11	**4.10**	**2**	3.23	11
Overall average score	**3.52**		**3.70**		**3.71**		**3.55**	

Note: The top three priorities for each country are in boldface type.

by German funds in U.S. commercial real estate over January 2002–May 2003. Other factors influencing this high priority in the German survey for international real estate investments include the introduction of the Euro as the common European currency, effectively eliminating exchange rate risk for German real estate investors in Europe.

The major differences between the U.S. survey and the U.K., Australia and Germany surveys were the higher U.S. priority given to microeconomic factors affecting real estate and demographic changes affecting real estate. Similarly, a lower U.S. priority was given to real estate and portfolio risk management.

The extent of these differences in general research priorities is shown in the cross-country correlations detailed in Exhibit 3. The U.S. priorities were not significantly correlated with any of the U.K., Australia and Germany priorities (average correlation = 0.21), compared to an average direct correlation of 0.59 across the U.K., Australia and Germany surveys. The highest significant correlations were for the Australia/U.K. (correlation = 0.81) and Australia/Germany (correlation = 0.61) priorities.

A range of factors are likely contributors to the differences between the U.S. and the U.K., Australia and Germany surveys. These factors include:

- The large and self-contained nature of the U.S. real estate market, compared to the strong linkages and communication between U.K. firms in Germany and German banks in the U.K.; similarly with the strong economic and business linkages between the U.K. and Australia;

- The strong reliance by U.S. institutional investors on a sophisticated advisory and investment management industry (*e.g.*, Jones Lang LaSalle) to have detailed real estate expertise, compared to the typically "in-house" expertise scenario for the U.K. and Australia;

- U.K. and Australian institutional investors have historically held significantly more real estate in their portfolios than their U.S. equivalents; this typically results in more institutional familiarity with real estate as an asset class than seen for real estate managers in U.S. pension funds;

- U.K., German and Australian institutional investors have a longer history of investing in real estate than their U.S. equivalents; this further reinforces their institutional familiarity with real estate as an asset class; and

- Real estate fund managers in the U.S. have not necessarily been formally trained in the real estate discipline, often being CFA-accredited compared to having real estate or finance degree backgrounds, whereas their equivalents in the U.K. are typically trained in RICS-accredited real estate degree programs. This difference in educational background has significant implications for understanding real estate as an asset class.

Identifying Dimensions in General Real Estate Research Priorities

Using principal component analysis, from the twelve general real estate research topics, Exhibit 4 indicates the number of underlying real estate "dimensions" and level of total variation explained for the four surveys, with Exhibit 5 presenting the PCA factor weights for the underlying dimensions for the U.K., Australian, German and U.S. analyses of the general real estate research priorities. The PCA results were generally consistent, identifying four or five real estate dimensions and accounting for 63.7%–70.2% of the total variation in each case.

Exhibit 3
**General Real Estate Research Priorities:
Cross-Country Correlations**

	U.K.	Australia	Germany	U.S.
U.K.	1.00			
Australia	0.81*	1.00		
Germany	0.34	0.61*	1.00	
U.S.	0.06	0.34	0.23	1.00

Note:
*Significant correlation ($p < 5\%$).

Exhibit 4
General Real Estate Research Priorities:
PCA Dimensions

U.K.: Four Dimensions Accounting for 63.7% of Variation
1. Changing real estate environment (18.0%)
2. Strategic real estate issues (17.9%)
3. Economic environment (15.1%)
4. Role of real estate in portfolio (12.7%)

Australia: Five Dimensions Accounting for 69.1% of Variation
1. Changing real estate environment (21.1%)
2. Strategic real estate issues (13.5%)
3. Role of real estate in portfolio (13.4%)
4. Macro real estate issues (10.9%)
5. Micro real estate issues (10.1%)

Germany: Five Dimensions Accounting for 70.2% of Variation
1. Changing real estate environment (17.5%)
2. Strategic real estate issues (16.0%)
3. Real estate portfolio issues (12.7%)
4. Performance of real estate investment strategies (12.2%)
5. Role of real estate in portfolio (11.8%)

U.S.: Four Dimensions Accounting for 69.8% of Variation
1. Strategic real estate issues (29.9%)
2. Macro real estate issues (14.6%)
3. Changing real estate environment (13.1%)
4. Micro real estate issues (12.1%)

All dimensions from each real estate fund manager survey were readily interpreted in a real estate context. The real estate dimensions that dominated across the four surveys were:

1. Changing real estate environment;
2. Strategic real estate issues; and
3. Role of real estate in portfolio.

These dimensions reflect the broad, strategic issues relating to real estate research. In particular, the changing real estate environment was the dominant real estate dimension in all surveys (except the U.S. survey), accounting for 13.1%–21.1% of the total variation explained. This further reinforces the differences between the U.S. survey and the U.K., Australia and Germany surveys.

Specific Real Estate Research Priorities

Analysis of Specific Real Estate Research Priorities

The average scores and respective ranks for the twenty-seven specific real estate research topics

for the U.K., Australia, Germany and U.S. real estate fund manager surveys are shown in Exhibit 6. Compared to the general real estate research priorities, there was considerably more variation in the specific real estate research priorities across the surveys of the four countries. This was evident in that no specific real estate research topic was ranked in the top four priorities in more than 50% of the surveys.

Across the four surveys, the top six specific real estate research priorities were:

1. Impact of capital flows in and out of real estate markets;
2. Existence and predictability of real estate cycles;
3. Diversification within a mixed-asset portfolio; and
4. Diversification within a real estate portfolio.
5. Forecasting methodologies for markets, results, returns; and
6. Real estate disposal and exit strategies.

The other topic that ranked highly across individual surveys was taxation factors affecting real estate (U.K. and Germany). The lower priority given to taxation factors in the U.S. and Australia surveys reflect the significant role of REITs in the U.S. and LPTs in Australia, with both having tax-exempt status.

Specific real estate research priorities average scores in each survey were lower than that seen for the general real estate research priorities average scores, reflecting the higher priority given by real estate fund managers to the broader strategic real estate issues, rather than the more specific real estate topics.

The extent of the differences in these specific real estate research priorities is shown in the cross-country correlations in Exhibit 7. Significant correlations are seen between the U.K., Australia and Germany specific priorities (average correlation = .56), with no significant correlations seen for the U.S. specific priorities with each of the U.K., Australia and Germany survey priorities (average correlation = .18). This lesser correlation with the U.S. survey results for the specific real estate

Exhibit 5
PCA Factor Weights for General Real Estate Research Priorities

Topic	Dimensions				
	1	2	3	4	5
Panel A: U.K.: Four dimensions accounting for 63.7% of variation					
The role of real estate in a mixed-asset portfolio	.01	.63	−.20	.40	
Diversification within real estate portfolios	.21	.77	.04	.12	
Macroeconomic factors affecting real estate	.20	.04	.79	.20	
Microeconomic factors affecting real estate	.00	.05	.83	−.03	
Performance measures of real estate	.04	.56	.56	−.08	
Role of international real estate in a portfolio	−.14	.22	.06	.76	
Real estate and portfolio risk management	−.27	.55	.12	.30	
Indirect real estate investment vehicles	.39	−.04	.07	.75	
Demographic changes affecting real estate	.80	−.02	.17	.03	
Technological factors affecting real estate	.78	.05	.05	.12	
Regulatory changes affecting real estate	.74	.15	.01	−.05	
Real estate investment strategies	.21	.67	.29	−.27	
Percentage variation explained	25.1%	16.0%	12.9%	9.8%	
Cumulative percentage variation explained	25.1%	41.1%	54.0%	63.7%	
Panel B: Australia: Five dimensions accounting for 69.1% of variation					
The role of real estate in a mixed-asset portfolio	−.06	.22	.76	.09	.02
Diversification within real estate portfolios	−.17	.84	.17	−.05	.04
Macroeconomic factors affecting real estate	.21	.17	.12	.75	.21
Microeconomic factors affecting real estate	.37	−.06	.08	.36	.65
Performance measures of real estate	.21	.01	.09	.06	−.78
Role of international real estate in a portfolio	−.07	−.21	.80	−.01	−.09
Real estate and portfolio risk management	.17	.36	.46	−.60	.13
Indirect real estate investment vehicles	.29	.69	−.13	.05	−.13
Demographic changes affecting real estate	.82	.05	.05	.05	−.17
Technological factors affecting real estate	.86	−.07	.02	−.06	.14
Regulatory changes affecting real estate	.76	.17	−.23	.12	−.03
Real estate investment strategies	.43	.38	−.24	−.47	.23
Percentage variation explained	22.8%	14.9%	12.5%	10.3%	8.6%
Cumulative percentage variation explained	22.8%	37.7%	50.2%	60.5%	69.1%

research priorities was also consistent with the lesser correlation seen in the general real estate research priorities.

In particular, the higher priority in the U.S. survey given to appraisal issues (priority 6–7) compared to the other three surveys (priority 12–19) reflects concerns over the use of the NCREIF Index as a customized real estate portfolio benchmark, particularly in comparison to the U.K. Investment Property Databank (IPD) indices and the Australia Property Council of Australia (PCA) indices and the higher level of academic awareness concerning the effectiveness of using valuations as a proxy for real estate market performance. Similarly, the lesser priority in the U.K., Australia and Germany surveys given to the impact of e-commerce on real estate demand (priority 23–27) compared to the U.S. survey (priority 12) reflects the timing of the surveys (2000 versus 2001–03) and the greater technological penetration in the real estate sector since the U.S. survey in 2000.

Exhibit 5 (continued)
PCA Factor Weights for General Real Estate Research Priorities

Topic	Dimensions				
	1	2	3	4	5
Panel C: Germany: Five dimensions accounting for 70.2% of variation					
The role of real estate in a mixed-asset portfolio	−.08	−.03	.42	−.16	.76
Diversification within real estate portfolios	.10	.59	.63	−.18	−.11
Macroeconomic factors affecting real estate	.74	.24	.14	−.11	−.05
Microeconomic factors affecting real estate	.18	.82	.07	−.08	.11
Performance measures of real estate	.29	.22	−.04	.67	.08
Role of international real estate in a portfolio	.05	.06	.77	.38	.21
Real estate and portfolio risk management	−.16	.72	−.01	.26	−.09
Indirect real estate investment vehicles	.23	.03	−.14	.12	.82
Demographic changes affecting real estate	.80	−.08	−.02	.10	.27
Technological factors affecting real estate	.82	−.04	−.06	.08	.01
Regulatory changes affecting real estate	.08	.51	−.55	.38	.06
Real estate investment strategies	−.13	−.05	.08	.75	−.06
Percentage variation explained	21.2%	15.4%	14.0%	11.3%	8.4%
Cumulative percentage variation explained	21.2%	36.5%	50.5%	61.8%	70.2%
Panel D: U.S.: Four dimensions accounting for 69.8% of variation					
The role of real estate in a mixed-asset portfolio	.21	−.03	.16	.89	
Diversification within real estate portfolios	.66	.11	.09	.23	
Macroeconomic factors affecting real estate	.36	.70	.31	−.15	
Microeconomic factors affecting real estate	.46	.24	−.04	.55	
Performance measures of real estate	.68	.14	−.06	.31	
Role of international real estate in a portfolio	−.22	−.73	.30	.26	
Real estate and portfolio risk management	.44	.73	−.28	.05	
Indirect real estate investment vehicles	.08	.23	−.83	.23	
Demographic changes affecting real estate	.79	.12	.28	.09	
Technological factors affecting real estate	.60	−.05	.67	−.17	
Regulatory changes affecting real estate	.76	.20	.23	.12	
Real estate investment strategies	.71	.01	.01	.08	
Percentage variation explained	38.3%	12.0%	10.2%	9.3%	
Cumulative percentage variation explained	38.3%	50.2%	60.5%	69.8%	

Identifying Dimensions in Specific Real Estate Research Priorities

From the twenty-seven specific real estate research topics, Exhibit 8 indicates the PCA results for the number of underlying real estate "dimensions" and the level of total variation explained in the four surveys.[4] The PCA results were generally consistent, identifying 8–9 dimensions and accounting for 69.3%–76.9% of the total variation in each case.

With 8–9 dimensions identified per survey, the vast majority of dimensions were able to be given a real estate interpretation; particularly the more significant dimensions that accounted for a large component of the total variation explained. The lack of a real estate interpretation for some dimensions was most evident in the higher order dimensions for the Germany and U.S. surveys.

The real estate dimensions that dominated across the four surveys were:

Exhibit 6
Specific Real Estate Research Priorities

Specific Real Estate Research Topic	U.K. Score	U.K. Rank	Australia Score	Australia Rank	Germany Score	Germany Rank	U.S. Score	U.S. Rank
Taxation factors affecting real estate	**3.73**	**1**	3.56	8	**3.93**	**2**	2.16	27
Real estate liquidity compared to other asset classes	**3.72**	**2**	3.47	9	2.72	19	3.02	19
Existence and predictability of real estate cycles	**3.70**	**3**	3.58	7	3.72	5	3.63	4
Diversification within a mixed-asset portfolio	3.65	4	**3.77**	**3**	3.48	9	3.22	9
Diversification within a real estate portfolio	3.62	5	3.64	5	3.69	6	3.16	13
Impact of capital flows in and out of real estate markets	3.46	6	**3.84**	**1**	3.48	9	**3.82**	**1**
Passive versus active investment strategies	3.43	7	3.34	13	3.21	14	2.98	21
Role of indirect real estate in a mixed-asset portfolio	3.42	8	**3.83**	**2**	3.41	11	2.94	23
Forecasting methodologies for markets, results, returns	3.27	9	3.59	6	**4.21**	**1**	3.20	10
Real estate investment in primary versus secondary markets	3.25	10	3.02	20	2.48	23	3.13	15
Real estate disposal and exit strategies	3.23	11	3.41	10	**3.90**	**3**	**3.81**	**2**
Economic versus geographic versus real estate type diversification	3.21	12	3.25	17	3.17	15	3.41	5
Effects of structural changes in employment demand on real estate investment	3.14	13	3.14	19	3.24	12	3.14	14
Effects of appraisal practices on individual portfolio returns	3.13	14	3.25	17	3.24	12	3.37	6
Supply side constraints	3.09	15	3.34	14	2.62	21	3.13	16
Impact of appraisal lags and biases on real estate indices	3.08	16	3.27	16	2.72	19	3.28	7
Real estate's market capitalization compared to other asset classes	3.04	17	2.98	22	3.03	16	3.04	18
Effects of an aging population on real estate investment	2.95	18	3.36	12	2.83	17	3.23	8
Individual real estate-type market studies	2.94	19	3.00	21	3.55	8	3.10	17
Environmental regulations regarding contaminated land	2.92	20	2.88	23	2.45	24	3.20	10
Effect of country/currency risk on international real estate investment	2.92	20	3.31	15	3.79	4	3.01	20
Effect of management fees on portfolio performance	2.91	22	3.36	11	2.83	17	**3.66**	**3**
Effect of e-commerce on real estate demand	2.76	23	2.64	27	2.31	27	3.19	12
Foreign investment restrictions	2.73	24	2.75	25	3.66	7	2.62	26
REITs as a proxy for direct real estate investment	2.70	25	3.75	4	2.41	26	2.96	22
Effects of changing household structure on real estate investment	2.51	26	2.81	24	2.45	24	2.73	24
Effects of immigration patterns on real estate investment	2.38	27	2.66	26	2.52	22	2.70	25
Overall average score	**3.14**		**3.29**		**3.15**		**3.14**	

Note: Top three priorities for each country are given in bold.

1. Changing real estate environment (found in 3 of the 4 surveys);
2. Specific real estate market dynamics (found in 3 of the 4 surveys);
3. Diversification in portfolio (found in all 4 surveys); and
4. International real estate investment (found in 3 of the 4 surveys).

The changing real estate environment was the dominant real estate dimension in all surveys (except the Germany survey), accounting for 9.9%–14.9% of the total variation explained and being

Exhibit 7
Specific Real Estate Research Priorities: Cross-Country Correlations

	U.K.	Australia	Germany	U.S.
U.K.	1.00			
Australia	0.71*	1.00		
Germany	0.52*	0.46*	1.00	
U.S.	0.18	0.28	0.07	1.00

Note:
* Significant correlation ($p < 5\%$).

Exhibit 8
Specific Real Estate Research Priorities: PCA Dimensions

U.K.: Nine dimensions accounting for 69.3% of variation
1. Changing real estate environment (9.9%)
2. Specific real estate market dynamics (9.7%)
3. Liquidity/international real estate (9.3%)
4. Appraisal reliability and accuracy (9.1%)
5. Real estate disposal issues (8.1%)
6–8. Not readily interpretable (18.0%)[a]
9. Diversification in portfolio (5.2%)

Australia: Nine dimensions accounting for 73.0% of variation
1. Changing real estate environment (12.7%)
2. Specific real estate market dynamics (9.9%)
3. Diversification in portfolio (8.8%)
4. International real estate investment (8.2%)
5. Capital flows/liquidity (8.1%)
6. Appraisal reliability and accuracy (7.9%)
7–8. Not readily interpretable (12.0%)[a]
9. Indirect real estate in portfolio (5.5%)

Germany: Eight dimensions accounting for 76.9% of variation
1–2. Not readily interpretable (26.1%)[a]
3. Specific real estate market dynamics (10.4%)
4. International real estate investment (9.9%)
5. Diversification in portfolio (8.8%)
6–7. Not readily interpretable (14.8%)[a]
8. Real estate investment strategy (6.7%)

U.S.: Eight dimensions accounting for 76.6% of variation
1. Not readily interpretable (15.5%)[a]
2. Changing real estate environment (14.9%)
3. Not readily interpretable (10.3%)[a]
4. Indirect real estate in portfolio (7.8%)
5. Diversification in portfolio (7.7%)
6. International real estate investment (7.7%)
7. Real estate liquidity/market capitalization (6.8%)
8. Real estate investment strategy (5.9%)

Note:
[a] Some PCA dimensions were not readily interpretable in a real estate context.

the most important real estate dimension in three of the four surveys.

Conclusion

These surveys have clearly identified the general and specific real estate research priorities for real estate fund managers in the U.S., U.K., Australia and Germany. These priorities should be useful for real estate fund managers, as well as to real estate researchers regarding potential priority real estate research topics suitable for research funding from leading real estate industry groups such as the Pension Real Estate Association (U.S.), Real Estate Research Institute (U.S.), Royal Institution of Chartered Surveyors (U.K.), Investment Property Forum (U.K.), German Society of Property Researchers (Germany) and Property Council of Australia (Australia).

The role of real estate in a mixed-asset portfolio and real estate and portfolio risk management figure prominently amongst the general real estate research priorities. Many of the dimensions identified using PCA have a clear real estate interpretation; particularly relating to the changing real estate environment, strategic real estate issues and the role of real estate in the portfolio. Importantly, when comparing the results of the four different surveys, there is a much closer alignment of the real estate research priorities in the U.K., Australia and Germany than found in the U.S.

It is hoped that the results of this research on the real estate research priorities across countries will be the catalyst to future research initiatives in this crucial area of real estate research for members of ARES, ERES, PRRES and AsRES.

Endnotes

1. The Germany survey (Schulte, Newell and Worzala, 2003) was administered in German.

2. The U.S. survey (Worzala, Gilliland and Gordon, 2002) used a seven-point rating scale, which was standardized to a five-point rating scale to ensure consistency with the U.K., Australia and Germany surveys.

3. Compared to the U.S. survey, the U.K., Australia and Germany surveys involved a broader range of real estate participants (see Exhibit 1), including real estate fund managers, real estate advisors and consultants, real estate companies and real estate academics. For consistency, only real estate fund managers were assessed in this research.

4. PCA factor weights for the underlying dimensions are not presented for the specific real estate research priorities due to the large size of the table; factor weights for the four country analyses if needed can be obtained from the authors.

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