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The economic rationality of landlords

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1 Introduction

UK government policy towards the private rental sector reflects the assumption that small landlords are less commercially oriented than larger ones. Is this so? This paper uses data from a large survey of UK investor landlords to ask to what extent the behaviour of such landlords is economically rational, and whether professional landlords behave differently from non-professionals.

The principles of investment theory apply to rental property, as to any other investment, but certain particularities make it difficult to compare returns from real property with those from alternative investments. Various economic stimuli will affect the returns from rental property--we categorise these stimuli in terms of how they would affect rental returns, then make predictions about how a rational investor would behave when faced with these stimuli.

Most empirical research into private landlords emphasizes the diversity of landlords' motives for entering and continuing in the property market—profit maximization not necessarily being high among them. Researchers in various countries have attempted to explain different landlord behaviour patterns by assigning landlords to categories according to the number of properties they own, their motives for being a landlord, etc. Drawing on these classifications, we develop our own, which distinguishes 'professional' investor landlords from 'non-professionals.'

After a brief description of the development of the buy-to-let market in the UK, we discuss the results of our analysis. This uses data from a 2004 survey of 1300 UK buy-to-let landlords, which asked landlords how they would react to several hypothetical economic stimuli. To what extent were their predicted responses 'rational'? Did the responses of professional and non-professional landlords differ? Finally, we offer some conclusions and some observations about what they might mean for policy.

2 General principles: investors as return-maximisers

Most economic analysis of the behaviour of investors, including landlords, starts from the premise that they are rational economic actors—that is, that their decisions about their investments (in this case, rental property) are governed by the goal of maximizing their returns. If rental property is viewed as an investment, then economic theory suggests that the risk-adjusted expected return on property assets should equal that on other types of asset, for otherwise investors would shift their holdings—if investors expect the risk-adjusted return on property to exceed that available, say, in shares, then they would sell shares and buy property; and conversely they would sell property and buy shares if the expected return on property were below that available in the stock market (we are ignoring diversification, for the sake of simplicity).

Recently, however, some behavioural economists have argued that investors do not in fact rationally assess relative rates of return. Robert Shiller observes that

> Economists usually like to model people as calculating optimally their investment decisions based on expectations of future prices and estimates of the risk in alternative investments. However, in fact, the typical investor's actual decision about how much to allocate to the stock market overall, and into other asset classes such as bonds, real estate, or other investments, tends not to be based on careful calculations. Investors are not often assembling forecasts for these different asset class returns and weighing these against measured risks. (Shiller, 2000, p. 55)

Recent research suggests that property investors in the USA and Australia have not been acting rationally with respect to potential growth in both rents and stock market returns, while property investors in the UK appear to behave more rationally over the cycle. (Hendershott and MacGregor, 2006)

Harvey puts the rational-investor position, in its simplest form:

> Anybody who purchases a property rather than renting is an investor. The satisfaction or return received should at least equal what could be obtained if, instead, premises were rented and the money invested elsewhere. (Harvey 1981, p.48)

According to Skifter Andersen

> The simple foundation of economic theory…on the investment behaviour of a landlord is the assumption that he maximizes the current value of the expected stream of profits (the share of rental income that remains after running costs and maintenance expenses are paid) arising from the ownership of a rental property. In view of the extreme durability of housing a landlord is assumed to adopt a perspective of an infinite horizon. The expected profits in future periods are discounted in order to obtain their present value. Rational expectations are assumed. (Skifter Andersen, 1998, p. 181)

The definition of return in the case of rental property is not necessarily simple. Some researchers, including Skifter Andersen, consider only net income (net annual rental) return on open market value, while others look at total annual returns (net annual returns plus capital growth—real or nominal) (Crook, Kemp, Barnes and Ward, 2002). For the purposes of this paper we are interested in both rental yield (net of costs) and expected change in capital value. Net rental yield is a known quantity, at least until the end of the current lease period. Change in capital value is much less certain but probably more important to most investors, as historically it has, over the long term, outweighed rental returns. (Many UK landlords who purchased properties in the last few years must be

anticipating that capital gains will make up all of their total return, since their net rental yields are often negative.) A 1999 study of Australian landlords found that the expectation of capital gains was as important to them as rental income, if not more so. (Beer, 1999)

3 Some complications

In a world where all investors behaved as profit-maximisers, landlords might be expected to increase or decrease their rental portfolios depending on the expected rate of return on property and that on other investments. However, housing has certain characteristics that set it apart from many other investments and make asset reallocation more difficult:

> Housing assets are neither divisible nor fungible; housing assets are lumpy. Furthermore, the adjustment and transactions costs associated with housing tend to be large and lumpy too. In addition, participants in the housing market will economise on transactions costs by limiting their number of housing transactions and the liquidity of housing assets will be constrained accordingly. (Baddeley, 2005, p.9)

It can be difficult to compare the returns from property and other investments, for several reasons:

- The tax treatment of various investment vehicles may differ. There are particular issues associated with the treatment of property as a perpetual asset and with the differential treatment of rented and owner-occupied property, which impact on both investor behavior and the strength of the market.
- Transactions costs must be taken into account. In the UK, transactions costs for the purchase of residential property are roughly 3-8% of property price on a purchase, and somewhat less on a sale[1]. This introduces a significant financial hurdle to portfolio rebalancing.

[1] Transactions costs on purchase comprise legal fees, estate agents' fees (usually 1.5-2% of property price), bank fees associated with securing a mortgage, and Stamp Duty Land Tax. This is levied at a rate of 1% on

- Rental property is often purchased with borrowed money (a mortgage); this is less often the case with the principal alternative investments, such as shares. Because the landlord leverages his investment with borrowed money, any increase in capital value translates to a much higher rate of return *on the landlord's own investment.*[2] Conversely, a fall in property values can wipe out a highly leveraged landlord's equity completely. Also, many landlords depend on rental income to pay the mortgage, so cash flow is critical. This is not generally an issue with other investments.
- The probability of potential changes in taxation, subsidy (e.g. housing benefit), regulation and the economic environment all have impacts on expected returns but that impact is difficult to quantify and therefore evidence of differences in returns across investments is difficult to assess.
- More generally, individual investors may have differing attitudes towards the risks inherent in different classes of investment, further obfuscating the evidence on rationality of choice.

Finally, the element of time must be considered. A high percentage of UK landlords have invested in rental property expressly in order to provide themselves a pension (27% in our sample)—and thus by definition they have a medium to long-term time horizon (depending on their current age and expected retirement age and preparedness to manage their portfolio). Monthly or even annual fluctuations in the property market may not concern them, as long as their cash flow allows them to service their mortgage(s). Even so, the issue about time horizon is not always straightforward –especially for those with small portfolios and long time horizons. Active management of the portfolio might lead

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dwellings or residential land worth £120,000 - £250,000, 3% on those worth £250,000 - £500,000, and 4% on those worth over £500,000.

[2] If an investor puts £100,000 in an index fund, and the stock market goes up 10%, the investor has made a 10% return. But if the investor puts a down payment of £100,000 on a property worth £500,000 and finances the rest with a mortgage, and the value of the property goes up 10% (or £50,000), the investor has made a return of 50% on his original investment (less interest on the mortgage). Ball notes that many landlords are outright owners or have a low indebtedness ratio; they could increase their returns by taking out mortgages up to prudent levels. The fact that they do not suggests that they are financially unsophisticated and are not maximising returns. (Ball 2004)

to short-term adjustments in holdings even though the long-term objective is clearly to hold property for liquidation in older age.

4 Factors affecting the rate of return on rental property

If the return on rental property is defined as net rental yield plus change in capital value, a change in one or more factors could affect the expected return:

- *House prices:* A reduction in house prices would reduce the capital gain element of expected rate of return, while increasing the rental yield on open market value; expectations of increasing property prices would have the opposite effect.
- *Rental demand:* A fall in demand for rented property could result in lower rents and higher vacancy levels (both of which would lead to lower net yields). Falling rent levels or voids can both lead to cash-flow problems for landlords who depend on rental income to pay the mortgage; landlords without a financial cushion may be forced to sell. Demand could fall for a number of reasons, including an upturn in first-time buyer purchases if housing became more affordable through price reductions, or a decline in immigration as a result of policy or indeed economic stagnation. Evidence collected by the Investment Property Databank suggests that UK rental returns have fallen quite significantly over the last two years (IPD 2005). Conversely, an increase in demand for rental property could lead to higher rents and higher yields;
- *Taxes:* Any increase in the rate of tax on rental income or capital gains (or changes in regulations that had an equivalent effect) would reduce the net return on rental property; decreases in taxes would increase it[3];
- *Interest rates:* A rise in the interest rate would reduce the net yield on rental property. The average interest rate on a buy-to-let mortgage in January 2006

[3] One implicit tax increase occurred recently: the UK Treasury announced in 2003 that, starting from April 2006, individuals could hold real property through a Self-Invested Personal Pension (SIPP), which would allow them to avoid capital gains tax on its sale. However, in December 2005 British Chancellor Gordon Brown announced that he had reversed this decision, and real property would not be permitted in the new SIPPs. Anecdotal evidence suggests that many investors had already bought, or contracted to buy, rental units to hold in their SIPPs, and will henceforth face higher than expected taxes when they are eventually sold.

2005 was about 5%. Because most mortgages in the UK are on variable interest rates or short-term fixes, most borrowers face higher mortgage payments soon after rates rise. An increase in interest rates would mean for some landlords that rents no longer covered their monthly costs. A fall in interest rates would increase the net yield on rental property.

These factors, and the predicted effect on landlord behaviour, are summarised in Table 1:

Table 1: Factors that might change the expected return on rental property

	1: Factors that increase return	***2: Factors that decrease return***
Rental yield	Lower interest rates Rising demand for rental property Decreased taxes on rental income Falling house prices	Higher interest rates Falling demand for rental property Increased taxes on rental income Rising house prices
Capital value	Rising house prices Decreased taxes on capital gains	Falling house prices Increased taxes on capital gains

In general, we would expect a rational investor with a short- to medium-term investment horizon or an active portfolio management strategy, faced with one or more of the changes in Column 1, with all else being equal, to purchase more rental property – or at least not to sell existing holdings. Faced with one or more of the changes in column 2, the investor would sell rental property – or at least not buy more.

Note that "Falling house prices" and "Rising house prices" appear in *both* columns. Falling house prices diminish the capital value of existing portfolios but increase the potential rental yield on new properties acquired. Expectations about the size and duration of price falls will be key, and individual investors must assess the net effect of a change in house prices on the total rental return for their own (existing and potential) portfolio, in light of their investment objectives. Some will sell on falling prices, and some will buy—and either decision may be rational. In addition, investors with long-term investment horizons may think falling house prices herald a buying opportunity, whatever they mean for returns in the short term.

<u>Alternative opportunities</u>

In addition, improvements in the performance of alternative investments, notably shares, could cause landlords to disinvest in property; conversely, a fall in the stock market could lead to increased investment in rental property.

5 Empirical research into landlords' behaviour in the UK and Denmark

Some research over the last few decades has tried to capture the rich variety of motivations for being a landlord, and has attempted to identify what this might mean for landlords' behaviour as investors. Table 2 summarises the categorization of landlords from three studies in the UK and Denmark.

John Allen and Linda McDowell, writing in 1989, categorized British private landlords in the early 1980s in terms of their motives, and the type and amount of property owned. They concluded that landlords could be split into seven categories (see Table 1), about half of which could be expected to behave as profit maximisers. (Their categorization reflects the situation that obtained before the liberalization of the private rental sector in the UK--in fact, the book sets out partly to explain the disinvestment in private rental housing--and the categories would be somewhat different today. In particular, the sorts of landlords covered by the 2004 CML survey analysed below are almost entirely absent from their categories.)

Allen and MacDowell surveyed a total of 532 privately renting households in the London boroughs of Hackney and Islington. Most were tenants of investor landlords or informal resident landlords (that is, they were renting a room or rooms in someone else's house). Allen and MacDowell point out that both these types of landlords often had motives other than strictly economic ones. They estimated, based on a survey of landlords in the London boroughs of Hackney and Islington, that about half to three-quarters of tenants lived in properties owned by landlords governed by economic criteria.

Table 2: Categories of landlords (bold italics indicate categories that could encompass 2004 survey respondents)

Allen & McDowell categories 1989	Return maximisers?	PRS H/I*	Skifter Anderson categories 1998	Return maximisers?	ODPM categories 2003	Return maximisers?	% dwellings owned
Traditional, e.g. Church, charitable trusts, Crown Estate	No—service ideology	0.5/1.6	Public utility: non-profit companies, private funds, charities.	No—service ideology	Institutional landlords—small % of income from renting, dwellings viewed as investments	No	22
Employer	No—provide housing for employees	9.8/4.3	Other companies: Public companies whose main business is other than property ownership	No			
Informal: resident landlords ***small non-resident***	No—personal relationship Some	39.1/29.1 1.3/5.0	***Informal: Individuals owning one property with <7 dwellings***	Some	Sideline non-investors	No	18
Investor: Mainly longtime owners who have inherited properties	Yes—but constrained by lack of finance	33.6/42.0	***Small investors: Individuals owning <4 properties but >6 dwellings***	Some	***Sideline investors: minority of income fm letting, viewed as investment***	Yes	45
Financial: Public property companies and pension trust funds	Yes	-/2.6	Financial investors: Pension funds, banks, insurance companies	Yes			
Commercial: speculative, view rented housing as commodity.	Yes—but interested in capital gains only	15.7/15.2	***Speculators: Companies organized with very limited liability***	Yes—but interested in capital gains only	***Business landlords: most of income fm letting, viewed as investments***	Yes	15
			Professionals: Individuals with >3 properties & companies who run properties as main business	Yes			
			Builders: Building companies	Yes—but capital gains only			

*PRS H/I: % of households in the private rented sector in Hackney & Islington living in accommodation owned by each landlord type

Hans Skifter Andersen, writing in 1998 about Danish landlords of pre-1950 flats, split them into eight categories, roughly corresponding to the Allen and McDowell categories. Skifter Andersen was concerned with understanding why some landlords made rational economic decisions about whether to invest in the maintenance of their buildings and others did not. He concluded that only in about half of the eight categories could landlords be expected to do so. "Studies from Denmark and several other countries…show that private landlords are a very non-homogeneous group with different motives and behaviour, where only a minority of landlords fit into the expected picture of the economically rational private landlord." (Skifter Andersen 1998, p.196) Skifter Andersen estimated, based on a survey of Danish landlords, that professional landlords with mainly purely economic motives owned 30-40% of the lettings (versus 50-75% in Allen & MacDowell's UK study).

The Office of the Deputy Prime Minister, in its analysis of the 2001 survey of landlords carried out as part of the English House Condition Survey (ODPM 2003), used a categorisation developed by Crook and Kemp in 1996. This divided landlords into four categories on the basis of the percentage of income received from lettings and whether or not they viewed their properties as an investment. Landlords in two of these categories, business investors and sideline investors (together owning about 60% of rental dwellings) could be expected to maximize returns.

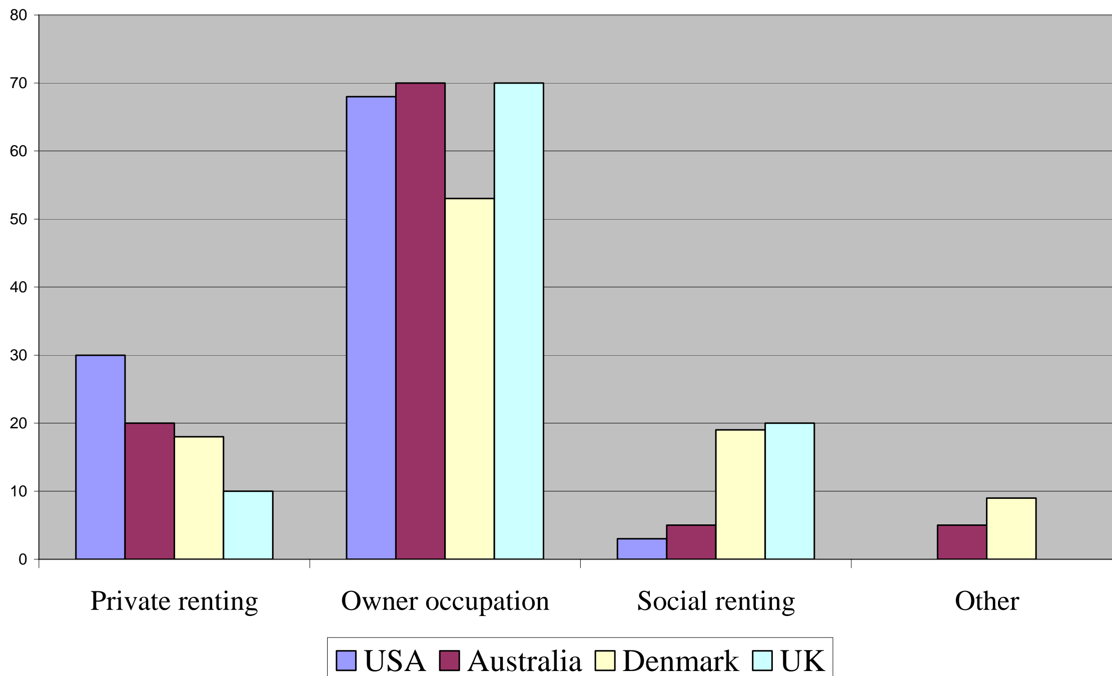
It is clear that over time the landlord sector in the UK has become more business-oriented--the 'small non-resident landlords' identified by Allen and MacDowell 1989 accounted for only 2-5% of lettings in their survey area, while ODPM's more or less analogous 'sideline investors' owned about 60% of rental properties in 2001.

6 Background on the UK private rental sector

The UK private rented sector, which houses about 10% of households, is smaller than that in most other developed countries—although the share of renting overall, including

social rental, is similar. In many other respects, though, the private rented sector in the UK resembles that of other countries. It is a minority tenure--in the UK, as in most developed countries, owner-occupation is the predominant tenure. Chart 1 shows the tenure shares in the three countries discussed in this paper, and the US.

Chart 1: Housing tenure in selected countries (2000)



Source: Scanlon & Whitehead 2004b

In the UK, as in Australia and Denmark, most landlords are private individuals rather than companies; they often had personal rather than financial reasons for acquiring property, such as through inheritance (Ball, 2004; Beer, 1999; Skifter Andersen, 1998; ODPM 2003). Private rented housing in the UK is not subject to rent control, unlike that of many European countries, and landlords therefore do not receive the tax breaks designed to allow them to operate in a rent-controlled environment. (Ball, 2004)

Over most of the last century the private rented sector in the UK was subject to heavy regulation with respect to both rents and security of tenure. At the same time, private renting was disadvantaged as compared to owner-occupation in terms of taxation and

subsidy. As a result of these and other pressures (notably slum clearance), the size of the private rented sector fell to around 9% of the total stock. There was very little institutional or company investment in housing, and British building societies virtually stopped lending to landlords after 1945. Individuals tended to be landlords for idiosyncratic and short-term reasons – they had inherited a property; they needed rental income to contribute to mortgage costs; they were providing for employees who had to live near their work; or they were caught in the system by the impact of past regulation (Nevitt, 1966; Harloe, 1985; Todd, 1986; Kleinman & Whitehead, 1987).

The position changed after 1988 as a result of both supply-side and demand-side changes. On the supply side, the 1988 Housing Act introduced the Assured Shorthold Tenancy, which allowed for a minimum rental period of six months, after which a landlord could give two months' notice to quit. The Act also abolished regulated rents for new lets, removing another disincentive for landlords to invest in rental property. In late 1993 a further reform of the law introduced an accelerated possession procedure, which made it easier for landlords with a clear right to possession to evict tenants.

These regulatory developments coincided with some significant social and demographic changes, which contributed on the demand side to the rise of the private rented sector. These included growth in the student population, an increase in divorce and relationship breakdown and increasing inward international migration (particularly to London). Over the same period the relative tax benefits of owner-occupation were reduced by the reduction and ultimate removal of mortgage tax relief and some relatively minor improvements in the tax position of landlords.

These factors stimulated a relatively slow growth of the private rental sector over the first few years, with an estimated 350,000 units added to the private rented sector in England and Wales between 1989 and 1996 (Kleinman & Whitehead, 1996). Since then, and particularly since 1999, there has been a more rapid increase; the private rented sector in the UK now contains some 2.7m dwellings, or about 10.3% of the housing stock (ODPM live tables), and 12% of households lived in private rented accommodation as of the 2001

census. This increase has been largely funded through dedicated ‘buy-to-let’ mortgages aimed specifically at landlords, with interest rates only slightly higher than rates on mortgages for owner-occupied properties. This has brought in a new range of individuals seeking to invest in property to let privately. Most major mortgage lenders now offer buy-to-let loans; this has proved an attractive new market for lenders because of the relatively low risk and the potential for securitisation. As of June 2005 there were 632,100 buy-to-let mortgages outstanding in the UK, according to the Council of Mortgage Lenders. If every mortgage covers one dwelling, buy-to-let mortgages now account for approximately 24% of private rented sector.

Simply making funds available, however, was not of itself enough to create demand. This depended on changing the relative expected rates of return as well as on more broadly based changes in attitudes. In this context a number of important elements came together to make investing in residential property more desirable.

First, the upturn in house prices that started in the mid 1990s gathered pace, particularly in London and the South East. Nationally, house prices rose by 7% p.a. from 1996 – 2000, and in London, where prices were rising most rapidly, they increased by 14% p.a. This provided an incentive for individuals to invest in residential property on the expectation of continued future rises. Moreover, as rents could at least be expected to cover costs, the downside risks were limited.

Second, the stock market experienced a period of heavy decline beginning in early 1994, but was still thought by many commentators to be overvalued. This provided an important incentive to shift to what was perceived to be a lower risk investment.

Third, partly as a result of this decline, many pension funds ran into trouble and the expected value of many pensions was reduced. For individuals wanting to make their own arrangements for retirement income, property appeared to offer a safe bet. Fourth, over the period interest rates have fallen to historically low nominal levels. In 1998, the

average interest rate on a UK mortgage was 7.19%; by 2004 this had fallen to 5.18%. This lessened landlords' outgoings and therefore further reduced the risks of investment. As of 2001, about 65% of private rented sector dwellings were owned by individual landlords, and about 30% by companies or institutions (ODPM 2003).

The British government has not viewed the rapid growth in individual investment in the private rented sector as an unalloyed good; it has made clear that it wants to encourage increased investment in the sector by institutions such as pension funds. An increase in institutional investment "could allow more efficient management, greater renewal and preservation of property, and a more liquid supply of housing…This potential in the UK for greater corporate and institutional investment in the PRS should also raise standards and provide an alternative to the highly geared buy-to-let market." (HM Treasury, 2004, p.12)[4]

7 The 2004 survey of UK buy-to-let landlords

Do landlords in fact make economically rational decisions? We define rational behaviour as that which is directed towards maximization of returns. Faced with economic factors that decreased the relative return on rented housing (see Table 1), a rational landlord would choose NOT to increase holdings of such property. Faced with economic factors that enhanced the relative return on rented housing, a rational landlord would chose NOT to decrease holdings of such property.

Our hypothesis is that landlords behave in a way that is consistent with economic rationality. Data from a recent survey of UK landlords allows us to test this. In 2004, the Council for Mortgage Lenders (CML) commissioned the largest survey to date of buy-to-let investors in the UK. The CML has generously allowed us to use the data for this analysis. The questionnaire was designed to elicit information for CML's own use, and

[4] The domination of the PRS by small landlords is viewed as a problem in other countries as well; Berry and Hall (2005) argue that 'the absence of large investors has, arguably, intensified the housing affordability crisis…in Australia."

thus some questions were not worded in the way that would have best suited our purposes.

Twelve mortgage lenders active in the buy-to-let market sent postal questionnaires to 700 randomly chosen buy-to-let customers (8400 in total). The overall response rate was 15.8% (1341 responses). This survey does not represent the whole spectrum of residential landlords, in particular because it excludes those landlords who have no mortgages on their rental property. Research by the ODPM in 2001 estimated that 31% of landlords had a loan or mortgage outstanding on their properties (ODPM 2001). Crook and Kemp found that in 1993-94, about 45% of lettings had been bought with cash. The Mintel survey found that 53% of landlords purchased their property without using a mortgage. By definition the survey excludes landlords in several of the other researchers' categories, notably traditional/public utility/institutional landlords; employers; and financial institutions. The names in bold italics in Table 2 are those landlord categories that might encompass the respondents to the 2004 CML survey.

We would expect the surveyed landlords to be more responsive to economic stimuli than landlords as a whole, because they all have mortgages on at least some of their properties, and in most cases bought those properties specifically in order to rent them out. A brief general description of the sample: 27% of the landlords surveyed owned one property and 16% owned two. Two percent of landlords surveyed owned more than 50 properties. 73% had been landlords for at least two years, and 18.5% for more than ten years. More than half the landlords surveyed owned some properties that were not backed by a mortgage (owned outright). (For a fuller report on the survey findings, see Scanlon & Whitehead 2004a.)

The overwhelming majority said their main reason for buying rental property in the first place was broadly financial. 31% said they would 'rather invest in property than other investments; 26% saw it as a contribution to pension provision, and 19% were seeking 'return on investment: growth plus rental income'. (Clearly these goals are not mutually exclusive.)

8 Categorisation of buy-to-let landlords

The criteria used by other researchers in assigning landlords to categories are set out in Table 3. The last two columns indicate whether each criterion seemed, a priori, a useful predictor of the economic rationality of the landlord, and whether the CML survey contained data on it.

Table 3: Criteria used in assigning landlords to categories

Criterion	***Researcher***	***Predictor of ec rationality?***	***Data available?***
Type of owner (individual; church/charity/Crown; employer; financial business)	Allen & McDowell; Skifter Andersen	Yes—at least insofar as some do NOT maximize returns (e.g. charities)	No--Charities, employers not included in our sample.
Means of acquisition of property (inherited/purchased)	Allen & McDowell	Possibly	No--all ours own at least some that they purchased
Whether landlord is resident or nonresident	Allen & McDowell	Probably	No—all ours are nonresident
Whether landlord has speculative motives	Allen & McDowell; Skifter Andersen	Possibly	No—survey does not address motivation in this way
Number of dwellings and properties owned	Skifter Andersen	Possibly	Yes
Whether property is main business/% of income derived from letting	Skifter Andersen; ODPM	Yes	Yes
Whether properties viewed as investments	ODPM	Yes	Yes

The CML data did contain data on most of the criteria we felt were definitely relevant to the economic rationality of landlords. Those criteria we considered possible predictors of economic rationality, and for which we had data, were:

- *Number of properties owned.* Those landlords owning many properties, with a commensurate amount of money tied up in them, could be expected to make more economically rational decisions than those owning only one or two.
- *Whether property is main business/% of income derived from letting.* We expect landlords who consider rental property to be their main business, or for whom rental income accounts for a high percentage of income, to be more governed by economic factors than landlords for whom renting is a minor sideline.
- *Whether properties are viewed as investments.* Landlords who explicitly state that they have investment goals for their rental units should make more economically rational decisions than those who own rental property for other reasons.[5]

We divided the sample into two sets, which we call Professional and Non-professional landlords. We define Professionals as those landlords who owned at least three properties; whose letting income was at least 50% of their total income; and who had financial, business or pension motives for being a landlord. Thus defined, Professionals made up 15% of the sample. Non-professionals were all other landlords. We expected that Professionals would exhibit a more commercial—or more economically rational--attitude to the acquisition and management of their portfolio than Non-professionals.

9 Analysis of economic rationality

The survey asked landlords several questions about how they might react to different economic scenarios. They were asked what might cause them to increase their portfolio of rental properties. Table 4 summarises the response from the whole sample, and from Professional and Non-professional landlords.

[5] The wording of the questionnaire was as follows: "How do you currently view your primary role as a residential landlord? 1. Am running full-time business; 2. Investment for capital growth only; 3. Investment for rental income only; 4. Investment for capital growth and rental income; 5. Provides somewhere for me/my family to live; 6. Temporary because cannot sell property; 7. Contribution to pension provision; 8. House an employee; 9. Other." Answers 5, 6 and 8 were considered to show non-investment motives.

Table 4: Reasons to increase portfolio[6]

Predicted reasons to increase portfolio (fm Table 1)	*Wording of survey*	*Percentage supporting**		
		All	*Profs*	*Non-profs*
Lower interest rates	Stable/low interest rates	57	63	53
Rising house prices	Steady/rising house prices	48	51	45
Rising demand for rental property	Very good rental yields	45	58	40
Worsening performance of alternative investments	Poor stock market performance	21	20	20
	Help children/family into housing market	15	10	15
	Improved job prospects/bonuses	9	2	10
	Children at university	9	7	9
	Other	10	10	10

*Percentages do not add to 100 as multiple responses were possible

The answers given broadly agreed with those predicted in Table 1. Landlords were far more likely to cite financial than personal reasons for increasing their portfolios. We would not necessarily expect all participants in a market to be equally affected by particular stimuli, and indeed even the most-frequently given reason for increasing a portfolio—stable or low interest rates—only attracted the support of 57% of respondents, and none of the others garnered more than 50%. Factors related to the performance of rental housing itself as an investment were seen as far more important than the performance of alternative investments; 'poor stock market performance' was cited by only 21% of respondents as a reason to increase rental portfolios.

The second most-cited reason given by landlords for increasing their portfolios was 'rising house prices.' This suggests that landlords are more interested in capital gains

[6]Among the factors in Table 1 affecting rate of return were changes in tax rates and falling house prices. They are not, however, included in Tables 3 and 4, as the survey did not ask about them.

(which would rise with rising house prices) than in rental yield (which would fall as house prices rose).

Professional landlords were more influenced than Non-professionals by cash-flow considerations: they were more responsive to interest-rate changes and rental yields.

The survey also asked landlords what might cause them to reduce their portfolios of rental property. Responses are summarized in Table 5.

Table 5: Reasons to decrease portfolio

<table>
<tr><th rowspan="2">Predicted reasons to decrease portfolio (fm Table 1)</th><th rowspan="2">Wording of survey</th><th colspan="3">Percentage supporting*</th></tr>
<tr><th>All</th><th>Profs</th><th>Non-profs</th></tr>
<tr><td>Falling demand for rental property</td><td rowspan="2">Rental income consistently not paying off mortgages</td><td rowspan="2">49</td><td rowspan="2">47</td><td rowspan="2">50</td></tr>
<tr><td rowspan="2">Higher interest rates</td></tr>
<tr><td>Rising interest rates</td><td>47</td><td>58</td><td>45</td></tr>
<tr><td></td><td>Worsening personal financial situation</td><td>26</td><td>8</td><td>30</td></tr>
<tr><td></td><td>Approaching retirement</td><td>19</td><td>20</td><td>19</td></tr>
<tr><td rowspan="2">Falling house prices</td><td>Falling house prices over 3-6 months**</td><td>15</td><td>16</td><td>14</td></tr>
<tr><td>Stagnating house prices: 0% growth over 3-6months**</td><td>7</td><td>7</td><td>6</td></tr>
<tr><td></td><td>Worsening general economic situation</td><td>8</td><td>14</td><td>8</td></tr>
<tr><td>Improved performance of alternative investments</td><td>Improving stock market</td><td>4</td><td>3</td><td>4</td></tr>
<tr><td></td><td>Children leaving home</td><td>2</td><td>2</td><td>2</td></tr>
</table>

*Percentages do not add to 100 as multiple responses were possible
**16% of all respondents said *either* falling or stagnating house prices over 3-6 months might cause them to decrease their portfolios.

Here as well, the two reasons landlords gave most frequently for decreasing their portfolios were financial ones, broadly in accordance with predictions. The next most commonly cited reasons, ‘worsening personal financial situation’ and ‘approaching

retirement', could be expected to lead to reductions in an investor's *overall* portfolio, including rental property.

> As in Table 4, the performance of rental property itself as an investment was much more important than the performance of alternative investments. Only 4% of landlords said an improving stock market would be a reason to decrease their portfolios (compared to 20% who agreed with the converse).

While 48% of landlords said that stable or rising property prices were a reason to increase their portfolio, only 16% supported the converse: that falling or stagnating property prices are a reason to sell. This may be due in part to the time frame of 3-6 months given for property price falls in the questionnaire (no analogous time frame was given for price increases), which is short compared to the investment horizon of many landlords.

Both the relative unimportance attached to returns in alternative markets, and the weak response to falling property prices, may in part be consequences of the significant financial hurdle represented by transactions costs for real property: very large price movements (for stocks or property) could be required to offset the transactions costs involved in making changes to portfolio of rental property.

Table 5 also highlights the importance of cash flow to landlords. The single most important reason landlords gave for reducing their holdings of rental property was 'rental income consistently not paying off mortgages', cited by 49% of all respondents. Rent not covering the mortgage could be a consequence of either or both of two factors that lead to lower returns: rising interest rates and/or a fall in demand for rental housing (which could lead to void periods as well as lower rents). The key here is the nexus between rental income and mortgage payments—if for some reason the rent did not cover mortgage payments, many landlords would have no choice but to sell, whatever they might think about the future of property as an investment.

Professional landlords were again more likely than Non-professionals to say they would react to changes in interest rates, and much less likely to say that changes in their personal financial situation would affect their property holdings.

The questionnaire asked landlords what they would do in the face of some scenarios. One was as follows: 'If, in the next 12 months, interest rates rise to 5.75% (currently 4.75) and were expected to stay at this level or rise going forwards, how would this affect your role in residential letting?' The results are given in Table 6.

Table 6: Predicted reaction if interest rates rose by 1%

Reaction to increased interest rates	***Percentage***		
	All	***Profs***	***Non-profs***
No effect	62	50	65
Trade/rebalance portfolio but keep investment	14	25	13
Sell some/all of portfolio	14	17	13
More likely to increase portfolio	5	10	5
Leave the market altogether	4	1	4

Most landlords said that a 1% increase in interest rates would not affect their portfolios. Of those who said it would have an effect, three times as many said they would sell properties as buy them, which is consistent with the predictions in Table 1.

Professionals were more likely than Non-professionals to say that they would react to a rise in interest rates. One-quarter said they would trade or rebalance their portfolio but keep their investment, while 17% said they would sell some of their portfolio and 10% said they would increase their holdings.

Buying more property after interest rates rise is inconsistent with the predictions in Table 1, yet Professionals (whom we expect to be more commercially minded) were twice as likely as Non-professionals to say that they would do so. This may simply mean that Professionals could still extract profit in a higher-interest-rate environment and so would continue to add to their portfolio regardless, although their additional investment might be smaller in scale or more selective than it would be if interest rates were unchanged.

Alternatively, Professionals might assume that higher interest rates would trigger price falls, which could offer compensating increases in gross rental yield.

At the same time, paradoxically, Professional landlords were more likely than Non-professionals to say that rising interest rates would be a reason to *sell* properties (Table 5). The higher propensity of Professionals to buy *or* sell with a change in interest rates suggests they may have less emotional attachment to individual properties than Non-professionals, and would buy/sell/rebalance to maximize their return.

10 Conclusions and policy implications

Our conclusions are necessarily rather broad-brush, not least because the UK buy-to-let sector is still so young. Many investors only have experience of a rising property market--and a survey about hypothetical situations has obvious limits. So faced with, say, a fall in property prices, landlords may in fact do something very different from what they said they would do. In addition, it is difficult to design a simple test to determine whether investors' decisions are 'rational' or not. A decision that seems irrational or even perverse, given one set of assumptions about investment horizons and expectations, may seem perfectly reasonable under another set of assumptions. Even so, some broad conclusions do emerge from the data.

First, most landlords are sensitive to the rate of return on rental housing, and when faced with various housing-market stimuli, say they would act in a way that is not inconsistent with maximizing return. A significant minority say they would behave in a way that would seem, a priori, to be inconsistent with return maximization. However, without more detailed information about their preferences, it is too simple to characterize these choices as 'irrational.' In particular, investors' different time horizons and investment approaches can lead to different outcomes: a short-term, speculative landlord concentrating on capital gains may buy into a rising market, on negative rental yields, in the expectation of selling the following year; while someone buying property as a

pension may buy during a market downturn, happy to buy cheaply an asset that will be held for 20 years.

Second, while most buy-to-let landlords are sensitive to the rate of return on rental housing, most do not appear to be directly sensitive to the rate of return *relative to other investments,* particularly the stock market. This does not accord with the standard view of investor behaviour, in which investors seek to maximize returns. This may be in part because it is very difficult, even for specialists, to make accurate comparisons of returns in the two markets—particularly given the fact that rental property is often financed with borrowed money. It may also reflect landlords' long investment horizon: 63% of those surveyed said they planned to remain in the residential rental market for ten years or more, and 27% said they viewed their properties as part of their pensions. However, some 20% of landlords said falling stock prices were a reason to *buy* property, but only one fifth as many--4%--said rising stock prices were a reason to *sell* property. This suggests that they do not assess their overall investment portfolios objectively and dispassionately, but rather have a general bias in favour of buying rather than selling property. On the whole, therefore, our findings seem to support Shiller's observation that investors do not, in fact, evaluate the entire universe of investment possibilities in making their decisions.

Given landlords' general insensitivity to developments in other markets, and the transactions costs problems, it is perhaps more useful to think of landlords as small businesspeople rather than straightforward investors. US-style REITs, which allow for passive, collective investment in rental properties, are an investment that can be compared in like terms with other investments; residential rental properties are not.

Third, although these buy-to-let landlords tend to claim to have long time horizons for their investments, about half of them say that rising interest rates might be a reason to sell properties. Indeed, when asked about a *specific* interest rate rise—1% over a year—19% said they would sell some or all of their properties. This is still a sizeable percentage.

This suggests that short-term considerations, particularly with respect to cash flow, would trump expectations of long-term capital gains.

Fourth, Professionals are more likely to say they would react to changes in two important economic factors, house prices and interest rates, than Non-professionals – which does point to different approaches to assessment and decision dependent on scale and attitude. It does not of course necessarily point to different outcomes.

Our conclusions echo those of Andrew Beer's 1999 study of private-sector landlords in Australia:

> First, the ability of private rental housing to offer a secure long-term investment is the dominant motive for investment. Second, landlords are drawn from all income groups, Third, individuals invest in rental housing for disparate reasons…there is therefore a degree of unpredictability within the private rental market, not all investors are likely to respond quickly to changes in investment regimes or market conditions and this is particularly true for those on lower incomes. (Beer, 1999, p.260)

Beer found that landlord income did affect economic rationality. Unfortunately our data did not allow us to test this explicitly, but the average income of the Professional landlords in our survey (who were more responsive to market conditions) was almost certainly higher than that of the Non-professionals.[7]

What implications do these findings have for policy? Changes over the last 20 years in the policy and financial landscape in the UK have led to an upsurge in the number of private landlords, in line with government intentions. The government is less pleased that this increase has come almost entirely from the ranks of private individuals. It would like to change the mix of private landlords by encouraging corporations and financial

[7] Interestingly, Beer found that over a third of all landlords, and 40% of those with mortgages, did not have a clear idea of their income position—that is, they did not know whether they were making money or not. Clearly such landlords cannot be return maximisers, at least in the short term.

institutions to invest in rental property. Although this has been the government's goal for some years now, it has failed to make much headway; corporations remain resolutely uninterested in becoming residential landlords. Our findings indicate that individual private landlords do generally respond to economic stimuli in rational ways. While Professional landlords are more responsive to some stimuli—particularly interest-rate changes--than Non-professionals, the difference is not enormous. It may be that policy would be better directed toward helping individual landlords develop financial and management skills than in continuing to try to attract direct corporate investment in the private rented sector.

Bibliography

Allen J & McDowell L (1989) *Landlords and Property: Social Relations in the Private Rented Sector* Cambridge University Press, Cambridge.

Association of Residential Letting Agents (2005) "The ARLA Review & Index of Returns on Residential Investment, Third Quarter 2005", ARLA, London

Baddeley M (2005) "Housing Bubbles, Herds and Frenzies: Evidence from British Housing Markets" Centre for Economic and Public Policy Brief No. 02/05, Centre for Economic and Public Policy, University of Cambridge, Cambridge.

Ball M (2004) *The Future of Private Renting in the UK* Social Market Foundation, London.

Ball M & Glascock J (2004) *Property Investment Funds for the UK* Council of Mortgage Lenders, London.

Beer A (1999) "Housing Investment and the Private Rental Sector in Australia", *Urban Studies* 36(2), 255-269.

Berry M and Hall J (2005) "Institutional Investment in Rental Housing in Australia: A Policy Framework and Two Models", *Urban Studies* 42(1), 91-111.

Clapp J, Goldberg M and Myers D (1994) "Crisis in Methodology: Paradigms and Practice in Real Estate Research" in *Appraisal, Market Analysis & Public Policy in Real Estate* (DeLisle J & and Sa-Aadhu J, editors), Kluwer Academic Publications, Boston.

Crook A and Kemp P (1996) 'The Revival of Private Rented Housing in Britain' *Housing Studies* 11(1), 51-68.

Crook A, Kemp P, Barnes Y and Ward S (2002) *Investment Returns in the Private Rented Housing Sector*, British Property Federation, London.

Harvey J (1981) *The economics of real property* Macmillan, London.

Harloe M (1985) *Private Rented Housing in the US and Europe* Croom Helm, London/Sydney.

Hendershott P and MacGregor A (2006) *Investor Rationality: evidence from UK capitalisation rates*, RICS, London.

HM Treasury (2004) *Promoting more flexible investment in property: a consultation* HM Treasury, London

Investment Property Databank (2005) "IPD UK Residential Investment Index". Available online at http://www.ipdindex.co.uk/downloads/indices/UKResidential_2005.pdf

Mintel Consultancy (October 2004) *The Changing Face of the UK Landlord* Charcol Mortgages, London.

Nordvik V (2001) "Analysis of Rental Housing Markets: Five Essays" Norwegian Building Research Institute (Byggforsk), Oslo. Summary online at http://www.byggforsk.no/default.aspx?DokumentID=794&innholdsID=114&spraak=en

Office of the Deputy Prime Minister (2003) *English House Condition Survey 2001: Private Landlords Survey* ODPM, London

Office of the Deputy Prime Minister (2006), live tables on housing stock, online at http://www.odpm.gov.uk/index.asp?id=1156006

Paley B (1978) *Attitudes to letting in 1976* Office of Population Censuses & Surveys, HMSO, London.

Poterba J (1984) "Tax subsidies to owner-occupied housing: an asset-market approach" Q*uarterly Journal of Economics* 99:729-752

Rhodes D & Bevan M (2003) *Private landlords and buy-to-let* Centre for Housing Policy, University of York, York.

Scanlon K & Whitehead C (2004a) *The profile and intentions of buy-to-let investors* Council of Mortgage Lenders, London.

Scanlon K & Whitehead C (2004b) *International trends in housing tenure and mortgage finance* Council of Mortgage Lenders, London.

Shiller R J (2000) *Irrational Exuberance* Princeton University Press, Princeton.

Shiller R J (2003) "From Efficient Markets Theory to Behavioural Finance" *Journal of Economic Perspectives* 17(1) 83-104.

Skifter Andersen, Hans (1998) "Motives for Investments in Housing Rehabilitation among Private Landlords under Rent Control" *Housing Studies* 13(2) 177-200.

Thaler R. (1980) "Towards a positive theory of consumer choice" *Journal of Economic Behavior and Organization* 1, 39-60.

Todd J E (1986) *Recent Private Lettings* HMSO, London.

Vass J (2004) “Buy-to-let: long-term stability or short-term volatility?” Market Briefing Special Article, Council of Mortgage Lenders, London