

## Crowd funding the next housing market liquidity shock\*

### Introduction

Buy-to-let (BTL) equity based crowd funding is embryonic at the moment, but a combination of cyclical and structural factors may propel it into the mainstream as an alternative savings vehicle.

To the extent that BTL crowd funding does become more mainstream and is used as an alternative savings vehicle, it could constitute a new form of liquidity shock to the housing market, exacerbating house price volatility and in doing so, bring with it new policy challenges from a monetary and macro prudential policy perspective.

The purpose of this note is not to critique the advent of BTL crowd funding, or offer anything in the way of concrete policy recommendations at this stage. Rather, it is to highlight the possibility that this sector, rather than the banking system, may well be the source of the next liquidity shock to the housing market. In this sense, the next boom could be equity rather than debt driven.

Section 1 begins by explaining the concept of crowd funding, section 2 outlines how crowd funding works in relation to BTL property and section 3 explains why BTL crowd funding is different from previous forms of collective property investment. Section 4 discusses the substitutability between cash savings and BTL crowd

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\*This is an article on equity based buy-to-let (BTL) crowd-funding. This is the sole focus; not commercial property, not property development, not peer-to-peer lending. These other topics may be followed up with separate notes in due course. We use the word 'shock' in the textbook economics sense i.e. to mean an exogenously driven change. 'Shocks' can be big or small, positive or negative. They do not per se mean something undesirable or bad. As will hopefully be clear to readers, RICS does not take a view on crowdfunding in general or BTL crowdfunding specifically.

funding shares as a necessary condition for a liquidity shock to take place, section 5 attempts to illustrate the scale of any potential liquidity shock under different scenarios, and finally section 6 ends with a comment on the possible macroeconomic and policy implications.

### 1) Crowd funding in a nutshell

Crowd funding is a strand of peer-to-peer finance, where project or venture organisers seek to raise funds directly from multiple participants. A project is listed on a website for all to see, alongside its required total funding cost and funding deadline. People who are interested in backing that project commit to funding a fraction of that cost (there is no minimum or maximum in principle), which usually involves transferring their funding commitment into an escrow account managed by the crowd funding website.

The escrow feature of a crowd funding platform usually works on an 'all or nothing' basis. If the aggregate funding commitments match the stated funding requirement by the deadline, the project receives its financial backing and goes ahead (the escrow transfers the total committed funds to the project organiser). However, if by the deadline the total funding commitments don't match the funding requirement, then the crowd funding platform's escrow returns the money to the individual backers and the project sponsors must re-evaluate (there is no reason why they can't try again).

We can see from this generic description that crowd funding is not like an ordinary e-commerce transaction. There are three crucial differences. First, crowd funding transactions not only facilitate, but by their very nature, require multiple participation



on the buy side (or sponsor side).

Second, the 'all or nothing' escrow feature means that even though money is transferred incrementally from the buy side as more people are attracted to a given project, it is held securely by a third party and only transferred to the 'sell' side if the stated funding requirement is met (otherwise it is automatically refunded on the funding deadline)

Finally, while the platform, depending on its focus, will structure the funder's interest in the transaction as either equity (this focus of this note), debt or donation, the transaction itself is not for a consumption good or a service in the ordinary e-commerce sense. Rather the transaction is for a stake in a venture or project (such as a business start-up, a community project or the building of a well in a developing country), or in the broadest sense, whether financial reward is the key objective or not, the transaction is an investment, and therefore sponsors implicitly accept the risk of failure and non-delivery.

## **2) How does it work in relation to BTL?**

As far as BTL (equity based) crowd funding is concerned, all of the platform operators that we have reviewed essentially follow the same basic model, which at its core is very simple and involves four basic stages which mark the BTL crowd funding investment lifecycle<sup>1</sup>.

First (the marketing stage), the platform offers via its website the wider public the chance to buy a portion of a specific property by a specified date if the sum of these portions reaches its stated target level (the sellers asking price). The platform operators are normally marketing the property belonging to a third party, with whom they have an agency agreement.

Second (the company formation stage), if the platform is successful in raising the requisite funds by the requisite date, a special purpose vehicle (SPV) is formed; this is what actually holds the property and its shares are what the investors hold. The SPV's memoranda and articles of association will detail exactly how it will operate and who it will be operated by over the course of its existence. The crucial point is that the terms of the SPV are offered by the crowd funding platform on a 'take it or leave it' basis; there is no scope for negotiation regarding the terms of the SPV and once it is formed, the shares allocated to investors, except in very limited circumstances, are non-voting. Investors therefore remain completely passive; they have no say in the running of the SPV or its charges. This of course has many advantages, not only to the crowd funding platform operators who by virtue of this arrangement are positioned to run a scalable operation, but also to the end investors, who do not have to get directly involved with the management of the SPV or the property.

Third (paying dividends stage), the SPV - as a company - then has to be administered and the actual property has to be managed (and of course tenanted). The SPV's articles of association will govern the specifics of who takes on what responsibility, but normally the platform operator administers the SPV and delegates property management to a third party or sister company. While the SPV is active, rental income that is derived from letting out the property is distributed by the SPV (at predetermined intervals) as dividends to its shareholders.

Finally (capital gains and company dissolution stage), the time will eventually come where the SPV will seek to realise the capital gains it has presided over whilst



holding the property. It does this by divesting its sole asset by selling it back on the open market, distributing the proceeds of the sale back to its shareholders and in the final act it is dissolved. Again, different operators have different criteria governing when the company is dissolved for the purpose of realising capital gains, but this usually takes place after a certain period of time or after a certain threshold of capital gains is believed to have been reached.

The above four stages outline the basic mechanics of the BTL crowd funding investment lifecycle. How the platform operators themselves profit from this process is not the focus of this note and different operators vary somewhat in their approach. However, in very basic terms they have opportunity, depending on their terms and conditions and the SPV's articles, to charge a finder's fee if the SPV is formed, an annual management fee during the life time of the SPV and/or a share of the rental income and finally an asset disposal fee when the company is dissolved, which is normally a share of the sale price. There is no hard and fast rule regarding percentages, although most operators tend to charge a fee at each stage of the project life cycle.

### **3) How is this different from existing collective property investment schemes/clubs?**

It is legitimate to ask how different crowd funding residential property is to the more traditional collective property investment schemes (CPIs) or investment club style of investing. In many respects, at least in terms of the business operating model, they are not that different at all; they both facilitate collective ownership of property.

Specifically, 'investors' a) gain residential (or buy to let) exposure through purchasing

shares in a special purpose vehicle which holds the property, and b) at the same time they delegate management of the property back to the scheme managers or some other third party (normally a sister company). In both cases, rents are distributed as normal dividends and capital gains are realised through liquidating dividends (as per the terms in the company memoranda or post-EGM).

However, there is one major difference between the two; technology. This in turn has two major consequences: 1) speed of purchase; buying shares in a house becomes as easy as ordering a book on Amazon (or perhaps more aptly, making an online bet), which is unprecedented; 2) accessibility through lower denominations; the entry costs for people seeking property market exposure essentially collapse. One soon to launch website, [propertypartner.co](http://propertypartner.co), offers access for as little as £50.

Purchases via traditionally focused CPIs, because they involve forms, signatures and essentially admin for the potential investor, have a natural built in transaction deterrent. Meanwhile, because the share allocation process is administered manually on the sell side, they tend to impose limits on the minimum purchase size (because processing forms and cheques costs time and money).

Speed and accessibility are in principle positive developments. However, if they vastly broaden the mass appeal of property investing, BTL crowd funding platforms acting could be used as super low cost/high speed market entry mechanism.

### **4) Property as an alternative savings vehicle**

It is fairly well established in the literature that liquidity shocks, through financial



integration, financial liberalisation and financial innovation, can result in higher house price volatility. However, much of the policy focus on managing this volatility has been on the debt side of the equation. BTL crowd funding is different in that the extra liquidity it may bring to the housing market would be equity driven.

How this plays out with the wider economy and changes the policy calculus is difficult to predict with any degree of certainty, and we wouldn't pretend to have all the answers. The effects in the end may prove to be totally benign. However, there is some evidence in the literature which suggests there may be risks worth considering.

At the heart of the matter in this specific case is the extent to which crowd funded shares in BTL property are perceived by the public to be savings substitutes. This seems quite plausible given that housing, at least in the UK, is considered by many to be an effective store of wealth over the long term. One positive implication of this is that crowd funded BTL shares could be used by first time buyers as a vehicle to bridge the equity gap while they are saving for a deposit. However, the more substitutable they are considered to be, the more liquidity is likely to flow into the housing market and the more volatile house prices have potential to become.

There are two factors at play here. The first is a structural issue regarding the nature of the crowd funding transaction process. Specifically, this enables one in principle to make relatively low denomination housing investments, which has never been possible before. So in this sense, as housing assets become divisible they may attain, perhaps for the first time, some new monetary characteristics.

The second issue is cyclical, regarding the

level of interest rates and the return one can expect on cash vs buy-to-let property. Specifically, low interest rates, particularly over an extended period, tend to encourage a search for yield into higher carry assets. The larger the spread between the expected return on buy to let and cash, the more of a financial incentive to rebalance portfolios from the latter to the former.

Interest rates in the UK at the time of writing remain at 0.5% and even though they are widely anticipated to start rising over the next year, the Bank of England itself is providing guidance that rates are unlikely to exceed 3% over the medium term i.e. about 2-3 years. Indeed, central banks, not just in the UK, have made much about the 'new normal' in interest rates post the financial crisis, in that they are likely to remain low by historical standards for an extended period of time, due to persistent headwinds (deleveraging in the public and private sector, lower trend productivity) even after they finish normalising.

These two factors - low deposit rates for a prolonged period of time combined with more divisible housing assets - do not guarantee there will be a flood of liquidity from cash savings into the housing market. But they do suggest, in our view, there is a non-negligible possibility of this scenario playing out over the medium term. Much stranger things have happened in this digital age of non-yielding alternative money substitutes, such as bitcoin, over relatively short periods of time.

## **5) How big could this liquidity shock be?**

Any estimate of the size of this potential liquidity shock is subject to considerable uncertainty. Our approach at one level is



quite crude and we steer clear of being overly precise. However, our methodology helps to underscore arguably the more important point, which is that relatively minor changes in households' cash portfolio weighting could - if BTL crowd funded shares are viewed as alternative savings substitutes - have the potential to generate significant liquidity shocks to the housing market.

Our methodology has three stages: 1) getting a ballpark sense of the total shock under different scenarios; 2) determine a plausible distribution of any given shock (it is unlikely to be evenly distributed) over a range of time horizons and then; 3) to get a sense of its relative importance, comparing this to the net liquidity that could be expected to be injected into the housing market by lenders. A final factor, although not explicitly part of our methodology, is determining when this process will effectively begin. We don't know for sure, particularly because the two next generation platforms (Property Moose and Property Partner) have not (at time of writing) fully launched but we are assuming it will start in early 2015, once their marketing kicks in.

We are going to steer clear from estimating the knock on impact this may have on house prices (forecasting house prices in relatively normal times is hard enough), other than saying this type of liquidity shock obviously creates upside risks that may need to be managed.

## Stage 1 - getting a ball park sense of the total shock

The starting point is to determine both the size of the aggregate household cash savings pot and what portion of this sum could shift into property through BTL crowd funding. Gauging the size of aggregate household savings – and then inferring from

this sum which part is relevant for our purposes - is relatively straightforward using official data. However, estimating the proportion of this savings pot that might be shifted into the housing market via BTL crowd funding is not straightforward. Rather than picking a number out of thin air, we try and make a more general point.

The starting point is to gauge the size of 'relevant' household savings. For our purposes, relevant household savings are interest bearing deposits, because these are the savings where the depositor expects to earn a return and therefore these are the savings that might be moved into higher yielding substitutes; hard currency and non-interest bearing deposits need to be taken out of the equation. Total household savings, excluding notes and coin (£55bn) and non-interest bearing deposits (137bn), amount to £995bn. This is comprised of interest-bearing sight deposits (£535bn), interest-bearing time deposits (£231bn) and cash ISA deposits (£229bn). So £995bn is our starting point.

The next step is to calculate what different portfolio shifts would look like, which is presented in the table1 (next page):

**TABLE 1 - alternative portions of household savings**

|  | 0.1%       | 1.0%      | 2.5%        | 5.0%       | 10.0%      |
|--|------------|-----------|-------------|------------|------------|
|  | £0.9952 bn | £9.9526bn | £24.8815 bn | £49.763 bn | £99.526 bn |

We do not have a central case in terms of the most likely scenario. There simply is not enough evidence to choose a number with a high degree of confidence. However, we assume that 5% is a relatively small share of household savings (equivalent to 1 in 4 people using BTL crowd funding and parking 20% of their savings into residential

property). Indeed, it could be viewed as quite a conservative estimate when set in context, considering that: a) 3 in 4 people already access the internet daily in the UK and buy things online and b) the home ownership rate is 64%, indicating that housing is already a widely held investment.

If we use this 5% figure just for illustrative purposes only, the more important point becomes clear. Specifically, even relatively small shifts in households' cash portfolio weighting could have the potential to generate significant liquidity shocks as far as the housing market is concerned. As the table 1 shows, 5% is roughly equivalent to £50bn.

## Stage 2 – estimating how it may be distributed over a given time period

The next step is to illustrate how any given liquidity shock - in our case we run with £50bn - may be distributed over time. Just as we can't predict with any degree of certainty the size of the total liquidity shock, we can't forecast its length. Consequently, we look at how £50bn may play out over different time horizons ranging from 3 - 5 years, which strikes us as reasonable.

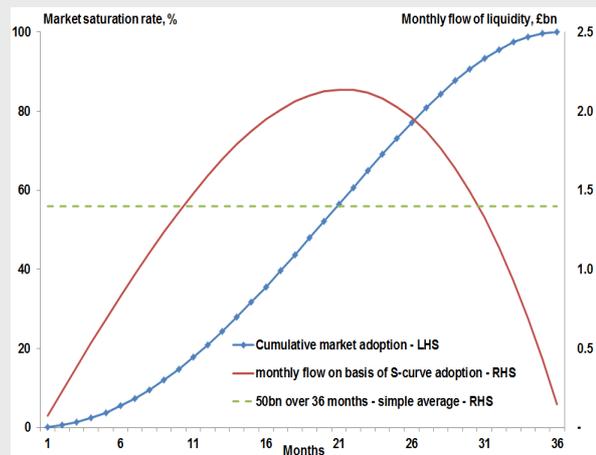
For illustrative purposes we begin with the 3 year scenario. It is tempting to then infer that £50bn over three years equates to £1.4bn per month of extra liquidity flowing into the housing market. However, it is unrealistic to assume we will move overnight from a state where practically no one has heard of BTL crowd funding to a state where we are pumping in £1.4bn per month out of our savings into the market.

One way of approaching this is by assuming that the take-up of BTL crowd funding follows an S-shaped path over time. The S-curve is the standard framework for

mapping out the process of technology diffusion i.e. market adoption of a new technology. At the most basic level it involves three stages; 1) slow but gradually accelerating take up initially by a first-moving minority; 2) followed by rapid take up as the proposition gains widespread acceptability; 3) followed by a deceleration as late comers and slow adopters eventually enter the fold. When take up is plotted cumulatively over time, this produces the classic S-shaped curve.

The results of an S-shaped adoption process, assuming only £50bn over a 3 year period are mapped out in chart 1.

**CHART 1 - crowdfunding take-up based on s-curve diffusion process**

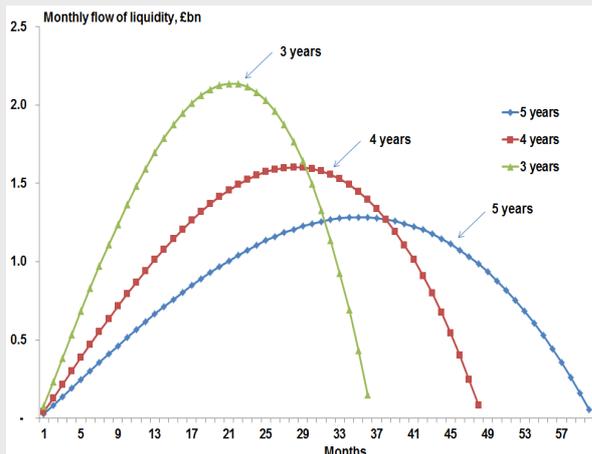


We can see that what looks like a trickle of liquidity at the beginning of this process at less than a £100m per month, rapidly increases, peaking at £2.1bn before dissipating in year 3.

The three year time horizon is a useful starting point to illustrate the diffusion process, but we aren't wedded to this scenario. In chart 2 we illustrate the monthly flow profile of a £50bn shift over 3,

4 and 5 years assuming that profile follows the same s-curve path.

**CHART 2 - crowdfunding take-up under alternative time horizons**



By thinking about the problem in this way, it becomes clear that the larger the asset allocation shift and the smaller the time period over which this takes place, the larger and potentially more disruptive the liquidity shock is likely to be at certain points in time.

Stage 3 – determining how significant this really is

With a range of plausible outcomes in hand, we are now in a position to determine if they are actually material. One, albeit simplistic, way to do this is to compare our estimates to monthly mortgage liquidity.

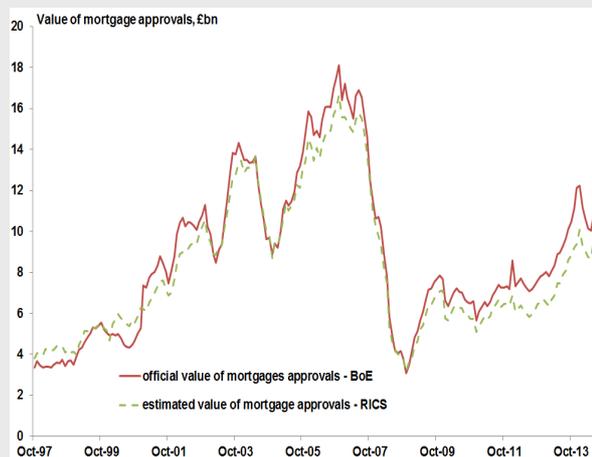
Data on mortgage lending is published on a gross (before repayments) and net (after repayment) basis. For our purposes, it is probably more appropriate to focus on the gross figure, because this is the sum that actually flows into the housing market.

However, the house purchase breakdown in the official gross mortgage lending data only

dates back to January 2013. The CML data provides a slightly longer history, but this only dates back to 2007. One way around this is to focus on the official data on the total value of mortgage approvals, as this should in theory be roughly the same as gross lending for house purchase. This only dates back to 1997, but the official data on the total number of (as opposed to value) of approvals for house purchase dates back to 1993.

By multiplying the total number of approvals by the average house price (we use the Nationwide data), and then reducing it in size by 25% to reflect the average deposit requirement, we arrive with an estimate of the total value of approvals. Comparing this estimated series with the official series shows that while the two aren't exact, the former is quite a good proxy of the latter, as illustrated in chart 3.

**CHART 3 - value of gross mortgage approvals**

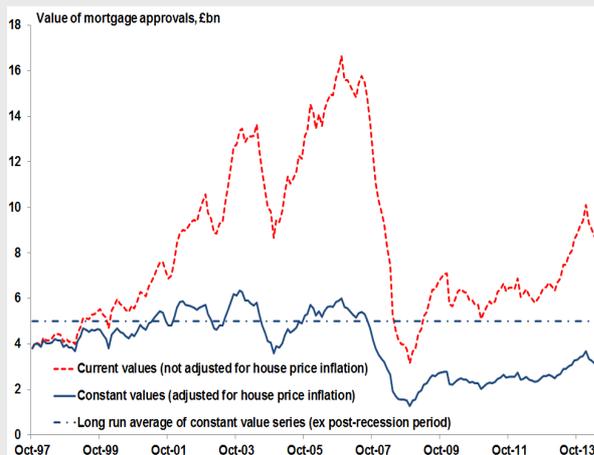


However, this is not the end of the story. Comparisons of gross mortgage lending with our estimated monthly liquidity flow projections (generated by BTL crowd funding) are not like-for-like. This because our gross lending series doesn't yet control

for house price inflation, which means that £1bn of mortgage lending today is not the same as £1bn ten years ago. To control for this, we deflate the gross mortgage lending data by house price inflation, and then we deflate our estimated monthly liquidity flow projections by the present-day deflator, so that in effect, both series are reduced to October 1997 levels.

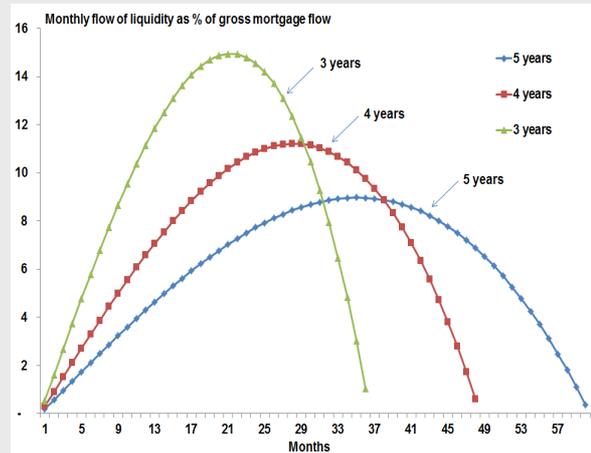
On the basis of these calculations, gross mortgage liquidity (for house purchase) averages (excluding the post recession period) about £5bn per month at 1997 prices (see chart 4).

**CHART 4 - value of gross mortgage approvals deflated by house prices**



Deflating chart 2 to 1997 levels and then converting it into percentages of £5bn results in chart 5 (adjacent).

**CHART 5 - monthly flow of crowdfunding liquidity as % of deflated gross mortgage flow**



What is clear is that even at the 5 year horizon, there is roughly a 2 year period where the extra liquidity flowing into the market is around 5% to 10% of the normal amount. If we shift to the left of the chart to the shorter time horizons, we can see that a portfolio shift, out of cash, of only £50bn, which in the grand scheme of things is little more than a rounding error as far as total household savings are concerned, constitutes in relative terms a significant amount of extra liquidity into the housing market.

## **6) Possible macroeconomic and policy implications**

Should BTL crowd funding induce an equity (or savings) driven liquidity shock to the housing market along the lines we have illustrated, potentially exacerbating house price volatility in the process, this is likely to also have macroeconomic and policy implications, both monetary and macro prudential.

First, a more volatile housing market is likely to result in a more uncertain

economic and therefore monetary policy (or interest rate) outlook. In this respect, to the extent that the housing market will have more of a bearing on the inflation outlook, it could feature more prominently in monetary policy discussions and decisions.

Second, the weight of extra liquidity likely creates upside risks for house prices, further stretching affordability and the balance sheets of those looking to buy directly. To the extent that mortgage lenders are willing to accommodate this, macroprudential policy may have to be put on a permanently tighter footing, perhaps through lower maximum LTI caps.

Finally, to the extent that crowd funded BTL shares do take on monetary characteristics, as far as a store of wealth and divisibility is concerned, they risk blurring the line between monetary and macro prudential policy. Specifically, lower interest rates may encourage a more vigorous search for yield into the housing market and vice versa and in this sense, macro prudential considerations may end up constraining monetary policy.

None of the outcomes above may crystallise. Indeed, even if BTL crowd funding does begin to work its way into the mainstream as a facility for parking cash, its macroeconomic consequences may nevertheless be benign.

Be that as it may, we do think that the chances of the kind of outcomes described above will increase along with popularity of BTL crowd funding. This in turn raises new issues, particularly on the macroprudential policy side. In the context of the housing market this has hitherto and quite understandably, only really had a debt focus. However, if BTL crowd funding does gain in popularity, this would leave the current macroprudential policy arsenal as

looking somewhat lopsided and may necessitate the development of a more balanced approach going forward that also sees equity focused measures as part of the policy response.

## **Conclusion**

BTL crowd funding, although barely on the radar of most savers and investors presently, could quite plausibly gain in popularity as an alternative savings vehicle over the next few years. Its financial proposition is compelling.

To the extent that BTL crowd funding does gain in popularity and is used as a savings vehicle, it could constitute a new form of liquidity shock to the housing market, exacerbating house price volatility and in doing so bringing with it new policy challenges from a monetary and macro prudential policy perspective.

As far as policy recommendations go, the important point is not to pre-judge the situation. Sound policy has a robust evidence base and in the case of BTL crowd funding, there is very little hard evidence to go by at the moment. Households may not turn to BTL crowd funding as an alternative venue to park their cash. And even if they did, this may not necessarily result in a more volatile housing market. The best course of action at this stage from a policy making perspective is to watch this space.

However, it is also fair to say that that the financial and economic stability risks potentially connected with BTL crowd funding will probably rise with its popularity. One consequence of this may be that macroprudential policy in the future may have to adopt a more balanced approach vis-à-vis equity driven liquidity.



## **Footnotes**

<sup>1</sup> In the UK there are only 2 domestically based BTL crowd funding platforms that we are aware of (propertymoose.co.uk and propertypartner.co) and a number of other operators that try to emulate the basic idea of multiple buyer participation but don't actually use crowd funding online transaction technology in the true sense (crowd2let.com, thehousecrowd.com, propertycrowdfunding.org.uk, crowdahouse.com).

