



## Assessing the Profitability of KPMG's Audit Function

### 1 Executive Summary

- 1.1 This paper sets out our response to the Competition Commission's (CC's) working papers "Profitability part one" and "Profitability part two" (the Working Papers).
- 1.2 We have reviewed the CC's analysis and conclusions in the Working Papers and present our comments on those below. In addition, we have undertaken our own analysis of the economic profitability of the audit function (the Audit Function) of KPMG LLP (KPMG UK).
- 1.3 We agree with the CC's view that calculating the economic profitability of the accounting firms' statutory audit businesses is difficult, in particular because of the need to quantify appropriate values for intangible assets, partner pay, common cost allocations and cost of capital<sup>1</sup>. As set out in our response to the Market and Financial Questionnaire (MFQ), the Audit Function is the business division in which our statutory audit business sits. The management of the Audit Function does not focus solely on statutory audit nor is the statutory audit business managed separately<sup>2</sup>. Also, statutory audit services to FTSE 350 companies contribute only a small percentage of the total audit services we provide to all our audit clients<sup>3</sup>. However our analysis of engagement profitability indicates that the margins for our FTSE 350 audit clients are broadly similar to those of our other audit clients and so it is reasonable to use an analysis of the profitability of the Audit Function as a whole as an indicator of the profitability of audit work for FTSE 350 clients.
- 1.4 We believe therefore that notwithstanding these difficulties it is possible to demonstrate that the economic profitability of KPMG's Audit Function is consistent with a competitive market over a five year period.

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<sup>1</sup> Paragraphs 19 and 69 of the CC's working paper "Profitability analysis - Part 1".

<sup>2</sup> Please see our response to question 1 (paragraph 1.23) of our response to the MFQ.

<sup>3</sup> This is evident from the information we submitted in response to the 'Other Business Information (OBI)' sheet in response to the ADR, where the audit fees for FTSE 350 client represent only 20 per cent of the total audit fees.

- 1.5 We have followed the CC's guidelines for conducting profitability analysis<sup>4</sup> and have reviewed relevant precedent from previous CC market investigations. Consistent with the CC's guidelines, we have adapted our approach to appropriately address specific features of professional services partnerships and the audit market<sup>5</sup>.
- 1.6 We have calculated profitability using a return on capital employed (ROCE) measure as this is, in our view, generally most appropriate for assessing the economic profitability of businesses or business units. We note that the CC's recently-published draft market investigation guidelines<sup>6</sup> state that the CC will generally start a profitability analysis by adapting accounting profit to arrive at "*an economically meaningful measure of profitability, usually in terms of rates of return on capital.*"<sup>7</sup> However, as the CC acknowledges, there are several important factors in the analysis which require judgment in this case. We agree with the CC's view that the main factors requiring judgement in relation to the profitability of an audit partnership business are:
- cost of partner labour;
  - inclusion of intangible assets;
  - allocation of common costs; and
  - cost of capital.
- 1.7 We address each of these below.

### ***Cost of partner labour***

- 1.8 KPMG's partners own the business. They also work in it. Partners are therefore rewarded for both their *investment in* the firm, and their *work for* the firm. However, the opportunity cost of partner labour is not separately captured or recorded in the firm's accounts. An assessment of the economic profitability of the partnership needs

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<sup>4</sup> [http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep\\_pub/rules\\_and\\_guide/pdf/cc3.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/rules_and_guide/pdf/cc3.pdf) and [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/consultations/market\\_guidelines\\_annexes.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/consultations/market_guidelines_annexes.pdf)

<sup>5</sup> Paragraphs 8 to 15 of Annex A to Market Guidelines.

<sup>6</sup> [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/consultations/market\\_guidelines\\_annexes.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/consultations/market_guidelines_annexes.pdf): "Annex A to Market Guidelines".

<sup>7</sup> Annex A to Market Guidelines, paragraph 8.

to take account of the opportunity cost of partner labour. Otherwise it will overstate the profit.

- 1.9 Estimating the cost of partner labour is not straightforward and there is no precedent from previous CC market investigations. We have estimated what we believe to be a conservative cost for partner labour tested using relevant benchmark employment costs. We also note the CC's suggestions for estimating the cost of partner labour, presented in the Working Papers<sup>8</sup> and PwC's submission "Observations on the Assessment of Profitability" which includes a partner pay benchmarking exercise ("PwC's benchmarking exercise")<sup>9</sup>. We have conducted a 'sense check' of our own analysis against these approaches.

#### *Inclusion of intangible assets*

- 1.10 Like any professional services firm, KPMG UK has built up a significant base of intangible assets, which needs to be included in a ROCE measure of economic profitability. The CC has noted the difficulties in doing this, because of problems in obtaining the relevant data and in isolating the relevant costs<sup>10</sup>. It considers this area to be the primary barrier to calculating the economic profitability of audit functions<sup>11</sup>.
- 1.11 We agree that valuing KPMG UK's intangible assets is not straightforward and requires a number of assumptions to be made regarding cost categories to be capitalised and asset lives.

#### *Allocation of common costs*

- 1.12 A substantial proportion of KPMG UK's cost is incurred and recorded at the firm level. An assessment of economic profitability of the Audit Function needs to take into account how the firm recovers these common costs. Excluding an allocation of common costs would understate costs of the Audit Function and therefore overstate profits. The approach we have taken is to allocate a proportion of common costs to the Audit Function, using appropriate cost drivers (primarily headcount), albeit that this is likely

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<sup>8</sup> Paragraphs 29 to 45 of the CC's working paper "Profitability analysis - Part 1".

<sup>9</sup> [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/pwc\\_observations\\_on\\_the\\_assessment\\_of\\_profitability.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/pwc_observations_on_the_assessment_of_profitability.pdf)

<sup>10</sup> Paragraphs 53 to 58 of the CC's working paper "Profitability analysis - Part 1".

<sup>11</sup> Audit Functions are the effective business unit the profitability of which the CC is examining.

to underestimate the allocation to the Audit Function for the reasons we explain below. In this context we note that KPMG UK, in its management accounts, does not allocate common costs across different parts of the business in assessing performance or profitability.

### ***Cost of capital***

- 1.13 Analysis of economic profitability using ROCE typically requires the ROCE to be compared to the firm's cost of capital – normally calculated as a weighted average cost of capital (WACC) which considers the cost of the firm's debt and equity funding. WACC is difficult to estimate for professional services partnerships. The CC has noted these difficulties, and suggested that both PwC and Oxera have made reasonable submissions on the use of the Capital Asset Pricing Model (CAPM) to calculate the cost of firms' equity and premia for liquidity and non-diversification. We also note that since partnerships do not pay Corporation Tax, all return on capital calculations need to be benchmarked using a pre-tax cost of capital.
- 1.14 We have sought the input of Professor Alan Gregory in relation to estimating KPMG's WACC and, using a modified CAPM approach, he has estimated a range for KPMG's pre-tax nominal cost of capital, with a central case of 17.5 per cent and a low case of 12.2 per cent. Professor Gregory's advice on cost of capital is submitted separately.

### ***Our results***

- 1.15 We have constructed a model which calculates annual ROCE from 2007 to 2011 for KPMG's Audit Function and also the firm as a whole (including the Audit Function). We have used this model to calculate ROCE under a set of conservative, base case assumptions. The average ROCE over the period was 12.7 per cent. This compares to a central WACC estimate of 17.5 per cent and a low case of 12.2 per cent.
- 1.16 In our view, our estimates of ROCE and WACC demonstrate that KPMG's Audit Function earns a return that is consistent with the level it could be expected to earn in a competitive market and there is no evidence at all to suggest that returns are in any way 'excessive'.

1.17 The principal base case assumptions in our calculation of the Audit Function's ROCE are<sup>12</sup>:

- average annual audit partner 'employment cost' of [£], based on a 100 per cent mark-up on top KPMG audit director salaries. Using a higher average partner employment cost, for example of [£] (as considered in the CC's profitability discussion)<sup>13</sup>, would lead to a lower ROCE for the Audit Function, of 11.2 per cent. Partner employment cost estimates based on external benchmarks such as the FTSE 350 Finance Directors (FDs) would be considerably higher. We therefore believe our base case estimate of partner employment cost to be conservative.
- average annual capitalised intangible expenditure of [£]. We believe that there would be a good case to support a higher level of intangible asset expenditure – for example if we applied a standard company valuation approach and conducted our analysis based on the future value of the Audit Function's / KPMG UK's business relationships, rather than the value of time and other costs associated with business development and marketing activities, as we use in our base case. We therefore consider this assumption to be conservative.
- intangible asset lives of three to five years. We believe that these are conservative assumptions. For example, our relationships with audit clients last for at least 10 years on average.
- an allocation of, on average, 34 per cent of common costs to the Audit Function. The allocation was based mainly on headcount, which we judge to be a conservative approach. Using revenues, or direct costs, as a driver would not generate a materially different estimate of ROCE.

1.18 The economic profitability of the Audit Function is also broadly in line with the economic profitability of KPMG UK as a whole, which our model estimates as being 13.2 per cent. The base case scenario for KPMG UK as a whole assumes:

- average annual partner 'employment cost' of [£];

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<sup>12</sup> These assumptions are explained in more detail in the remainder of the paper.

<sup>13</sup> This would correspond with the CC's estimate of possible partner employment costs based on PwC's salary benchmarking exercise. CC Profitability Part 1 paragraph 43.

- average annual capitalised intangible expenditure of [REDACTED]; and
- intangible asset lives of three to five years.

1.19 As with our assumptions for the Audit Function, we believe that these assumptions are conservative.

1.20 There are a number of other factors that need to be considered in our calculations. In summary, these are that:

- as we noted in our hearing with the CC on 3 October 2012 (the “Hearing”), audit is our most inherently risky business<sup>14</sup>, with the constant risk of a low probability, high negative impact event. The Audit Function’s profits are likely to be an overstated estimate of long run sustainable profits to the extent that such events have not arisen in the period under review;
- although we have presented pre-tax numbers, the benchmark cost of capital has been uplifted only for the rate of Corporation Tax; and
- the cost of delays between partner earnings and partner drawings are not taken into account in the ROCE analysis.

1.21 These are discussed in detail in Section 4.

1.22 We present the detailed analysis in section 3 below. The rest of our response is structured as follows:

- overview of our approach;
- our ROCE analysis;
- conclusions of our analysis; and
- our comments on the Working Papers.

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<sup>14</sup> Lines 9 – 11, page 11, KPMG Hearing Transcript (version received from the CC 9 October 2012).

## 2 Overview of our approach

2.1.1 We have conducted analysis of profitability for KPMG's Audit Function and for KPMG UK as a whole. Our analysis has been guided by:

- the Working Papers;
- the CC's recently-published draft market investigation guidelines<sup>15</sup>;
- the CC's June 2003 market investigation guidelines<sup>16</sup>; and
- our understanding of the approach to profitability analysis that the CC has taken in previous markets investigations.

2.1.2 While the principles of an economic profitability assessment are well-defined, we agree with the CC that a flexible approach is needed in practice. This is because the particular circumstances of the market and market participants necessarily shape the analysis, and we have therefore drawn on our own understanding of the structure of KPMG UK and of the provision of audit services.

2.1.3 Precedents from previous CC market investigations are useful for certain issues, such as the treatment of intangible assets. However, we believe that the supply of statutory audit services is significantly different to markets previously investigated by the CC. The CC has never, to our knowledge, investigated a market in which the participants are professional services firms, owned by partners who also work for the firm. There is therefore no relevant precedent for some of the analysis needed to assess the economic profitability of our Audit Function.

2.1.4 The CC's preference for profitability analysis is to attempt a return on capital measure if possible<sup>17</sup>. We have therefore estimated the annual ROCE earned by our Audit Function, and for KPMG UK as a whole, over the last five years.

2.1.5 We do not believe it is feasible to construct a robust model of the economic profitability of our FTSE 350 audit services because this would require an allocation of the costs of

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<sup>15</sup> [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/consultations/market\\_guidelines\\_main\\_text.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/consultations/market_guidelines_main_text.pdf)

<sup>16</sup> [http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep\\_pub/rules\\_and\\_guide/pdf/cc3.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/rules_and_guide/pdf/cc3.pdf)

<sup>17</sup> Annex A to Market Guidelines, paragraph 8.

the Audit Function to individual audit engagements, an exercise that in our view could not be done in a robust or meaningful way. In any case, as shown in the chart below we note that the Engagement Margins for our FTSE 350 audit clients are broadly similar to those of other audit clients and so it is reasonable to use an analysis of the profitability of the Audit Function as a whole as an indicator of the profitability of audit work for FTSE 350 clients.

**Figure 1: Audit Engagement Margins<sup>18</sup>**

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### **3 Analysis of ROCE**

#### **3.1 Summary**

3.1.1 Our analysis of the ROCE has taken as its starting point KPMG UK's annual management accounts<sup>19</sup> which present revenues and costs for the firm as a whole. Revenues and costs by function are presented to a gross contribution level. Costs below the gross contribution level are not allocated to individual functions for management or performance reporting purposes.

3.1.2 For the purpose of calculating capital employed, we have used the balance sheets reported in the statutory audited accounts for KPMG LLP (entity only)<sup>20</sup>.

3.1.3 To calculate ROCE we used:

- the values of the tangible and intangible assets reported in the balance sheets for KPMG LLP (entity only); and
- the income statement from the management accounts as the basis for the profit for the Audit Function and for KPMG UK as a whole.

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<sup>18</sup> The figure contains the representative engagement margins for the FTSE 350 and TopTrack100 companies captured in the Engagement Dataset submitted to the CC in response to the Audit Data Request (ADR). Please see our letter dated 30 October 2012, for details on the calculations of the margins this represents. We will further consider any analyses of engagement margins in our response to the CC's working paper on engagement profitability.

<sup>19</sup> Provided to the CC for years 2006 to 2011 as part of our response to the CC's First Day Letter.

<sup>20</sup> Consolidated financial statements for KPMG LLP are not prepared, but we do not believe there would be significant differences in the level of capital employed between the consolidated and partnership-only balance sheets.

3.1.4 Gross contribution has been adjusted for partner labour costs, common costs and capitalised intangible expenditure (all discussed further below) to derive the adjusted earned profit for the Audit Function and for KPMG UK.

3.1.5 ROCE represents the adjusted earned profit divided by capital employed.

### **3.2 *Adjusting for partner labour costs***

3.2.1 KPMG's partners own the business. They also work in it. Partners are therefore rewarded for both their *investment in* the firm, and their *work for* the firm. However, the opportunity cost of partner labour is not separately captured or recorded in the firm's accounts. An assessment of the economic profitability of the partnership needs to take account of the opportunity cost of partner labour, which we refer to as 'partner employment costs'. Otherwise it will overstate the profit.

3.2.2 Estimating the value of partner labour is not straightforward and there is no precedent from previous CC market investigations. We have estimated what we believe to be a conservative range for partner employment costs using relevant benchmark employment costs. We also note the CC's suggestions for estimating partner employment costs, presented in the Working Papers<sup>21</sup> and PwC's benchmarking exercise<sup>22</sup>. We have conducted a 'sense check' of our own analysis against these approaches<sup>23</sup>.

3.2.3 We note that adjustments for partner employment costs are necessary even in the case of simpler metrics such as Return on Sales (ROS) and other measures proposed in the Working Papers, such as profit per partner or engagement margins.

3.2.4 There is no CC precedent in previous CC market investigations for estimating the value of partners' labour. We considered a number of possible approaches. Ultimately, the approach we have adopted has been to assess partner employment costs using senior KPMG UK director remuneration (i.e. total employment costs of senior directors to

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<sup>21</sup> Paragraphs 41 to 45 of the CC's working paper "Profitability analysis - Part 1".

<sup>22</sup> [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/pwc\\_observations\\_on\\_the\\_assessment\\_of\\_profitability.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/pwc_observations_on_the_assessment_of_profitability.pdf)

<sup>23</sup> We note that KPMG UK's management accounts do include a notional "partner charge". As we have previously argued in our response to question 70 of the MFQ, this figure does not represent the true employment cost of a partner. It is a somewhat arbitrary calculation, used to reflect the fact of partner involvement in reporting. This is partly so that projects can be more fairly compared to each other and over time.

KPMG UK, including benefits). This approach starts from the premise that progression through the employment grades at KPMG UK results in a rise in reward. As KPMG UK's partners are primarily drawn from the director grade group (particularly within the Audit Function)<sup>24</sup>, director remuneration serves as a reasonable starting point for a floor for partner salaries. Our analysis considers a range of mark-ups to the median remuneration for our highest paid directors (the "top 20 per cent of directors") as a basis for estimating average partner pay.

3.2.5 Mark-ups are applied to this starting point to estimate partner employment costs. A starting point of the median remuneration of the top 20 per cent of directors was chosen to avoid including outliers in the population – for example, new directors with substantial 'signing on' bonuses, and partners returning from overseas assignments who are temporarily treated as directors. In our view, a base case mark-up of 100 per cent is a reasonable and relatively conservative starting point given the typical career path of directors and partners and their levels of pay and remuneration. For the Audit Function, this creates the estimates of partner employment costs shown in Figure 2 below. This results in an average audit partner employment cost over five years of [REDACTED]. We note that this is lower than the estimate of £473,000 that the CC states in the Working Papers may be reasonable<sup>25</sup>.

**Figure 2: Estimates of Partner Employment Cost per annum**

£ per annum	2007	2008	2009	2010	2011	Simple 5 year average
Base case	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

3.2.6 This is of course only an estimate of the *average* partner employment costs. In reality, the *range* of partner employment costs is relatively substantial. The chart below shows the cumulative distribution of director and then partner reward in the Audit Function in 2011.

<sup>24</sup> In the period 2007-2011, 31 out of 45 new KPMG UK audit partners were KPMG UK directors who had been promoted. 13 of the remainder were returning secondees or transfers from other KPMG Member Firms, with only one external hire. See the 'Other Business Information' submission we provided to the CC in response to the ADR.

<sup>25</sup> Paragraph 43 of the CC's working paper "Profitability analysis - Part 1"

### Figure 3: Total Remuneration of KPMG Audit directors and Reward of KPMG Audit partners

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Source: KPMG data and analysis

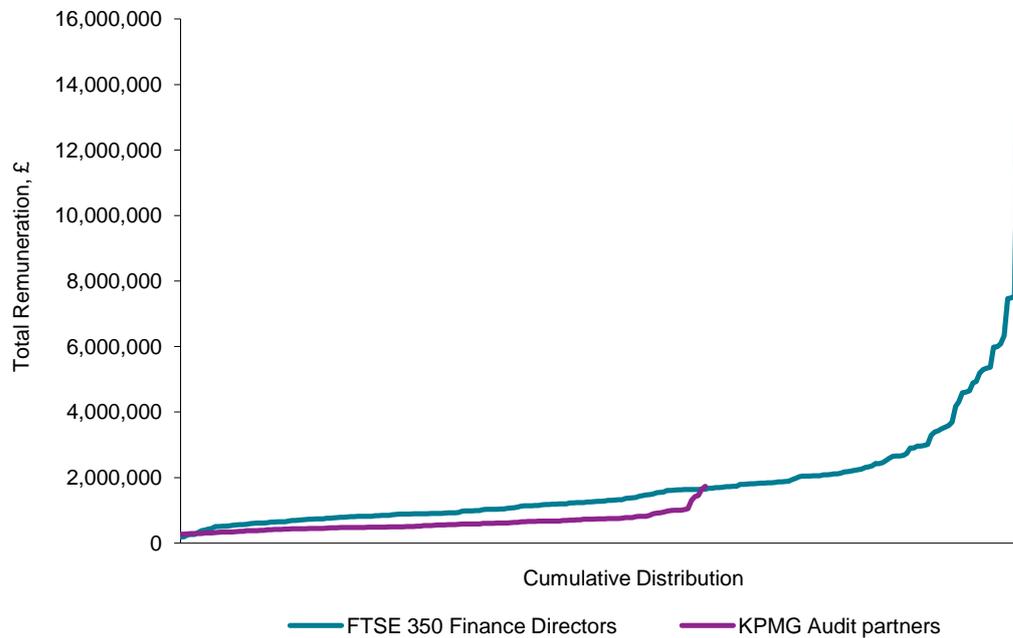
- 3.2.7 Figure 3 shows that there is a steady progression of director remuneration to total partner reward, and that there is no significant differential between senior directors and junior partners. The absence of any significant differential between senior director and new partner remuneration provides further support for our view that partner remuneration reflects only limited amounts for return on investment and that therefore we should treat a large proportion of partner reward as employment cost.
- 3.2.8 The general view of KPMG UK's partners is that the vast majority, if not all, of partner reward is effectively pay and benefits (ie a reward for their personal services) rather than a return on a financial investment.
- 3.2.9 We have also considered how our assumptions compare to external remuneration benchmarks. We have looked, for example, at the employment costs of senior individuals in other finance roles. Figure 4 below shows the employment costs of FDs at FTSE 350 companies<sup>26</sup>. Note that pension contributions are excluded, so that FD remuneration is significantly understated in comparison to KPMG UK's audit partners in this chart<sup>27</sup>.

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<sup>26</sup> This information has been provided by Incomes Data Services (IDS), an independent research body. IDS collect remuneration data from company annual reports. Where information disclosed in these reports are not completely transparent, IDS refer to regulatory announcements or request addition information from the company directly. The data excludes individuals for which IDS was unable to provide data, or unable to provide complete data, leaving 242 observations.

<sup>27</sup> Total employment costs would be the ideal benchmark, as KPMG's partners are rewarded only in cash and therefore have no equivalent benefits of their own (apart from those they choose to buy themselves).

**Figure 4: Remuneration of Senior Finance Professionals**



Source: IDS, KPMG data and analysis

3.2.10 In 2011, the median remuneration of FTSE 350 FDs was £1,276,507 (before pension contributions), and the median total reward of KPMG UK's audit partners was [redacted] (which effectively includes pension contributions, as KPMG partners do not receive additional pension contributions).

3.2.11 FDs tend to have similar backgrounds and qualifications to audit partners, often with similar career experience. They act as senior finance professionals and are closely involved in the running of large business units, as are KPMG's audit partners. In addition, there are examples of KPMG UK's audit partners leaving KPMG UK to join FTSE 350 companies (indeed, even FTSE 100 companies) as FDs. For example, Douglas Flint left KPMG to become the FD of HSBC, and Jon Symonds to become FD of AstraZeneca, both in the 1990s. We are aware of similar cases at other of the largest four audit firms.

3.2.12 Given that Figure 4 shows that most FTSE 350 FDs earn more, often considerably more, than KPMG UK's audit partners, we believe this supports our view that our base case assumptions on partner employment costs are relatively conservative. Indeed, in our view, the data presented in Figure 4 above suggests that a very large majority of partner remuneration should be treated as employment costs, and that our base case assumption of an average annual employment cost of [x] is conservative.

### **3.3 Inclusion of intangible assets**

3.3.1 As a knowledge-based, people business, KPMG UK invests significantly in intangible assets. It is therefore important that the value of these assets is taken into account in the ROCE calculation. The main categories of activity which create intangible assets in the business are:

- Marketing and Business Development
- Training
- Recruitment

3.3.2 To value these assets, we have:

- identified the costs incurred directly and as a result of time spent by partners and employees in the creation of these intangible assets;
- capitalised the value of these costs;
- estimated the asset life by reference to, for example, the length of time staff stay with KPMG's Audit Function / KPMG UK and data on average new client retention;
- added amortisation of these now capitalised intangible assets to the income statement in from the management accounts; and
- adjusted the income statement from the management accounts to avoid double-counting these costs as expense.

3.3.3 More detail of our approach can be found in Appendix 1.

3.3.4 We note that, on this basis, costs capitalised as intangibles in the Audit Function amount to [x] on average annually compared with [x] million on average annually for KPMG UK as a whole – ie only [x] per cent, compared with the Audit Function's [x] per cent and [x] per cent share of KPMG UK's headcount and Net Sales respectively.

3.3.5 We believe that there would be a good case to support a higher level of intangible asset expenditure – for example if we applied a standard company valuation approach and conducted our analysis based on the future value of the Audit Function's / KPMG UK's business relationships, rather than the value of time and other costs associated with business development and marketing activities, as we use in our base case.

3.3.6 As we explained in our response to the MFQ<sup>28</sup>, KPMG International also invests in intangible assets, using funds received from KPMG UK as well as other Member Firms of the KPMG International network. For example, KPMG International has invested [x] over the last five years in developing 'eAudit' software for use by audit functions in Member Firms. For simplicity, the value of these assets is not reflected in our modelled capital employed. The capital employed of the Audit Function and KPMG UK as a whole would be higher if these assets were included.

#### **3.4 Allocation of common cost**

3.4.1 Approximately [x] per cent of all costs in KPMG UK are not recorded as directly attributable to the Audit Function or another individual function<sup>29</sup>. This includes costs such as accommodation and computing costs. A portion of this cost must be allocated to our Audit Function in order to estimate its economic profit.

3.4.2 We have allocated these costs in proportion to headcount, which in our view is an appropriate method given that many of these costs are directly related to the number of partners and employees. We believe it is likely that this is a conservative approach since senior management time and other elements of cost will be skewed to audit by volume and value as a result of the public interest in audit, the cost of inspection regimes and the management of reputational risk.

3.4.3 One exception to the use of headcount as the basis of allocation has been in relation to risk management and practice protection costs<sup>30</sup>. These have been allocated in line with the method of calculation of the Practice Protection Insurance premium which the firm pays annually. This premium is calculated based on historical revenues in audit and

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<sup>28</sup> Questions 14 and 15.

<sup>29</sup> Average for the years between 2007 and 2011.

<sup>30</sup> For reference, in 2011 these were £14 million.

other parts of the business, with a strong weighting towards audit (i.e. audit drives the large majority of these costs)<sup>31</sup>. This reflects the independent view of our insurers that audit is a higher insurance risk business than the rest of the firm.

3.4.4 Further, in considering the economic profitability of any one part of KPMG UK, it should be recognised that it would be reasonable for KPMG UK to recover different proportions of common costs from different parts of the firms, and that therefore any inevitably arbitrary allocation (such as that based on headcount) will not necessarily be the only economically efficient allocation of common costs. It is worth noting, however, that there is normally a strong correlation between different possible cost drivers (for example, headcount and sales) and therefore that using alternative cost drivers as a basis for allocating costs would be likely to result in similar outcomes in terms of our estimates of ROCE.

### **3.5 *Cost of capital***

3.5.1 An assessment of economic profitability using ROCE requires the ROCE to be compared to the expected level of returns in a competitive market. This is typically estimated using a WACC for the firm. The CC has stated its preference for the CAPM to estimate the cost of equity in the WACC.

3.5.2 We have not previously performed any analysis of KPMG UK's WACC, nor are we aware of any prior research into KPMG UK's WACC.

3.5.3 The CAPM was designed to assess the cost of capital for a company, funded by external investors, as part of a diversified portfolio. Applying the model to a partnership structure raises a number of methodological issues as a number of the underpinning principles of the CAPM model do not hold. For example, CAPM relies on the principle that investors are free to move their capital in and out of the investment, which is not the case for KPMG UK's partners. Furthermore, KPMG UK's partners are required to invest equity stakes in the firm in order to become partners and also at any point in time have a considerable portion of their annual expected profits tied up in the firm. This in

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<sup>31</sup> [x] per cent to Audit, [x] per cent to the rest of the firm.

turn leads to an enforced bearing of unsystematic risk, something that the CAPM assumes can be diversified away. The CC made these points in the Working Papers<sup>32</sup>.

3.5.4 We have therefore taken advice from Professor Alan Gregory at the University of Exeter on how best to calculate the firm's WACC and his paper is submitted separately.

3.5.5 Professor Gregory's analysis highlights the difficulties in applying the CAPM to a partnership firm. It considers alternatives and concludes that an adjusted CAPM is nevertheless the best way to estimate WACC. Making adjustments for factors such as illiquidity and undiversifiable risk, Professor Gregory has arrived at a central case estimate for KPMG's pre-tax nominal WACC of 17.5 per cent and a low case of 12.2 per cent.

## **4 Results and Conclusions of ROCE analysis**

4.1.1 Under the analysis we have described above, we have estimated that the average ROCE our Audit Function over the period was 12.7 per cent. This compares to a central WACC estimate of 17.5 per cent and a low case of 12.2 per cent (as set out in paragraph 3.5.5 above).

4.1.2 In our view, our estimates of ROCE and WACC demonstrate that KPMG's Audit Function earns a return that is consistent with the level it could be expected to earn in a competitive market and there is no evidence at all to suggest that returns are in any way 'excessive'.

4.1.3 To summarise section 3 above, the principal assumptions in our calculation of the Audit Function's ROCE in our base case are<sup>33</sup>:

- average annual audit partner 'employment cost' of [x], based on a 100 per cent mark-up on top KPMG audit director salaries. Using a higher average partner employment cost, for example of [x] (as considered in the CC's profitability discussion)<sup>34</sup>, would lead to a lower ROCE for the Audit Function, of [x] per cent.

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<sup>32</sup> Paragraph 59 of the CC's working paper "Profitability analysis - Part 1".

<sup>33</sup> These assumptions are explained in section 3.2 to 3.4 of this paper.

<sup>34</sup> This would correspond with the CC's estimate of possible partner employment costs based on PwC's salary benchmarking exercise. CC Profitability Part 1 paragraph 43.

Partner employment cost estimates based on external benchmarks such as the FTSE 350 FDs would be considerably higher. We therefore believe our base case estimate of partner employment cost to be conservative.

- average annual capitalised intangible expenditure of [x]. We believe that there would be a good case to support a higher level of intangible asset expenditure – for example if we applied a standard company valuation approach and conducted our analysis based on the future value of the Audit Function's / KPMG UK's business relationships, rather than the value of time and other costs associated with business development and marketing activities, as we use in our base case. We therefore consider this assumption to be conservative.
- intangible asset lives of three to five years. We believe that these are conservative assumptions. For example, our relationships with audit clients last for at least 10 years on average.
- an allocation of, on average, [x] per cent of common costs to the Audit Function. The allocation was based mainly on headcount, which we judge to be a conservative approach. Using revenues, or direct costs, as a driver would not generate a materially different estimate of ROCE.

4.1.4 The ROCE for the Audit Function is also broadly in line with, the ROCE for KPMG UK as a whole, which we estimate to be 13.2 per cent. The base case scenario for KPMG UK as a whole assumes:

- average annual partner 'employment cost' of [x];
- average annual capitalised intangible expenditure of [x]; and
- intangible asset lives of three to five years.

4.1.5 As with our assumptions for the Audit Function, we believe that these assumptions are conservative.

4.1.6 There are a number of other factors that need to be considered in our calculations.

- 4.1.7 First, as we noted in the Hearing, audit is our most inherently risky business<sup>35</sup>. There is a constant risk of a low probability, high impact event adversely affecting the performance of the Audit Function in the future. This is reflected in the Practice Protection Insurance premium which the firm pays annually, which has a strong weighting towards audit (i.e. audit drives the large majority of these costs)<sup>36</sup>. Low probability, high impact events are examples of specific risk and not systematic risk. Specific risk is excluded from a cost of capital calculation which assumes investors can diversify away all unwanted specific risk. However this is not possible for audit partners. Such events would manifest as major cash flow shocks, and so care must be taken in extrapolating long run profitability from profits in a relatively short period. The important implication is that the Audit Function's profits are likely to be an overstated estimate of long run sustainable profits to the extent that such events have not arisen in the period under review.
- 4.1.8 Second, although we have presented pre-tax numbers, the benchmark cost of capital has been uplifted only for the rate of Corporation Tax. Whilst the cost of capital has been adjusted for the impact of KPMG UK's partnership structure on liquidity risk and undiversifiable risk, we have not attempted any uplift to take account of the disadvantageous position of partners compared to shareholders in terms of realised returns. Whilst, in principle, this would be possible, in practice the calculation would require difficult assumptions in order to identify the "marginal" UK shareholder and the split of any return realisations between capital gains and dividends.
- 4.1.9 Third, the limits on the amounts partners can draw down in advance of finalised year end accounts and available working capital means that they will wait for up to a year before receiving pay earned in a particular month. The ROCE analysis does not take into account the cost of this delay.

## **5 Comments on the Working Papers**

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<sup>35</sup> [REDACTED]

<sup>36</sup> This is discussed further below at Paragraph 3.4.3.

5.1.1 In this section we set out our comments on the Working Papers. We are in broad agreement with many of the CC's comments in relation to the relevance of, and the difficulties in calculating, the various measures of profitability considered.

5.1.2 The CC's overall view is that it is unlikely to obtain a reliable or meaningful assessment of economic profitability in this market. This applies to both ROCE and ROS approaches.

5.1.3 We have structured our comments on the Working Papers according to the measures of profitability discussed by the CC:

- ROCE and Adjusted ROS
- Profit per partner
- Profit by service line

## **5.2 *ROCE and Adjusted ROS***

5.2.1 The CC has considered estimating ROCE for the audit functions of the largest four audit firms, describing ROCE as “a standard measure of profitability”<sup>37</sup>.

5.2.2 However, the CC concludes that estimates of the ROCE for an audit function would be unlikely to be robust enough to allow the CC to draw conclusions, because of the number of assumptions that would need to be made.

5.2.3 In our view, ROCE is the most economically meaningful measure of profitability. While we agree with the CC that a number of assumptions are required to estimate the ROCE for an audit function we believe that, whilst the inherent difficulties in such an analysis might preclude a wholly accurate calculation of ROCE, it is possible to use such an analysis to demonstrate that the economic profitability of KPMG UK's Audit Function is consistent with a competitive market over a five year period.

5.2.4 The CC has concluded that it is not able to obtain meaningful results from an Adjusted ROS approach in this case. This is largely for same reasons it has identified as preventing a robust ROCE approach.

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<sup>37</sup> Paragraph 64 of the CC's working paper “Profitability analysis - Part 1”

5.2.5 We set out a discussion of the CC's comments on the main assumptions below, along with our own approach to each.

*Intangible asset valuations*

5.2.6 The CC's view:

- The CC believes that it will not be able to reliably assess the intangible asset base of audit functions, because of problems isolating and obtaining data on the relevant costs<sup>38</sup>. It considers this to be the primary barrier to calculating economic profitability of audit functions.
- The CC considered whether it might identify a sub-set of costs that related to client acquisition and which might therefore qualify to be recognised as creating an intangible asset<sup>39</sup>.
- However the CC considered that there is insufficient information available in the management accounts of audit firms to be able to reach a conclusion on the specific nature of the cost incurred<sup>40</sup>.
- It would be conceptually difficult to isolate Assurance or Audit-specific intangibles given the integrated nature of the firms that provide audit services<sup>41</sup>.

5.2.7 We agree that it is difficult to value intangibles. However, in our model we have found that the results on the ROCE are not particularly sensitive to the assumptions in relation to intangible assets.

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<sup>38</sup> Paragraph 58 of the CC's working paper "Profitability analysis - Part 1".

<sup>39</sup> Paragraphs 55 and 56 of the CC's working paper "Profitability analysis - Part 1".

<sup>40</sup> Paragraph 56 of the CC's working paper "Profitability analysis - Part 1".

<sup>41</sup> Paragraph 56 of the CC's working paper "Profitability analysis - Part 1".

*Partner remuneration*

5.2.8 The CC's view:

- The CC agreed with submissions from PwC, Deloitte and Oxera that a “salary” element for partner remuneration needs to be included in costs<sup>42</sup>, which we believe should represent “total employment costs”.
- The CC considered that the following benchmarks for partner salaries could be reasonable:
  - a mark up on average director salary costs;
  - the salary costs of a non-equity partner;
  - the partner charge used by different firms; and
  - industry benchmarks such as the average salary for FTSE 250 Finance Directors (FDs)<sup>43</sup>.
- The CC found that the approach in PwC's benchmarking exercise, of benchmarking partner employment costs to external roles, may be reasonable<sup>44</sup>. The average partner employment cost estimated by the CC on the basis of the PwC analysis is £473,000 per year<sup>45</sup>.

5.2.9 The assumptions on partner remuneration are in our view the most challenging aspect of a ROCE analysis in this market, and the results of the ROCE analysis are also more sensitive to assumptions about partner remuneration than the level of intangible assets capitalised.

5.2.10 We note that the CC used PwC's analysis to arrive at a suggested £473,000 partner employment cost. We cannot comment on this in detail, not having seen the underlying

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<sup>42</sup> Paragraph 31 of the CC's working paper “Profitability analysis - Part 1”.

<sup>43</sup> Paragraph 41 of the CC's working paper “Profitability analysis - Part 1”.

<sup>44</sup> Paragraph 41 of the CC's working paper “Profitability analysis - Part 1”.

<sup>45</sup> Paragraph 43 of the CC's working paper “Profitability analysis - Part 1”.

benchmarking analysis. However, the figure is similar to our base case estimate of [X] (five year average).

5.2.11 We note that assumptions on partner employment costs are needed even when simple metrics like engagement profitability/margins and profit per partner are considered as an alternative to a ROCE analysis.

#### *Cost of Capital*

5.2.12 The CC's view:

- The CC did not come to a final view on cost of capital for an audit function<sup>46</sup>.
- It recognised that the cost of capital for a business is usually assessed using the CAPM<sup>47</sup>.
- The CC agreed with Oxera that an uplift for firm-specific and liquidity risks may be necessary<sup>48</sup>.
- Oxera estimated the premium on the required rate of return of 10 to 20 per cent<sup>49</sup>.
- The CC concluded that PwC's approach to WACC does not appear unreasonable. PwC calculated a pre-tax cost of equity of 10.7 per cent based on the CAPM framework (using an equity beta of 0.8 based on companies with an industrial classification including accounting, auditing and taxation services)<sup>50</sup>.

5.2.13 The final WACC estimated by Professor Gregory is somewhat higher than the WACC PwC estimated in its submission, although our post-tax unadjusted equity cost is slightly lower. In explaining the difference in the estimates, we note that the tax uplift on PwC's estimate appears to require an adjustment – by our calculations, PwC's pre-tax

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<sup>46</sup> Paragraph 62 of the CC's working paper "Profitability analysis – Part 1".

<sup>47</sup> Paragraph 59 of the CC's working paper "Profitability analysis - Part 1".

<sup>48</sup> Paragraph 63 of the CC's working paper "Profitability analysis - Part 1".

<sup>49</sup> Paragraph 59 of the CC's working paper "Profitability analysis - Part 1".

<sup>50</sup> Paragraph 62 of the CC's working paper "Profitability analysis - Part 1".

cost of equity should be 11.6 per cent<sup>51</sup>. PwC then applied no uplift for any of the adjustments to cost of capital suggested by the Oxera Report. The WACC estimated by Professor Gregory applied a post-tax uplift of between 2.2 and 7.6 percentage points, with a central estimate of 4.9 percentage points for liquidity and unsystematic risk premia. Whilst these premia are clearly higher than the zero uplift in the PwC benchmarking analysis, they are lower than the uplift of just under 10 per cent suggested by Oxera.

5.2.14 Allowing for such premia, the central estimate on a pre-tax nominal basis is 17.5 per cent. For the purposes of the analysis, it is assumed that the business is funded 100 per cent by equity in the long term (although in practice, short term bank loans have been used to part finance a major property asset, pending a potential sale and conventional leaseback). Therefore the WACC is the pre-tax cost of equity.

#### *Cost allocation*

5.2.15 The CC's view:

- The CC found that “no firm calculated a profit per engagement that closely reflected actual costs”<sup>52</sup>.
- The CC found that obtaining reasonably robust cost allocations for an audit function as a whole is possible for some audit firms but not for the others, depending on the information available for different audit functions<sup>53</sup>.
- It observed that shared and common costs could be allocated from the firms to their assurance service lines. However, it found that to assess FTSE 350 audit or engagement level profitability, a further allocation of costs would be required, which would be increasingly arbitrary<sup>54</sup>.

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<sup>51</sup> The correct uplift is post-tax cost of equity / (1-Corporation Tax rate). They appear to have multiplied the post-tax rate by (1+ Corporation Tax rate), which is incorrect.

<sup>52</sup> Paragraph 17 of the CC's working paper “Profitability analysis - Part 1”.

<sup>53</sup> Paragraph 21 of the CC's working paper “Profitability analysis - Part 1”.

<sup>54</sup> Paragraph 27 of the CC's working paper “Profitability analysis - Part 1”.

- The CC considered that estimating profitability measures for FTSE 350 statutory audits as a subset of the assurance businesses is unlikely to be a robust analysis<sup>55</sup>.

5.2.16 We agree that it is not possible to allocate cost reliably to statutory audit services for FTSE 350 clients alone. Instead, we have undertaken cost allocation to estimate a reasonable proportion of central costs to be attached to our Audit Function as a whole. This includes statutory audit services as well as other audit and assurance services.

5.2.17 In performing this analysis we have not attempted to use our “scale rates” to cost staff or partner time. We note the CC’s comments on scale rates (called “RRR” by the CC with reference to similar systems across firms). We agree with the CC’s main conclusion that (at least for KPMG UK):

*“RRR is similar to contribution-based approaches in that it avoids the need for detailed cost allocation. The focus for management in using RRR is in comparing relative performance of engagements (between one another and over time) rather than indicating absolute levels of profitability of engagements.”<sup>56</sup>*

### **5.3 Profit per partner**

5.3.1 The CC has considered some measures of profit per partner. Under one approach, the CC did not attempt to distinguish the partner employment costs and profit elements of total partner remuneration. Therefore the figures for profit it has used in these calculations *include* the opportunity cost of partner labour. Using this measure, the CC found that total remuneration per partner of the partners at mid-tier firms was “*generally less than half that of those at the Big 4 firms*”<sup>57</sup>.

5.3.2 We note that the CC does not appear to draw any conclusions from this analysis. In our view, this kind of measure is not appropriate when considering the level of economic profitability in the market. This is because, as we have set out in sections 3.2 above, partner employment costs are significant. We would also expect partner employment costs to be higher in the largest four audit firms than in the mid-tier firms, reflecting the

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<sup>55</sup> Paragraph 27 of the CC’s working paper “Profitability analysis - Part 1”.

<sup>56</sup> Paragraph 17 of the CC’s working paper “Profitability analysis - Part 1”.

<sup>57</sup> Paragraph 9 of the CC’s working paper “Profitability - Part 2”.

market rate for the talent required to deal with the larger and more complex audit engagements of the largest four audit firms.

5.3.3 The CC has also used data from PwC's benchmarking exercise on estimated "audit partner salaries" to calculate a "return on capital" element, which it states it is considering, to assess whether these returns are "*commensurate with the levels of capital invested by individual audit/assurance partners*"<sup>58</sup>.

5.3.4 An assessment of profit per partner requires assumptions in relation to partner employment costs, just as an assessment of ROCE does. We have discussed our views on the employment cost of partners in section 3.2 above.

5.3.5 In relation to invested capital, our view is that the cash injected as members' capital is not an appropriate measure of the firm's capital for an assessment of economic profitability, on either a firm or per partner basis. This is for two main reasons:

- Large amounts of funding for working capital and for new investment come not from capital subscriptions made by partners, but from internally generated funds. Bank loans may occasionally also be used to fund exceptionally large investments, as was the case in 2009 for the funding of our Canada Square building. The most recent published accounts for KPMG LLP report aggregate members' interests of some £329 million at 30 September 2011. Whilst this amount fluctuates over the year, only a relatively small proportion – around £54 million – represents injected capital.
- In addition to the intangible assets reported on our balance sheet, there is a significant amount of intangible assets which is not included on the balance sheet. This is discussed in more detail in section 3.3 above. As with the assets reported on our balance sheet, the cash investment in these intangible assets is funded through both partner capital injection and internally generated funds, with the latter being most significant. As a result we do not think that this measure of return on capital provides an appropriate or meaningful measure of the profitability of the Audit Function.

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<sup>58</sup> Paragraph 20 of the CC's working paper "Profitability - Part 2".

5.3.6 We also note that profit per partner measures are affected by the number of partners in the firm in question. For profit per partner measures to be sensibly applied in inter-firm comparisons, differences in the business models of each firm, as well as their policy on appointing new partners, would need to be taken into account.

#### **5.4 Profit by service line**

5.4.1 The CC states that “among the closest comparators for the Assurance businesses are the accounting firms’ other service lines”<sup>59</sup>. The CC has therefore examined the relative profitability of each audit firm’s service lines, using gross margin (net revenues less direct costs) and net margin (net revenues less all costs attributable or apportioned to a service line) calculations to do this. The CC makes a number of observations in relation to this analysis, concluding that “Assurance is not a loss leader”, and that “Assurance margins are generally more stable than the other lines of service”<sup>60</sup>. The CC considers the conclusion (as put forward by Deloitte<sup>61</sup>) that audit is competitive because it has overlapping margins with non-audit (competitive) markets. However, the CC states that “it can be argued that the risk profile of audit is lower than that of consulting”, because “the income stream is less lumpy, and the costs base is fairly stable, there is a high proportion of repeat business and significant long-term clients”<sup>62</sup>.

5.4.2 We agree that KPMG UK’s non-audit functions make reasonable comparators for the Audit Function, given the similarities in the businesses. Hence we have calculated a ROCE for KPMG UK as a whole as well as for our Audit Function, and we discuss the comparison above at section 4. We believe that ROCE is the most appropriate measure to use for this comparison, in order to compare the economic profitability of the service lines.

5.4.3 We do not agree with the CC’s hypothesis that the risk profile of audit is lower than that of other services, for the reasons explained at paragraph 1.21 above<sup>63</sup>. Although the CC has considered a number of specific factors in relation to the relative risk of audit firms’

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<sup>59</sup> Paragraph 22 of the CC’s working paper “Profitability analysis - Part 2”.

<sup>60</sup> Paragraph 44 of the CC’s working paper “Profitability analysis - Part 1”.

<sup>61</sup> Paragraph 44 of the CC’s working paper “Profitability analysis - Part 2”.

<sup>62</sup> Paragraph 44 of the CC’s working paper “Profitability analysis - Part 4”.

<sup>63</sup> We discussed this in more detail in our response to the CC working paper “Liability, Insurance and Settlements”, submitted on 5 October 2012.



various functions, it has not considered a number of factors which in our view imply that KPMG's Audit Function is more risky overall than other functions, as we set out at the Hearing<sup>64</sup>. These include the Audit Function's higher level of specific risk (as illustrated by, for example, the collapse of Arthur Anderson's worldwide firm as a result of the Enron scandal).

5.4.4 In our view, the calculation of our Practice Protection Insurance Premium by our external insurers provides strong evidence that our Audit Function is more risky than other functions. Our Practice Protection Insurance is discussed in more detail in paragraph 4.1.7 above.

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<sup>64</sup> Lines 9 – 11, page 11 of the KPMG Hearing Transcript (received from CC 9 October 2012).



## **Appendices**

Appendix 1 – Methodology and sources of KPMG's Return on Capital Employed Model

Advice from Professor Alan Gregory on KPMG's WACC is separately submitted

### **Appendix 1: Methodology and Sources of KPMG's Return on Capital Employed Model**

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