

Funerals Market Investigation

Crematoria: Profitability Analysis

20 February 2020

This is one of a series of consultative working papers which will be published during the course of the investigation. This paper should be read alongside the [Issues Statement](#) published on 8 April 2019 and other working papers published. These papers do not form the inquiry group's provisional decision report. The group is carrying forward its information-gathering and analysis work and will proceed to prepare its provisional decision report, which is currently scheduled for publication in April/May 2020, taking into consideration responses to the consultation on the Issues Statement and responses to the working

papers as well as other submissions made to us. Parties wishing to comment on this paper should send their comments to Funerals@cma.gov.uk by 19 March 2020.

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The Competition and Markets Authority has excluded from this published version of the working paper information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. [Some numbers have been replaced by a range. These are shown in square brackets.] [Non-sensitive wording is also indicated in square brackets.]

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Introduction and purpose of this paper

1. The purpose of this paper is to set out how we have assessed the profitability of crematoria services and to present the results of this initial assessment.
2. On 24 July 2019, we published a working paper titled '[Approach to profitability and financial analysis](#)' (the 'profitability approach paper'), setting out in detail our proposed methodological approach to the financial and profitability analysis.
3. We have considered parties' comments on this proposed methodology carefully. In this paper, we explain how we have taken those responses into account in carrying out our analysis of the profitability of crematoria services. However, we have not repeated here the detailed methodological discussion set out in our previous paper. Therefore, we recommend that this working paper is read in conjunction with the 'the profitability approach' paper.
4. In performing our analysis, we have considered two groups:
 - (a) The four largest providers of crematoria services:
 - (i) Dignity plc ('Dignity')
 - (ii) Westerleigh Group ('Westerleigh')
 - (iii) Memoria Ltd ('Memoria')
 - (iv) The London Cremation Company ('LCC'), and
 - (b) A random sample of twenty-two local authority crematoria.¹
5. This paper is structured as follows:
 - (a) First, we set out the scope of our analysis, in terms of the relevant business activities, time period and companies covered.
 - (b) Second, we discuss our approach to ROCE analysis for crematoria services, with a particular focus on:
 - (i) Identification and valuation of capital employed; and

¹ In this paper we present the results of fourteen of these local authority crematoria. The remaining eight have been excluded at the current time due to potential issues with the data submitted. We are in the process of resolving these issues and will include the results of a larger number of local authority crematoria as we develop our analysis further.

- (ii) Adjustments to EBIT.
- (c) Third, we set out the results of our ROCE analysis, first for the largest providers of crematoria services, and then for the local authority crematoria, together with some preliminary commentary on those results.
- (d) Finally, we show the results of our preliminary analysis of the CIPFA Dataset, which includes information on the financial performance of a number of local authority crematoria. We have identified the profit margins earned by the local authority crematoria included in the dataset and compared these with the profit margins earned by the largest crematoria operators.

Scope of our analysis

6. In the profitability approach paper, we proposed to carry out financial analysis on:
 - (a) The four largest providers of crematoria services in the UK, namely Dignity, Westerleigh, Memoria and LCC ('large crematoria'). In the UK, these firms have an estimated combined share of supply of approximately 26%, based on volume of cremations.² Based on value,³ these firms have a combined share of supply of approximately 31%.
 - (b) A random sample of twenty-two local authority operated crematoria ('local authority crematoria') in the remaining portion of the market.
7. We defined 'crematoria services' as those services provided by a crematorium in connection with the cremation of the deceased, including the provision of a chapel or specific place for attended cremations, the committal and the associated sales of additional products and services, such as memorials, audio-visual support and hospitality. This definition excludes all activities associated with burials.
8. In terms of the time period for the analysis we proposed to consider the 2014 to 2018 period, as well as forecast data for 2019.

² CMA analysis of The Cremation Society data.

³ We have assumed all cremations are standard fee cremations. This therefore does not take into account the level of reduced fee services, which may differ between providers.

Parties' views

Market coverage

9. Dignity told us that for crematoria services it was 'concerned that the proposed market coverage focuses disproportionately on private operators, whereas local authority operators comprise 70% of crematoria in the UK'.
10. Memoria told us that the proposed sample size appears very small, comprising just 22 smaller crematoria which is around 10% of the population of smaller providers and therefore it did not provide sufficient detail to assess whether it would lead to a successful understanding of smaller crematoria (including local authorities).
11. Further, Memoria stated that the 'stratification proposed to establish a representative sample appears overly simplistic, controlling only for ownership [...] region and volumes [...] Memoria would expect local demographics, the mix of burials versus cremation/memorialisation and local competitive structure to also play a role in driving profitability of local authority crematoria'.
12. Westerleigh stated 'The CMA [...] proposes a light-touch 'small sample' approach meaning that information on profitability of only 30% of the market would be collected'.
13. Westerleigh also highlighted the CMA's Guidelines for Market Investigations, which state that 'Profitability analysis is relevant "where profitability of firms representing a substantial part of the market has exceeded the cost of capital over a sustained period"⁴.

Time period

14. Dignity told us that 'the long-lives of crematoria assets also means that investigating profitability trends with only a six-year window may not give a representative view'.
15. Dignity also 'recommends that the CMA requests more complete actual data for 2019 in January 2020, together with relevant 2020 forecasts. This will allow the CMA a longer time period of analysis, and, as the markets continue to change rapidly, it is critical that the CMA's analysis is up-to-date in any remedies design stage'.

⁴ CC3 (revised) Guidelines for market investigations: paragraph 118

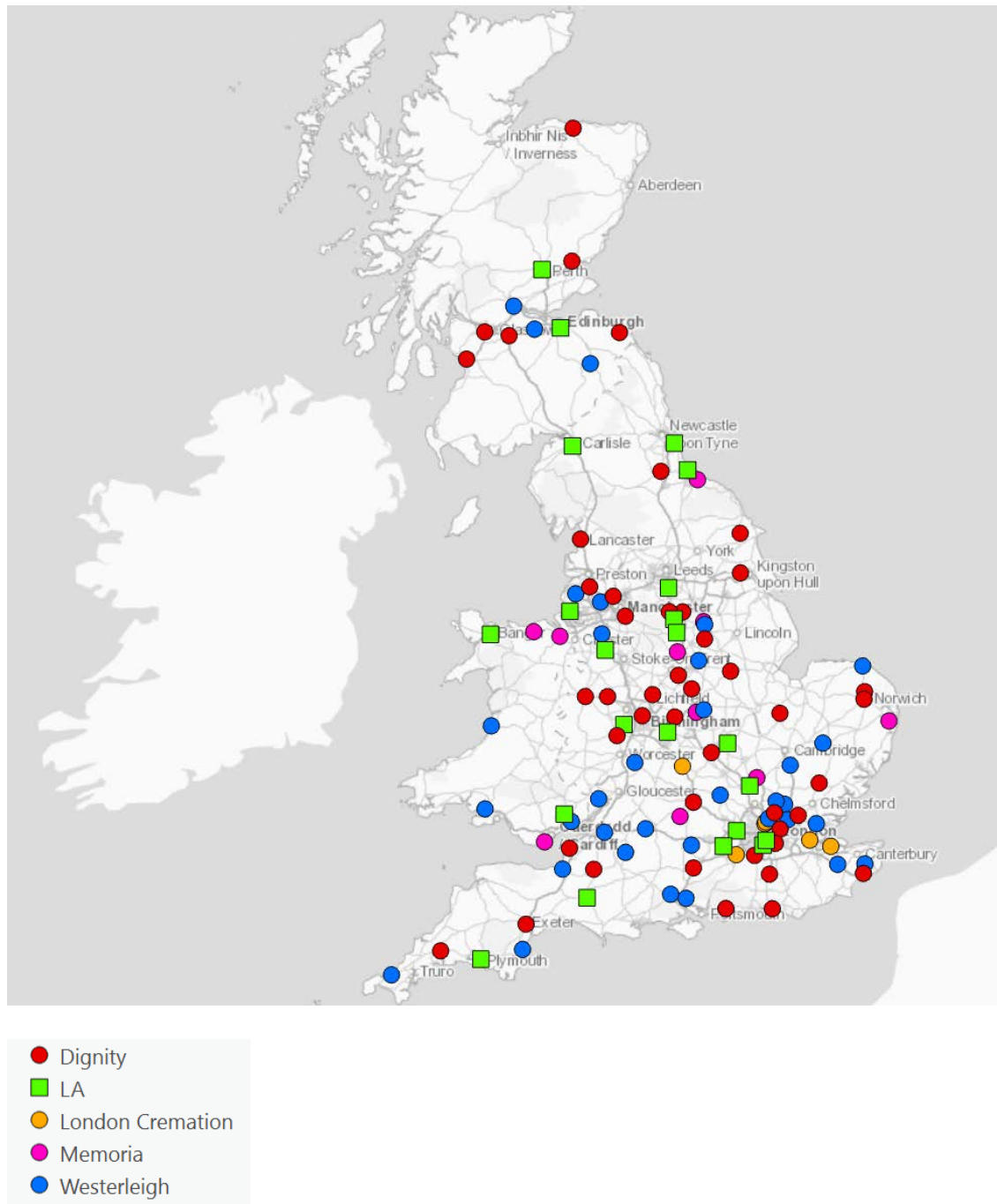
16. With regards to the time period, Memoria told us that 'it will be important to recognise in interpreting the results that this will not cover a full business cycle, or the lifespan of the key crematoria assets'. It continued: 'this has been a period in the development of the crematoria market when years of underinvestment and under-capacity are in the process of being reversed'.
17. Westerleigh told us that investments in crematoria were large and risky and that the CMA guidance notes that where such investments have been made, the CMA 'would expect to see a normal level of profits restored over a relatively long timescale'. On this basis, Westerleigh concluded that 'the CMA's proposed approach in the WP therefore does not appear consistent with either the characteristics of the sector or its own guidance'.
18. Westerleigh further highlighted that 'five years is not a sufficient time period to identify trends'.
19. Memoria raised the following concern: 'it is entirely unclear how the CMA plans to value land acquired in the last 10 years'.

CMA approach

Coverage

20. We note parties' views on coverage and their arguments that the CMA should extend its analysis to a greater proportion of the sector in general, and the local authority providers in particular.
21. The provision of crematoria services in the UK is highly fragmented, with the four largest firms accounting for around 26% of the sector by volume. In carrying out our analysis, therefore, we must balance considerations of coverage with practical concerns regarding the collection of robust financial data from a large number of parties.
22. We note that our current approach means that our analysis covers 118 out of approximately 300 crematoria in the UK, which is just under half the total number of crematoria. With regards to the fragmented portion of the sector (around 70% of cremations by volume), we consider that a random sample of 22 crematoria, which comprises approximately 11% of volumes from this part of the sector, is likely to provide information that is statistically representative of that part of the sector as a whole. We note that our sample of local authority crematoria has broad geographical coverage as well as a mix of larger and smaller urban areas, and rural locations. See Figure 1 below.

Figure 1: Map of coverage of crematoria and key



23. In this context, we do not believe that extending our sample would provide significant additional insight into the financial performance of the crematoria sector. Furthermore, we note carrying out a full profitability analysis on up to 26 crematoria operators (both large and local authority crematoria operators combined) is resource intensive and that increasing the number of parties further would create practical challenges in terms of completing our analysis, robustly, within the timeframe of our investigation, without adding significant benefit. As such we do not propose to extend the sample size.

24. However, we have supplemented our analysis by also reviewing and analysing the data prepared by the Chartered Institute of Public Finance & Accountancy ('CIPFA') on the financial performance of local authority crematoria. This dataset comprises information on the financial performance of 79 crematoria in 2014/15 and 69 crematoria in 2015/16. We have considered how the margins of these crematoria compare with those of the firms for which we have undertaken a full profitability analysis and how this information should be interpreted in the context of our overall analysis. See paragraphs 186 to 192 for further details.

Time period

25. Next, we considered parties' representations regarding the timeframe for our analysis. First, we observed that, while five years is shorter than the lifecycle of an individual crematorium, our analysis covers a broad range of crematoria that are in different stages of the lifecycle. As such, we do not consider it necessary to extend the relevant period for our analysis in order to understand the profitability of crematoria over their lifecycle since this can be achieved on a cross-section basis.
26. However, we consider that it would be useful to collect data for 2019 in order to have the most up-to-date view on the sector and will continue to seek additional data as we develop our analysis further.

ROCE Analysis

Approach to ROCE analysis

27. We set out the overarching conceptual approach to return on capital employed as in our profitability approach paper.
28. Return on Capital Employed ('ROCE') is calculated as earnings before interest and tax ('EBIT') as a percentage of the capital employed by the party to provide crematoria services.
29. As set out in paragraphs 32 to 50 of the profitability approach paper, we are guided by the following key principles in carrying out our analysis:
- (a) Return on capital compared with the weighted average cost of capital ('WACC') is our primary means of measuring profitability.⁵

⁵ We use ROCE, where data permits, as this can be computed annually and thus provides greater insights into trends over time and the drivers of profits above the 'normal' level.

- (b) We determine the ROCE using operating profits and net operating capital employed. The general principle is that all revenues, costs, assets and
 - (c) liabilities necessarily arising from the operation of the business to supply the in-scope activities (ie the provision of crematoria services) should be included. We exclude financing costs, and taxation on income and any associated corporation tax or deferred tax.
 - (d) We start with accounting profits and the balance sheets for the operating units of the firms that undertook the relevant activities, and then make adjustments to arrive at a more economically meaningful measure of profitability.
 - (e) We also require common cost and asset allocations where a firm undertakes other business activities in addition to those which we are reviewing in the market investigation.
30. The main adjustments to accounting data set out in this paper relate to adjustments required to the value of capital employed in the business.
31. As noted in the profitability approach paper, the value of assets in the capital employed input should reflect their current value to the business ('VTB'). Modern equivalent asset value ('MEAV') is the most common outcome of a VTB assessment. This is the depreciated replacement cost of the asset in its current condition today.
32. This method is used to generate a capital employed figure which is reflective of what a new entrant would need to enter and operate within a competitive market.
33. We have assessed the financial information provided by crematoria operators and considered their comments on the adjustments they consider necessary to update their financial information to reflect replacement cost.

Identification and valuation of capital employed

34. This section of the paper sets out our approach to: (1) identification of the operating capital employed required to provide crematoria services and (2) valuation of those assets.
35. The main categories of assets recorded on the balance sheets of the four largest crematoria operators are:
- (a) Tangible fixed assets, such as land, buildings and cremator equipment;
 - (b) Intangible fixed assets, such as goodwill;

(c) Working capital, which comprises operating current assets such as inventory, trade debtors, other debtors and VAT, and operating current liabilities such as trade creditors and other creditors; and

(d) Other current assets such as cash.

36. In this section, we consider each of these categories of assets in turn and set out the approach that we have taken in the recognition and valuation of these assets in our analysis.

Tangible fixed assets

37. The tangible fixed assets related to the provision of crematoria services are typically, land, buildings and cremator equipment.

38. In most cases, these assets tend to be valued on the balance sheet at historic cost less any depreciation charged against the asset over its useful life, apart from land which is not depreciated. In some cases, assets will have been 'fair valued' on acquisition (see paragraph 41 below). We asked the parties questions to inform our understanding of the cost of replacing these assets. In particular, we asked whether:

(a) net book value ('NBV') was a good approximation for the cost of replacing the assets in their current condition. For example, could you:

(i) purchase your land and construct the cremation buildings at a cost in line with the net book values etc?

(ii) purchase your cremation equipment at their net book values?

39. All parties noted that NBVs were not a good proxy for replacement cost, as explained in more detail below.

40. Memoria said 'There are two major reasons why accounting values do not form a good proxy for replacement cost in Memoria's case: Depreciation [...] [and] increases in site sizes and relevant costs [...]'.

41. Westerleigh also told us that 'The net book value of tangible fixed assets are based on depreciated cost (ie when the asset/land was acquired), including where relevant fair value adjustments on business combinations.' Moreover, 'the depreciation of tangible fixed assets in line with accounting standards is not designed to derive the replacement costs of an asset at the balance sheet date'.

42. Dignity told us that it does not consider the NBV of crematoria in the Fixed Asset Register ('FAR') to be a reliable estimate of the replacement costs for its portfolio of crematoria.
43. Finally, LCC told us that 'The NBV is not a good approximation for the cost of replacing the main assets required to provide crematoria services'.
44. Parties also noted that it is a feature of the crematoria sector that there is not typically a second-hand or resale value for crematoria assets.
45. Specifically, Memoria told us 'there is no meaningful second-hand value to/market for these assets. This is clearly true for e.g. buildings and roads/parking, [...] but in practice is also true for the other key assets (for example, [✂]). Therefore, the cost of replacing these assets (even if they have been in place for some years) would be the full cost of a new rebuild, and not a depreciated cost.'
46. Similarly, Westerleigh stated 'If replaced, plant and equipment would be replaced with new equipment. Therefore depreciated cost would significantly understate the cost of a new replacement.'
47. Dignity told us that 'Dignity does not believe there is an effective, liquid market in second-hand cremator equipment, particularly as the equipment is typically tailored to fit the site into which it is placed.'

Land

48. In our profitability approach paper, we suggested that land might be valued by indexing the purchase price from the point of acquisition, using an appropriate land value index. The exception to this approach would be where a crematorium had been constructed on land that would not have been granted planning permission for a new crematorium during the relevant period. We suggested doing this by identifying nearby land that would have been likely to receive planning permission and valuing the area of land on which the crematorium is located, in line with the market value of this suitable land nearby.⁶
49. Having considered parties' submissions in response to the profitability approach paper, and the financial information submitted by parties in response to our information requests, we consulted on our [Approach to Valuation of Crematoria Land](#) ('land valuation consultation').

⁶ [Approach to profitability and financial analysis](#), para 120.

50. In the land valuation consultation, we explained our view that, in the context of the crematorium sector, the best estimate of the MEAV of a plot of land currently in use as a crematorium is the current market price of the lowest cost, suitable site that an operator could purchase to serve the relevant local market. In particular, such a site should:
- (a) be appropriately located to serve the population served by the existing crematorium;
 - (b) meet the relevant criteria for a suitable plot for a crematorium in terms of size, aspect, road access etc;⁷ and
 - (c) have, or have a reasonable prospect of obtaining, planning permission for use as a crematorium.
51. We highlighted that these criteria meant that the MEAV would not necessarily be a valuation for the same site as is currently employed by a firm. For example, the MEAV may be either smaller or larger than the existing site or in a different location.
52. In addition, we noted that the MEAV should reflect a situation of ‘normal’ market conditions, ie where both the buyer and seller of land have a number of potential options such that neither party is a necessary counterparty for the other.
- *Parties’ views*
53. Westerleigh questioned the definition of replacement cost, noting that ‘once operating, the land value of a crematorium would increase significantly, reflecting the value created during development as planning risk, development risk have been resolved and operational risk has significantly declined.’
54. Westerleigh told us that ‘Land values should not be adjusted using a generic national land value index’, adding ‘Westerleigh believes that land values specific to crematorium use have increased significantly and a generic land index may not be reflective of this’.
55. Further, Westerleigh told us that it was important for us to understand that, generally, ‘the land required for a crematorium site with a cemetery would not be materially different if Westerleigh did not plan to include a cemetery.’

⁷ [The Siting and Planning of Crematoria](#)

Westerleigh typically seeks sites in excess of 10 acres. The land provides a peaceful setting for the bereaved as well as for memorial gardens’.

56. Memoria noted a number of issues, saying ‘it is unlikely that the CMA will find public data on land values that reflect the actual value of land used for crematoria particularly well’ and that crematoria ‘may need to pay a substantial premium over agricultural land values in order to secure suitable packages of land. Not only is the level of land value different, but these values may also develop differently over time.’
57. Memoria told us that ‘Prices for small parcels of agricultural land close to towns and cities [...] have increased significantly in recent years, particularly in areas where there are alternative uses [...]. Therefore, replacing Memoria’s existing sites would in several cases have a significantly higher cost today than is recorded even in the undepreciated book value of the land.’
58. LCC told us ‘Land often appreciates in value over time. However, it is difficult to put a value on the land owned as any purchaser would be limited in its use. Any purchaser would effectively be buying a site as a going concern business, rather than the land on its own.’
59. Dignity told us that it had commissioned an independent report from Cushman & Wakefield, to undertake a bottom-up direct replacement cost analysis of the land and buildings in its crematoria portfolio. Dignity further recommended that the CMA conduct similar detailed analysis for other crematoria.
60. In response to the land valuation consultation, Dignity noted that it ‘it is not possible to demarcate parts of Dignity’s grounds / infrastructure as being “burial grounds only”’.
61. Another view expressed was that ‘MEAV analysis should assess alternative sites against currently and potentially smaller plot sizes, enabling a more dynamic structure of the market to exist over time’.

- *Our approach to valuing land*

62. In our land valuation consultation, we proposed commissioning an independent, expert report on the MEAV of land employed by the crematoria for which we did not have recent information on acquisition costs. For sites acquired since 2010, we proposed to use the actual purchase costs in our analysis. In November-December 2019 and January-February 2020, we undertook two separate procurement processes, seeking to appoint an expert surveyor to carry out this work as part of our investigation. However, we did

not receive any bids from experts in response to either of our invitations to tender.⁸

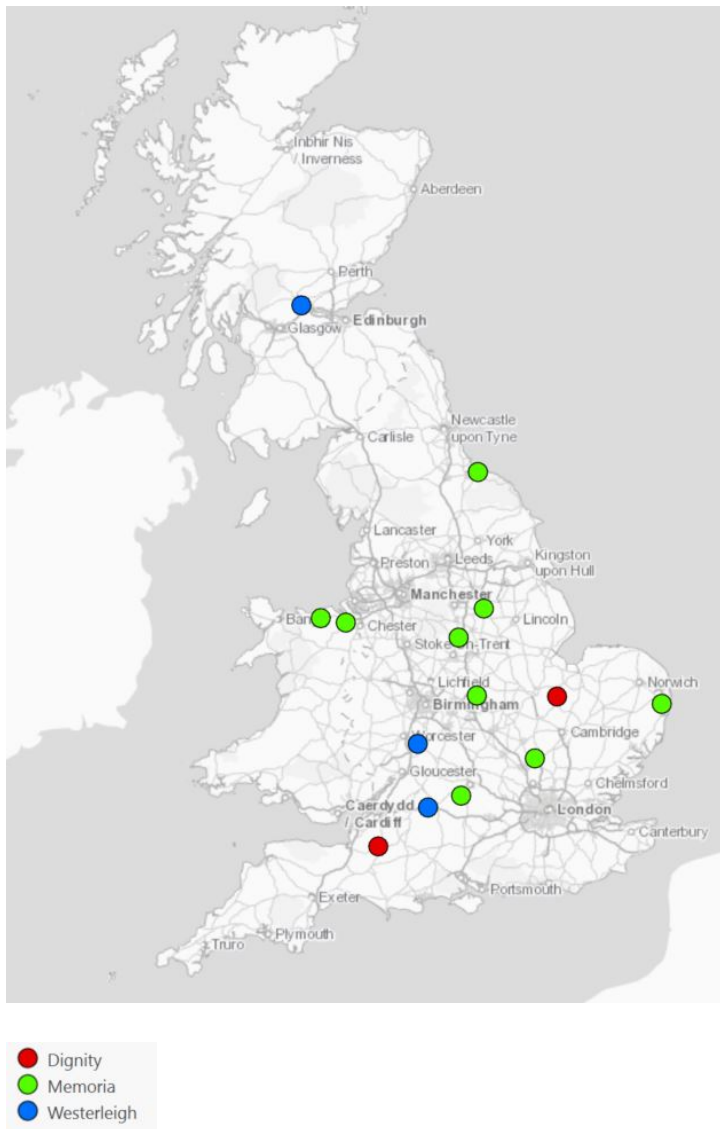
63. In our view, the ideal approach to valuation of land for older sites would have been to conduct an external valuation exercise of land values for all crematoria within our sample. However, it has not proven possible within the constraints of this investigation to conduct such an exercise.
64. Therefore, in this working paper we have considered the range of information collected to date on land valuations to identify the most reliable estimates of replacement cost. In particular, we have considered:
 - (a) the carrying values of land in parties' financial records;
 - (b) the Cushman & Wakefield report submitted by Dignity; and
 - (c) information on recent purchase costs collected from Memoria, Dignity and Westerleigh.
65. We observed that the carrying value of land in the parties' financial records was unlikely to provide a good proxy for the MEAV of this asset in many cases and, furthermore, was not recorded on a consistent basis across the parties. For example, [REDACTED], while Westerleigh's assets were revalued in 2016 at the time of its acquisition by Ontario Teachers' Pension Plan and Universities Superannuation Scheme. In other cases, land was recorded at cost at the date of acquisition which was many years ago.
66. Next, we reviewed the Cushman & Wakefield report submitted by Dignity. This report gave the (depreciated) replacement cost of Dignity's crematoria land and buildings. However, we were concerned that the approach adopted was likely to result in an over-valuation of the land on an MEAV basis. For example, Cushman & Wakefield valued a number of the sites ([REDACTED] out of [REDACTED]) on the basis of residential or long-term residential alternative use. In contrast, Memoria told us that 'the vast majority of all UK crematoria applications in the last 20 years have been proposed on land designated for open-countryside.' As residential land is generally the most valuable land use in the UK and agricultural land is one of the lowest value land uses, this approach is likely to over-value the land.

⁸ In response to the first failed procurement round, we sought feedback from potential suppliers regarding their reasons for not bidding. A number of parties indicated that the timing of the procurement process (in December) and the two-week timeframe for submitting bids had prevented them from participating. Hence, we re-ran the process in January/February 2020 and extended the time period for submitting bids (from two to three weeks). However, this second process also failed to generate any bids.

67. We compared the average price per acre of land estimated by Cushman & Wakefield for Dignity with the average price per acre paid by firms opening new crematoria in the last ten years. Cushman & Wakefield's report implies a valuation of [£500-700k] per acre for Dignity's existing sites. In comparison, recent entrants have paid an average of around £90,000 per acre. This difference appears to have been driven in part by the valuation of a few very large sites at residential valuations with no adjustment for their size.⁹ In practice, at the land valuation provided by Cushman & Wakefield, such sites would not be economic for use as a crematorium. If these sites are excluded, the average price per acre declines to [less than £200k]. We note that this estimate is still significantly more than crematoria operators have paid in recent years.
68. Finally, we considered the information we collected on purchase costs incurred since 2010. As Figure 2 below shows, this data includes sites with broad geographic coverage in Great Britain, although none of the sites are located in Greater London. We consider that this information is likely to provide a good proxy for the MEAV of land, given that it reflects the actual costs incurred by crematoria operators for sites of a suitable size, location and aspect and which have been able to obtain planning permission for use as crematoria.

⁹ These sites are Dignity's crematoria in [redacted].

Figure 2: Map of coverage of purchase costs of land since 2010 and key



69. Figure 2 shows the coverage of recent land purchase costs for fourteen of the sixteen data points used. The two sites which have not been plotted were purchased after 2010 with planning permission. They have not yet opened and so have been omitted from Figure 2.
70. Therefore, as explained in more detail below, we have drawn on recent purchase prices and, to a lesser extent, the Cushman & Wakefield report. In carrying out this analysis, we have identified a base case and two sensitivities, as described below.

- *Base case*

71. In the base case, we have used the average price per acre (£89.5k¹⁰) of crematoria land observed in recent transactions and applied this to all of the sites acquired prior to 2010 for which we are undertaking profitability analysis. The sites acquired since 2010 have been valued at their historic purchase cost.
72. In estimating the MEAV of sites, we have capped the size of sites at 10 acres on the basis that the evidence we have seen suggests that this is the typical size of site needed to operate a crematorium. **Error! Bookmark not defined.** Memoria told us that ‘small (~5 acre) sites are no longer sufficient to meet client expectations in relation to parking, gardens, interment sites, etc. Memoria now seeks sites [X]. This view is consistent with the evidence from recent transactions, in which the average site size was just under 9 acres.
73. Finally, we gathered information on the costs incurred by Dignity, Westerleigh and Memoria in obtaining planning permission for sites in the past ten years. We calculated the average cost of obtaining planning permission for a crematorium, and then adjusted this for the probability of failing to obtain permission. This gave a planning cost of £428,000 per site. We added this cost to the calculated value of land for all crematoria built prior to 2010. For those built in recent years, we have used the actual planning costs incurred as provided by the parties.

- *Sensitivity one*

74. This sensitivity takes into account the fact that our set of recent transactions does not include any sites located in Greater London, where land costs may be expected to be particularly high for all suitable sites within a reasonable drive time of a crematorium’s customer base (30 minutes at cortege speed).
75. As in the base case, in this sensitivity, we have applied the average price per acre of £89.5k to all sites outside of the M25. However, for sites inside the M25, we have drawn on the land valuations as set out in the Cushman & Wakefield report. There are three such sites owned by Dignity ([X], [X], and [X]) with an average price per acre of [£1.75 – £2 million]. We have applied this estimate to all sites within the M25.

¹⁰ CMA Analysis. This figure has been adjusted to remove planning costs for those sites which were acquired with planning already in place. We have made separate allowance for planning costs in our analysis.

76. As in the base case, all sites were capped at 10 acres and planning permission costs of £428,000 per site have been included.
- *Sensitivity two*
77. In this case, we drew exclusively on the valuations in the Cushman & Wakefield report, calculating an average price per acre for all sites outside the M25 of just [£100 – 300k] per acre and of £[1.75 – 2 million] for sites within the M25. We applied these values per acre to all sites for which we are conducting profitability analysis as appropriate depending on their location.
78. As in the other sensitivities, we capped all sites at 10 acres and included planning permission costs of £428,000 per site.
79. We consider that this sensitivity represents a generous upper bound to land values, and therefore a conservative lower bound to the crematoria operators' profitability.

Buildings

80. Consistent with the profitability approach paper, our proposed approach was to ask parties for evidence on what a good approximation for MEAV would be, where book value was not. All large crematoria operators confirmed book value is not a good approximation for NBV, so we used replacement cost estimates prepared for the purposes of insurance as a proxy for MEAV.
81. For each crematorium owned by each party, we revalued the building based on the replacement cost estimate included in the parties' insurance policy and applied depreciation.
82. At this stage, we have applied straight line depreciation to the building from the point at which the crematorium was first constructed using a useful economic life of 100 years. Where the building was over 100 years old, we recorded a value of £nil. In our set of 118 crematoria, there are 8 fully depreciated buildings. We may revisit this approach as we develop our analysis further and we may, for example, consider applying annuity depreciation as set out in our profitability approach paper.

Other fixed assets

83. For all other categories of fixed assets employed by crematoria, we considered that the net book value was likely to be a good proxy for the depreciated replacement cost. These assets have relatively shorter asset lives than land and buildings such that historic cost will be closer to current

replacement cost. In addition, parties are responsible for choosing a depreciation schedule that approximates the useful economic lives ('UEs') of these assets, such that the decline in NBV should broadly match the timeframe over which the asset wears out and needs replacing.

84. Therefore, we have not sought to revalue any other categories of tangible assets.

Intangible fixed assets

85. In this section we consider intangible fixed assets.

- *Parties' views*

86. Memoria told us that there are a range of intangible assets that differentiate crematoria from one another but are not recorded on Memoria's balance sheet. While these asset values are difficult to quantify, this does not mean that the CMA should ignore them because these are real assets which underpin the charges that crematoria are able to levy.

87. Memoria emphasised the value of its brand name to the business. They told us that 'Another key asset is Memoria's brand and local reputation – both of which are critical to Memoria being able to offer (and charge for) a high-quality service' and went on to say 'If the CMA proposes to make any kind of comparison between profits and the capital base on which profits are earned, then the value of Goodwill associated with Memoria's brand and reputation must also be taken into account'.

88. Westerleigh told us that it strongly believes that 'a significant part of what it offers the sector is its high level of quality and service' and that 'reputation adds significant value to Westerleigh as a business'.

- *Our approach to recognition and valuation of intangible assets*

89. Our Guidelines set the criteria for consideration when determining whether to recognise an intangible asset for the purposes of profitability analysis or not. The Guidelines state that we may consider the inclusion of intangible assets where the following criteria are met:

- (a) It must comprise a cost that has been incurred primarily to obtain earnings in the future.
- (b) This cost must be additional to costs necessarily incurred at the time in running the business.

(c) It must be identifiable in creating an asset separate from any assets arising from the general running of the business.¹¹

90. The main category of intangible assets recorded on the balance sheets of the large crematoria is goodwill. However, we also consider whether it would be appropriate to recognise the other types of intangible assets that the parties have put to us above.

- *Goodwill*

91. Goodwill arises where a price is paid for a business which exceeds the fair value of tangible assets plus separately identifiable intangible assets. When firms acquire other firms and pay a price in excess of the net assets, they are incurring costs which are primarily to obtain earnings in the future. Furthermore, these costs are additional to those needed to run the business.

92. However, such purchased goodwill, by definition, is not an asset that is separable from the running of the business. It is profits generated from running the business - above those needed to cover costs, including asset costs. Goodwill should not therefore be included in the capital employed because it breaches the third recognition criteria, criteria (c) set out in paragraph 89.

93. Further, including goodwill is 'circular' when trying to assess whether profits have been above the level needed to cover costs, including asset costs. Ultimately, if all future profits were capitalised, it would be not be possible to identify supranormal profits under a ROCE versus WACC framework.¹²

- *Other types of intangible assets*

94. Memoria and Westerleigh have both suggested that brand and reputation for providing a high-quality service are important intangible assets that should be recognised in their capital employed.

95. We consider that in order to develop a trade name, brand or reputation, firms may incur costs with the aim of generating earnings in the future and such costs may be additional to the costs incurred in the general running the

¹¹ CC3 (Revised) Guidelines for market investigations: Their role, procedures, assessment and remedies paragraph, Annex A, paragraph 14

¹² Because profits would be capitalised into the capital employed based on future cashflows discounted at the WACC. So, capital employed = profits/WACC (the formula for discounting into perpetuity) and therefore ROCE = profit/capital employed = WACC.

business.¹³ On this basis, such expenditure meets two out of three of the CMA's criteria for recognition of intangible assets. However, the information that we have gathered to date does not support the view that crematoria do, in fact, incur material costs in seeking to develop a trade name, brand or reputation, particularly those which are additional to the costs incurred in the general running of the business. For example, we note that many crematoria seek to build relationships with local funeral directors and establish their reputations in the local area by providing high quality services. While such activities can be expected to develop the reputation of the crematorium and thereby generate earnings in the future, they are clearly also part of the general running of the business, seeking to attract customers in the short-term and delivering services to them.

96. Furthermore, with respect to the third criteria, ie that the asset created be separable from those assets arising from the general running of the business, the information that we have gathered to date does not seem to indicate there is a separate, intangible asset. The local brand and/or reputation of a crematorium does not appear to be separable from the rest of the business since it appears to be strongly associated with a particular site and could not easily be separated from that site.
97. Therefore, our current thinking is that we do not consider it appropriate to include a separate brand/reputation asset in the capital employed by crematoria.

Working capital and cash

98. Working capital comprises inventory, trade debtors and other debtors and operating current liabilities such as trade creditors and other creditors. These assets are necessary for the provision of crematoria services and therefore we have included them in our calculation of capital employed.
99. As noted in paragraph 29, financing costs and balances are excluded from the calculation of EBIT and capital employed. We have therefore excluded cash balances from the calculation as this represents a means of funding the capital employed of the business rather than being an operational balance.
100. For the large crematoria, we have used the relevant current assets and liabilities information on their balance sheets. However, some of the local authority crematoria were unable to provide us with a detailed balance sheet

¹³ For example, there are certain costs which give rise to brand values that may not be addition to those incurred from the running of the business. For example, consistently providing a good quality service, via well-trained and well-paid staff may give rise to a higher brand value.

breakdown and therefore we estimated their working capital on the following basis.

101. In the first instance, we sought to use data from those parties in our analysis who had provided full working capital information to estimate average debtor, creditor and inventory days and apply these estimates to the P&L information of the other parties in order to model working capital balances for the latter. However, we observed that the recording of cost of goods sold ('COGS') is inconsistent across the industry, with some parties not recording any COGS, ie all their costs are recorded as overheads, and others having significant COGS balances. This meant that our estimates of creditor and inventory days were also inconsistent and that these figures could not, in any case, be applied to those local authorities that did not record COGS separately. Therefore, we adopted an alternative approach of estimating debtors, creditors and inventories as a proportion of total revenues and applying these percentages to the revenues of the crematoria that had not been able to identify separate working capital balances to model these. Our analysis indicated that trade debtors were on average 7.5% of revenues, inventories 1.5% of revenues and trade creditors were 5.0% of revenues.¹⁴

Adjustments to EBIT

102. In addition to considering capital employed, we considered the need to make adjustments to EBIT.
103. EBIT is the earnings made by the party before interest and tax. Naturally, therefore, interest and tax revenues and costs are excluded. We made some additional adjustments to EBIT to ensure we used a figure which was meaningful for profitability purposes. This section details the adjustments we made.

Income

104. Westerleigh provided us with information on its revenues split between those from cremations, memorials, and burials, but only provided its costs information on an aggregate basis across these activities. Westerleigh told us that it was not possible to split overhead expenses between cremation and burial revenue streams.

¹⁴ These figures represent the averages over the Relevant Period. While there were year-on-year fluctuations in our estimates, we considered that these were likely to represent 'noise' in the data rather than differing working capital requirements over time (as we do not believe there has been any change in the basic business model of crematoria over this period) and therefore chose to use the period average.

105. Therefore, in order to avoid artificially deflating Westerleigh's profits, we added income from burials back to Westerleigh's EBIT to ensure consistency between revenues and costs. We observe that between 2014 and 2018 around [X]% of Westerleigh's income is derived from burials.
106. Similarly, Dignity provided us with information on its revenues split between cremations, memorials and burials and provided its costs information on an aggregate basis across these activities.
107. As with Westerleigh, for the purposes of consistency we included income from burials in Dignity's EBIT. Income from burials accounts for around [X]% of Dignity's income.
108. This approach means that Westerleigh and Dignity's profitability figures will represent a weighted average of its returns from crematoria services and from burials, rather than a 'pure' estimate of the profitability of crematoria services. However, we consider that the relatively small proportion of total revenues accounted for by burials means that any distortion arising as a result of this approach will be relatively minor, ie it does not give us reason to believe that the profitability of crematoria services on a stand-alone basis will be materially different from the figures we present in this paper.

Depreciation of buildings

109. Having revalued buildings using insurance replacement cost, we also took into account the corresponding impact on EBIT: as the value of their parties' buildings increased, the depreciation charge thereon also increased.
110. We calculated the depreciation charge corresponding to the revalued buildings. We then removed the parties' own depreciation charge and replaced this with the recalculated value.

Other

111. Regarding non-underlying cost items Dignity told us that 'it would be appropriate to include a portion of these costs, as even a new entrant will – from time to time in the normal course of business – need to incur restructuring and regulatory costs'.
112. Our approach to the calculation of planning permission costs is detailed at paragraph 73. We have not included any other non-underlying costs.

Large Crematoria Results

113. In this section we present the results of our analysis of the profitability of the four large crematoria operators.
114. The ROCE figures have been calculated using capital employed and EBIT derived as per our explanations above. We also consider average total revenue, cost-plus and economic profits per cremation.
115. Economic profits are the profits left over, after the providers of capital have been paid a market-based return on their investment, which is equal to the capital employed multiplied by the WACC. It is calculated as EBIT less WACC * Capital Employed. For the purposes of our profitability analysis, we have calculated WACC at 8%. Further details concerning our WACC calculation can be found in our WACC working paper.
116. Cost plus is the calculation of all costs plus the cost of capital (ie the capital employed multiplied by WACC). This demonstrates the total cost of the provision of crematoria services, including an allowance for a reasonable return on capital (debt plus equity).
117. Economic profits as a percentage of cost plus ('EP/CP') demonstrates how much above or below the 'normal' or 'expected' price, prices have been.
118. Average revenue per cremation has been calculated as total revenues divided by volume of cremations. We have noted that in some cases total revenue earned by parties included revenue earned from burials and memorials as well as from cremations. For these parties, and to ensure consistency as between the treatment of costs and revenues, total costs associated also included those costs associated with burials. As such, while these limitations on measurement mean that our results are only indicative of cremation-only costs, revenues and economic profits, we consider they provide a useful metric in understanding the scale of the crematoria's revenues and profits.
119. [✂].

Firm A

120. Table 1 shows the results of our analysis for Firm A under the 'base case'.

Table 1: Firm A's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[300-350]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

121. On the basis of our calculations, Firm A has earned returns that are significantly in excess of our estimate of its weighted average cost of capital throughout the relevant period. ROCE averaged [10-20%] over the period, and economic profits averaged £[300-350] per cremation. Economic profits as a percentage of cost plus indicate that Firm A's revenues/prices have been around [X]% above the level at which it would have earned a normal profit.
122. In table 1 we have presented [X].
123. When performing the land revaluation, [X] out of [X] of Firm A's owned sites used the actual price paid for land. The remaining [X] were recalculated using the method at paragraphs 71 to 79. We note that [X] is such that our use of average land purchase costs is likely to produce reasonably accurate total land valuations, and therefore profitability metrics, at the company level.
124. [X]% of Firm A's estate was built in the last 10 years¹⁵ and three of its crematoria were fully depreciated for the entirety of the Historic Period.
125. Firm A's results using sensitivities one and two are detailed below.

Table 2: Firm A's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: sensitivity one

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[200-250]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

¹⁵ [Funerals Market Investigation Crematoria: Outcomes](#), paragraph 67

Table 3: Firm A's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[150-200]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

126. Under sensitivity one, Firm A's average ROCE decreases by [X] percentage points to [10-20%] (compared with a WACC of 8%) and average economic profits declines to £[200-250] per cremation, while under sensitivity two, ROCE decreases by a further 3 percentage points to [10-20%], with average economic profits of £[150-200] per cremation. We note that under both these sensitivities Firm A is still earning returns which are materially above its weighted average cost of capital.

Firm B

Table 4: Firm B's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[150-200]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

127. On the basis of our calculations, Firm B has earned returns that are significantly in excess of our estimate of its weighted average cost of capital throughout the relevant period. ROCE has averaged [10-20%] over the 2014 to 2018 period, giving average economic profits of £[150-200] per cremation. Economic profits as a percentage of cost plus indicate that Firm B's revenues/prices have been around [X]% above the level at which it would have earned a normal profit.

128. [X]. When performing the land revaluation, [X] out of [X] of Firm B's owned sites used the actual price paid for land. The remaining [X] of Firm B's owned sites were recalculated using the method at paragraphs 71 to 79. We note that Firm B's profitability estimates are not affected to a great extent by the CMA's land valuation sensitivities [X].

129. [X].

130. [X]% of Firm B's estate has been built in the last 10 years.¹⁵ [X].

131. Firm B's results using sensitivities one and two are detailed below.

Table 5: Firm B's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: sensitivity one

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[100-150]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

Table 6: Firm B's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[100-150]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

132. Our ROCE estimates for Firm B decrease by 1 percentage point and 2 percentage points to [X]% and [X]% [10-20%] under sensitivities one and two respectively. Average economic profits saw a decrease of 25% and 39% of the base case to £[100-150] per cremation, under sensitivities one and two respectively. We note that under both these sensitivities Firm B is still earning returns which are materially above its weighted average cost of capital.

Firm C

133. [X].

Table 7: Firm C's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[(100-150)]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[0-10%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

134. Over the 2014 to 2017 period, Firm C earned returns below our estimate of its weighted average cost of capital. In 2018, it earned returns [X]. There is a clear upward trend in profitability, with ROCE increasing from [0-10%] in 2014 to [0-10%] in 2018, which appears to be driven by growth in cremation volumes as Firm C's sites [X]. In this context, we observe that Firm C's results are unlikely to reflect the profits that the business might expect to earn once its crematoria [X].
135. When performing the land revaluation, each of Firm C's [X] owned sites used the actual price paid for land. [X].
136. [X].

Firm D

Table 8: Firm D's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[(100-150)]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[0-10%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

137. Firm D has made returns below our estimate of its weighted average cost of capital throughout the 2014 to 2018 period, earning a ROCE of [0-10%].
138. When performing the land revaluation, [X].
139. [X] of Firm D's [X] in the last 10 years and three were fully depreciated for the Historic Period.

Table 9: Firm D's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: sensitivity one

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[(500-550)]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[0-10%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

Table 10: Firm D's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[(550-600)]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[0-10%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]
Volume of cremations/crematorium	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

140. Under both sensitivities one and two, Firm D makes returns significantly below our estimate of its weighted average cost of capital.

Local Authority Crematoria Results

ROCE analysis results

141. As noted in the introduction to this paper we selected a random sample of twenty-two local authority crematoria to carry out financial analysis on. However, in this paper we present the results of fourteen of these local authority crematoria, being:

- (a) Wellingborough Council (Nene Valley);
- (b) Sheffield City Council (City Road Crematorium);
- (c) Bracknell Forest Council (Easthampstead Park Cemetery and Crematorium);
- (d) Dudley Council (Gornal Wood Crematorium);
- (e) Slough City Council (Slough Crematorium);
- (f) Hartlepool Borough Council (Stranton Crematorium);

- (g) Wakefield Council (Pontefract Crematorium);
- (h) Carlisle City Council (Carlisle Crematorium);
- (i) Coventry City Council (Canley Garden Crematorium);
- (j) Luton Borough Council (Value Crematorium);
- (k) Sunderland City Council (Sunderland Crematorium);
- (l) Chesterfield Council (Chesterfield and District Crematorium);
- (m) Yeovil Council (Yeovil Crematorium); and
- (n) Cheshire East Council (Crewe Crematorium).

142. We have presented the results of these fourteen local authority crematoria at paragraphs 145 to 176. The parties have not been identified for confidentiality reasons and have been labelled as LA 1 to LA 14.¹⁶
143. The remaining eight have been excluded at the current time due to potential issues with the data submitted. We are in the process of resolving these issues and will include the results of a larger number of local authority crematoria as we develop our analysis further.
144. The results presented for all local authority crematoria use the base case assumption for land valuation, as described at paragraph 71. We note that the use of average land purchase price per acre may not reflect the actual costs that a crematoria operator might face in a particular geographic location as land values vary materially across the UK. As a result, our approach to land valuation is likely to give more robust operator-level results for the larger crematoria operators which have a large number and geographic spread of sites than for individual local authority crematoria. Therefore, we consider the results of our analysis to be indicative for individual local authority crematoria and we consider averages for this group as whole in assessing these results at paragraph 180.

¹⁶ The order in which results are presented in the paragraphs below is not of the same as in paragraph 141.

LA 1

Table 11: LA 1 revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[200-250]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

145. LA 1 has earned returns that have been persistently and significantly in excess our estimate of its weighted average cost of capital throughout the 2014 to 2018 period, with an average ROCE of [10-20%]. Its economic profits as a ratio of cost plus indicate that its prices have been [X]% above the level at which it would have earned a normal return on its capital invested.

Table 12: LA 1 revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[200-250]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

146. Under sensitivity two, LA 1's ROCE decreased to [10-20%] on average over the period and economic profits as a proportion of cost-plus decreased to [X]% over the period.

LA 2

Table13: LA 2's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[150-200]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

147. LA 2's ROCE and EP/CP percentages demonstrate that it has earned returns that have been persistently and significantly in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [10-20%] and economic profits per cremation of £[150-200]. LA 2's EP/CP indicated that its revenues/prices have been around [X]% above the level at which it would have made normal profits.

Table 14: LA 2's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[150-200]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[10-20%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

148. In sensitivity two, LA 2's ROCE reduced to [10-20%] on average over the period, and its EP/CP to [£]%.

LA 3

Table 15: LA 3's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[250-300]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[30-40%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

149. LA 3's ROCE and EP/CP percentages demonstrate that it has earned returns that have been persistently and significantly in excess of our estimate of the weighted average cost of capital over the 2014 to 2018 period. Its ROCE averaged [30-40%] over the period, while EP/CP averaged [£]%.

Table 16: LA 3's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[200-250]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[20-30%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

150. Under sensitivity two LA 3's ROCE declines to [20-30%] and its EP/CP to [£]%.

LA 4

Table 17: LA 4's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[0-50]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[10-20%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

151. LA 4 earned returns broadly in line with our estimate of its weighted average cost of capital over the relevant period, with a ROCE of [10-20%] and economic profits per cremation of £[0-50].

Table 18: LA 4's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[(50-100)]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[0-10%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

152. In sensitivity two, LA 4's ROCE declines to [0-10%] and its economic profits per cremation to £[(50-100)].

LA 5

Table 19: LA 5's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base Case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[350-400]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[40-50%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

153. LA 5 earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [40-50%] and economic profits per cremation of around £[350-400].

Table 20: LA 5's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[300-350]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[20-30%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

154. Under sensitivity two LA 5's ROCE declines to [20-30%].

LA 6

Table 21: LA 6's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[400-450]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[30-40%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

155. LA 6 earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [30-40%] and economic profits per cremation of around £[400-450].

Table 22: LA 6's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[350-400]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[20-30%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

156. Under sensitivity two, LA 6's ROCE declines to [20-30%] and its EP/CP to [X]% (compared with [X]% in the base case).

LA 7

Table 23: LA 7's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[150-200]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

157. LA 7's buildings are fully depreciated throughout the Historic Period as they were constructed in [X].

158. LA 7 has earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [10-20%] and economic profits per cremation of around £[150-200].

Table 24: LA 7's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[50-100]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[0-10%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

159. In sensitivity two, LA 7's ROCE declines to [0-10%], such that it made economic profits (of around £[50-100] per cremation) over the 2014 to 2018 period.

LA 8

Table 25: LA 8's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[250-300]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[20-30%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

160. LA 8 earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [20-30%] and economic profits per cremation of around £[250-300].

Table 26: LA 8's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[150-200]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[10-20%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

161. Under sensitivity two, LA 8's ROCE declines to [10-20%] and its EP/CP to [£]% (compared with [£]% in the base case).

LA 9

Table 27: LA 9's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cost plus/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic profits/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[400-450]
EP/CP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjusted ROCE (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[40-50%]
Volume of cremations	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis

162. LA 9's buildings were fully depreciated throughout the Historic Period. They were constructed in [REDACTED].
163. LA 9 earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [40-50%] and economic profits per cremation of around £[400-450].

Table 28: LA 9's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cost plus/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic profits/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[300-350]
EP/CP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjusted ROCE (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[20-30%]
Volume of cremations	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis

164. Under sensitivity two, LA 9's ROCE decreases to [20-30%] and its EP/CP to [REDACTED]% (compared with [REDACTED]% in the base case).

LA 10

Table 29: LA 10's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cost plus/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic profits/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[150-200]
EP/CP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjusted ROCE (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[10-20%]
Volume of cremations	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis

165. LA 10 was unable to provide us with information on the volume of cremations undertaken at its site. Therefore, the volume of cremations was obtained from publicly available information from The Cremation Society.¹⁷
166. LA 10 earned returns that were substantially in excess of our estimate of its weighted average cost of capital on average over the 2014 to 2018 period, with a ROCE of [10-20%] and economic profits per cremation of around £[150-200].

Table 30: LA 10's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cost plus/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic profits/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[50-100]
EP/CP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjusted ROCE (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[10-20%]
Volume of cremations	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis

167. Under sensitivity two, LA 10's ROCE declines to [10-20%] and its average economic profits per cremation to around £[50-100].

LA 11

Table 31: LA 11's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cost plus/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic profits/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[450-500]
EP/CP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjusted ROCE (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[50-60%]
Volume of cremations	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis

168. LA 11 earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [50-60%] and economic profits per cremation of around £[450-500].

Table 32: LA 11's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cost plus/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic profits/cremation (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[400-450]
EP/CP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjusted ROCE (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[40-50%]
Volume of cremations	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis

¹⁷ [The Cremation Society](#) is a registered charity which collects data from both private and public crematoria on a voluntary basis.

169. Under sensitivity two, LA 11's ROCE declines to [40-50%] and its economic profits to £[400-450] per cremation.

LA 12

Table 33: LA 12's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[350-400]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[40-50%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

170. LA 12 earned returns that were substantially and persistently in excess of our estimate of its weighted average cost of capital over the 2014 to 2018 period, with a ROCE of [40-50%] and economic profits per cremation of around £[350-400].

Table 34: LA 12's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[300-350]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[20-30%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

171. Under sensitivity two, LA 12's ROCE declines to [20-30%] and economic profits per cremation to £[300-350].

LA 13

Table 35: LA 13's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Cost plus/cremation (£)	[£]	[£]	[£]	[£]	[£]	[£]
Economic profits/cremation (£)	[£]	[£]	[£]	[£]	[£]	[(550- 600)]
EP/CP	[£]	[£]	[£]	[£]	[£]	[£]
Adjusted ROCE (%)	[£]	[£]	[£]	[£]	[£]	[0-10%]
Volume of cremations	[£]	[£]	[£]	[£]	[£]	[£]

Source: CMA analysis

172. LA 13 opened in [£].

173. LA 13's ROCE increased from [£]% to [£]% from 2016 to 2018, with an average of [0-10%] and economic losses throughout the period.

Table 36: LA 13's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[(750- 800)]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[0-10%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

174. Under sensitivity two, LA 13's ROCE decreased to a range of [X]% to [X]% across the Historic Period.

LA 14

Table 37: LA 14's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Base case

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[50-100]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[10-20%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

175. LA 14 has earned returns in excess of our estimate of its weighted average cost of capital throughout the 2014 to 2018 period, with an average ROCE of [10-20%] and economic profits of £[50-100] per cremation.

Table 38: LA 14's revenue, cost plus and economic profits per cremation, ROCE % and volume of cremations over the Historic Period: Sensitivity two

	2014	2015	2016	2017	2018	Average
Revenue/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Cost plus/cremation (£)	[X]	[X]	[X]	[X]	[X]	[X]
Economic profits/cremation (£)	[X]	[X]	[X]	[X]	[X]	[(50-0)]
EP/CP	[X]	[X]	[X]	[X]	[X]	[X]
Adjusted ROCE (%)	[X]	[X]	[X]	[X]	[X]	[0-10%]
Volume of cremations	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis

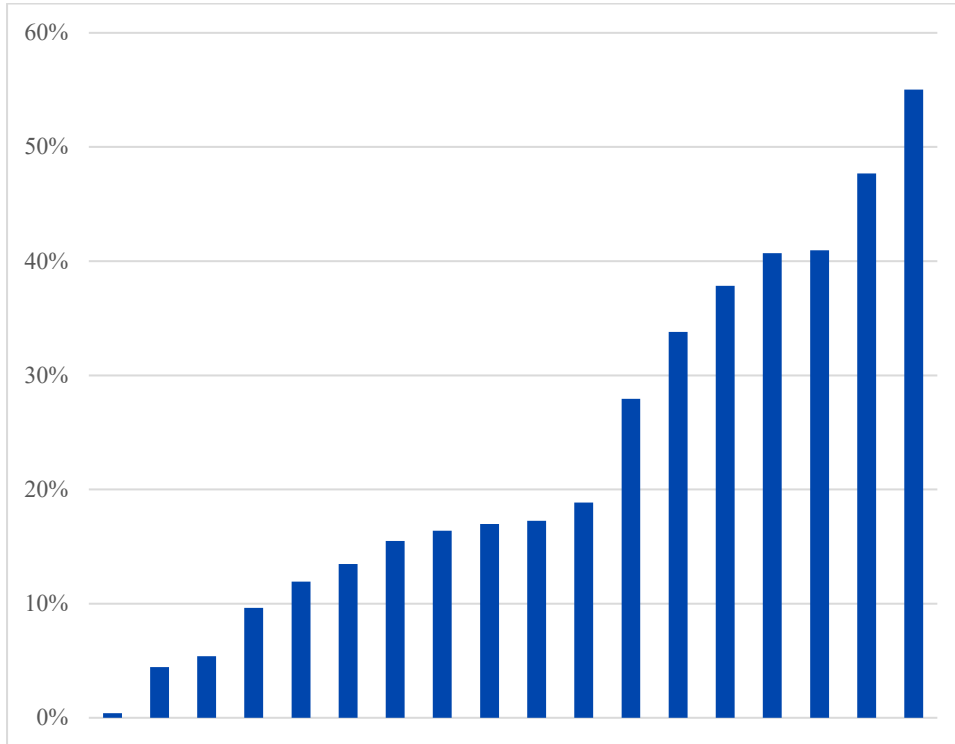
176. In sensitivity two, LA 14's ROCE declines to [0-10%], ie in line with our estimate of its weighted average cost of capital.

Discussion of the preliminary results of our analysis

177. Our preliminary analysis shows that both Firm A and Firm B, as well as the majority of the local authority crematoria analysed are earning returns that are significantly in excess of our estimate of the weighted average cost of capital under our base case and both sensitivities land value assumptions. We note that Firm C's lower returns appear to be the result of it [X] and it may be expected to earn higher returns in the future than it has done in the past.

178. The following two figures show the average ROCE per firm for the four largest and 14 local authority crematoria analysed to date, as well as the (weighted) average returns earned by the 14 local authority crematoria over the 2014 to 2018 period.

Figure 1: Average ROCE per firm across 2014 to 2018 (%)



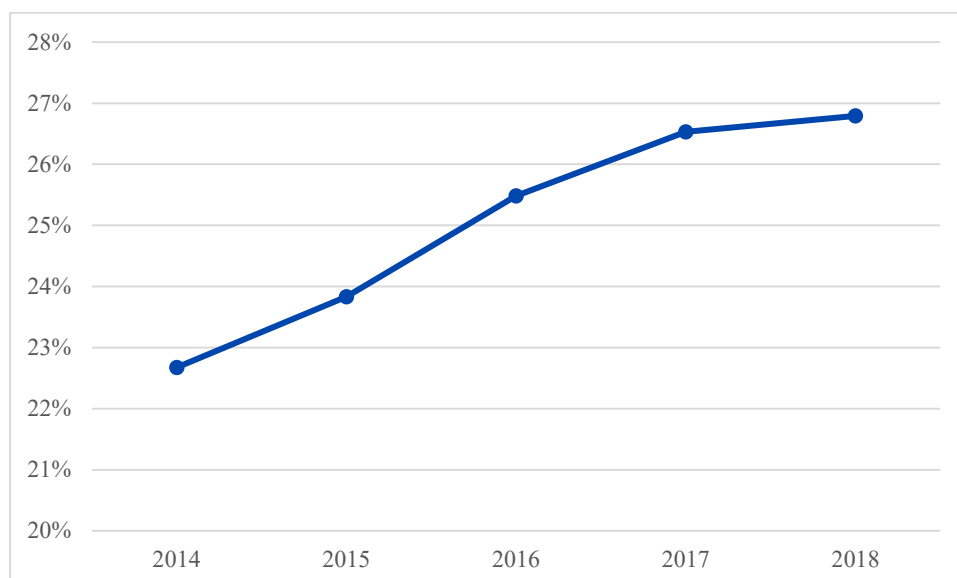
Source: CMA Analysis

Notes:

- a) The chart above is a bar chart.
- b) The parties have not been identified for confidentiality reasons.
- c) The chart is structured with bars representing the lowest average ROCE per party earned on the left, and the highest on the right.
- d) The lowest bar is just above 0%, and the highest is at approximately 55%.

179. Figure 1 shows the average ROCE earned over the 2014 to 2018 period by party. While there is significant variability in the returns earned by the crematoria operators, fifteen of eighteen parties are earning returns above the estimated 8% weighted average cost of capital, while only three are earning returns that are below the weighted average cost of capital.

Figure 2: Average ROCE of the local authority crematoria, 2014 to 2018 (%)



Source: CMA Analysis

Notes:

- a) The chart above is a line chart spanning from 2014 to 2018 inclusive. The line represents the total ROCE of the local authority crematoria.
- b) The results of individual parties have been removed for confidentiality purposes.
- c) The chart demonstrates that the total ROCE of the local authority crematoria has been increasing year-on-year.
- d) The line shows that total ROCE starts at between 22% and 23% in 2014, increasing to almost 27% in 2018.

180. Figure 2 shows the (weighted) average ROCE earned by local authority crematoria over 2014 to 2018.¹⁸ It demonstrates that these crematoria, as a group, are earning returns significantly in excess of their WACC.

181. Figure 2 shows that local authority crematoria are making higher returns on average than the large crematoria and that their profitability has increased by around 5 percentage points, on average, over the relevant period. We observe that these higher average returns appear to be due to a combination of higher average volumes per crematorium and owning older assets, which are therefore more depreciated. We will consider the differences in profitability between the private and local authority crematoria in more detail as we develop our analysis further.

CIPFA Dataset

182. Next, we considered the other available evidence on the profitability of crematoria in the UK.

183. Local authorities make up 90% of the smaller providers in the crematoria services sector. Separate financial statements for the operation of local

¹⁸ Calculated as the total EBIT earned by local authority crematoria divided by the total capital employed of local authority crematoria, for each year in the period.

authority run crematoria are not publicly available. However, the Chartered Institute of Public Finance and Accountancy (CIPFA) undertakes annual surveys of local authority operations; this includes requesting financial information on crematoria operated by local authorities. We have referred to this as the 'CIPFA dataset'.

184. We have analysed two years of this data (2014/15 and 2015/16) as described in paragraphs 133-138 of the profitability approach paper for the purpose of comparing it to the results of our profitability analysis.

185. For the 2014/15 CIPFA dataset the response rate was: 79 of 194 crematoria surveyed. For the 2015/16 CIPFA dataset the response rate was 69 of 194 crematoria surveyed.

Net Margins

186. We used the data provided to CIPFA for net expenditure including capital charges¹⁹ and total income to calculate the net margin for each local authority crematorium.

187. Table 39 below shows the range of net margin values within the responses for each year. The local authority net margins range widely, particularly in 2014/15. In both years, much of this range is within the first quarter, influenced by two to three low outliers. The gap between the average and median values also reflects the skewing effect of these very low outliers.

Table 39: Local Authority Net Margins Range, CIPFA data

	2014/15	2015/16
Minimum Value	-281.1%	-49.2%
1st Quarter	32.4%	30.1%
Median	46.8%	47.6%
3rd Quarter	57.1%	59.2%
Maximum Value	71.9%	75.8%
Average Value	37.7%	40.8%

Source: CMA analysis

188. Table 40 below shows the net margin of large crematoria in 2014/15 and 2015/16.

¹⁹ Our review of the margins for the overlapping local authorities in the CMA and CIPFA datasets indicated that generally the capital charges declared to CIPFA were very similar to the depreciation and amortisation charges provided to CMA.

Table 40 Large crematoria net margins range

	2014/15	2015/16
Dignity	[X]%	[X]%
Westerleigh	[X]%	[X]%
LCC	[X]%	[X]%
Memoria	[X]%	[X]%

Source: CMA analysis

189. Over one quarter of the local authority crematoria generated higher margins than any of the four largest private providers in both years.
190. Figures 3 and 4, below, show the range of the local authority net margins plotted alongside the EBIT margins of the four largest providers in each year. This analysis indicates that, while there is significant variability in profit margins across the local authority crematoria included in the CIPFA dataset, the majority of local authority crematoria are earning margins in excess of those earned by [X] and [X] and broadly in line with those earned by [X] and [X].

Figure 3: Local Authority Net Margin Range Compared to the EBIT Margins of the Four Largest Providers for 2014/15

[X]

Source: CMA Analysis

Figure 4: Local Authority Net Margin Range Compared to the EBIT Margins of the Four Largest Providers for 2015/16

[X]

Source: CMA Analysis

191. In general, for the CIPFA dataset, the net margins increase slightly for those local authorities handling greater volumes of cremations and the costs per funeral reduce.
192. We propose to develop this margins analysis further. However, this preliminary analysis suggests that local authorities (more broadly than our sample) are earning similar profit margins to Firm A and Firm B and may, therefore, be expected to be earning returns in excess of our estimate of WACC for crematoria operators.