BARCLAYS

Equity Research
5 December 2018

#brexit

UK Homebuilding

House builders and a 'No-Deal' Brexit

Ahead of the Withdrawal Agreement vote (11th Dec), we consider the impact of 'No-Deal' on the UK house builders. We use three scenarios: an 'orderly' exit using our Economics team's estimates (*'Alternative Brexit scenario: A no-deal rate cut'*, 3 Oct), and two 'no transition' alternatives (the 'disruptive' and 'disorderly' scenarios from the Bank of England's *EU withdrawal document*, 28 Nov). Long-term PER trends imply that EPS cuts of c26-35% are currently being priced in. Our analysis suggests this is commensurate with up to c8% off house prices and c30% off volumes.

- **GDP and house prices.** In our Economics team's scenario, GDP doesn't fall, though we have a mild *intra-year* recession in 2019. This suggests some scope for house price weakness next year, though no crash. In the Bank's 'disruptive' scenario, 14% off house prices seems optimistic to us, given its expected GDP impact (-3%, worse than the early '90s recession). And in its 'disorderly' scenario, 30% off house prices is feasible if GDP falls 8% (dwarfing the -19% and -6.3% experienced respectively in the financial crisis). Only in this latter case would builders' high intake margins fail to protect their TNAVs.

- **Rates and affordability**. Our economists see a 50bps rate cut to 0.25%, which would promote affordability in the UK (and in London too for the first time in several years, pp 7-8). But in the Bank's two scenarios, the implications are gloomier, as affordability is hit by rate hikes in the 'disruptive' (to 1.75%) and particularly the 'disorderly' (to 5.5%) outcomes.

- **Labour, build costs and unemployment.** Supply is tight across most skilled trades and Brexit sharpens the focus on migrant labour (>50% on London construction sites). Although a 'disruptive' outcome is expected to reduce net migration to +30k p.a., a fall of 100k p.a. in a 'disorderly' scenario is more troubling. And with build cost inflation running at c3-4% p.a., a 25% fall in the pound would amplify margin pressure. A rise in unemployment to 6-8% would further threaten house building fundamentals.

- **Housing volumes.** In previous downturns, volumes have been hit more than prices. In a 'disorderly' scenario, we believe they could fall by as much as 60%, based on historical precedent, though the impact on new build activity would likely be much less severe, given Help To Buy support.

- **What is the market pricing in?** Comparing 2020E PER multiples with long-term averages for four house builders implies EPS cuts of c26-35% are now priced in. Although this is less extreme than either of the Bank's scenarios, we calculate that it is commensurate with up to c8% off house prices and c30% off volumes.

INDUSTRY UPDATE

UK Homebuilding
NEUTRAL
Unchanged

UK Homebuilding
Jon Bell
+44 (0)20 7773 5996
jon.bell@barclays.com
Barclays, UK

Dheeraj Singh
+91 (0)22 61751206
dheeraj.singh@barclays.com
Barclays, UK

Completed: 04-Dec-18, 20:47 GMT Released: 05-Dec-18, 05:00 GMT

CONTENTS

THE POTENTIAL IMPLICATIONS OF A 'NO-DEAL' BREXIT

Three 'No-Deal' scenarios

Let's start with what this note *isn't*. It isn't an assessment of whether we think the Bank of England's (or our Economics team's) estimates are accurate. Nor is it an attempt to suggest how Parliament will (or should) vote. What this note *does* is explore the implications for the housing market (and the UK house builders) in three 'No-Deal' scenarios.

Barclays Economics team – 'No-Deal'/'orderly'

Our Economics team published '*Alternative Brexit scenario: A no-deal rate cut*' on 3rd October. It forecasts a mild intra-year recession in 2019 (despite this, the calendar year sees modest GDP growth), unemployment peaking at 6.5% by the end of 2020, sterling falling 5-10% (2% of which has occurred since publication) and base rate falling 50bps to 0.25%. This, as our team describes it, *'sits towards the more benign side of the spectrum'*.

Bank of England – 'No-Deal, no transition'/'disruptive'

In its 'disruptive' scenario (see *'EU withdrawal scenarios and monetary and financial stability'*, 28th November), the Bank expects GDP to fall 3% from its Q1 2019 starting point (greater in magnitude than the early 1990s recession, though much less acute than the financial crisis). Here, the Bank sees house prices down 14% (we consider this optimistic should GDP fall by this amount), unemployment reaching 5.75%, sterling falling by up to 15%, and base rates rising to 1.75% (a 3-year average of 1.5%). It also expects net migration to fall to +30k p.a. by 2021.

Bank of England – 'No-Deal, no transition'/'disorderly'

In its 'disorderly' scenario (also viewed using the link above) - which we consider to be a useful bear case - the Bank expects GDP to fall by 8% from its Q1 2019 starting point (a more acute downturn than even the financial crisis), house prices down 30% (broadly consistent with this GDP fall, in our view), unemployment up to 7.5% and base rate up to 5.5% (a 3-year average of 4.0%). Significantly, the Bank expects negative net migration (-100k p.a.) from 2021.

FIGURE 1
Three 'No-Deal' scenarios

	Barclays/Bank of England estimates						Our assessment		
	GDP[8]	House prices[9]	Unemp.	Sterling fall	Bank rate (ave)	Migration (net p.a.)	Land values fall	Housing vols[1] (overall) fall	Housing vols (new build) fall
BARC Econ. - 'orderly'	n/a[7]	n/a	6.50%[2]	5-10%	0.25%[6]	n/a	<= 5%	<= 5%	-
BoE - 'disruptive'	-3%[4]	-14%	5.75%[11]	c15%[3]	1.50%[5]	+30k[10]	<= 30%	<= 30%	<= 15%
BoE - 'disorderly'	-8%[4]	-30%	7.50%[11]	c25%[3]	4.00%[5]	-100k[10]	<= 60%	<= 60%	<= 30%

Notes:

[1] - from our estimated 2018 outturn of 1.125m, [2] - by the end of 2020, [3] - versus the US Dollar, [4] - from its Q12019 starting point,
[5] - three year period from 2019, with a peak of 1.75%('disruptive') and 5.5%('disorderly'), [6] - 2 year period from 2019,
[7] - technical recession in 2019, with GDP 2%lower by end 2020 in a 'No-Deal' than in our Economics team's central scenario, [8] -maximum fall from starting point (Q12019), in real terms,
[9] - in nominal terms, [10] - by 2021, [11] - peak

Source: Bank of England, Barclays Research

In addition to the work undertaken by our Economics team and the Bank of England, we make reference to a similar exercise undertaken by our Banks team, 'Running the numbers on 'No-Deal' Brexit', *published on 27th November.*

THE EXPERIENCE OF PREVIOUS ECONOMIC EVENTS

What the early '90s recession and the financial crisis tell us

The table below shows the impact on a) **house prices**, b) **housing volumes,** and c) **land values** from their peaks to their troughs in the last two major economic downturns: the early '90s recession and the global financial crisis.

FIGURE 2

Previous economic downturns through a housing market lens (peak-to-trough impacts)

	Early 90s	Financial crisis
GDP fall (real, %)[4]	-2.0	-6.3
Duration of down cycle (quarters)	*5*	*5*
House prices (nominal, %)[1]	-20.0	-18.7
Duration of down cycle (quarters)	*13*	*6*
Housing volumes (%)[2]	-47.0	-56.9
Duration of down cycle (quarters)	*16*	*20*
Land values (%)[3]	-58.0	-50.1
Duration of down cycle (quarters)	*7*	*7*

Notes

[1] - using the Nationwide house price index, [2] - using DCLG/HMRC data, only for England

[3] - greenfield land values taken from Savills data, [4] - using ONS data

Source: Nationwide, DCLG/HHMRC, Savills, ONS and Barclays Research

All three metrics likely to come under pressure in a downturn

It comes as no surprise that all three housing market metrics fell materially on both occasions. However, based on these previous downturns, we highlight the following:

- **Transaction volumes were more negatively impacted than prices.** In both previous downturns, there has been a greater impact on the former than the latter.
- **Land values have been more negatively impacted than house prices.** This likely reflects in part the geared relationship that land values have (or at least used to have) with house prices. Although this relationship has weakened since the crisis - as increases in house prices have been accompanied by commensurate (rather than steeper) rises in land values - significant downside risks present.
- **The early '90s recession saw a bigger fall in house prices.** Despite a more acute economic event in the global financial crisis, the impact on house prices was marginally less severe, likely due to the policy response (interest rates and quantitative easing).
- **The early '90s downturn had a longer duration, particularly on house prices and volumes** (this could also reflect the policy response to the financial crisis).

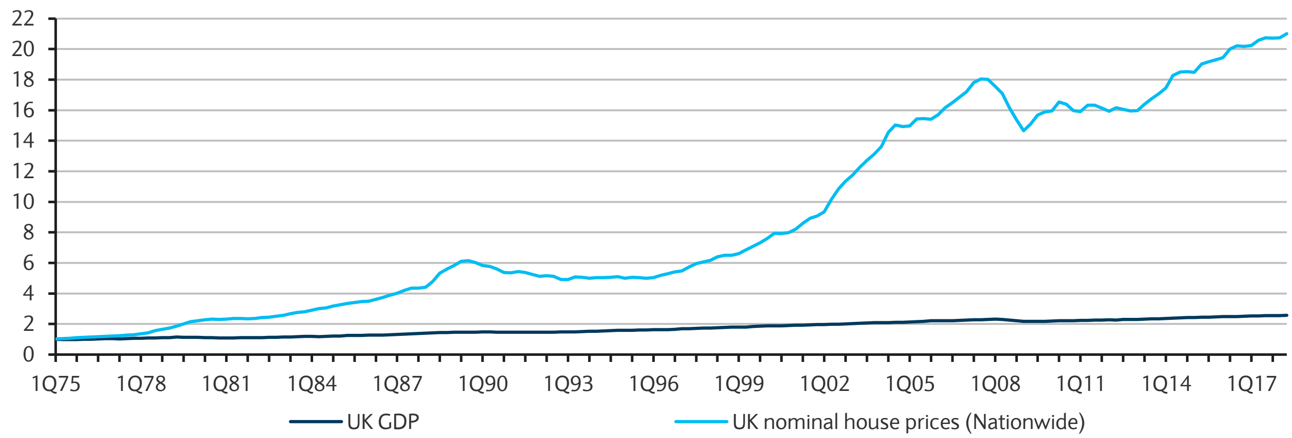
OVERLAYING 'NO-DEAL' WITH CHART BOOK READ ACROSS

House price trends influenced by GDP

We consider house prices to be a geared play on wider economic conditions and, in the long term (the chart below runs from 1975), house prices have significantly outpaced GDP.

FIGURE 3

Average UK house prices vs. GDP, rebased to 1974

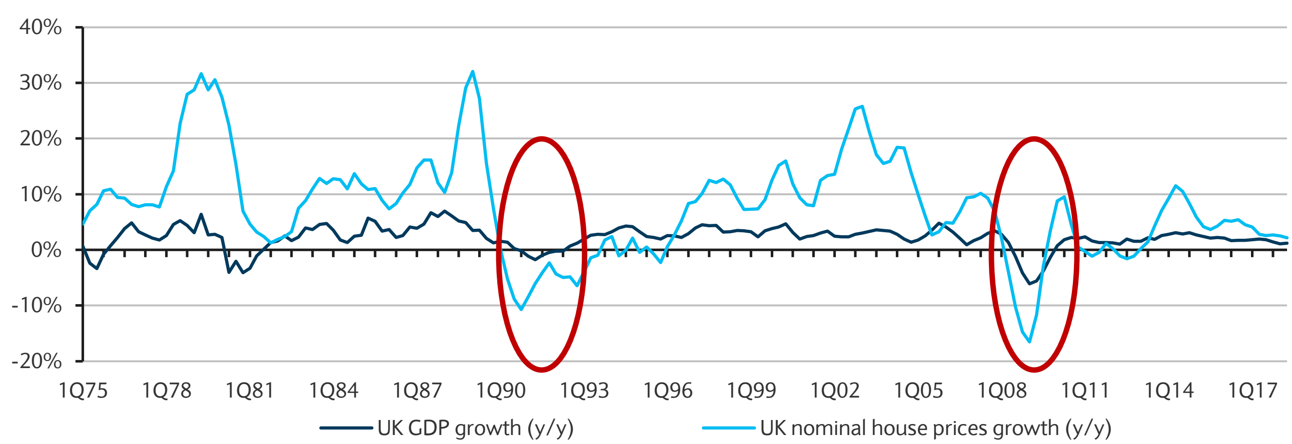


Source: Nationwide Building Society, Barclays Research

The chart below shows the annual *movement* in GDP and house prices since 1975. House prices have not fallen materially in the absence of a fall in GDP in this period. Two occasions in which they did fall meaningfully – during the early '90s recession and the global financial crisis – are highlighted. On both these occasions, GDP fell materially in the same period.

FIGURE 4

Annual movements in nominal UK house prices and GDP (Q1 1974 onwards)



Source: ONS, Nationwide

Barclays Economics team – 'No-Deal'/'orderly'

In our Economics team's scenario, real GDP stays positive. However, it expects a mild recession (two consecutive quarters of falling GDP) *during* 2019. This suggests to us that there are some downside risks to house prices next year, though no crash.

Bank of England – 'No-Deal, no transition'/'disruptive'

In this scenario, the Bank forecasts that house prices would fall 14%. Although possible, our view is that this could be optimistic should GDP fall 3% (a downturn of greater magnitude than the early '90s recession when house prices fell c20%).

Bank of England – 'No-Deal, no transition'/'disorderly'

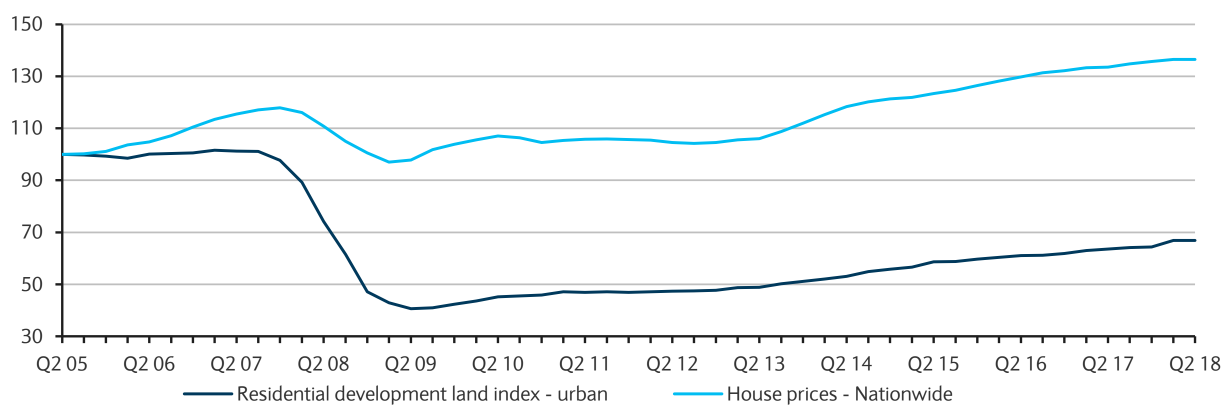
Here the Bank expects house prices to fall 30%, an unprecedented correction, the consequences of which would spread far beyond the UK house builders. However, we believe this is broadly consistent with its expectation of an 8% fall in GDP, more acute even than that in the global financial crisis. Here, the implications would be significant, with pressure on house builders' NAVs (despite high intake margins on new land in recent times - typically c24-25% at the gross margin level). Although the financial crisis brought a house price fall of c19%, builders had been buying land on lower gross margins in the run up to this period – c15% at best – leaving NAVs exposed.

Land prices would fall, despite post financial crisis trends

Since the crisis, land prices have risen commensurately with house prices, bucking the long-term trend where they have increased more rapidly, as shown below. This reflects the consolidation of the builders the demise of smaller players and the release of more land.

FIGURE 5

House prices vs. the urban land index rebased to Q2 2005



Source: Savills, Nationwide

Barclays Economics team – 'No-Deal'/'orderly'

Consistent with the GDP impact expected by our Economics Team, we would expect to see some mild pressure on land values (we estimate 5%).

Bank of England – 'No-Deal, no transition'/'disruptive'

In this scenario, we would expect land values to come under significant pressure (we estimate they would fall by 30%).

Bank of England – 'No-Deal, no transition'/'disorderly'

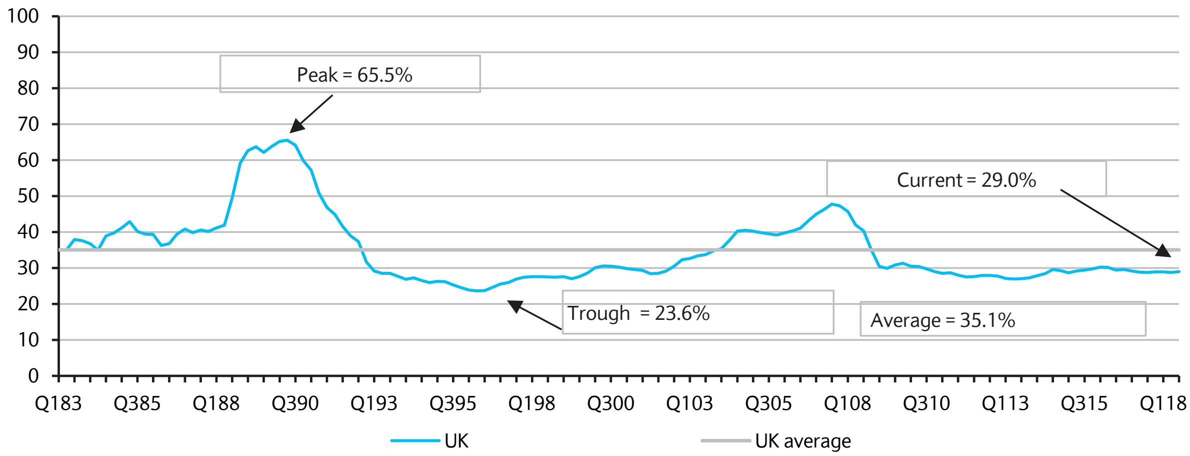
In this scenario, we would expect land values to come under intense pressure (we estimate they would fall by 60%).

Base rate cuts and the impact on affordability

Our favoured affordability measure is the Mortgage Payments To Take Home Pay Ratio, shown below for the UK. Mortgage payments currently occupy a smaller proportion (c29%) of take home pay than the long-term average (c35%).

FIGURE 6

The Mortgage Payments To Take Home Pay Ratio in the UK



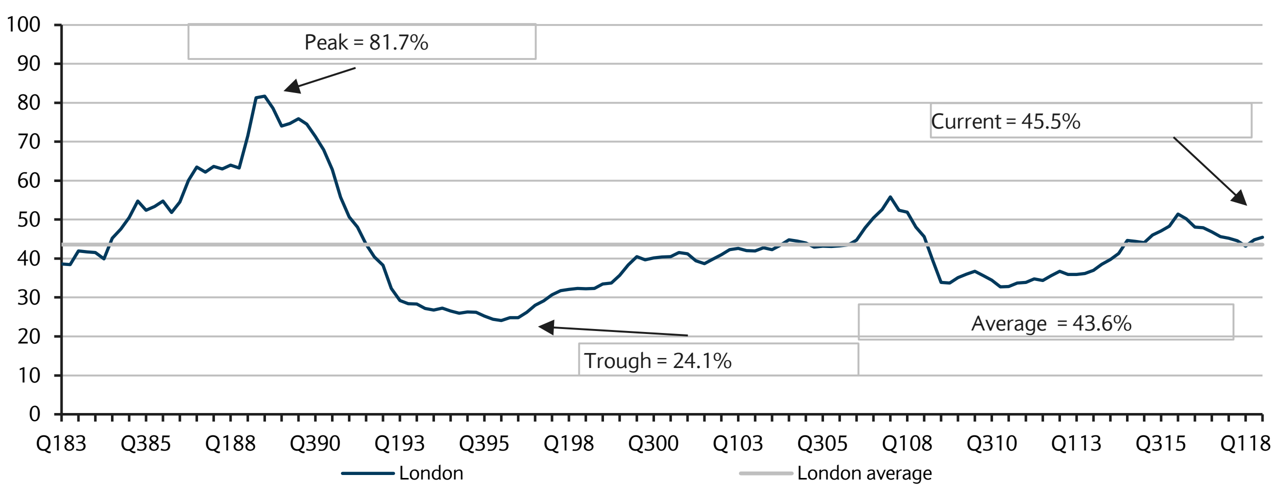
Source: Halifax

Barclays Economics team – 'No-Deal'/'orderly'

In its scenario, our Economics team estimates that base rate would be cut by 50bps to 0.25%. This would enhance housing affordability not just in the UK at large but in London too. If we assume that 50bps off base rate is passed on by the lenders in full, then – all else equal - lower mortgage rates would reduce the affordability ratio in the capital to 42.9% (marginally *below* its long run average for the first time in c4 years).

FIGURE 7

The Mortgage Payments To Take Home Pay Ratio in London



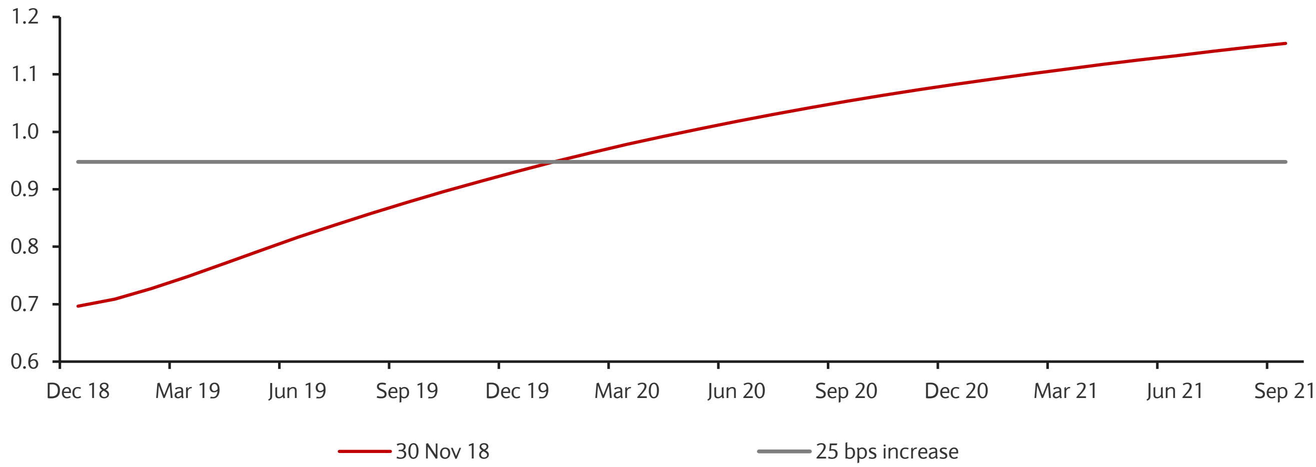
Source: Halifax

Bank of England – 'No-Deal, no transition'/'disruptive'

In this scenario, base rate rises to a peak of 1.75% (an average of 1.5% over a three-year period). This would represent a higher base than at present, though not materially so, particularly as financial markets are pricing in a further rate rise of 25 bps by early 2020 (as illustrated by the chart below , which shows Overnight Index Swaps, a proxy for base rate). Please note that the horizontal line represents the level that Overnight Index Swaps would need to rise to if they were to increase by 25bps.

FIGURE 8

Overnight Index Swaps (OIS)



Source: Bank of England

Bank of England – 'No-Deal, no transition'/'disorderly'

Here base rate rises to 5.5%, its highest level since late 2007, challenging affordability in London and the UK. Furthermore, there could be significant implications in this scenario, depending how the banks and other lenders react. Should they react by increasing their margins, or restricting finance availability, the implications would run deeper, in our view.

Labour and build costs

The chart below shows the proportion of construction labour represented by migrants by region. Easily the highest reliance is in the capital. For this reason, we view pressures on labour availability as a very London-centric issue.

FIGURE 9

Proportion of UK construction labour represented by migrants, by region

Source: DCLG

Barclays Economics team – 'No-Deal'/'orderly'

Our team does not estimate the impact on net migration of a 'No-Deal' Brexit.

Bank of England – 'No-Deal, no transition'/'disruptive'

In this scenario, the Bank expects net migration to fall to 30k per annum by 2021. We would expect there to be some implications for the availability of supply of migrant construction labour.

Bank of England – 'No-Deal, no transition'/'disorderly'

In this scenario, the Bank expects migration to turn negative, with a net 100k people leaving the UK each year by 2021. This would have significant implications for population forecasts, housing needs and, of course, the availability of migrant construction labour, particularly in London.

Exchange rates and the impact on build cost inflation

House building is a largely domestic trade, though this is not exclusively the case and a number of items are sourced from overseas, notably timber (from Scandinavia), steel, sanitary ware (sinks, lavatories, toilet bowls) and some bricks and blocks. These items have seen price inflation in recent times, partly as a consequence of weak sterling. Broadly speaking, imports represent c10% of house builders' build costs. For this reason, the impact on overall cost inflation is fairly muted, though not inconsequential. Overall build cost inflation is currently running at c3-4% p.a., with the lower end observed in London and the upper end in northern regions. However, the impact of this is exacerbated by the recent tempering of house price inflation, because it is the *net* effect of the two that impacts margins.

Barclays Economics team – 'No-Deal'/'orderly'

Our Economics team expects the pound to depreciate by a further 5-10%. It is worth highlighting that, since it published its note on 3rd October, sterling has depreciated by around 2% against the US dollar.

Bank of England – 'No-Deal, no transition'/'disruptive'

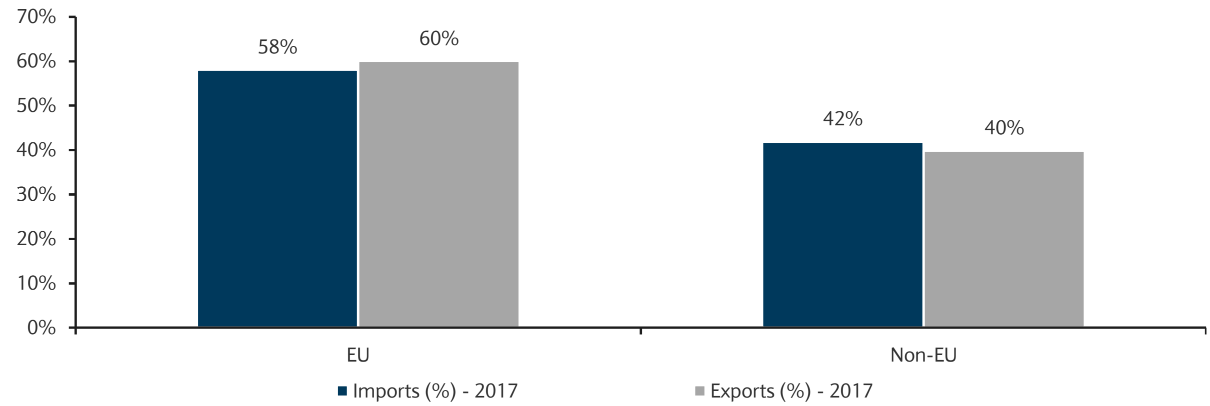
In its 'disruptive' scenario, the Bank expects sterling to weaken by 15%. This would place some further strain on imported material prices and overall build cost inflation.

Bank of England – 'No-Deal, no transition'/'disorderly'

In its 'disorderly' scenario, the Bank expects sterling to weaken by 25%. This would place significant strain on imported material prices and overall build cost inflation.

FIGURE 10

UK trade of construction materials with EU and non-EU countries, 2017

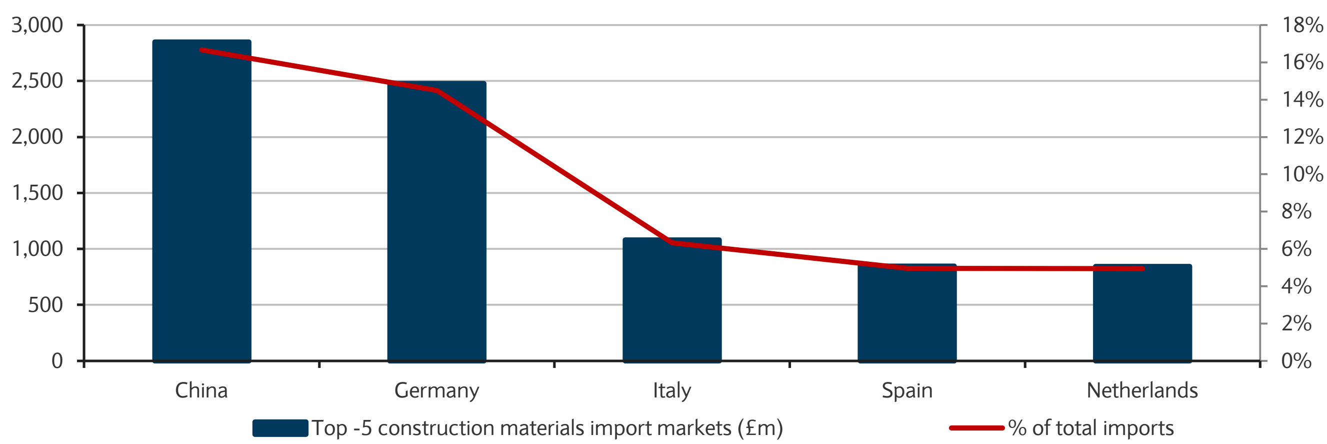


Source: DCLG

Although the EU provides the majority of imports, the biggest individual source is China. Germany is the most important source market in the EU, as shown below.

FIGURE 11

Top 5 construction materials import markets (£m)



Source: DCLG

A spike in unemployment would pose a significant headwind

The chart below shows the unemployment rate since 2008. The current rate of unemployment (c4%) is low relative to historical norms and some other European countries (French unemployment is currently 9.1%, according to Trading Economics – see *here*).

FIGURE 12

Unemployment rate (%)

Source: Datastream/ONS

Rising unemployment poses risks for house builders as it shrinks the available pool of potential home buyers (obtaining mortgage finance largely impossible without being employed).

Barclays Economics team – 'No-Deal'/'orderly'

In our Economics team's No-Deal scenario, unemployment rises to c6.5% by 2020, over 50% above its current level. This is some way below the rate in France (and some way higher than the near 38-year low rate of unemployment currently experienced in Germany, according to Trading Economics – see *here*).

Bank of England – 'No-Deal, no transition'/'disruptive'

In its 'disruptive' scenario, the Bank expects unemployment to rise to 5.75%. Although this represents an increase, it would only take us back to the mid 2014 position.

Bank of England – 'No-Deal, no transition'/'disorderly'

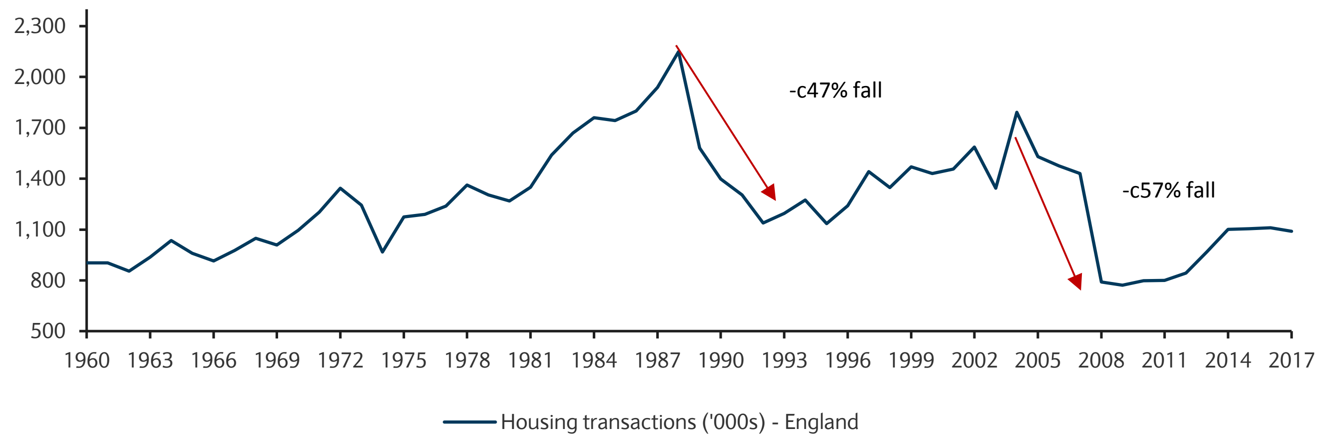
In its 'disorderly' scenario, the Bank expects unemployment to rise to 7.50%, its highest level since mid 2013. This would represent a near doubling of the current level and could have significant implications for house building fundamentals.

Housing transactions could fall significantly

The chart below shows housing transactions in England (the majority of UK transactions) since 1960. Setting aside distortions caused by the 2016 SDLT changes, one clear implication of the last two recessions was a collapse in housing volumes, as indicated by the red arrows. Should this recur, this has implications for those with reliance on volumes, notably the Estate Agents and retirement house builder McCarthy & Stone.

FIGURE 13

England housing transactions



Source: Datastream/HMRC

The impact on housing transaction levels has not been estimated by our three sources. However, we believe that there would be a significant impact on volumes, based on historical precedent.

Barclays Economics team – 'No-Deal'/'orderly'

In this scenario, we estimate that housing transactions would fall 5% next year. Despite this, we estimate that new build volumes would be flat, as the market is supported by the Help to Buy scheme.

Bank of England – 'No-Deal, no transition'/'disruptive'

In this scenario, we estimate that housing transactions would fall by up to 30% next year. We assume that new build volumes would fall by up to 15%, as Help to Buy lessens the impact on the house builders.

Bank of England – 'No-Deal, no transition'/'disorderly'

In this scenario, we estimate that housing transactions would fall by up to 60% next year. We assume that Help to Buy would lessen the impact on new build volumes, which would fall by up to 30%.

WHAT'S CURRENTLY PRICED IN BY THE MARKET?

We estimate the market is pricing in c26-35% off 2020E EPS

The table below shows long-term prospective PER averages for the four house builders included in this note, together with the 2020E PER multiples they currently trade on (based on our forecasts). Please bear in mind that house builders' financial year ends vary, with two of these companies (Barratt Developments and Bellway) having their year ends in June and July respectively.

FIGURE 14

House builders' PERs

	Long term ave. (fwd)	2020E	% diff
Barratt Developments	8.7	6.4	*-26.4*
Bellway	8.3	5.4	*-34.8*
Persimmon	9.0	6.6	*-27.0*
Taylor Wimpey	8.9	5.8	*-34.5*

Source: Datastream, Barclays Research

What could the outturn look like in these three scenarios?

On the following pages, we illustrate the potential impact on house builders' 2020 EPS forecasts of different house price and volume assumptions, as outlined in our three scenarios. **These workings are illustrative and should not be treated as forecasts.** We do not make any assumption of overhead or other savings that would house builders would likely seek should some of these scenarios play out.

Barclays Economics team – 'No-Deal'/'orderly'

In this scenario, we assume that house prices are flat and volumes are unaffected. In other words, we use our existing (and last published) forecasts.

Bank of England – 'No-Deal, no transition'/'disruptive'

In this scenario, we assume that house prices fall by 14% (consistent with the Bank's estimate) and new build volumes fall by 15% (our own assumption, which we believe is broadly consistent with the implied economic environment).

Bank of England – 'No-Deal, no transition'/'disorderly'

In this scenario, we assume that house prices fall by 30% (consistent with the Bank's estimate) and new build volumes fall by 30% (our own assumption, which we believe is broadly consistent with the implied economic environment).

Shares prices are discounting up to c8% off selling prices and c30% off volumes

Barratt Developments

The chart below shows the theoretical impact on our 2020E EPS forecasts of changes in selling prices and volumes (including the assumptions in our three scenarios, which are highlighted in the grey shaded cells).

These numbers are illustrative only and do not represent our forecasts.

The red shaded area represents price and volume combinations resulting in *more* than the amount we calculate is currently being priced in (in the case of Barratt Developments, this is c26%).

For Barratt, we believe the market is factoring in a price and volume decline of up to c4% and c22% respectively (or some combination of these two variables, which would have a maximum 26% EPS impact).

FIGURE 15

2020 EPS sensitivity to changes in volumes and selling prices (Barratt Developments)

Change in volume \ Change in selling price	0%	-2%	-4%	-6%	-8%	-10%	-13%	-14%	-30%
0%	0%	-11%	-22%	-33%	-44%	-55%	-72%	-78%	-166%
-2%	-2%	-13%	-24%	-35%	-46%	-57%	-73%	-78%	-165%
-4%	-5%	-15%	-26%	-37%	-47%	-58%	-74%	-79%	-164%
-6%	-7%	-17%	-28%	-38%	-49%	-59%	-75%	-80%	-163%
-8%	-9%	-20%	-30%	-40%	-50%	-60%	-76%	-81%	-162%
-10%	-12%	-22%	-32%	-42%	-52%	-62%	-77%	-82%	-161%
-12%	-14%	-24%	-34%	-43%	-53%	-63%	-77%	-82%	-160%
-14%	-16%	-26%	-35%	-45%	-54%	-64%	-78%	-83%	-159%
-15%	-17%	-27%	-36%	-46%	-55%	-65%	-79%	-83%	-159%
-16%	-19%	-28%	-37%	-47%	-56%	-65%	-79%	-84%	-158%
-18%	-21%	-30%	-39%	-48%	-57%	-66%	-80%	-85%	-157%
-20%	-23%	-32%	-41%	-50%	-59%	-68%	-81%	-85%	-156%
-22%	-26%	-34%	-43%	-52%	-60%	-69%	-82%	-86%	-155%
-24%	-28%	-36%	-45%	-53%	-62%	-70%	-83%	-87%	-154%
-26%	-30%	-39%	-47%	-55%	-63%	-71%	-84%	-88%	-153%
-28%	-33%	-41%	-49%	-57%	-65%	-73%	-85%	-89%	-153%
-30%	-35%	-43%	-50%	-58%	-66%	-74%	-85%	-89%	-152%

Source: Barclays Research

Bellway

The chart below shows the theoretical impact on our 2020E EPS forecasts of changes in selling prices and volumes (including the assumptions in our three scenarios, which are highlighted in the grey shaded cells).

These numbers are illustrative only and do not represent our forecasts.

The red area represents price and volume combinations resulting in *more* than the amount we calculate is currently being priced in (in the case of Bellway, this is c35%).

For Bellway, We believe the market is factoring in a price and volume decline of up to 6% and 31% respectively (or some combination of these two variables with a maximum 35% impact on EPS).

FIGURE 16

2020 EPS sensitivity to changes in volumes and selling prices (Bellway)

Change in volume	Change in selling price								
0.0	**0%**	**-2%**	**-4%**	**-6%**	**-8%**	**-10%**	**-12%**	**-14%**	**-30%**
0%	*0%*	*-9%*	*-18%*	*-26%*	*-35%*	*-44%*	*-53%*	*-62%*	*-132%*
-2%	*-2%*	*-11%*	*-19%*	*-28%*	*-37%*	*-45%*	*-54%*	*-63%*	*-132%*
-4%	*-4%*	*-13%*	*-21%*	*-30%*	*-38%*	*-47%*	*-55%*	*-64%*	*-131%*
-6%	*-7%*	*-15%*	*-23%*	*-31%*	*-40%*	*-48%*	*-56%*	*-65%*	*-131%*
-8%	*-9%*	*-17%*	*-25%*	*-33%*	*-41%*	*-49%*	*-57%*	*-66%*	*-130%*
-10%	*-11%*	*-19%*	*-27%*	*-35%*	*-43%*	*-51%*	*-59%*	*-67%*	*-130%*
-12%	*-13%*	*-21%*	*-29%*	*-36%*	*-44%*	*-52%*	*-60%*	*-67%*	*-130%*
-14%	*-15%*	*-23%*	*-31%*	*-38%*	*-46%*	*-53%*	*-61%*	*-68%*	*-129%*
-15%	*-17%*	*-24%*	*-32%*	*-39%*	*-47%*	*-54%*	*-61%*	*-69%*	*-129%*
-16%	*-18%*	*-25%*	*-32%*	*-40%*	*-47%*	*-55%*	*-62%*	*-69%*	*-129%*
-18%	*-20%*	*-27%*	*-34%*	*-42%*	*-49%*	*-56%*	*-63%*	*-70%*	*-128%*
-20%	*-22%*	*-29%*	*-36%*	*-43%*	*-50%*	*-57%*	*-64%*	*-71%*	*-128%*
-22%	*-24%*	*-31%*	*-38%*	*-45%*	*-52%*	*-59%*	*-66%*	*-72%*	*-127%*
-24%	*-26%*	*-33%*	*-40%*	*-47%*	*-53%*	*-60%*	*-67%*	*-73%*	*-127%*
-26%	*-29%*	*-35%*	*-42%*	*-48%*	*-55%*	*-61%*	*-68%*	*-74%*	*-126%*
-28%	*-31%*	*-37%*	*-44%*	*-50%*	*-56%*	*-63%*	*-69%*	*-75%*	*-126%*
-30%	*-33%*	*-39%*	*-45%*	*-52%*	*-58%*	*-64%*	*-70%*	*-76%*	*-126%*
-31%	*-34%*	*-40%*	*-46%*	*-52%*	*-59%*	*-65%*	*-71%*	*-77%*	*-125%*
-32%	*-35%*	*-41%*	*-47%*	*-53%*	*-59%*	*-65%*	*-71%*	*-77%*	*-125%*

Source: Barclays Research

Persimmon

The chart below shows the theoretical impact on our 2020E EPS forecasts of changes in selling prices and volumes (including the assumptions in our three scenarios, which are highlighted in the grey shaded cells).

These numbers are illustrative only and do not represent our forecasts.

The red area represents combinations of price and volume that result in *more* than the amount we calculate is currently being priced in (in the case of Persimmon, this is c27%).

For Persimmon, we believe the market is factoring in a price and volume decline of up to 8% and 24% respectively (or some combination of these two variables that gives rise to a maximum 27% impact on EPS).

FIGURE 17

2020 EPS sensitivity to changes in volumes and selling prices (Persimmon)

Change in volume	Change in selling price									
	0.0	0%	-2%	-4%	-6%	-8%	-10%	-12%	-14%	-30%
	0%	0%	-7%	-13%	-20%	-27%	-34%	-40%	-47%	-101%
	-2%	-2%	-9%	-15%	-22%	-28%	-35%	-42%	-48%	-101%
	-4%	-4%	-11%	-17%	-24%	-30%	-37%	-43%	-49%	-101%
	-6%	-7%	-13%	-19%	-26%	-32%	-38%	-44%	-51%	-101%
	-8%	-9%	-15%	-21%	-27%	-33%	-40%	-46%	-52%	-101%
	-10%	-11%	-17%	-23%	-29%	-35%	-41%	-47%	-53%	-102%
	-12%	-13%	-19%	-25%	-31%	-37%	-43%	-49%	-55%	-102%
	-14%	-15%	-21%	-27%	-33%	-38%	-44%	-50%	-56%	-102%
	-15%	-17%	-22%	-28%	-34%	-39%	-45%	-51%	-56%	-102%
	-16%	-18%	-23%	-29%	-35%	-40%	-46%	-51%	-57%	-102%
	-18%	-20%	-25%	-31%	-36%	-42%	-47%	-53%	-58%	-102%
	-20%	-22%	-27%	-33%	-38%	-43%	-49%	-54%	-60%	-102%
	-22%	-24%	-29%	-35%	-40%	-45%	-50%	-56%	-61%	-103%
	-24%	-26%	-32%	-37%	-42%	-47%	-52%	-57%	-62%	-103%
	-26%	-29%	-34%	-39%	-44%	-49%	-53%	-58%	-63%	-103%
	-28%	-31%	-36%	-41%	-45%	-50%	-55%	-60%	-65%	-103%
	-30%	-33%	-38%	-42%	-47%	-52%	-57%	-61%	-66%	-103%

Source: Barclays Research

Taylor Wimpey

The chart below shows the theoretical impact on our 2020E EPS forecasts of changes in selling prices and volumes (including the assumptions in our three scenarios, which are highlighted in the grey shaded cells).

These numbers are illustrative only and do not represent our forecasts.

The red area represents combinations of price and volume that result in *more* than the amount we calculate is currently being priced in (in the case of Taylor Wimpey, this is c35%).

For Taylor Wimpey, we believe the market is factoring in a price and volume decline of up to 6% and 31% respectively (or some combination of these two variables that gives rise to a maximum 35% impact on EPS).

FIGURE 18

2020 EPS sensitivity to changes in volumes and selling prices (Taylor Wimpey)

		Change in selling price								
Change in volume	0.0	0%	-2%	-4%	-6%	-8%	-10%	-13%	-14%	-30%
	0%	0%	-9%	-18%	-27%	-36%	-45%	-59%	-63%	-136%
	-2%	-2%	-11%	-20%	-29%	-38%	-47%	-60%	-64%	-135%
	-4%	-4%	-13%	-22%	-30%	-39%	-48%	-61%	-65%	-135%
	-6%	-6%	-15%	-24%	-32%	-41%	-49%	-62%	-66%	-134%
	-8%	-9%	-17%	-25%	-34%	-42%	-50%	-63%	-67%	-134%
	-10%	-11%	-19%	-27%	-35%	-43%	-52%	-64%	-68%	-133%
	-12%	-13%	-21%	-29%	-37%	-45%	-53%	-65%	-69%	-133%
	-14%	-15%	-23%	-31%	-39%	-46%	-54%	-66%	-70%	-132%
	-15%	-16%	-24%	-32%	-39%	-47%	-55%	-66%	-70%	-132%
	-16%	-17%	-25%	-33%	-40%	-48%	-55%	-67%	-71%	-131%
	-18%	-19%	-27%	-34%	-42%	-49%	-57%	-68%	-71%	-131%
	-20%	-22%	-29%	-36%	-43%	-51%	-58%	-69%	-72%	-130%
	-22%	-24%	-31%	-38%	-45%	-52%	-59%	-70%	-73%	-130%
	-24%	-26%	-33%	-40%	-47%	-53%	-60%	-71%	-74%	-129%
	-26%	-28%	-35%	-42%	-48%	-55%	-62%	-72%	-75%	-129%
	-28%	-30%	-37%	-43%	-50%	-56%	-63%	-73%	-76%	-128%
	-30%	-32%	-39%	-45%	-51%	-58%	-64%	-74%	-77%	-128%
	-31%	-34%	-40%	-46%	-52%	-59%	-65%	-74%	-77%	-127%
	-32%	-35%	-41%	-47%	-53%	-59%	-65%	-75%	-78%	-127%

Source: Barclays Research

ANALYST(S) CERTIFICATION(S):

I, Jon Bell, hereby certify (1) that the views expressed in this research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

IMPORTANT DISCLOSURES

Barclays Research is produced by the Investment Bank of Barclays Bank PLC and its affiliates (collectively and each individually, "Barclays"). All authors contributing to this research report are Research Analysts unless otherwise indicated. The publication date at the top of the report reflects the local time where the report was produced and may differ from the release date provided in GMT.

Availability of Disclosures:

Where any companies are the subject of this research report, for current important disclosures regarding those companies please refer to https://publicresearch.barclays.com or alternatively send a written request to: Barclays Research Compliance, 745 Seventh Avenue, 13th Floor, New York, NY 10019 or call +1-212-526-1072.

The analysts responsible for preparing this research report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by investment banking activities, the profitability and revenues of the Markets business and the potential interest of the firm's investing clients in research with respect to the asset class covered by the analyst.

Research analysts employed outside the US by affiliates of Barclays Capital Inc. are not registered/qualified as research analysts with FINRA. Such non-US research analysts may not be associated persons of Barclays Capital Inc., which is a FINRA member, and therefore may not be subject to FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst's account.

Analysts regularly conduct site visits to view the material operations of covered companies, but Barclays policy prohibits them from accepting payment or reimbursement by any covered company of their travel expenses for such visits.

Barclays Research Department produces various types of research including, but not limited to, fundamental analysis, equity-linked analysis, quantitative analysis, and trade ideas. Recommendations contained in one type of Barclays Research may differ from those contained in other types of Barclays Research, whether as a result of differing time horizons, methodologies, or otherwise.

In order to access Barclays Statement regarding Research Dissemination Policies and Procedures, please refer to https://publicresearch.barcap.com/S/RD.htm. In order to access Barclays Research Conflict Management Policy Statement, please refer to: https://publicresearch.barcap.com/S/CM.htm.

Risk Disclosure(s)

Master limited partnerships (MLPs) are pass-through entities structured as publicly listed partnerships. For tax purposes, distributions to MLP unit holders may be treated as a return of principal. Investors should consult their own tax advisors before investing in MLP units.

Guide to the Barclays Fundamental Equity Research Rating System:

Our coverage analysts use a relative rating system in which they rate stocks as Overweight, Equal Weight or Underweight (see definitions below) relative to other companies covered by the analyst or a team of analysts that are deemed to be in the same industry (the "industry coverage universe").

In addition to the stock rating, we provide industry views which rate the outlook for the industry coverage universe as Positive, Neutral or Negative (see definitions below). A rating system using terms such as buy, hold and sell is not the equivalent of our rating system. Investors should carefully read the entire research report including the definitions of all ratings and not infer its contents from ratings alone.

Stock Rating

Overweight - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

Equal Weight - The stock is expected to perform in line with the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

Underweight - The stock is expected to underperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

Rating Suspended - The rating and target price have been suspended temporarily due to market events that made coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.

Industry View

Positive - industry coverage universe fundamentals/valuations are improving.

Neutral - industry coverage universe fundamentals/valuations are steady, neither improving nor deteriorating.

Negative - industry coverage universe fundamentals/valuations are deteriorating.

Below is the list of companies that constitute the "industry coverage universe":

UK Homebuilding

Barratt Developments (BDEV.L)	Bellway (BWY.L)	Berkeley Group (BKGH.L)

IMPORTANT DISCLOSURES CONTINUED

Bovis Homes (BVS.L)	Countryside Properties (CSPC.L)	Countrywide PLC (CWD.L)
Crest Nicholson Holdings, plc. (CRST.L)	Foxtons Group PLC (FOXT.L)	Galliford Try (GFRD.L)
McCarthy & Stone (MCS.L)	Persimmon (PSN.L)	Redrow (RDW.L)
Taylor Wimpey (TW.L)	Telford Homes Plc. (TELF.L)	

Distribution of Ratings:

Barclays Equity Research has 1556 companies under coverage.

45% have been assigned an Overweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Buy rating; 56% of companies with this rating are investment banking clients of the Firm; 75% of the issuers with this rating have received financial services from the Firm.

38% have been assigned an Equal Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 48% of companies with this rating are investment banking clients of the Firm; 67% of the issuers with this rating have received financial services from the Firm.

14% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 35% of companies with this rating are investment banking clients of the Firm; 65% of the issuers with this rating have received financial services from the Firm.

Guide to the Barclays Research Price Target:

Each analyst has a single price target on the stocks that they cover. The price target represents that analyst's expectation of where the stock will trade in the next 12 months. Upside/downside scenarios, where provided, represent potential upside/potential downside to each analyst's price target over the same 12-month period.

Top Picks:

Barclays Equity Research's "Top Picks" represent the single best alpha-generating investment idea within each industry (as defined by the relevant "industry coverage universe"), taken from among the Overweight-rated stocks within that industry. Barclays Equity Research publishes "Top Picks" reports every quarter and analysts may also publish intra-quarter changes to their Top Picks, as necessary. While analysts may highlight other Overweight-rated stocks in their published research in addition to their Top Pick, there can only be one "Top Pick" for each industry. To view the current list of Top Picks, go to the Top Picks page on Barclays Live (https://live.barcap.com/go/keyword/TopPicks).

To see a list of companies that comprise a particular industry coverage universe, please go to https://publicresearch.barclays.com.

Types of investment recommendations produced by Barclays Equity Research:

In addition to any ratings assigned under Barclays' formal rating systems, this publication may contain investment recommendations in the form of trade ideas, thematic screens, scorecards or portfolio recommendations that have been produced by analysts within Equity Research. Any such investment recommendations shall remain open until they are subsequently amended, rebalanced or closed in a future research report.

Disclosure of other investment recommendations produced by Barclays Equity Research:

Barclays Equity Research may have published other investment recommendations in respect of the same securities/instruments recommended in this research report during the preceding 12 months. To view all investment recommendations published by Barclays Equity Research in the preceding 12 months please refer to *https://live.barcap.com/go/research/Recommendations*.

Legal entities involved in producing Barclays Research:

Barclays Bank PLC (Barclays, UK)

Barclays Capital Inc. (BCI, US)

Barclays Bank Ireland Plc, Frankfurt Branch (BBI, Frankfurt)

Barclays Securities Japan Limited (BSJL, Japan)

Barclays Bank PLC, Hong Kong branch (Barclays Bank, Hong Kong)

Barclays Capital Canada Inc. (BCCI, Canada)

Barclays Bank Mexico, S.A. (BBMX, Mexico)

Barclays Securities (India) Private Limited (BSIPL, India)

Barclays Bank PLC, India branch (Barclays Bank, India)

Barclays Bank PLC, Singapore branch (Barclays Bank, Singapore)

DISCLAIMER:

This publication has been produced by Barclays Research Department in the Investment Bank of Barclays Bank PLC and/or one or more of its affiliates (collectively and each individually, "Barclays"). It has been distributed by one or more Barclays affiliated legal entities listed below. It is provided to our clients for information purposes only, and Barclays makes no express or implied warranties, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to any data included in this publication. To the extent that this publication states on the front page that it is intended for institutional investors and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors under U.S. FINRA Rule 2242, it is an "institutional debt research report" and distribution to retail investors is strictly prohibited. Barclays also distributes such institutional debt research reports to various issuers, media, regulatory and academic organisations for their own internal informational news gathering, regulatory or academic purposes and not for the purpose of making investment decisions regarding any debt securities. Media organisations are prohibited from re-publishing any opinion or recommendation concerning a debt issuer or debt security contained in any Barclays institutional debt research report. Any such recipients that do not want to continue receiving Barclays institutional debt research reports should contact debtresearch@barclays.com. Barclays will not treat unauthorized recipients of this report as its clients and accepts no liability for use by them of the contents which may not be suitable for their personal use. Prices shown are indicative and Barclays is not offering to buy or sell or soliciting offers to buy or sell any financial instrument.

Without limiting any of the foregoing and to the extent permitted by law, in no event shall Barclays, nor any affiliate, nor any of their respective officers, directors, partners, or employees have any liability for (a) any special, punitive, indirect, or consequential damages; or (b) any lost profits, lost revenue, loss of anticipated savings or loss of opportunity or other financial loss, even if notified of the possibility of such damages, arising from any use of this publication or its contents.

Other than disclosures relating to Barclays, the information contained in this publication has been obtained from sources that Barclays Research believes to be reliable, but Barclays does not represent or warrant that it is accurate or complete. Barclays is not responsible for, and makes no warranties whatsoever as to, the information or opinions contained in any written, electronic, audio or video presentations of third parties that are accessible via a direct hyperlink in this publication or via a hyperlink to a third-party web site ('Third-Party Content'). Any such Third-Party Content has not been adopted or endorsed by Barclays, does not represent the views or opinions of Barclays, and is not incorporated by reference into this publication. Third-Party Content is provided for information purposes only and Barclays has not independently verified its accuracy or completeness.

The views in this publication are solely and exclusively those of the authoring analyst(s) and are subject to change, and Barclays Research has no obligation to update its opinions or the information in this publication. Unless otherwise disclosed herein, the analysts who authored this report have not received any compensation from the subject companies in the past 12 months. If this publication contains recommendations, they are general recommendations that were prepared independently of any other interests, including those of Barclays and/or its affiliates, and/or the subject companies. This publication does not contain personal investment recommendations or investment advice or take into account the individual financial circumstances or investment objectives of the clients who receive it. The securities and other investments discussed herein may not be suitable for all investors. Barclays is not a fiduciary to any recipient of this publication. Investors must independently evaluate the merits and risks of the investments discussed herein, consult any independent advisors they believe necessary, and exercise independent judgment with regard to any investment decision. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information herein is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results.

This document is being distributed (1) only by or with the approval of an authorised person (Barclays Bank PLC) or (2) to, and is directed at (a) persons in the United Kingdom having professional experience in matters relating to investments and who fall within the definition of "investment professionals" in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); or (b) high net worth companies, unincorporated associations and partnerships and trustees of high value trusts as described in Article 49(2) of the Order; or (c) other persons to whom it may otherwise lawfully be communicated (all such persons being "Relevant Persons"). Any investment or investment activity to which this communication relates is only available to and will only be engaged in with Relevant Persons. Any other persons who receive this communication should not rely on or act upon it. Barclays Bank PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange.

The Investment Bank of Barclays Bank PLC undertakes U.S. securities business in the name of its wholly owned subsidiary Barclays Capital Inc., a FINRA and SIPC member. Barclays Capital Inc., a U.S. registered broker/dealer, is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

Barclays Bank PLC, Paris Branch (registered in France under Paris RCS number 381 066 281) is regulated by the Autorité des marchés financiers and the Autorité de contrôle prudentiel. Registered office 34/36 Avenue de Friedland 75008 Paris.

This material is distributed in Canada by Barclays Capital Canada Inc., a registered investment dealer, a Dealer Member of IIROC (www.iiroc.ca), and a Member of the Canadian Investor Protection Fund (CIPF).

All Barclays research reports are distributed to institutional investors in Japan by Barclays Securities Japan Limited. Barclays Securities Japan Limited is a joint-stock company incorporated in Japan with registered office of 6-10-1 Roppongi, Minato-ku, Tokyo 106-6131, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokucho (kinsho) No. 143.

Barclays Bank PLC, Hong Kong Branch is distributing this material in Hong Kong as an authorised institution regulated by the Hong Kong Monetary Authority. Registered Office: 41/F, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

All Indian securities-related research and other equity research produced by Barclays' Investment Bank are distributed in India by Barclays Securities (India) Private Limited (BSIPL). BSIPL is a company incorporated under the Companies Act, 1956 having CIN U67120MH2006PTC161063. BSIPL is registered and regulated by the Securities and Exchange Board of India (SEBI) as a Research Analyst: INH000001519; Portfolio Manager INP000002585; Stock Broker/Trading and Clearing Member: National Stock Exchange of India Limited (NSE) Capital Market INB231292732, NSE Futures & Options INF231292732, NSE Currency derivatives INE231450334, Bombay Stock Exchange Limited (BSE) Capital Market INB011292738, BSE Futures & Options INF011292738; Depository Participant (DP) with the National Securities & Depositories Limited (NSDL): DP ID: IN-DP-NSDL-299-2008; Investment Adviser: INA000000391. The registered office of BSIPL is at 208, Ceejay House, Shivsagar Estate, Dr. A. Besant Road, Worli, Mumbai – 400 018, India. Telephone No: