ANNEX 2

Response to Oxera Presentation on Audit Profitability dated 6 December 2012

This Annex contains PwC's response to the slides on audit profitability dated 6 December 2012 prepared by Oxera for a meeting with the CC. In responding to this presentation we have been hampered by the lack of detail in the slides and have not been provided with any transcript of the meeting itself. Our comments should be read in this context.

We set out our comments below, following the structure of the Oxera presentation.

1 Introduction (*slides 2-3*)

1.1 We agree with Oxera that the CC should reach a conclusion on profitability based on *"multiple independent tests"*. On this basis the CC has ample evidence to reach the conclusion that the profitability of FTSE 350 audits is at a level consistent with a competitive market:

(a) Our analysis of our own audit profitability, calculated over a five year period using a modified return on sales or economic profit margin approach[1], demonstrates a level of profitability consistent with a competitive market.[2]

(b) KPMG LLP has submitted evidence of its own audit practice profitability also calculated over a five year period.[3] KPMG employed a different methodology – return on capital employed (**ROCE**) – but reached the same conclusion: that its profitability was consistent with a competitive market.

(c) As the CC has not undertaken its own detailed assessment of audit firm profitability, the two pieces of work described in (a) and (b) above provide the CC with the best available evidence of actual achieved profit levels, using the available financial data and recognised methodologies taking into account the CC's normal approach.

(d) In addition, other less direct evidence is available to the CC. Evidence has been submitted to the CC demonstrating that the profitability of the large audit firms appears reasonable when compared with that of large UK law firms:

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1 Observations on the assessment of audit profitability, 31 July 2012 (our **Profitability submission**).

2 Our work was also endorsed by Professor Ian Cooper of the London Business School - see Annex 1 of our Profitability submission.

3 Assessing the Profitability of KPMG's Audit Function, KPMG, published on the CC website 13 December 2012.

(i) We provided evidence that our UK profits per partner are at the same level as the third quartile of the top ten UK law firms.[4]

(ii) Deloitte produced a similar result using net profit margin figures.[5]

(e) For the largest audit firms the average profitability of non-audit services is higher than the profitability of audit services.[6] Non-audit services cover a wide range of different offerings which are supplied in a similarly wide range of competitive and fragmented markets.

(f) We have demonstrated to the CC that our UK firm partner rewards are in line with what would be expected in a competitive market given the extent of tangible capital employed and a highly conservative estimate of intangible assets.[7]

(g) The best available evidence shows that audit profitability is lower in the FTSE 350 audit market than in what Oxera refer to as *"(competitive) non-FTSE 350 markets"*[8] – see paragraph 4.6 below.

1.2 With regard to intangible assets, we believe that it would be difficult to agree a robust figure for the CC's purpose. Nevertheless, the CC now has two different pieces of evidence that suggest that the magnitude of intangible assets necessary to conclude that returns are reasonable is plausible:

(a) Our evidence on partner rewards (see paragraph 1.1(f) above) demonstrates that PwC's intangible assets need only be modest by comparison with those implied by valuations from business services firm transactions.

(b) KPMG estimate the value of their intangible assets for the purpose of their ROCE calculation (see paragraph 1.1(b) above) and conclude that this is consistent with a competitive profit level.

1.3 We deal with other points mentioned in Oxera's introduction as necessary below.

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4 See Annex 2 of our Profitability submission.

5 Summary of Deloitte's response to the Competition Commission's marketing and financial questionnaire, Non-confidential version, 6 March 2012, paragraphs 7.19 to 7.22.

6 For the period in which audit operating profits are disclosed in Transparency Reports (2009-2012), PwC, Deloitte and KPMG audit profitability levels are almost without exception lower than those of the firms as a whole - ie, non-audit profitability levels are higher on average than those of audit services. (The single exception is for KPMG in 2009, when the operating margin for the group was 13% and 16% for the audit business). It is also important to note that the profitability of different non-audit services vary considerably.

7 Letter from Norton Rose to the CC dated 8 November 2012 in response to the CC's Profitability Follow-up Questions (the text of which is set out as Annex 3).

8 Slide 3.

2 Margin analysis *(slide 5)*

2.1 Oxera do not explain why they consider *"evidence submitted to the CC is more likely to form a lower bound for audit profitability than an upper bound"*. From later slides it is clear that Oxera's view applies to the evidence in our Profitability submission. In fact, we made clear in that submission the basis on which we prepared our estimates and the limited redactions in the non-confidential version available to Oxera mean that they have visibility of our approach. The bases for our cost allocations and our partner salary estimates were transparent, as was the fact that our overall approach was endorsed by Professor Ian Cooper of the London Business School and our approach to partner salaries was endorsed by Dr Jonathan Trevor of Cambridge University.

2.2 In fact if anything our analysis overstated profitability by taking a conservative approach to the return on tangible capital element:

(a) We explained clearly that we used a very limited measure of capital employed – partners' invested capital – in order to avoid contentious issues such as circularity in including retained earnings, and controversy in estimating intangibles.

(b) We also explained that our WACC calculation was a lower bound.[9]

2.3 Oxera's assertion that our evidence forms a *"lower bound"* is therefore unfounded.

2.4 We also reject Oxera's suggestion of the use of *"group annual reports"* to arrive at an *"upper bound"*. Our group figures reflect the performance of PwC UK as a whole. Audit revenue comprises less than one quarter of our total revenue. We earn lower margins on our audit services than we do on non-audit services on average (see paragraph 1.1(e) above) so it is not possible to make inferences about audit profitability by using whole firm data.

2.5 We can see some merit in using *"sensitivity analysis"* to test whether profitability seems reasonable, but any sensitivity analysis would need to be symmetrical – actual profitability could be both higher or lower than our calculated figure.

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[9] See paragraphs A7.13 to A7.14 of our Profitability submission. We note our WACC calculation was far lower than that employed by Oxera in its work for the European Commission (EC). In their 2007 report for the EC Internal Market and Services Directorate General (Ownership rules of audit firms and their consequences for audit market concentration, Oxera, October 2007, page iv), Oxera state that "*the evidence broadly suggests that required returns for audit firms could be approximately 10 percentage points higher than those of a diversified benchmark*." Considering this comment, the five-year average cost of capital of 10.7% that we estimated in our Profitability submission appears conservative.

3 Revenue and cost allocation: Audit vs non-audit *(slide 6)*

3.1 Oxera note that PwC's calculated audit profit margin (19%) is low relative to that of the firm as a whole (29%). This is unsurprising as our publicly available Transparency Reports also give a figure of 19% for our audit margins.[10] Deloitte also reported lower audit margins, though by a lesser difference.[11]

3.2 Oxera state that this *"implies high returns elsewhere, and/or that the 19% is a lower bound for audit profit margin"*. We explained above why there is no basis for Oxera asserting that our figure is *"a lower bound"*. Indeed, given the close correspondence with our published Transparency Report figures, any suggestion that the figure is "*a lower bound*" might imply that we have misstated audit profitability in published Transparency Report figures and submissions to the CC, which is not the case.

3.3 Oxera's alternative conclusion is that there must be *"high returns elsewhere"*. This is also incorrect. There are relatively higher average returns in other parts of our UK business, which have an effect on the average of the firm as a whole. However, for all of our services we operate in competitive markets and so our returns are at competitive levels – they are not *"high"*.

3.4 Further, Oxera fail to draw the obvious conclusion from the figures they cite – that PwC's audit profitability is lower than the average profitability of its non-audit services, which itself is indicative that there is not a competition problem in the audit market (see paragraph 1.1(e) above).

4 Revenue and cost allocation: Large vs small audits (slide 7)

4.1 Oxera's statement that *"the CC's engagement profitability analysis suggests that, on average large audits (eg, FTSE 100) are more profitable than smaller audits"* is selective.

4.2 Oxera appear to have chosen to highlight the FTSE 100 market in order to draw attention to the CC's engagement profitability findings with respect only to the FTSE 100, rather than the whole of the FTSE 350 (the reference market). The CC's FTSE 100 data suggest that profits are higher for this segment than for smaller audits.

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[10] For the period considered by Oxera in their presentation in which PwC audit operating profits are disclosed in Transparency Reports (2009-2011), PwC's average audit operating margin was 19% (2009: 20%; 2010: 20%; 2011: 16%). Source: PwC 2011 and 2012 Transparency reports.

[11] For the period considered by Oxera in their presentation in which Deloitte audit operating profits are disclosed in Transparency Reports (2010-2011), Deloitte's average audit operating margin was 26% (2010: 29%; 2011: 23%). Source: Deloitte 2011 and 2012 Transparency reports.

4.3 What Oxera fail to point out is that the CC's engagement profitability work has found that *"the average engagement profitability of non-FTSE-350 audit engagements is on average greater than for FTSE 250 engagements but lower than for FTSE 100 audit engagements"*.[12] So the CC's evidence as set out in the working paper is ambiguous with respect to the comparison between the entire reference FTSE 350 audit market and other audit markets.

4.4 In any case we have reservations on a number of grounds about using the CC's data to make such comparisons:

(a) FTSE 100 audits typically demand more time by more senior partners, and if account was taken of this higher cost, profits would be relatively lower in the segment.

(b) There are costs that are not included in the CC's analysis (e.g. software and practice protection costs) that are incurred by the large audit firms at a particular level in order to be able to provide effective audit services to the largest FTSE companies. Appropriate allocation of such costs according to cost causation would drive down the calculated profitability of the largest audits.

(c) The CC also have data on an incomplete group of non-FTSE 350 companies (based on the Top Track) which makes any comparisons outside the FTSE 350 less than comprehensive.

4.5 Nevertheless we agree with Oxera that it is informative to compare profitability in the FTSE 350 audit market with profitability in the audit market more generally. For smaller companies the mid-tier firms are viable alternatives to the four largest firms. As a result, concentration levels are lower and companies can select from a larger number of suitable firms. Furthermore there is evidence of higher rates of switching. These characteristics of the markets for smaller audits have led to a general acceptance, including by Oxera[13], that these markets are competitive.

4.6 There are two sources of evidence for comparing the profitability of the FTSE 350 audit market with that of other audit markets.

(a) Transparency Report data show that mid-tier firm audit profitability is higher than that of the largest audit firms.[14] This implies that audit profitability is higher outside of the FTSE 350 audit market, as the mid-tier firms have little presence in the reference market but

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12 Engagement level profitability analysis working paper, paragraph 7(c).

13 See slide 3.

14 See Annex 2 of the PwC Combined Response to the CC's "Profitability – Part 1"& "Profitability – Part 2" Working Papers, 15 November 2012.

larger market shares elsewhere. If non-FTSE 350 audit markets are competitive, as Oxera believes, then this provides evidence that FTSE 350 audit profitability is also consistent with a competitive market.

(b) Our own engagement profitability evidence using our CPy measure shows that in FY11 we achieved lower margins on our FTSE 350 audits than we did across our audits as a whole.[15]

4.7 Contrary to Oxera's final statement on slide 7, it therefore follows that any measure of profitability of audit as a whole (as for example in our Profitability submission and that of KPMG) is likely to overstate the profitability of FTSE 350 audits.

5 Revenue and cost allocation: Sensitivity analysis *(slide 8)*

5.1 It is difficult to comment on this slide because it is too brief to be clear. We agree with Oxera that it is possible to calculate a separate profitability figure for audit services from the wider group profitability figures, and we have carried this out in our Transparency Reports and our Profitability submission.

5.2 We do not understand why such a resulting measure *"may not meaningfully reflect the economic contribution of audit to the profitability of the group"*. Normally issues of *"economic* contribution*"* might be expected to concern the treatment of common cost allocations, whereby a low calculated profitability based on fully allocated costs might mask a large contribution on an incremental basis before the allocation of common costs. However, economic theory tells us that any allocation of common costs between zero (incremental cost) and full (standalone cost) is consistent with competitive pricing. Regulators, including the CC, have typically focussed on either fully allocated costs (the approach used in our Profitability submission) or incremental costs with equi-proportionate mark-ups (which can often be similar to fully allocated costs).

5.3 We also do not understand why Oxera refer to uncertainty with respect to revenue allocation, at least as regards PwC. Given our engagement coding system it is clear what revenue has been earned from audit and audit-related services.

6 Notional partner salaries *(slide 9)*

6.1 We agree with Oxera that a notional partner salary is needed, and that the result is sensitive to the figure used so the calculation needs to be performed accurately. This is why, as explained

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[15] See footnote 33 of our Profitability submission.

in paragraph 2.1 above, we used professionals who have undertaken such calculations many times before, including for the CC itself, and had our work reviewed and endorsed by an independent academic expert.

7 Capital employed (slide 10)

7.1 Oxera rely on *"the CC's criteria for recognition of intangible assets"* to assert that *"the value that* can be attributed to intangible assets is small". We agree with the CC that this is incorrect as *"the intangible asset base could have substantial value and be long-lived"*.[16] As noted above (paragraph2.1) the CC has evidence that intangible assets are sufficiently substantial to explain the level of profitability.

7.2 We agree with Oxera that if the asset base is limited to the value of member's capital this results in a small capital charge. This is precisely what we included in our calculation of our economic profit margin in our Profitability submission in order to be conservative. We have explained to the CC elsewhere the implications of expanding the capital base to include other tangible assets (funded by retained earnings) and a conservative estimate of intangible assets.[17]

8 Economic profit margin: Combined sensitivity analysis *(slide 11)*

8.1 As above, our estimate of a 1% economic profit margin cannot be regarded as a *"lower bound"*. Uncertainty regarding estimates (e.g. cost allocation, partner salary) could result in this figure either increasing or decreasing, but our calculation was undertaken in order to provide the most robust figure possible given inherent uncertainties. The conservative assumptions underlying our calculation for the capital charge element in particular would mean, if anything, the figure is likely to be overstated.

8.2 Calculating an upper bound based on group operating profits that predominantly reflect non-audit services profitability is manifestly inappropriate. Whilst it may be the case that for the four largest audit firms as a whole the distribution of partners, and hence partner salaries, across the four seniority levels of partners is more skewed towards the bottom end than it is for PwC (since we perform proportionately more of the largest audits requiring the most senior partner time),

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16 Paragraph 58 of Profitability Part One working paper.

17 Letter from Norton Rose to the CC dated 8 November 2012 in response to the CC's Profitability Follow-up Questions (the text of which is set out as Annex 3).

the CC's partner salary figure of £473k is only a *"working assumption"*.[18] Our analysis calculated the partner salary cost consistent with the revenue earned from the mix of audits we perform. Robust conclusions cannot be based on assumption-based calculations in preference to actual calculations.

[18] Paragraph 43, Profitability Part One working paper.