The European Real Estate Market

Stephen L. Lee
Department of Land Management, The University of Reading
Whiteknights, Reading, RG6 6AW, England

Phone: +44 (0) 118 931 6338, Fax: +44 (0) 118 931 8172 E-mail: S.L.Lee@reading.ac.uk

Abstract

Two strands of research have developed in the study of international real estate. The first considers the benefits of international diversification, in terms of risk and return, on the real estate portfolio. The second a classification of countries in terms of their institutional market characteristics. This paper draws these two strands together in a study of the European Office market.

Keywords: International diversification, the institutional structure of European Office markets, the performance of European Office markets.
The European Real Estate Market

Introduction

A number of studies have shown the considerable benefits to be gained from the international diversification of the real estate portfolio (see Lizerli et al 1998 for a review). Nonetheless most institutional investors still display an ‘home bias’, that is concentrate their property holdings in domestic markets. A number of explanations have been proposed for this home bias, none of which is sufficient to explain or adequately account for the concentration in home markets (see Uppal, 1992 and Worzala, 1994). In addition until recently real estate investors faced two major problems when contemplating international investment. First a lack of property specific information with which to make portfolio decisions, Nabarro and Unsworth (1993) and Sweeney (1993). Indeed the establishment of a benchmark of performance is now considered a major area of development in order to attract overseas investors, Blundell (1998). Second investors had little understanding of the institutional characteristics of the markets, D'Arcy and Keogh (1996, 1998) and Guerts and Jaffe (1996). In other words to implement an international diversification strategy investors need reliable historic measures of property performance, in order to make rational decisions about the relative performance of real estate markets, coupled with an understanding of local market trading conditions in order to implement those decisions effectively. Consequently, in the past, investors contemplating international diversification in the real estate portfolio faced seemingly insurmountable obstacles. However, over the past few years both of these issues have started to receive more attention.

First the ONCOR Database now provides commercial real estate market information on a large number of countries, with data in some cases available back to 1982. The Database providing an invaluable source of consistent market data which has been employed in a number of studies (see Goetzman and Wachter, 1996, Case, et. al, 1997 and D'Arcy and Lee, 1998). The second problem, that of the institutional characteristics of the markets, has also started to be addressed. In particular the work by Keogh and D’Arcy (1994) on market maturity has advanced our understanding of the market characteristics of a number of countries within Europe and around the world. This second issue is particularly important because Guerts and Jaffé (1996) suggest real estate markets are likely to perform differently according to their institutional form and structure and are likely to continue to display these differences for many years to come, D'Arcy and Keogh (1998) and D'Arcy and Lee (1998). Consequently investors need to be fully cognisant of the differing in institutional structures across Europe in order to implement a pan-European investment strategy. Indeed at least one European portfolio group, PRICOA Property Investment Management (PRICOA, 1997) already follows such an institutional approach.

This paper draws upon this previous work and explicitly takes account of the diversity of real estate markets structures that exist across Europe and relates this to the performance of the markets within Europe.
International Diversification

In the equity and bond markets there is abundant literature on the benefits of international diversification (see Madura, 1985 and Lonie et al. 1993 for reviews). These studies clearly indicate that the risk and return advantages of international diversification are very large for investors. In contrast the issue of international real estate diversification has received limited attention in the academic literature (Eichholtz et. al, 1996) even though the globalisation of financial markets has a particular significance for international property investment. However a number of studies have examined the risk reduction possibilities of international diversification of real estate portfolios and used portfolio models to determine the optimal international allocation of real estate investments (see Lizerli et al 1998 and D’Arcy and Lee, 1998).

Recently the arguments for international real estate diversification have been brought into sharp focus by two factors. First the global collapse of the office markets in the early 1990’s (Goetzman and Wachter, 1996 and Case, et. al, 1997). Second the increased awareness of the European markets resulting from the creation of the Single Market in 1993 (JLW, 1992 and Elliot and Halliday, 1996). The focus on Europe has also received an addition boost with the advent of monetary union in 1999, which will remove of one of the major obstacles to overseas investment, exchange rate risk (D’Arcy and Lee, 1998).

In the context of Europe Sweeney (1993) argues that portfolio risk can be greatly reduce by expanding into economies with non-synchronous cycles. In particular Sweeney argues that diversification within Europe can improve the performance of the real estate portfolio. A view not shared by Baum and Schofield (1991) who consider Europe as one market, which needs to be balanced by global diversification. While Lizieri and Finlay (1995) question the benefits of diversification, of the type proposed by Sweeney, as a consequence of the convergence of market economies within Europe under the impetus of monetary union and market unification. In contrast Worzala and Bernasek (1996), argue that while economic integration will result in a single market for individual goods and services the special characteristics of commercial real estate makes it unlikely that a fully fledged single real estate market will result. Consequently Worzala and Bernasek suggest that this leads to inefficiency within the real estate market and the absence of standard pricing. That is the value of most real estate is derived from local market conditions with local constraints determining the supply, the demand and the value of property. Indeed D’Arcy and Lee (1998) have shown that the country factor is relatively more important in explaining real estate returns that sector or regional effects. In other words real estate returns are mainly determined by local (country specific) conditions and are only mildly affected by general European factors. In addition D’Arcy and Keogh (1998) and D’Arcy and Lee (1998) argue that the major institutional differences between the countries of Europe are likely to persist for many years to come, even after the convergence of the economies. Indeed the property market is one of the few areas of commercial and social life unaffected by edicts from Brussels in the drive towards European economic integration. Consequently the real estate markets of Europe are likely to show differences in performance for some
considerable time.

Whatever the outcome of this debate, investors have been alerted to the possibility of improving portfolio performance by investing in foreign countries. The rush by the Swedish property companies and investment institutions, following the removal of exchange controls in the late 1980's, into Germany and the UK attesting to the fact that there is a pent up desire by investors to expand beyond the limitations of the local economy. Despite these findings most institutional investors still display an 'home bias', by concentrating their holdings in their domestic economies. Uppal (1992) suggests a number of reasons for this. First investors desire to hedge inflation at home. Second the barriers to foreign investment are sufficiently larger are such that they deter international investment. Finally, transaction costs and taxes differences in markets are large enough to explain the concentration in the domestic market. After a careful examination of the literature Uppal (1992), however, finds that none of these factors are sufficient to adequately explain the home bias phenomenon.

Solnik (1992) suggests additional factors as barriers to international investment including: unfamiliarity with foreign market structures and conventions, information gathering costs, withholding taxes, fees, and other formal regulatory barriers. A number surveys of real estate investors finding that investors are not unfamiliar with these problems but perceive the lack of local market expertise as the prime difficulty to overseas investment. For example, Worzala (1994) found that 81% of respondents to a survey of institutional investors in the UK and Netherlands saw lack of local market expertise as the major problem affecting international investing. A results confirmed by the surveys of the Investment Property Forum (reported in Baum, 199/) and Elliot and Halliday, (1996) both of which finds the lack of local expertise and information the greatest difficulty to overseas investment. Other factors sighted including different cultural and legal structures and difficulties in identifying and managing real estate in foreign market closely allied to this perceived lack of local market knowledge. Thus the lack of knowledge as to the local institutional structures consequently represents the greatest barrier investors need to over come before they can even contemplate overseas investment. Consequently the first hurdle in developing a pan-European portfolio is an understanding of the institutional structure of each market. Little work is available in this area, especially in Europe but the work of North (1990) provides a convenient starting point for any analysis of institutional market structures.

**Institutional Market Structures**

North (1990) argues that markets are a collection of institutional factors both formal and informal. The formal factors include the concrete organisational forms and the explicit rules by which business is transacted with in each market. Within the property market these factors would include the professional bodies, the market actors, codes of conduct, property law etc. The formal rules of the “property market game” reflecting the vested interests of the local market players. Consequently there is a tendency of such institutions is to maintain the status quo. Thus change in the formal institutions will only be very infrequent. The informal institutions in contrast are less tangible based as they are the local market social attitudes, accepted norms of behaviour and expected modes of business conduct. All of which derive from the
cultural, ethical and religious convictions of the market. Thus the informal institutions rules constitute the “playing field” upon which the “property game” is to be played. Consequently changes in the functioning of such informal rules is even less likely than in the case of the ones governing the formal institutions. Nonetheless a slow but gradual change in the informal institutions can not be ruled out with the shift in social, moral and ethical attitudes through time.

Taken together the informal and formal institutions define the market structure and provide market players with certainty as to how market activity is to be conducted. Their consequence most readily observed in the transaction costs present in the market. In some cases these will be clear to all (e.g. land agency fees agency fees and legal costs) in other cases they are less tangible and difficult to assess (e.g. market search costs, transaction delays, the local business culture etc.). In addition the implications of such institutional structures will differ across market actors (e.g. individuals or institutions) and across the current market activity be undertaken (e.g. development or investment).

All of which suggests that unless an outsider is fully aware of the institutional structures, both formal and informal, between countries and even for segments within a country such investors are likely to be at a major disadvantage compared with local market players when they wish to enter the market. As a consequence Guerts and Jaffe (1996) suggest that this “institutional risk” should be a prime area of concern when contemplating diversification into foreign markets. In other words any reduction in portfolio risk due to international diversification may be outweighed by the increase in institutional risk which results from imperfect information on the institutional structure of the foreign market under evaluation.

But how can investors classify real estate markets in terms of institutional risk?

The Classification of Real Estate Markets in Europe

One area of research, which may help, in the review of the institutional structure of real estate markets, is the concept of market maturity. Such work has evolved since 1990, from a number of diverse and apparently independent pieces of work. However, the most comprehensive treatment of market maturity is found in Keogh and D'Arcy’ (1994) and D'Arcy and Keogh (1998). After a careful review by of the literature on real estate markets the authors focus on five institutional factors: (1) market actors, (2) obligations of occupation, (3) market openness and flexibility, (4) market specialisation, and (5) information generation and transmission. Using these criteria Keogh and D'Arcy, were able to classify a number of markets in Europe using London as the exemplar. While Armitage (1997) has applied the approach developed by Keogh and D'Arcy to markets in South East Asia.

Keogh and D'Arcy conclude, however, that whilst market maturity provides a useful comparative framework, a more broadly based agenda for research into property market performance than the currently dominant focus on economic fundamentals may be appropriate Keogh and D'Arcy (1994). A view shared by Sweeney (1993) who suggests additional factors such as the size of the local real estate market, accessibility and security of tenure are important areas for analysis in developing a
practical and realistic international diversification strategy. While PRICOA Property Investment Management (PRICOA, 1998) consider the influence of the property tax regime, the recoverability of outgoings, and the exit liquidity (i.e. institutional demand) as major determinants of the local real estate market structure.

In addition D'Arcy and Keogh (1996) and Guerts and Jaffe (1996) suggest that the institutional characteristics are of particular important in real estate markets has the differences in market structures, information gathering costs, withholding taxes, fees, and other formal regulatory barriers across countries that are likely to lead to differing performance. Specifically this suggests that the formulation of an appropriate portfolio strategy must also be informed by an institutional analysis of international real estate markets (Guerts and Jaffe, 1996 and D'Arcy and Keogh, 1998). Accordingly an analysis of the institutional character of the various countries into which investors wish to invest is a prerequisite in developing any credible international investment strategy.

However, the number of countries comprising Europe and the differences that exists between them constitutes a far from trivial choice problem for the non-resident investor. But by drawing on the work of Keogh and D'Arcy (1994) and D'Arcy and Keogh (1998), augmented by the suggestions of Sweeney and PRICOA, it is possible to identify groups of European countries that display similar institution characteristics that are different from others. But even in these countries, not all sectors will operate satisfactorily. For example, the retail investment market in France is all but non-existent. While in Spain retail investment is very restricted due to the leases favouring the tenant at the expense of the landlord. Consequently, for the purposes of this paper the analysis will concentrate on the institutional characteristics of the European office markets.

European Institutional Data

Based on previous work a number of variables of interest can be identified that when applied to countries across Europe are likely to be helpful in highlighting the institutional differences and similarities across markets. The number of characteristics that could be analysed is huge so in order to keep the analysis tractable only seven variables, which are felt to be the most important, are considered here. First a measure of market maturity and transparency based on the work of Keogh and D'Arcy. Secondly the standard lease terms in each country, an indication of income security. Third a measure of market liquidity, indicating by the ease with which property transactions can take place. Fourth landlord obligations, an indication of to what extent cost can be recovered from the tenant and the responsibilities for the owner/tenant. Fifth the property tax regime as indicated by the costs of transacting within the market. This is followed by a measure of tax efficiency, that is the ability to reduce the tax burden within the country from the ownership of real estate. Finally exit liquid, a measure of the institutional demand for property in the country and so an indication of the ability to sell quickly, if so desired.

However, there is no one source of institutional characteristics of the real estate markets in Europe. The study here therefore had to draw upon a number of publications, both academic and professional, all of which provided some pieces of
the puzzle. No one publication providing the whole picture, either in terms of country coverage or institutional characteristics. The data sources used including work produced by: DTZ (1997); Crosby and Murdoch (1998); Lofstedt and Baum (1992); JLW (1995,1998); Richard Ellis (1990,1997); CB Richard Ellis (1998); PRICOA (1998); Levainen and Lahdes (1996); Larsen (1996); Lundstrom and Persson (1996); Hoesli, Bender and Favarger (1996); and Worzala and Bernasek (1996).

Furthermore given the wide variation in institutional characteristics used and the differing units of measurement. In order to provide a clearer picture of the similarities and differences between countries each characteristic was then coded between 1 and 5/10. Where the highest value was always given to the UK market as the exemplar against which the other countries could be judged, following the approach of Keogh and D’Arcy’ (1994). The scores on each characteristic for each country and their total institutional score presented in Table 1.

Table 1: The Real Estate Market Characteristics Of European Countries

<table>
<thead>
<tr>
<th>Group</th>
<th>Maturity</th>
<th>Standard</th>
<th>Market</th>
<th>Landlord</th>
<th>Tax</th>
<th>Tax Exit</th>
<th>TOTAL</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Belgium</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>2. Denmark</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>3. Finland</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>4. France</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>5. Germany</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>6. Holland</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>7. Ireland</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>8. Italy</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>9. Portugal</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>10. Spain</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>11. Sweden</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>12. Switzerland</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>13. UK</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

Notes: 5 most mature 1 least mature 5 longest leases /income security 1 least 5 most liquid 1 least 5 fewest recoverable outgoings 1 most 5 lowest tax regime 1 highest 5 optimum tax efficiency 1 lowest 10 highest institutional demand 1 lowest 1 the immature countries and 3 the most mature

After Keogh and D’Arcy(1994) and PRICOA (1998)

An examination of Table 1 reveals a number of differences and similarities between the real estate markets of Europe. As can be seen in Table 1 the UK stands out in terms of its maturity, tax efficiency and institutional demand. In contrast Italy displays the worst characteristics of the group of countries, displaying the most onerous tax structure, the least market maturity and liquidity and hence the least institutional demand. Closely followed by Switzerland and surprisingly France. In contrast the middle group of countries, exemplified by Germany, is typically much more mature but also display intermediate to high levels of landlord obligations, lease terms, tax efficiency and so intermediate to levels of institutional demand. The country scores ranging from the most mature and open market, the UK with a maximum score of 40, to the least mature and least attractive country, Italy with a score of 16.
That is the UK represents one extreme position on the institutional real estate market continuum being the most transparent and mature market within Europe and consequently subject to the greatest institutional demand from the German open-ended funds US REITS and other institutional investors around the world, DTZ (1998). At the other extreme the immature of the markets, exemplified by Portugal and Italy, are the least liquidity and subject to the worst property tax regimes. The rest of the countries lying somewhere in between but as seen in Table 1 closer in market structure to the UK but with less maturity and tenet obligations.

Using these scores the countries were then classified into three institutional groups as presented in the last column of Table 2. The UK property market displaying considerable depth, liquidity and institutional dominance. This country could therefore be classified as the “Mature market” country. In contrast the countries with the lowest scores such as Italy, Portugal and surprisingly France could reasonable be called the “Immature market” group. The countries in between these two extremes classified as the “Maturing markets” group due to their typically higher scores on the characteristics of landlord obligations and greater security of leases terms coupled with higher levels of tax efficiency.

Two countries, however, at first sight would seem to be wrongly classified, France and Spain. France has long been a major office market in Europe. Indeed in terms of office space Paris is the largest market in Europe with some 30,500,000 square meters, JLW (1998). While Spain has only 7,175,000 square metres of office space in Madrid, less than a quarter of the size of Paris. However, as shown in Table 1 France has the worst property taxation and highest transaction costs in Europe. In contrast Spain has a more liberal regime of taxation, lower landlord obligations and especially greater tax efficiency in terms of transaction costs, following changes to the property law in 1985 (see Keogh, 1994 and Lunt, 1992). While France still labours under a much more penal legal and taxation system. Making Spain a much more attractive investment market than France. Indeed France came bottom in a recent survey on the attractiveness of global real estate markets to international investors, Kaleva (1998). In the light of which the classification France as an immature market and Spain as a maturing market seems quite valid.

How Have the Groups Performed?

D’Arcy and Keogh (1996) and Guerts and Jaffe (1996) suggest that due to the differing market structures of the markets these groups should display differences in risk and return performance. Using data from the ONCOR Database the risk and return\(^1\) of an equal weighted portfolio of countries for the three groups identified above, over the period 1985 to 1997 are shown graphically in Figure 1.

Figure 1 displays a number of features of interest. First the three real estate markets show significant differences in their cyclic behaviour. The UK market entering and leaving the downturn earlier than the other markets. The maturing group declining much later than the UK or the immature group and recovering at the same time as the

---

1 The ONCOR data is based on total returns (income and appreciation), however, the data are not based on appraisals, but upon changes in capitalised asking rents net of service charges and local taxes. In addition in calculating returns no adjustment was made for exchange rates between countries.
immature group. While the immature group declined and recovered about one year after the UK. Second the graph shows that the maturing group had the lowest losses over this period showing only slightly negative values for only 3 out of the 13 years. In contrast the immature group and the UK showing much high negative returns and for a longer time. Finally 1995 and 1996 shows a convergence of performance after the turbulent years of the early 1990s. The returns in 1997 however, displaying a divergence in performance with the UK once again rising faster than the other two groups.

Thus the UK property market can be considered as a leading indicator of the performance of other markets across Europe. Since the maturity and transparency of the UK market means that investors obtain information more rapidly and are more able to act more quickly on that information, than in any other country in Europe. Changes in the performance of the UK market are consequently likely to precede changes in other markets, were information is more difficult to obtain and were investors find it more difficult to react to that information, due to the structural nature of the market.

This non-synchronous cyclic behaviour suggesting that the three groups do indeed react differently over time and should therefore show differences in risk and return performance. This issue is examined in more detail in Table 2, which presents the total risks and returns together the yields for each individual country and the averages for the three institutional groups.

**Figure 1: The Cyclic Behaviour of Equal Weighted Country Groups 1985-1997**

As suggested from the picture displayed in Figure 1 the data in Table 2 shows a difference in performance across the institutional country groups. For example, the average returns over the period 1985-1997 in the UK are slightly below the average of the other two groups. While the immature markets show average returns above the
maturing group. More significantly the maturing markets are characterised by greater stability in investment returns, as measured by the standard deviation. The immature group displaying a far higher variability in returns, with the UK somewhere in between. That is maturity does not imply stability, D’Arcy and Keogh (1998). In other words the immature markets display high levels of volatility in returns due to their lack of transparency coupled with relatively few market players and hence little possibility of easy exit. While the most mature market, the UK, shows high levels of variability as a results of its’ openness and large numbers of market actors. Transparency and maturity therefore implies volatility, but with the ability to react to any market changes due ease of enter and exit. Similarly lack of transparency and immaturity implies volatility but with little chance of exit. The more regulated but maturing markets offering lower volatility with some possibility of exit. Finally, the reasonable level of returns achieved by the maturing group coupled with their lower risk means that this group showed the lowest coefficient of variation in returns over this period and hence the highest risk-adjusted returns. The immature markets displaying the worst risk-adjusted performance with the UK again in the middle.

Table 2: The Risk and Return Characteristics of the European Real Estate Office Markets 1985-1997

<table>
<thead>
<tr>
<th>Panel A</th>
<th>Returns</th>
<th>Yields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Group</td>
<td>Average</td>
</tr>
<tr>
<td>Belgium</td>
<td>2</td>
<td>12.65</td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
<td>5.23</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>11.35</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
<td>10.24</td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>7.41</td>
</tr>
<tr>
<td>Holland</td>
<td>2</td>
<td>10.48</td>
</tr>
<tr>
<td>Ireland</td>
<td>2</td>
<td>12.35</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>9.16</td>
</tr>
<tr>
<td>Portugal</td>
<td>1</td>
<td>28.95</td>
</tr>
<tr>
<td>Spain</td>
<td>2</td>
<td>20.60</td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
<td>16.53</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>5.26</td>
</tr>
<tr>
<td>UK</td>
<td>3</td>
<td>11.29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B</th>
<th>Average</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>E.G.</td>
<td>Return</td>
</tr>
<tr>
<td>Maturing</td>
<td>Germany</td>
<td>11.45</td>
</tr>
<tr>
<td>Immature</td>
<td>Portugal</td>
<td>13.58</td>
</tr>
<tr>
<td>Mature</td>
<td>UK</td>
<td>11.29</td>
</tr>
</tbody>
</table>

NB: The results in Panel B are not the risk and return of an equal weighted portfolio of the constituent countries but the simple average of the values in Panel A, to avoid any portfolio effect.

The results for the yields follow a similar pattern. That is yields of countries in the maturing group displaying the second highest average values, but with the lowest variability, and hence the lowest coefficient of variation. For example a yield of 5 percent occurred in 8 of the 13 years in Germany with yields never rising above 5.5 percent. Yields in other countries in this maturing group displaying similar stability. In contrast the immature markets displayed the highest average yields over this period. More importantly yields in the immature countries were subject to the highest volatility. Exemplified by the yields in Portugal, which varied between 18 and 9.5 percent over the 13-year period. While the variability in yields of the other countries
in this group, except France and Finland, displaying similarly high values. The variability in yields of the maturing markets on average only half that of the immature group. Consequently the coefficient of variation of the maturing group is the lowest than that for the immature group the highest. The UK again taking up a position between the two, but closer to the immature rather than the maturing group.

The results in Figure 1 and Table 2 indicating that the three groups of countries, identified by their institutional characteristics, do indeed display performance differences over time, both in terms of the cyclical behaviour, yields and their risk and return.

**Conclusions**

A number of studies have shown the considerable benefits to be gained from the international diversification of the real estate portfolio. Consequently the relatively low weighting of real estate in international portfolios is surprising. Nevertheless there is general agreement that international real estate investment, especially into Europe, will be an important contribution in institutional investment strategies, as market participants become more familiar with the range of real estate markets in Europe and as the quality of real estate market information improves.

However, for those investors considering international investment the management of risk is a major consideration in any successful strategy. As for those investors who seek to take advantage of the increased diversification and greater investment opportunities in international markets the lure of such an expansion into unfamiliar territory may prove illusory, unless they are fully cognisant of the increased risks involved. In other words the implementation of an effective international investment strategy must focus the appropriate dimensions of risk. In this context both D'Arcy and Keogh (1996) and Guerts and Jaffe (1996) argue that an analysis of the institutional characteristics of real estate markets is a prerequisite to the in development of any credible international investment strategy. The authors suggesting that such differences in institutional risk between countries are likely to lead to differences in performance.

In order to test this contention this paper as applied the concept of the market maturity paradigm of Keogh and D'Arcy (1994) and the addition factors suggested by PRICOA to evaluate the institutional market characteristics of 13 European countries. The countries were subsequently classified into three groups, in order to simplify the investor choice faced by investors. The investment performance of the three groups was then analysed over the period 1985 to 1997 to see if differences in performance did exist between the differing groups of countries. The results in Figure 2 and Table 2 showing that the markets do indeed display differing performance reflecting their different market structure. To the extent that these results imply regularities in the institutional framework of European countries, they will be useful information for property fund managers in developing a portfolio strategy for diversification Europe.
References


Richard Ellis (1997) *World Rental Levels*.


