

A Survey of Institutional Investors' Attitudes and Perceptions of Residential Property: The Swiss, Dutch and Swedish Cases

JOAQUIM MONTEZUMA

ImoEconometrics, Lisbon, Portugal

(Received June 2004; revised February 2006)

ABSTRACT *This paper provides evidence about institutional investors' attitudes and perceptions of residential property as an investment asset group in three European countries (Switzerland, the Netherlands and Sweden). These countries stand out, with an extraordinarily large institutional residential ownership, in fact, residential institutional allocation represents about 6 per cent, 2 per cent and 3 per cent of the total institutional investment in Switzerland, the Netherlands and Sweden, respectively. Housing is the most important institutional property asset type in Switzerland and the Netherlands, comprising over 52 per cent and 50 per cent of their institutional property portfolios, respectively. In Sweden residential property plays an important, but not dominant role in the domestic institutional property portfolios, representing about 21 per cent of the institutional property holdings. Using a postal survey of representatives of pension funds, insurance companies, property investment and asset management companies the study analyses the attractiveness of residential property in terms of institutional investment goals. The survey examines the institutional investors' perceptions of housing investment, namely with respect to its returns, volatility, inflation hedging, liabilities matching and correlation with shares, bonds and non-residential property. Additionally, the survey looks at the institutional investors' experiences regarding the private rented sector. The survey suggests that investment in residential property equity is likely to be done through larger portfolios, which tend to invest in housing directly. Residential property is seen mainly as an earning asset group able to provide diversification benefits for investors even when portfolios already include non-residential property. The respondents are mainly concerned with rent regulation issues, the lack of well-structured investment vehicles is undoubtedly a less important problem.*

KEY WORDS: Residential property, rental housing markets, institutional investment

Introduction

This study presents results and conclusions based upon a postal survey of major residential property institutional investors in Switzerland, the Netherlands and Sweden, i.e. pension

Correspondence Address: Joaquim Montezuma, ImoEconometrics, Rua Lúcio de Azevedo, 12, 11B, 1600-148 Lisbon, Portugal. Tel: + 351 934418496; Email: jmontezuma@imoeconometrics.pt

ISSN 0267-3037 Print/1466-1810 Online/06/060883-26 © 2006 Taylor & Francis
DOI: 10.1080/02673030600917818

funds, insurance companies, property investment companies and asset management companies. The study aims to enhance our understanding of the reasons underlying the high residential institutional ownership, providing evidence with regard to institutional investors' attitudes and perceptions of residential property as an investment asset group in the three countries. These countries stand out, with an extraordinarily large institutional residential ownership. In fact, residential institutional allocation represents about 6 per cent, 2 per cent and 3 per cent of the total institutional investment in Switzerland, the Netherlands and Sweden, respectively. Moreover, housing is the most important institutional property asset type in Switzerland and the Netherlands, comprising over 52 per cent and 50 per cent of their institutional property portfolios, respectively. In Sweden residential property plays an important, but not dominant role in the domestic institutional property portfolios, representing about 21 per cent of institutional property holdings.

The present study assumes that in order to understand the reasons underlying the involvement of institutional investors in the private rented sector it is not possible to rely solely on the traditional financial factors: return, risk, diversification and hedge against inflation. The traditional theoretical approach to considering the appropriate allocation to property in mixed asset portfolios is the mean-variance framework. The theory underlying the mean-variance framework considers that asset classes should be selected on expected return and risk for each asset and on the correlation of returns of each and every pair of asset classes (for example, shares, bonds, cash, other types of property). Taking these co-movements into account allows building of a mixed asset portfolio that has the same expected return and less risk than a portfolio constructed by ignoring the interactions between asset classes. Empirical studies regarding the role of residential property in mixed asset portfolios suggest that direct residential property not only generates risk-adjusted returns comparable to those on bonds and shares, but also provides low correlations with shares, bonds and non-housing property (e.g. Hoesli & Hamelink, 1997; Ibbotson & Siegel, 1984; Montezuma, 2004).

The mean-variance framework assumes investors to be fully rational expected utility maximisers. The present study departs from this traditional hypothesis, taking into consideration other factors that may also shape the institutional investors' behaviour. For instance, prudential habits and 'institutional variables' are some of the factors that could also influence institutional decision making. As Kahneman & Tversky (1979) pointed out, in their seminal work on behavioural finance, there are several classes of choice problems that violate the standard consumption-investment models where agents are assumed to be fully rational expected utility maximisers. For instance Clark (1998) following Kahneman & Tversky (1979) suggests that pension fund trustees commonly accept and practise a number of habits of prudence that represent violations of the expected utility theory.¹ According to Clark (1998) these habits minimise the funds' risk exposition in the natural context of uncertainty. The first habit of prudence, the loss aversion, states that the disutility of losses is higher than the utility of equal sized gains. The second habit of prudence, the preference for certainty, states that investors give disproportionate weight to eliminating the smallest chance that the investment value will fail. In other words, pension funds tend to be risk-avoiding when it comes to gains, preferring a certain gain to a probable gain even if the expected value of the latter was greater (i.e. hold onto the bird in the hand). The preference for similarity is another prudential habit, whereby the trustees tend to follow the investment strategies of other funds (the benchmark). Clark (1998) argues that these habits of prudence help to explain the convention that dominates pension

fund investment decisions, namely the avoidance of allocating funds into alternative investments.

Additionally, the institutional investors' decision-making process is influenced by 'institutional variables' including matching against liabilities, portfolio regulations, accounting standards, tax systems and socially responsible investment, amongst others. The nature of institutional liabilities has potential influence on the institutional portfolio allocation strategy. For instance, the duration of liabilities combined with the funding rules determine the assets' duration in which to allocate funds and the resultant interest rate risk. Similarly, the inflation sensitivity of liabilities influences the strategic investment regarding assets' capabilities to hedge against inflation.

Quantitative regulations of portfolio holdings are imposed in several countries and have a clear and widespread influence on portfolios. These regulations exist not only to protect fund beneficiaries or benefit insurers against associated risk, but also to ensure a stable demand for governmental bonds (Davis, 1994). In Switzerland the pension funds face ceilings on holding certain assets, such as a 50 per cent limit on shares, 50 per cent for real estate and 20 per cent for foreign assets (Meier, 1993 in Davis & Steil, 2001). The Swedish pension funds have been compelled to hold the majority of their portfolio in domestic bonds, debentures and loans to contributors (Davis & Steil, 2001). This could explain to some degree the small allocation to property in the Swedish institutional portfolios.² The Dutch private funds appear to be less regulated facing a ceiling of only 5 per cent on self-investment (Van Loo, 1988 in Davis & Steil, 2001). In contrast, the Dutch public pension funds face more strict legal restrictions, limiting them to investing only 10 per cent in foreign assets and 20 per cent in shares or property. According to Davis (1994) the existing portfolio regulations in Sweden and Switzerland result in high allocations of funds to bonds, despite their poor returns. The regulations also influence the international diversification strategy. For instance, the Dutch private institutions have invested a considerable number of their portfolios in foreign assets, not only because foreign asset investment restrictions are virtually absent, but also because of the large volume of pension fund assets compared with domestic equity and property markets. Conversely, the foreign assets have a less significant presence in the Swiss and Swedish funds due to portfolio regulations.

Strict accounting standards, in Switzerland, limit the investment in shares by funded pension schemes³ independently of the existing portfolio regulations discussed previously (Davis, 1994). The same author also points out that Dutch funds hold shares at market value and bonds at book value. This acts as a potential bias against investment in shares.

The taxation system is another factor that could have influence upon the investment strategy. For instance, Bezooyen & Mehta (1998) argue that the Dutch tax system has made investments in bonds relatively more attractive than equities for pension plans.

Other 'institutional variables' such as the availability of investment opportunities and social awareness can be added. The former institutional variable is especially important in small countries, such as the Netherlands, Switzerland and Sweden, where local financial markets are small, tending to be relatively more illiquid, and where the assets of institutional investors easily exceed the entire domestic equity market. In the same vein, Meer (1990) argues that the large size of Dutch pension funds relative to the capitalisation of the domestic equity market decreases the flexibility of portfolios invested in shares, thus diminishing equity investment attractiveness.

The survey examines the institutional investors' perceptions of residential property investment, namely with respect to its returns, volatility, inflation hedging, liabilities matching and correlation with shares, bonds and non-residential property. The survey also analyses the attractiveness of residential property in terms of institutional investment goals. In addition, the survey looks at the institutional investors' experiences regarding the private rented sectors in their respective countries. The evidence is based upon the results of a postal survey that targeted the major residential investors in the private rental sector in each of the three countries.

The paper is structured as follows: the next section reviews the relevant literature and other recent surveys of institutional investors placing the study in the context of previous relevant work. The background material on the private rented sectors (PRS) in each of the three countries is provided in the following section. The research methodology is then described and in the next section the results of the survey are reported, discussed and compared with previous surveys. The final section concludes.

Private Rented Sector in Switzerland, the Netherlands and Sweden

The three main housing tenures in Switzerland and the Netherlands are homeownership and social and private rented. In Sweden there is an additional form of housing tenure with significant importance known as tenant-ownership (co-operative associations).

A comparative analysis of the Swiss, Dutch and Swedish housing systems reveals that there is an interesting similarity between them in terms of tenure. They all have a large rental sector (see Table 1), which appears to be related to past government intervention in the form of subsidies and allowances to both the social and private rented sectors and a restrained encouragement of owner occupation. For instance, the tax regime for homeownership in these countries has been less favourable than in other West European countries. All three countries apply a tax on imputed rental income, as a corollary to the provision of tax relief on mortgage costs. Additionally, Switzerland and Sweden impose a capital gains tax (see Table 1).

Table 1. Cross country housing system summary

<i>Housing tenure %</i>	Switzerland (year 2000)	The Netherlands (year 2001)	Sweden (year 1999)
Owner occupied	35	53	42
Private rental	57	12	17
Social rental	3	35	23
Other tenure	5	0	18
<i>Taxes</i>			
Mortgage interest relief	Yes	Yes	Yes
Capital gains exempt	No	Yes	No
Imputed rental income	Taxed	Taxed	Taxed
<i>Rent control design</i>	The rents for the unsubsidised segment reflect the changes in costs and interest rates	The rents for the high-rental segment are liberalised	Tight rent controls persist at all rental segments

In these affluent countries, the households owning their own home held a minority position, but not necessarily a rich minority meaning that renting is not necessarily a feature of those with lower incomes. In fact, a reasonable proportion of wealthy Dutch and Swiss households live in rented accommodation owned by institutional investors.

However, the mixed provision within the rental sector is significantly different in the three countries. On the one hand there are the Netherlands and Sweden with predominance of social renting and on the other Switzerland with a clear predominance of private renting. In spite of these differences in terms of rental mix provision, the residential rented stock owned by institutional investors has been historically relatively important in all three countries, with remarkable relevance in Switzerland (in 2000, around 16 per cent of total Swiss stock was owned by institutional investors). However, the evolution of institutional rental share has been different between them. In Switzerland the rental stock owned by institutions has been rising since 1950, whereas in the Netherlands this type of ownership has been fairly stable (in 1997, around 6 per cent of total stock) and in Sweden it has been decreasing since the mid-1990s. The divergent evolution of residential institutional ownership seems to be related to different strategies in housing policy. The new housing policy strategy introduced in the Netherlands and Sweden during the beginning of the 1990s established a more residual role for the state in the production, allocation and financing of houses together with progressively more emphasis on homeownership. The 1990s housing policy strategy together with mortgage market liberalisation and the reduction of interest rates led to a relative fall in private rental accommodation in these two countries.⁴ It is noteworthy that, while in the Netherlands the elimination of supply subsidies to both private and rented sectors was followed by a rent control liberalisation (especially in the high-rental market where the institutional investors are more active) in Sweden the rent controls persisted in all rental categories (low-rental, medium-rental and high-rental). The withdrawal of subsidies and the perpetuation of a highly restrictive rent control together with high land prices and excessive production costs led to a steady decrease of investment in the Swedish private rented sector after the mid-1990s. In contrast, the Swiss unsubsidised market for new contracts has been following a second-generation rent control system, where the rents for sitting tenants reflect the changes in costs (i.e. net annual income, interest rate and operation costs).

Literature Review

There are not many surveys focused on institutional investors' perceptions of residential property (e.g. Crook *et al.*, 1998; Crook & Kemp, 1999, 2002; Property Research Unit, 1998). Most of the other previous surveys were concerned with investment goals and decision-making practices of institutional investors relative to property as an overall asset class. These studies were particularly focused in budgeting techniques and investment goals. Such surveys include Wit (1996) for the Netherlands, Brzeski *et al.* (1993) for Sweden and the US and Rydin *et al.* (1990) for the UK. Surveys undertaken in the US include Louargand (1992), Miles *et al.* (1989), Webb & MacIntosh (1986), Webb (1984), Farragher (1982), Wiley (1976) among others. As Brzeski *et al.* (1993) point out, these surveys generally show that institutional investors in property have been increasing their reliance on more sophisticated techniques and analyses, consistent with the academic research on property. However, the literature shows that the adoption of concepts from

modern finance in the management of institutional property portfolios has not advanced particularly quickly.

Crook & Kemp (1999) carried out an interview survey, following up a previous survey, Crook *et al.* (1998), to analyse British institutional investors' perceptions of private rented housing and their attitudes towards investing either debt or equity in this sector. The survey involved interviews with 27 senior institutional investor managers. The studies reported that few financial institutions that had already invested in private rental housing, were doing so via direct investment. The organisations that were examining the possibility of starting to invest, were, in general, more interested in using indirect investment vehicles. The latter organisations mentioned the lack of suitable investment vehicles (mainly in terms of tax transparency) as an important investment constraint. In addition, the surveys reported that problems like small lot/portfolio size, poor liquidity, low returns,⁵ poor quality and high costs of management and maintenance in the private rented sector typified some of the main obstacles to investment in this sector. Interestingly, the participants in the Crook *et al.* (1998) survey indicated that risks and costs of investing directly in British PRS are substantial compared with investing in other types of property. In a posterior paper using qualitative interviews, Crook & Kemp (2002) explored the apparent failure of indirect investment vehicles (known as Housing Investment Trusts, HITs) in reviving the UK private rented sector. The research indicates several reasons for that failure. First, HITs are not fully tax transparent. Second, the property value ceilings are too low and make it difficult to achieve well-diversified housing portfolios in terms of value. Other reasons include existing trading restrictions, Stock Exchange rules and a lack of large portfolios available to invest in, poor liquidity, and finally, discount on property net asset value.

The Property Research Unit (1998) undertook an interview survey in Britain that sought to examine the likely impact of restricting rent increases on institutions' attitudes to investing in the private rented sector. Twenty-seven British institutional investors were interviewed. The list of investors included pension funds, insurance companies, property management companies, property companies and banks. The study concludes that institutional attitudes towards the private rented sector in Britain were changing slowly and those who had decided to have a positive involvement were less concerned about the possibility of increased regulation in the fair rent sector.

The Immo Survey (2003) conducted by Ernst & Young AG and Swiss Life Real Estate Partners AG followed up previous surveys on the investment practices of Swiss institutional property investors. Sixty-five responses were received from the selected sample (i.e. a 30 per cent global response rate). The survey reports that the overall property assets represent a substantial proportion of Swiss institutional investors' portfolios. The study shows that pension funds and insurance companies prefer to invest directly in the Swiss property markets even though their exposure to indirect property investments is increasing. Moreover, the survey reports that 'profitability requirements' (57 mentions) is the most important institutional investment strategy factor. This criterion is followed by 'geographic boundaries' (38 mentions) and 'risk requirements' (38 mentions). Interestingly, 'market liquidity requirements' was the least mentioned factor. In addition, the survey respondents indicate that they primarily diversified by region (over 60 per cent), type of use (58 per cent) and risk/return (55 per cent), while tenant structure, property size and property age were considered to be of secondary importance as diversification factors.

In a later section further results from the literature are compared and contrasted with the results of this survey.

Methodology

The questionnaire was structured around four areas. The first area characterises the respondent, over-viewing the type of respondents and their overall portfolio size. The second area considers the institutional investment policy. The investment policy issues covered include: the amount allocated to residential property, the composition of the property portfolio, past and future residential property investment evolution, type of allocation processes (direct or indirect and investment), the institution's chosen market segment (bottom, middle or top end market), source of advice for residential investment (in-house staff, external staff or both), ability to take advantage of the house cycle, and objectives of both the institute's residential and overall portfolio investment strategies. The third area is concerned with the institutional perception of residential property as an investment in a portfolio context. The fourth area analyses the attitudes and experiences regarding the private rented sector.

The sample was designed to include the larger institutional property investors in the surveyed countries. In order to achieve this goal the organisations were selected using specific criteria. They were selected by their inclusion in the main property institutional investors' associations and benchmarks for property investments. Property benchmarks included Global Property Research, a database of listed property companies, for the three countries and the Swedish Property Index (SFI)⁶ for Sweden. Property institutional investors' associations include the European Public Real Estate Association (EPRA)⁷ for the three countries and the Association of Institutional Property Investors in the Netherlands (IVBN).⁸ To supplement the overall sample, also included were property companies listed in the Swiss, Dutch and Swedish Stock Exchanges, members of the Swiss Insurance Association (SVV),⁹ pension funds and insurance companies registered in the website of the Pensions and Insurance Supervisory Authority for the Netherlands (Pensioen- & Verzekeringskamer/PVK), members of the Swedish Insurance Federation (Sveriges Forsakringsforbund), pension funds listed by the Swedish Association of Institutions for Retirement Provisions (SIRP),¹⁰ as well as pension funds listed by the Swiss Federal Statistical Office and, finally, members of the Swedish Investment Fund Association (Fondbolagens Förening). While these lists may not be exhaustive, they are believed to comprise almost the entire population of large portfolios in the pension and insurance community in Switzerland, the Netherlands and Sweden.

A small-scale pilot study was undertaken using a preliminary questionnaire in order that possible defects could be uncovered. A draft of the questionnaire was given to a group of seven researchers with experience in survey development and two institutional investors. Rather than asking the test group to simply fill out the questionnaire, participants were asked to comment on their reactions to the questionnaire's appearance, formatting, concepts and wording.

The questionnaire was conducted in autumn 2003. It was sent to 100 leading institutional investors in each of the three countries with a cover letter. The purpose of the cover letter was to describe the goals of the survey and guarantee respondent anonymity. After the questionnaires were mailed by post, follow-up e-mails were sent. One of the disadvantages of postal surveys is that it is not possible to be entirely sure whether the right

person answered the questionnaire. The cover letter was directed to the organisation's Chief Investment Officer. However, it could be expected that in some cases the Chief Investment Officer delegated the answering of the questionnaire to someone else within the organisation. Nonetheless, the technical characteristics of the questionnaire and the financial jargon employed in it imply that the respondent has sufficient knowledge of the field of portfolio investment theory and organisation investment strategy to answer the questions accurately.

Results

The total respondent pool was 37 in all three countries (i.e. a 12 per cent global response rate), including pension funds, insurance companies, property investment and asset management companies. The small sample is disappointing but not unexpected, a well-known disadvantage of postal surveys is the low response rate. Postal surveys usually generate substantially lower response rates than interview-based surveys. When the response rate is low it is likely that the findings will suffer from the risk of bias. The low response rate and sample bias towards large investment portfolios is not unexpected in the study because institutional residential ownership tends to be concentrated in a small number of large investors. In addition, the self-selection of respondents makes the sample even more biased towards large portfolios. From the total respondent pool, 16 respondents were from Switzerland (i.e. a 16 per cent response rate), 15 from the Netherlands (i.e. a 15 per cent response rate) and 6 from Sweden (i.e. a 6 per cent response rate). Eight responding companies did not have any equity residential property in their portfolio at the end of 2003. Three of those eight organisations without housing holdings are planning to start investing in residential property in the next five years. That is to say that more than 86 per cent of respondents are currently involved in the private rented sector or are planning to start investing in it.

Clearly, one of the reasons for no response was due to not having investment in the residential private rented sector. The entire population of institutional investors active in PRS is not vast. In actual fact, the institutional residential property assets are concentrated in a relatively small number of institutions.¹¹ As expected, the Swedish investors had the lowest response rate. As already mentioned, residential is not the most important property investment segment in the Swedish institutional portfolio and its importance has been decreasing since the mid-1990s. The overall response rate although low is still considered to be somewhat satisfactory given the acceptable coverage of the total institutional residential property market in terms of value, and the intense time pressures on the respondent universe of investment officers. Although the sample is small, it represents over €14 billion of residential property in those three countries with a relatively small population.¹² The Swiss institutions in the sample control over €6 billion, representing more than 17 per cent of the total institutional residential property market value in Switzerland.¹³ The Dutch respondents control over €6 billion, representing over 39 per cent of the total institutional residential property market in the Netherlands.¹⁴ The remaining sample's €2 billion are controlled by Swedish respondents, representing more than 17 per cent of the domestic institutional residential property market.¹⁵ While the estimate of the true response rate is difficult to know since the target population (number of institutional investors holding equity residential property) is not known, it is thought that the overall sample obtained is reasonably representative of the market in terms of the

number of equity residential investment decisions. As Brzeski *et al.* (1993) highlighted, organisations owning larger portfolios make a far greater number of investment decisions than more numerous smaller investors. Taken as a whole, the sample appears to be able to give a reasonable picture of the decision making of residential institutional ownership markets in these three countries in question.

Respondents’ Characterisation

The following Tables contain information on respondents and their portfolios for the three countries combined. Figure 1 displays the organisation type to which the respondents belong (86 per cent of which are currently involved in the private rented sector or are planning to start investing).

Figure 2 provides a histogram of the size of the total fund portfolio of the respondents in all countries. The distribution of the total portfolio’s value appears to be unimodal and reasonably normally distributed. Almost half of the overall respondents have portfolios between €1–5 billion. Over 67 per cent of the total institutional portfolios are over €1 billion. Almost 21 per cent of the respondents’ portfolios are over €5 billion.

Figure 3 presents a histogram of the size of the residential property portfolios in the three countries.¹⁶ The distribution of the size of the residential portfolio is skewed to the left. This distribution shape is more than likely related to the fact that the sample is biased towards large portfolio size. On the other hand, this shape could also indicate that most of the respondents currently investing in the PRS tend to have large residential portfolios. About 75 per cent of the respondents have residential property portfolios over €100 million. Only 14 per cent of the respondents have residential portfolios under €50 million. On the other hand, a significant percentage of the respondents (28 per cent) have residential portfolios over €1 billion. The shape of this distribution seems to corroborate Hoesli & Macgregor’s (2000) argument that specific risk can only be diversified away in large property portfolios. The authors claim that investors with smaller size property

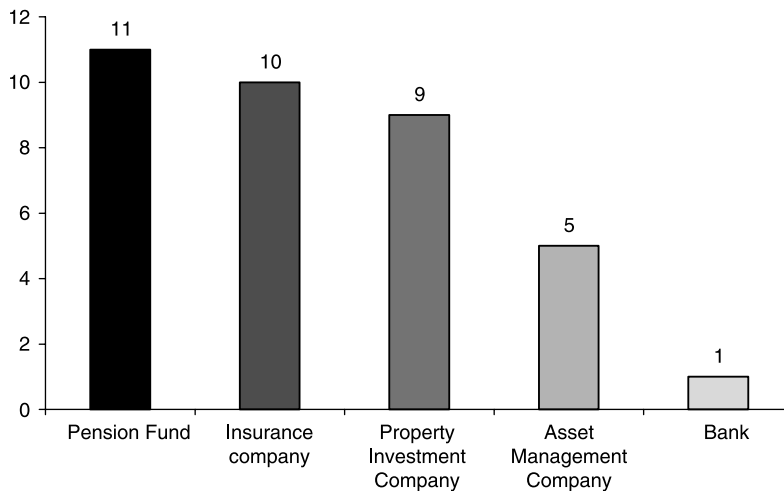


Figure 1. Type of respondents (all countries)

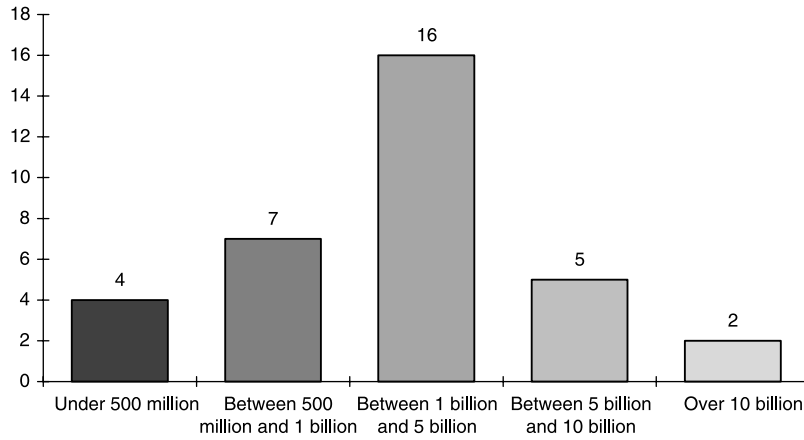


Figure 2. Value of total fund portfolio at year-end 2003 (Euros): all countries

portfolios are subject to higher risk exposure (i.e. both systematic and specific risks) and should not hold property. Alternatively, Louargand (1992) justifies this distribution tendency by highlighting the barriers of entry to the property market (i.e. divisibility, transactions, search and agency costs, as well as liquidity).

Investment Policy

Table 2 contains the position by type of property by those respondents that have equity residential property in their portfolios (34 respondents). Not surprisingly, residential is the most popular type of property investment in the sample, with 85 per cent of respondents investing in residential property. Since, the questionnaire was targeted at organisations with a higher probability of having residential property in their portfolios this bias would

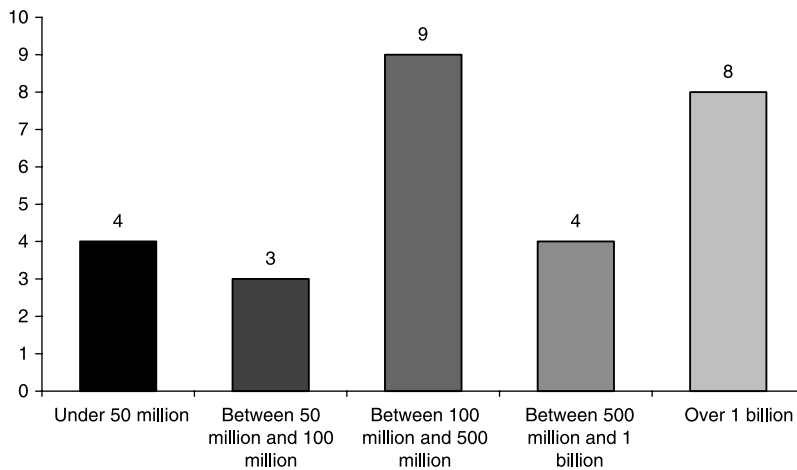


Figure 3. Value of residential portfolio at year-end 2003 (Euros): all countries

Table 2. Position by type of property (all countries)

Property type	Frequency	% of 34 respondents
Housing	29	85
Office	26	77
Retail	18	53
Industrial	14	41
Land	6	18

be expected. Again, the self-selection of respondents makes the sample even more biased towards portfolios holding residential property. Office buildings are the second most popular type of investment (77 per cent) and land the least popular type of investment (18 per cent). A large number (86 per cent) of the respondents with residential property also have offices in their portfolio, whereas the percentage of those having also retail and industrial property is 52 per cent and 38 per cent, respectively.

Tables 3 and 4 contain the residential investment evolution of institutional investors. The majority of respondents were investing in PRS during the last five years and anticipate that their involvement in the sector will increase over the next five years. The data suggest that organisations are not planning to change their past strategy regarding PRS investment during the next five years.

None of the Swiss respondents did and will not consider decreasing their investment in PRS (see Table 4). In fact, they seem somewhat more optimistic about the future of the sector than their Dutch counterparts. These findings are corroborated by the Immo Survey (2003), which states that there is clear evidence of a commitment to institutional investment in the residential private rented market.

Additionally, the respondents were asked about the percentage of their investment in PRS that was held through direct investment. Table 5 shows that the respondents rely essentially on direct ownership for their investments in the private rented sector.¹⁷ Interestingly, none of the respondents, even the smaller ones, invest in residential property via indirect vehicles exclusively. This disagrees with those who argue that the absence of a suitable indirect investment vehicle (e.g. property investment company, property investment trust, property fund) constitutes a major obstacle to institutional investment in the British private rented sector. Of course, that is not to say that a well-structured investment vehicle¹⁸ is not advantageous to those interested in investing in the private rented sector, particularly for organisations with smaller sized residential portfolios. Nonetheless, it is far from being a pre-requisite to the existence of a residential institutional ownership market.

Table 3. Evolution of investment in PRS: past and future (all countries)

Number of respondents	Past five years	Next five years
Start to invest in PRS	2	3
Maintain investment in PRS	4	7
Increase investment in PRS	18	20
Decrease investment in PRS	5	4
Total number of respondents	29	34

Table 4. Investment evolution past and future (the Netherlands and Switzerland)

Number of respondents	Past five years		Next five years	
	Netherlands	Switzerland	Netherlands	Switzerland
Start to invest in PRS	0	2	2	0
Maintain investment in PRS	1	3	3	3
Increase investment in PRS	7	9	6	11
Decrease investment in PRS	3	0	3	0
Total number of respondents	11	12	12	14

Consistent with the survey, the Immo survey (2003) reports that exposure to indirect investment is overall minor. For instance, in the case of the Swiss insurance companies the indirect investment represents only 0.3 per cent of all of the property investment volume, and in the case of the remaining Swiss institutions around 2.3 per cent of all of the property investment volume. The Swiss authors argue that domestic insurance companies and larger domestic pension funds give preference to direct investment over indirect investment not so much due to tax leakage problems, but largely because they have a high degree of residential property expertise in-house, which allows them to implement direct investments in the domestic market both effectively and appropriately. Furthermore, the Swiss study states that the increased flexibility, liquidity and diversification are the most important reasons for Swiss organisations to invest indirectly in property, whereas the outsourcing of management tasks and the reduction in the level of complexity of investments are manifestly less significant.

Table 6 indicates that the number of organisations relying entirely on external advice for their residential investment is substantially smaller than those relying entirely on in-house advice or both (i.e. in-house and external). In addition, Table 6 suggests a greater reliance upon in-house advice for residential equity investments by larger institutions compared with their smaller counterparts. In fact, seven out of eight of the respondents with residential portfolios over €1 billion rely only on in-house expertise for their housing investments. This result is consistent with the Immo Survey (2003) argument that larger institutional investors choose to invest in residential property by direct ownership because they have sufficient dimension to have an in-house team with reliable expertise on this specific investment asset group. In this vein, it can be said that the 'critical mass' constitutes an important factor for the residential institutional ownership. In other words, the residential portfolio size must be large enough in order to justify an in-house team specialised in housing investment, which allows them to invest directly in residential

Table 5. Direct investment by residential portfolio size: all countries

Frequency	Between 40% and 90%	Over 90%
Under €50 million	2	2
Between €50 million and €100 million	2	1
Between €100 million and €500 million	1	8
Between €500 million and €1 billion		4
Over €1 billion	1	7
Total number of respondents	6	22

Table 6. Source of advice for housing investment by residential portfolio size: all countries

	In-house	External staff	Both
Under €50 million	1	1	2
Between €50 million and €100 million	0	0	3
Between €100 million and €500 million	2	3	4
Between €500 million and €1 billion	1	0	3
Over €1 billion	7	0	1
Total number of respondents	11	4	13

property effectively. It seems reasonable to say that the increase in size and sophistication of the indirect residential investment vehicles will probably change the actual importance of this 'critical mass' factor.

Table 7 shows the main residential private rented market segment which the organisations are investing in. As could be expected, none of the three countries' respondents invest exclusively in the bottom segment of the residential market. The survey indicates that the middle market is by far the most popular segment for all countries.

Table 8 indicates the responses to the question with regard to the organisation's ability to take advantage of house price cycles, buying housing stock during periods of market decline and selling when the market rises. Almost 50 per cent of the overall respondents are able to take advantage of the house price cycle. However, this percentage is not uniform across the three countries. For instance, it appears to be easier for the Swedish and Dutch investors to profit from the housing cycle than their Swiss counterparts. Again, one note of caution must be made in relation to the Swedish case due to the small sample size.

According to some respondents, residential property is set apart from non-residential property by its superior capital gain performance. As a matter of fact, some respondents point out that residential property is expected to perform primarily as a capital appreciation asset whereas non-residential property is expected to perform as an income asset.

It could be said that the apparent 'speculator' behaviour of institutional investors could in fact, be beneficial to the owner-occupied sector, helping to reduce the 'natural' house price volatility in the sector. The institutional investors sell housing stock to owner occupiers (and to other institutional portfolios) when the prices are high, increasing the housing supply at a time when it is most needed. Conversely, the institutions buy housing stock (including some that was initially built for the owner-occupied sector) when the prices are low, helping to absorb a possible housing stock surplus. However, empirical research is required to be able to analyse more fully the impact of the 'speculator' behaviour of the institutional investors on owner-occupied house price volatility.

Table 7. Main private rented market segment of investment

	Bottom	Middle	Top	Middle and Top	All segments
Sweden	0	2	1	1	
Switzerland	0	6	2	4	2
Netherlands	0	4	3	2	2
All countries	0	12	6	7	4

Table 8. Take advantage of house price cycle

	Yes	No	Total
Sweden	4		4
Switzerland	4	10	14
Netherlands	6	5	11
All countries	14	15	29

The institutional investors were asked about what goals they had for their residential property holdings. Their answers (see Table 9) show that they expect residential property to perform primarily as a total return and a portfolio diversification asset, with inflation hedging and matching against liabilities as less important goals. Total expected return is the highest ranked goal, followed by risk diversification. The cash flow from operations comes third, followed by the potential for appreciation. It is interesting to note that just a small number of respondents in the present survey nominated residential hedge against inflation or match against liabilities as the most important reason to hold residential property. Furthermore, social factors appear to be less influential in the institutional investors' decisions regarding residential property. Moreover, government subsidies (including tax benefits) do not appear to act as an incentive to invest in the PRS.

Similar results were reported by Brzeski *et al.* (1993), Louargand (1992) and Rydin *et al.* (1990). They reported that Swedish institutional investors were primarily seeking 'long-term real return on equity' for their property investments (all types). The potential for appreciation comes second, followed by 'regular return on equity'. The importance of hedge against inflation and matching against liabilities were not analysed in this survey. Louargand (1992) found that the total expected return was the most important institutional

Table 9. Goals of institutional investors for residential property: all countries (1 = most important, 5 = least important)

Goals	Ranking frequency					Weighted mean
	1	2	3	4	5	
Total expected return	13	8	5	1	1	7.7
Risk diversification	9	8	4	6	1	6.8
Cash flow	6	6	6	5	3	5.7
Potential for capital appreciation	5	3	5	4	6	4.4
Inflation hedging	2	4	4	4	9	3.7
Match against liabilities	1	1	1	3	3	1.4
Tax benefits			1	1	1	1.1
Lack of other investment opportunities		1	1		2	0.9
Portfolio regulations		1	3		1	0.6
Other governmental subsidies			2	1	1	0.6
Socially responsible investment			1	1	2	0.5
Ratio of maintenance expenditures to investment			4	2	1	0.4

Note: A statistical weight (w_i) of 5 was assigned to the most important answers and 1 to the least important. The weighted mean w_x was then calculated by the formula:

$$W_x = \frac{\sum_{i=1}^5 w_i x_i}{\sum_{i=1}^5 w_i}$$

goal for property (all types) holdings in the USA, while inflation hedging was seen as less important. Rydin *et al.* (1990) reported that British institutional PRS investors¹⁹ were above all motivated by the risk-return characteristics of residential property, and much less by its inflation-hedging abilities. Furthermore, the Property Research Unit (1998) asked, both actual and potential institutional investors in the UK, whether they were looking more for capital appreciation, 'rental returns' or total return in their investments in residential property. They found that the total return was the most important goal for residential investments, followed by 'rental returns'.

Conversely, different results from those pointed out previously regarding the goals of property investment were reported by Wit (1996). The majority of his Dutch interviewees stated that the hedge against inflation was the most important reason to hold property (all types). In order to analyse the variation in the goals for residential investment across the countries surveyed Table 10 presents the ranking frequency for total expected return and inflation hedging as investment goals for each country. The total expected return seems to be the most popular reason for holding residential assets in all of the countries surveyed. Hedging against inflation as an investment goal, despite being relatively more important for the Dutch organisations than for the Swiss or Swedish counterparts, is not the main reason influencing the Dutch respondents' decision to invest in the private rented sector.

Further, the respondents were asked to rank several of the goals they desired from their overall portfolio investment strategy. Table 11 illustrates that the maximisation of expected portfolio returns is by far the most important goal for the respondents. While minimising the volatility goal, performance relative to one's peer universe and ensuring a real rate of return are ranked at lower level of importance. Moreover, matching plan liabilities or eliminating the smallest chance of a decline in the funds' wealth are seen as much less important goals. The institutional investors refer to the preference for similarity (i.e. ensuring performance relative to peer universe) as their most institutional prudential habit. Similar results were reported by Crook & Kemp (2002). Their study indicates that British institutional investors were particularly concerned with performing in line with market benchmarks. Thus, the habit of prudence, the preference for certainty (i.e. eliminating the smallest chance of decline in the funds' wealth), appears not to be amongst the core strategic portfolio goals of the respondents in the three countries surveyed.

Table 10. Goals of institutional investors for residential property (1 = most important, 5 = least important)

	Ranking frequency					Weighted mean
	1	2	3	4	5	
<i>Total expected return</i>						
Netherlands	6	4	2			8.7
Sweden	2		1		1	2.5
Switzerland	5	4	2	1		7.9
<i>Inflation hedging</i>						
Netherlands	2		2	2	5	4.2
Sweden			1	1	1	1.0
Switzerland		3	2	1	3	3.0

Table 11. Goals of institutional investors for their overall portfolio (1 = most important, 5 = least important)

Goals	Ranking frequency					Weighted mean
	1	2	3	4	5	
Maximise expected returns	22	2	3	2	1	8.8
Minimise volatility of returns	2	10	8	4	3	5.7
Ensure performance relative to peer universe	3	4	7	5	5	4.5
Ensure a real rate of return	4	4	5	4	3	4.1
Keep fund wealth from falling below a certain level		7	4	4	7	3.7
Match plan liabilities	2	4	3	5	4	3.3
Eliminating the smallest chance of funds' wealth decline		2	2	4	2	1.6

The results lead to two conclusions. First, the key objectives of asset allocations are to maximise expected returns and minimise the volatility of returns. Second, respondents are not more concerned with protection against inflation or matching against liabilities than with their performance relative to that of their peers. Peer pressure seems to have a significant influence over the respondents' investment strategy. According to Bezooyen & Mehta (1998) in the Netherlands peer pressure is primarily a consequence of the regulation policy enforced by the Insurance Chamber (i.e. the regulatory body for pension funds and insurance companies). The Dutch regulatory body requires an annual report of the plan's funding position, which stresses the investment strategy risk.

Institutional Perceptions of Residential Property

The respondents were asked to compare residential property returns with those on other asset groups (shares, government bonds and non-residential property). Table 12 suggests that cross-correlations of share returns with those of residential property are believed to be low. In addition, non-residential property and bond returns are believed to be mildly correlated with those of residential property. Meaning that residential property is expected to provide diversification benefits for investors even when their portfolios already include non-residential property. Similarly, Crook & Kemp (2002) report that British institutional investors perceive residential property as being able to offer diversification benefits within property portfolios. Besides, residential property, according to the respondents' opinion, is more correlated with inflation than with any other asset group analysed. Interestingly, in

Table 12. Correlation of residential property returns with different asset returns and inflation: all countries

Number of respondents	Shares	Government bonds	Non-residential property	Inflation
Negative correlated	10	3	4	
Not correlated	16	12	7	4
Mildly correlated	7	18	20	13
Highly correlated			2	15

Table 13. Performance of residential property as liabilities matching

	Pension funds	Insurance companies	Other organisations	All organisations
A very good match against liabilities	1	3	5	9
A good match against liabilities	9	4	6	19
A fairly good match against liabilities	1	1	2	4
A bad match against liabilities		2		2
Total number of respondents	11	10	13	34

spite of organisations' belief that residential property is a good hedge against inflation, they do not emphasise this housing feature (see Table 9) in their goals for investing in PRS.

In order to analyse the investors' perception about the ability of residential property to match against liabilities, the respondents were asked how residential property performs in matching against liabilities (see Table 13). The survey results suggest that housing is perceived to perform well as a match against liabilities, independent of the organisation type. Again, this study indicates that even though organisations perceive residential property to be a good match against liabilities, they do not consider it as a principal reason to invest in the PRS (see Table 9).

Next, the respondents were asked to compare the risk of residential property with the risk of shares (see Table 14). Undoubtedly, residential property is perceived as an asset group less risky than shares.

The respondents' perception about the volatility of housing returns compared with that of shares is consistent with the empirical results presented in Table 15, which detail the standard deviation of total returns of these two asset groups in the three countries surveyed (see Table 15).

Table 14. Risk of residential property compared with risk of shares

	Pension funds	Insurance companies	Other organisations	All organisations
Much less risky than shares	4	4	10	18
Less risky than shares	7	5	2	14
About as risky as shares			1	1
Much more risky than shares			1	1
Total number of respondents	11	9	14	34

Table 15. Standard deviation of residential property and share total returns by country

Standard deviation (%)	Residential property	Shares
Switzerland (1987 to 2002)	5.5	22.9
Sweden (1984 to 2002)	7.5	29.1
The Netherlands (1986 to 2002)	5.1	21.0

Source: Montezuma & Gibb (2003)

Table 16. Problems of residential private rented sector: all countries (1 = most important, 5 = least important)

PRS Problems	Ranking frequency					Weighted mean
	1	2	3	4	5	
Rent control	19	6	3	1	3	8.9
Tenancy regulation	7	16	3	4	3	7.9
Poor market information	1	1	6	7	4	3.0
Low returns	1	1	8	4	4	3.0
Poor liquidity	4	1	2	2	3	2.5
Small lot size and poor quality	1	2	2	6	3	2.3
Transaction costs		4	2	2	6	2.1
Lack of management expertise	1	1	2	0	7	1.5
Lack of well-structured investment vehicles		1		3	2	0.8

Institutional Experiences Regarding the Private Rented Sector

In order to gain a better understanding of the investors' perception regarding the problems associated with the private rented sector, the respondents were asked to rank what they considered to be the top five problems in order of importance. These rankings are shown in the frequency Table 16.

The rankings in Table 16 seem to indicate that the majority of respondents perceive rent regulation issues (both rent control and tenancy regulation) as being the key problems associated with investing in the private rented sector. Concerns surrounding poor market information come third (distant), followed by low returns and poor liquidity. Unsurprisingly, the respondents referred to the lack of well-structured investment vehicles to be a much less important problem associated with investing in private rented housing, as they tend to invest in housing equity directly (see Table 5).

Conclusions

Although few categorical conclusions are possible from a survey such as this, it provides an important idea of the character of the institutional residential market character and gives an indication of institutional investors' perceptions towards residential property equity. Because of the respondents' representativeness in terms of market share, their views can be given some weight and authority.

The survey suggests that investment in residential property equity is likely to be done through larger portfolios, which tend to invest in housing equity directly. Interestingly, none of the respondents invest exclusively in residential property via indirect vehicles. Consistent with previous studies, the survey suggests that only a few institutions rely on external advice for residential investment. Overall, this appears to support the idea that 'critical mass' is an important factor for residential ownership.

Furthermore, the survey suggests that residential property is seen mainly as an earning asset group able to provide diversification benefits for investors even when institutional portfolios already include non-residential property. These results are consistent with a previous study (Montezuma & Gibb, 2003), which concludes that direct residential

property in Switzerland, the Netherlands and Sweden has an important role in the optimal allocation of institutional investors with low risk tolerance.

Interestingly, the prudential habit of the institutional investors for a preference for similarity is no less important, in terms of overall portfolio goals, than protection against inflation or liabilities matching. Yet, organisations perceive residential property to be correlated with inflation and a good match against liabilities.

The respondents are mainly concerned with rent control and tenancy regulation when investing in the PRS and the lack of well-structured investment vehicles is undoubtedly a less important problem.

Acknowledgements

The author wishes to express his gratitude to all who participated in the survey for their trust and their willingness to answer the questionnaire. It is your interest and candour that have enabled us to conduct this study. The author would also like to acknowledge Jennifer MacGarrigle for proof reading this paper. He is grateful to Kenneth Gibb and participants at the ERES 2004 meeting for their helpful comments and suggestions.

Notes

- ¹ The process of decision making under risk has long been accepted as being modelled by expected utility theory. In this theory decisions are made based on the final asset position of each outcome.
- ² According to Brzeski *et al.* (1993) Swedish financial institutions often held as little as 1 per cent of their portfolios in property.
- ³ Pension plans where commitments are covered by real or financial assets.
- ⁴ In the Netherlands the decrease of private rented stock resulted mainly from the reduction in individual owners' investment.
- ⁵ It is interesting to note that the British institutions have had the opportunity to secure high total returns if they invested in the private rented sector at the time of the survey, benefiting from the considerable residential capital appreciation verified since 1999.
- ⁶ SFI is a key property benchmark organisation in Sweden. The members of this co-operative comprise the leading Swedish property institutional investors.
- ⁷ EPRA's members comprise most of the leading real estate companies and investment institutions in Europe.
- ⁸ Its 30 members include pension funds, insurance companies and share funds that represent approximately 90 per cent of total Dutch institutional property capital.
- ⁹ The SVV comprises 69 members, which represents 98 per cent of the annual premium revenue in the Swiss insurance market.
- ¹⁰ The SIRP represents 90 per cent of the occupational pension plans within the private, co-operative and local government sectors in Sweden.
- ¹¹ For instance, the 30 IVBN members control approximately 90 per cent of the total Dutch institutional property capital. Six of those members do not have residential property holdings.
- ¹² As Wit (1996) points out the usual low response rate from mail questionnaires results in very low sample sizes for smaller countries.
- ¹³ IPD and Wuest & Partner estimated that the total Swiss institutional property market in 2003 was approximately €64 billion, divided 52–48 between residential and non-residential property (see http://www.ipdindex.co.uk/about_ipd/locate/swiss.asp).
- ¹⁴ The Association of Institutional Property Investors in the Netherlands (IVBN) estimated that the total Dutch institutional property market in 2003 was €33 billion, divided 50–50 between residential and non-residential property (see http://www.ivbn.nl/eng/eng_profile.asp).
- ¹⁵ The Swedish Property Federation and NewSec estimated the value of the residential property market was €127 billion at the end of 2002. The same source estimated that institutions owned €11.43 billion of the Swedish residential market (i.e. 9 per cent of the total residential market value). The same source

estimated that institutional and listed companies owned €42.16 billion of the Swedish non-residential market (see <http://www.isa.se/upload/Filer/pdf/RealEstate2003.pdf>).

¹⁶ Information by country is provided in Table A1 in Appendix 2.

¹⁷ Information by country is provided in Table A2 in Appendix 2.

¹⁸ A well-structured investment vehicle must fulfil a number of requirements. Among other things, they need to be tax-efficient (i.e. not be a tax disadvantage compared to direct investments), liquid and have a good management and an appropriate portfolio structure.

¹⁹ The institutional property holdings in Britain are mainly non-residential.

²⁰ Ownership interest in property (excludes investment in property mortgages).

²¹ Allocated more funds to the PRS.

²² Relative high size of institutional investors versus equity market capitalisation.

²³ For instance, portfolio restrictions aimed to prevent over concentration of risk in an asset class.

References

- Bezooyen, J. & Mehta, S. (1998) Investing strategies for Dutch and UK pension funds, working paper, Group of Economic and Market Value Based Studies.
- Brezeski, W. J., Faffe, A. & Lundstrom, S. (1993) Institutional real estate investment practices: Swedish and United States experiences, *Journal of Real Estate Research*, 8, pp. 293–323.
- Clark, G. L. (1998) Why convention dominates pension fund trustee investment decision making, *Environment and Planning*, 30, pp. 997–1015.
- Crook, D. & Kemp, P. (1999) *Financial Institutions and Private Rented Sector* (York: Joseph Rowntree Foundation).
- Crook, D. & Kemp, P. (2002) Housing investment trusts: a new structure of rental housing provision? *Housing Studies*, 15, pp. 741–753.
- Crook, D., Hughes, J. & Kemp, P. (1998) Housing investment trusts and the returns from residential lettings, *Journal of Property Research*, 15, pp. 229–248.
- Davis, P. (1994) *An International Comparison of the Financing of Occupational Pensions*, Special Paper 62, Financial Market Group (London: London School of Economics).
- Davis, P. & Steil, B. (2001) *Institutional Investors* (Cambridge, US: MIT Press).
- Devaney, M. & Rayburn, W. (1988) When a house is more than a home: performance of the portfolio household portfolio, *The Journal of Real Estate Research*, 3(1), pp. 75–85.
- Farragher, E. (1982) Investment decision-making practices of equity investors in real estate, *Real Estate Appraiser and Analyst*, 48, pp. 36–41.
- Hoesli, M. & Hamelink, F. (1997) An examination of the role of Geneva and Zurich housing in Swiss institutional portfolios, *Journal of Property Valuation & Investment*, 15(4), pp. 354–371.
- Hoesli, M. & Macgregor, B. (2000) *Property Investment—Principles and Practices of Portfolio Management* (Harlow: Longman/Pearson Education Limited).
- Ibbotson, R. & Siegel, L. (1984) Real estate returns: a comparison with other investments, *Journal of American Real Estate and Urban Economics Association*, 12(3), pp. 219–242.
- Immo-Survey (2003) *The Investment Behaviour of Swiss Institutional Real Estate Investors* (Zurich: Swisslife Real Estate Partners and Ernst & Young).
- Khaneman, D. & Tversky, A. (1979) Prospect theory: an analysis of decision under risk, *Econometrica*, 47, pp. 263–291.
- Louargand, M. A. (1992) A survey of pension fund real estate portfolio risk management practices, *Journal of Real Estate Research*, 7, pp. 361–373.
- Martin, R. & Minns, R. (1995) Undermining the financial basis of regions: the spatial structure and implications of the UK pension fund system, *Regional Studies*, 29, pp. 125–144.
- Meer, Van Der (1990) Investment strategies based on matching, working paper, Pensionen, Uitkeringen en Beleggingen.
- Miles, M., Pringle, J. & Webb, B. (1989) Modeling the corporate real estate decision, *The Journal of Real Estate Research*, 4(3), pp. 47–66.
- Montezuma, J. (2004) Housing investment in an institutional portfolio context, *Property Management*, 22, pp. 230–249.

- Montezuma, J. & Gibb, K. (2003) Residential property as an institutional asset: the Swiss and Dutch cases, working paper, University of Glasgow.
- Property Research Unit, Department of Land Economy, University of Cambridge (1998) *Institutional Investors' Attitudes Towards Residential Investment and Prospective Controls on Regulated Rents*. Research Report for The British Property Federation.
- Rydin, Y., Rodney, W. & Orr, C. (1990) Why do institutions invest in property? *Journal of Property Finance*, 1(2), pp. 250–258.
- Webb, J. R. (1984) Real estate acquisition rules for life insurance companies and pension funds: a survey, *AREUEA Journal*, 12, pp. 495–520.
- Webb, J. R. & McIntosh, W. (1986) Real estate investment acquisition rules for REITs: a survey, *Journal of Real Estate Research*, 1, pp. 77–98.
- Wiley, R. (1976) Real estate investment analysis: an empirical study, *Appraisal Journal*, 44, pp. 586–592.
- Wit, P. (1996) Real estate portfolio management practices of pension funds and insurance companies in the Netherlands a survey, *The Journal of Real Estate Research*, 11(2), pp. 131–149.

Appendix 1: Questionnaire

Organisation name: _____

Interviewee's position within the organisation: _____

Email to send the enquiry results: _____

1. Country of respondent:

- The Netherlands
- Sweden
- Switzerland

2. Is your organisation a:

- Defined Contribution Pension Fund
- Defined Benefit Pension Fund
- Life Insurance Company
- Non-life Insurance Company
- Property Investment Company
- Other Investment Company
- Other (please specify) _____

3. What is the approximate value of your total fund portfolio?

- Under €500 million
- €500 million to €1 billion
- €1 billion to €5 billion
- €5 billion to €10 billion
- Over €10 billion

4. For what types of property are you currently holding an equity position:²⁰

- Housing
- Office Buildings
- Retail
- Industrial
- Hotel/Motel
- Land
- Other (specify) _____

5. Do you invest in the residential private rented sector (PRS)?

- Yes
- No (please go to question 13)

6. In the past 5 years your organisation had:

- Started the investment in the private rented sector
- Maintained the investment in the PRS
- Increased investment in the PRS²¹
- Decreased investment in the PRS

7. What is the approximate value of your investment in the private rented sector?

- Under €50 million
- €50 million to €100 million
- €100 million to €500 million
- €500 million to €1 billion
- Over €1 billion

8. Approximately what percentage of your residential property portfolio is invested in:

- 1. Social housing _____ per cent
- 2. Non-social housing _____ per cent
- 100 per cent total

9. Approximately what percentage of your investment in the private rented sector is held through:

- 1. Direct investment _____ per cent
- 2. Indirect investment (using investment vehicles) _____ per cent
- 100 per cent total

10. What is your source of advice for equity residential property investment?

- In-house staff
- External staff
- Both

11. What is the main residential private rented market segment you invest in?

- Bottom market (lower quality)
- Middle market
- Top end market (higher quality)

12. Is your organisation able to take advantage of the house cycle by buying housing stock during the market decline and selling in market rise?

- Yes
- No

13. In the next 5 years do you think your organisation will:

- Start to invest in the private rented sector
- Maintain the actual investment in the PRS
- Increase investment in the PRS²¹
- Decrease investment in the PRS
- Exit the PRS

14. Please rank your goals or objectives for equity residential property investment (Pick top 5, from 1 = most important to 5 = least important):

- 1. Potential for capital appreciation _____
- 2. Cash flow _____
- 3. Total expected return _____
- 4. Risk diversification _____
- 5. Inflation hedging _____
- 6. Match against liabilities _____
- 7. Tax benefits _____
- 8. Other governmental subsidies _____
- 9. Lack of other investment opportunities²² _____
- 10. Accounting standards _____
- 11. Portfolio regulations²³ _____
- 12. Socially responsible investment _____
- 13. Ratio of maintenance expenditures to investment _____
- Other (please specify) _____

15. On the following scale, please show your view on the correlation of equity residential property returns (1 = negatively correlated; 2 = not correlated; 3 = mildly correlated; 4 = highly correlated):

- 1. With stock returns _____
- 2. With governmental bond returns _____
- 3. With commercial property returns _____
- 4. With inflation _____

16. In your opinion equity residential property is:

- A very good match against liabilities
- A good match against liabilities
- A fairly good match against liabilities
- A bad match against liabilities

17. In your opinion equity residential property returns are:

- Much less risky than stock returns
- Less risky than stock returns
- About as risky as stock returns
- Somewhat more risky than stock returns
- Much more risky than stock returns

18. Please rank the following residential private rented sector problems (Pick top 5, from 1 = most important to 5 = least important):

- 1. Rent control _____
- 2. Poor market information _____
- 3. Low returns _____
- 4. Tenancy regulation _____
- 5. Small lot size and poor quality _____
- 6. Poor liquidity _____
- 7. Lack of management expertise _____
- 8. Lack of well-structured investment residential vehicles _____

9. Transaction costs _____
 Other (please specify) _____

19. Please rank the goals or objectives of your overall portfolio investment strategy (Pick top 5, from 1 = most important to 5 = least important):

1. Maximise expected returns _____
 2. Minimise volatility of portfolio returns _____
 3. Ensure performance relative to peer universe (benchmark) _____
 4. Match plan liabilities _____
 5. Keep fund wealth from falling below a certain level _____
 6. Ensure a real rate of return _____
 7. Eliminating the smallest chance of fund's wealth decline _____
 Other (please specify) _____

20. What do you think would contribute to make investment in the private rented sector more attractive _____

Additional comments _____

Thanks very much for your help. Please return the completed questionnaire by 12 December, 2003 to Joaquim Montezuma, University of Glasgow, Department of Urban Studies, 25 Bute Gardens, G12 Glasgow, UK or by email to: 0110774m@student.gla.ac.uk.

Appendix 2

Table A1. Value of residential portfolio at year-end 2003

Responses (%)	Switzerland %	Netherlands %	Sweden %	All countries %
Under €50 million	14	10	25	14
Between €50 million and €100 million	14	10		11
Between €100 million and €500 million	36	20	50	32
Between €500 million and €1 billion	7	30		14
Over €1 billion	29	30	25	29
Total number of respondents	14	10	4	28

Table A2. Percentage of direct investment by country

	Between 40% and 90%	Over 90%	Total
Sweden	2	4	6
Switzerland	6	10	16
Netherlands	6	9	15
Total number of respondents	14	23	37

Table A3. Main problems of residential private rented sector by country
(1 = most important, 5 = least important)

Problems	Ranking frequency				
	1	2	3	4	5
<i>Rent control</i>					
Sweden	5		1		
Switzerland	5	3	2		2
Netherlands	9	3		1	1
<i>Tenancy regulation</i>					
Sweden	1	3		1	1
Switzerland	3	6	1	2	2
Netherlands	3	7	2	1	
<i>Poor liquidity</i>					
Sweden	0	0	0	0	0
Switzerland	4	1	2	1	1
Netherlands				1	2

There is some consistency about how residential property investments are carried out across the three countries. The majority of the respondents in the surveyed countries clearly prefer the direct investment option (see Table 9).

Table A4. Correlation of residential property returns with those of shares by country

	Negatively correlated	Not correlated	Mildly correlated	Total
Sweden		3	2	5
Switzerland	4	8	3	15
Netherlands	6	5	2	13
Total	10	16	7	33

Table A5. Correlation of residential property returns with those of government bonds by country

	Negatively correlated	Not correlated	Mildly correlated	Total
Sweden	1		4	5
Switzerland	1	5	9	15
Netherlands	1	7	5	13
Total	3	12	18	33

Table A6. Correlation of residential property returns with those of non-residential property by country

	Negatively correlated	Not correlated	Mildly correlated	Highly correlated	Total
Sweden	1	1	3		5
Switzerland	1	4	8	2	15
Netherlands	2	2	9		13
Total	4	7	20	2	33

Table A7. Correlation of residential property returns with inflation by country

	Not correlated	Mildly correlated	Highly correlated	Total
Sweden		2	3	5
Switzerland	2	7	5	14
Netherlands	2	4	7	13
Total	4	13	15	32