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Anticipated acquisition by Wienerberger Finance Service BV of  
Baggeridge Brick plc

The OFT's decision on reference under section 33(1) given on 11 December 2006.  
Full text of decision published 19 December 2006.

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**Please note that the square brackets indicate figures or text which have been deleted or replaced with a range at the request of the parties for reasons of commercial confidentiality.**

## **PARTIES**

1. **Wienerberger Finance Service BV** (Wienerberger) is a wholly owned subsidiary of Wienerberger AG, a publicly quoted company listed on the Vienna Stock Exchange. Wienerberger is a major international brick maker.
2. **Baggeridge Brick plc** (Baggeridge) is a brick maker based in the English Midlands. Baggeridge's turnover during the last accounting year amounted to £50.7 million.

## **TRANSACTION**

3. Wienerberger is proposing the acquisition of legal control of Baggeridge. The anticipated merger was notified to the OFT on 18 August 2006. The administrative target date for a decision was 8 November 2006.

## **JURISDICTION**

4. As a result of this transaction, Wienerberger and Baggeridge will cease to be distinct. The parties overlap in the manufacture and supply of clay bricks. The share of supply test in section 23 of the Enterprise Act 2002 (the Act) is met with respect to the parties' combined share of [25-35] per cent of the supply of soft mud bricks in the UK. The OFT therefore believes that it is or may be

the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

## **RELEVANT MARKET**

### **Product scope**

5. Bricks are made by forming clay into rectangular blocks which are then hardened – typically by firing in a kiln. They are used in construction, both in the housing and in the commercial and industrial sectors, as interior and exterior walling materials as well as in foundations and engineering works.
6. In its most recent case in this sector, *Hanson/Marshall*<sup>1</sup>, the OFT gave consideration to two alternative segmentations of clay brick according to: (1) manufacturing technique, and (2) end use.

### **Segmentation by manufacturing technique**

7. If clay bricks are categorised according to the methods by which they are manufactured, the following segments would be applicable.

#### **Extruded bricks**

8. The most common commercial mass production method involves mixing high density clays (the technique is also called 'the stiff mud process') with sufficient water to produce plasticity. These are extruded through a die to produce a continuous column of clay in which two dimensions of the final unit are determined. As the clay column leaves the die, textures or surface coatings may be applied. The extruded clay column is wire-cut to the required size. This highly automated process makes extruded bricks cheaper than many other types.

#### **Soft mud bricks**

9. The soft-mud process is particularly suitable for clays too soft to be extruded by the stiff-mud process. The process involves mixing clays to a content of around 20 to 30 per cent water and then forming the bricks in moulds. Bricks may be produced in this manner by machine or by hand. Machine-made soft

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<sup>1</sup> Completed acquisition by Hanson Building Products Ltd of Marshalls Clay Products Ltd, 2 March 2005 (published 1 April 2005).

mud bricks (also called 'stock' bricks) are typically a little more expensive than extruded bricks and are not as regular in shape. Handmade soft mud bricks are the most expensive to produce. Due to the clay not being uniformly compacted by machine, each brick normally has distinctive creasing. For this reason, handmade bricks are considered more aesthetically pleasing than either stock bricks or extruded bricks.

### **Fletton bricks**

10. Also known as 'London bricks' - these are manufactured from shale-rich 'lower Oxford' clay using a method of brick-making called the Fletton Process. The high carbon content of the clay allows for the bricks to be kiln-fired very economically. However, fletton bricks are considered inferior to other varieties since they are not well suited to withstand severe weather conditions.
11. Both extruded and soft mud bricks are used for new build and for repair, maintenance and improvement (RMI). The use of fletton bricks is now almost exclusively in the RMI of buildings already constructed from fletton brick.
12. The parties propose that, on the demand side, extruded and soft mud bricks are inter-changeable from a technical point of view. Choice is linked to some extent to geography: soft mud bricks are predominantly used in the South, extruded bricks in the Midlands and the North.
13. In relation to fletton bricks, the parties submit that buyers can substitute between fletton and 'fletton look-alikes' (bricks of similar appearance to flettons but with superior technical qualities). They further argue that Baggeridge has built two plants producing fletton-substitute bricks to compete directly with the 'real' fletton bricks produced exclusively by Hanson plc.
14. Third party views are mixed. A few respondents supported the parties' assertion that extruded and soft mud bricks were inter-changeable given that demand is driven by aesthetic preferences. In contrast, other respondents suggested that there would be limited substitutability in the event of a 5-10 per cent price increase.
15. The parties have been unable to provide any quantitative analysis to formally test the degree of substitution between extruded, soft mud and fletton bricks.

They do assert that soft mud bricks are generally more expensive than extruded bricks. The OFT considers that this implies some asymmetry in substitutability.

16. On the supply side, the parties indicate that there is a lack of supply-side substitution between the manufacture of extruded and soft mud bricks.

### **Segmentation by end use**

17. If clay bricks are categorised according to the end use to which they are put, the following segments would be applicable.

#### **Facing bricks**

18. 'Facing bricks' are used as visible walling and paving materials. They are manufactured from blends of different clays to provide a range of colours, textures, weather-resistance and durability. They may be of any of the extruded, soft mud or fletton varieties.

#### **Engineering bricks**

19. Engineering bricks are of the extruded variety. Having few aesthetic qualities, these bricks are manufactured to heavy-duty and high performance specifications with regard to strength, low porosity and weather-resistance. They are best suited for load-bearing and other technically demanding structures such groundworks, sewer works and retaining walls.
20. The evidence suggests that engineering bricks are used as facing bricks only where the appearance of the brickwork is not considered a priority.
21. As is the case with obtaining data on bricks segmented by manufacturing technique (i.e., extruded, soft mud and fletton bricks), the parties have been unable to provide any quantitative analysis to formally gauge substitutability between engineering and facing bricks. Nonetheless they submit that, in general, demand for engineering bricks is more price sensitive than demand for facing bricks.
22. Comments from third parties on substitutability were mixed. Some respondents argued that engineering and facing bricks are inter-changeable, whilst one respondent indicated that such inter-changeability was asymmetric

to the extent that engineering bricks can be used as facing, but not vice versa. Other commentators submitted that the two types of brick vary according to aesthetic qualities and architectural applications.

23. On the supply side, there is insufficient evidence regarding the timeliness, cost and scope of substitution to gauge the extent of the product scope of the frame of reference.
24. The European Commission (the Commission) also considered facing bricks and engineering bricks separately in its decision concerning the acquisition by CRH of Ibstock in 1999<sup>2</sup>.

### **Summary on product scope**

25. The parties have submitted that the relevant product market is that for all bricks. Third party comment is not altogether supportive of the parties' position. However, there is insufficient evidence for the OFT to conclude definitively that a narrower product scope is appropriate. Nor is there any evidence suggesting that the OFT's analysis of the transaction would be affected by adopting a narrower product scope. In the circumstances, the OFT has decided for the purposes of this decision only, to adopt the parties' proposed approach and to adopt all bricks as the relevant product scope.

### **Geographic scope**

26. In *Hanson/Marshall*<sup>3</sup> the OFT considered that it was appropriate to assess the competitive impact of the merger on the basis of a geographic scope consisting of Great Britain (GB) rather than individual regions.
27. In this case, the parties set out a number of arguments in support of their proposition that the relevant geographic scope of the market is no narrower than GB. First, they argue that bricks are routinely collected and transported over significant distances and sold profitably. They submit that this is evidenced by the large proportion of total sales delivered to destinations further than 50 miles from each of the parties' manufacturing bases. Second, they submit that the number and geographical spread of brick production plants is such that there is overlap with a competitor between 50 mile radii

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<sup>2</sup> Case IV/M.1423, CRH/Ibstock, 1 March 1999.

<sup>3</sup> See footnote 1 above.

around each manufacturing centre – creating a robust chain of substitution. Third, the parties submit that there is limited price differential throughout GB.

28. By way of contrast to the parties' proposals for a GB-wide geographic scope, there is some evidence of regional variations in the choices of brick type – whether due to established regional preferences or to the type of clay available in nearby reserves. Additionally, the parties submit that Wienerberger occasionally engages in promotions at the regional level. Furthermore Baggeridge submits that it is restricted in its ability to be competitive in negotiating deals at a national level. The parties further submit that major customers will typically negotiate at a national level (even if draw-down is organised locally) but will receive plant-specific prices – occasionally regional prices – reflecting the different transportation costs incurred by a particular manufacturer in delivering to different customer locations.
29. Third parties maintain that distances travelled should ideally be kept to a minimum due to transport costs. Most third party respondents estimated transport costs within GB to be around 10 to 20 per cent of the value of the delivered product. The parties maintain that, although sales of bricks are most profitable when the customer is located close to the point of manufacture, in practice very substantial volumes of bricks are transported over significant distances and are sold profitably.
30. The parties submit that the merger will not give rise to any competition concerns in Northern Ireland (NI). Post-merger, the parties' combined share of supply in NI is [10-20] per cent – increment [0-10] per cent. The only producer physically located in NI is Hanson. No third party raised concerns regarding the impact of this transaction in NI and therefore no further consideration with regard to this specific region is given in this decision<sup>4</sup>.

### **Summary on geographic scope**

31. The OFT considers that there are valid arguments in favour of both a regional and a national geographic scope – and that it is appropriate to consider both in the context of this assessment. However, it is not necessary to conclude on this issue given that it does not materially impact on the substantive analysis.

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<sup>4</sup> Consequently, for the purposes of this decision alone, references to the national level or national issues are to Great Britain.

## **NON-COORDINATED EFFECTS**

32. The parties do not consider that any competition concerns resulting from non-coordinated effects arise at either a regional or national level on the basis of the following arguments:
- they will continue to be constrained by the remaining competitors
  - there is significant excess capacity in the industry
  - customers exert countervailing buyer power due to their procurement of large volumes and sourcing through buying consortia.
33. Given the parties' positions as two of the four principal suppliers in the overall GB brick sector, there is merit, before looking into the regional issues, in considering the wider GB-wide implications in terms of customers' ability to switch between suppliers and of the excess capacity that exists within the industry as a whole.

## **NATIONAL ISSUES**

34. The parties are the third and fourth largest suppliers of bricks in GB. On the evidence available to the OFT, the parties' combined post merger share of the supply of all bricks in GB, on the basis of volume, is between [20 and 30] per cent (increment less than [5-15] per cent). The two largest suppliers at the national level, Hanson and Ibstock, each hold a similar percentage share of supply as the parties will hold post-merger. The parties submit that shares of supply on the basis of value do not significantly diverge from the volume data.

### **Switching**

35. Customer switching may constrain the parties' ability to raise prices post merger. Factors that impact on customers' ability to switch include price, reliability, lead times, plant location, architectural design, planning regulation and consumer preference.
36. It is evident that most customers currently procure the majority of their requirements from the four main suppliers (Hanson, Ibstock, Wienerberger and Baggeridge) and that customers multi-source between these same four suppliers.

37. Evidence has been presented to the OFT of customers switching between suppliers, including part way through a building development project. One builders' merchant submitted that it had sourced bricks for existing construction sites from alternative manufacturers following a price increase from its incumbent supplier. Additionally, a developer observed that Baggeridge had won sales at the expense of Hanson.

### **Capacity**

38. According to the parties, significant excess capacity in the industry gives all suppliers the ability to increase production and satisfy any additional demand. The total demand for bricks in GB has seen a decline of around 10 per cent in recent years from the 2.9 billion bricks sold in 2000 to 2.6 billion in 2005: a reduction in demand equivalent to 317 million bricks. The parties submit that this decline has generated a significant stockpile of unsold bricks and production over-capacity in the industry.
39. Comments from third parties support the parties' assertions with regard to excess capacity.

### **Imports**

40. Around seven per cent of the total current GB demand for bricks is met by imports. Given that Wienerberger accounts for the majority of the GB imports and there is still a price differential that makes the majority of potential imports uncompetitive, the OFT has therefore not relied upon constraints posed by imports in this part of its assessment.

### **REGIONAL ISSUES**

41. The parties overlap in two regions: the Midlands and West Sussex.

#### **Midlands**

42. In the Midlands, Wienerberger operates one plant at Walsall whilst Baggeridge operates four plants at Kingsbury, Sedgley, Hartelbury and Waresley.
43. The parties have provided evidence that there are competing plants that are geographically closer to the plants operated by Wienerberger and Baggeridge than they are to each other.
44. The OFT also has due regard to evidence that there are a total of 19 competing sites operating within a 50 mile radius around Wienerberger's

Walsall plant. There have been no third party concerns raised in relation to the Midlands.

### **West Sussex**

45. In West Sussex, Baggeridge operates one plant at Rudgwick whilst Wienerberger operates one plant in Warnham. Wienerberger also has two other plants within a 50 mile radius of Rudgwick: one at Ewhurst in Surrey and one at Smeed Dean in Kent.
46. The parties submit that Baggeridge's Rudgwick plant is small (capacity [ ] million bricks per annum) and that whilst Wienerberger's Warnham and Ewhurst plants are geographically closest to Rudgwick, the merged entity will be constrained by several other competitors including Ibstock, Hanson and independent manufacturers.
47. The evidence before the OFT indicates that there are a total of 11 sites, operated by four competing manufacturers within a 50 mile radius of Rudgwick.

### **CONCLUSION ON NON-COORDINATED EFFECTS**

48. The OFT considers that Hanson and Ibstock – whose GB shares of supply are broadly similar to the combined shares of Wienerberger and Baggeridge are capable of posing a sufficient post merger competitive constraint. Both Hanson and Ibstock support the parties' submission that excess capacity is available. Comments from third parties indicate that switching is generally feasible
49. Taking due account of the above elements, the OFT does not consider that the merger will lead to competition concerns resulting from non-coordinated effects, either nationally or regionally. Indeed, some third parties submit that the transaction will be pro-competitive as it will enable the merged entity to compete more effectively with Ibstock and Hanson. This corroborates the submission of the parties, who claim that the rationale for the merger includes access to Baggeridge's clay reserves and that the merged firm will better be able to exploit these and provide more effective competition to the main two players. While not explicitly presented as efficiencies claims in the sense of the 'customer benefits' exception to the duty to refer under section 33(2)(c) of the Act, the OFT regards these claims as plausible, and credibility is added by the support from some customers. However, as is discussed

below, these claims have not resolved the OFT's coordinated effects concerns detailed below.

## **COORDINATED EFFECTS**

### **Tacit coordination**

50. As set out in the OFT's Substantive Assessment Guidance, tacit coordination may arise in circumstances where (i) market participants have the ability to align their behaviour in the market (ii) the firms have incentives to maintain coordinated behaviour and (iii) coordinated behaviour is sustainable in the face of other competitive constraints.<sup>5</sup> The European Commission guidelines on horizontal mergers recognise the same factors in the assessment of coordination and provide useful guidance on their application.<sup>6</sup>
51. The supply of bricks in GB illustrates a large number of features that are consistent circumstances in which tacit coordination could arise. Taking the three issues set out in the OFT's guidance in turn, these include the following.

#### **Ability to align**

##### **Number of market participants**

52. The transaction will reduce the number of significant players on the market. From a pre-merger situation of four large players, the supply of bricks will move to a situation in which three major suppliers will together represent around [80-100] per cent of total supply of clay bricks and individually will have both shares of supply and a degree of national coverage significantly in advance of their nearest competitors. All other things being equal, such a reduction in the number of significant players on a market will increase the ability of the remaining players to align their behaviour.

##### **Symmetry**

53. Symmetry is an important criterion for successful coordination. If firms have similar shares of supply and cost structures (and they sell very similar products) then every firm will benefit similarly from the establishment of a

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<sup>5</sup> For a discussion of coordinated effects in merger analysis, see the OFT's Mergers: substantive assessment guidance, paragraphs 4.11–4.13 (OFT516, May 2003).

<sup>6</sup> Commission Notice, Guidance on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ [2004] C31/5.

pattern of tacit coordination, each will have a similar (lowered) incentive to deviate, and each will suffer similarly from retaliatory action.

54. The transaction will increase symmetry between the largest players in the supply of bricks. Post-merger, the three largest players in the supply of bricks -- the merged entity, Hanson and Ibstock -- will have respective shares of [20-30] per cent, [30-40] per cent and [30-40] per cent respectively. The remaining competitors will be substantially smaller and constitute only around 10 per cent of total supply.
55. Despite this, the parties submit that incentives to coordinate in the first place are less likely given the asymmetries between market participants in terms of market size, product portfolios, spare capacities and marginal costs. The parties argue that Ibstock will remain considerably the largest supplier and, as a result, that Hanson and the merged entity would benefit less from any tacit arrangement than would Ibstock and would therefore have a stronger incentive to deviate from coordinated commercial behaviour. However, as set out above, the post-merger shares of supply of the merged entity, Hanson and Ibstock will be reasonably closely aligned.
56. The parties also point to asymmetries in the extent to which the three major players, post-merger, would have excess capacity. Although this is potentially an important consideration, the capacity data is difficult to read given the possible inconsistency between the parties' and competitors' definition of capacity and the possible distortion by recent acquisitions by the parties and their major competitors. The OFT considers, however, that each of the three major players will have some excess capacity post-merger.
57. In terms of product portfolios, the parties argue there are significant variations in the composition of the principal suppliers' respective portfolios, evidenced by differences in average prices between suppliers. While there is some variance in each of the suppliers' composition of extruded, soft mud, facing and engineering bricks, all are nonetheless active to a substantial extent in each segment.
58. Finally, the parties contend asymmetries exist in terms of marginal costs -- due to differences in the marginal costs associated with different technologies and transport costs -- which limit the sustainability of coordination. However, the parties also propose that there are significant common elements in the cost of brick production, such as labour and energy costs. They maintain this would tend to indicate symmetry in the marginal cost conditions faced by suppliers. Verifying detailed marginal cost data is difficult due to different

suppliers' definition of time frame considered and marginal cost definition and the fact that costs may be plant-specific. In the circumstances, there is insufficient counter evidence to rebut the proposition that the suppliers' marginal costs are symmetrical.

59. Overall, therefore, the effect of the transaction would increase the overall level of symmetry between the three major players in the market and there is insufficient evidence to conclude that any remaining asymmetries would be sufficient to defeat coordination.

#### Product homogeneity

60. The parties submit the diversity in product types and customer preferences means that bricks cannot be accurately characterised as a homogenous product.
61. Third party comment indicates that substitutability between brick types is a function of preference, aesthetics, architectural characteristics and brick specification. However, competing manufacturers would appear to offer similar ranges of brick type in GB and, although it is clear that the various brick types are not perfect substitutes, the OFT considers that there is a material degree of product homogeneity at least within the various brick types.

#### Stable economic environment

62. Generally, the less complex and more stable the economic environment, the easier it is for firms to reach a common understanding on the terms of coordination. Conversely, volatile demand, frequent entry or a significant level of innovation may make coordination significantly more difficult.
63. The parties submit that the demand for bricks in GB is not stable. They further submit that since the 1950s there has been significant movement in the price of bricks and that, more recently, the market has become extremely unstable in that demand has proved volatile with variations in the rate of decline.
64. Demand for bricks is clearly cyclical, moving in line with levels of house building and construction more generally. It is also the case that there has been a significant decline in the overall demand for bricks -- even taking account of cyclical effects -- since the 1980s. However, these trends are relatively long term and transparent. Demand for housing and construction is widely forecast and monitored and the supply of bricks itself is monitored by

both by the industry trade association and by the DTI, which publishes monthly figures. Further, the evidence available to the OFT indicates that demand for bricks has been reasonably stable (albeit declining somewhat) over the five year since 2001. Overall, the evidence does not support the proposition that demand has been volatile to an extent that would substantially inhibit coordination by undermining the ability to align behaviour on the market.

65. The parties have submitted that there have been no significant developments in product specification, application or in production methods in GB in the last five years. However, they argue that they have been as innovative as it is possible to be within the current structure of the brick market. Notwithstanding this, the OFT considers that there is currently no evidence of innovation in brick design of the type that would allow any particular supplier to gain a major advantage over its competitors.

#### Transparent focal point for alignment

66. For tacit coordination to arise, the relevant market participants must be able to identify a focal point around which to coordinate their competitive behaviour. Potential focal points include: price, capacity, geographic areas, identified customers or (particularly in a bidding market) contracts. There must be sufficient transparency in relation to the relevant feature to allow market participants to align their competitive behaviour in relation to it.
67. In the bricks industry, neither geographic areas nor customers appear likely candidates to operate as focal points for tacit coordination. Post merger, the production plants of each of the three major players in the industry would be similarly widely geographically dispersed across GB, which would limit the scope for coordination to focus on the allocation of geographic areas. The fact that major customers typically multi-source bricks, having supply contracts in place with several major suppliers, also limits the scope for coordination to focus on the allocation of customers.
68. The most likely focal points for coordination appear to be price and capacity. The issues in relation to the ability of the parties to align their behaviour in relation to these two factors are discussed further below.

#### Incentives to maintain coordination

69. It is often in the interests of individual firms (at least in the short term) to deviate from an established pattern of coordinated behaviour by, for example,

unilaterally cutting prices. If this is not to frustrate the establishment, or at least the maintenance, of tacit coordination, firms must be able to detect deviation from the tacit coordination ('cheating'). Generally, there must also be some mechanism for punishing any such deviation. At a minimum, the consequences of deviation must be sufficiently severe to convince coordinating firms that it is in their best interest to adhere to the established pattern of coordination.

#### Detection

70. The key issue in relation to the detection of cheating is transparency. The issues in relation to detection and the existence of a transparent focal point for alignment are, therefore, closely related and are dealt with separately below.

#### Punishment

71. Two factors suggest that credible punishment strategies could exist post-merger. First, there are currently large stockpiles of bricks. The parties estimate that current stock levels are approximately one billion bricks across the industry, which represents approximately 20 per cent of annual production. Baggeridge's stock level currently run at [ ]. Wienerberger's stock levels currently run at [ ]. Stock levels this high suggest that, post-merger, the major players in the industry would have the capacity to flood the market by releasing stockpiles as a punishment mechanism in response to deviation, if coordination were to arise.
72. Second, as the parties have argued, there is significant overcapacity in terms of production in the industry. As discussed above, post-merger it appears likely that each of the three major players would have excess capacity and, in particular in the case of Hanson and the merged entity, the level of overcapacity would appear very substantial. Again, this suggests that the major players in the industry would have the capacity to flood the market (by operating at full capacity and releasing all production onto the market) as a punishment mechanism in response to deviation, if coordination were to arise.
73. The parties submit that, to date, there is no evidence of any history of punishment of non-coordinated behaviour by temporarily engaging in price wars and increasing output significantly. They argue that the notion that excess capacity has ever been used as a tool to discipline maverick pricing behaviour is fanciful and that customers would, in any event, prevent any price manipulation caused by short term flooding of the market with

stockpiled product. The parties refer to full statistics on stocks in the brick industry published on a monthly basis by the DTI and submit that customers monitor these statistics.

74. The OFT considers that an absence of any history of punishment is not sufficient to exclude the possibility of coordinated behaviour post-merger, particularly where, as here, there is a means - available to suppliers as well as customers - of monitoring stock levels.<sup>7</sup>

#### Sustainability of coordination given other competitive constraints

75. Typically, coordination will not be effective unless the competitive constraints (both actual and potential) on the relevant firms are limited and there are no other factors likely to disrupt the coordination. Thus, coordination is unlikely to be a possibility unless entry barriers are high, the competitive fringe is weak, the constraint posed by imports is weak and customers lack countervailing buyer power.

#### Barriers to entry

76. The parties submit that de novo entry in GB is unlikely. Barriers to entry include gaining access to clay reserves and the capital that needs to be invested in constructing manufacturing facilities (£20 million for a plant producing 50 million bricks per year or about 2 per cent of GB supply). Third parties shared this view.
77. This is consistent with the fact that in the last five years there have been no new entrants into the brick manufacturing sector in GB – whereas there has been some exit. The parties submit that Hanson 'mothballed' two of its production plants and closed one other during this time period. Ibstock and three independent producers have also closed plants. Additionally the parties submit that this acquisition – as the only means by which Wienerberger can expand materially within the UK – is a corollary of the lack of scope for new entry.
78. Consequently, given the available evidence, the OFT considers that no new market entry will act as a constraint on the merged entity.

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<sup>7</sup> The OFT notes the CFI's comments in its judgment in Case T-464/04, *Impala v European Commission*, NYR, 13 July 2006, at paragraph 466 that 'the mere existence of effective deterrent mechanisms is sufficient, in principle, since if the members of the oligopoly conform with the common policy, there is no need to resort to the exercise of a sanction. As the applicant observes, moreover, the most effective deterrent is that which has not been used.'

### Strength of the competitive fringe

79. As set out above, post-merger, the merged entity, Hanson and Ibstock will have respective shares of supply of [20-30] per cent, [30-40] per cent and [30-40] per cent and a combined share of around [80-100] per cent. In addition, these three entities will have the ability to act as suppliers on a national level.
80. In contrast, the closest of the fringe competitors will have a share of supply substantially less than half that of the smallest of the big three. Other competitors will be many times smaller again. None of the fringe will compete on a nation-wide level. Further, the ability of the fringe to expand production to the level necessary to challenge the big three would appear to be extremely limited given, among other things, the limited availability of clay reserves. In the circumstances, the OFT does not consider it likely that the competitive fringe would be able to disrupt any coordination between the three largest suppliers post-merger.

### Imports

81. The evidence before the OFT suggests that it is extremely unlikely that imports would disrupt any coordination between players in GB. A market analysis report on Baggeridge indicates that the prices of imported bricks exceed those of domestically produced brick by some 20 per cent and that these 'will not impact on the industry's scope to increase price'.
82. This view appears to be confirmed by the fact that transport costs are likely to restrict the geographic areas in which imports are able to compete with domestic bricks, the fact that imported bricks currently represent less than 7 per cent of GB supply and evidence indicating that imported bricks are niche, higher-end products.

### Countervailing buyer power

83. The parties submit that the brick sector is characterised by very substantial buyer power. They argue that there has been increasing consolidation in the customer base in recent years, including the mergers between Persimmon and Westbury (developers), Jewson and Graham (merchants) and Travis Perkins and Wickes (merchants). Third party comments were more varied: some third parties suggested that customers had significant buyer power but others took a different view.

84. Overall, the brick industry is much less concentrated on the buyer's side than on the supply side. The four largest builders merchants would appear to represent no more than [20-30] per cent of total brick purchases and the four largest developers only a further 10 per cent to 20 per cent. Beyond these eight, there would appear to be a long tail of smaller customers. In the circumstances, and given the weakness of the competitive fringe, the OFT is not convinced that there would be sufficient buyer-power, post-merger, to disrupt any potential coordination between the three major market participants.<sup>8</sup>

#### Behavioural factors

85. As set out in the OFT's decision in *Dairy Crest/Arla*, contemporary coordinated effects analysis relies not only on a basic structural assessment, but also on an assessment of the impact of the transaction on the behaviour of the merging parties,<sup>9</sup> in particular, the likelihood that a merger will create or eliminate a 'maverick' supplier. A merger that eliminates a maverick that might otherwise have disrupted attempted coordination is likely to be anticompetitive, conversely, a merger that is likely to create a maverick would tend to increase the likelihood that post-merger coordination will be disrupted and therefore to be pro-competitive.

86. In this case, there is no good evidence to suggest that the merger will either create or eliminate a maverick. However, given the large number of other market factors consistent with a risk of tacit coordination, the OFT does not regard this lack of evidence to be determinative one way or the other.

#### Summary

87. The review of the features of the brick industry set out above indicates that the industry exhibits many of the factors that potentially indicate a risk of tacit coordination. This conclusion is consistent with the assessments of the GB brick industry made by third parties. In its 1999 *CRH/Ibstock* merger decision, the European Commission concluded that the structure of the GB market together with some of the condition of competition in the market could indicate a risk of coordination.<sup>10</sup>

88. However, the OFT does not believe that a simple 'check-list' approach is appropriate in the assessment of coordinated effects. All market features

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<sup>8</sup> In reaching this conclusion here, the OFT took due account of its decision in *Hanson/Marshall*, paragraph 35 (see footnote 1 above).

<sup>9</sup> Case ME/2622/06, *Dairy Crest/Arla*, not yet published, paragraph 60.

need to be assessed in the round and the OFT would, at a minimum, wish to be able to describe a non-fanciful mechanism for coordination before taking a reference decision.

89. The OFT has therefore examined in greater detail the two candidate coordination mechanisms that emerge from the review of the 'check-list' above: i.e. tacit coordination in relation to (i) price and (ii) capacity. These two are discussed in more detail below (in reverse order).

#### Tacit coordination in relation to capacity

90. The production capacity of market participants appears to be a reasonably transparent feature of the brick industry. Production plants are large and easily identified. Plant capacity appears to a large degree to be a function of kiln size, which is itself a function of the available technology and therefore the age of the plant. Transparency in terms of plant capacity can also be increased by public statements from market participants giving capacity figures in relation to particular plants, of which there is at least one recent example. Capacity would therefore appear to be a credible focal point for tacit coordination.
91. However, any attempt by market participants to collude in relation to capacity would face a number of difficulties. Given current overcapacity in the industry, coordination is likely to take the form of coordinated capacity reduction (rather than, e.g., delaying investment in developing new capacity)<sup>11</sup>. This can be achieved in at least two ways: (i) by mothballing existing plants and/or (ii) by closing plants altogether. If capacity is reduced in this way, it is very costly to bring back into operation. Once a brick kiln has been allowed to cool, the kiln itself is difficult and costly to re-start and the plant as a whole will often start to deteriorate rapidly due to damp conditions. Skilled labour may also be lost.
92. This has important implications for any coordination strategy. Once its capacity has been reduced, a parties' ability to engage in punishment in the event of cheating is significantly reduced and, in the case of plants that have been closed rather than moth-balled, may be lost altogether. On the other hand, at the same time and by the same token, a party has little incentive to

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<sup>10</sup> Case No IV/M. 1423, *CRH/Ibstock*, 1 March 1999, paragraph 31

<sup>11</sup> [In this regard, the analysis in this case is distinct from that in *Aggregate Industries/Foster Yeoman* (Case ME/2634/06, Completed acquisition by Aggregate Industries of Foster Yeoman Limited) *Aggregate Industries/Foster Yeoman* is also distinguishable in that it involved the creation of a structural link (membership of a JV) between the parties in relation to which coordination might potentially have taken place. CONFIRM]

'cheat' once it that has reduced capacity, since it will not be able to substantially increase market share even if it does 'cheat'.

93. This suggests that the most likely coordination strategy in relation to capacity is a phased series of capacity reductions with market participants 'taking turns' to close a small amount of capacity and then waiting for competitors to reciprocate by doing the same. Given the risk that a competitor will cheat, the better strategy in such a 'tit-for-tat' game would appear to be to achieve capacity reductions through moth-balling (which allows some scope for 'punishment' by reopening capacity) rather than by plant closure (which is less reversible). Even a strategy of this type would, however, be risky, particularly if larger plants were involved.
94. Furthermore, certain features of the brick market are likely to make any such strategy complex to coordinate. First, different plants produce different types of brick. Given their desire to maintain balanced portfolios across all brick types, competitors might need to select carefully the plants that they close. Second, although the larger market participants operate on a nation-wide basis, bricks are costly to transport. Thus, parties would potentially have to coordinate not only on the capacity to be closed (and the type of brick) but also on the location of that capacity.
95. Finally, the parties were able to point to a number of instances in which they, Hanson and Ibstock had already begun to reduce capacity. There was no indication that this capacity reduction was in any way coordinated.
96. Overall, the OFT felt that the difficulties involved in achieving coordinated capacity closures made this a speculative theory of harm, particularly given the absence of any suggestion that such coordination was occurring pre-merger.

#### Tacit coordination in relation to price

97. The parties have argued that there is insufficient transparency in relation to pricing for price to act as a focal point for tacit coordination.
98. The parties concede that most manufacturers have list prices for ex-works (that is, customer-collected) and delivered bricks. However, they note that these price lists are not universally published, that Wienerberger does not have a price list and that Baggeridge introduced its price list in January 2006. Moreover, the parties point out that only [ ] per cent of bricks are actually sold at list price. Major customers typically negotiate supply contracts at a

national level (even if draw-down is organised locally) but will receive plant-specific prices - occasionally regional prices.

99. Further, the parties have provided sales data – which has been charted into scatter plots – in order to demonstrate that prices actually charged for bricks are widely dispersed, with substantially different prices being charged to different customers for similar quantities of similar bricks. The parties argue that this dispersion data demonstrates that price transparency is very limited.
100. The OFT agrees that, to the extent that price lists are rarely observed in practice, they are of limited value in terms of promoting price transparency. It also agrees that, the data submitted by the parties shows substantial price dispersion in relation to smaller orders of bricks.
101. However, the dispersion data is not sufficiently conclusive on the issue of price transparency. The data submitted by Wienerberger indicates that while prices for small orders of bricks are highly variable there is much less variation in the prices for very large orders. Further, although the parties' data suggests that different prices are charged for different brick types, an analysis of the data suggests that, particularly for higher volume contracts, prices may cluster around a limited number of price points.
102. The data submitted by Baggeridge is more limited than that submitted by Wienerberger. In particular, Baggeridge has only submitted data for ex works contract – i.e. excluding those contracts for delivery to the customer. This appears to have had the effect of excluding very large contracts from Baggeridge's data. The OFT has, therefore, been unable to confirm whether the substantially reduced variation in relation to price in high volume contracts observed in relation to Wienerberger also applies in relation Baggeridge. The OFT has also been restricted in its ability to identify whether or not there are price points across brick types around which coordination might form.
103. In addition, the OFT does not have similar price dispersion data for Hanson and Ibstock. Without this, the evidence available to the OFT on a point central to the analysis, whether variations in brick prices are sufficient to preclude price transparency, is importantly incomplete. In such circumstances, the OFT's general policy is to apply a lowered threshold of probability in determining whether its duty to make a reference in relation to a transaction is met.<sup>12</sup>

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<sup>12</sup> OFT 516a, Guidance note revising 'Mergers – substantive guidance', October 2004.

104. The OFT has also considered whether the way in which larger customers purchase bricks might mean there is insufficient market transparency to allow detection/punishment. As indicated above, major customers typically negotiate national framework supply contracts. Typically, a customer will have framework agreements in place with a number of brick manufacturers. These contracts do not generally commit the customer to purchasing any particular volume of bricks. Instead, customers will place orders for particular quantities of bricks as and when the need arises throughout the year. However, the parties have indicated that contracts will often include loyalty/volume rebates, which will presumably be linked to purchase volume targets.
105. These purchasing arrangements may make the detection of cheating difficult. A manufacturer will not simply lose a customer as a result of cheating by a competitor. Its framework agreements will remain in place. Rather, the quantities of bricks that a customer orders under the framework agreement will fall. If customer demand is not easy to predict, this fall in orders may be difficult to detect.
106. However, the evidence here is mixed. The number of very large customers in the market is reasonably limited. As mentioned, eight customers -- the four largest builders merchants and the four large developers -- would appear to represent somewhere between 35 per cent and 50 per cent of total brick purchases. They are likely to represent an even greater proportion of the largest orders, where post-merger the three leading suppliers will be least subject to competitive pressure from fringe players.
107. Moreover, relationships between manufactures and these customers would appear to be reasonably close, and the parties gave at least one example of a customer indicating to a manufacturer the kind of price reductions it would need to make in order to win an order in the face of an alternative bid from a competitor. This potentially indicates that the detection of cheating may be less onerous than a simple examination of the patterns of customer contracts might suggest.
108. In light of the evidence suggesting that tacit coordination may be a possibility in relation to broader brick pricing on larger orders, taken in combination with the evidence that customer contacts may facilitate transparency, the OFT is not in a position to conclude with sufficient confidence in first phase that tacit coordination on price would not be possible post-merger. Given the number of risk factors in relation to tacit coordination in brick production highlighted in the discussion above, the OFT considers that it is under a duty to conclude

that it may be the case that the merger may be expected to result in a substantial lessening of competition as a result of post-merger tacit coordination on price.

### **Explicit coordination**

109. As indicated in the OFT's Substantive Assessment Guidance, a merger may substantially lessen competition by increasing the possibility that firms will explicitly coordinate their activities post-merger.<sup>13</sup>

110. Where, as here, a transaction results in the reduction of significant players in an already concentrated market, it will be both relatively easy to allege that the risk of explicit coordination has increased as a result and relatively difficult to show that this is not the case. The OFT will generally therefore be reluctant to make a reference pursuant to a theory of harm based on explicit coordination without some additional evidence, e.g. either: (i) of pre-existing explicit coordination between market participants;<sup>14</sup> (ii) that the transaction will result in the creation of a structural forum for contact between market participants;<sup>15</sup> or (iii) that the incentives for explicit coordination have significantly increased.

111. In this case, the OFT has no evidence to suggest pre-existing explicit coordination between the parties.<sup>16</sup> Nor will the transaction result in the creation of a structural link between market participants that might operate as a forum for coordination.

112. However, the transaction would appear to increase the incentives for explicit coordination between market participants. In addition to reducing the number of significant players in the market to three, the transaction will (as described above) increase the degree of symmetry between these players post merger. Whether in the context of this market this increased incentive to engage in explicit coordination is sufficiently significant to justify a reference is a difficult issue.

113. However, in view of its conclusions in relation to tacit coordination, the OFT does not believe it is necessary to determine this issue one way or the other. Nonetheless, the OFT notes that many of the transparency issues which

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<sup>13</sup> [para 4.11].

<sup>14</sup> Cf, the OFT's decision *Dairy Crest/Arla Foods*, not yet published.

<sup>15</sup> See *Aggregate Industries/Foster Yeoman* [REF].

<sup>16</sup> However, the OFT notes that the OFT research paper OFT 773 - Predicting cartels identified the brick industry as a high risk one in terms of the likelihood of the formation, maintenance or detection of cartel activity.

potentially cause difficulties for the tacit price coordination story could potentially be overcome through an explicit coordination strategy.

## **SUMMARY ON COORDINATED EFFECTS**

114. For the reasons set out above, the OFT concludes that it may be the case that the merger may be expected to result in a substantial lessening of competition as a result of post-merger tacit coordination on price.

115. Although the merger may also increase the likelihood of explicit coordination (in particular on price) the position is not clear cut and the OFT does not believe that it is necessary to determine this issue in light of its conclusions in relation to tacit coordination.

## **THIRD PARTY VIEWS**

116. The OFT sent out questionnaires to 32 third parties.

117. The majority of respondents did not raise any competition concerns. A minority expressed the view that the transaction would enable the merged entity to compete more vigorously with Hanson and Ibstock. Conversely, another minority raised issues regarding the reduction in competition. Some noted that the transaction inhibiting their ability to negotiate whilst others alluded to possible coordination.

## **ASSESSMENT**

118. The activities of the parties overlap in respect of the manufacture and supply in Great Britain (GB) of clay bricks.

### **Non-coordinated effects**

119. The parties' combined GB share of supply is between 20 and 30 per cent, depending on brick type (increment less than [5-15] per cent). The OFT considers that Hanson and Ibstock – whose GB shares of supply are broadly similar to the combined shares of Wienerberger and Baggeridge are capable of posing a sufficient post merger competitive constraint. Both competitors support the parties' submission that excess capacity is available. Comments indicate that switching is generally feasible.

120. There are two regional overlap areas: the Midlands and West Sussex where there are, respectively, a total of 19 and 11 competing production sites.

121. Barriers to entry are high and some third parties raised concerns regarding lack of choice and reduction in negotiating opportunity. Comments indicate switching between the larger national players has generally been feasible although hindered in some instances by site location relative to production plant, transport costs and brick type required. Some third parties submit that the transaction will be pro-competitive as it will enable the merged group to compete more vigorously with Ibstock and Hanson.

122. Taking due account of the above elements, the OFT does not believe that it is or may be the case that the merger may be expected to result in a substantial lessening of competition due to non-coordinated effects, either nationally or regionally.

### **Coordinated effects**

123. Whilst the parties' arguments as to the pro-competitive rationale behind the transaction do have a good deal of merit, for the reasons set out above, the OFT concludes at first phase that competition concerns arise as a result of post-merger tacit coordination on price.

124. Although the merger may also increase the likelihood of explicit coordination (in particular on price) the position is not clear cut and the OFT does not consider that it is necessary to determine this issue in light of its conclusions in relation to tacit coordination.

125. Consequently, the OFT believes that it is or may be the case that the merger may be expected to result in a substantial lessening of competition due to coordinated effects within a market or markets in the United Kingdom.

### **DECISION**

126. This merger will therefore be referred to the Competition Commission under section 33(1) of the Act.