18 October 2018

FORTERRA

BUILDING MATERIALS

FORT.L

237.5p

Market Cap: £476.4m

SHARE PRICE (p)

12m high/low	333p/234p

Source: LSE Data

KEY INFORMATION

Enterprise value	£537.2m
Index/market	LSE
Next news	Final results, Mar 2019
Gearing	12.8%
Interest cover	26.9x

FORTERRA IS A RESEARCH CLIENT OF PROGRESSIVE

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Does sector weakness belie fundamentals?

Shares of housebuilders have fallen, possibly prompted by concerns about home prices and margins, potentially triggering weakness in the wider sector. We believe, however, that developers and basic material producers such as Forterra have limited exposure to those drivers and operate under very different dynamics. Their pricing power is underpinned by low inventories and a consolidated sector. The positive demand-supply situation could improve further due to new government housebuilding initiatives.

- **Market dynamics are different for brick makers.** We understand that investors are concerned that major housebuilders are beginning to experience downwards pressure in prices and margins as well as slower volume growth. However, we believe the dynamics facing brick makers are very different to those for the housebuilders.
- **Falling inventory levels support pricing power.** In the short-term, industry stocks have fallen 12.5% YoY to 351 million, the lowest since the 'brick shortages' following the introduction of Help to Buy in 2014. This is despite the industry operating at close to full capacity. We believe this will support brick manufacturers to raise prices at least to compensate for rises in their input costs, such as energy.
- **Consolidated brick sector offers further protection.** We believe that housebuilders could attempt to offset margin pressure by seeking savings from the supply chain. But the brick manufacturers are even more consolidated, with three owning 88% of capacity, compared with the top ten developers, which build c. 55% of private homes. We look at other parts of the supply chain which may be more susceptible.
- **PM weighs in to government building plans.** Theresa May announced plans to remove the borrowing cap on local authorities, which could result in 100,000 council homes being built. This and other major initiatives from a range of public and private organisations could drive even further growth in housebuilding volumes over the long-term.
- **Valuation.** The shares trade at a PER of 9.5x FY 18E and 9.0x FY 19E and a FY 18E yield of 4.4%, with £43.8m est. YE 18 net debt. This is at a discount to Ibstock, which has a FY 18E P/E of 11.6x. We have trimmed our FY 18E PBT by £0.7m to £64.7m, reflecting production issues in Bespoke Products, and FY 19E by £1.5m to £68.7m, on the assumption of brick production hitting full capacity (see page 10).

FYE DEC (£M)	2015	2016	2017	2018E	2019E
Revenue	290.2	294.5	331.0	359.4	374.1
Adj EBITDA	70.5	70.6	75.4	79.5	83.5
Fully Adj PBT	34.1	54.3	61.1	64.7	68.7
Fully Adj EPS (p)	14.9	21.4	24.1	25.3	26.5
EV/Sales (x)	1.9	1.8	1.6	1.5	1.4
EV/EBITDA (x)	7.6	7.6	7.1	6.8	6.4
PER (x)	16.0	11.1	9.9	9.4	8.9

Source: Company Information and Progressive Equity Research estimates

Brick demand and pricing power on firm foundations

Share price movements

	Price (p)	Mkt cap (£m)	12 m hi (p)	% chg	12 m lo (p)	% chg
Forterra	259	519	340	-24	255	+2
Ibstock	229	929	306	-25	228	0
Michelmersh	87	75	102	-16	75	+15
Marshalls	422	834	502	-16	380	+11
Housebuilders [1]	na	32,666	na	-21	na	+6

Source: Factset. Priced at COB 5 October 2018. [1] ***index based on 12 leading stocks***

We understand that there have been worries among investors that the biggest quoted developers are generally predicting that volume growth will slow to low single-digits percentages. However, we believe that their main concerns reflect a belief that builders will attempt to offset their own margin pressure by imposing price cuts on their supply chains.

Brick industry operating at near to capacity and demand could grow further, while pricing power is under-pinned by low inventory levels

We believe these concerns may be misplaced, both in terms of volume and pricing. Official data indicates that the brick industry deliveries at near to or possibly above its sustainable production capacity, while there are increasing signs from politicians and the rest of the development sector that total housebuilding volumes will continue to rise, irrespective of the plans of the quoted national builders.

In terms of pricing, the related data on brick inventory levels both supports this view of an industry running at full capacity and indicates that producers retain significant pricing power. While we agree that housebuilders could seek to mitigate margin pressure by seeking savings in their supply chains, our analysis of the dynamics in various industry sub-sectors suggests that suppliers of bricks and other 'basic' materials are more protected on a structural basis than, for instance, component manufacturers or building subcontractors – at least unless volumes collapse. The basic suppliers operate in highly consolidated markets and, especially in the case of brickmakers, are capacity-constrained; other sectors are more fragmented and do not share the same production limitations.

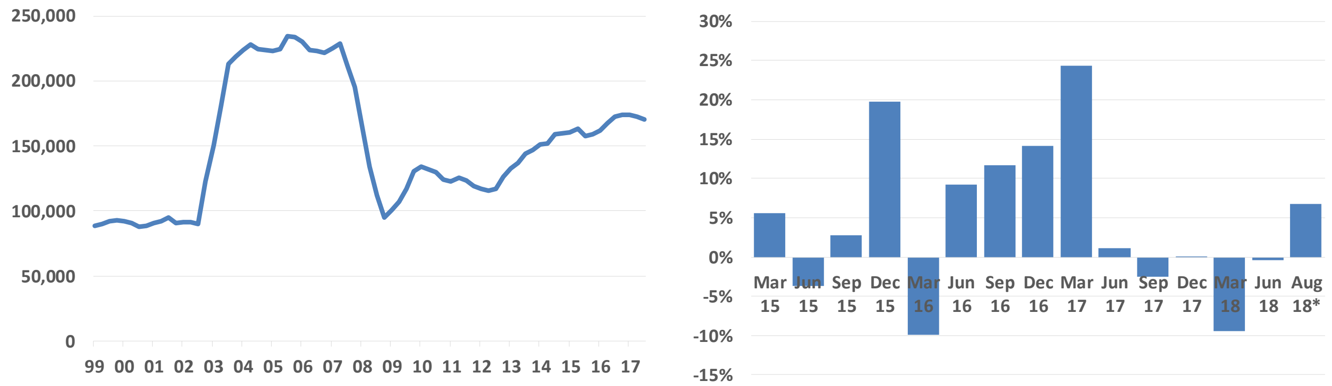
Volumes: politics and industry push for more housing growth

Housebuilding volumes, the main driver of brick demand, have grown strongly, albeit with a recent slowdown

Total housebuilding has been trending upwards since 2012, however, with a more recent steadying in the growth rate (below, left).

Latest housebuilding statistics from the MHCLG, supplemented by recent data from the NHBC, indicate a fairly stable level of overall new construction starts since Q2 17, albeit with a sharp YoY fall in Q1 18, due to the harsh winter, offset by an uptick in the three months to August, according to the more up to date NHBC statistics (below, right).

Total housebuilding starts: total UK, 12m (LHS); YoY change, England (RHS)



Source: Ministry of Housing, Communities and Local Government, Factset. * Based on the more up to date NHBC data for the UK as a whole

This flattening out may be due to two factors: uncertainty about the progress of Brexit negotiations among buyers and impacting the investment decisions of developers; and slower land buying by major housebuilders in the absence of clarity over whether Help to Buy will be extended beyond the current 2021 cut off.

PM adds to government push for more, mixed-tenure housebuilding

Theresa May reverses Thatcherite opposition to council house building by removing local authority borrowing limits

However, we believe there is mounting political pressure to substantially increase building new homes across all tenures, not just private housing, which is impacted by the two constraints above.

The highest profile political move recently is Prime Minister Theresa May's proposal at the Conservative Party conference in October 2018 to free local authorities from the centrally-regulated borrowing caps that had restricted the number of new council houses they could build. This is a remarkable change for the Conservatives, almost 40 years after Margaret Thatcher introduced Right to Buy, allowing council tenants to buy their homes at steep discounts. This, and large-scale transfers of council homes to housing associations, was accompanied by stringent regulations on the building of new local authority housing. This led to the stock of council houses falling by over two-thirds to just under two million since then.

Savills predicts up to 100,000 new council homes

Savills has calculated that councils will be able to borrow an extra £10 - 15bn, sufficient to build 100,000 new homes. Last year 3,280 local authority homes were started; in 1978, the year before Margaret Thatcher came to power, it was 110,170. This may take some time to enact, since legislation has to pass through parliament, but the pledge received near-universal support from key social housing bodies and would appear to chime with Labour Party policy on housing.

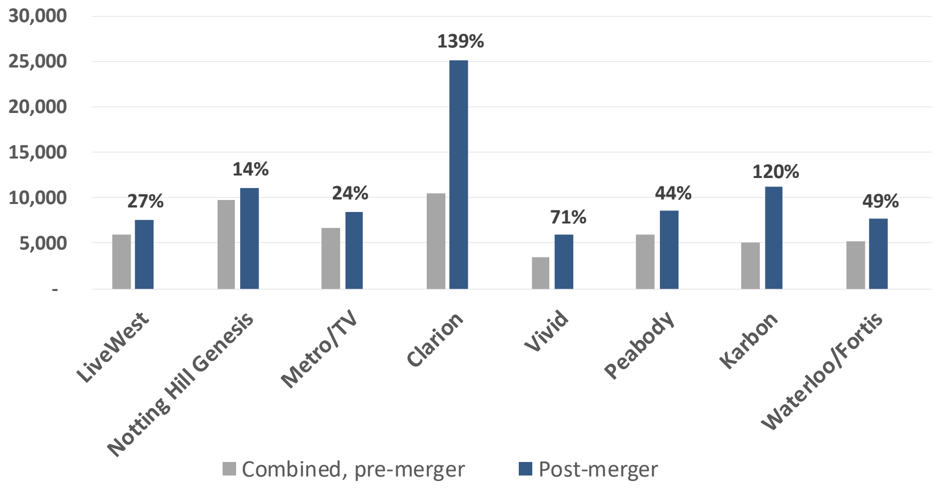
Other providers have ambitious development plans

This comes in addition to a range of mainly positive trends for other tenures that we have highlighted in previous notes. These include:

- **Build to rent.** Purpose-build development for private rental has been gathering pace since 2015. There are now 25,665 units completed, 41,870 under construction, and a further 64,320 with planning permission, according to the British Property Federation. We believe the institutional backers of some large urban schemes may encounter financial challenges due to wrong assumptions on rental income and both building and management costs, but the concept should mature over time and provide a widespread alternative to private development for sale.

- **Housing associations.** There has been a succession of 'mega-mergers' between the largest housing associations since 2016 and these enlarged groups command substantial borrowing power and most have ambitious development plans, including build to rent and shared-ownership as well as their core social rented output. Five of these merged groups – Clarion, L&Q, Optivo, Peabody and Notting Hill Genesis – plan to build an implied average of c, 22,000 homes annually over different time periods up to 10 years, according to the g15 group of the largest HAs. The top 50 associations plan to build 41,288 homes in 2018-19, up 17% from 35,370 homes of all tenures completed last year. In just one example of the borrowing power of large HAs, Moody's reports that Southern Housing Group is preparing to issue a £300m bond. One notable factor of the major mergers is that the merged groups almost all plan to build more homes than the combined targets of the individual units previously – a trend highlighted by research published at Galliford Try's recent capital markets day (see below).
- **Specific London plans.** Mayor Sadiq Khan's London Housing Strategy plan sets a target of 65,000 homes per year. This compares to 40,000 in 2016-17, a figure that has been growing steadily since the low of 20,000 in 2010-11. However, there has been considerable disagreement over the plan's affordable housing targets and the definitions of 'affordable rent'.
- **Mid-sized housebuilders.** Although most of the top 10 quoted housebuilders have indicated that volume growth should tail off over the next one to two years at least, a number of the largest unquoted groups, including Miller, Cala and Avant (all mentioned in the media as IPO candidates), have announced ambitious growth plans, having had less access to bank borrowing than their quoted peers for most of the period since the financial crisis.

Major housing associations, targets before and after mergers (numbers, % uplift)



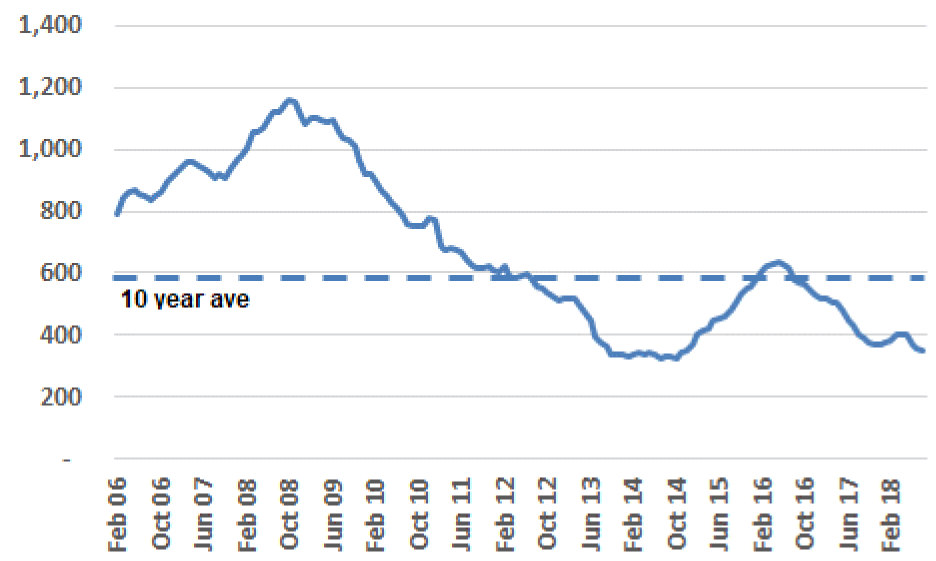
Source: Galliford Try analysis of housing association data

Pricing: falling inventory levels underpin pricing power

Stock levels down to near lows for the cycle

A mounting imbalance between demand and supply can be tracked in the falling levels of inventories across the industry. The latest Building materials and components statistics from the Department for Business, Energy & Industrial Strategy indicates stocks in August were down 12.5% YoY to 351 million, the lowest since the supposed 'brick shortages' following the introduction of Help to Buy in 2014.

UK brick stocks, million

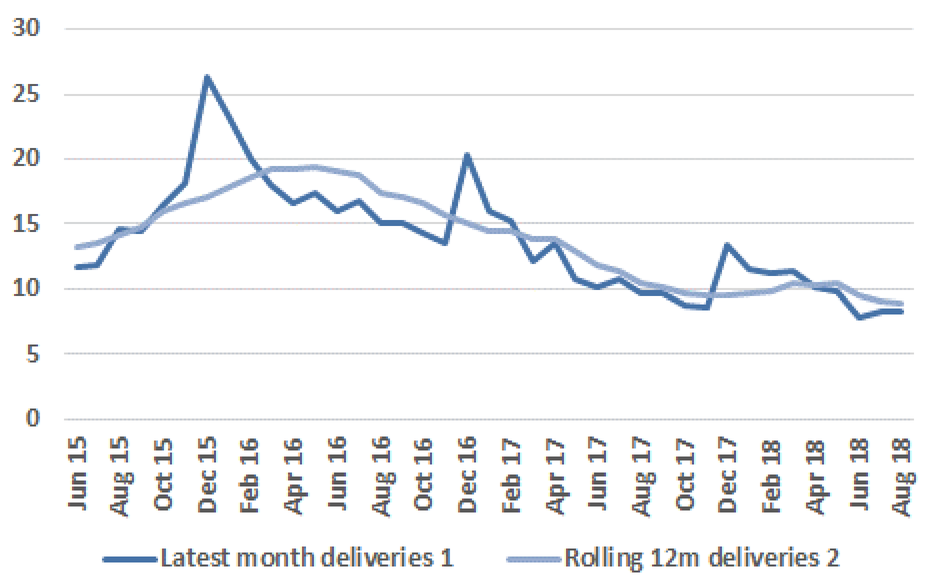


Source: Department for Business, Energy & Industrial Strategy

Stocks down to nine weeks' worth of deliveries

The latest stock level compared to the trailing 12 months of deliveries (a more reliable, albeit lagging indicator than compared with the 'spot' level of deliveries) is down to 9.0 weeks, the lowest level in available records from 2004, and down from 20 in 2016.

UK stock levels / deliveries (weeks)

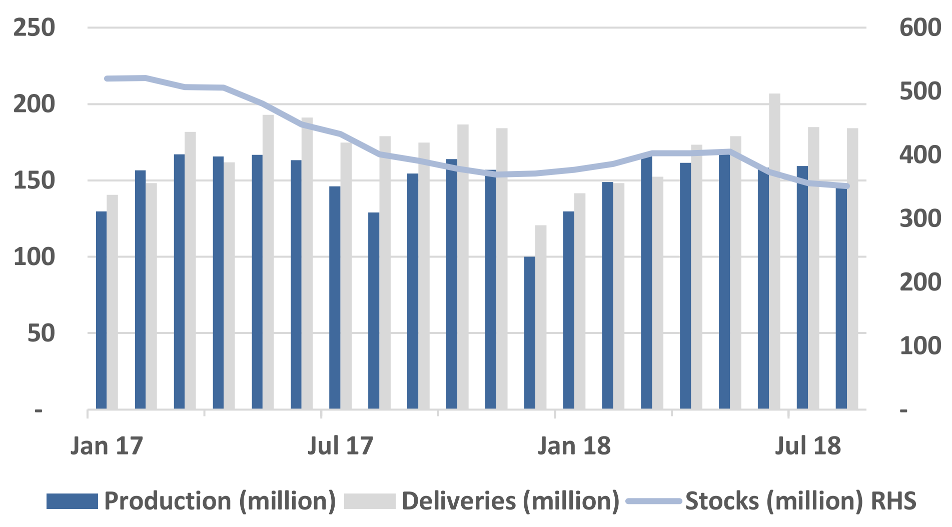


Source: Department for Business, Energy & Industrial Strategy, Progressive

Production failing to meet demand

The reason for the falling stock levels is that delivery levels have exceeded production in the past five months of data and in 11 of the preceding 15 months (see below).

Deliveries, production and stocks, million



Source: Department for Business, Energy & Industrial Strategy

Imports bridge the gap – for now

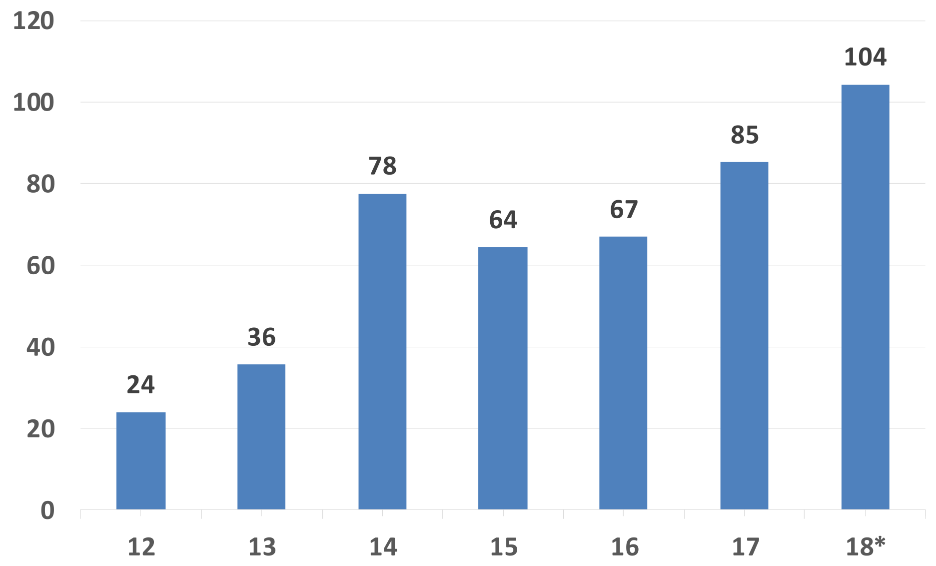
Imports have been rising but continental producers now seeing improving demand in their home markets

This trend has pushed up brick imports from the continent. The value of brick imports in Q2 18 was £30.3m, up 50% YoY and the annual run rate to Q2 was £104m (see below) – significantly higher than during the 'shortages' during 2014 (more perceived than real, in our view).

However, imports may become harder to rely on in the near future. Importing is always an expensive recourse – other than if architects require a particular aesthetic – due to the relatively high transport costs. Manufacturers usually only export if there is marked over-capacity in their home market and full capacity in neighbouring countries.

However, the housebuilding markets in north-western European countries appear to be recovering and, given the weakness of sterling, the economics of exporting to the UK now appear to be diminishing – other in the case of higher value specialist bricks.

Value of brick imports, annual (£m)



Source: Department for Business, Energy & Industrial Strategy
**** based on 12 months to Q2 18***

Measured expansion under way – aimed at key growth sector in housing

Planned expansion of Desford will boost production of in-demand lower priced bricks

In May the company outlined details of investment in new capacity. The new plant will be sited at the group's existing Desford facility in Leicestershire, which has a current annual capacity of 85m bricks and will lead to a new factory producing up to 180m pa, at a cost of £90 - 95m, spread over 2019 - 22 and funded from free cashflow. The existing plant will remain operational until the new one is completed. This will boost group capacity by 16% to 685m, c. 31% of the projected national total of 2.2bn when the plant is due to open.

Desford is centrally located in the Midlands, with good road connections. The output from the plant will be extruded or 'wire cut' bricks, the more economical type favoured by volume housebuilders and in affordable housing.

Further plant upgrades are possible should there be sustainable levels of additional demand, according to Forterra, which in our view has demonstrated a measured approach to investment before and after the IPO.

Theme: where does the pricing power lie?

Big developers feeling margin pressure and are fairly consolidated

Our view remains that brick demand could remain close to or above the industry's manufacturing capacity for the foreseeable future, due to ambitious plans by alternative providers. Irrespective of this, there appears to be speculation that housebuilders could offset margin pressure by demanding their suppliers cut their prices. This might not be so straightforward, in our view.

Housebuilders derive their gross profits and margins from the prices they can sell their homes at, less their build costs (both in 'real time') and the historic cost of land (often bought years previously). Margins appear to be peaking across the sector as house price growth slows down, building costs inflation overtakes price rises and as developers run out of 'cheap' land bought in the immediate aftermath of the financial crisis.

An inescapable problem for housebuilders is that they are generally 'price takers' and the price of most mortgaged new homes is set by lenders' valuers. These judge prices with reference to the much larger secondhand homes market.

They can mitigate some of the margin pressure by extracting savings from further down the supply chain, but developers themselves as well as the main participants in the supply chain operate under varying industry dynamics. The key differentiator is the degree of fragmentation, both for developers and for their supply base.

Building materials are either sold directly to housebuilders by manufacturers or indirectly via builders' merchants or specialist distributors or are bought by subcontractors. Bigger housebuilders often have major direct sales agreements with bigger producers. They have significant pricing power, given their comparative 'market clout' – the top 10 account for c. 55% of housebuilding starts according to latest NHBC statistics.

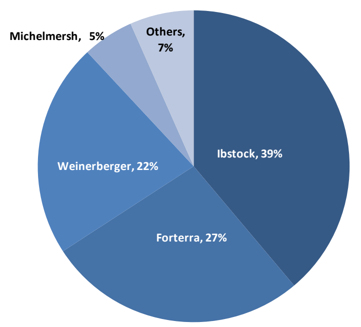
But brick and other 'basic' material sectors are even more consolidated than housebuilders, but take a longterm view on pricing

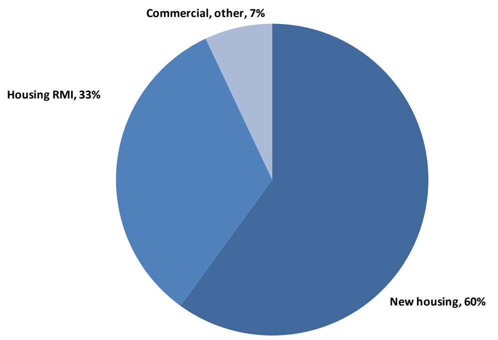
However, the biggest 'basic' building materials producers arguably benefit from even greater consolidation. In the case of bricks, the top three command c. 88% of industry capacity. (Other basic materials, such as concrete blocks and roof tiles, have similar industry structures, with their markets generally dominated by three to five producers.)

Forterra has stressed publicly in results presentations that it intends to use its pricing power responsibly to maintain good longterm relationships with its largest housebuilding and merchant customers, stating that recent and planned price rises principally to recover rises in input cost, such as energy and packaging.

Additionally, although newbuild housing is Forterra's main market, housing repair, maintenance & improvement (RMI) – for which it produces the high margin 'Fletton' brick and other new work, allow the group an extra level of price protection, in our view.

Market share of brick producers (LHS); Forterra's end markets (RHS)





Source: Forterra presentations

The housebuilding sector, however, has a long 'tail' of mid-sized housebuilders: numbers 11 - 50 under the NHBC rankings account for c. 27% of private starts. This more fragmented market sector, it can be assumed, has less buying power than the top ten. Towards the bottom of this range, they are more likely to buy indirectly, from builders' merchants and specialist brick 'factors'.

Other parts of the supply chain are more fragmented, particularly component makers and subcontractors

Although there is a small handful of major builders' merchant chains, owned by Travis Perkins, Saint-Gobain, Ferguson and Grafton plus a few large regional groups, the majority of the distribution sector is highly fragmented.

We believe housebuilders will encounter less resistance to cost cutting from more fragmented sectors in their supply chains. See table. Manufacturers of components – plumbing products, kitchen units and the like – generally face more competitors, since there is usually less capital required than the highly expensive kilns and limited reserves required in basic materials such as, for instance, brick and cement production.

Subcontractors have even less sway over pricing and often have to take on work at wafer thin margins. However, certain specialist trade contractors may be in short supply even when others are struggling.

Housbuilders and their customers: degrees of pricing and buying power

Sector	Pricing/buying power
Top ten housebuilders	Pricing: 'price takers' - constrained by secondhand market. 'Forced sellers' once construction is underway. Buying power: significant, since top 10 take c. 55% of private starts.
Mid-sized housebuilders	Pricing: as above Buying power: less so, fragmented with next 40 biggest taking up only c. 27% of private starts
Basic material producers	Price setters when demand-supply balance is in favour. Highly consolidated market.
Component producers	More fragmented markets - less pricing power.
Builders' merchants	'Two tier' market, with a few major national or regional chains but competing against hundreds of smaller independents. Biggest chains have a degree of power with their suppliers.
Subcontractors	Will provide labour and materials. Very fragmented, but certain trades, such as brick layers, can intermittently be in short supply.
Land vendors	Theoretically driven by geared residual value model, set by prices, build costs and target margin. Ultimately, these three variables (either current or anticipated) set land prices – which affect housebuilders' future profits.

Source: Progressive analysis, NHBC, company presentations

Estimates

We have trimmed our estimates reflecting production constraints in, this year, Bespoke Products and, in FY 19E, brick output.

The FY 17 results referred to hold-ups in production levels in Bespoke Products, which manufactures a range of concrete and clay flooring, drainage and other components. We have reduced growth in revenues in the division, which acquired the business of Bison Manufacturing mid-year, from +20% to +12%, reducing revenue from £100m to £93.6m. For FY 19E we leave our revenue unchanged at £103m. This reduces our estimated division EBITDA for the division by £0.7m to £4.2m.

For FY 19E, we had expected a further 2% growth in brick volumes, but we have reduced this to no change, on the basis that the division is currently running effectively at full capacity. This has reduced the divisional EBITDA from £78.4m to £76.9m.

No other changes have been made to our estimates, other than the feed-through to net debt, which goes up from £41.5m to £43.1m for YE 19E, having fallen from a pro-forma £155m in December 2015, immediately prior to the April 2016 IPO.

Valuation considerations

We note that Forterra currently sits at the bottom of the range on the consensus valuation metrics shown in the table below for the three quoted UK brick manufacturers as well as building products specialist, Marshalls. The high relative yield for Ibstock includes assumptions for the level of special dividends, which it has committed to.

Investors should view any valuation in the context of their own assessments of the relevant risks and drivers. Here are the current headline valuation metrics:

Building materials companies – valuation ratios

	PER (x)		EV/EBITDA (x)		Yield (%)
	FY1E	FY2E	FY1E	FY2E	FY1E
Forterra (FORT)	9.5	9.0	6.8	6.5	4.4
Ibstock (IBST)	11.6	10.5	8.5	7.8	6.6
Michelmersh (MBH)	10.5	10.5	8.2	7.9	3.8
Marshalls (MSLH)	16.9	15.8	11.3	10.6	3.5

Source: Progressive (FORT), Thomson Reuters consensus

Financial Summary: Forterra

Year end: December (£m unless shown)

PROFIT & LOSS	**2015**	**2016**	**2017**	**2018E**	**2019E**
Revenue	290.2	294.5	331.0	359.4	374.1
Adj EBITDA	70.5	70.6	75.4	79.5	83.5
Adj EBIT	61.1	60.2	64.5	67.2	71.2
Reported PBT	22.2	37.1	59.3	64.7	68.7
Fully Adj PBT	34.1	54.3	61.1	64.7	68.7
NOPAT	53.7	58.1	47.7	51.6	54.0
Reported EPS (p)	9.0	13.8	23.8	26.0	27.5
Fully Adj EPS (p)	14.9	21.4	24.1	25.3	26.5
Dividend per share (p)	0.0	5.8	9.5	10.5	11.0
CASH FLOW & BALANCE SHEET	**2015**	**2016**	**2017**	**2018E**	**2019E**
Operating cash flow	50.0	56.2	90.2	74.5	83.2
Free Cash flow	7.9	28.8	69.2	47.7	57.1
FCF per share (p)	3.9	14.4	34.6	23.9	28.6
Acquisitions	0.0	(0.1)	(21.8)	0.0	0.0
Disposals	N/A	N/A	N/A	N/A	N/A
Shares issued	0.0	2.0	3.0	4.0	5.0
Net cash flow	3.2	32.0	(27.2)	17.0	0.7
Overdrafts / borrowings	405.6	148.5	89.8	89.8	89.8
Cash & equivalents	24.2	56.2	29.0	46.0	46.7
Net (Debt)/Cash	(381.4)	(92.3)	(60.8)	(43.8)	(43.1)
NAV AND RETURNS	**2015**	**2016**	**2017**	**2018E**	**2019E**
Net asset value	(210.5)	69.2	104.7	136.9	170.5
NAV/share (p)	(105.3)	34.6	52.2	68.3	85.0
Net Tangible Asset Value	(223.8)	55.5	88.9	121.1	154.7
NTAV/share (p)	(111.9)	27.8	44.3	60.4	77.1
Average equity	(219.5)	(70.7)	87.0	120.8	153.7
Post-tax ROE (%)	(8.2%)	(38.9%)	54.6%	43.0%	35.7%
METRICS	**2015**	**2016**	**2017**	**2018E**	**2019E**
Revenue growth	N/A	1.5%	12.4%	8.6%	4.1%
Adj EBITDA growth	N/A	0.1%	6.8%	5.5%	4.9%
Adj EBIT growth	N/A	(1.5%)	7.1%	4.2%	5.8%
Adj PBT growth	N/A	59.3%	12.5%	5.9%	6.1%
Adj EPS growth	N/A	44.0%	12.5%	5.0%	4.8%
Dividend growth	N/A	N/A	63.8%	10.5%	4.6%
Adj EBIT margins	21.1%	20.4%	19.5%	18.7%	19.0%
VALUATION	**2015**	**2016**	**2017**	**2018E**	**2019E**
EV/Sales (x)	1.9	1.8	1.6	1.5	1.4
EV/EBITDA (x)	7.6	7.6	7.1	6.8	6.4
EV/NOPAT (x)	N/A	N/A	N/A	N/A	N/A
PER (x)	16.0	11.1	9.9	9.4	8.9
Dividend yield	N/A	2.4%	4.0%	4.4%	4.6%
FCF yield	1.7%	6.1%	14.6%	10.1%	12.0%

Source: Company information and Progressive Equity Research estimates

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