



NHPAU Research Findings Number 1

Buy-to-let mortgage
lending and the impact
on UK house prices

NHPAU Research Findings Number 1

Buy-to-let mortgage lending
and the impact on UK house prices

February 2008



National Housing and Planning Advice Unit
CB04 Ground Floor of Clerical Block
Segensworth Road, Titchfield
Fareham PO15 5RR

T 023 9295 8167
www.communities.gov.uk/housing/nhpau

Main points

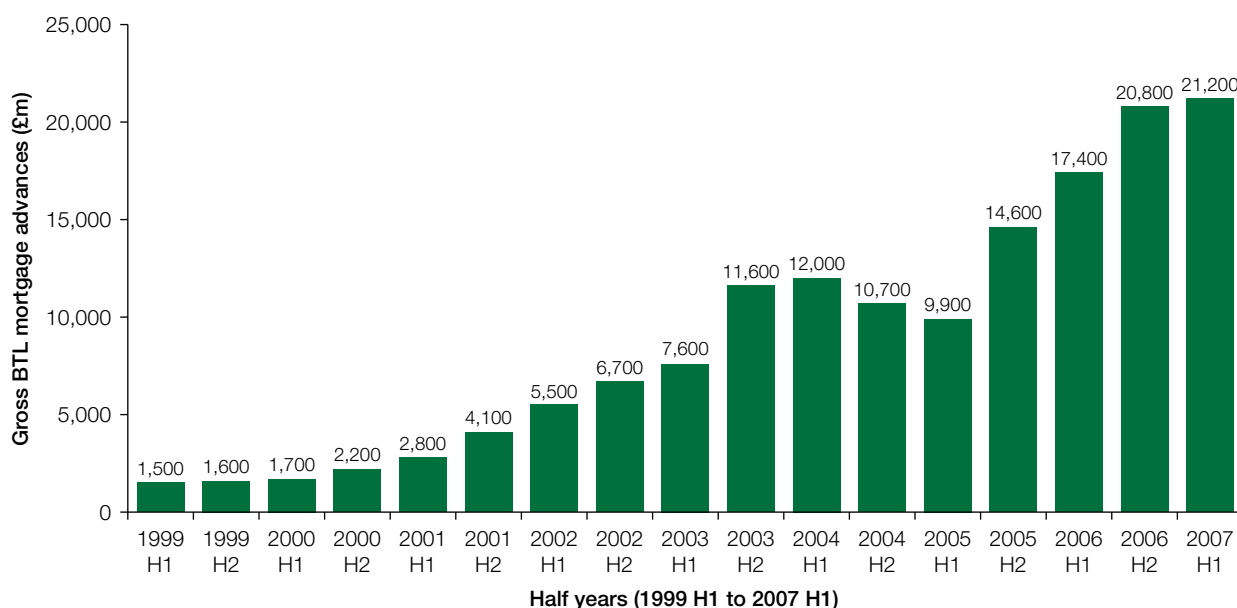
- BTL has made a small contribution to house price inflation in recent years but rising incomes, low and stable interest rates, household growth and limited supply are much more important factors.
- Since the mid 1990s the average price of a house had increased in real terms by 150 per cent, an annual increase of 8.6 per cent per annum.
- Without the record levels of investment in BTL properties our new research indicates that the average price of a home over the same period would still have risen by 130 per cent, an annual increase of 7.9 per cent per annum.
- The impact of BTL is most felt in recent years, with BTL increasing average house prices by up to 7 per cent in 2007 Q2. These estimates represent an upper bound.
- Nevertheless BTL financing has increased overall demand for housing, so some inflationary effect is not surprising particularly in a market where supply is constrained.
- Buyers of the average priced home, on a 100 per cent mortgage, would pay around £1,190 rather than £1,100 per month as a result of a 7 per cent increase in house prices.
- Affluent individuals with access to BTL financing and capital have significant purchasing power and are often competing in the same area of the market as potential first time buyers.
- The results from the model concur with analysts who have suggested that a downturn in BTL lending could potentially create a downward pressure on house price inflation.
- Previous research suggests that BTL has significantly increased the size of the private rented sector and has helped to keep rents low. It has therefore helped to provide affordable accommodation for those who do not want or cannot afford to be owner occupiers.

Introduction

Buy-to-Let (BTL) is characterised by private investors who purchase residential property using mortgages in order to rent out accommodation to tenants. The property is an investment asset on which they earn a rental return and achieve capital gains as house prices rise over time.

In the last decade one of the most significant features of the UK mortgage market has been the rapid growth in the size of the BTL market. The BTL mortgage product has given investors the means to borrow easily and at competitive rates. Since its introduction in July 1996, following an initiative launched by the Association of Residential Letting Agents (ARLA), BTL mortgages have grown to over 991,600 by end September 2007, with a value of over £116 billion (CML, 2007). This period coincides with a large and sustained increase in real house prices and a downturn in the number of mortgages to first time buyers. This has prompted much speculation that BTL investment has added to house price inflation and has priced out first time buyers (e.g. Sprigings, Nevin, and Leather, 2006).

Figure 1: Buy-to-let gross mortgage advances (£m)



Source: Council of Mortgage Lenders

There are good reasons to assume that the rapid growth in BTL investment has increased house prices. The record levels of investment could have raised demand and with supply more or less fixed in the short-term, this would help to push up prices. Furthermore, others have argued that the consequence of large scale investment activity in the housing market is the break in the relationship between house prices and average earnings (Sprigings, Nevin, and Leather, 2006). However, there is little published empirical research on the impact of BTL investment on house prices.

Previous research on BTL and house prices

The published studies that have looked at this issue have been mainly qualitative. For instance, one local level study of Glasgow found that one in three landlords explicitly attributed the rental market investment to contributing to higher house prices (Gibb and Nygaard, 2005). But this is just anecdotal evidence from a small number of investors. A second local level study also included anecdotal evidence that the buoyancy of the private rented sector of Burngreave in Sheffield had contributed to house price inflation (Hickman et al, 2007).

These local qualitative studies are at odds with the findings from econometric research on UK house prices. The econometric work shows that a large proportion of the variance in house prices over time can be explained by fundamental economic and demographic factors.

House price models

Models of the UK housing market show that prices change in relation to real incomes, the number of households, population trends, expectations, credit availability and the cost of borrowing (Meen, 2006; Muellbauer and Murphy, 1997; HM Treasury, 1992; Drake, 1993). However, the raised availability of mortgage finance is known to stimulate the demand for housing (Pain and Westaway, 1996) and this might suggest that the introduction of BTL mortgages could raise demand, and therefore house prices, independently of other factors.

Developing a house price model

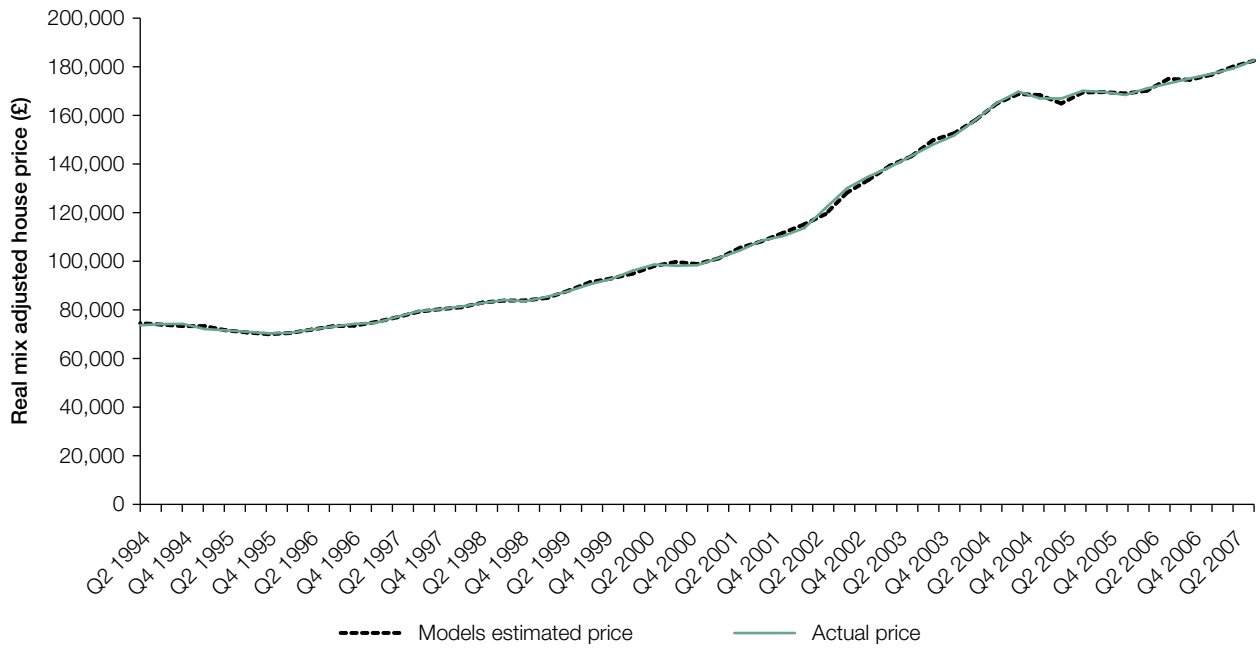
The NHPAU developed a model to estimate UK house prices in order to simulate the impact of BTL on house prices following their introduction in the third quarter of 1996. The model was based on the factors identified by previous research as important determinants of house price movements. The model is summarised in Box 1. The house price model accurately estimated house prices between 1994 Q2 and 2007 Q2 (see Figure 2).

Box 1: the house price model

The following factors were used by the model to explain changes in UK house prices between 1994 Q2 and 2007 Q2:

1. The average mortgage interest rate
2. Real household disposable income per capita
3. The repossession rate
4. Real value of mortgage advances (including BTL)
5. Stock of dwellings
6. Number of households
7. Housing user cost of capital (a measure of the cost of home ownership less the capital gain)

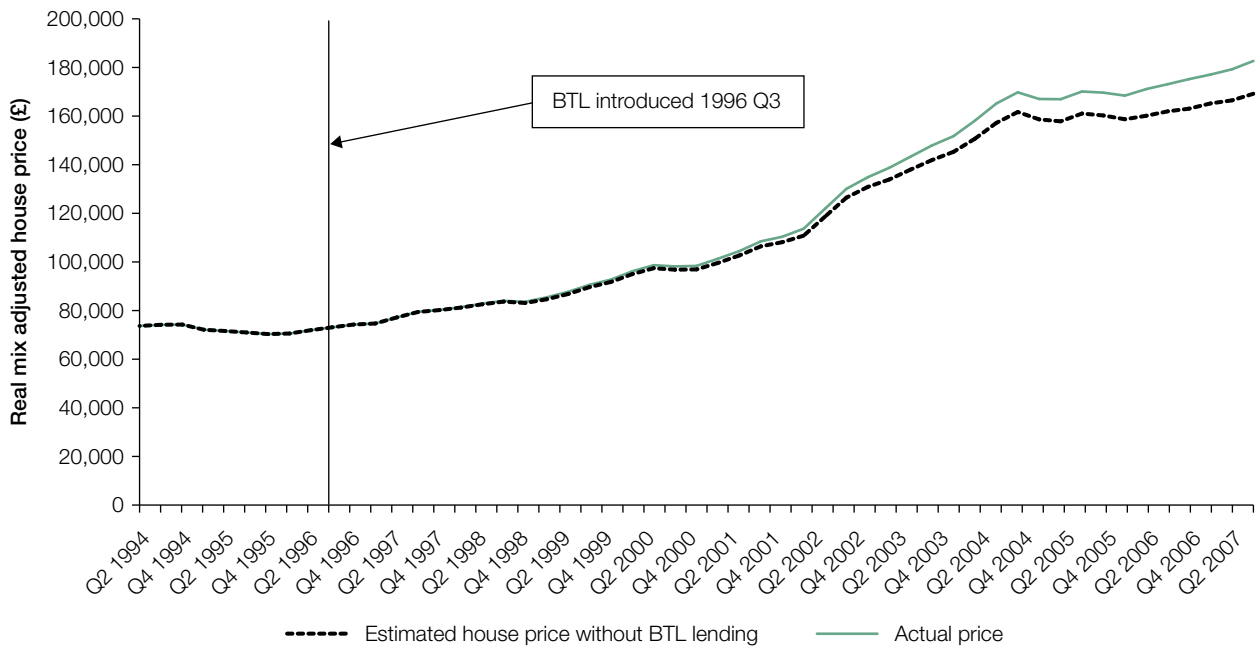
Figure 2: Actual versus estimated UK real mix adjusted house prices (1994Q2 to 2007Q2)



Estimating the impact of BTL on house prices

The model was used to estimate what house prices would have been had there been no buy-to-let mortgage lending. This can be regarded as the counterfactual house price and was compared to the actual house price. The difference is assumed to be the inflationary effect of BTL on house prices. This can be seen in Figure 3.

Figure 3: Actual mix adjusted house prices and the estimated house price if there had been no BTL mortgage lending (1994Q2 to 2007Q2)



Taking the last period that a comparison can be made in 2007 Q2, the actual mix adjusted house price was then £183,000 and the counterfactual price was estimated to be £169,000. This implies that BTL lending had increased prices by up to £13,000 (or 7 per cent) over and above what they would otherwise have been. These estimates represent an upper bound on the BTL impact because the counterfactual (i.e. what house prices would have been without BTL mortgage lending) assumes that non-BTL advances would have remained unchanged. In reality, if BTL mortgages had not existed, there probably would have been some upward shift in non-BTL mortgage advances.

Housing supply, household growth, income and interest rates matter more than BTL

Between 1996Q3 and 2007Q2 the overall impact of BTL on house prices was relatively modest and illustrates the point made by others that movement's in house prices can largely be explained by fundamental economic and demographic factors. The model used in this paper attributes much of the variation in house prices to mortgage interest rates, changes in disposable income, changes in housing supply, rates of household formation, and mortgage availability. For instance, since 1996Q3 house prices increased in real terms by 150 per cent and, even without the

estimated effect of BTL, they would still have been expected to increase by more than 130 per cent. It would therefore be wrong to say that BTL has been responsible for *all* of the growth in house prices over the last decade but it has played a part.

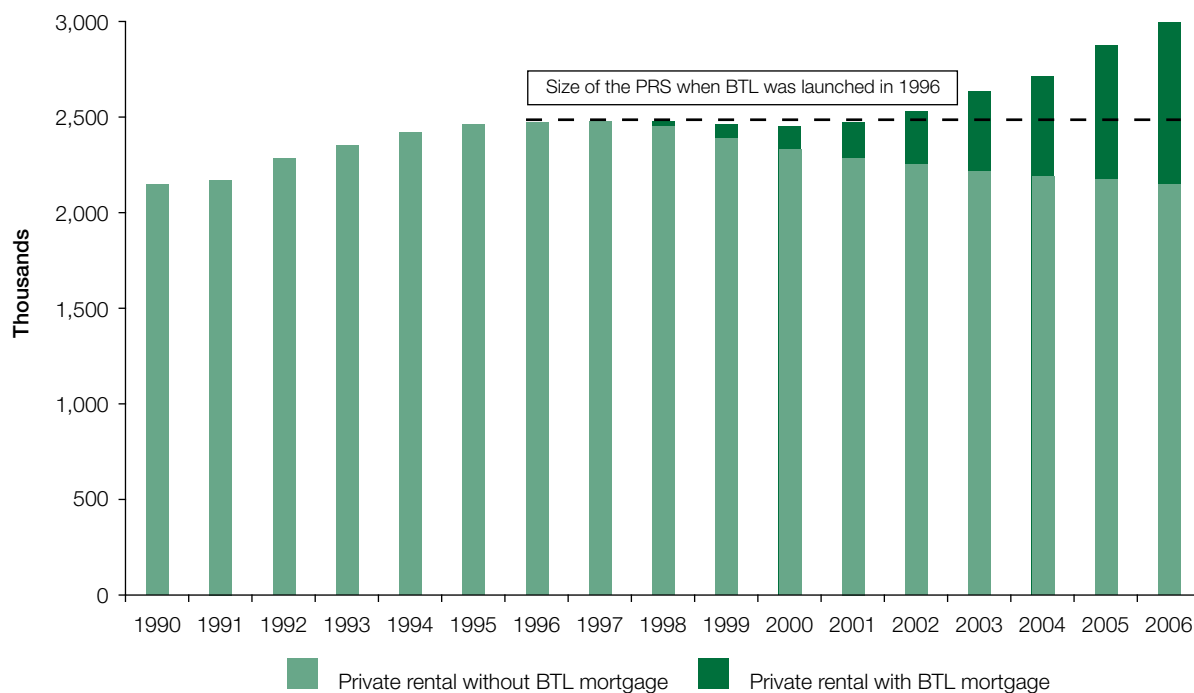
Affordability

In term of affordability it is an open question as to whether a seven per cent increase in house prices represents a significant additional cost. For example, the monthly mortgage repayment on a property priced at £183,000 in 2007 Q2 would be around £1,190, assuming a 100 per cent mortgage at an interest rate of 6 per cent over 25 years. The equivalent monthly repayment for a property priced at £169,000 (the models estimated house price for this period had there been no BTL lending), would be £1,100. A difference of £90 per month in mortgage repayments could be significant for some. However, if one assumes that BTL investment has provided no wider benefits then the additional amount it adds to house prices and households mortgage repayments is undesirable because it has reduced the opportunity for home ownership, particularly for those on lower incomes.

Benefits arising from BTL

There is some evidence to suggest that BTL mortgage finance has helped to increase the size of the private rental sector (PRS), particularly in recent years. For example, BTL mortgaged properties were estimated to make-up over a quarter (28 per cent) of the whole private rented stock in 2006, rising from less than 1 per cent in 1996 (see Figure 4). However, we cannot necessarily conclude from this data that the PRS would have declined from its pre-BTL level had BTL *not* existed. This is because the statistics mask the fact that some investors will have taken out BTL mortgages on rental stock that they already owned once the BTL product became available.

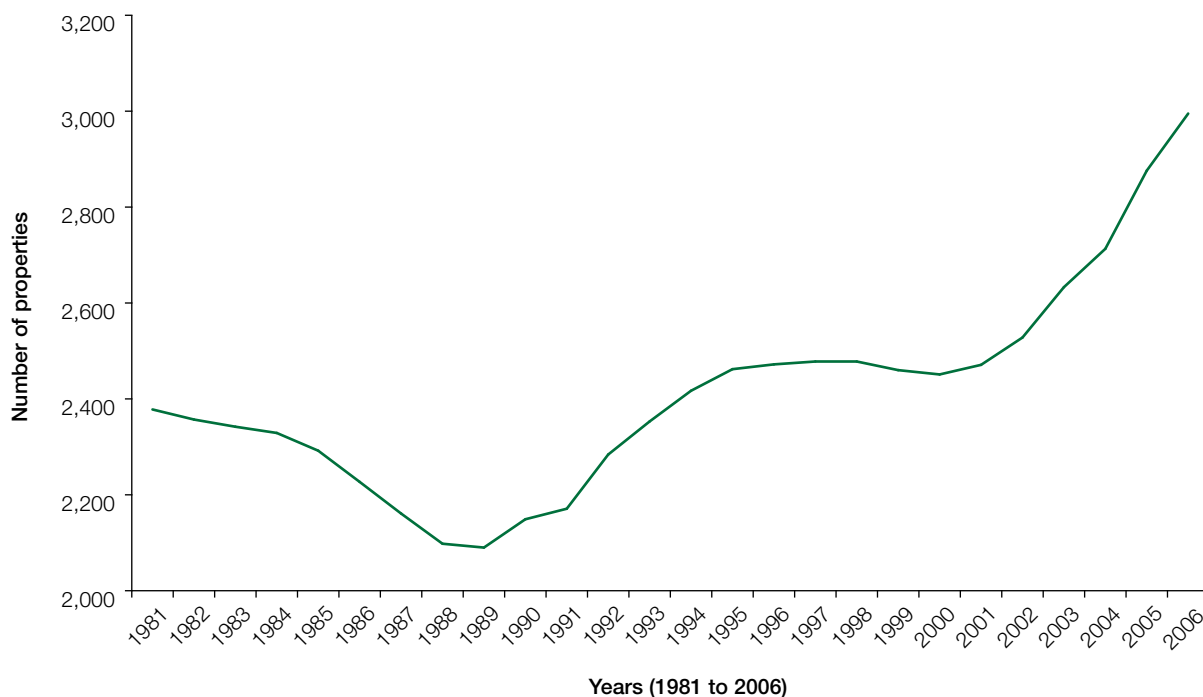
Figure 4: Private sector rental properties with and without a buy-to-let mortgage



Source: Based on analysis by CML (2007)

The size of the private rented sector (PRS) at large was in steady decline throughout most of the twentieth century. Its lowest point was in the late-1980s, when the sector dropped to just over 2 million properties, representing just 9 per cent of all stock (Thomas, 2006). Following the 1988 Housing Act, that introduced the Assured Shorthold Tenancy, it became easier for landlords to evict tenants where they had a clear right to possession. This helped to grow the sector significantly. It was further boosted by the introduction of the BTL mortgage product in 1996, although this did not have an impact until 2000/2001, when new lending started to increase rapidly. As a result of these changes the sector now represents 11 per cent of all stock (CLG, 2007), housing nearly 3 million households (see Figure 5).

Figure 5: Number of dwelling in the private rental sector (thousands)



The private rental sector provides flexible accommodation that helps to facilitate labour mobility and this is beneficial to the national economy. It can also be said to provide housing to those who cannot afford to buy and enables them to build up their own equity and, although tenants do not share in capital gains directly, they do so through lower rents as a result of competition between the increased numbers of landlords. However, further research would be required to estimate the number of tenants that could have afforded to buy a home of their own had there been no BTL lending.

There is some evidence to suggest that BTL has promoted increased supply by effectively forward funding housing development. The argument is that high density development requires significant amounts of advance funding for the necessary infrastructure involved. The viability of these cash intensive developments is said to have been improved through off-plan sales to investors who have provided evidence of take-up for banks and other lenders (owner-occupiers generally purchase much later). Therefore, the confidence that is brought to a scheme by investor sales leads to housing starts in less established residential areas, particularly in town centres that are undergoing large-scale urban regeneration, which generally costs more and is viewed as higher risk (Savills Research, 2007). It though should be said that mortgage data suggests that only around 10 per cent of BTL mortgages between 2004 and 2006 were on newly built properties.

BTL and the housing market

The relationship between house prices and the BTL sector has received much comment with some leading commentators suggesting that a downturn in the sector could precipitate a slow down in house price inflation. This could be facilitated in two ways. Firstly, BTL borrowing may fall as housing user costs rise as a result of higher interest rates or, and perhaps more significantly, there is a reduced expectation of capital gains. These factors will deter *new* investors from entering the market. Secondly, if *existing* BTL investors do not anticipate future capital gains or rental yields fall they may decide to sell properties. This would be more likely if other forms of investment such as equities start to outperform property. It also appears to be the prospect of capital gains that has motivated BTL investment rather than rental yields. Indeed, rental yields have been falling since 2004 but BTL lending has continued to rise. Thus, a fall in expectations about housing price inflation might be more significant than falling rental yields.

BTL lending and house price inflation

The results of the modelling in this study would suggest that house price inflation may decrease if the amount of BTL lending decreased. This *could* also bring a glut of BTL properties onto the market *if* existing investors attempted to sell properties because of lower expectations about capital growth. However, recent survey research indicates that 9 out of 10 investors wish to either maintain their current property portfolio or to increase it in 2008. Furthermore, fundamental factors like increases in real disposable income and growth in the number of households in relation to the housing stock will work to support prices. There will also come a point at which prices reach a level to be affordable to more first time buyers. The first time buyer would then presumably take the place of former investors in the housing market.

Possible differing regional impacts

There is tentative evidence to suggest that the inflationary impact of BTL investment could impact on some UK regions more than others. Data kindly provided to the NHPAU by a major BTL mortgage lender suggests that BTL investment is concentrated in certain regions, particularly London, South East and the North West (see Table 1). This data may not be representative of all BTL lending but it is indicative of the regional distribution.

Table 1: Proportion of BTL mortgages approved, by region (2004 to 2006)

| Government Office Region | % BTL mortgages | % All mortgages ¹ |
|--------------------------|-----------------|------------------------------|
| London | 22.2 | 13.9 |
| SE | 15.2 | 16.7 |
| NW | 13.9 | 12.5 |
| East | 8.8 | 11.1 |
| Y&H | 8.0 | 9.6 |
| WM | 7.6 | 8.9 |
| SW | 7.2 | 9.8 |
| EM | 6.8 | 8.3 |
| NE | 5.5 | 4.6 |
| Wales | 4.7 | 4.4 |
| Total | 100.0 | 100.0 |

It would be useful to consider the regional impact of BTL in more detail by modelling house prices on a regional basis, particularly in the high pressure markets in the South of England. However, at the time of this study comprehensive regional BTL lending data was not available. It would also be desirable to consider the impact of BTL on local housing markets, where there is a concentration of BTL activity, because the impact on UK prices reported in this study may disguise the fact that at a local level the impact could be even more significant.

Characteristics of BTL properties

There is evidence to suggest that BTL investment is concentrated towards the lower end of the housing market, particularly on the purchase of flats and terraced houses (see Figure 6), which are also popular with first-time buyers.

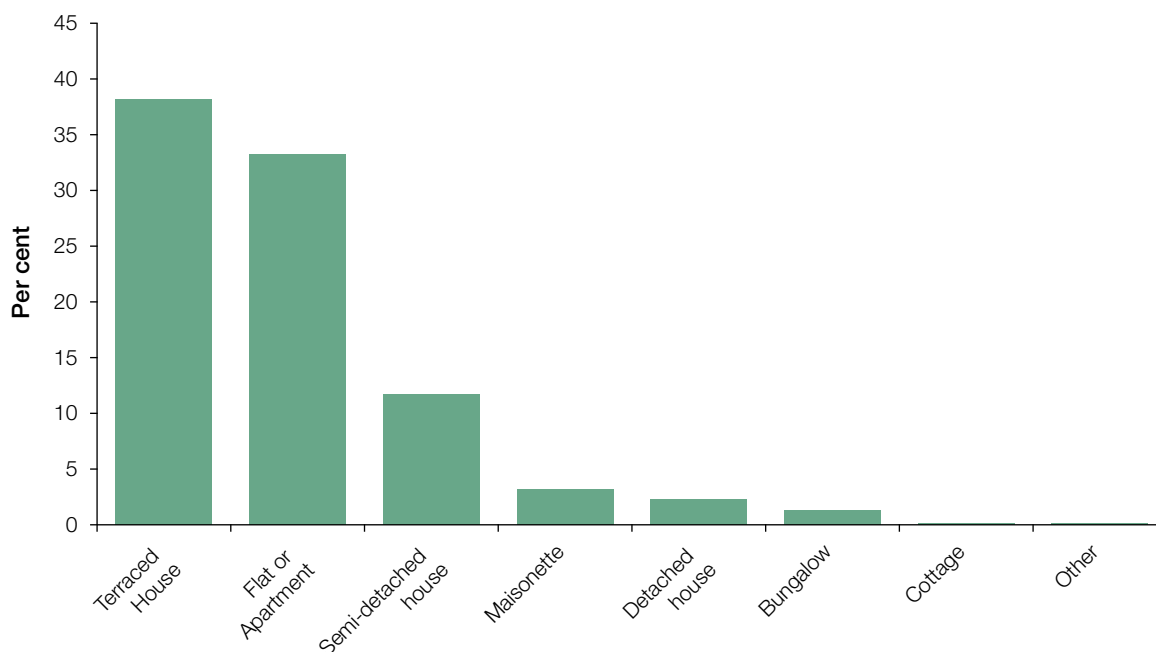
The average price of a BTL property was approximately £156,000 in 2006.² This compared to an average price of £201,000 for all UK properties in that year³.

¹ NHPAU analysis of Land Registry data

² Based on a large sample provided to the NHPAU by a major BTL mortgage lender. The sample may not be representative of all BTL properties.

³ Based on NHPAU analysis of Land Registry data of residential property transactions in 2006, purchased using mortgage finance.

Figure 6: BTL properties by type



In terms of the characteristics of BTL investors, the typical BTL investor would appear to be affluent and middle-aged. For example in 2006 the average gross annual income of a single BTL mortgage applicant was around £50,000 and the average age was 42 years. In terms of their motivations for investing, it has been suggested that falling stock markets and companies closing final salary pension schemes have been the two main drivers for people to invest in residential property (e.g. Rhodes and Bevan, 2003). It has also given people greater confidence in managing their own long-term investment affairs rather than rely on financial market specialists.

BTL mortgage lending and overall residential property investment

It is important to see the findings in the context of overall investment in residential property rather than just the effect of BTL mortgage lending. BTL mortgage lending should be seen as a proxy measure for overall investment activity. The study did not consider the impact of cash investment from individuals or institutions on house prices because this information, unlike BTL mortgage data, is not readily available. This raises the possibility that the combined impact of all these different sources investment on house prices might be greater than BTL alone.

Conclusions

BTL mortgage lending would appear to have increased house prices since its introduction in 1996 Q3 but it is important to note that the impact is small in relation to the effect of household growth, the size of the housing stock, mortgage interest rates, and changes in disposable income. However, it has nevertheless had some impact on prices and therefore affordability, particularly in recent years. For instance, in 2007 Q2 BTL investment had probably increased prices by more than 7 per cent, which was the equivalent of £13,000 on the average house price in that period. This may have been enough to price out some potential buyers from the housing market. However, while there are some localised concerns about the impact of BTL, overall there are significant economic and social benefits being delivered by the sector.

The results from the econometric modelling also concur with analysts that have suggested that a downturn in BTL lending could potentially create a downward pressure on house price inflation, but overall investors and lenders remain relatively upbeat about prospects in the sector.

Further information

This Research Findings is a summary of two reports commissioned by the NHPAU Board. It draws on a report by Ricky Taylor titled *'Buy-to-let mortgage lending and the impact on UK house prices: a technical report'* and the findings from a *'Rapid evidence assessment of the research literature on the buy-to-let housing market sector'* conducted by ECOTEC. Both reports are available in full from the NHPAU website (www.communities.gov.uk/housing/nhpau)

Notes

House price data was provided by the Nationwide Building Society.

Data on economic, demographic and housing variables was obtained from the Office of National Statistics (ONS) and the Department of Communities and Local Government (CLG). Mortgage data was provided by the Council of Mortgage Lenders (CML) and from a major BTL mortgage lender.

References

- ARLA (2007). Information about ARLA
<http://www.arla.co.uk/info/overview.htm>
- CML (2007) Council of Mortgage Lenders statistics.
<http://www.cml.org.uk/cml/statistics>
- Drake, L. (1993), Modelling UK house prices using cointegration: an application of the Johansen technique, *Applied Economics*, 25, 1225-1228.
- Gibb, K and Nygaard, C (2005) 'The impact of buy to let residential investment on local housing markets: Evidence from Glasgow, Scotland' *European Journal of Housing Policy* 5.3 pp301-26
- HM Treasury (1992), HM Treasury Macroeconomic Model Documentation, December 1992.
- Meen, G (2006) 'Ten new propositions in UK housing macroeconomics: An overview of the first years of the century' conference paper, ENHR conference "Housing in an expanding Europe: Theory, policy, participation and implementation" Ljubljana, Slovenia, July 2006
- Muellbauer, J. and Murphy, A. (1997), "Booms and Busts in the UK Housing Market", *Economic Journal*, 107, 1720-46.
- Sprigings, N., Nevin, B., and Leather, P. (2006). Semi-Detached Housing Market Theory for Sale: Suit First Time Buyer or Investor. A Paper Presented to The Housing Studies Association Conference April 19th -20th 2006
<http://www.research.salford.ac.uk/surf/documents/sprigings06.pdf>
- Hickman, P, Robinson, D, Casey, R, Green, S and Powell, R (2007) *Understanding housing demand: Learning from rising markets in Yorkshire and the Humber* Chartered Institute of Housing/Joseph Rowntree Foundation: Coventry/York
- Pain, N. and Westaway, P. (1996). Modelling structural change in the UK housing market: A comparison of alternative house price models. National Institute of Economic and Social Research and Bank of England
<http://www.niesr.ac.uk/pubs/dps/dp98.pdf>
- Rhodes D and Bevan M (2003) *Private landlords and buy-to-let*. University of York: York
- Savills Research (2007) *The buy-to-let market in the South East*. Savills Research: London
- Thomas R (2006) The growth of buy-to-let, *Housing Finance* 9, September 2006

NHPAU Board Members



Stephen Nickell (Chair)

Currently Warden of Nuffield College Oxford. He was an External Member of the Bank of England Monetary Policy Committee from 2000 – 2006 writing a number of pieces about the impact of the UK housing market on the wider economy. Until 2005 he was School Professor of Economics at the London School of Economics, following his role from 1984 – 1998 as Professor of Economics and Director of the Institute of Economics and Statistics at the University of Oxford.



Prof Glen Bramley

Professor of Housing and Planning/ Urban Studies at Heriot-Watt University in Edinburgh since 1994 leading research on planning, housing and urban policy. Prior to this he lectured in Urban Studies at the University of Bristol specialising in local government finance, housing and economic aspects of public policy. He has published papers and extensive research analysing the economics around housing affordability and its relationship with planning and house building.

Glen is the linked Board member for the South West and North East regions.



Prof Paul Cheshire

Has been Professor of Economic Geography at the London School of Economics and Political Science since 1995. Prior to this he was Professor of Urban and Regional Economics at the University of Reading and has spent time at Washington University in the USA. He has written extensively and conducted research on applied urban and regional economics, particularly the economics of housing, land markets and land use regulation.

Paul is the linked Board member for London and the East Midlands region.



Max Steinberg

Has been Chief Executive of Elevate East Lancashire, a housing market renewal pathfinder since 2003, following 25 years at the Housing Corporation where his roles included, Director of Investment & Regeneration for the North and Regional Director of the North West and Merseyside. He is a leading UK practitioner in Urban Regeneration and Housing. Max is Chair of the Board of Liverpool John Moores University European Institute for Urban Affairs and the Chair of Governors at King David High School in Liverpool.

Max is the linked Board member for the Yorkshire and Humber region.



Bob Lane

Is currently Chief Executive for North Northants Development Company responsible for growth and regeneration in the area. His previous roles include Chief Executive of Speke Garston Development Company, Liverpool, Assistant Chief Executive of the Merseyside Development Corporation and roles at Oldham and Lambeth Councils managing urban programmes. He is a specialist in the delivery of complex urban regeneration projects, with more than twenty five years experience as a regeneration practitioner/manager.

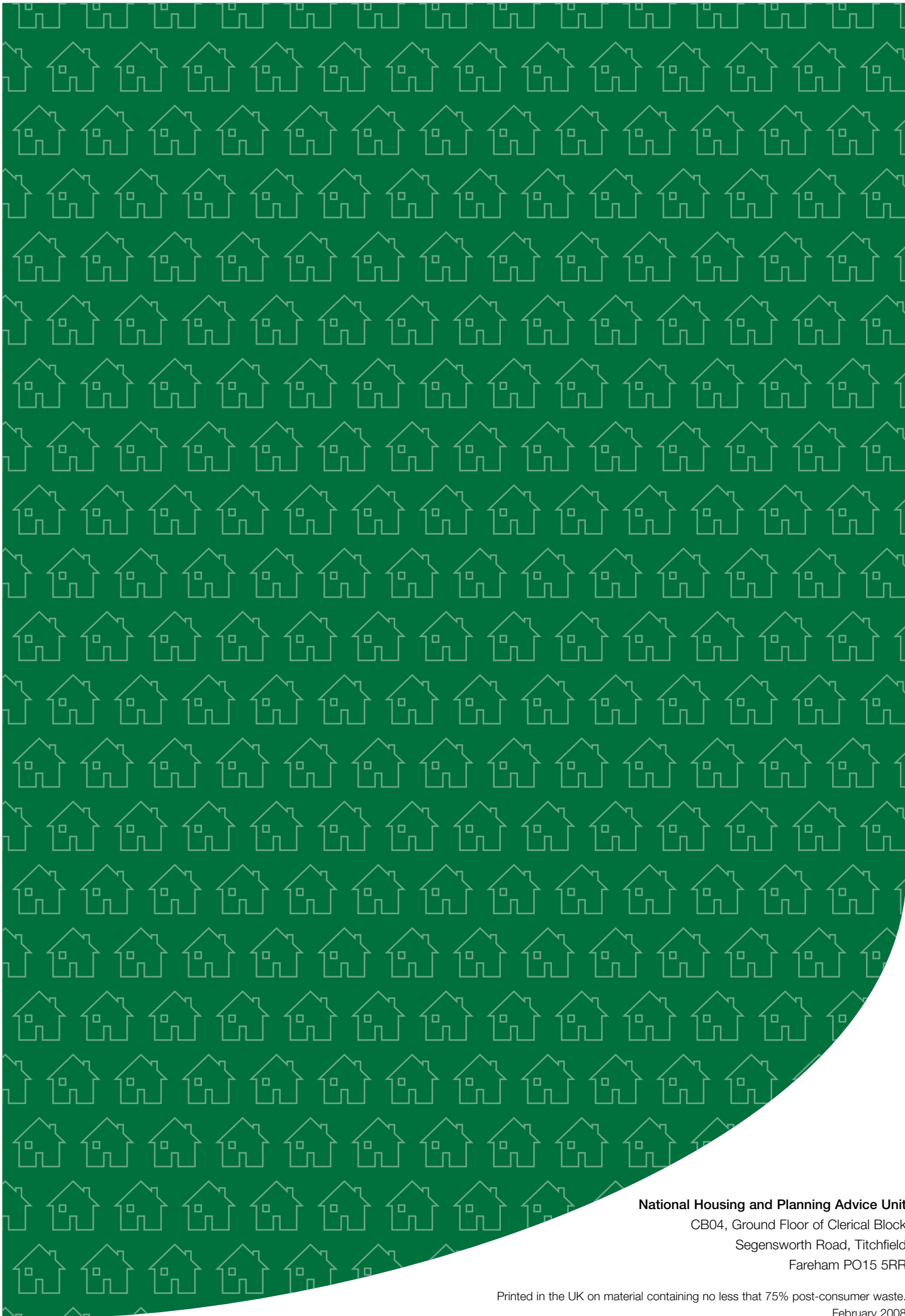
Bob is the linked Board member for East England and the North West regions.



Dr Peter Williams

Is now an independent consultant on housing and mortgage markets. His clients include the Intermediary Mortgage Lenders Association and Acadametrics. He was previously Deputy Director General of the Council of Mortgage Lenders. Prior to that he was Professor of Housing Management at Cardiff University, Deputy Director at the Chartered Institute of Housing and an academic at the Australian National University and the University of Birmingham. He previously served on the Board of the Housing Corporation (1995 - 2002) and Housing for Wales (1989 to 1993). He is a Visiting Professor at the Centre for Housing Policy at the University of York.

Peter is the linked Board member for the West Midlands and South East regions.



National Housing and Planning Advice Unit

CB04, Ground Floor of Clerical Block
Segensworth Road, Titchfield
Fareham PO15 5RR

Printed in the UK on material containing no less than 75% post-consumer waste.

February 2008

© Crown Copyright, 2008