

Homebuilding market study

Annexe E - Study investigating financing for homebuilders

KPMG

September 2008

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1 EXECUTIVE SUMMARY AND CONCLUSIONS

1.1 This study investigating the financing of homebuilders is part of the OFT's broader market review of homebuilding in the UK. The work aims to:

- provide a summary of the financial dynamics of the homebuilding sector together with the range of funding models that are used
- review land pipeline and financial implications with a view to understanding the requirement for holding a land bank, and
- consider whether any material financing constraints exist in the sector, particularly with regards to the delivery of a larger number of higher quality homes.

1.2 The work was conducted between February and April 2008, over a period in which homebuilders have had to deal with a very different environment than that experienced over the last decade. Where relevant we have described the historic situation and also tried to consider implications of the current market (see 2.23 – 2.24).

1.3 This report has been structured as an appendix to the OFT's study covering the broader market review of homebuilding in the UK and should therefore be read as such rather than as a standalone document.

Financial implications of the land bank

1.4 A pipeline of land is essential to a homebuilder's ability to maintain build and sale programmes. The time lag and uncertainty involved in obtaining planning consent and building are such that a land bank will naturally span over a number of years. (See 4.22 – 4.27 for further details.)

1.5 Land may only be developed when planning permission has been granted. Since it is uncertain how long the planning process will take, homebuilders tend to link payment for land to the granting of planning permission. This reduces the risk that money is paid for the land far in advance of any sales receipts (that is, that capital is 'locked up' for a

long period). It also favours land owners who benefit from the increase in land values that tends to come as a result of obtaining planning permission.

- 1.6 As a result most land is paid for in full only after planning permission has been gained. Land may be secured through conditional contracts, under option agreements, on the condition that planning permission will be obtained, or purchased in the open market with planning permission already granted. There are a number of variations on payment of full land value before construction begins, which may result from commercial negotiations or the specific circumstances of the transaction (see 4.6 – 4.11 for explanation).
- 1.7 Land without planning permission may be purchased as longer term 'strategic land' and be promoted through all stages of the planning process by the homebuilder.
- 1.8 Some homebuilders specialise in a particular type of residential (or mixed use) development (see Figure 28); however the scarcity of residential land means that the majority of homebuilders will retain a mix of sites.

Definitions and role of the land bank

- 1.9 In general there is a lack of published information about the size and type of land held in land banks. Even where information is disclosed, there is a lack of consistency in definitions, which means that different homebuilders classify and report the size of their land banks in different ways (for further details see 4.31 – 4.34).
- 1.10 Notwithstanding ambiguities around definitions, the length of reported land banks has increased among listed homebuilders in recent years (see 4.41 – 4.43).
- 1.11 Several factors may account for apparently longer land banks, including:
 - longer planning timescales
 - focus on larger sites which are built in phases

- greater focus on apartment schemes with a longer build to sale period
 - greater complexity of schemes (for example mixed use / regeneration) which tend to take longer to receive planning consent, and
 - merger and acquisition activity.
- 1.12 Interview feedback suggests that the total time involved in obtaining planning permission is increasing. Even though the planning decision itself may be slightly faster than in the past (that is, the time elapsed from submission of an application to planning consent), a number of interviewees commented on additional time required in advance of submitting a planning application. This will have an impact on the bank of land without planning permission that is required to ensure adequate conversion to land with planning permission, ready for development. (See 4.25 – 4.27 for details.)
- 1.13 Most homebuilders look to start work on site as soon as possible to avoid the risk of losing profit through the holding costs of land (see 4.27 – 4.28). Costs associated with providing social housing and complying with building regulations are taken into account in price negotiations when acquiring land; however holding land for longer than necessary exposes the homebuilder to the possibility of additional regulatory costs.
- 1.14 In a rising market, where land values are increasing, holding land can result in additional profit. However this is not without cost in terms of money tied-up, any maintenance costs and the risk of loss in value through changes in regulation.
- 1.15 Large sites give the impression of a long land bank; however the need to stagger development of the site into different phases means that for practical purposes the short term developable land bank could still be relatively short. Larger developments are phased for various reasons including topography, the time to achieve planning permission, logistics and access, capital lock-up, sales rate and market demand.

Financing of different types of developments

- 1.16 The characteristics of different sites and developments have differing implications for working capital. A typical development is capital intensive, as payment for land and the costs of land holding, site preparation and building all precede cash receipts from sales (see 5.1 – 5.3).
- 1.17 Aside from the characteristics of the site (greenfield or brownfield); size of site; and type of development (houses, apartments or mixed use), a range of other factors may influence the timing and size of cash flows. Mitigating these risks is a key requirement for homebuilders. Homebuilders try to avoid relying on any one site for a large share of their production in any one year. (See 5.4 for more information.)
- 1.18 Some of the benefits and risks of different types of developments are as follows (see also Figure 21; 5.7 – 5.9):
- Greenfield sites (see Figures 23 and 24) are typically technically and commercially more straightforward; however there may be challenges involved in securing the land (in a competitive land market) and in obtaining planning consent.
 - Brownfield sites (see Figures 25 and 26) tend to be technically and commercially more complex, with uncertainties linked to the scale and costs of any groundwork and remediation. Given the Government's target for 60 per cent of all new builds to be on brownfield land, it may be slightly easier to obtain planning permission in these cases, albeit there are often more parties involved and these sites are more likely to be apartment schemes rather than houses.
 - Large sites have implications for capital lock-up, linked to the cost of the land and the time taken to develop the site. This may be alleviated in part through phasing. There are also benefits to be gained from economies of scale on site overheads.

- Small sites are accessible to a wider range of homebuilders, as there is a lower capital outlay up-front and they are less likely to attract a requirement for affordable housing.
- Housing developments, as opposed to apartment developments, are the preference of many homebuilders as they are technically straightforward and therefore faster to execute following planning consent; they also give scope for phasing (reducing capital lock-up). Most importantly sales risk is generally lower since anecdotally the shortage of houses is more acute than apartments.
- Apartment developments are technically and commercially more complex than housing developments, with capital lock-up linked to inability to phase sales. In addition, there is greater exposure to uncertainties in demand, especially if targeting investors in the buy to let market. However, anecdotally, these higher density developments may be more likely to obtain planning consent, particularly on brownfield land, as they contribute to local authorities' density targets. The shift to a greater number of apartment developments will have put additional pressure on homebuilders' working capital.
- Mixed use developments (see Figure 27) are the most technically and commercially complex schemes. Homebuilders tend to view commercial property as needing a different skill set and hence, unless it accounts for only a minor percentage of scheme gross development value (GDV), will look to partner or back-to-back that element with a commercial specialist. Given current planning policy these schemes may be more likely than others to obtain planning permission. However increasing the number of mixed use schemes may create a barrier to entry to many smaller homebuilders.

Homebuilder funding structures

- 1.19 Homebuilders' willingness to take on debt reflects various operational risk factors. For instance: high capital investment is required on sites before sales can be made; a drop in sales prices or a slowdown in the

rate of sale has a disproportionate impact on earnings and capital employed (see Figure 8; 2.25); and in some instances, particularly apartment developments, it is not possible to slow build to reduce cash outflows.

- 1.20 Homebuilders' funding strategies necessarily reflect these operational risks. As a result there is a rational decision in much of the sector to gear at what appears to be a relatively low level (depending on the risk appetite of management and shareholders). Gearing (debt) levels at year end are also typically not indicative of peak debt, which may be significantly higher (see 6.32 – 6.34).
- 1.21 All homebuilders, regardless of their ownership structure, aim to optimise shareholder financial returns – generally a mix of yield and capital gain over cost of capital. However they vary significantly in their approach and level of gearing (see 6.3).
- 1.22 In general large listed homebuilders are less geared than privately owned homebuilders who are, in turn, less geared than private equity / financial institution-backed homebuilders. This is generally driven by risk appetite, level of retained earnings, dividend yield profile and level of growth in the business. (See 6.12 for details.)
- 1.23 In terms of debt funding, banks will lend against viable developments with planning permission (typically at the stage of outline planning permission). Banks may lend against land without planning permission on a portfolio basis, typically at a reduced loan to value ratio. This is less likely to be made available to small homebuilders and will generally have a greater equity requirement in these cases. (Further details are provided in 6.4 – 6.11.)
- 1.24 The more assets a company has, and the larger its portfolio of land and other assets over which it can spread its risk, the less risky it is for a bank to lend it money and so the terms and conditions are more favourable than for a smaller firm with fewer assets.

- 1.25 There are a number of alternative, more expensive sources of funding, such as 100 per cent site funding, which are typically available for smaller schemes.
- 1.26 Large listed homebuilders: Notwithstanding the difference between year end gearing and peak gearing, which is more accentuated in listed homebuilders, they tend to have lower gearing than homebuilders with other ownership arrangements. This reflects the maturity of the businesses and the level of retained earnings. Management teams tend to be focused on consistent earnings and share price growth and therefore they restrict gearing to minimise exposure in the event of a slowdown in the market (as is currently being experienced). (See 6.13 – 6.21 for details.)
- 1.27 Homebuilders with retained earnings and low gearing are able to buy land rapidly (which may result in better deals); can deal with a housing market slowdown when that part of the cycle returns; and have sufficient headroom to cover peak funding requirements. When all these factors are considered, listed homebuilders may not be considered as ‘under-gearred’, merely rational.
- 1.28 Privately owned homebuilders’ funding will depend on the level of retained earnings. Low equity reserves may force the developer to fund working capital through more expensive equity partnering or higher gearing. Banking terms are typically less favourable as their banking covenant is weaker (see 6.22 – 6.29).
- 1.29 Private equity and financial institution backed homebuilders have emerged over the last few years and have focused on re-leveraging the balance sheet as a means of funding the transaction. Higher gearing means that risk is increased and therefore the equity returns required are likely to be higher. In order to avoid vulnerability in a downturn it is crucial for these homebuilders to have flexible funding (see 6.30 – 6.31).
- 1.30 The higher gearing of private equity backed or other similarly financed homebuilders is effective in stable or growing markets; however this

financial structure can be more of a constraint in housing downturns, as a slowdown in sales generally results in an accentuated impact on earnings and gearing. This may be mitigated by a slowdown in the build out rate and, in some cases, by reducing the rate of land acquisition. Due to the timescales involved any slowdown may have an impact on the business for some years.

- 1.31 As discussed, large homebuilders have, from force of market circumstances, adopted a financing model with few financing constraints; although equity return requirements reflect the cyclicity of the sector, as do the relatively conservative headline levels of gearing.
- 1.32 Small homebuilders (especially new entrants to the market) are more equity constrained, which leads to a perception of debt constraints. Where current shareholders do not have sufficient equity to inject, particularly in homebuilders targeting growth or with limited retained profits, typical banking terms in the sector may lead to capital constraints.

Current market

- 1.33 The current market conditions are forcing homebuilders to focus on cash management even more than usual. Lower sales and reservations approximately 30 per cent lower than previous years are having a direct flow through to volumes of completions in 2008.
- 1.34 Interview feedback suggests that, given the impact that lower sales has on net debt, most homebuilders are looking to mitigate the reducing cash flows. These include rationalising costs and overhead, postponing or reducing land acquisition and slowing build on sites (to avoid incurring build costs to create temporarily unsaleable units). The lead times involved in the sector will result in reduced housing completions in 2008 and 2009.

2 BACKGROUND AND HOMEBUILDING MARKET CONTEXT

2.1 In June 2007, the Office of Fair Trading (OFT) launched a market study into homebuilding in the UK. It aims to understand constraints on the ability of the market to deliver sufficient quantities of cost-effective, high quality new homes.

2.2 The need for this market study has been driven by a number of issues:

- a perceived failing of the homebuilding industry to respond to the market – leading to issues in the number of new homes supplied to market
- perceptions of excessive land banking affecting supply of new homes
- customer satisfaction issues relating to the quality of new homes and the associated urban environment, and
- escalating prices and poor affordability.

2.3 The overall study will be delivered in September 2008 and is intended to recommend remedies and to feed into government policy formulation.

2.4 The OFT market study has two main areas of focus: the extent of competition in the industry and barriers to entry and expansion; and satisfaction levels of homebuyers who purchase new homes. To inform the first of these, the OFT has commissioned this study from KPMG to investigate financing in the homebuilding industry.

2.5 Specifically, the OFT requested that we consider three issues:

- i) the financing of different types of site
- ii) funding structures and the cost of capital, and
- iii) the financial implications and need for land bank.

2.6 This report focuses on private residential development rather than the provision of new social housing or the activities of commercial property developers (but includes homebuilders which may undertake limited mixed use development activity).

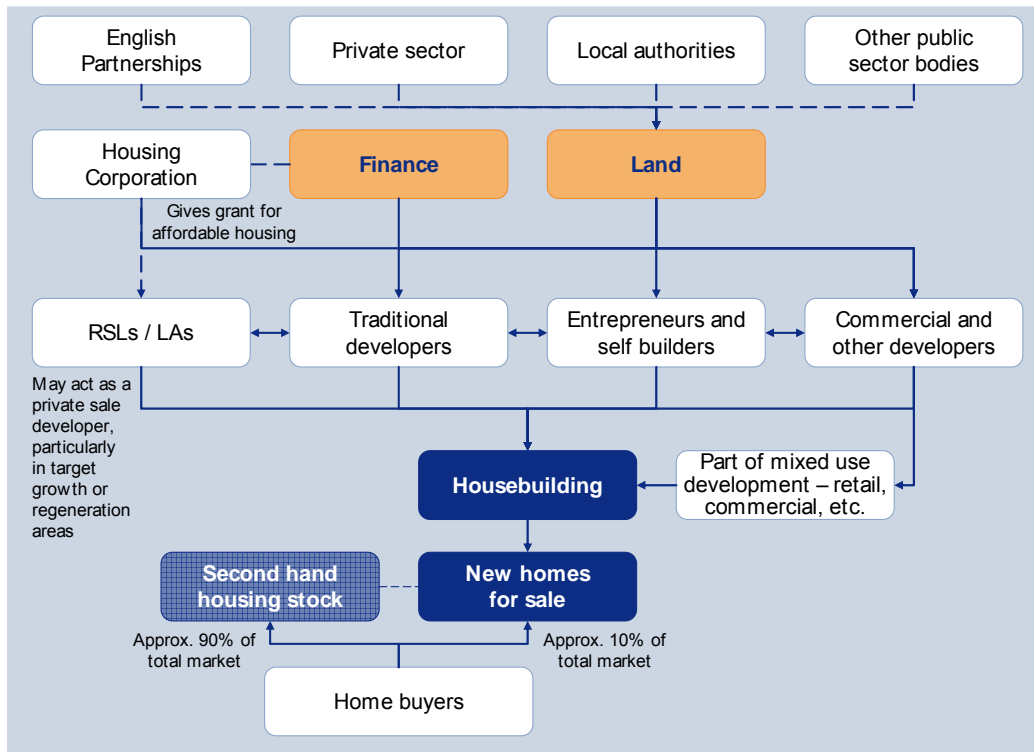
Industry structure

2.7 New build housing sales represent approximately 8 per cent of total residential transactions in the UK (Land Registry, 2007). The remainder of housing sales involve existing market stock.

2.8 New homes for sale are developed by a number of different industry participants, including:

- traditional homebuilders
- some commercial developers, as part of mixed use schemes
- registered social landlords (RSLs) / housing associations, taking development margin on private sale units to re-invest profit back into social housing stock, and
- property entrepreneurs and self builders.

FIGURE 1: STRUCTURE OF THE HOMEBUILDING INDUSTRY



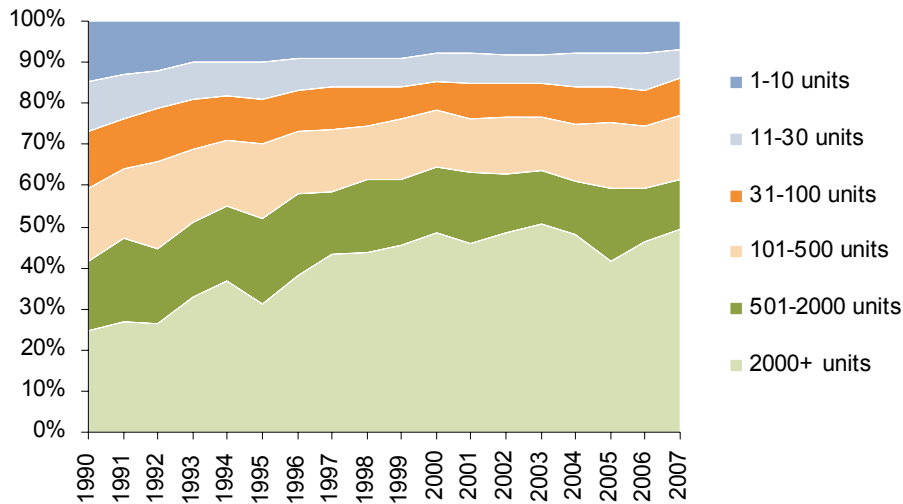
2.9 The majority of new build homes are completed by homebuilders; although RSLs are increasingly entering the market. Larger homebuilders (defined as those producing over 2,500 units per annum) account for approximately 45 per cent of the market, while small and medium homebuilders account for the remaining 55 per cent (DCLG 2007 completions for England, Scotland and Wales and company annual reports).

FIGURE 2: SEGMENTATION OF HOMEBUILDERS IN THE UK

	Listed	Privately owned	Financial institution backed
Large <i>>2,500 units per annum</i>	Barratt Persimmon Taylor Wimpey Bellway Berkeley Bovis Redrow	Gladedale Miller	Crest McCarthy & Stone
Medium <i>>500 units per annum</i>	Galliford Try Abbey Gleeson Kier McNerney Telford	Bloor Emerson Galliard Stewart Milne Wain	CALA Countryside Fairview Morris
Small <i><500 units per annum</i>	approx. 20 – 25 between 200-500 units with varying ownership types		

Source: Annual accounts and KPMG estimates

FIGURE 3: PERCENTAGE OF ANNUAL STARTS BY SIZE OF HOMEBUILDER



Note: Size of homebuilder is shown as units started per year

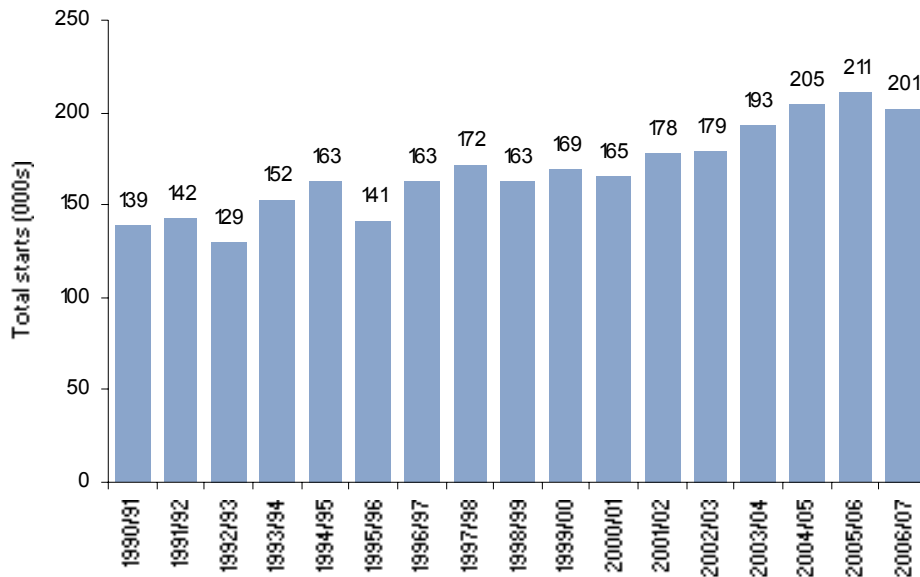
Source: NHBC

2.10 Merger and acquisition activity, particularly active in the last decade, has led to consolidation of the market with fewer larger homebuilders and a decline in the number of medium-sized players.

New build volumes

2.11 The number of starts on new build homes for private sale in the UK has increased to an estimated 201,414 in 2006/07 (see Figure 4). This is somewhat behind the Government's target for 240,000 new homes per annum by 2016; however starts and particularly completion volumes are generally expected to decline further in 2008.

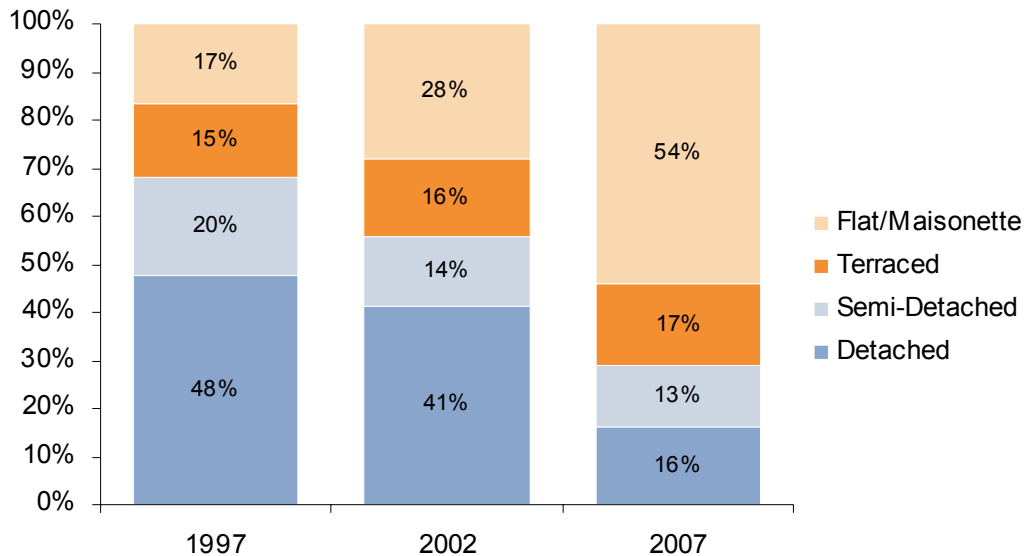
FIGURE 4: NEW BUILD STARTS IN UK: 1990/91 – 2006/07



Source: Department for Communities and Local Government (DCLG)

- 2.12 During benign market conditions housing completions are driven by housing starts, typically in the prior year. Starts, in turn, are driven by the lead time to achieve planning consent on land, along with site infrastructure / access considerations. Accordingly there is a time lag involved in growing completion volumes.
- 2.13 In the current more difficult housing market, completions are taking longer to achieve and hence demand rather than supply will have a more significant impact on volumes. Homebuilders will attempt to part mitigate the impact of this through slowing build.
- 2.14 More than half of all new homes sold in 2007 were flats and maisonettes, compared to less than 20 per cent in 1997.

FIGURE 5: NEW BUILD HOMES BY TYPE: 1997, 2002, 2007



Note: England and Wales only; 'new build' means a property that is an addition to the national housing stock

New build homes are identified from the deeds

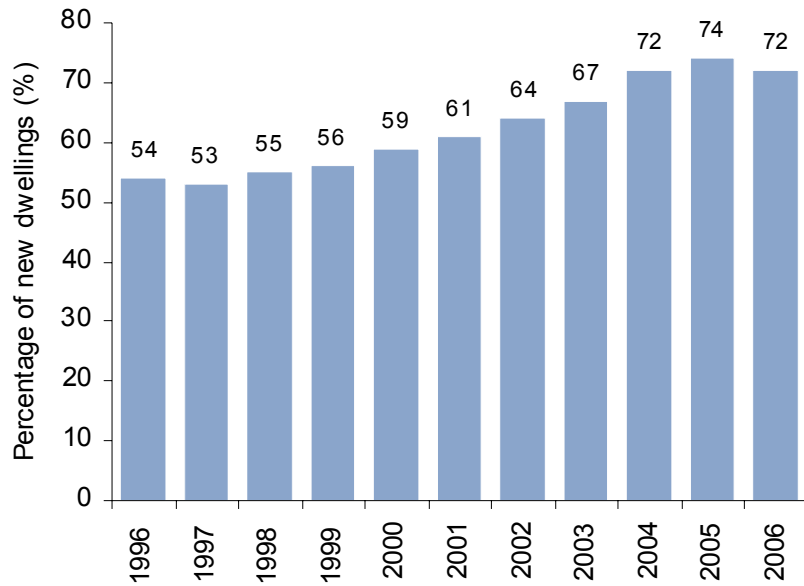
The Transfer deed plan shows that the property is a removal from a large development and the vendor is usually a developer

Source: Land Registry (unpublished data)

2.15 A number of factors have contributed to this shift:

- density requirements set out in Planning Policy Guidance 3 (PPG3) and, more recently, Planning Policy Statement 3 (PPS3)
- greater requirement for affordable housing
- increasing proportion of brownfield sites being released through the planning system (which are typically found in more built up areas), and
- more mixed use schemes combining residential, commercial and social land uses.

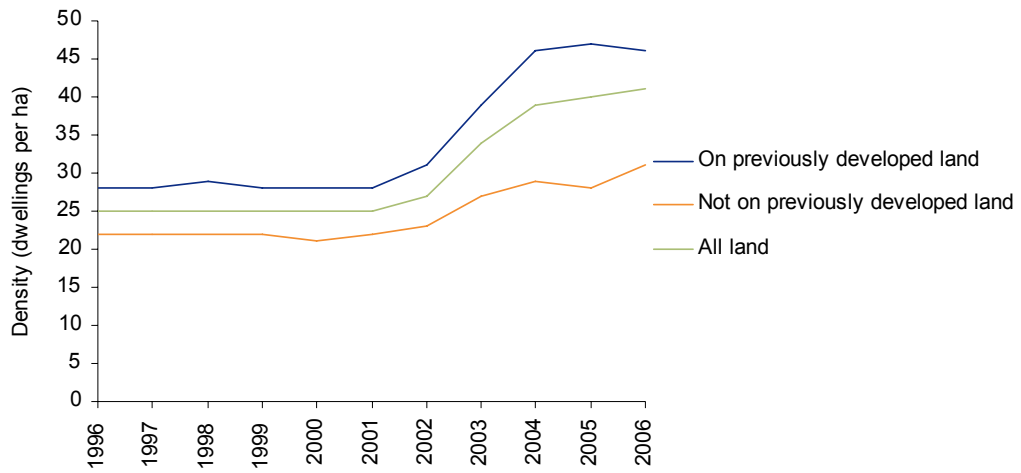
FIGURE 6: NEW BUILD HOUSING ON PREVIOUSLY DEVELOPED (BROWNFIELD) LAND



Note: Excludes conversions

Source: Department for Communities and Local Government (DCLG)

FIGURE 7: DENSITY OF NEW HOUSING DEVELOPMENTS, BY LAND TYPE



Source: Department for Communities and Local Government (DCLG)

Demand for new homes

- 2.16 Demand for housing is well documented and has been driven by a number of factors. The number of households is projected to grow by 223,000 per year until 2026 in England alone. Of these, 131,000 are attributable to adult population growth; 45,000 due to changing age distribution; and 39,000 due to increasing household formation, much of which is linked to net migration (DCLG, 'Homes for the Future', July 2007).
- 2.17 Looking at demand for homes as a whole may be misleading however, as demand and supply trends vary dramatically by location and property type. For example, over the last few years London and the South East have experienced particularly high demand, reflected in higher than average house price inflation. Equally, demand for family homes needs to be viewed separately to that for apartments: for instance apartments in Leeds, Manchester and Liverpool are reported to be suffering from a slump in demand and declining prices (interviews and The Observer, 09/03/08).
- 2.18 While long term demand is driven by macroeconomic drivers and demographic changes, short term demand is significantly influenced by issues such as consumer confidence, expectations of short term house price inflation / deflation and by the availability of mortgage finance. These latter influences are becoming apparent in the current market and may have an impact on the volume of transactions: both in sales of homes themselves and in homebuilders' acquisition of land for future development.

Impact of market slowdown (April 2008)

- 2.19 The current market conditions highlight that homebuilding remains particularly cyclical in nature, which has implications for homebuilding volumes and for how the sector is funded. During downturns in the housing market, homebuilders will tend to respond by slowing their rate of build in an attempt to preserve margins. There is also a knock-on effect on land transactions, with less land brought to market as land

values decrease to reflect anticipated declines in house prices. Equally homebuilders reduce land spend. This means that the pipeline of new homes may reduce over a number of years.

- 2.20 Homebuilding volumes have generally risen steadily over the last decade. However, the recent economic slowdown and tightening in credit conditions has led to a marked slowdown in housing transactions. HBoS recently forecast a 30 per cent drop in total housing transactions for this year and many major homebuilders have reported reductions in sales rates and forward order books of the order of 25 – 30 per cent (April 2008).
- 2.21 The cash flow set out in the figure below illustrates the impact of a reduction in selling price on the margins of a homebuilder. In the absence of mitigating factors, a three per cent reduction in house prices impacts margin by 15 per cent. Homebuilders tend to reduce sales prices as a last resort due to the impact on profit margin, as well as the impact such a price reduction might have on existing mortgage approvals for exchanges and reservations and the willingness of other buyers to transact. In addition there is a reluctance to reduce headline release prices in order to optimise sales revenues where a dealing margin exists. Incentives, rather than headline sales price, are less visible to the market and hence are less likely to impact future sales.

FIGURE 8: MARGIN IMPACT ON HOMEBUILDERS FROM ACHIEVING REDUCED SELLING PRICES

Development cash receipts and payments	Development appraisal	Actual cash flow	Decrease (%)
Sales receipts	100	97	(3)%
Land cost	(30)	(30)	-
Build cost	(40)	(40)	-
Overhead	(7)	(7)	-
Interest	(3)	(3)	-
Homebuilder's profit	20	17	(15)%

Note: A decrease in achieved selling prices results in a disproportionate decrease in the homebuilder's profit margin

Source: Interview discussions

2.22 In the current market sales completions are taking longer to achieve than during the past ten years. Homebuilders will attempt to mitigate the impact of a downturn by slowing build out rates. This reduction in sales will result in higher capital employed and higher net debt.

3 APPROACH

3.1 The approach to this study involved forming a series of hypotheses, which were developed using the knowledge and experience of various KPMG specialists who routinely work for homebuilders and financial institutions involved in the industry. We used desk research to gather evidence and refine the hypotheses; and finally we tested the hypotheses in the market, through an interview programme.

3.2 We undertook 24 in-depth interviews with a range of industry stakeholders including:

- small, medium and large homebuilders (both privately owned, private equity funded and publicly listed)
- finance providers
- registered social landlords, and
- related public sector bodies.

3.3 This report is structured in three sections:

- financial implications of the land bank
- financing of different types of developments, and
- homebuilder funding structures.

3.4 Unless indicated otherwise, all facts, figures and conclusions expressed are based on internal and external interviews.

4 FINANCIAL IMPLICATIONS OF THE LAND BANK

4.1 In order to maintain an ongoing build programme, homebuilders must ensure they have a development pipeline of land – a ‘land bank’. The timescales to build and sell homes, and also the uncertainties in planning outcome and timing, mean that most homebuilders hold a mix of land types at different stages in the planning process.

Land supply

4.2 There is a wide range of sources of land for development. Residential land opportunities are often in competition with other development uses: that is, commercial, industrial, social or retention of existing use.

4.3 The availability of land for residential development in the UK is controlled via the planning system. Decisions on planning permission are driven by the need to balance such issues as the importance of maintaining greenbelt with the need to match housing supply and demand. The complexities involved in managing these conflicting interests contribute uncertainty and delay to the delivery of additional homes.

4.4 Working within a framework set by central Government, local authorities set housing allocations through local development plans. These drive regional housing strategy for five year periods and give some clarity on which areas of land should be granted some form of residential consent. Land owners may lobby their local authority to include their land within the allocation, which could include the commissioning of various impact surveys.

4.5 Land owners that are minded to sell their land for residential use will either work up planning permission themselves or partner in some way with a homebuilder, typically through an option or conditional contract arrangement (see below). Costs, timescales and skills required may encourage this early partnering with a homebuilder.

Land acquisition methods

- 4.6 Given the typical uplift in land values following the granting of planning permission, owners of land tend to look to achieve post planning or near to post planning values wherever possible. Equally the timing, uncertainty and capital lock-up involved in taking land through to planning consent means that, in many cases, homebuilders will look to link payment to the granting of planning consent.
- 4.7 Accordingly most land is purchased through conditional contracts, under option agreements or in the open market with planning consent. The precise terms and nature of these contracts depends on demand and supply in the land market.
- Conditional contracts typically have the bulk of payment conditional on the granting of a certain planning status, which is usually a pre-agreed sum. Accordingly they are more often used for sites currently in the development framework, where there is more certainty on the likely value of the end scheme.
 - Option agreements typically peg land payments to a discount on open market value (for instance 10 per cent) and hence are often used for longer-term land.
- 4.8 In both cases it is usual for the homebuilder to progress planning permission along with bearing the associated cost risk. While agreements are subject to commercial negotiation, there will usually be a pre-condition that reasonable endeavours are used to progress the planning process, which would in any event normally be in the homebuilder's interests. This cost will be factored into the final pricing of the land and can be significant, particularly for larger schemes. This is one reason why some land owners will look to enter into an early contract at a discount to the post planning value.
- 4.9 In strong markets, where bargaining power sits with the land owner, land payments may be made at the stage of outline permission with cash upfront, whereas in weaker markets land payments may be negotiated at

the stage of detailed planning, after the threat of judicial review, on deferred terms. Ultimately the strength of the market drives who bears the (predominantly planning related) risk.

4.10 Some homebuilders own land that has been bought without planning consent:

- In some cases this is allocated land (that is, the local authority has already agreed in principle to some sort of development) that has been bought in a competitive scenario and the homebuilder has taken the risk on the precise nature and timing of planning permission.
- In other instances, particularly regeneration schemes, buyers may take allocation risk as well. This may occur in a very competitive market or where there is a rental yield in the existing use that offsets some of the costs of capital lock-up. Other times this may relate to agricultural land bought at or close to agricultural value with a view to promoting its inclusion in the next local area plan. While the planning gains will be much higher for the developer in this scenario, they are bearing the risk that no planning permission is forthcoming alongside the cost of promotion and capital lock-up.

4.11 There are a number of variations on payment of full land value at completion. These may be the result of commercial negotiations reflecting local land market conditions or specific circumstances of the transaction including:

- overage payments - additional payment to the land vendor if sales exceed an agreed selling price or based on the type of planning permission achieved
- deferred payment terms - an element of land payment is deferred until a condition precedent is met; which may simply be a given timescale
- development contract - where the homebuilder pays for the land as units are sold

- joint venture (JV) or partnership arrangements – may take various forms, for example the land owner may provide the land at a discounted value for a percentage share of the profit, and
- cross subsidy arrangements – increasingly used in mixed tenure social housing schemes where delivery of social units for rent or shared ownership to the RSL is used as part or full payment for the land for the private development.

4.12 Most homebuilders view commercial development as having a different risk profile and requiring a different skill set to residential development. As such, where there is a commercial element to a scheme most homebuilders will look to joint venture or back-to-back any commercial risk with a commercial partner. Where the commercial element is a small percentage of the overall scheme (for instance less than 20 per cent) homebuilders may be willing to front the scheme, although they may take specialist advice.

Land values and availability of land

4.13 In most cases the granting of planning permission will give the land owner a material uplift in value over and above existing use value. Unless the homebuilder is the owner of the land, the majority of the uplift will not apply to them.

4.14 Key considerations that impact directly on the value of land include:

- planning requirements: number of units, type, specification, Section 106 (S106) requirements including infrastructure and affordable housing (either as part of S106 or as a separate requirement on non S106 sites)
- forecast selling prices and expected rate of sale for those units
- expected build costs, which will include forecast remediation / ground engineering requirements, forecast labour rates and materials, expected cost impact of known building regulations, and

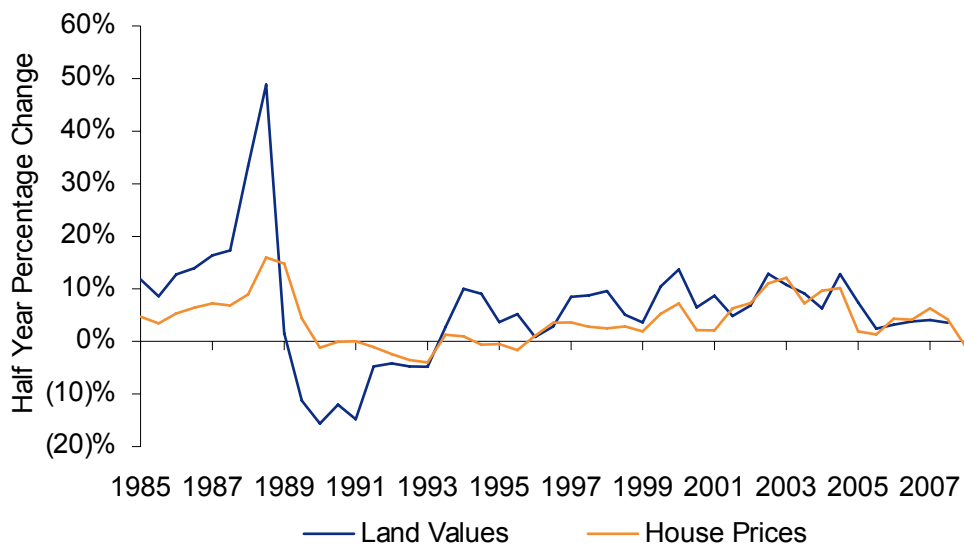
- homebuilder targets such as: gross margin hurdle rates, which may be flexed depending on competitiveness of the local market; return on capital employed (ROCE); and a need to build a certain volume of homes in a particular region to cover overhead costs.

4.15 The above factors have a direct impact on the price paid for the land.

4.16 If normal laws of supply and demand apply to the land market, higher land prices should encourage more land being offered for sale, while lowering land prices would have the reverse effect. In an environment of low house price inflation, increasing social housing requirements, building regulations and unpredictable planning, that might not optimise gross development values (GDVs), land prices are reduced, discouraging some landowners from bringing land to the market.

4.17 House price and land price inflation inevitably correlate as illustrated below; however land prices tend to be more volatile.

FIGURE 9: LAND VALUE / HOUSE PRICE CHANGE: 1985 – 2007

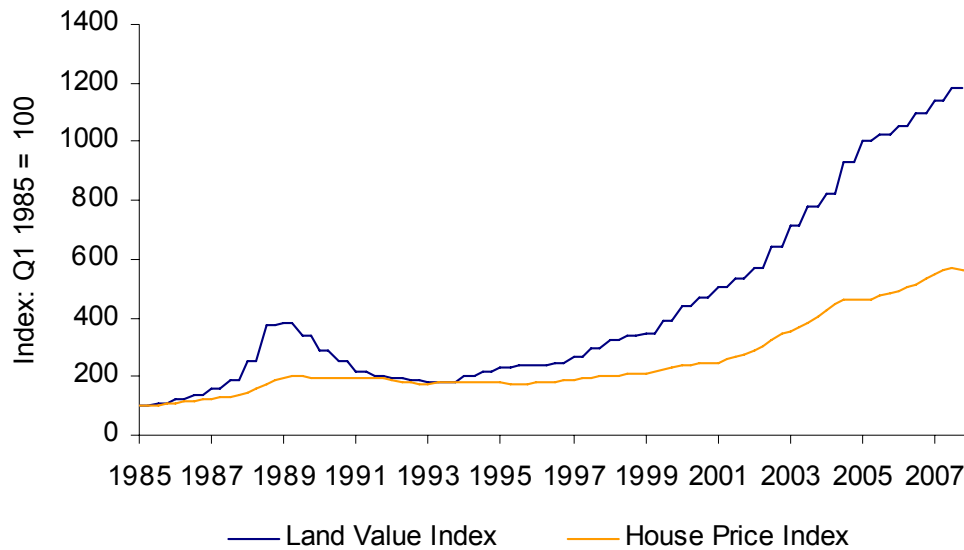


Source: Land values: VOA (England and Wales, exc. London); House prices: Halifax and land price inflation is also impacted by anticipated changes.

4.18 Typically land values are driven by expected house price inflation rather than actual inflation. In general it lags house price inflation, since many

buyers of land buy at current or close to current house prices. In the early 1990s, however, when there was a period of significant deflation, land prices actually dropped in advance of house prices and dropped further (Figure 10).

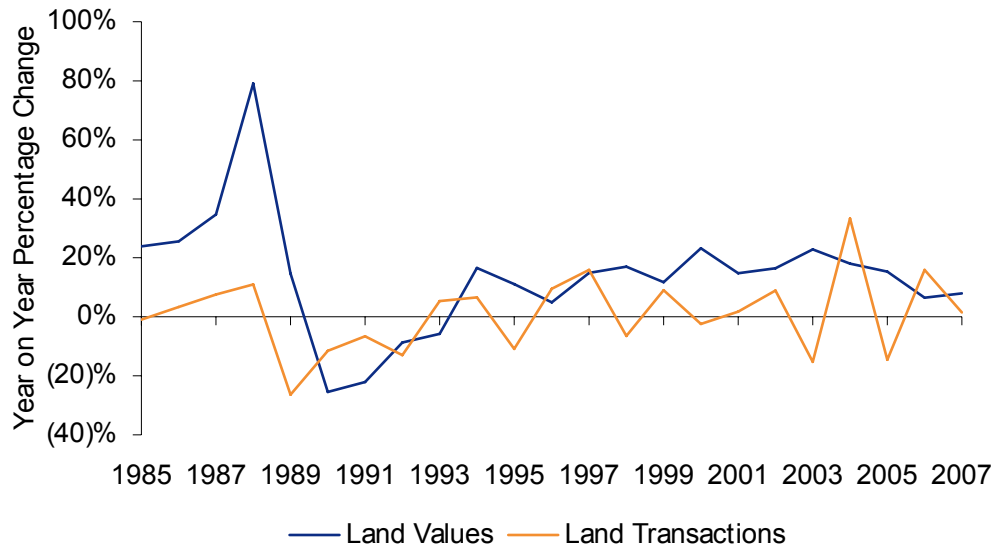
FIGURE 10: LAND VALUE / HOUSE PRICE CHANGE 1985 – 2007 REBASED TO 1985



Source: Land values: VOA (England and Wales, exc. London); House prices: Halifax

4.19 During this period, a slowdown in the volume of housing transactions, in advance of prices dropping, resulted in a reduction in the number of land transactions (Figure 11). This created a buyer’s market for land more rapidly than in the housing market itself.

FIGURE 11: LAND VALUE / LAND TRANSACTIONS: 1988 – 2007



Source: Land values: VOA (England and Wales, exc. London); Land transactions: DCLG

4.20 The residual value approach that is used to price land is illustrated in Figure 12 below. In order that the homebuilder can retain margin, a three per cent change in forecast house prices in the scenario shown results in a 10 per cent change in land price. Hence, with everything else equal, one would expect land prices to be more volatile than house prices.

FIGURE 12: IMPACT OF REDUCED SELLING PRICES ON LAND VALUE

Development cash receipts and payments	Development appraisal	Revised appraisal	Decrease (%)
Sales receipts	100	97	(3)%
Land cost	(30)	(27)	(10)%
Build cost	(40)	(40)	-
Overhead	(7)	(7)	-
Interest	(3)	(3)	-
Homebuilder's profit	20	20	-

Note: Assuming a developer maintains a constant land acquisition hurdle rate (that is, they require the same minimum net profit for developing a site), a decrease in expected selling prices will result in a disproportionate reduction in the amount they are willing to pay for the land

Source: Interview discussions

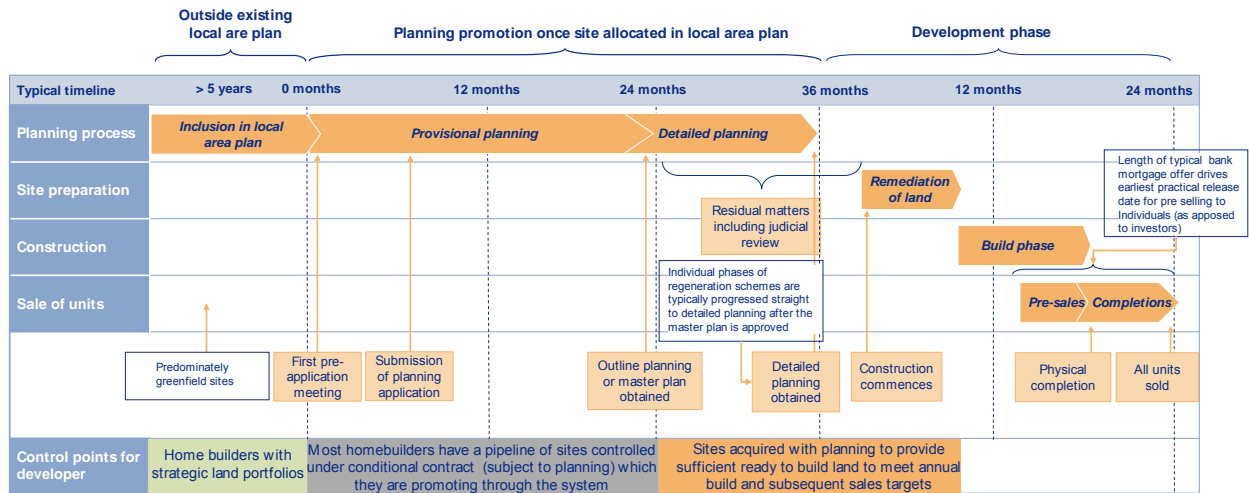
4.21 In the current market, with uncertainty around future house price inflation, we would expect a reduction in land transactions, resulting in a reduction in the pipeline of new homes over a number of years. A potential mitigation to this may be the increasing presence of RSLs, which are increasingly active in the land market and have different hurdle rates, objectives and, in some cases, experience.

The need for a land bank

4.22 Holding sufficient land for future years serves a practical purpose in acting as a buffer for the time lag from land acquisition through to starting work on site. The length of this time lag influences the size of the land bank a homebuilder must retain to ensure a constant build programme.

4.23 Figure 13 below outlines the timeframes involved in a typical development lifecycle.

FIGURE 13: TYPICAL DEVELOPMENT LIFECYCLE



Notes: Assumes no appeal process is required
 Planning times will vary by region, size, land type and particulars of individual development

Source: HBF Planning Timeline Survey; interview programme

4.24 A key factor impacting the time lag between land acquisition and starting work on site is the planning process. While there is much variation, typical timeframes to take the various categories of land through to planning consent are as follows:

FIGURE 14: SUMMARY OF PLANNING STAGES AND TYPICAL CONTROL MECHANISMS USED WHEN ACQUIRING LAND

	Indicative time to detailed planning					
	>5 years	1-5 years	6-12 months	-	Plus 3-6 months	After residual matters including vacant possession
Land planning status	Unallocated	Allocated but no planning	Outline planning or master plan	Detailed planning	Detailed planning to residual matters	Onsite and commenced first plot
Typical land control mechanism	Strategic option	Conditional contract	Owned	Owned	Owned	Owned
Typical capital lock-up	Limited	Limited	Partial to full land cost	Full land cost	Full land cost	Full land cost

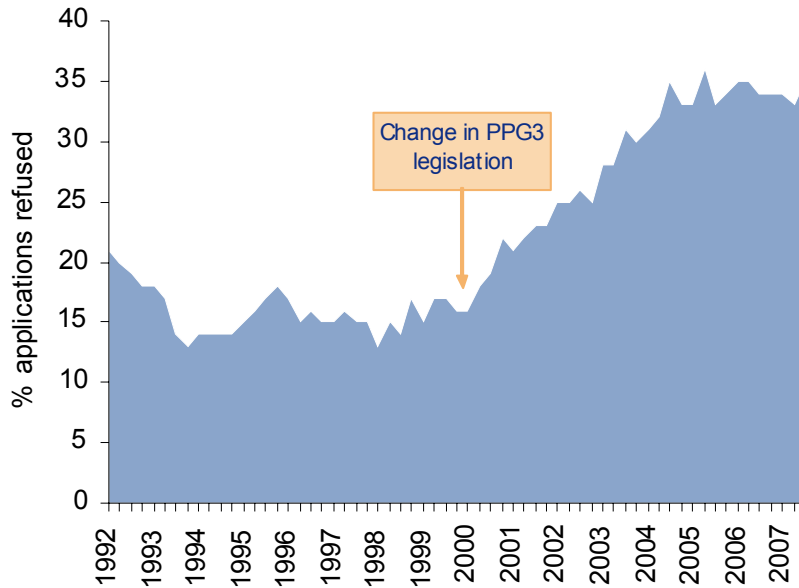
Comments	Usually as part of a portfolio Often greenfield sites	Option for longer term more speculative sites	Land bought at open market value typically secured at this stage	Plans often modified to fit developers product, density etc before detail application submitted	Conditions subsequent to planning inc judicial review	May have been possible to negotiate some form of deferred payment terms
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4.25 All interviewees commented on the uncertainties of the above time frames. Examples include:

- sometimes lengthy pre-planning negotiations
- increasing levels of pre-planning studies (for example traffic impact, environmental)
- under-resourced planning departments
- planning permissions that have officer recommendation rejected and subsequently amended
- section 106 and affordable housing negotiations; and
- time involved in reaching closure where there are multiple land vendors.

4.26 The majority of homebuilders perceive the timescales involved in obtaining planning permission to have increased over the past few years. This is supported by the percentage of planning applications refused following introduction of PPG3 in 2000.

FIGURE 15: PERCENTAGE OF PLANNING APPLICATIONS REFUSED: 1992 – 2007



Source: DCLG planning decision quarterly performance statistics

- 4.27 Aside from contributing to security of future development pipeline, land banks may directly contribute to the profitability of homebuilders, where land values increase over the course of the holding period. Equally, homebuilders may suffer from a decline in land values during a downturn or with regulatory cost changes; land holding is merely part of the risk / reward dynamic of any business.
- 4.28 The following example highlights the potential risk / reward trade off from holding land on balance sheet to benefit from house price inflation.

FIGURE 16: RISK / REWARD RELATIONSHIP OF HOLDING DEVELOPABLE LAND ON BALANCE SHEET

Development cash receipts and payments	Development appraisal	Upside case	Downside case	Change
Sales	100	108	92	+/- 8%
Land cost	(30)	(30)	(30)	-
Build cost	(40)	(42)	(42)	+5%
Overhead	(7)	(7.4)	(7.4)	+5%
Interest	(3)	(5.3)	(5.3)	2.3
Homebuilder's profit	20	23	7	

Note: The scenario is based on holding land for one year and assumes house price inflation / deflation of eight per cent, build cost inflation of five per cent and a nominal interest charge of 7.5 per cent

- In a rising housing market, the gearing effect of a fixed land cost and proportionally higher sales may result in additional profit after taking account of inflated build, overhead and additional capital costs.
- The potential downside case however, is more accentuated as the additional finance costs are significant. In addition, build cost inflation is typically a function of the broader economy and tends to track inflation.

4.29 To the extent that a homebuilder's pipeline of land is unable to deliver volumes in the desired mix, homebuilders will supplement development pipeline through the acquisition of land with planning consent (with typically lower margins). More mature businesses generally have the benefit of greater throughput from sites promoted through the planning process compared with land bought with planning consent at full market value. This will often translate into higher gross margins and provides an additional element of headroom in the event of a downturn.

4.30 The majority of homebuilders consider the availability of land with planning permission to be the greatest constraint on their existing business and for any new entrant.

Land bank disclosure and definitions

4.31 In general there is a lack of disclosed information on the size and nature of land banks. The listed homebuilders and some, typically larger private companies, disclose varying levels of detail on their development pipeline.

4.32 There has been a trend over the last few years of increasing disclosure amongst the listed companies. While there is little doubt that investors take some comfort from longer land banks, anecdotally we were told that few analysts ask questions on land bank composition and that there is more focus on other KPIs such as gross profit margins, earnings and return on capital employed.

4.33 There is a lack of consistency in the definitions used and the level of detail given, which means that different homebuilders classify and report the size of their landbanks in different ways. In part this reflects the difficulties in finding an all encompassing definition that reflects the commercial reality of the site. Inherent difficulties include the following:

- Land with planning may include:
 - Land with master plans or outline planning permission – which cannot be put into operation
 - Land with detailed planning permission – but without reserve matters agreed or vacant possession, and
 - Current work in progress.
- Land without planning may include:
 - Sites owned and paid for
 - Conditional contracts
 - Option agreements on varying bases and with differing pre-planning status, and

- Equally it may include some 'strategic land'.

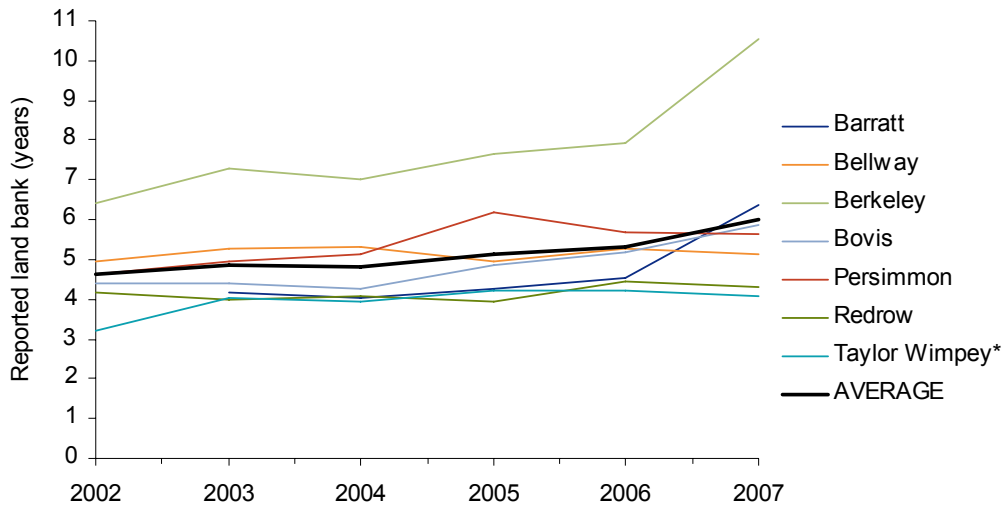
- Land held under joint venture arrangements (which may impact on its value to the company) is usually not separately identified.
- Regeneration schemes where there is a framework agreement and master plan may be shown separately since the number of units may not be known.
- Strategic land may be shown in acreage or, less often, as estimated plots. It could include land that has been allocated for residential development in a local plan but more often is used for unallocated land, often held under option. Timescales and likely value are often difficult to assess.
- Commercial land bank is often ignored.
- Social housing units are ambiguous and could be included or excluded.
- Some homebuilders highlight the conversion rate of the various parcels of land, for example how much of the current build is derived from strategic land bank.

4.34 Land banks vary in length based on the business model used, for example:

- A focus on larger sites produces longer land banks 'with planning', since homebuilders may have master plans and outline planning permission on sites which may be built in smaller phases over a number of years.
- A focus on apartment schemes may result in longer land banks, since there may be a longer build phase and completions will only happen once the whole of the build is complete.

- 4.35 The complexity of the scheme and any regeneration aspect may lengthen the time between master plan / outline planning and detailed consent, as well as lengthening the time to reach consent.
- 4.36 Notwithstanding the ambiguities around definitions, the length of reported land banks among listed homebuilders has increased, from 4.6 years on average in 2002 to 6.0 years on average in 2007 (Figure 16).

FIGURE 17: REPORTED LAND BANKS IN YEARS: 2002 – 2007



Note: Includes consented and unconsented land; excludes land defined as 'strategic land'; land bank years calculated based on build volumes in the previous year

Taylor Woodrow and George Wimpey results amalgamated pre merger and reflect UK landbank only

Source: Annual reports

- 4.37 The aggregate figure for total land bank may overstate the current pipeline of land that homebuilders have, as some of this will be without any planning permission, that is, 'unconsented', as discussed earlier in this section. It also masks the distortion of any particularly large sites. In practice even where a homebuilder has a number of years of consented land, they may need to buy land with planning in the current year to fill any regional and / or timing gaps.
- 4.38 Notwithstanding these caveats, several factors may have contributed to the apparent increase in land banks.

- 4.39 Due to the lead time involved in achieving completed sales, any future increase in volumes requires an uplift in land bank (and capital employed).
- 4.40 Acquisition activity results in a one-off uplift in land bank: for example Barratt acquired Wilson Bowden during 2007; Berkeley acquired the remaining 50 per cent stake in St James during its 2007 financial year; Bovis acquired Elite Homes during 2007; and Persimmon acquired Merewood Homes in 2003 and Westbury in 2006.

Impact of merger and acquisition activity on land banks

- 4.41 Growth via merger and acquisition is a strategy which has been pursued by a variety of different homebuilders (in terms of both size and ownership type) as a means to:
- supplement organic growth by sourcing a significant portfolio of land in one acquisition
 - benefit from central overhead rationalisation synergies, and
 - expand or increase presence by gaining instant critical mass in a geographical area, rather than relying on, for instance, a three year strategy to build a land pipeline.
- 4.42 Of the five trade transactions with deal values in excess of £500 million, all appear to have resulted in the combined entity producing fewer units in the subsequent year, compared to their combined output in the previous year. This may be due to a number of factors.
- One of the reasons for acquisition may have been to fill a hole in the acquirer's development pipeline in a particular region. If both homebuilders were at 75 per cent capacity in a region, and the combined overheads are rationalised, there may be a resultant reduction in the number of units that the region can handle as one operation.

- Less acquisition of current land is needed to fill annual regional volume targets, hence there may be no need to go into the land market to buy current land.
- A focus on reducing balance sheet gearing post deal may mean less current land is acquired.

FIGURE 18: ESTIMATED POST DEAL UNIT VOLUMES FROM TRADE ACQUISITIONS / MERGERS SINCE 2000

Acquirer	Target	Date	Units sold (pre deal)	Units sold (post deal)	Volume change
Wilson Connolly	Wainhomes	April 2001	5,953	4,002	(33)%
Persimmon	Beazer	Jan 2001	13,671	12,352	(10)%
George Wimpey	McAlpine	Oct 2001	14,466	12,124	(16)%
George Wimpey	Laing	Nov 2002	13,410	11,813	(12)%
Taylor Woodrow	Wilson Connolly	Sep 2003	9,941	9,053	(9)%
Persimmon	Westbury	Jan 2006	16,701	15,905	(5)%
Barratt	Wilson Bowden	Jan 2007	20,087	17,168	(15)%
Taylor Woodrow	George Wimpey	July 2007	21,910	-	-

Notes: Units sold pre deal estimated by amalgamating closest full year results before the transaction date of the acquirer and target. Units sold post deal based on the earliest available full year results which combines both entities.

Source: Annual reports

Conclusion

- 4.43 In summary, land banking is a key part of the development pipeline of a homebuilder. Time lag involved in planning and build are such that a land bank will naturally span over a number of years. Equally it is rational for homebuilders to try to ensure that they have a development pipeline that insulates them from volume fluctuations due to planning delays.
- 4.44 Homebuilders are typically motivated to commence build as soon as a site has full planning consent, as the potential for margin erosion from additional holding cost; risk of sales price and regulatory changes; and

build cost inflation outweigh the potential upside from house price inflation.

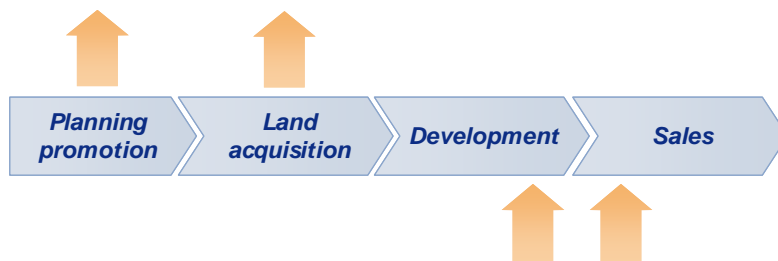
5 FINANCING OF DIFFERENT TYPES OF DEVELOPMENTS

- 5.1 Working capital requirements differ depending on the characteristics of a particular site and particular type of development. Typically developments are very cash intensive as land acquisition, land holding, planning, and build costs precede cash receipts.
- 5.2 As discussed in Section 4, in some instances payments for land can be deferred and / or receipts from RSLs for affordable housing may be front-ended. In both cases early stage capital lock-up will be reduced with a resultant improvement in return on capital employed (ROCE).
- 5.3 Cash flows for a typical development can be represented by the following profile.

FIGURE 19: TYPICAL CASH FLOW PROFILE FOR A HOUSING DEVELOPMENT

Cash out, funded by:

- Cash available in the business (retained profits)
- Cash from sales
- Bank debt
- Deferred payment terms



Cash in, from:

- Deposits and pre sales
- Sales to private buyers or investors
- Upfront payments from RSLs for S106 affordable housing

Source: KPMG specialists; interview programme

- 5.4 There are a number of material risks to the quantum of cash flows, which include:
- sales prices net of incentives being different to forecasts
 - rate of sale and impact on capital lock-up / funding costs
 - unforeseen build cost increases – typically on more complex schemes or where there is unforeseen remediation or ground engineering work required
 - build slippage resulting in delayed completions and hence additional capital lock-up
 - exposure to the commercial market which may be outside of the developer’s skill set
 - higher planning costs and longer time periods than forecast (although these variances may be passed through to the land owner in the case of land that is controlled rather than owned outright)
 - planning permission post S106 agreement being different to that assumed on the purchase of the land (again potentially mitigated where land is controlled rather than owned), and
 - impact of pipeline slippage, for example through delays in the planning process resulting in either more expensive land being acquired with planning consent or inefficient use of overheads.

5.5 These risks can be categorised as either: timing related, house price related or, to a lesser extent, due to unforeseen build costs. A core skill for all homebuilders is the ability to manage these risks. As an overarching risk management tool, most homebuilders aim to avoid having too much production in any one year concentrated on any one site.

FIGURE 20: TYPICAL RISKS AND MITIGATIONS

Risk	Mitigation
Planning outcome and timing	<ul style="list-style-type: none">• Conditional contracts and options• Planning costs predominantly incurred once land is allocated for planning• Large pipeline of vacant land to ensure sufficient conversion of land into implementable planning
House price	<ul style="list-style-type: none">• Focus on achieving target price at expense of volume• Low gearing to avoid early pressure to discount• Slowing of build programmes where possible to reduce capital employed
Build costs	<ul style="list-style-type: none">• Pre-completion land surveys• Sound project management• Robust procurement processes

5.6 Given the myriad influences on working capital, any specific, real-life example may not be representative. However it is possible to identify a few key factors that influence the working capital requirements of different development types. We have segmented developments based on size, previous land use and type of housing stock – houses or apartments. These factors will have a key influence on the working capital requirements: which may contribute to risk and / or provide scope for greater financial rewards.

FIGURE 21: MATRIX OF RISKS AND REWARDS OF DIFFERENT TYPES OF SITES / DEVELOPMENTS

		Risks – disadvantages	Rewards – advantages
Type of site	Brownfield	<ul style="list-style-type: none"> Commercially and technically complex Uncertainties linked to scale and cost of ground works Capital lock up linked to remediation of site 	<ul style="list-style-type: none"> May be easier to obtain planning permission Higher density gives scope for greater revenues (although factored into land price)
	Greenfield	<ul style="list-style-type: none"> Risk of delays due to difficulties obtaining planning consent 	<ul style="list-style-type: none"> Commercially and technically more straightforward
Size of site	Large	<ul style="list-style-type: none"> Capital lock up linked to cost of land and time taken to develop site Risk is more concentrated in a single development 	<ul style="list-style-type: none"> Phasing sales may assist cash flow Economies of scale on site overheads
	Small	<ul style="list-style-type: none"> Sales receipts only on completion of whole development Require disproportionate overhead to manage smaller sites 	<ul style="list-style-type: none"> Lower upfront capital outlay Less likely to be affordable homes requirements Ability to spread risk among larger number of developments May be attractive to a wider buyer population
Type of development	Mixed-use	<ul style="list-style-type: none"> Commercially and technically complex Commercial market risks may be outside homebuilders core skill set Often require a joint venture arrangement 	<ul style="list-style-type: none"> More likely to obtain planning consent Denser developments mean greater scope for better return
	Residential: apartments	<ul style="list-style-type: none"> Commercially and technically more complex than houses Capital lock up linked to inability to phase completions More risky demand – especially if targeting the investor market 	<ul style="list-style-type: none"> Higher density gives scope for greater £ per square foot
	Residential: houses	<ul style="list-style-type: none"> Lower density limits returns (although factored into land price) 	<ul style="list-style-type: none"> Relatively simple technically Faster to execute once planning permission has been granted May be possible to phase sales

Source: Interview programme

5.7 During interviews with a wide range of homebuilders, it was possible to develop and refine a series of indicative cash profiles for a cross-section of development types, as follows:

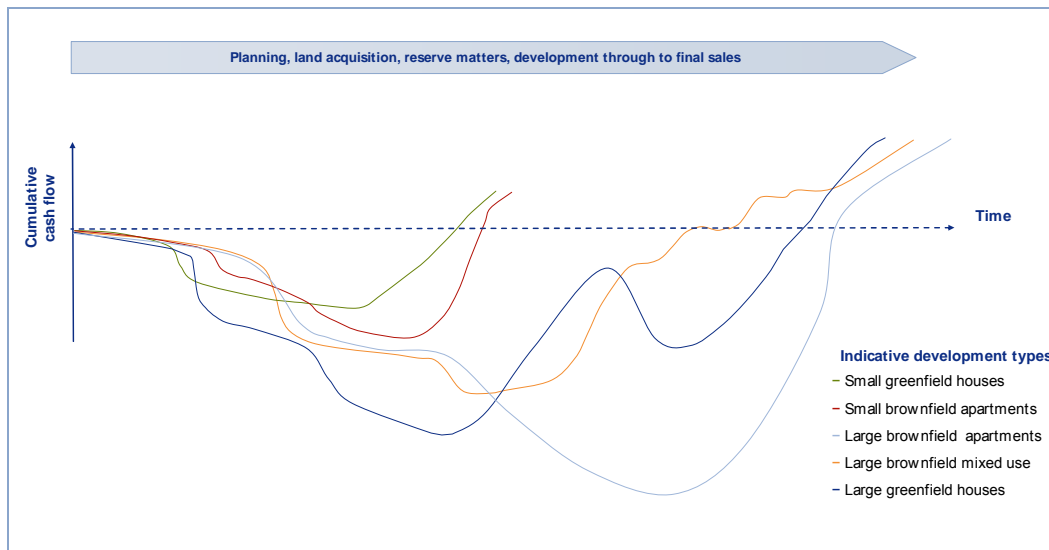
- small greenfield development of houses
- large (200 unit plus) greenfield development (typically houses)
- small brownfield development of apartments
- large brownfield development of apartments, and

- large mixed use brownfield scheme.

5.8 The profiles below aim to represent an overview of the cash flow and capital lock-up implications of these types of developments. They have been validated through a series of discussions with homebuilders who have confirmed that they reflect empirical experience of these schemes.

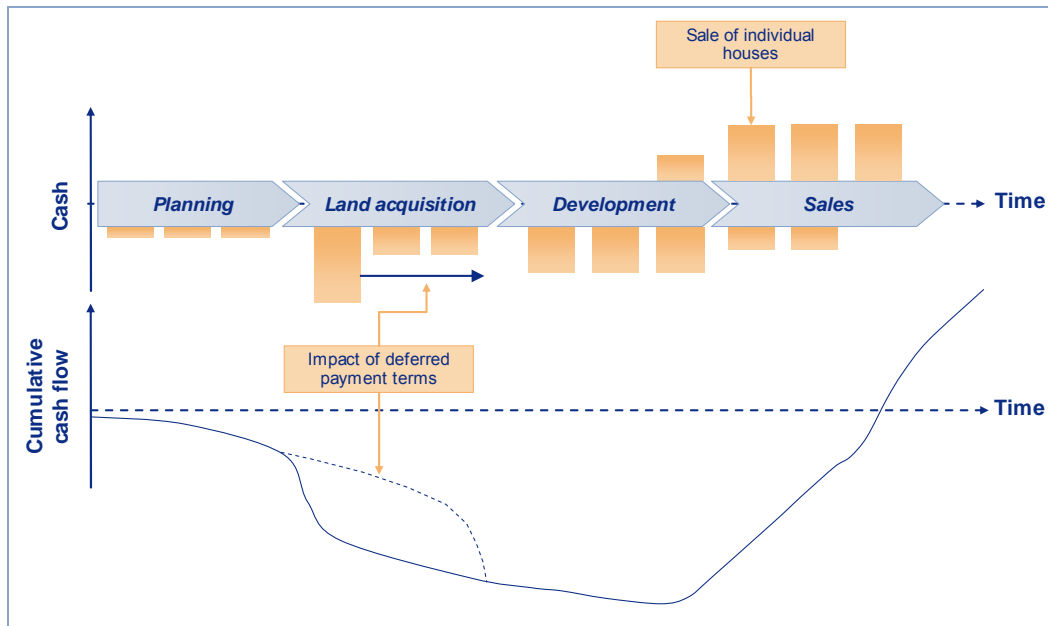
5.9 A summary of indicative cash profiles is shown below and highlights the significant additional capital employed on large sites and apartment developments.

FIGURE 22: COMPARISON INDICATIVE CASH FLOWS FOR DIFFERENT TYPES OF DEVELOPMENTS



5.10 We consider each of these in more detail below.

FIGURE 23: INDICATIVE CASH FLOW FOR SMALL GREENFIELD DEVELOPMENT OF HOUSES



Advantages	Disadvantages
<ul style="list-style-type: none"> • Smaller developments (<20 units) are typically less liable to section 106 requirements • Less competition from volume players • Enhanced margins if developed through the planning process • Technically and commercially simpler • Less capital lock-up than apartments driven by no need for land remediation and greater flexibility in build / sales phasing • Technically and commercially simpler than apartment developments • Reduced effect of individual plot build delay • Less exposure to buy to let market • Reduced risk of over supply in a region 	<ul style="list-style-type: none"> • Very competitive land market • Initial capital outlay linked to price of land (more costly than brownfield) • Planning approval may be slow or planning variation may impact margins • Margin dilution from proportionally higher site overheads (i.e. show homes, general marketing, etc.) • Reduced phasing flexibility in smaller developments may result in lower ROCE • Risk of mis-pricing development if complete greenfield area and may require significant infrastructure • Development risk

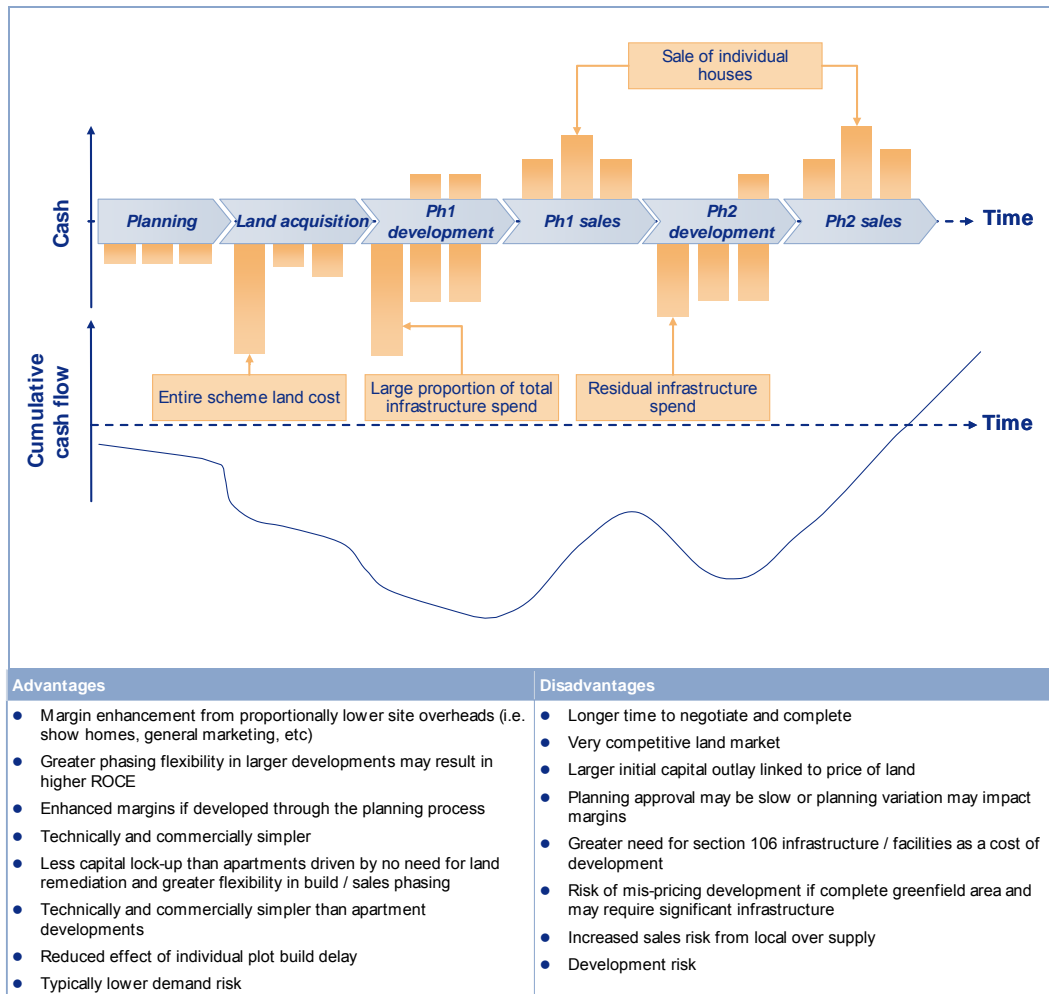
Source: Interview programme

- 5.11 While the above is provided as an example of a greenfield site, it applies equally to brownfield sites where houses rather than apartments are built and where there are no significant remediation requirements.
- 5.12 Small greenfield sites tend to be the preferred sites of medium-sized and smaller homebuilders, as they are technically straightforward to develop and require significantly less upfront capital than large multi-phase schemes. Their moderate scale can make smaller (less than 20 unit) sites

less attractive to larger homebuilders due to their disproportionate incremental overhead costs.

- 5.13 Smaller sites generally have slightly faster planning timeframes since they are less complicated; however we were told of many small sites that still took a long time before and during the planning process. They are also generally less risky in terms of build complexity and demand for the homes built.
- 5.14 Sites of less than 15 units are more likely to avoid a requirement for social housing, although this is passed through in land pricing.
- 5.15 While land cost is typically the biggest single outlay, build costs over the period are usually a larger percentage of the costs. Once the infrastructure is in place and a show home is built, the marketing team will focus on getting as many pre-sales as possible to reduce capital employed. With houses, it is usual to have completions before the whole site is finished, thus reducing the maximum capital employed. However it is less common for exchanges to happen prior to having standing units, since houses are generally acquired by owner occupiers who want to see what they are buying. This is not often the case with apartments.

FIGURE 24: INDICATIVE CASH FLOW FOR LARGE GREENFIELD DEVELOPMENT (TYPICALLY HOUSES)



Source: Interview programme

5.16 Large greenfield sites typically involve developments which are predominantly houses rather than apartments. Although most homebuilders have the technical capability required, these developments tend to be provided by large and medium size homebuilders. Crucially they have access to the large amount of upfront capital required for a development of this type. The large upfront funding requirement, together with the multi-year build out programme, may mean that these

sites lock up land and capital for a long period of time, often not becoming cash positive until the later phases of the development.

- 5.17 Larger sites are likely to be phased over a number of years. They may therefore have a master plan or outline planning for the whole site but each phase will be subject to obtaining detailed planning consent. While it is likely that S106 contributions and affordable housing is agreed at outline planning stage, it appears there are a number of instances where amendments have been made as part of a detailed planning application. The cost risk of building regulation changes also exists until the first plot is commenced on site.
- 5.18 The exact nature and size of each phase is driven by the developer in consultation with planners. Considerations include:
- Time that detailed planning permission is likely to take for different size schemes, linked to planning resource constraints and also the level of consultation needed. In the main homebuilders will be keen to progress their pipeline rapidly (particularly if they have already paid for the land) and hence the size of each phase needs to be manageable to ensure that planning consent is expedited.
 - Site topography and access constraints.
 - Level of capital lock-up (which may be build cost or infrastructure lock-up) or deferred land payment requirements.
 - Demand for the units and expected sales rate needed to achieve sales prices underpinning the land price paid. Between 35 and 50 units per annum is often used as a benchmark, depending on whether it involves houses or apartments; high rises are assumed at higher rates. Sales rates tend to decline in harder markets as are now being experienced.
- 5.19 Even large homebuilders will often consider selling parcels of land in large developments to competing builders. The two main reasons are:

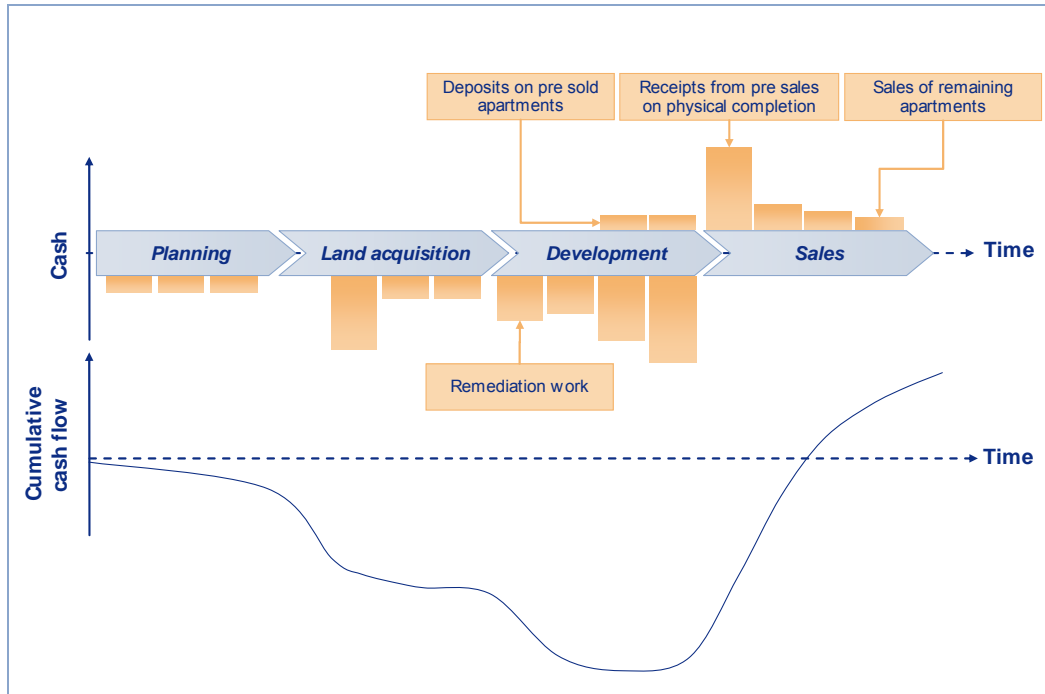
- reducing capital employed by obtaining cash from a land sale to offset against some of the upfront land cost, and
- reducing the risk concentration of land bank on a single site. Clearly this will depend on the size of site in relation to the homebuilder.

5.20 Other reasons include profiting from price uplifts between the date land was acquired and the date of on-sale; packaging a part of the site to another homebuilder who has a product / skill set better suited to the local market; or to supplement earnings to meet year end profit expectations.

5.21 Where more than one homebuilder is marketing on the same site, there is anecdotal evidence to suggest that the rate of sales across the site is higher than that attainable with just one homebuilder. A site on which one developer may be aiming to sell 40 units per annum may be able to deliver combined sales of between 40 and 80 units per annum with two builders active. There is no over-arching rationale given for this, although potential influencing factors include:

- range of product types, locations and, to a lesser extent, brands
- double the advertising spend and different approaches to advertising, leading to
- more choice, which can help to influence and crystallise a buying decision, by allowing the buyer to benchmark products and prices.

FIGURE 25: INDICATIVE CASH FLOW FOR LARGE BROWNFIELD DEVELOPMENT OF APARTMENTS



Advantages	Disadvantages
<ul style="list-style-type: none"> • Margin enhancement from proportionally lower site overheads (i.e. show homes, generally marketing etc) • Greater phasing flexibility in larger developments may result in higher ROCE • Potentially cheaper land leading to enhanced margins and reduced overall capital outlay • Dependant on site but usually implies high density / apartments so greater return per square foot • Government pushing English Partnerships to increase supply of brownfield sites in local development plans • Garden assembly also classed as brownfield (but atypical) which may provide planning advantages • Greater density (than houses) means potential greater return per square foot • Generally more land available 	<ul style="list-style-type: none"> • Longer time to negotiate and complete • Larger capital lock-up linked to price of land • Greater need for section 106 infrastructure / facilities as a cost of development • Building work can be technically difficult • Additional costing risk of remediation work • Capital lock up during remediation / site preparation • Technical skills required for developments over three storeys can be prohibitive for some developers • Greater capital lock-up as units cannot be sold until the entire development is complete • Sales receipts largely on completion of entire site

Source: Interview programme

5.22 Large brownfield sites of apartments typically have a number of different attributes to those of a large greenfield development. These include:

- potentially additional capital lock-up as completions can only be made once the whole apartment block is build complete

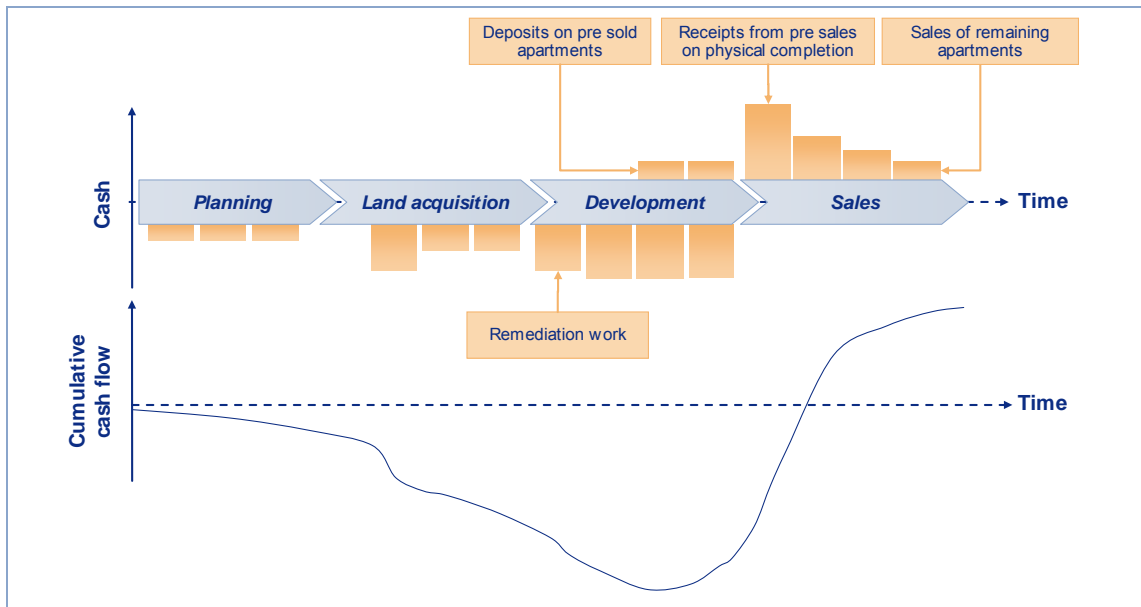
- reduced ability to sell part of the site to a competitor due to practicalities such as access and build restrictions; traffic movement restrictions; and potentially lower product differentiation
- potentially lower land costs as a percentage of total costs due to the higher and more complex remediation and build infrastructure costs (particularly for high rise developments)
- large percentage of sales made to buy-to-let investors and hence exposure to the financial return dynamic of that market place
- greater numbers of exchanges and sales 'off plan' before physical completion of the development and even prior to construction, often to investors in the buy-to-let market, and
- occasionally lower land costs through off-settable affordable housing receipts or given the higher overall costs of the scheme.

5.23 Requirements for strong commercial, technical and financial skills can put large brownfield developments out of reach of small scale homebuilders. It is the largest homebuilders with appropriate skills and access to finance that tend to acquire these sites.

5.24 While the cost of acquiring the land may be lower than a greenfield site, the overall funding requirement is often higher. This is driven by the need for extended ground works and the focus on apartments which result in capital lock up over a prolonged period of time. Availability of debt finance in terms of loan to value (LTV) ratios may be lower pre ground works due to the technical risks involved.

5.25 Sometimes brownfield sites are bought 'subject to contract and subject to ground'. This is a form of risk mitigation and includes a contractual condition that the homebuilder may exit the contract if it finds there is any residual risk on the site. In a few instances it may be possible to obtain land through staged payments, which improves return on capital employed (ROCE).

FIGURE 26: INDICATIVE CASH FLOW FOR SMALL BROWNFIELD DEVELOPMENT OF APARTMENTS



Advantages	Disadvantages
<ul style="list-style-type: none"> • Smaller developments (<20 units) are typically less liable to section 106 requirements • May be technically simpler to develop than large brownfield • Potentially cheaper land leading to enhanced margins and reduced overall capital outlay • Dependant on site but usually implies high density / apartments so greater return per square foot • Government pushing English Partnerships to increase supply of brownfield sites in local development plans • Garden assembly also classed as brownfield (but atypical) which may provide planning advantages • Greater density (than houses) means potential greater return per square foot • Generally more land available 	<ul style="list-style-type: none"> • Margin dilution from proportionally higher site overheads (i.e. show homes, generally marketing etc) • Reduced phasing flexibility in smaller developments may result in lower ROCE • Building work can be technically difficult • Additional costing risk of remediation work • Capital lock up during remediation / site preparation • Technical skills required for developments over three storeys can be prohibitive for some developers • Greater capital lock-up as units cannot be sold until the entire development is complete • Sales receipts largely on completion of entire site

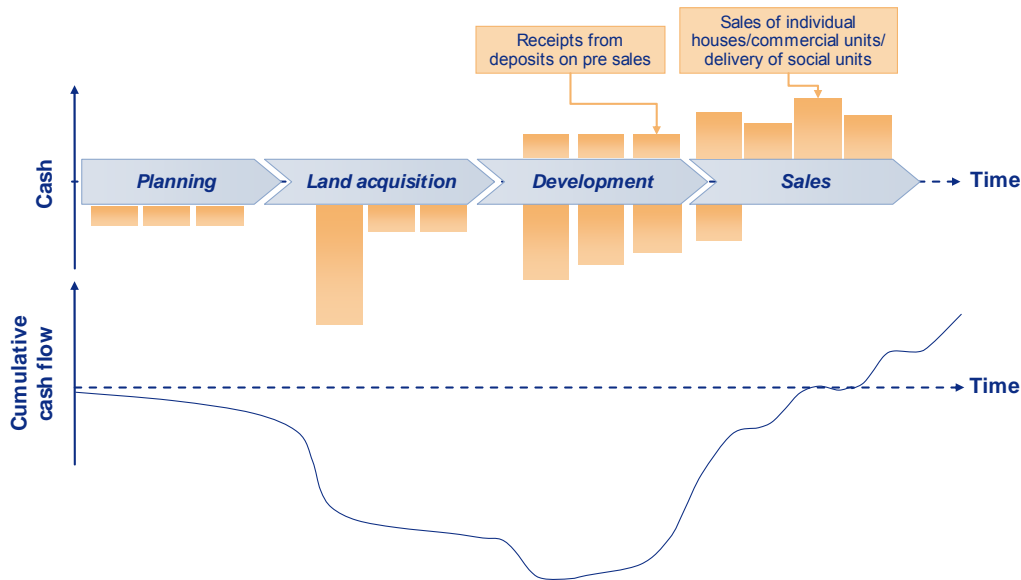
Source: Interview programme

5.26 Many of the factors affecting large brownfield sites apply to smaller brownfield sites; however the uncertainties and risks are scaled down, as is the capital requirement. Small brownfield sites may also include garden assembly which can be more akin to the cash flows we have described in the 'small greenfield' illustration (Figure 23).

5.27 Small brownfield developments may be less attractive to larger homebuilders given the incremental overhead required. Therefore, small

brownfield developments are often acquired by small and medium-sized homebuilders who may then sub-contract specialist construction skills.

FIGURE 27: INDICATIVE CASH FLOW FOR LARGE BROWNFIELD MIXED USE DEVELOPMENT



Advantages	Disadvantages
<ul style="list-style-type: none"> • Margin enhancement from proportionally lower site overheads (i.e. show homes, generally marketing etc) • Greater phasing flexibility in larger developments may result in higher ROCE • Potentially cheaper land leading to enhanced margins and reduced overall capital outlay • Dependant on site but usually implies high density / apartments so greater return per square foot • Government pushing English Partnerships to increase supply of brownfield sites in local development plans • Source of typically well located land • Cost of commercial work can be used to cross subsidise residential units 	<ul style="list-style-type: none"> • Mixed use can be complex to deliver commercially (i.e. negotiating a balance between private, commercial, government and social sector interests) • Longer time to complete • Building work can be technically difficult • Additional costing risk of remediation work • Capital lock up during remediation / site preparation • Technical skills required for developments over three storeys can be prohibitive for some developers • Greater capital lock-up as units cannot be sold until the entire development is complete • Sales receipts largely on completion of entire site • Commercial and residential very different markets • Land holders such as Tesco tend to prefer the larger developers as partners making it difficult for smaller developers to secure opportunities

Source: Interview programme

5.28 The typical homebuilder profile for a large mixed use development on a brownfield site depends on its scale and composition, that is, share of the development that is commercial, residential and social / affordable housing. The requirements for funding and technical expertise can be very high, particularly for large regeneration projects. Therefore these

schemes are often funded through some form of joint venture arrangement, either with the land owner or a commercial partner (if the commercial element of the scheme is material). Often there will be separate funding arrangements for the residential and commercial components of the development.

- 5.29 Homebuilders involved in developing the residential component of these schemes (usually apartments) tend to be larger due to the scale of funding required and the technical complexity involved. A number of medium-sized homebuilders have a commercial development business within the group, which may be leveraged.
- 5.30 Smaller schemes are more likely to attract specialist niche players, particularly when cross-subsidy arrangements are used. For example a homebuilder may provide affordable housing units to the partner, typically an RSL, in exchange for part or all of the cost of the land, thereby negating the need for upfront capital for land acquisition. Such arrangements are becoming increasingly common as a form of funding. Another perceived benefit of involvement in mixed use schemes is a means to access land and expedite planning permission.

Conclusion

- 5.31 Most residential development schemes are highly capital intensive until construction is finished and sales completions can occur. This is accentuated in apartment schemes, which are anecdotally often on brownfield land. Timescales for development of these sites can also be longer, which exacerbates capital lock-up.
- 5.32 In general, there remains a preference among many homebuilders for lower risk housing schemes on greenfield land, which have potentially lower capital lock-up. These sites are also preferred from the perspective of the technical expertise required.
- 5.33 The availability of skilled staff and other resources such as local sub-contractors and materials is perceived as supply constrained in many regions, or at least under pricing pressure.

6 HOMEBUILDER FUNDING STRUCTURES

6.1 Some homebuilders specialise in one or more particular development type, for example high value homes worth in excess of £1 million. Others may have particular types they look to avoid, such as city centre apartments. In reality many retain a mix of sites, which is a function of what can be sourced in the land market at a price that will provide an adequate return.

6.2 Characteristics of different types of sites include the following considerations:

- average selling price (relative to geographic region)
- site size
- single versus multi phase
- apartments versus houses
- technical complexity
- brownfield, greenfield or 'garden assembly' brownfield
- pure residential versus mixed use
- social housing and / or infrastructure requirements, and
- sustainability focus (that is, large urban regeneration schemes).

FIGURE 28: OVERVIEW OF MORE COMMON HOMEBUILDER SPECIALISATIONS



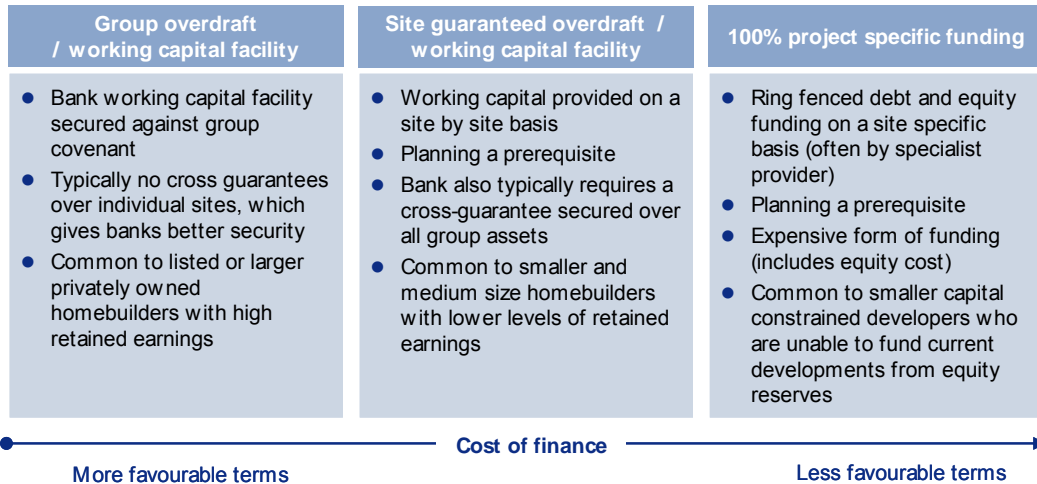
6.3 Regardless of whether homebuilders are publicly listed, privately owned, or private equity (PE) / financial institution backed, all have a need to optimise shareholder financial returns – which are likely to be a mixture of yield and capital gain. Given the capital intensive nature of the sector (described in Section 5), the maturity of the business, linked to retained profits, will impact on the ability to deliver yield based return to shareholders. Growing businesses are unlikely to be able to deliver significant yield since cash will be tied up in growing the business.

Debt funding

6.4 Debt funding is utilised in varying degrees by homebuilders as it is generally cheaper than equity. Banks will lend against viable developments with planning permission (typically at outline stage),

although the cost, maximum loan to value ratio (LTV) and whether it is lent to the group or on a project-by-project basis will vary.

FIGURE 29: INDICATIVE FUNDING MODELS AVAILABLE TO HOMEBUILDERS



Source: Interview programme

6.5 Bank debt tends to be less expensive and terms less stringent depending on the covenant strength and critical mass of the group, which is intrinsically linked to the equity capital buffer. As gearing levels increase, so too does the risk of financial distress and corresponding costs of both equity and debt.

FIGURE 30: INDICATIVE FUNDING TERMS

	Group overdraft / working capital facility	Site guaranteed overdraft/working capital facility	100% project specific funding
Duration of facility	<ul style="list-style-type: none"> 3-5 year rolling facility 	<ul style="list-style-type: none"> 1-3 year rolling facility 	<ul style="list-style-type: none"> Renegotiated for each project
LTV ratio (1)	<ul style="list-style-type: none"> 70-75% LTV 	<ul style="list-style-type: none"> 70-75% LTV 	<ul style="list-style-type: none"> Debt gearing 70% LTV
Cost of debt (margin over Base or LIBOR)	<ul style="list-style-type: none"> Approx. 100-200bps 	<ul style="list-style-type: none"> Approx. 125-225bps 	<ul style="list-style-type: none"> Approx. 150-250bps
Banking covenants	<ul style="list-style-type: none"> Tested on group assets 	<ul style="list-style-type: none"> Tested on individual developments 	
Equity yield	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Approx. 150-200bps plus 50% post interest profit share

Note: Lending rates assume normalised market conditions. ‘Value’ component of the LTV calculations typically defined as current land value (as opposed to balance sheet carrying value) plus other development WIP at cost.

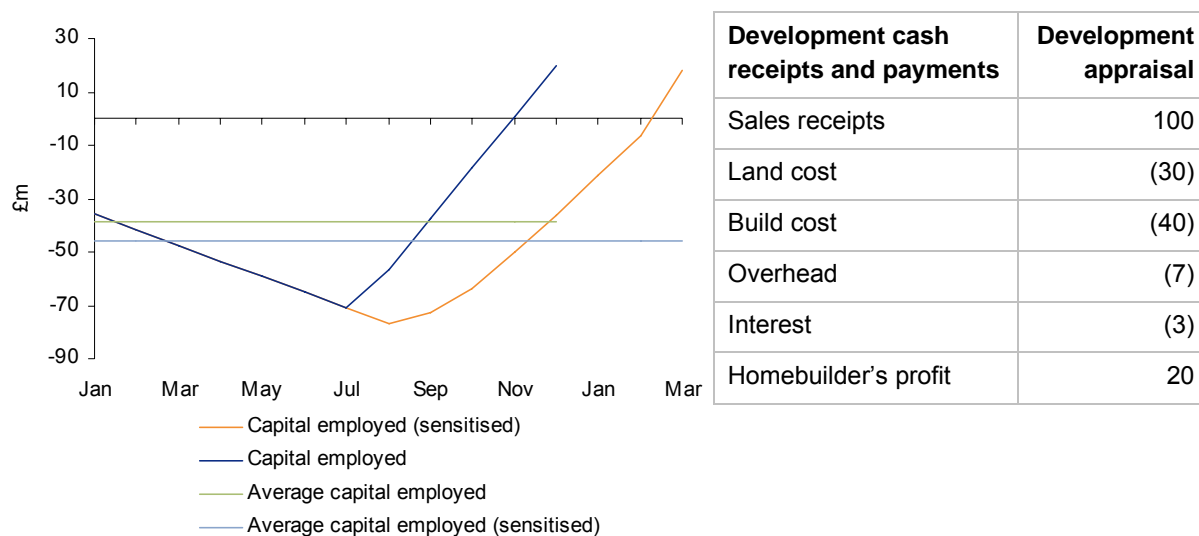
(1) LTVs of 80 per cent have been achievable but are less common.

Source: Interview programme

- 6.6 Where land is bought without planning permission banks may lend on a portfolio basis, depending on the overall planning risk and covenant strength of the group, typically at a reduced LTV. Anecdotally this is more likely to be the case the more risk diversification and the larger the size of the business.
- 6.7 Smaller homebuilders, with a limited portfolio of sites, are less likely to receive funding for sites without planning permission other than where it is based on an existing use basis. In that instance there will be a greater equity requirement, making acquisitions difficult for some. The planning status required (that is, outline or detailed) before draw down will depend on the view of the bank’s valuers, the broader company covenant and management’s track record.

- 6.8 Land for large city regeneration schemes is sometimes bought without planning permission and may take a number of years before cash receipts are recognised. When combined with the risk of regulatory changes impacting cost, the question over when, indeed whether, the site will achieve planning permission, tends to push these regeneration specialists to use lower gearing. Some schemes may have a significant existing use value which can de-risk the site and be used to offset some of the extended carrying costs.
- 6.9 Access for debt in the current banking environment is much more of a constraint than in recent times. The effective closure of the debt syndication market in homebuilding has resulted in club banking arrangements being required. Club banking takes longer to put in place since all banks must agree to terms pre-deal, which also gives some completion risk to the land vendor. Typically in the current market club banking is resulting in more expensive and more restrictive terms since all banks tend to the lowest common denominator. Equally, costs are going up and covenants are getting more restrictive across the board. Accordingly, access to capital for smaller players will become more expensive and, for larger players will become more difficult to secure, at a time when more flexible and larger debt facilities will be required.
- 6.10 The back-ended cash receipt profile of a typical development results in an accentuated capital lock-up from sales delay. The illustrative example (based on an indicative twelve month build and sales programme) highlights the gearing impact from a slowdown in sales volumes, as is being experienced by homebuilders in the current market.

FIGURE 31: SALES DELAY IMPACT ON CAPITAL EMPLOYED



Note: Assumes land acquired with full consent, land cost paid upfront, no presales, eight month build programme and five month sales programme

Sensitised case - seven month sales programme with one month delay of first sale's profit margin

Source: Interview discussions

Other forms of funding

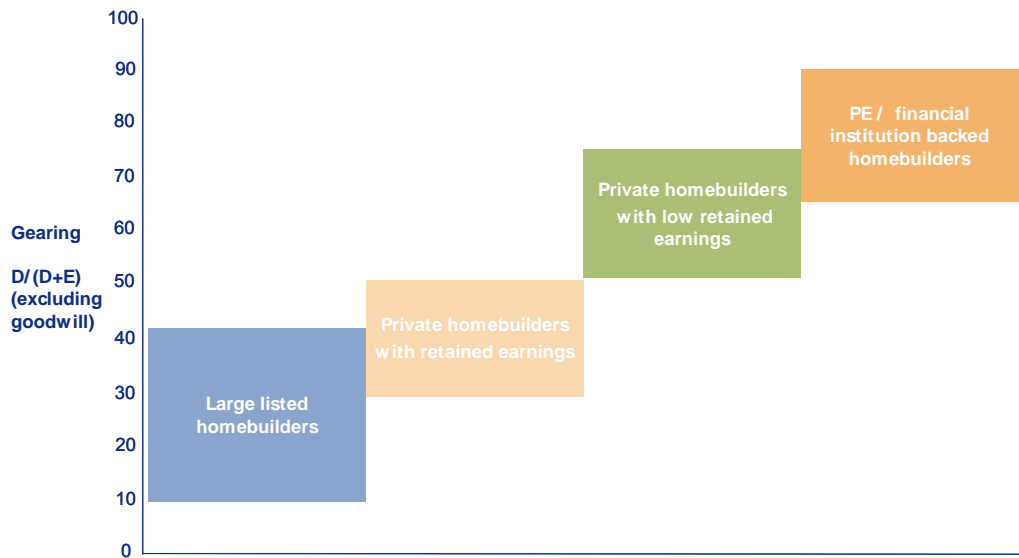
6.11 To the extent that a homebuilder is capital constrained, there are a number of other more expensive sources of funding, including:

- 100 per cent site funding from a specialist provider – typically taking a priority profit share on the site
- mezzanine funding
- joint venture funding with individual investors, land owner or financial institution, and
- negotiating deferred payment terms on land transactions.

Different types of homebuilders

6.12 While there are always exceptions, the level of average gearing for different types of homebuilders may be summarised as follows:

FIGURE 32: AVERAGE LEVEL OF GEARING BY HOMEBUILDER EQUITY OWNERSHIP



Source: Interviews and publicly available information

Note: D = debt; E = equity

Large publicly listed homebuilders

6.13 Large listed homebuilders are likely to focus on a mixture of capital gain through increasing share price and in some cases share buy-backs, along with an element of dividend yield. Most are of a size that growth in capital employed is low to moderate and hence there is some free cash for yield.

6.14 Management teams are likely to be focused on consistent earnings and share price growth, in part due to their typical incentivisation and share /

option ownership and in part to avoid the other implications of underperformance – including takeover.

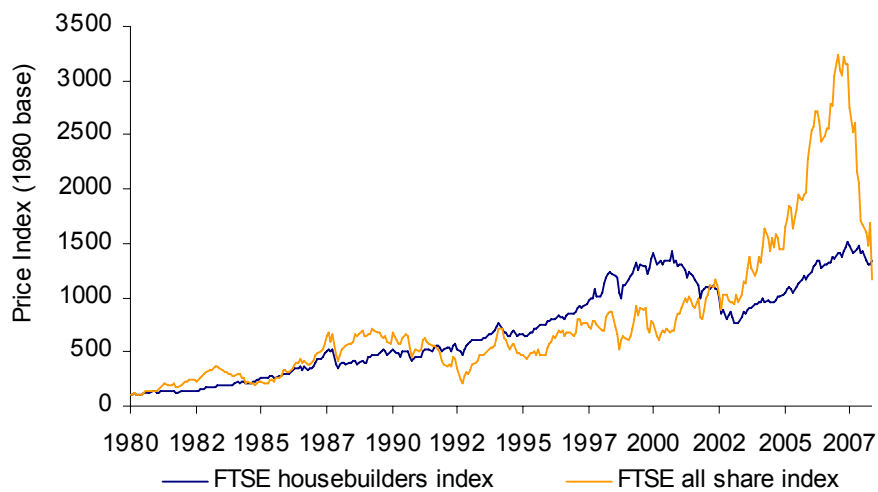
FIGURE 33: SUMMARY OF BOARD INCENTIVE PERFORMANCE TESTS FOR THE LARGE LISTED HOMEBUILDERS

	Annual bonus	Share and or option incentive scheme
Barratt	Profit related	Combination of Total Shareholder Return (TSR) and earnings per share (EPS) growth
Berkeley	Cash redemption plus PBT (division directors only)	Returning £12 per share to shareholders by 2011
Bellway	EBIT	Combination of TSR and ROCE
Bovis	Increase in profit over Retail Price Index	Combination of TSR and EPS growth
Persimmon	PBT and EPS	Combination of TSR and ROCE
Redrow	Profitability and individual objectives	Combination of ROCE and EPS (60% weighting) TSR (40% weighting)
Taylor Wimpey	EBIT, margins and individual objectives	Share plan - TSR and EPS growth Option plan - ROCE > Cost of Capital

Source: Annual reports

6.15 The cyclical nature of the industry, along with share prices being driven often by an element of short termism, means that performance can be challenging when external market conditions are less benign, as illustrated by a comparison of the price index for FTSE homebuilders with the FTSE all share index.

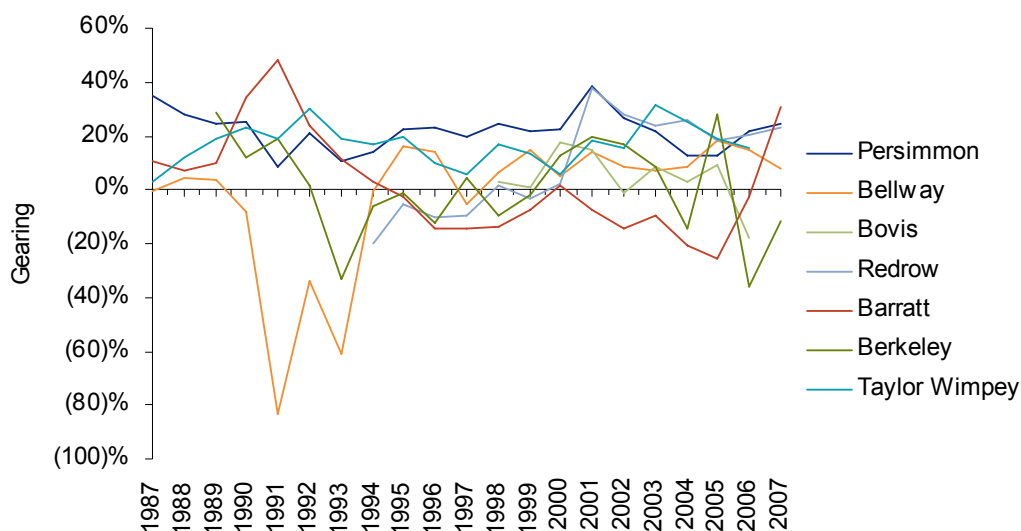
FIGURE 34: COMPARISON OF PRICE INDEX FOR FTSE HOMEBUILDERS VERSUS FTSE ALL SHARE INDEX: 1980 – 2008



Source: Datastream

- 6.16 Share prices over the last year have dropped dramatically. Recently they have been particularly volatile given the uncertainties in the housing market and bid speculation. Over the past two years, equity betas for the large listed homebuilders have ranged between 0.8 and 1.2, implying a strong correlation with the performance of the market in general (Bloomberg based on two year weekly sample).
- 6.17 The level of year end gearing over time for the larger listed homebuilders is shown in Figure 24. The negative percentage values indicate points in time where the company has a net cash position (that is, the cash balance is greater than debt owing).

FIGURE 35: GEARING TREND FOR LARGE LISTED HOMEBUILDERS: 1987 – 2007



Notes: Figures shown are for year end. Gearing shows net debt as a percentage of total net debt plus net assets.

Source: Datastream

- 6.18 The above illustrates that while different approaches are used there is an average gearing at year end of between 10 per cent and 30 per cent from 2000 to 2007.
- 6.19 Current cost of equity ranges from 10 per cent to 12 per cent, while the current equity return for the FTSE 100 is approximately 11 per cent (Bloomberg, dividend valuation model).
- 6.20 Cost of debt ranges from four per cent to five per cent net of tax (or six per cent to seven per cent gross) but will vary depending on individual banking terms, repayment profile, country exposure and effective tax rate. The majority of the listed homebuilders negotiated banking terms pre credit crunch.
- 6.21 Weighted Average Cost of Capital (WACC) ranges from eight per cent to 12 per cent and is dependent on individual gearing levels (Bloomberg).

Privately owned homebuilders

- 6.22 Privately owned homebuilders may have low equity reserves due to a combination of the following:
- limited initial equity investment by shareholders
 - fewer years of operation meaning less accumulated retained profit and
 - high proportion of profit paid as dividend.
- 6.23 This equity constraint may self-perpetuate by forcing the homebuilder to fund working capital through more expensive equity partnering or higher gearing (with associated funding costs).
- 6.24 Group cash receipts and cash payments are typically lumpy as there are fewer developments to provide a portfolio effect. Risk can be accentuated by higher site specific overheads per outlet resulting from fewer sites over which to spread costs.
- 6.25 A small number of sites combined with a low equity buffer, results in heavy reliance on cash receipts from final unit sales, to release sufficient equity to fund the next round of land acquisition. This constraint may force the developer to live 'hand to mouth' and increases the risk of financial distress.
- 6.26 Less attractive banking terms are typically available for these types of companies since their banking covenant is weaker.
- 6.27 Balance sheet gearing within the year tends to be more a function of timing of land acquisitions and stage of production of current developments than due to the year end effect per se (although there may be a linkage between them).
- 6.28 Many will have either self-imposed or, for smaller developers, funder-imposed limits on the level of exposure the business will take on one site in terms of units, revenue or margin contribution.

6.29 Shareholders in smaller private homebuilders typically find it more difficult to participate in capital gain due to the lack of marketability of their shares. Given that capital gain may be more driven by an exit transaction, privately owned businesses are more likely to divide into two types: those that extract a dividend yield and those that focus more on retained earnings and hence an ultimate capital gain. Those with a capital focus may have lower relative gearing due to the higher retained earnings invested in the business.

FIGURE 36: MEDIUM SIZED PRIVATELY OWNED HOMEBUILDERS GEARING

	Opening	Closing
Bloor	14%	24%
Emerson	45%	43%
Galliard	72%	84%
Stewart Milne	57%	67%
Wain	86%	80%
Average	46%	50%

Notes: Gearing defined as debt / (debt + equity – goodwill)

'Opening' refers to gearing at beginning of the year; 'Closing' refers to gearing at year end.

Source: Latest available annual reports

Financial institution backed

6.30 There have been a number of financial institution backed transactions in the sector over the last few years. Typically these have focused on re-leveraging the balance sheet as a means of funding the transaction. To a certain extent therefore these are seen as yield transactions by the funders, although management teams may view them as opportunities to build longer term capital value, without the need to satisfy shorter term KPIs in the listed market.

6.31 Inevitably the higher gearing means that the business risk is increased and hence the equity returns required are likely to be higher. In

downturns it is key to have flexible funding so that the medium term value strategy is not offset by short term debt requirements.

FIGURE 37: MEDIUM FINANCIALLY BACKED HOMEBUILDERS GEARING

	Opening	Closing
CALA	116%	110%
Countryside	154%	139%
Fairview	41%	35%
Morris	92%	85%
Average	101%	92%

Notes: Gearing defined as debt (including loan stock) / (debt + equity – goodwill)

Gearing will reduce if institutional loan stock is treated as equity

If institutional loan notes are treated as equity finance, nominal gearing percentage decreases (for example CALA would have 71 per cent and 68 per cent opening and closing gearing respectively and Countryside would have 118 per cent and 111 per cent respectively)

Excludes Crest Nicholson as post deal financial information not yet publicly available

'Opening' refers to gearing at beginning of the year; 'Closing' refers to gearing at year end

Source: Latest available annual reports

Variations in cash flows through the year

- 6.32 Many homebuilders will aim to operate a funding model which allows some flexibility in financial gearing to offset any short term funding spikes and to allow flexibility in the event of increased capital employed from a slowdown in the housing market. Financial gearing must also accommodate any growth aspirations of the business – which typically draws additional capital employed due to the cash outflows that occur for the majority of developments.
- 6.33 While it is difficult to gain any hard empirical data on typical variations in homebuilders' cash flows through the year, discussions with industry participants identified a number of factors that influence cash flows through the year.

6.34 When looking at levels of net debt in the sector it is important to consider the additional impact of land creditors (that is, deferred payments due on land). Equally year end gearing is typically not representative of either average gearing in the year, or peak gearing, both of which can be materially higher. These factors are discussed below.

Land creditors

6.35 Homebuilders tend to view land creditors as a source of funding for a percentage of land purchases and as a consideration in determining net debt – although they do not always classify it as such. Banks differ as to whether or not they include land creditors in their covenant tests; however analysts are increasingly looking at land creditors as a component of net debt, particularly following IFRS accounting policy changes.

6.36 The following table illustrates the impact of average gearing and land creditors in the large listed homebuilders. The negative percentage values indicate points in time where the company has a net cash position (that is, the cash balance is greater than debt owing).

FIGURE 38: LARGE LISTED HOMEBUILDERS YEAR END GEARING VERSUS AVERAGE AND IMPACT OF LAND CREDITORS

	Opening	Mid year	Closing	Average	Closing (inc land creditors)
Barratt	(2)%	12%	38%	25%	-
Berkeley	(36)%	(55)%	(12)%	-	-
Bellway	16%	17%	10%	19%	13%
Bovis	(18)%	(18)%	6%	(7)%	15%
Persimmon	29%	27%	27%	34%	35%
Redrow	20%	26%	24%	28%	34%
Taylor Wimpey	18%	26%	32%	28%	43%

Notes: Closing and average gearing based on last full year results

Gearing defined as debt / (debt + equity – goodwill)

'Opening' refers to gearing at beginning of the year; 'Closing' refers to gearing at year end

Source: Annual and interim reports

6.37 The above shows the impact on nominal gearing if land creditors are treated as debt. In reality, the intra-year land creditor balance will vary depending on land acquisitions and will have a corresponding negative / positive impact on debt.

Year end dates

6.38 Year end net debt is typically lower than average net debt, which of course is lower than peak net debt. Reasons include:

- Management performance targets resulting in a push for completions at year end to achieve bonus targets and meet investor expectations. Anecdotally this skewing is more marked for listed homebuilders; although from our discussions most companies in the sector experience this to a certain extent.
- Seasonality and the timing of most year ends in the sector occurring either after the peak Autumn or Spring selling seasons.

- 6.39 Some interviewees in the privately owned sector who have been operating for many years considered year end net debt to be broadly consistent with average net debt through the year. Having a long track record, alongside some retained earnings, helps to ensure that site starts become less influenced by the sales cycle.

Peak net debt

- 6.40 Inevitably peak net debt corresponds to peaks in capital employed. While this may be skewed by a material land purchase, it also reflects seasonality in sales and timing of build completions, especially where apartments are a large part of the mix.
- 6.41 Intra-month peaks tend to be higher than month end net debt, since sub-contractor costs are paid through the month, while sales completions are typically timed for the end of the month.
- 6.42 During discussions with homebuilders there were different views on the ratio of peak net debt versus year end net debt. Comments varied between 120 per cent to 200 per cent of year end net debt, with a typical range of between 150 per cent and 175 per cent.

Conclusion

- 6.43 Corporate funding strategy should reflect the operational risks inherent in the business, which include slowdown in a more difficult housing market; the increased capital lock-up inherent in developments involving apartments (which form an increasingly large part of the market); and the lumpiness of cash flows. As such there is a rational decision in much of the sector to keep debt at low levels, depending on the risk appetite of management and the shareholders. This allows flexibility for rapid land buying (which may result in better deals); ability to deal with a slowing housing market when that part of the cycle returns; and leaves sufficient headroom to cover peak funding requirements. When all these factors are considered, the typical levels of net debt may be viewed as rational rather than under-gearred.

- 6.44 Given typical banking terms in the sector, smaller builders may be capital constrained, where the current shareholders do not have sufficient equity to inject, particularly in homebuilders targeting growth or with limited retained profits.
- 6.45 The higher gearing of private equity backed or other similarly financed homebuilders works in stable or growing markets; however this can be more of a constraint in housing downturns. A number of the transactions have been backed by banks, for example HBOS, which is arguably able to take a holistic debt and equity view (subject to the level of syndication that has taken place). Deals in the sector of this type work best where a long time horizon can be taken.

7 APPENDIX A: GLOSSARY

Allocation risk	Risk that unconsented land does not get allocated for residential development in the Local Authority Plan
Beta	Measure of the relative volatility of a stock in comparison with the market as a whole
Brownfield	Previously developed land
Club banking	Funding arranged in advance of the transaction with a consortium of banks
Closing gearing	Gearing at year end
Conditional contracts	Typically have the bulk of payment conditional on the granting of a certain planning status, which is usually a pre-agreed sum. Accordingly they are more often used for sites currently in the development framework, where there is more certainty on the likely value of the end scheme
Covenant strength	Inherent security value available to banks
DCLG	Department of communities and local government
Debt syndication	Selling down of debt to other financial institutions
Draw down	The utilising of an available facility
EBIT	Earnings before interest and tax
EPS	Earnings per share
Equity capital buffer	The level of owner invested capital, or the level of net assets (that is, gross assets less net debt)
Equity reserves	Retained profits plus share capital, that is, owner

invested capital

Framework agreement	Overall contract in principle, against which individual pieces of work are called off
Gearing	Debt / (debt + net assets (excluding goodwill)). Note another definition of gearing is debt / net assets, which we have not used
Greenfield	Land that has not previously been developed, often in agricultural use
Hurdle rate	The target performance measure (often gross margin per cent) that a company will use to assess whether a land acquisition is value enhancing and therefore should be carried out, for example if the expected returns are higher than the hurdle rate, it will make sense to purchase the land
IFRS	International financial reporting standards
KPI	Key performance indicator
Land bank	A supply of potential development plots.
Land creditors	Deferred payments on land
Leverage / leveraging	Used as per gearing, a highly leveraged company would have high levels of debt in comparison to equity. Equally a high operational leverage / gearing would be seen where the ratio of fixed costs to variable costs is high
Loan to value ratio	The ratio of debt / value of land and WIP. There are various definitions used; however typically used in either banking covenants or for draw down of site

specific funding, for example a ratio of 70 per cent would not be uncommon

Master plan	Overall high level plan for large housing and / or commercial development
Mezzanine funding	Subordinated debt – a higher cost form of funding which ranks behind serviced debt in a winding up
Mixed use	Development that combines two or more types of development, for example residential, commercial (retail / office), leisure and / or industrial
PPG3 – Planning Policy Guidance 3	A government statement setting out policy and guidance for local authorities on the provision of housing
PPS3 – Planning Policy Statement 3	A government document setting out the national planning policies for housing, which regional planning bodies and local authorities should take into account in developing regional spatial strategies and local development frameworks
Peak funding	Maximum funding requirement, which is the maximum level of debt incurred on a daily basis
OFT	Office of Fair Trading
Opening gearing	Gearing at the start of year
Option agreements	Typically peg land payments to a discount on open market value (for instance 10 per cent) and hence are often used to acquire longer-term land
S106 (Section 106 Agreement)	Section 106 of the Town and Country Planning Act 1990. These agreements act as a main instrument for placing obligations on developers, often requiring them to minimise the impact on the local community and to invest in infrastructure to provide community benefits

Strategic land	Land which is held, generally under option, which is being promoted through the planning system in order to ultimately achieve a planning consent
ROCE	Return on capital employed, defined as $\text{EBIT} \div (\text{net assets} + \text{net debt})$
WACC	Weighted average cost of capital
Yield	Annual income (dividend or interest) derived from a company or debt instrument