

**Pacific Rim Real Estate Society (PRRES)  
Conference 2000**

**Sydney, 23-27 January, 2000**

**RESIDENTIAL PROPERTY INVESTMENT DECISIONS IN NEW ZEALAND:  
ECONOMIC AND SOCIAL FACTORS**

**SUSAN FLINT-HARTLE \*  
ANNE DE BRUIN**

**Department of Commerce,  
Massey University Albany Campus  
Private Bag 102 904 NSMC Auckland  
New Zealand**

\* Contact author for all enquiries

Phone: 64 9 443 9799, Facsimile: 64 9 441 8177, E-mail: S.L.Flint-Hartle@massey.ac.nz

**Keywords:** Residential rental property, investment behaviour, decision making, questionnaire, in-depth interviews

## **Abstract**

*Despite criticism of property investment on the grounds that it is unproductive and therefore not helpful to the national economy, an increasing number of New Zealanders continue to favour this investment option. This paper examines the motivations for investment in residential rental property and explores the key factors that impact on these investment decisions. The findings and discussion are based on a postal survey of a sample of residential rental property owners and a study of a smaller sample using more in-depth interview techniques. The study comprises the first phase of a national exploration of property investment behaviour in New Zealand.*

## **1. Introduction**

Recently in New Zealand there has been discussion on the rationale for the preference for property in the investment portfolios of the household sector. The Governor of the Reserve Bank for instance has spoken out against this trend in property investment since ‘.regrettably, real estate investment generally contributes little to increasing the economy’s output’ (Reserve Bank 1998:4). Another strand in the debate on saving and investment behaviour of the household sector has involved the question of the need for New Zealanders to plan and save for their retirement (ISI 1998; Office of the Retirement Commissioner 1996). Despite debate, other than on factors influencing home ownership, there has been little in-depth empirical research on the motivations for investment in housing. Our research aims to mitigate this gap by exploring the key factors, both economic and social, that impact on the decisions of private residential property investors. At the 1996 Census of Population and Dwellings this group made up 67% of New Zealand’s residential rental market owning around 212,000 rental properties (King 1997).

This paper discusses some of the preliminary findings of a postal survey of a nationwide sample of residential rental property owners in New Zealand and 20 face to face interviews with Auckland investors, drawn from the respondents to the questionnaire.

## **2. Methodology**

A questionnaire was inserted into two publications: the October 1999 issue of the *New Zealand Real Estate Journal* and the November issue of the *Residential Property Investor*. The preliminary data analysis is for all those questionnaires returned as at 12 December 1999, which totaled 895. More responses (60), however, have come in after this date.

The *NZ Real Estate Journal* is a publication of the Real Estate Institute of New Zealand. It is compulsory for real estate agents to belong to the Institute and real estate salespersons may subscribe to the College of Salespeople. The journal is complimentary with membership to these two organizations. The *Residential Property Investor* is a New Zealand publication providing independent information to residential property investors.

It is not affiliated to any property investor association and is a privately owned publishing venture.

8000 copies of the questionnaire were inserted into both publications, of which 4600 were included in the *NZ Real Estate Journal*. Of these 4600, 3871 were to individuals, with the balance to organisations such as libraries, real estate companies and valuation companies. It is reasonable to assume that organisations would not respond to the questionnaire. Furthermore of the 3871 to individuals, not all recipients would be residential property investors. A random telephone poll of real estate salespersons belonging to the College of Salespeople was carried out to gauge the approximate proportion of individual subscribers actively involved in residential real estate investment. This poll indicated that approximately 36% were investors in this category. We may therefore infer that only 1394 of the questionnaires in this magazine would be accurately targeted and it was this number that we used in our calculation of the response rate. Our total responses of 895 (the base for analysis for this paper) thus represent a 19% rate of response. The true rate of response, however, was 20%.

Because of the short time period between receipt of returned questionnaires and this Conference, only a limited number of face to face interviews were possible. We intend to conduct further interviews both in Auckland and other regions of New Zealand, to complement our preliminary findings.

Considering the aim of the study, the key question seeks information on the main reason for choosing to invest in residential rental property. Eleven specified options were listed in the questionnaire as reasons for this investment preference. Additionally an 'other – please specify' category was included so that respondents would not be confined within the parameters of the reasons suggested. Respondents were asked to rank their main reasons, picking five options in order of importance. Some respondents did not rank their reasons, merely ticking boxes and are accounted for as *missing* in figures 1 and 2 of the paper. An exception report was compiled on these respondents. There were 825 ranked responses, representing 92% of the sample under study.

Central editing of the questionnaires revealed that slight fine-tuning of the responses was advisable. For example, in the question seeking information on the reasons for the investment decision, we found that some comments in the 'other' category could fit into one of the given categories. Subtle differentiation in categories was also ignored e.g. those who considered renovation or the use of own skills to add value was included in the option of wealth accumulation through long term capital gain. The 'quick flick' – 'do up' for quick capital gain', was nevertheless not transferred to this category and, recorded as 'other'.

The 'other' option, however, gave us some useful reasons, which were not specified. For example, six respondents actually embarked on property investment specifically in order to diversify their investment portfolio. Another example of the 'other' reason included options for future personal use and security. Family reasons such as providing accommodation for children at school or university or for relatives were included here.

Those who wished to retain family owned property due to an emotional attachment also featured here. Interestingly, for one respondent property investment ‘keeps me sane’!

As anticipated, the bulk of the respondents came from the Auckland region, accounting for 42% of total responses. 40% of the respondents were in the 41-51 age group, while 29% and 22% belonged to the 52-64 and 30-40 age groups respectively. The majority, or 42% of property investors in our sample, had between 1-2 properties. This percentage increased to 58% with those owning 3 properties. Those owning 4 or 5 properties comprised 30%. Those who owned 6 or more properties made up the balance.

While it may be argued that there is a definite bias in our sample, since it comprised only those rental property owners who are subscribers to the magazines, nevertheless our final total of 955 respondents to the questionnaire is a sizable sample. Our interviewee base comprises those who indicated their willingness by filling out a contact detail portion included at the end of the questionnaire. In a sense therefore, they were self-selecting and those whom we interviewed for this paper were those who were available during the holiday period and lived in the Auckland region.

### **3. Economic Reasons**

Broadly, economic reasons provided in the questionnaire included the expected return on investment: ‘It provides a good investment return’ and ‘It allows for wealth accumulation through long term capital gain/growth’. To gauge risk preference we provided the option: ‘It is a low risk investment’. Other economic considerations listed were: ‘It provides taxation benefits’; ‘It gives an income for retirement’. 85% of valid responses ranked one of these economic reasons as their first most important motive for investing in rental property. In this section we chiefly discuss the economic reasons ranked highly in the investment decision of respondents.

Wealth accumulation and long term capital gain was clearly the most important consideration in the property investment decision. 43% of respondents ranked this as their first most important reason for engaging in rental investment. A further 17% had this as their second most important reason. This result is not unsurprising in the light of a general trend of capital gains and wealth increase that has historically been afforded by urban residential property in New Zealand since the 1970s. Considerable and sustained capital gains and wealth increase particularly from housing in the Auckland regions is a feature (Dupuis and Thorns 1997; Dupuis 1992).<sup>1</sup> The majority of our respondents were from this region. As the concept of ‘real wealth increase’<sup>2</sup> (Dupuis 1992) highlights, when measured in real terms, the smaller the outlay of the investor’s own equity in the property, i.e. the size of the deposit, the greater is the wealth increase. Hence, ‘it is even possible to make real wealth gains from nothing but the capacity to pay a mortgage, to

---

<sup>1</sup> It should be noted here however that general calculations of financial gain could be problematic not only because the periods chosen affect calculations but also because there is no easy way of taking into account other factors such as improvements that have been made to the property. Dupuis 1992 provides a good discussion.

<sup>2</sup> Calculated as the selling price less final mortgage debt, selling costs and the deposit. The real wealth increase is calculated by inflation adjusting the deposit.

the extent that if all of the purchase price of a house can be borrowed, upon resale all the relative increase accrues to the owner' (Dupuis 1992: 29). It would appear that this idea of real wealth increase receives implicit support in the interviews, with several commenting that it is possible to 'get rich because the tenant pays the mortgage'. With financial institutions increasingly willing to lend on smaller sized deposits, the scope for real wealth gains also increases. Contributing to the expectation by property investors that they will benefit from capital gain and wealth accumulation is the fact that New Zealand, unlike several other countries does not have a capital gains tax on housing.

Furthermore in comparison with the other investment option of equities, over the last 10-15 years residential housing has outperformed the New Zealand sharemarket. The barometer NZSE40 Capital Index increased by only 10.6% in the decade December 1989 to December 1999 in contrast to the 66% gain on residential housing (Gaynor 2000). Furthermore the three listings: Brierley Investments, Fletcher Challenge and Robert. Jones, which had the largest number of shareholders at the end of the 1980s, produced negative returns (Gaynor 2000). NZ is unique globally in that house prices have outshone shares in the last 15 years (Gaynor 1999). While pointing to the influence of timing of buying and selling of assets influencing outcomes, Bourassa and de Bruin (1998) show that in overall terms capital growth of the housing market has outperformed the share market. Figure 1 in the Appendix of this paper graphs the real indexes of capital growth and shows each of the housing market series has had generally better capital gain than the share market. The Auckland housing market shows a clearly spectacular performance since 1973-1997, which only in 1986 when the share market was at its peak, marginally under-performed shares. Though less spectacular, the major urban areas of Christchurch and Wellington have also done well in comparison with the share market. The greater capital growth of housing when examined in five year holding periods provides mixed results for the three main centres and all New Zealand housing. Once again however, in the five-year periods since 1984 to 1997, the Auckland market produced real capital gain (Bourassa and de Bruin 1998).

While in general calculations support the superior performance of residential property in New Zealand, it should be stressed that capital gains that can be made by individual investors are strongly influenced by both location of property and the initial purchase price. Even if there is little or no overall house price inflation per se, capital gain could eventuate on specific properties. This point is illustrated in the interview data. For example, a 41-51 year old male investor, whose chief reason for investment in property was the expectation of capital gain, told us that he was aware of the low inflation climate eroding the possibility of high capital gain. His motivation for property investment resting on making capital gain, however, relied on bargain buying. Another couple of interviewees, who were professional licensees in real estate, believed that they should 'practice what they preach' and felt they were sufficiently knowledgeable and confident to 'buy well'.

As stated previously, location can make a vital difference in obtaining capital gain. Location also features in the fact that buying in known, very familiar locations

characterised the property purchases of those interviewed.<sup>3</sup> One person interviewed had bought the house next-door, motivated by the ability to ‘keep a close eye on the tenants’. The need to have proper tenant management was highlighted as an important aspect of the success of the investment, by several people we interviewed. In fact the issue of tenant management was also closely related to the location of the rental property because the vast majority of respondents did not use or intend to use property managers. 72.3% of respondents indicated they would not use professional property managers. Our interviews also showed that the ability to manage tenants well was a factor in the investment decisions of those actively involved in the real estate industry. Additionally, location was significant because it meant the investor felt confident with knowledge of the values in a particular area.

Cross tabulations showed that in every age group, capital gain and wealth accumulation was ranked as the most important motivating factor. The highest percentage support for this reason in the 41-51 age group is consistent with life cycle trends. Often, wealth accumulation is entrenched by the latter part of the period.

The ‘good investment return’ reason for investing in residential rental property, was only ranked first by 8% of respondents and was the second most important reason for 13%. Perhaps this lower percentage ranking is accounted for by the fact that it appeared from our interview data that the vast majority of property investors do not attempt to make detailed calculation of expected return on their investment. Of the 20 interviewees only one of them made computer calculations of returns. Others mostly had a ‘gut feeling’ that they were getting a good return. With the exception of the one person mentioned, an annual rate of return of the investment was certainly not mathematically calculated. Nevertheless all of the interviewees had their own individual way of assessment of returns and were confident that their investment was providing a ‘reasonable return’. As table 1 below shows, they were not wrong. Although it is seen that the effective annualised real return, which takes into consideration different variances of return, was better for shares than for housing, even if the returns on shares are higher, ‘it is not immediately obvious that investing in housing is sub-optimal as it is quite logical for an investor to accept the lower return on housing if they do not consider the extra return from the stock market to be sufficient to compensate for the additional risk and effort’ (Joint Working Group 1999:15). Moreover, a change of the time period to 1987-1997 shows the sharemarket outperformed by all of the other 3 asset categories in table 1.

---

<sup>3</sup> Two of those interviewed were owners of several rental properties and each had a property in the Gold Coast of Australia. They admitted that these Australian properties were very low return, no capital growth. Perhaps, lesser knowledge of the location in which they were purchasing and the distance from the place of their residence accounted for this.

**Table 1**  
**Returns for New Zealand Asset Classes 1970 – 1998**

Asset	Effective Annualised Real Return (%)
NZSE40	5.54
Housing	4.38
6 month deposit rate	0.72
10 Year Government Bonds	1.23

Source: Joint Working Group 1999 Table 3

Despite a popular perception that New Zealanders should be planning better for their retirement, our data showed that property investors were very mindful of the need for retirement provision. This reason for investment came in second, after capital gain and wealth accumulation, as the first most important reason, with 26% of respondents ranking this as their first reason. At 20%, it was ranked highest as the second most important reason. There was a gender difference, however, with 47% of males ranking capital gain and wealth accumulation as their chief reason, while females gave equal importance to this reason and to the provision for retirement income. Thus in our female sample which comprised only 25% of respondents, each of these two reasons received around 30% support. 19 out of the 20 people interviewed were below the age of 64 and they were all very aware of the need for retirement provision and considered that their property investment was serving them well in working toward a good standard of living in retirement.

**Figure 1**

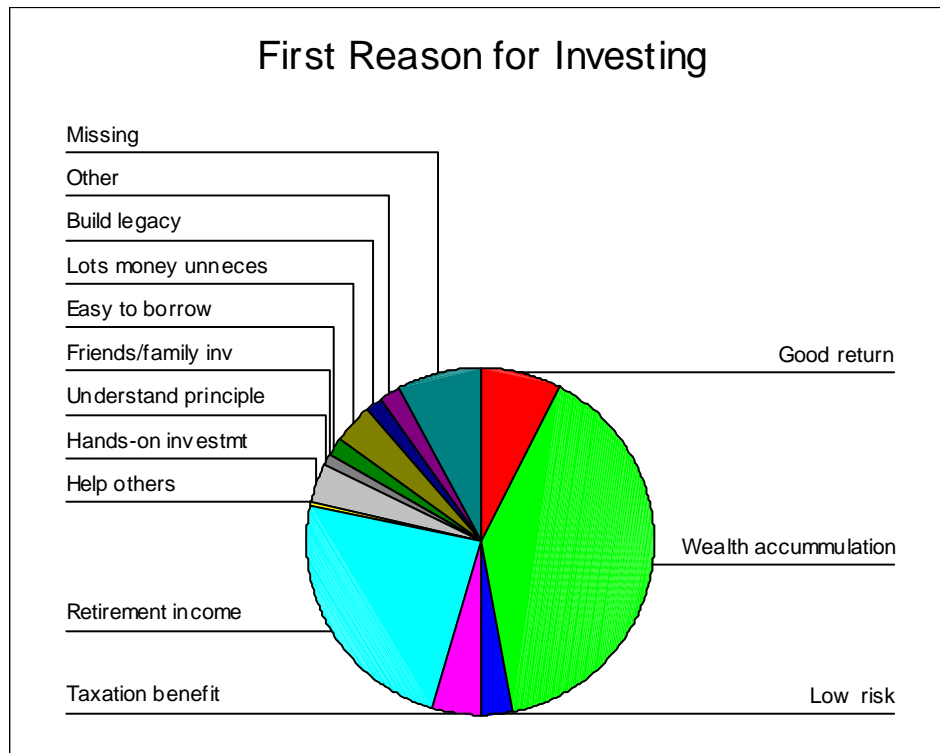
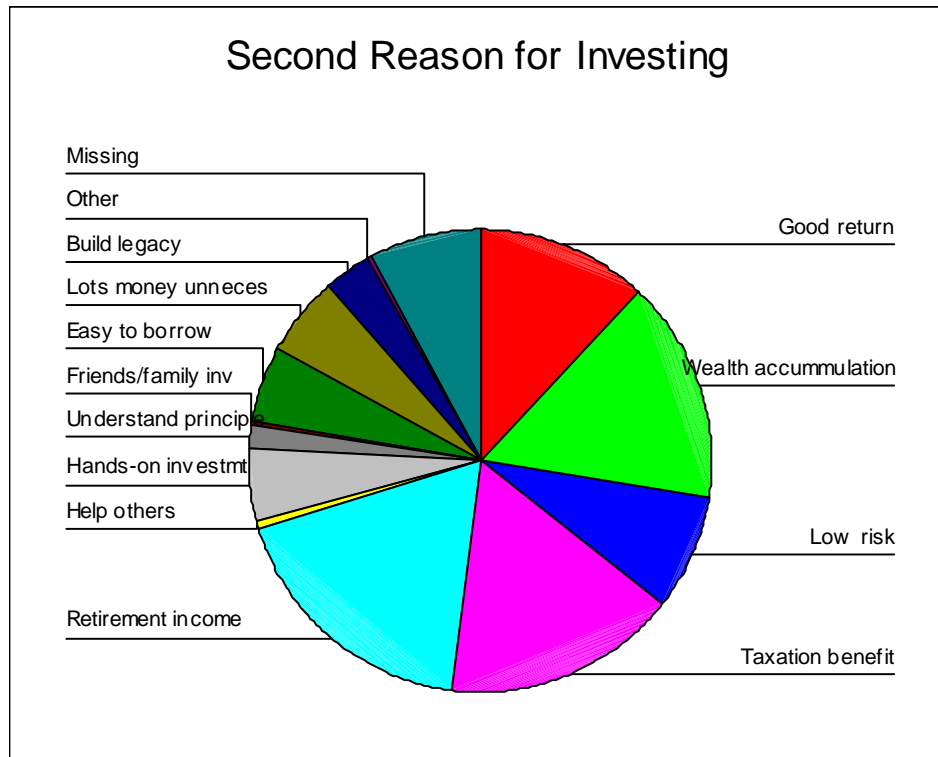


Figure 2



Another factor affecting the investment decision is the impact of taxation. Residential property investment has tax advantages over several other forms of investment. Investors can off set the losses they make on this investment against the taxable income from other sources. They can also claim tax deductions against expenses incurred in the production of rental income. Furthermore property investors may not always possess the skills to successfully invest in the share market but in New Zealand capital gains of managed funds are at a tax disadvantage in relation to private share holdings of the investor and property. 'It provides taxation benefits' was ranked the highest of all reasons as the 3<sup>rd</sup> and 4<sup>th</sup> most important reason influencing the rental property investor.

#### 4. Social and Psychological Reasons

Social reasons we considered could be an influence on property investors' behaviour were included in the questionnaire. These focused on 'altruistic' aspects: 'I help other New Zealanders by providing rental accommodation'; 'To build a valuable legacy for my children' and 'leader following' factors: 'My friends/family members invest in property'. Socio-psychological factors we felt would enter into the reasons given as: 'It is a hands on investment' and 'I can come to grips with the principles of property investment'.

As a corollary to the ranking of most important reasons, we also asked respondents to rank their least important reasons. Analysis of this question reveals that by far the least important reason for investment was, 'I help other New Zealanders by providing rental



accommodation'. Altruism does not therefore, feature in the investment decisions of property investors.

The face to face interviews revealed some strong underlying social and psychological reasons in almost every case. We found some interesting common themes emerging. For example two interviewees, women in the 52-64 age group were re-establishing themselves both financially and emotionally after marriage breakups and considered that merely relying on the meagre state safety net was inadequate. What came through strongly in the interviews with females was that property investment gave psychological and financial independence. The women took pride in their achievements especially in the sense of taking control in ensuring their current standard of living could be maintained in retirement.

It is not always easy to separate economic from the social factors that influence the investment decision. The issue of 'personal confidence' as a determinant of investor behaviour (Wydeveld 1999) was covered in the questionnaire in the reason stated as: 'I can come to grips with the principles of property investment'. While this reason did not feature prominently among the first or second important reasons (see figures 1 and 2), it nevertheless is an element of the 'comfort factor' of investors and is related to information and skill in the area of investment. It also links in with the subjective assessment of returns. Particularly those interviewees who worked in real estate were quite 'comfortable' with property. Some interviewees spoke of the scarcity value of land in the areas in which they had purchased, ensuring continuation of financial gain on their investment. For others there had been bad experiences with the New Zealand sharemarket and a continued inherent discomfort with this type of investment (Gaynor 1999).

The 'other' category in the reasons for choosing to invest in property also included reference to the fun value of the investment. Although it may be argued that intrinsic worth could be incorporated into a widened concept of expected investment return (Wydeveld 1999), and hence fit in with the reason provided that rental property gives a good return, we chose to keep this reason separate. We see this reason for investment as more socio-psychological than economic. Respondents also appreciated the fact that property was tangible- 'I like property - I can see it, enjoy it and use it.' Several interviewees expressed their delight at the tangibility of real property. They could drive by the properties, check everything was satisfactory and when necessary either use their own skills to make improvements or hire practical help. Tangibility and other intrinsic aspects were common themes in the face-to-face interviews. One interviewee actively enjoyed the interaction with tenants and the challenge of using his skills to maintain and enhance his rental properties - his properties were his hobby!

The concept of 'investor pride' was revealed in the interviews. There was evidence in some of our cases that investors believed their decisions were based on superior information and that they intuitively had some sort of sophistication in their assessment and reading of housing market conditions. For example one male investor had purchased in an area which he considered to have potential growth based on his reading of the market. He had not secured valuations and took advice from real estate agents with

scepticism. In this example the investor not only had 'pride' in his superior abilities but also revealed a sense of complacency. All this appears to be in line with the findings of Bernstein (1996). While taking pride in their abilities, many investors paradoxically kept the existence of their property portfolios secret from most. They did not think being a property investor gave them any social status.

All those interviewed felt that investment in property enabled them to control their own investment. A perception of control was an important psychological factor for the majority of those interviewed. This reflects a feeling that the success or otherwise of the investment depends on their own management skills and for some, other related expertise such as doing repairs and maintenance themselves. This aspect has been accounted for in 'It is a hands-on investment'. Many of those interviewed believed that other forms of investment involved an unnecessary 'middleman (sic) taking his cut'.

Interestingly only 1.7% of the entire respondent group considered leaving a legacy as an important motivation and although it may not be unreasonable to expect this to increase in the older age group, no supporting evidence was found. Similarly a tendency to 'copy cat' friends and family in the decision to become a property investor, did not figure as an important motivating factor. It would be difficult not to accredit some influence to popular trend however, especially when one considers the comments in the interviews of people involved in the real estate business that it is helpful for credibility to be actively involved in the property investment market. Although herd behaviour has been frequently highlighted in financial markets, there was little evidence of this in our results.

New Zealand is a nation of homeowners. This national preoccupation with home ownership can be traced back to nineteenth century concerns with land and property ownership. Starting from the early days of colonisation settlers arrived in New Zealand motivated by the desire to own land. In addition to it being a common shared experience, home ownership has taken on close to mythical significance within our national psyche (de Bruin and Dupuis 1995). It may be argued that this embedded positive feeling about property has extended to other forms of property investment. All those interviewed felt a sense of ease with rental property and despite the odd difficulty with tenants found the experience worthwhile and fulfilling. As one interviewee phrased it 'I have had a long love affair with property'.

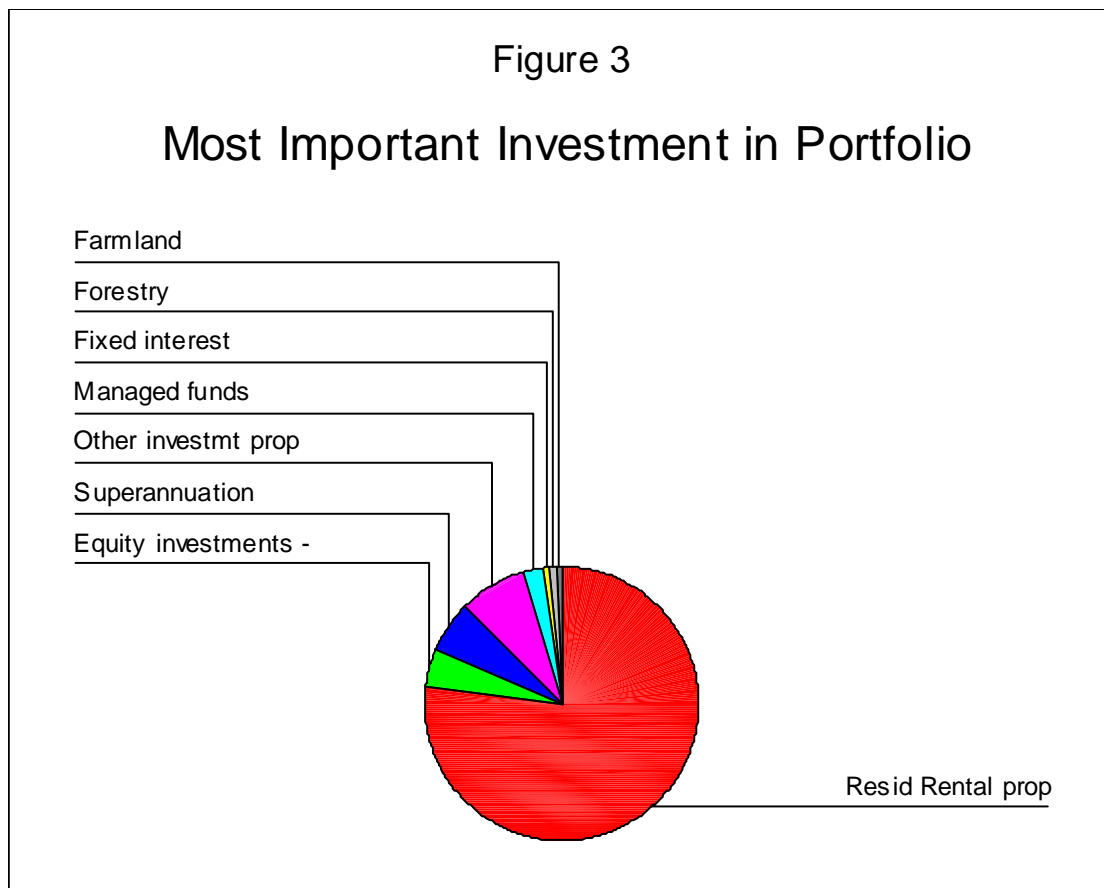
## **5. Portfolio Diversification and Attitudes to Risk**

A diversified portfolio so that risk may be spread, is a standard rule of investment. Our study sought to assess the degree of diversification of the investment portfolio of residential rental property owners. We asked respondent to rank their investment categories in order of importance. Six categories were specified: residential rental property, other investment property, equity investments - shares, managed funds, superannuation, fixed interest and 'other - please specify'. This latter category yielded forestry and farmland, which were also incorporated into the analysis as shown in figure 4. Residential rental property was the most important investment in the portfolios of 77% of respondents. Together with other investment property, property comprised the most

important investment for 85% of respondents. Simply on the basis of the number of investment categories in a portfolio, 22% had a totally non-diversified investment portfolio, holding only property.

Our data appears to confirm that in general, rental property investors tend to concentrate their investment in property. This finding was not unexpected. New Zealanders traditionally have a very strong leaning toward property. Their savings portfolio allocation is also heavily skewed toward housing with a higher proportion of savings in housing than their counterparts in most other OECD countries (Joint Working Group 1999). As pointed out in the previous section too there is a national predilection toward property. This coupled with the general historically superior capital growth of housing, supports the inference that the investment decisions and portfolios of our respondents may indeed be optimal for them.

Interestingly, 19% of male respondents had only property in their investment portfolios, compared to 30% of women who had a completely non-diversified portfolio. Even if we are to interpret a non-diversified portfolio as more 'risky', it must be emphasised however, that 'in practice, risky financial decisions are inherently contextual' (Schubert et al. 1999:385). This was generally supported by our interview data. For example, as alluded to previously, two of interviewees were trying to build up a retirement 'nest-egg' after marriage break-ups and considered property a 'safe' way to do this. A couple of men interviewed had made losses in the share market. Another woman who only had property in her portfolio had acted purely on the advice of a financial planner whom she trusted and her investment fitted well with a projected long-term plan for retirement.



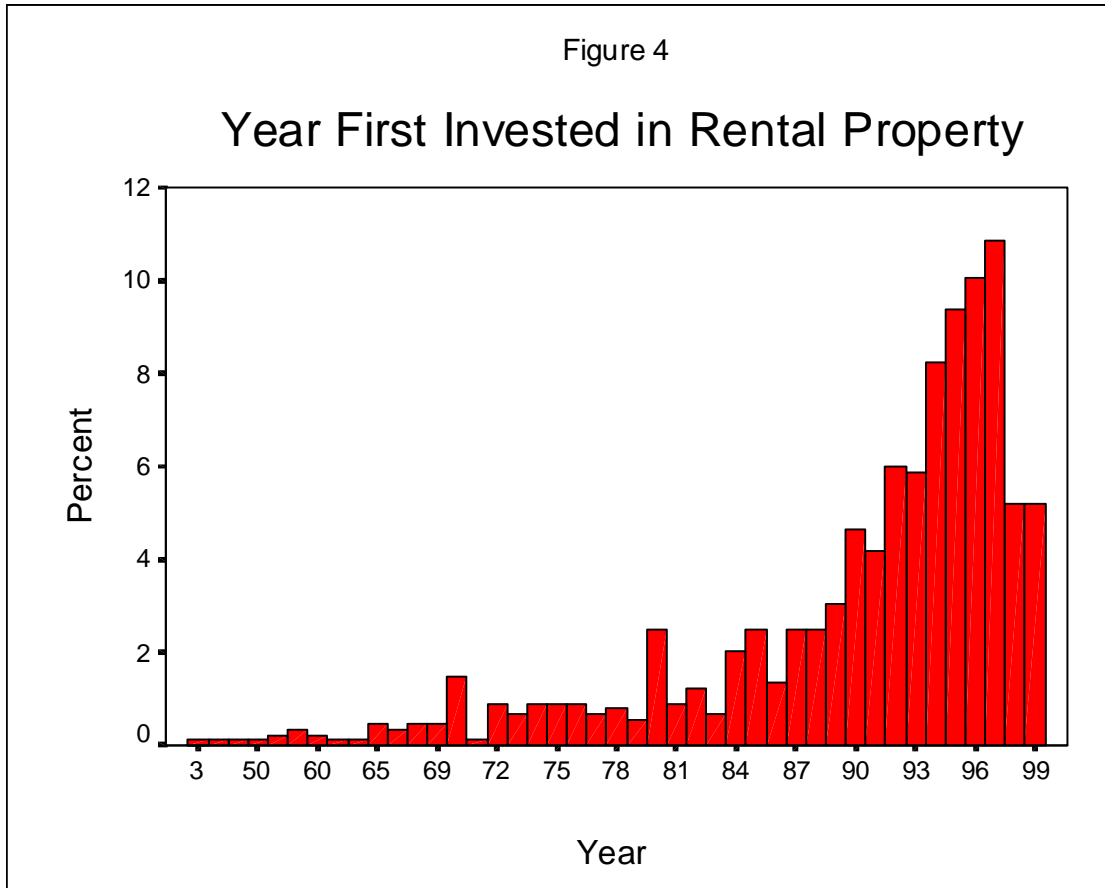
We sought to capture attitudes to risk in the reasons for investing in residential property - 'It is a low risk investment'. While only 3% of valid responses ranked this as their most important reason, the proportion of respondents influenced by this factor in their decision to invest in property steadily increased down the ranking scale. Thus for 9% it was the 2<sup>nd</sup>, 12% the 3<sup>rd</sup>, 14% each the 4<sup>th</sup> and 5<sup>th</sup> important reason. It could be inferred from these results therefore that a preference for low risk investments significantly influences the portfolio-composition decisions of residential property investors. Whether or not residential rental property is in fact of low risk investment, however, is a matter of debate. As a study commissioned by the Reserve Bank of New Zealand warns, 'values can be pretty wobbly in the short term' and 'shed the lessons that were learnt in the 70s, like property is a bullet-proof asset' (Holm et al. 1998: 28). Yet the respondents in our study with support from interviews believe that they are in a low risk investment. Certainly the majority of respondents looked on their investment as long-term with 71% intending to hold their current rental property for over 10 years. This once again supports the idea that the degree of risk of their investment is indeed low, risk reducing with the length of time of intended holding.

## **6. Implications of Inflation**

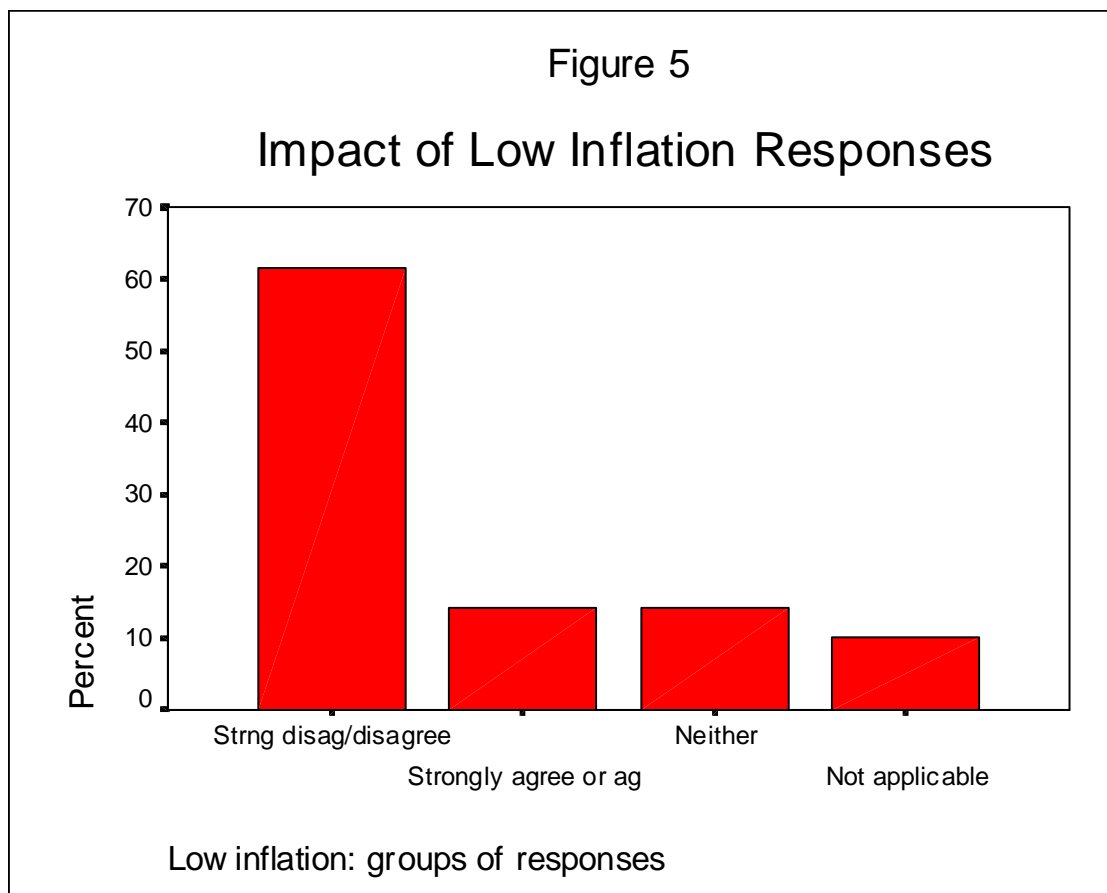
A strand of the debate on the optimality of investing in property involves the implications of low inflation. By the end of 1991 the Reserve Bank of New Zealand had been successful in bringing underlying inflation within the required 0-2% band and a low, relatively steady inflation climate now appears embedded in the economy. In such a low inflation climate the potential for capital gains is reduced. Yet as figure 4 shows many of our respondents commenced rental property investment in a low consumer price index inflation period after 1990, peaking in 1997. On the face of this and at a superficial level of analysis therefore, it would appear that the majority response that capital gain was a most important reason for their investment decision appears rather inconsistent. Yet as already pointed out, this was a period of high house price inflation, particularly in Auckland (see discussion in section 3 and Appendix figure 1). The decision to invest in property at that time cannot be judged non-optimal for these individual investors.

Furthermore this was a period when banks were actively seeking to increase their residential mortgage lending and when the real interest rate on borrowing began to fall from 6.8% in 1992 to 0.6 in 1993 to -4 and -1.8% in 1994 and 1995 respectively (Dalziel and Lattimore 1999:125).

The real rate of interest is the nominal rate, which is the average rate for new first mortgages, minus the rate of inflation over the following 12 months. This real rate has been calculated using the average price of urban freehold houses, hence making it more relevant for the purposes of this study. When the real rate of interest is negative, the value of a residential property purchased with mortgage finance increases faster than the nominal interest rate on the borrowing, acting as an incentive to purchase residential property.



We sought to gauge the impact of low inflation on the decision to invest, by asking respondents to agree or disagree on a five-point Likert type scale. The statement: ‘I would not have bought a rental property if I knew that very low inflation was here to stay in New Zealand’ was used. The ‘not-applicable’ option was also included because we thought that some reasons for purchase such as family reasons would render this statement inapplicable. Figure 5 below groups the strongly and agree/disagree responses into 2 categories and shows that over 60% would still have invested in property despite knowing that low inflation was entrenched. Our interview data confirmed that there was an understanding that low inflation eroded the potential for capital gain but this did not generally alter the belief that the decision to invest in property was a sound one.



### Concluding Comment

Although capital gain and wealth accumulation and provision for retirement featured strongly as the key reasons for residential property investment, it does appear that there were several intertwined reasons for the investment decision. Social and psychological factors were interwoven with the economic factors. Further insights and qualitative assessment of the investment behaviour of rental property owners will become possible when we complete more in-depth interviews in the future. Additional quantitative analysis will also be undertaken on the data collected. In conclusion we remind the reader that this paper presented the preliminary findings of our nationwide survey of residential rental property investors in New Zealand. It is hoped that the findings to date go some way towards closing the knowledge gap and can provide useful assistance to property professionals in their understanding of the complexity of the motivations of their clients and customers.

As a final closing comment we draw attention to the fact that only 8% of our respondents got 'The original idea for investment in property' from a real estate professional. This would imply that the professional should be more pro-active in being the catalyst of the decision to invest in property. Perhaps there may even be a responsibility to provide more assistance in the calculation of investment return for properties being considered.

## References

- Bernstein, P. (1996) *Against the Gods: The Remarkable Story of Risk*, New York: John Wiley & Sons.
- Bourassa, S. and J. de Bruin (1998) 'Capital Growth in Housing Versus Other Markets – A Report to Harcourts Group Ltd', Real Estate Research Unit, Department of Property, University of Auckland
- De Serpa, A. (1988) 2<sup>nd</sup> Ed. *Microeconomic Theory: Issues and Applications*, London: Allyn and Bacon.
- Dalziel, P. and Lattimore, R. (1999) *The New Zealand Macroeconomy*, 3<sup>rd</sup> edition, Auckland: Oxford University Press.
- de Bruin, A. and A. Dupuis (1995) 'The Implications of Housing Policy for New Zealand Women in Non-Nuclear Families', Paper presented at the New Zealand Geographical Society Conference, University of Canterbury, August.
- Dupuis, A. (1992) 'Financial Gains from Owner Occupation: The New Zealand Case 1970-88', *Housing Studies* 7(1): 27-44.
- Dupuis, A. and D. Thorns (1997) 'Regional Variations in Housing and Wealth Accumulation in New Zealand', *Urban Policy and Research*, 15 (3): 189-202.
- French, N and S. French (1997) 'Decision theory and real estate investment' *Journal of Property Valuation & Investment* 15(3): 226-232.
- Gaynor, B. (2000) 'New Government, New Investment Cycle' *New Zealand Weekend Herald*, 17-18 July: E2.
- Gaynor, B. (1999) 'Only Risk will bring Rewards' *New Zealand Herald*, 1 January: A23.
- ISI (1998) 'The ISI Report on Retirement Savings: A Wake-up Call' Investment Savings and Insurance Association of New Zealand Inc., Wellington, June.
- Joint Working Group (1999) 'Savings Rates and Portfolio Allocation in New Zealand' *Treasury Working Paper* 99/9.
- King, A. (1997) 'Who are the Landlords in New Zealand' *The New Zealand Landlord*, November.
- Reserve Bank of New Zealand (1998) *The Impact of Monetary Policy on the Economy*, Wellington: Reserve Bank of New Zealand.
- Office of the Retirement Commissioner (1996) *Welcome to Your Retirement* Wellington: The Office of the Retirement Commissioner
- Mary H. with T. Alexander, T. Hayward and F. Pearson (1998) *The REAL Story: Saving and Investing now that Inflation is under Control* Commissioned by the Reserve Bank of New Zealand.
- Wydeveld, M. (1999) Considerations in Explaining Investor Behaviour New Zealand Securities Commission Occasional Paper 2, September.
- Schubert, R., M. Brown, M. Gysler, and H. Branchinger (1999) 'Financial Decision-Making: Are Women Really More Risk-Averse?' *AEA Papers and Proceedings* May, 89(2): 381-345.