

STAFF PAPER

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IASB Meeting

Project	Post-implementation review of IFRS 8		
Paper topic	Review of academic literature to May 2012—preliminary findings		
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Purpose

1. The purpose of this paper is to present the findings of academic research and other reports about the impact of the application of IFRS 8 *Operating Segments*. This literature review provides evidence relevant to the post-implementation review of IFRS 8.

Questions for the Board

2. In this paper we will ask the Board two questions:
 - (a) Do they have any questions at this stage on the external research findings to date?
 - (b) Would they like any further areas to be researched at this time?
3. The academic findings included in this paper will be updated (expected to be in December 2012) before the Board issues its report on the post-implementation review of IFRS 8.

Structure of the paper

4. The paper is organised as follows:
 - (a) Introduction.

- (b) Statement of the questions about IFRS 8 for which the Board is seeking information.
- (c) Research findings relevant to the questions posed by the Board about IFRS 8.
 - (i) Effect of identifying segments based on the management perspective.
 - (ii) Effect of the use of non-IFRS measurement bases in IFRS 8.
 - (iii) Effect of reporting those line items identified by the chief operating decision maker (CODM).
 - (iv) Effect of the disclosure requirements of IFRS 8 on how constituents do their jobs.
 - (v) Experience of constituents in implementing IFRS 8.
- (d) Impact of application of IFRS 8.
- (e) Staff summary and conclusions.
- (f) Questions for the Board.
- (g) Appendix 1 IFRS 8 *Operating Segments* Basis for Conclusions.

Introduction

5. This paper forms part of the post-implementation review of IFRS 8. The paper lists the questions about IFRS 8 for which the Board is seeking information. It then presents findings from academic studies and reports that are relevant to answering these questions. Further details of the studies and reports are included in June 2012 Board Paper 12C ‘Appendices: Summary of relevant literature to May 2012’.

Statement of the questions about IFRS 8 for which the Board is seeking information

6. The staff memorandum (Pitman, IASB Agenda ref 8, 19-21 March 2012) identified the following as the improvements to financial reporting that the Board expected from applying IFRS 8. The standard was expected to:
 - (a) Enable investors to see the business through management's eyes. This means that investors can predict future cash flows more reliably.
 - (b) Result in consistency between management commentaries and the financial statements, increasing investors' understanding of communications from the entity's management.
 - (c) Highlight the risks that management think are important by using management measures.
 - (d) Result in low incremental costs and substantial time savings by using management reporting. This will also mean that more interim reporting will be available.

7. The initial review work performed has also identified the following contentious issues that had arisen when the standard was being developed. Concerns were raised by those who thought that IFRS 8 would not represent an improvement to financial reporting:
 - (a) Segment analyses would be inconsistent between entities because internal management structures vary between entities.
 - (b) Geographical analyses would not be available for key line items.
 - (c) Use of non-IFRS measures would mean that investors could not understand the amounts reported.
 - (d) The number of reconciliations required between segment totals and the IFRS financial statements would reduce the understandability and perceived reliability of the reported amounts.
 - (e) Key information would be omitted if it is not regularly reported to the chief operating decision maker.

8. See also the IFRS 8 Basis for Conclusions (Appendix 1).

9. These benefits and controversial topics will be investigated by issuing a Request for Information (RFI) in June 2012. The questions raised in the RFI are designed to gather evidence about the effect of the key decisions taken by the Board in finalising IFRS 8. These decisions, and the questions included in the RFI, are:
- (a) Q1 Tell us about your background and experience in reporting operating segments or in using reports about operating segments.
 - (b) Q2 What was the effect on financial reporting of the IASB's decision to identify and report segments based on the management perspective?
 - (c) Q3 What was the effect of the IASB's decision to require reported line items to be measured on a basis consistent with amounts reported to the chief operating decision maker (CODM)?
 - (d) Q4 What was the effect of the IASB's decision to report only those line items regularly reviewed by the CODM?
 - (e) Q5 What effect have the disclosure requirements of IFRS 8 had on you and on how you do your job?
 - (f) Q6 What was your experience of implementing IFRS 8?

Research relevant to the Board's questions about impact of IFRS 8

10. This literature review presents findings from academic research and other reports that are relevant to assessing the impact of the application of IFRS 8 by reference to the questions posed in the RFI.
11. Two types of academic studies are included. Studies that are *published* (or accepted for publication) include data and conclusions that not will change. In contrast, the *working papers* are work in process and may be revised and developed further. Their data and conclusions may change. We also include *other reports* on IFRS 8 effects provided by a number of entities. The data and conclusions in these reports will not change.
12. The June 2012 Board Paper 12C provides a list of the academic studies in Appendix A and a summary of their findings in Appendix B. The other reports are listed and summarised in Appendix C.

13. The academic research reviewed consists primarily of studies of listed companies' financial statements before and after the application of IFRS 8. There are three published or forthcoming studies; namely Crawford et al. (2012), Nichols et al. (2012) and Pisano and Landriana (2012). The other academic studies are working papers.
14. Most studies are based on data extracted from the published financial statements. The studies contain useful descriptive statistics about the effect of the change from IAS 14 to IFRS 8 (eg changes in the number of reported segments and items disclosed). Some studies attempt to look deeper into issues, by linking changes in segment reporting with capital market consequences (eg information asymmetry effects; value relevance; and changes in analyst forecast accuracy and dispersion). Most studies are based on a single country, with a large range of variation in the number of companies included in each study. There is only one cross-country study with a substantial sample size (Nichols et al., 2012). Only one study (Crawford et al., 2012) has a substantial qualitative element (ie interviews with UK preparers, auditors and users).
15. The other reports referred to in this paper come from a variety of sources and provide both quantitative and qualitative analyses. They include feedback from regulators (ESMA, FRRP) and analyst societies (CFA Institute, SFAF).¹ Although the feedback from regulators and users is potentially of great interest, it is limited in some dimensions. For example, the extent of the problem is not quantified (eg FRRP) or the number of analysts with the view is not stated (eg ESMA).
16. The working papers included in this literature review have been completed in a relatively short time period. Consequently, they often include small samples (because of lack of data availability) and have not yet received peer feedback. Their findings and conclusions may change as the studies go through the peer review process. In our summary of the research that accompanies this paper (see Board Paper 12C), we do not critically review the studies and generally avoid highlighting limitations in the design of the study or in its execution. Our

¹ ESMA is the European Securities and Market Authority; FRRP is the UK Financial Reporting Review Panel; SFAS is La Société Française des Analystes Financiers.

objective is to include as many studies as possible that contain data that may be useful for answering the questions of interest to the Board in relation to the application of IFRS 8. We expect the working papers to be developed and extended over the next several months and for more studies to be released. Consequently, we plan to update the summary of the relevant literature to focus on the most useful studies in December 2012.

Key findings from the research

17. The academic research and other reports indicate the following:
- (a) The early application of IFRS 8 does not appear to be common.
 - (b) There is evidence from several countries that a large number of companies have not changed the number of reported segments under IFRS 8. However, we do not know if these same entities have changed the composition of their segments.
 - (c) On average, the number of reported segments has not decreased under IFRS 8. When a company changes the number of segments, an increase in the number of segments is more likely.
 - (d) On average, the number of items disclosed by segment has not declined. However, some key items are no longer disclosed by many companies (notably segment liabilities and capital expenditure).
 - (e) There is mixed evidence about whether IFRS 8 entity-wide disclosures are providing transparency about geographical operations. Although many entities provide geographical disclosures, some companies use broad country groupings and do not disclose items by country.
 - (f) Many companies include one or more non-IFRS measures of profit in their segment note with reconciliation to IFRS earnings. However, regulators have questioned the adequacy of the reconciliations in some cases (ESMA, 2012).
 - (g) The number of single-segment entities has decreased.

- (h) At this time, there is no academic evidence that application of IFRS 8 has reduced information asymmetry or the cost of capital or improved analysts' information environments. Studies have generally not considered the impact of IFRS 8 on preparers' costs, nor have they explored the standard's effect on the comparability of segment disclosure between entities and over time or the usefulness for investors of segment disclosure based on the management approach.

Q 1 Effect of identifying segments based on the management perspective

18. Identifying segments based on the management perspective was expected to enable investors to view the business through managements' eyes.
19. Several studies investigate the effect of identifying segments based on the management perspective. They consider if the number of reported segments and items of segment disclosure have changed after application of IFRS 8.

The management approach

20. Crawford et al. (2012, p. 35 in their report)² describe broad support for the management approach from a series of interviews with UK preparers, auditors and users.³ Eleven of 20 interviewees thought the management approach supplied more useful information (than the IAS 14 approach). Preparers welcomed the freedom of the management approach but many users were suspicious of management motives and of the potential of the approach to enable preparers to avoid disclosing negative information.
21. ESMA (2011) presents views that suggest, for some people, the change to the management approach is not beneficial. ESMA (2011, p. 22) reports feedback from analysts,⁴ noting that the geographical splits made by companies do not represent the real way in which businesses are managed, giving rise to questions

² Page references are to source documents, ie the academic studies or other reports.

³ Users were from these sectors or entities: asset management, an NGO/charity, corporate finance, a private investor, and an investment trust.

⁴ ESMA (2012) refers to 'analysts' without providing any more details of the type of analyst or their industry sector.

about the usefulness and relevance of segment information. In addition, some analysts hold the opinion that management is not providing a ‘view through the eyes of management’. They consider that there are significant differences between what is communicated to management and what is communicated to the shareholders.

Number of reported segments

22. Many studies present data about the number of segments and the content of segment disclosure under IFRS 8. Studies consistently show that many companies did not change the number of reported segments. Both the European sample of Nichols et al. (2012, n = 335) and the UK sample of Crawford et al. (2012, n = 150) show that 62 per cent of companies did not change the number of reported operating segments. For an Australian sample of 1,617 entities, Bugeja et al. (2012) find that 79 per cent made no change in the number of operating segments.
23. When companies do change the number of reported segments, an increase in the number of segments is more likely. Nichols et al. (2012, n = 335) report that 27 per cent of European companies increased the number of segments disclosed. Similarly, Bugeja et al. (2012) find that 17 per cent of Australian companies increased the number of operating segments.
24. Comparable results are observed in other countries. For an Italian sample, Pisano and Landriana (2012, n = 124) report that 75 per cent of companies made no change and 14 per cent increased the number of segments. Weissenberger and Franzen (2012a, n = 71) report that 68 per cent of German companies made no change in the number of reported segments, while 18 per cent increased the number of segments. Heem and Valenza (2012, n = 37) find that 78 per cent French companies made no change, but they observe that 16 per cent report fewer segments.
25. Vorst (2012, n = 25) focuses on early applying companies from eight EU countries and reports a similar pattern. He finds that 11 companies (44 per cent) made no change in number of reported segments and another 11 companies (44 per cent) increased the number of reported segments.

26. The results of research about the number of segments from a range of studies (listed alphabetically) is shown below:

Author	Sample size	Geography	No change per cent	Increase per cent
Bugeja et al. (2012)	N = 1,617	Australia	79	17
Crawford et al. (2012)	N = 150	UK	62	23
Heem and Valenza (2012)	N = 37	France	78	6
Nichols et al. (2012)	N = 335	12 EU countries, Norway and Switzerland.	62	27
Pisano and Landriana (2012)	N = 124	Italy	75	14
Weissenberger and Franzen (2012a)	N = 71	Germany	68	18

27. ESMA (2011) reports on a review of consolidated accounts for 2009 and 2010 of 118 listed entities from nine European countries. They observe that 74 per cent of entities report the same number of segments under IAS 14 and IFRS 8, 19 per cent increased the number and 6 per cent decrease the number (for reasons other than disposal of activities).⁵
28. KPMG (2010, p. 18) reviews accounts of 81 companies from 17 European countries, Israel and Hong Kong. They report an increase in the average number of reported segments from 4.6 to 5.2.
29. ESMA's (2011, p. 21) comments from analysts (from CRUF and SFAS)⁶ suggest that some companies change segments from year to year, casting doubt on the 'relevance and reliability' of segment disclosure.

Type of segment

30. When IFRS 8 was issued many were concerned that using the management perspective would result in a loss of geographical information.

⁵ The total of 99 per cent is due to rounding error.

⁶ CRUF is Corporate Reporting User Forum; SFAS is La Société Française des Analystes Financiers.

31. Many studies report that companies are more likely to disclose operating segments based on deliverables rather than on geographical segments or a mix of segments. However, this lack of geographical segmentation is supplemented by entity-wide disclosure. For European companies, Nichols et al. (2012, n = 335) report that entity-wide disclosures include geographical segment information for 77 per cent of their sample companies. The authors thus conclude IFRS 8 does not lead to a loss of geographical segment information.
32. KPMG (2010) reports that under IFRS 8 geographical disaggregation was predominant in certain industry sectors (eg food and drink, consumer goods, communication and media). (Prior practice under IAS 14 was not discussed).
33. Weissenberger and Franzen (2012a, n = 71) report entity-wide disclosure of geographical segments for 76 per cent of German companies with a further 13 per cent providing a mix of product and service and geographical segment disclosures. They also find that the number of geographical segments (in entity-wide disclosures) under IFRS 8 is significantly higher than the number of secondary segments under IAS 14.
34. However Weissenberger and Franzen (2012a) express concern about the quality of geographical disclosures under IFRS 8. They report that many companies continue to use broad geographical categories of supranational regions or continents (47 per cent under IFRS 8 and 56 per cent under IAS 14). They also question compliance with IFRS 8 by 29 companies that appear to have material foreign sales (average 58 per cent) but do not make revenue disclosures for individual countries. In addition, they note that the number of line items disclosed in each geographical segment has decreased significantly.

Consistency with other narrative disclosure

35. An expected benefit of the management perspective was that the reported operating segments would agree directly with the management commentary.
36. Crawford et al. (2012) report that some UK companies' discussion of business structure in narrative reports may not be consistent with IFRS 8 segment disclosures. They state:

The mean number of segments in the segmental notes post IFRS 8 is four by products and services and four by geography, but on average the rest of the annual report refers to seven segments by products and services and 34 countries.

37. Crawford et al.'s (2012) UK result contrasts with that of Nichols et al. (2012) who find that 96 per cent of European companies' segment information is consistent with "other sections" (that is, narrative reports including a management report, financial review or MD&A) of the annual reports. Nichols et al. (2012) also point to a high level of comparability of disclosure of segment information and discussion of segments elsewhere in the annual report under IAS 14.
38. Backhuis and Camfferman (2012) conclude that segment reporting was largely consistent with discussion in the Directors' Report for 50 large European companies. They find significant differences for only two companies. Commenting on French companies, SFAF (2012) present the view that segment information is generally consistent with the discussion of sectors in management commentary reports and presentations. The report highlights only one exception from the sample of 53 companies.

Is the CODM identified?

39. Nichols et al. (2012, n = 335) find that 36 per cent of European companies disclose the identity of the CODM (eg Board of Directors, senior management group, senior individual executive). Only 3 per cent of companies specify the Board of Directors as the CODM. Results appear to differ by country as Crawford et al. (2012, n = 150) reveal that in the UK the majority of companies (69 per cent) disclose the name of the CODM while in Australia 82 per cent of companies disclose the CODM's identity (Kang and Gray, 2012, n = 189).
40. ESMA (2011) reports that 41 per cent of issuers who provide the identity of the CODM named the Board of Directors, even though the Board may include non-executive directors. ESMA (2011) concludes there may be some confusion among users about the definition of CODM in IFRS 8.

41. KPMG (2010) observes that one third of their sample companies provide the identity of the CODM. Within this group, 75 per cent indicated that the CODM was a group of executive directors or a similar governing body.
42. A majority of the UK stakeholders interviewed by Crawford et al. (2012) thought it useful to see the information that was produced internally for the CODM. However, only six (out of 20) respondents (mainly auditors and users, not preparers) thought the identity of the CODM should be provided.

Early application of IFRS 8

43. An expected benefit of using the management perspective was that application of IFRS 8 would be easier for preparers, resulting in:
 - (a) low costs of initial application and lower ongoing costs;
 - (b) greater interim disclosure of segments; and
 - (c) a greater number of entities applying IFRS 8 early.
44. Nichols et al. (2012) find that among 335 European companies, only 32 were early appliers of IFRS 8. In Australia, Kang and Gray (2012, n = 189) report that only 7 per cent of companies chose to apply the standard before it was mandatory.
45. Vorst (2012) reported on 25 EU companies that early applied the standard. Eleven (44 per cent) did not change their number of segments while a further 11 increased the number of segments. Twelve companies (24 per cent) did not change the number of line items and a further 12 companies decreased the number of items.
46. The UK's FRRP reviewed 2009 interim account and 2008 annual accounts of early appliers. They identify several concerns about segment reporting, although they do not disclose the magnitude of the problem (ie how many companies were observed to have defective reporting). They comment on four issues:
 - (a) Only one segment is reported but the company's operations appear to be diverse.
 - (b) The segments in the narrative report are different to those in the segment notes in the financial statements.

- (c) Titles of directors and management imply an operating structure that is not reflected in the operating segments.
- (d) The narrative report focuses on non-IFRS measures but the segment disclosures are based on IFRS amounts.

Single-segment entities

Some studies investigate whether fewer companies reported a single sector under IFRS 8. Nichols et al. (2012, n = 335) observe that 23 European firms reported a single segment under IAS 14 compared with 20 companies under IFRS 8. Based on Australian data, He et al. (2012, n = 173) find the number of single-segment companies decreased by 7 per cent while Bujega et al. (2012, n = 1,617) report a 12 per cent decrease.

Aggregation of segments and usefulness of reported segments

- 47. In general, academic studies do not investigate aggregation of operating segments into reportable segments. Backhuis and Camfferman (2012, n = 50) review whether non-financial companies from FTSE Eurotop 100 explain how segments are identified. They report that only 69 per cent of companies discuss the factors and that the discussion provided is superficial.
- 48. ESMA (2011, p. 11) find that aggregation of segments was explicitly mentioned by only 29 per cent of issuers. Regulators are “sceptical whether the segment information reported by the majority of users reflects the detailed internal management information used in the business to make operating decisions”. KPMG (2010) also points to a lack of disclosure about how segments have been aggregated.
- 49. Crawford et al. (2012, p. 36) asked UK interviewees whether “operating segments were a more useful way of disaggregating results of an organisation than the primary and secondary segments approach mandated under IAS 14R”. Preparers supported the change while the majority of users and auditors expressed concerns about the variation permitted and the lack of comparability that may emerge.

50. ESMA (2011, p. 21) reports views of analysts on aggregation of segments. They consider that companies minimise the number of reportable segments in the notes and therefore avoid providing meaningful information. The concept of similar economic characteristics is not always properly applied and in some cases it is not clear whether there are any similarities at all.
51. SFAF (2012) notes that many companies have unallocated amounts in their segments notes that reduce the comparability of information. Ten companies in the sample of 53 French entities have unallocated amounts that represent more than 10 per cent of earnings. The report concludes that analysts' concerns about loss of comparability of information (expressed during the ED phase prior to IFRS 8) were justified.

Q 2 Effect of the use of non-IFRS measurement bases

52. When IFRS 8 was issued, some investors were concerned that the measurement of some key information would not be easy to understand and, in particular, that alternative non-IFRS profit measures might be confusing.

Measures of profit

53. Nichols et al. (2012, n = 335) conclude that IFRS 8 leads to more information about segment profitability for their European sample. They find that companies report significantly more measures of segment profitability under IFRS 8. For example, the proportion of companies reporting two profitability measures increased from 14 per cent to 19 per cent and the proportion reporting three measures increased from 4 per cent to 6 per cent. In addition, companies reporting one measure declined from 82 per cent to 75 per cent.
54. Nichols et al. (2012, n = 335) find that 83 per cent of European companies use a non-GAAP measure of profitability in their segment report. Comparison of the measures used when reporting according to IAS 14, then according to IFRS 8, are as follows:
 - (a) operating profit (no change, reported by 57 per cent of companies under both standards);

- (b) EBIT (from 19 per cent to 23 per cent);
 - (c) EBT (from 20 per cent to 56 per cent); and
 - (d) EBITDA (from 8 per cent to 16 per cent).
55. Interestingly, Crawford et al.'s (2012, n = 150) results for UK companies contrast with Nichols et al.'s (2012) results for European companies. Only a minority of UK companies include non-IFRS measures in their segment disclosure. Crawford et al. (2012, p. 40) states:
- Most of these preparers indicated that their companies had used non-IFRS measures when reporting on profitability, a find that is not reflected in the analysis of 150 sets of annual reports.
56. Crawford et al. (2010) reported that preparers in particular commented on the usefulness of non-IFRS measures, although users were more sceptical. Users also commented on the lack of non-IFRS measures reported by companies in their segment notes, although the use of such measures might reasonably be expected when the management approach is used.
57. KPMG (2010) finds a high level of consistency in the profit and loss measurement used by companies in the same sector. For example, 80 per cent of companies in the communication and media sector used EBITDA or adjusted EBITDA, while 80 per cent of insurance sector companies use operating profit or adjusted operating profit.
58. ESMA's (2011) review is consistent with Nichols et al.'s (2012) study. ESMA (2011) reports that 93 per cent of issuers use IFRS as the basis of segment information and 47 per cent use non-GAAP measures such as EBIT and EBITDA. They noted that, for 71 per cent of the sample, information about non-recurring and reconciling items was disclosed in accordance with IFRS 8. However, information about how profit and loss, assets and liabilities are allocated to reporting segments and reconciliation between segment information and financial statement amounts was "often not disclosed properly" (p. 3).
59. The comments from analysts presented by ESMA (2011) suggest that the use of non-GAAP measures and adjusted figures means that more precision in the

reconciliations between IFRS 8 figures and financial statement is required.

Analysts consider that the present levels of reconciliation (on a total reportable segment basis) are inadequate.

60. SFAF (2012) also point to the use of a range of non-IFRS earnings measures. Around 40 per cent of their CAC40 and NEXT20 sample present a non-GAAP earnings measure (without an IFRS earnings measure). Twenty-four companies (45 per cent) do not reconcile their non-GAAP measure to IFRS earnings.
61. Company Reporting (2011) notes that companies show a “healthy variety” in the way in which segments are distinguished and in the number of segments reported, which is consistent with the permissive nature of IFRS 8. They believe that management has “excessively broad” scope to adjust figures, hindering comparability from investors’ and analysts’ perspectives and that greater explanation of the reason for choosing a published measure would be helpful (p. 4)
62. Crawford et al.’s (2012) 20 UK interviewees highlight different views about the comparability of IFRS 8 information. One user saw IFRS 8 as a failure because of the loss of comparability. On the other hand, a preparer defended the management approach, because it allows the company to explain the results with reference to the way in which the business is managed (p. 51).

Q 3 Effect of reporting line items identified by CODM

63. When IFRS 8 was issued, some investors were concerned that key segment information would not be reported unless it was regularly reviewed by the CODM.

Number of reported line items in segment disclosure

64. Many studies indicate that companies provide fewer line items in segment reports under IFRS 8 than were reported in accordance with IAS 14. Crawford et al. (2012, n = 150) observe a significant decline in the number of line items reported for operating segments UK companies. Although both He et al. (2012, n = 173 Australian companies) and Weissenberger and Franzen (2012a, n = 71 German

- companies) report fewer line items under IFRS 8 in their studies, the change is not statistically significant.
65. IAS 14 provided a list of specific line items of disclosure for primary and secondary segments. IFRS 8 provided a different list of items, along with the requirement that the items are to be disclosed if they are reviewed by the CODM. Consequently, studies find that disclosure of line items has changed under IFRS 8. For example, He et al. (2012, n = 173) report an increase in the number of Australian companies disclosing intersegment revenue, interest expense, interest revenue, income tax and income, while the number disclosing liabilities, capital expenditure and assets by segment decreased.
 66. Nichols et al. (2012, n = 335) find little change in the number of European companies reporting segment revenue and assets under IAS14 and IFRS 8. However, the number reporting capital additions and liabilities by segment declined significantly (47 per cent to 13 per cent and 87 per cent to 71 per cent, respectively). More companies disclose segment revenue to external customers (from 87 per cent to 91 per cent).
 67. Similarly, Crawford et al. (2012, n = 150) report that fewer UK companies disclose amounts for all of the line items that were required under IAS14, including capital expenditure (from 83 per cent to 77 per cent), liabilities (from 84 per cent to 60 per cent), and total carrying amount of assets (from 87 per cent to 83 per cent). Budeja et al. (2012, n = 1,617) and Weissenberger and Franzen (2012a, n = 71) also point to fewer line item disclosures under IFRS 8 for these items for Australian and German companies respectively.
 68. Crawford et al. (2012, n = 150) report some UK companies disclose items for interest revenue, interest expense, income tax expense and minority interests under IFRS 8.
 69. Comments from analysts reported by EMSA (2011) state that analysts expected to find more information about operating cash flow, operating assets ratios, working capital and debt by segment, because this information is essential for the CODM in allocating resources and assessing performance of operating segments.

Q4 Are the disclosures required by IFRS 8 adequate?

Entity-wide disclosures

70. Crawford et al. (2012) report that some UK interviewees did not understand the meaning of entity-wide disclosures. Many respondents, particularly users, saw them as a ‘replacement’ for the secondary segments of IAS 14 and appeared to understand entity-wide disclosures as geographical information rather than the information required by paragraphs 31-33 of IFRS 8.
71. ESMA (2011) observes that 58 per cent of issuers provided information about revenue and non-current assets by geographical area. However, they report that the notes to the financial statements rarely present information for individual foreign countries and there is no ‘common understanding’ of how the materiality concept should be applied in this context (p. 3, 17).

Required reconciliations

72. Crawford et al. (2012, n =355) report that the number of UK companies providing a reconciliation of segment revenue and entity revenue is the same (85 per cent—85 per cent) but the number reconciling segment and entity operating profit, assets and liabilities is lower than under IAS 14 (78 per cent to 68 per cent; 84 per cent to 79 per cent; and 72 per cent to 52 per cent respectively). Under IFRS 8 fewer companies reconcile segment data to IFRS data based on *profit after tax* than under IAS 14 (57 per cent to 45 per cent). More companies reconcile segment data to *profit before tax* (13 to 29 per cent) reflecting greater use of profit before tax as an earnings measure in segment reporting.
73. Blase et al. (2012) report that, for 101 German listed companies (in the DAX, MDAX and SDAX), the quality of reconciliations was poor. Only around 50 per cent of companies fully complied with IFRS 8 requirements. Similarly, SFAF (2012) find that around 45 per cent of French companies (based on a sample of 53 listed entities included in CAC40 and NEXT20) did not provide sufficient information to allow readers to reconcile the entity’s segment measures with IFRS measures.

Impact of application of IFRS 8

74. Has the application IFRS 8, particularly the management approach, been beneficial? A few studies attempt to provide data relevant to this question.⁷
75. In relation to properties of analyst forecasts, He et al. (2012) study 173 Australian companies.
- (a) They test the association of analyst forecast accuracy and dispersion and explanatory variables (size, volatility and forecast horizon) and find that analyst accuracy and dispersion are not significantly different in the immediate pre- and post-IFRS 8 period.
 - (b) Additional tests of levels of information uncertainty and analyst consensus show that these are not significantly different in the pre- and post-IFRS period.
76. Considering value relevance of segment information, Kajuter and Nienhaus (2012) study up to 110 German companies. They report:
- (a) Adding segment earnings (but not segment assets) to a model including book value of equity and book value of assets improves the explanatory power of the model. The authors conclude that information users find measures of segment earnings (based on EBIT) to be useful.
 - (b) Comparing IAS 14 data from the year prior to IFRS application with IFRS 8 data for the same year (because companies restate the prior year data when they apply IFRS 8) shows that value relevance is greater for IFRS 8 data because it is more strongly associated with share price than the IAS 14 data.
77. Investigating information asymmetry, Weissenberger and Franzen (2012b) compare 55 German companies who applied IFRS 8 early in 2007 and 2008 with 135 mandatory 2009 appliers. They find no significant difference in change in bid-ask spreads between the two groups and conclude that IFRS 8 did not reduce information asymmetry for German companies.

⁷ Explanations of what is meant by tests of association, value relevance and information asymmetry are provided in Appendix A of June 2012 Board Paper 12C.

Staff summary and conclusions

78. The academic research and other reports are clear on the following points:
- (a) The number of reported segments has not decreased. When there is a change, an increase in number of segments is more likely.
 - (b) There is strong evidence that a large number of companies have not changed the number of reported segments under IFRS 8. We do not know if these same entities have changed the composition of their segments.
 - (c) Segment reporting (ie number of segments) may not have changed for many entities because the risk and rewards approach of IAS 14 is aligned with the management approach of IFRS 8.
 - (d) The number of single-segment entities has decreased, suggesting more information is now available for these companies.
 - (e) There has been a decline in the number of items disclosed by segment, most prominently in relation to segment liabilities and capital expenditure. Consequently, it is possible that key information is no longer disclosed because it is not reported to the CODM.
 - (f) There is concern about material amounts not being allocated to segments, thus reducing the quality of segment information.
 - (g) There is mixed evidence about whether IFRS 8 entity-wide disclosures are promoting transparency about geographical operations. Although many entities provide geographical disclosures, some companies use broad country groupings and do not disclose items by country leading to a lack of transparency. Evidence from interviews suggests there is confusion among preparers, auditors and users about the concept of entity-wide disclosure.
 - (h) There is limited evidence of early adoption of IFRS 8 and of changes in numbers of segments and items of disclosure among entities making early application of the standard.

- (i) Many companies include one or more non-IFRS measures of profit in their segment note. One major study suggests this measure is likely to be included in the income statement and, if not included, reconciliations are likely to be provided. If disclosed and reconciled, these non-GAAP measures should be useful for users.
 - (j) ESMA (2012) comments on the prevalence of non-GAAP measures such as EBIT and EBITDA and accompanying reconciliations. However, ESMA (2012) notes that in some cases, disclosure about how elements are allocated to segments, and reconciliation between segment and financial statement amounts, are not provided. Consequently, there is evidence of inadequate reconciliations in some cases, raising concerns about the reliability and understandability of information.
79. There are several questions that are not well covered in the academic research, including:
- (a) We do not know whether IFRS 8 enables investors to see through managements' eyes. Some preparers claim that it does, but users seem more sceptical (Crawford et al., 2012). We did not find any IFRS 8 research that has addressed the question of whether the standard permits investors to better predict future cash flows.
 - (b) Although there is evidence of consistency between segment notes and management commentary (Nichols et al. (2012), we do not know whether this consistency has increased investors' understanding of managements' communications.
 - (c) Evidence that some companies do not use their measures of segment earnings in their presentations to investors (SFAF, 2012) is not consistent with the segment measures improving management communication.
 - (d) We do not know whether the use of management measures in segment reporting under IFRS 8 has highlighted the risks that management thinks are important.
 - (e) We do not know whether IFRS 8 reduces the time or cost incurred in segment reporting. There is evidence of no change in the *number* of

segments under IFRS for a large number of companies. An unanswered question is whether this result implies that segment reporting is carried out in much the same way under IFRS 8 and IAS 14.

80. Some of the reasons why the questions of interest to the Board are not adequately covered include the following:
- (a) IFRS 8 is mandatory for 2009 financial year-ends. In some countries, only two years' post-application data are available. For example, studies of IFRS 8's role in improving prediction of future cash flow can be carried out as more data becomes available.
 - (b) Most studies use the archival empirical method. There are many questions of interest that cannot be answered using this method because of its focus on publicly available financial statement and capital market data.
 - (c) Fewer researchers are willing and able to carry out projects with a qualitative element (eg surveys, interviews, experiments and case studies). These techniques could shed light on the question of whether consistency between segment information in the notes and the management commentary improves communication between management and investors. These methods would also be useful to explore the extent to which IFRS GAAP information is used in internal management reporting. (The reporting of IFRS GAAP information in segment notes under IFRS 8 implies that IFRS information is used in the internal decision-making process.)
 - (d) However, even if researchers use qualitative approaches, some of the data is sensitive and may not be revealed by companies.

Next steps

81. This literature review includes published studies and working papers on the impact of IFRS 8 as at May 2012. Since many studies are work in progress, their findings and conclusions may change as the studies are developed further and undergo the peer review process. Consequently, we plan to update the summary

of the relevant literature in December 2012 to include revisions to working papers and the final results of any studies that have been published.

Questions for the Board

Question 1

- (a) Do the Board have any questions on the external research findings to date?
- (b) Would the Board like any further areas to be researched at this time?

A1. Appendix: IFRS 8 *Operating Segments* Extract from Basis for Conclusions

The extracts below lists the benefits of application of FAS 131 and application of the management approach as stated in the Basis of Conclusions.

Benefits of application of FAS 131: Academic research findings

BC6 Most of the academic research findings on segment reporting indicated that application of SFAS 131 resulted in more useful information than its predecessor, SFAS

14. According to the research, the management approach of SFAS 131:

- (a) increased the number of reported segments and provided more information;
- (b) enabled users to see an entity through the eyes of management;
- (c) enabled an entity to provide timely segment information for external interim reporting with relatively low incremental cost;
- (d) enhanced consistency with the management discussion and analysis or other annual report disclosures; and
- (e) provided various measures of segment performance.

Benefits of application of the management approach

BC9 In the Basis for Conclusions on ED 8, the Board noted that the primary benefits of applying the management approach in SFAS 131 are that:

- (a) entities will report segments that correspond to internal management reports;
- (b) entities will report segment information that will be more consistent with other parts of their annual reports;
- (c) some entities will report more segments; and

(d) entities will report more segment information in interim financial reports.

In addition, the Board noted that the proposed IFRS would reduce the cost of providing disaggregated information for many entities because it uses segment information that is generated for management's use.