

AGGREGATES, CEMENT AND READY-MIX CONCRETE MARKET INVESTIGATION

Statement of issues

1. On 18 January 2012 the Office of Fair Trading (OFT) in exercise of its powers under sections 131 and 133 of the Enterprise Act 2002 (the Act), made a reference to the Competition Commission (CC) for an investigation into the supply or acquisition of aggregates, cement and ready-mix concrete (RMX).
2. The CC is required to determine whether any feature or combination of features of each relevant market prevents, restricts or distorts competition in connection with the supply or acquisition of any goods or services in the UK or a part of the UK.¹ If the CC decides that there is such a prevention, restriction or distortion of competition, there will be an 'adverse effect on competition' (AEC).²
3. In accordance with section 133(2) and (3)(a) and (b) of the Act, the OFT required the CC to confine its investigation to the effects of features of such market or markets as exist in connection with the supply or acquisition of such goods or services in Great Britain.
4. Our statutory remit is to assess competition in the markets for aggregates, cement and RMX. We may also take account of whether any features in the reference markets in Great Britain give rise to detriment in other markets (such as the related downstream markets for asphalt and concrete products). Were information to come to our attention that led us to believe it was appropriate to extend the terms of reference for this investigation, we would consider whether it was appropriate to ask the OFT to do so. Although our investigation will not be able to address broader public policy issues such as environmental concerns in determining whether there is an AEC, we will consider whether, and how, such policies interact with the process of competition.
5. This issues statement is based on the OFT's decision document³ and on our initial consideration of an appropriate framework for the investigation. We are publishing this statement now to assist those submitting evidence to focus on the issues we envisage being relevant to this investigation. The points raised in this document are intended as topics for investigation and do not represent any views or findings of the CC. If parties consider that there are additional issues which we should consider, they are invited to identify them and to explain why these are relevant to our investigation.
6. This investigation is separate from the inquiry into the joint venture between Anglo American and Lafarge. That inquiry has recently published its [provisional findings report](#). We are of course aware of these findings but the members of the Inquiry Group for the market investigation will reach their own conclusions in relation to the matters covered by the market investigation on the basis of the evidence we receive and analysis we undertake. We welcome submissions commenting on the relevance

¹See [section 134\(1\)](#) of the Act.

²As defined in [section 134\(2\)](#) of the Act.

³See the report *Aggregates: The OFT's reason for making a market investigation reference to the Competition Commission*, January 2012, OFT1358ref, www.offt.gov.uk/shared_offt/market-studies/offt1358ref.pdf.

of the joint venture provisional findings (and in due course the final report) to the market investigation.

7. We plan to hold hearings with interested parties in due course. As our thinking develops, we expect to issue further documents for consultation prior to publication of provisional findings. If we were to find provisionally that there was an AEC, we would then consult on possible remedies.
8. To submit evidence, please email aggregates@cc.gsi.gov.uk or write to:

Inquiry Manager
Aggregates Market investigation
Competition Commission
Victoria House
Southampton Row
LONDON
WC1B 4AD

by 10 April 2012.

Presentation of the issues

9. We now set out the issues which appear to be relevant to the decision as to whether any feature, or combination of features, of the market prevents, restricts or distorts competition.
10. First, we begin by setting out the broad approach to assessment of competition that the CC adopts within market investigations.
11. Second, to focus our analysis, we set out a number of hypotheses we have identified that describe how a possible market characteristic (or characteristics) could give rise to an AEC. Our investigation is at a very early stage, and the purpose of identifying these hypotheses or ‘theories of harm’ is to present some early thinking on how issues might fit together, so as to help frame our investigation. Their identification does not mean that we have reached any conclusions on whether these hypotheses apply, nor have we yet reached conclusions on any of the issues set out in this statement. The identification of these theories of harm does not preclude an AEC being identified on another basis following further work by us or the receipt of additional evidence. These theories are not necessarily mutually exclusive.
12. Third, we set out the possible nature of detriment that might arise if there were any adverse effect on competition.

Approaches to the assessment of the effectiveness of competition

13. As set out in [Market Investigation References: Competition Commission Guidelines, CC3](#) (paragraph 1.21), the CC will normally approach a market investigation through consideration of two related issues: the identification of the relevant market or markets for the goods or services concerned; and an assessment of competition in the market and whether any features of the market create an AEC. We consider the definition of the relevant markets and the examination of competition within those markets to be overlapping parts of the same analysis. As noted in [CC3](#) (paragraph 2.2) there is inevitably an element of judgement involved in defining the market and the CC will adopt the methodology most appropriate in the context of the investigation. Our examination of competition will take into account, as necessary, constraints

outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others.

Market definition

14. We will consider the scope of the affected markets across two dimensions—‘product market’ and ‘geographic market’.
15. We will consider the various product markets and the extent to which there may be substitution either in production or use between different types of aggregates, cement and RMX. We will also consider whether any other products may be part of the same market by virtue of their substitutability.
16. We will consider whether there are separate markets for different grades/categories of these products, and whether there are separate markets for products for different uses, such as for bulk cement and bagged cement, aggregates for construction use compared with those for more specialist uses (eg rail ballast, high PSV stone for road building, high purity limestone for various applications, etc).
17. A related question is the extent of geographic markets. For each product market, this will depend on transport costs, and may depend on whether the product in question is a commodity product or whether there is substantial differentiation between grades and types of that product.
18. We note that in the provisional findings for the Anglo American/Lafarge joint venture, the report sets out views on the definition of relevant product markets and the identification of relevant geographic markets, as determined by the Inquiry Group of members for that inquiry. We welcome submissions on the relevance of those definitions for this separate market investigation.

Analysis of competition in the relevant market(s)

19. In order to understand the nature and extent of competition in the relevant markets, we will need to examine a range of issues across those markets, with the aim of identifying any features that might adversely affect competition. This range of issues will include observed outcomes (indicators of the extent of competition) and observed behaviour (both supplier and customer) that might explain those outcomes, as well as evidence of factors that influence that behaviour. Features that may have the effect of preventing, restricting or distorting competition include the structure of the market, the conduct of firms whether as sellers or buyers, or the conduct of customers. The conduct of suppliers could include any behaviours which take advantage of any market power they might acquire as a result of aspects of market structure, or supplier or customer conduct.
20. We shall consider whether any aspects of the behaviour of customers and consumers in the relevant markets contributes to a possible reduction in competition. While we do not at the moment have evidence of any relevant customer conduct, we shall consider whether any of the following aspects (or any other aspects of conduct) could be relevant to any AEC:
 - willingness to compare suppliers and attitudes to switching;
 - whether demand is responsive to prices;

- willingness to switch to different products or sources of supply (such as imports, or to sponsor new entry); and
 - information asymmetries.
21. We will examine evidence as to whether competition or the threat of entry results in effects on prices and other aspects of performance, and how such competition has manifested itself in practice. We will consider a range of possible indicators of the extent of competition, and how these vary depending on the extent of competition in particular markets. These are likely to include:
- prices, aspects of innovation and service;
 - margins and capacity utilization;
 - willingness to supply;
 - the extent to which different producers offer competing products in the same markets; and
 - whether market shares and customers served change over time.
22. We will also consider whether there is evidence of persistent high profits for producers of these products, and if so whether this is indicative of a lack of competition. We may also consider whether there is evidence of persistent high profits for specific products or in specific markets.

Hypotheses for investigation (theories of harm)

23. It appears from the OFT investigation that concentration is high at a national level in the supply of all the reference products. For at least some of these products, markets may be local because of transport costs,⁴ and in some local markets it is possible that concentration will also be high. As well as investigating further the extent to which these observations are accurate reflections of the industry, we will seek to understand what market characteristics might be driving them. These may include barriers to entry arising from operating costs and transport costs, availability of suitable production sites, planning and regulatory restrictions, and the conduct of existing competitors. Alternatively vertical integration between different stages of production of the reference product could give integrated producers efficiency or other competitive advantages over rivals.
24. Another possibility is that actions of firms in the market might reduce competition. This could arise if firms for various reasons found it in their interests not always to compete actively with their rivals. Alternatively, firms may choose to act in ways which have the effect (whether or not this is intended) of reducing rivals' ability to enter the market or to sustain their presence in the market.
25. We will also consider whether any aspects of policy or regulation in relation to the production and use of these products may influence competition for these products.

⁴ For example, the weight of aggregates and their market value means that transport costs can be significant. However, we will consider whether this means that markets are local, if so what size they are, and whether this can depend on specific local circumstances, such as when quarries and depots are connected by rail links.

26. These possibilities are reflected in some of the hypotheses for investigation set out below. Theories of harm may operate in different ways and to different degrees in different markets, and in some cases might apply across more than one market. Theories of harm are not mutually exclusive, and as with features, it is possible that they could apply singly or in combination.

Theory of harm 1: High levels of concentration and barriers to entry mean that the suppliers can exercise unilateral market power

27. As noted above, the supply of the reference products is characterized by a high degree of concentration at a national level. There are a great many small producers of aggregates and RMX. We shall undertake our own investigation of industry structure, including consideration of the number of producers, their areas of activity, market shares and market concentration, and whether market shares have remained stable over time. In a concentrated market, competition between firms may be subdued. This may not give rise to an AEC if the constraint from entry, or from substitute products, is strong. However, this may not be the case, if barriers to entry and expansion are strong. There are indications that barriers to entry and expansion may apply in some or all of the relevant markets. As a result of market concentration and barriers to entry, incumbent firms may have the ability to exercise market power for certain products and/or in certain geographic markets and the ability to set higher prices or reduce the quality of other aspects of their offer.
28. If significant barriers to entry existed, we would expect to see evidence of the existence of such barriers and few examples of successful entry on any significant scale. Furthermore, we might expect differences in prices (or other competitive variables) to exist between areas where there were many competing suppliers and those where no such rivalry existed.
29. We will also consider whether there could be unilateral exclusionary conduct on the part of individual firms that raise strategic barriers to entry or otherwise affect competition. For example, producers of any of the reference products might respond to entry or expansion in a local area by targeting that entrant's business. Such tactics might be deployed if a supplier believed it has greater resources or more commitment to a particular market than its rivals. Such actions could establish a reputation that might deter further entry. We will consider whether such actions would form a plausible strategy, and whether there is evidence of their occurrence, and if so whether this represents a form of competition or alternatively exclusionary conduct that could constitute a feature that prevent, restrict or distort competition.

Aggregates

30. In the case of aggregates, we shall assess competition taking account of the extent of the relevant geographic market for different products, the presence of other sources of supply and the degree of substitutability for other products. These factors may differ for different types of aggregate and for products for certain uses (such as those identified in paragraph 16). Consequently the existence of unilateral market power for incumbent firms could vary depending on the type of aggregate considered and the circumstances of relevant local markets.
31. Possible barriers to entry for aggregates may include:
- lack of naturally suitable sites in appropriate areas;

- transport costs between suitable sites and areas of demand, including access to suitable transport infrastructure (such as rail);
- cost and difficulty in obtaining planning permission for new aggregates extraction, including the possible influences of the application of the Managed Aggregates Supply System, and whether there may be any aggregates sites with planning permission which might be deliberately left unexploited (land banks); and
- whether there are economies of scale in aggregates production which mean that small-scale sites are unviable or disadvantaged relative to large-scale sites. Whether there are economies such that multi-site producers are advantaged, and whether there are economies arising from vertical integration.

Cement

32. We shall assess competition taking account of the extent of the geographic market, the threat of entry and expansion, and whether imports provide a competitive constraint. We shall consider whether there are any relevant differences relating to different grades of cement. We shall include in our assessment consideration of whether the markets for inputs to the production of cement (including fly ash and ground granulated blast furnace slag (GGBS)) affect competition in the markets for cement.
33. Possible barriers to entry for cement may include:
- economies of scale at plant level, and the cost of efficient plant and scale relative to market size;
 - whether there are economies of scale arising from the overall (multi-plant) scale of the producer and/or arising from any aspects of vertical integration;
 - availability of suitable sites (large area, adjacent supplies of limestone etc, access to rail) and cost/difficulty of obtaining planning permission;
 - access to other cementitious materials, such as fly ash and GGBS;
 - whether any aspects of supplier conduct represent a barrier to entry, such as quantity rebates to purchasers, and concerns over responses of rivals to new entry (including spare capacity of incumbents); and
 - allocation of emissions permits.

RMX

34. In the case of RMX, we shall assess competition taking account of the extent of the relevant geographic market, and the substitutability of supply from plant-batched, site-batched and volumetric truck sources and the degree of substitutability for other products. We shall consider whether there are relevant differences for different grades of RMX or for certain uses.
35. Possible barriers to entry for RMX may include:
- economies of scale at plant level, and whether there are economies of scale arising from the overall (multi-plant) scale of the producer and/or arising from any aspects of vertical integration;

- availability of cement and aggregates from suppliers, particularly the conduct of suppliers where they may also be RMX competitors; and
- whether any aspects of supplier conduct represent a barrier to entry, such as quantity rebates to purchasers.

Theory of harm 2: Coordination between producers reduces or prevents competition

36. We will also consider whether a lack of competition could arise because of coordination between producers, either in any of the individual product markets, or spanning more than one product market. This could arise if suppliers individually felt that competing with rivals in order to win customers could lead to rivals responding in kind elsewhere, and the resulting levels of competition might be less profitable than avoiding competition to some extent in the first place.
37. There are various ways in which coordination could occur, and it might only arise in certain areas or for some products. Coordination could be on the basis of sustaining a certain level of production, or a certain share of overall production or sales. It could be on the basis of geographic market sharing or serving only particular parts of the market (such as historic customers or certain types of customer). Alternatively, there could be coordination on prices. However, coordination could be more subtle, for example it may involve how best to respond to certain types of situations such as demand shocks. If producers recognized that it could be more profitable to abstain from direct competition than to compete, coordinated outcomes might not depend on explicit collusion or agreement. This market outcome might persist over time if new or smaller suppliers felt unable to take advantage of opportunities for fear of a retaliatory response, and/or imports did not provide an effective competitive constraint.
38. For coordination to arise and be sustained, there would need to be some common understanding for producers on what form coordination would take, and how it would be framed (eg how common prices would be set, how market shares would be measured and maintained, how customers or markets would be allocated). The forms that coordination could take, and the relevant benchmark, may well be different for different products, and we would need to consider in each case whether there is a feasible form of coordination, and if so, whether there is evidence that behaviour or market outcomes suggest coordination of that type is occurring.
39. We will also consider whether coordination could arise which impacts on competitive behaviour in more than one market. This could be coordination across a range of geographic markets (such as similar behaviour in multiple markets or segregating between different markets), or similar behaviours in different product markets. It could also be that responses to deviation from coordinated behaviours might arise in a different product or geographic market where the suppliers concerned also overlapped.
40. We will consider whether such behaviours would be likely to be sustainable, ie whether producers would have a long-term incentive to behave in this way, whether any producer who deviated from such behaviour would face a response (such as retaliation, or just loss of future profits) which would deter deviation, whether there is sufficient transparency in the market such that rivals could identify whether a particular party was deviating from the coordinated conduct, and whether such outcomes would be undermined in the longer term by a competitive fringe, new entry, imports, etc. So, for example, such conduct would be likely to depend on the existence of some barriers to entry as described in paragraphs 27 to 35. We would also need to distinguish whether any market outcomes were likely to have resulted from coord-

ination or were more likely to be explained by other factors such as barriers to entry, ie whether there is evidence that producers choose to avoid competition on price, within particular areas, etc.

Theory of harm 3: Vertical integration and exclusionary behaviour

41. Aggregates and cement are key inputs in to the supply of RMX. Some of the companies involved in these sectors are vertically integrated. Notably the four cement producers present in Great Britain also have significant aggregates and RMX operations, but other companies also have both aggregate and RMX operations, and may be involved in the importation of cement. These producers may also be integrated into the production of other products such as asphalt.
42. We will consider whether vertical integration could impact on competition in any of these markets. For example, we will consider whether vertical integration itself impacts on producers' costs so that non-integrated producers are unlikely to be able to compete effectively with integrated producers.
43. We have not seen suggestions that integrated producers bundle products to customers in ways which make it difficult for non-integrated suppliers to attract customers. However, the OFT received suggestions that some integrated producers were raising the prices of cement relative to the prices of RMX, which could have the effect of squeezing the margins of non-integrated RMX suppliers. It was suggested that this could be conduct which has the effect (and may have the intention) of weakening or excluding small and independent non-integrated RMX producers. We shall consider whether there is evidence that prices have moved in this way, and whether there are indications that RMX producers have been excluded from the market. We shall also consider whether these price movements may be explained by differences in the markets for cement and RMX (such as differences in the costs of producing these products). We shall also consider whether such an effect applies in relation to aggregates.
44. We shall also consider whether it would be a profitable long-term tactic in some circumstances for a vertically-integrated producer to seek to squeeze the margins of RMX producers who were customers for cement (or aggregates). This will depend on our assessment of the nature of competition in the markets for cement (or aggregates) and RMX.
45. For example, we will consider whether such conduct would be a viable tactic for an operator acting unilaterally, or whether such conduct would only be viable if it were similarly adopted by other suppliers. We shall consider whether there is evidence of vertically-integrated producers adopting common behaviours and/or coordinating their conduct.

Theory of harm 4: Policy and regulation

46. We will also consider whether any aspect of regulation of these industries, or the implementation of policies relevant to these industries, has the effect of preventing, restricting or distorting competition. While we recognize the benefits of such measures, we will consider whether they might have any adverse effects on competition that should be acknowledged, such as distorting behaviours or creating a barrier to entry.
47. Examples of issues which may be addressed include:

- whether the EU Emissions Trading System has the effect of giving advantages to existing cement producers, distorts patterns of production, and tends to drive increased concentration;
- how the aggregates tax influences the choice between use of primary, secondary and recycled aggregates and whether this may have the effect of distorting competition;
- whether the planning regime and/or policy on the development and use of mineral reserves, and the way these are applied, restricts the ability to develop new aggregates production facilities, or to expand existing facilities, and so may create a barrier to entry and expansion or distort competition in the market;
- whether these schemes create incentives for companies to seek permissions for aggregates extraction which are not then developed. If so, whether companies holding undeveloped sites in a land bank (and/or mothballing previously active sites) has the effect of restricting supply to the market or making entry by rivals more difficult; and
- whether any aspects of these schemes provide a degree of transparency that facilitates coordinated behaviours.

Possible detriment

48. We will seek to identify any detrimental effect on customers which might result from any AEC. These could take the form of higher prices or contracts that are less suited to the customer's needs, reduced service quality, and reduced choices of product and supplier.
49. We will also consider whether any detrimental effect to customers arises in other markets as a result of any AEC in the markets for aggregates, cement and RMX. For example, we shall consider whether there are any effects in the markets for downstream products, such as asphalt and concrete products.
50. If we provisionally conclude that there is an AEC, then in considering remedies we will also consider whether any relevant customer benefits arise from the features that prevent, restrict or distort competition, within the meaning set out in paragraphs 4.26 to 4.31 of [CC3](#).

8 March 2012