

Chapter Eight- Different Scenarios for Supply and Demand

8.1 Introduction

8.1.1 The higher level market forecasting model has been used to explore two key issues through running alternative scenarios. These deal with

- Different economic growth in the region
- Different levels of new housing supply

8.2 Economic Growth Scenarios

8.2.1 The base scenario sees Gross Value Added (GVA) growth in WoE of c.2.8% after 2011 compared with c.2.4% for England, the low growth scenario sees only c.2.3% growth while the high scenario sees c.3.3%. The high economic growth scenario examines the impact of seeing GVA growth in the South West region increase by an additional 0.5% pa, with a corresponding increase of 0.33% pa in job growth and associated change in unemployment. The low growth scenario is 0.5% pa less than GVA growth, 0.33% less job growth. Other regions and national economic variables are assumed unchanged.

8.2.2 Table 8.1 presents a summary of the impacts of these high and low economic scenarios in the form of percentage differences for key outcome variables in key future years (2016, 2026). This looks at household incomes, household numbers, house prices and HPIR affordability. As may be expected, incomes are 5-6% lower/higher in 2016 and 10-11% different in 2026.

8.2.3 The price impact of higher growth is about 4-5% higher in 2016 and 10-13% higher in 2026. This is equivalent to about 0.5% per year, which is much the same as the triggering increase in GVA. Some other studies/models show UK house prices to be very sensitive to income growth (for example, the 'Reading' model used by CLG and NHPAU). This level of sensitivity seems rather less than might be expected from these studies, but this is a different model and we are only looking at one region. Some of the price impacts leak out into surrounding regions, as is illustrated by the figures for West Midlands and South East. This implies that only a concerted increase of GVA growth rate in all regions would have a larger impact on house prices.

- 8.2.4 The negative impacts of lower growth are broadly a mirror image of those just described, but slightly smaller. Both positive and negative price impacts seem slightly smaller in percentage terms in Wiltshire than in the rest of WoE or RoSW.
- 8.2.5 The impact of higher or lower economic growth on ‘affordability’, measured by the HPIR, is relatively small, and not consistently in the same direction. For example, higher growth would lower the HPIR in Avon by 1.6% in 2016, while raising it by 1.2% in 2026. The results are not fully consistent between the areas, with former Wiltshire (including Swindon) showing a slightly different pattern. This finding may be surprising but it should not be - it follows from the previously reported finding that the price impact of higher growth is of a similar order of magnitude in annual percentage terms.
- 8.2.6 This finding may be regarded as encouraging for this SHMA, in two senses. Firstly, it suggests that our assessments of future affordability, and its consequences for housing need, are not highly sensitive to the performance of the economy; in other words, they are in this respect robust. Secondly, Partners and Regional bodies should not be concerned about promoting economic growth on the grounds that this will make housing affordability problems much worse.

Table 8.1: Impact of Higher or Lower Economic and Employment Growth on Household Incomes, Household Numbers and Price: Income Ratios, Selected Areas 2016 and 2026 (percentage difference from baseline)

Subregional Area	Household Incomes		Household Numbers		House Price Low Growth	House Price High Growth	HPIR Low Growth	HPIR High Growth
	Low	High	Low	High				
	Growth	Growth	Growth	Growth				
2016								
Former Avon	-5.8	6.1	0.0	0.0	-4.1	4.4	1.8	-1.6
Somerset	-5.8	6.1	0.0	0.0	-4.1	4.5	1.7	-1.5
Wiltshire	-5.8	6.1	0.0	0.0	-3.3	3.6	2.6	-2.4
R o South West	-5.7	6.0	0.0	0.0	-4.0	4.3	1.9	-1.6
2026								
Former Avon	-10.3	11.4	-0.1	0.1	-10.5	12.8	-0.3	1.2
Somerset	-10.3	11.4	-0.1	0.2	-11.0	13.4	-0.8	1.8
Wiltshire	-10.3	11.4	-0.1	0.1	-8.6	10.2	1.9	-1.1
R o South West	-10.2	11.2	0.0	0.0	-11.0	13.3	-0.9	1.9

Source: higher level forecasting model

- 8.2.7 Regional economic growth will also have some effect on new house building supply, although again this is not very dramatic. New output would be 3-5%

higher in the high economic growth scenario compared with the low scenario in the period 2011-2021. The effect is somewhat greater in 2026. The fact that these impacts are quite small partly reflects the low responsiveness of house building to prices and demand in England in recent years, which is reflected in the econometric estimates underpinning our model.

8.2.8 The impact of growth on household numbers appears to be very slight, only of the order of 0.1-0.2% by 2026. This reflects counteracting tendencies, whereby although growth raises output (partly via higher prices), higher prices tend to reduce household formation and migration. GVA growth associated with higher migration and population, rather than higher income per head, would have different effects. A possible implication of these findings is that, for economic growth to achieve its full benefits and multiplier effects, there has to be a corresponding increase in housing supply, through planning and land release.

8.2.9 The model also estimates the impact on affordable sector relet rates. Again, the effect is relatively slight, and not in a wholly consistent direction. This finding is not surprising given that we know that relets relate inversely to pressure within the private housing market, as well as positively with growth and employment. Again, these effects offset one another.

8.3 Different Supply Scenarios

8.3.1 A major issue identified in the Barker (2004) review of housing supply in England was that housing supply was inadequate in scale and unresponsive to market demand, that this led to house prices rising at well above the rate of inflation over an extended period, and that this had a range of deleterious effects for the economy and society. These effects included limitations on labour mobility and labour supply in growth regions, affordability problems affecting particularly new entrants to the housing market including key workers, regressive wealth redistribution, and problems of homelessness and housing need. The principal barriers to better housing supply identified in Barker related to the operation of the planning system.

8.3.2 Following Barker, the Government adopted Public Services Agreement targets for housing affordability, modified planning guidance to enshrine affordability issues among the criteria for determining housing numbers and established the NHPAU to provide analysis and advice to Regional Planning Bodies on these issues. In reports published in 2007¹ the Unit presented further evidence on affordability conditions and on the relationship between housing supply numbers

¹ Affordability Matters NHPAU June 2007
Developing a Target Range for the Supply of New Homes across England NHPAU October 2007

and affordability. This work has emphasized that the greatest need to increase supply was in the more pressured regions of the south of England, including the South West. In further work published 2008², evidence from both economic analysis of affordability and more traditional demographic approaches both point to the need to plan for a higher range of output in most regions, including the South West. The Panel Report for the South West RSS responded to these arguments, and possibly to other arguments within the region about economic growth requirements, by proposing increases to the housing numbers for the region, including within WoE. The Government's response to this proposed a further increase in numbers, specifically in WoE and the other city-regions of the South West.

- 8.3.3 The Partnership therefore agreed that modeling should be undertaken to show the impact of different supply scenarios on key outcomes, and these are shown in Table 8.2. While the baseline supply scenario corresponds to the Government's aspiration nationally (240,000 pa after 2021, with 45-50,000 affordable units) and the provisional RSS Panel/SoS revisions for the South West, the low supply scenario corresponds with the Draft RSS numbers. The high supply variant is similar to the level of supply discussed in NHPAU (2007b), essentially targeting 270,000 net additions nationally after 2021. The actual numbers are determined as one outcome within the model, given changes in the inputs for new private planning permissions and new affordable completions. In fact the low scenario delivers 208,000 in 2016, rising to 239,000 by 2026, an average of 175,000 over the 20 years. The high scenario delivers 257,000 in 2016 rising to 289,000 in 2026, an average of 225,000.
- 8.3.4 It should be emphasised that the supply scenarios are applied to the whole country, rather than just to the South West region. They should be regarded as concerted national strategies, although greater housing supply is disproportionately focused on the south outside London, as favoured by NHPAU (2007). It can be demonstrated that the price and affordability impacts of a high supply strategy will be much less if only applied to a single region, and relatively small if only applied within a single local authority.
- 8.3.5 Table 8.2 shows that under the low supply scenario annual output would be 2 to 5% lower in the three WoE areas in each year after 2011. Under the higher supply scenario the increase would be of a rather larger order of magnitude, particularly in Somerset (13 to 18%) and Wiltshire (10 to 14%), but rather less so in former Avon (8 to 11%). The overall difference between the high and low scenarios would be 1078 units pa, although this difference varies quite markedly

² Meeting the Housing Requirements of an Aspiring and Growing Nation NHPAU June 2008

over the period (as shown also in Figure 8.1). This may be partly to do with the phasing of the release of extra land in the simulation; this seems to interact with the market fluctuations, suggesting that a proactive supply policy now could counteract the market slump associated with the Credit Crunch.

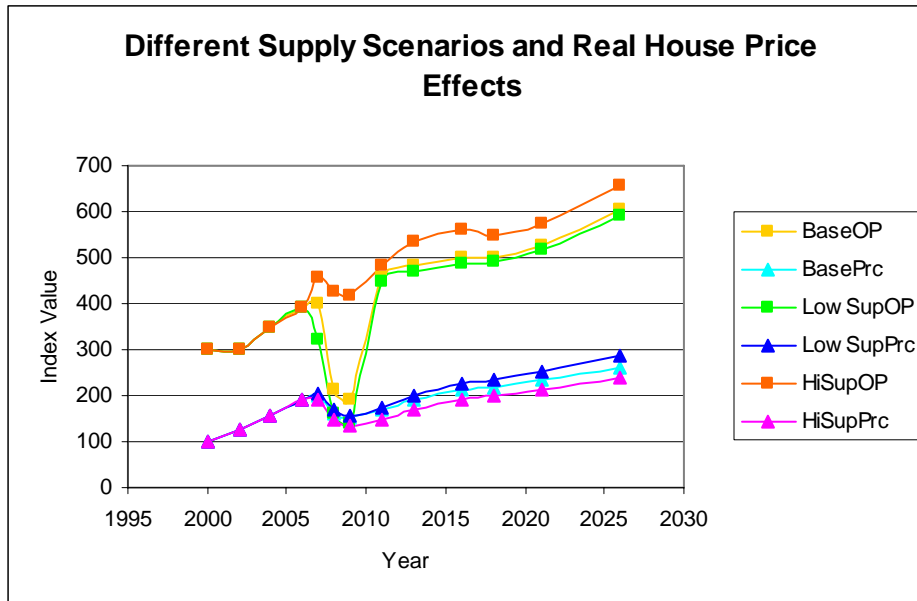
Table 8.2 Different Supply Scenarios: Differences in Output Levels and House Prices in WoE Areas by Year (percent difference from baseline forecast)

Sub-regional Area & Year	New Plg Perms		Output Completions		House Price Low Supply	House Price High Supply
	Low	High	Low	High		
	Supply	Supply	Supply	Supply		
2011						
Former Avon	-34.8	113.7	-1.6	5.2	4.6	-11.0
Somerset	-34.7	112.4	-3.8	12.6	4.3	-10.7
Wiltshire	-34.7	112.5	-2.8	9.4	4.3	-10.4
R o Sth West	-34.8	112.8	-11.3	11.7	5.5	-10.9
2016						
Former Avon	-34.8	115.0	-2.7	11.1	6.0	-10.2
Somerset	-34.7	114.0	-4.8	18.0	6.3	-11.2
Wiltshire	-34.7	113.8	-3.7	14.1	6.3	-10.4
R o Sth West	-35.1	114.6	-12.5	17.8	7.8	-11.1
2021						
Former Avon	-34.7	115.9	-1.5	8.7	7.1	-8.8
Somerset	-34.7	115.6	-3.1	14.1	7.4	-9.7
Wiltshire	-34.6	115.0	-2.4	10.9	7.6	-9.1
R o Sth West	-35.4	116.2	-11.6	14.1	8.7	-9.6
2026						
Former Avon	-34.7	116.5	-2.6	7.8	8.5	-8.8
Somerset	-34.6	116.8	-2.7	13.0	8.8	-9.7
Wiltshire	-34.6	116.0	-1.9	10.3	8.8	-9.3
R o Sth West	-35.7	117.5	-13.0	15.5	10.6	-10.0

Source: higher level forecasting model

8.3.6 Table 8.2 (and Figure 8.1) show the impact of these supply scenarios on house prices (affordability as measured by the HPIR would show the same pattern). For example, in 2016 an increase in supply of 11-18% is associated with a reduction of 10-11% in prices. The impact of higher supply kicks in quite sharply in 2011, but then fades slightly in percentage terms at the end of the period. The impact of lower supply appears a bit lower, but seems to persist or grow slightly more over time. In fact, the impacts of supply on affordability are of a generally similar order of magnitude (in percentage terms) to the supply changes themselves.

Figure 8.1 Different Supply Scenarios and Real House Price Effects



Source: higher level forecasting model. Notes: Output (OP), Price (Prc), Supply (Sup)

8.3.7 These supply scenarios do affect the number of households in the area in later years (i.e. household growth). This would be expected for a supply increase in a single region but it is interesting that, when supply is increased in a concerted way, WoE areas tend to gain households and population, perhaps because these areas have more scope for growth, or more latent/suppressed demand. The difference in household numbers under the high supply scenario is 2.2-2.5% above baseline by 2026 (an extra 15,000 households).

8.3.8 Despite this induced increase in households, higher output will tend to increase vacancies in future years. However, this effect is not very large in these cases. For example, in former Avon, the vacancy rate in 2021 would rise from 1.74% to 2.32%.

8.3.9 One more positive impact to mention is that higher supply would increase the affordable sector net relet rate. For example, for former Avon this rate would rise from 5.2% to 5.8% in 2021. Thus one can begin to see higher supply as creating a virtuous circle of indirect effects, from a housing need perspective, with improved affordability and greater relets supply.

8.4 Implications of higher supply for affordability and need

8.4.1 The results of the 'high supply' scenario generated in the higher level economic model can be traced through the affordability and need model at local authority level. The high supply scenario reported earlier saw levels of new house building

increased by 10-15% and was expected to reduce house prices by around 10%. Table 8.3 shows that 'affordability', that is the proportion of younger households able to afford to buy or rent in the market, would increase by 5-6% points for WoE (for example, from 44.4% to 50.4% in 2016; which could be also described as 13.5% improvement in affordability). The impacts are similar across the six districts, but somewhat greater in South Gloucestershire, Mendip and West Wilts, and somewhat less in Bristol and North Somerset.

Table 8.3: Differences in Affordability and Net Affordable Housing Need associated with Higher Supply Scenario (percentage points)

Area	Affordability 2011	Affordability 2016	Affordability 2021	Need 2011	Need 2016	Need 2021
B&NES	6.6	6.1	5.2	-22.8	-20.9	-21.9
Bristol	6.3	5.4	4.5	-63.1	-49.7	-61.0
North Som	5.7	5.8	4.9	-23.8	-23.4	-25.6
South Glos	6.9	6.8	5.8	-23.7	-21.8	-22.6
Mendip	6.0	6.5	5.6	-26.6	-22.4	-22.4
West Wilts	6.0	6.4	5.6	-23.0	-19.5	-18.5
R o South West	6.2	6.1	5.2	-22.1	-20.1	-20.0
Rest of South	5.4	5.3	4.6	-24.2	-23.5	-24.7
London	2.6	2.5	2.4	-5.7	-5.0	-5.5
Mids & North	1.5	2.5	2.7	-14.6	-20.0	-24.6
England	3.2	3.6	3.5	-14.6	-14.9	-16.0
WoE Subregion	6.3	6.0	5.1	-31.4	-27.4	-29.1

Source: LA-level affordability and need model linked to higher level economic forecasts.

8.4.2 More striking is the modelled impact on the net need for affordable housing. This would be reduced by between 27% and 31% for WoE as a whole over the period 2011-2021, which is about 1700 fewer households in need in each year (17,000 fewer over 10 years). The proportional impact is greatest in Bristol, and least in West Wilts and BANES, mainly because of the different relationship between relets and gross needs in these areas. Higher supply reduces need through several routes, most importantly through easier affordability. The reduced need for new households, more of whom would now be able to buy or rent in the market, would account for 40% of the total; increased relets for 32%; reduced backlog in later years for 20%; and reduced need for affordable housing for migrants would account for 8% of the overall reduction. This helps to illustrate the virtuous circle which higher overall supply would initiate, but note that these

impacts are only achieved if supply increases across the country as a whole. Increasing supply in the WoE HMA area alone would have much less impact.

- 8.4.3 The point may be further illustrated by considering the increased supply of affordable housing opportunities which may be delivered from within a greater quantum of new building. The extra output over the 20 year planning period averages 800 per year; applying the regional affordable housing 'norm' of 35% would yield an extra 280 affordable units per year, or 5,600 in total. Another way of looking at this is to consider the impact on the indicative (unadjusted) target figures generated from the models.

8.5 Summary

- 8.5.1 This chapter has explored the impacts of both higher and lower economic growth and higher and lower housing supply. The model suggests that higher or lower economic growth will have only a marginal impact on house prices and affordability, with a 0.5% increase in economic growth translating into a similar growth in house prices. This relative lack of sensitivity to economic performance does suggest that the model is robust despite the current economic downturn. Economic growth would also tend to increase housing supply, although the impact is not dramatic.
- 8.5.2 An increase in housing supply could have a more significant impact on house prices and affordability, but only as part of a concerted strategy across England. Increasing supply in the HMA area alone has little impact. However, an increase in housing supply across England of 10 – 15 % would reduce house prices by 10%. In turn this would reduce the need for affordable housing by around one-third, with increased affordability, increased relets and a reduced backlog.