

Understanding Risk on Buy-to-Let and Why It Should be a Priority Now

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Introduction

There is a serious problem with the understanding of Buy-to-Let (BtL) risk and its relationship with the economy. Going into the credit crunch, a commonly held view was that BtL was at or below the risk level of mainstream mortgage lending and would maintain that pattern as economic circumstances deteriorated. That myth was exploded by the arrears figures before the end of 2008, a point the FSA is well aware of. Their concern on BtL risk has been made clear in recent presentations to the industry. Serious problems persist. With inflation re-emerging and the prospect of interest rate rises occurring before a recovery in house prices, rents and voids means worse could be yet to come.

The fundamental problem is that the asset class is still not fully considered on its own merits, being too readily associated with owner-occupier mortgages in the minds of risk managers. It is crucial to switch to an approach based on the incentives faced by the BtL investor. Here we outline an approach which takes this as its starting point before working through an illustrative example. This improved approach to BtL risk has a wide range of applications, across provisioning, collections and recoveries, stress-testing, Basel II Capital calculations and new lending strategy.

The problem...

The problem with Buy-to-Let lending is that, unlike for mainstream mortgage lending, there is no history of performance through a period of economic stress including rising or stable interest rates. BtL has been through a testing time of late, as arrears went up by something of the order of 400% over the course of the recession. In truth, however, the cuts in interest rates saved the asset class. The problems are not over yet. Interest rates cannot stay at historic lows forever and with inflation re-emerging, what will happen should interest rates start rising has become a key question.

A contributory factor to the problem is that the risk community has developed into a sophisticated analytical machine over a time where the economic waters were calm and untroubled. Perhaps unsurprisingly given the backdrop, there was little effort put into developing models to predict not which of the current applicants is the most likely to default, but how many of them will default under a 'what if' scenario for economic stress with unemployment rises and house price falls. At Volterra we have been working hard developing such an approach.

Getting on the Right Track

To really do useful 'what if' analysis, we need to develop a model focussed on the incentives of BtL borrowers. Of course borrower motivation is complex, but the essence can be captured by highlighting three simple questions that are always current for a borrower:

1. Can I rent it?
2. Can I make the monthly payment from the rent?
3. Is it worth anything to me?

Being able to let the property is an obvious requirement. Without tenants the business model breaks down instantly. The other two conditions operate in conjunction. Of course, the attractiveness of Buy-to-Let lies in the prospect of repaying the mortgage with the incoming rent (and making some extra) and the property's capital value appreciation over time. However, this might not always be the case. If the rent is not enough to finance their full mortgage commitment (either because rents have fallen too much, or payments have risen), but the house is still worth more than the outstanding debt, the landlord might choose to subsidize the investment for a while, avoiding default and repossession. The same holds true if the property is in negative equity, but the annual rental yield is positive.

In the case where a landlord must subsidise an investment that is making a loss and is worth nothing in absolute terms, incentives to keep up the payments are severely reduced. For a lender, securing charging orders against other assets is not always a successful strategy and can be a difficult stick to wield in motivating borrowers to repay. Apart from that, lenders are relying on the borrower's optimism on house prices and old fashioned commitment not to default on an obligation. So an approach focussed on the combination of equity and payment cover seems a good basis for a simple, informative model. Bringing some evidence to bear on the dual impact of unemployment rises, causing higher void rates and depleting investor income as the economy deteriorates, is also a worthy addition to the modelling framework.

Putting this in practice...

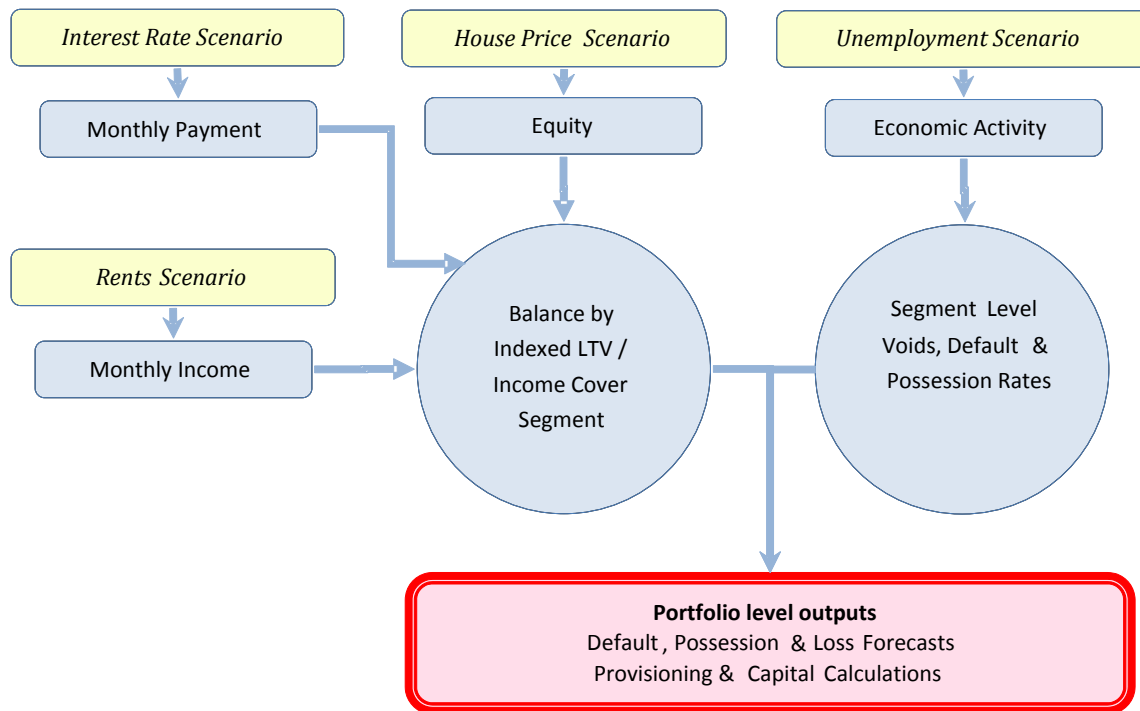
To move to a modelling framework focussed on the incentives of BtL investors and the key issues they face, we put forward two modelling fundamentals.

Fundamental I: *Equity/Income Cover Viewpoint*
Always view the portfolio through equity/income cover segments. Continuously update the book based on interest rate, rent and house price information.

Fundamental II: *Estimate the Impact of Economic Activity Changes*
Estimate the effect of unemployment on default in each equity/income cover segment, either through an explicit link to voids or, if good information is not available for voids, directly on default.

This framework is illustrated in the diagram below. It is set up for a continuously updated view of risk on the portfolio, but is also ideally structured for 'what if' scenario and stress testing analysis.

Diagram 1: Modelling Framework for Understanding Buy to Let Risk as the Economy Changes



In order to take this more customer-centric view on the BtL market, the portfolio needs to be looked at in some detail. To view the balance within updated indexed Loan-to-Value (LTV)/Income Cover segments, we need to look at dynamic rental cover and equity positions at the same time. It is common to model changes in indexed LTV for individual properties using regional house price change data. This approach can be extended to encompass the other major variable for BtL mortgages, rental cover. Taking data on rent changes and initial rental cover, an estimate of indexed cover can be derived. The most risky mortgages will be the ones showing the combination of rental cover below 100 per cent and the property in negative equity.

Turning to the impact of economic activity changes, an examination of unemployment levels on a regional or more local basis will help uncover geographical areas that are particularly exposed to difficulties in letting property and tenants failing to meet rent payments. For example, unemployment over the course of this recession has weighed heaviest on the young, meaning that neighbourhoods heavy in private rented flats to non-students are likely to be worst affected.

The approach gives an updated view of the current state of the portfolio. It can then be the basis for scenario analysis, to understand the robustness of the portfolio to adverse economic events.

An example...

An informative exercise is to apply our first modelling fundamental, taking our *Equity/Income Cover Viewpoint* and looking at the impact of three scenarios for interest rates, rents and

house prices on some BtL loan types. In this example, we are only considering our first fundamental.

All scenarios are based on a return to pre-crisis standard variable interest rates, the key concern we want to think through. We then vary rental house price experience to understand their combined impacts. We take three loan types, ‘standard’, ‘medium’ and ‘high’ risk, based on Loan-to-Value at (LTV) and Rent-to-Income (Income cover) as January 2008, just before the crisis kicked in.

The ‘average’ scenario represents the average rent and house price experience of UK property since January 2008, taken from findaproperty.com and Nationwide Building Society data, respectively. The ‘worse’ and ‘extreme’ scenarios are there because important segments of the BtL market will have had an experience worse than the average for the UK. It is really the most exposed parts of BtL lending books that we would want to focus on, as these are where most losses will come from.

The results are shown in the table below, with red cells indicating either negative equity or the rent not covering the mortgage. Two red cells for one loan type indicates the particularly unpleasant combination of negative equity and subsidising the mortgage (for convenience, let us christen this situation ‘the undesirable bucket’). The good news is that standard mortgages don’t quite tip into the undesirable bucket even in an extreme scenario, although they are clearly at the margins.

There is no doubt, however, that the situation of even the standard group gets quite bad, with income cover and indexed LTV getting to 110% and 94% respectively in the ‘worse’ scenario. Things start to look pretty messy for the medium and high risk loan types, however. In the ‘worse’ scenario, which is far from outlandish for some BtL lending, the high risk group is firmly in the undesirable bucket and the medium is at the margin, with things looking considerable worse in the extreme scenario.

Table 1: Scenario testing for BtL mortgages

Loan Type	Measure	Starting Position	Scenario for Rental and House Price Changes		
		(as at Jan 08)	Average: Rent -7% HPI -12%	Worse: Rent -12% HPI -15%	Extreme: Rent -18% HPI -20%
Standard	Income Cover	125%	116%	110%	103%
	Indexed LTV	80%	91%	94%	100%
Medium Risk	Income Cover	115%	107%	101%	94%
	Indexed LTV	85%	97%	100%	106%
High Risk	Income Cover	110%	102%	97%	90%
	Indexed LTV	90%	102%	106%	113%

Undertaking such an analysis for each account and then matching the results to observed default rates from similar equity and income cover characteristic loans allows portfolio level default and loss metrics to be calculated. If we then bring in our second modelling fundamental, linking segment level default rates to unemployment to proxy for the effect of economic activity changes on void rates and personal insolvencies, we can really start to understand BtL portfolios and how they relate to economic circumstances.

To conclude...

Current methods of understanding risk of BtL lending have been shown to be inadequate. Taking the experience during this recession is still not good enough because of the radical interest rate cuts which have saved the asset class. Current models have two principle problems. Firstly the assessment of risk has been too 'point-in-time', focusing on ranking risk between potential customers at a good point in the economic cycle. Secondly, risk managers need to really put themselves in the shoes of a Buy-to-Let borrower and think through their situation before structuring and developing models.

The bottom line is that we can, and must, do better on understanding BtL risk and its relationship with the economy. An approach focused on equity, income cover and the impact of the economy can give a more accurate view of the current portfolio and enable better assessments for provisioning, collections and recoveries numbers, as well as stress testing and scenario analysis.