How big a problem is land 'hoarding'?

A follow up from my post on Friday about whether ending land hoarding will help solve the housing crisis.

I've finally had a chance to take a look at the report underlying the headline figure - that councils have provided planning permission for 400,000 homes that have yet to be built. Some thoughts:

There were 399,816 unimplemented units as of December 2011 (down, from 499,873 in March 2008)

Unimplemented units are either unstarted or under construction. Of the 399,816 headline figure 37% are unstarted (down from 47% in 2008). Units under construction make up the other 63%. In terms of numbers of units that equates to around 150k units unstarted, around 250k under construction.

On average, it takes 10 months from getting permission for development to start and then another 15 months for completion. In 2011/12 planning permission was given for 135,179 units (down from 187,605 in 2007/08). Let's say 130k a year for the last two years which equates to 10.8k per month.

So at any point in time we might expect around 110k units to have permission, but not be under construction. I'm not sure how to square that with the 150k figure quoted above - perhaps the point in time sampling as of 31 December 2011 tends to overestimate the average. Let's imagine we could reduce the average delay to start from 10 months down to it's 2007 figure of 7 months. That gives around 30k additional units (or 45k units if we use th higher 150k figure from the report).

If it takes 15 months from start to completion, then at any point in time we should expect around 162k units to be under construction. Again, I struggle to square this with the 250k figure reported above. Again, let's ignore that and imagine reducing the average length of time to completion back to it's 2007 figure. The total time to completion back then was 20 months as compared to 25 months now. 3 months of that is accounted for by additional time to start, so that means we would need to take 2 months of current time to completion, reducing it from 15 months to 13 months to get back to figures comparable to 2007. Using my 162k figure (based on 10.8k permissions per month) this gives around 21k additional units (or 33k if we use the higher 250k figure).

So if we had time to completion from permission running at levels seen at the height of the boom we would have somewhere between 51k and 78k additional units. That doesn't sound that significant in the grand scheme of things (especially when you consider that the drop in total permissions from 50k per year will undo all of this 'gain' within the next 12-18 months).

I should also note that I've ignored the impact of stalled sites (which I assume are driving up the average time to completion - and which government is already trying to do something about). I also have no idea if 7 or 10 months stock of permissions is more suitable for developers. Finally, I have no idea whether we should be focusing on bringing down the average time to completion by focusing on developer productivity or by trimming the right tail of sites that are being hoarded by developers. What I do know is that 400,000 is certainly not a good estimate of the amount of 'hoarding' that may be going on.