EUROPEAN eaa ACCOUNTING ASSOCIATION

24 October 2023

EFRAG
Mr. Vincent Papa
35 Square de Meeûs
1000 Brussels
Belgium

Dear Mr Papa,

RE: Submission in response to EFRAG's Request for comments on the IASB's PIR IFRS 15 *Revenue from Contracts with Customers*

On behalf of the EAA's Financial Reporting Standards Committee the following author team produced a comment letter in response to the IASB's PIR IFRS 15 *Revenue from Contracts with Customers.* Elisabetta Barone (Brunel University London and Cork University Business School), Stephani Mason (DePaul University), Araceli Mora (Universidad de Valencia) and David Procházka (Prague University of Economics and Business) want to contribute to the IASB's due process by summarizing relevant findings based on empirical evidence from academic research. The purpose of the EAA's FRSC and the EAA members is to bring contributions of academic research to the standard-setting process related to Financial Reporting. With this letter the author team shares its comment letter that has been submitted to the IASB in response to their request for information on the PIR IFRS 15 *Revenue from Contracts with Customers* with EFRAG.

Summary of our views

Our starting point was identifying recently published papers, working papers, and dissertations that delve into various aspects of revenue recognition after implementing IFRS 15. We also consider the work on ASC 606, as the requirements of both standards are similar, and many of the results could be extrapolated, with the caveats caused by the different contexts in which IFRS 15 is applicable. From those papers, we selected and analysed those that we considered relevant and related to the PIR Request for Information.

The literature on the direct accounting effects of the new standard (such as measurement, recognition, presentation, and disclosure) is particularly rich for disclosure and transition (i.e., Q7 and Q8 in the PIR). However, there is less prominent and rather indirect evidence available for some specific topics of the 5-step model, namely timing of revenue recognition (Q4 in the PIR), transaction price (Q3 in the PIR), and principle-agent consideration (Q5 in the PIR). The most robust evidence is available for (widely defined) user and stakeholder benefits, including capital market effects and preparers' costs (Q1 in the PIR). Additionally, the academic literature provides multiple examples of real effects (Q11 in the PIR) for the new standard.

The main findings from academic research are:

- IFRS 15 is decision-useful for many stakeholders;
- the adoption is associated with high implementation costs;
- the impact of the new standard on the business is complex, with implementation driving significant investment in other areas, bringing additional benefits beyond accounting;
- accounting figures are more comparable; disclosures are more relevant to users;
- users value the full retrospective approach to transition more;
- any negative effects identified appear to be temporary.

We want to highlight that compared to other standards, the number of studies related to IFRS 15 (and ASC 606) at the date of writing this comment letter is relatively limited. Most of the studies we considered potentially relevant are still working papers (not published in peer-reviewed journals but distributed on websites or databases). Presumably, many are not finalised

but are pending the academic peer review process. However, we still believe these studies are relevant and, thus, were of interest to the Comment Letter team.

Despite the limitations, we believe that the results of these academic studies may be of great interest to the Board and that additional and more complete academic evidence on IFRS 15 will be available in the coming years.

If you would like to discuss any issue further, please do not hesitate to contact us.

Yours sincerely,

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Comment Letter

Background

When developing our views to the PIR questions, we proceeded as follows. First, we extensively searched for papers (both published and works-in-progress) focusing on any topic related to IFRS 15 (or ASC 606). Second, we categorised the papers by the topics examined, the sample of firms and countries included, and the methodology applied. Third, we determined the papers' overall scientific quality and significance. We linked the relevant papers to the corresponding PIR questions based on the process described. We consider the academic evidence summarised below to be of potential interest to the IASB when deliberating future amendments to IFRS 15.

Question 1—Overall assessment of IFRS 15
a) In your view, has IFRS 15 achieved its objective? Why or why not? Please explain whether the core principle and the supporting five-step revenue recognition model provide a clear and suitable basis for revenue accounting decisions that result in useful information about an entity's revenue from contracts with customers. If not, please explain what you think are the fundamental questions (fatal flaws) about the clarity and suitability of the core principle or the five-step revenue recognition model. **(b) Do you have any feedback on the understandability and accessibility of IFRS 15 that the IASB could consider:** **(i) in developing future Standards; or** **(ii) in assessing whether, and if so how, it could improve the understandability of IFRS 15 without changing its requirements or causing significant cost and disruption to entities already applying the Standard—for example, by providing education materials or flowcharts explaining the links between the requirements?** **(c) What are the ongoing costs and benefits of applying the requirements in IFRS 15 and how significant are they?** If, in your view, the ongoing costs of applying IFRS 15 are significantly greater than expected or the benefits of the resulting information to users of financial statements are significantly lower than expected, please explain why you hold this view.

Evidence from research

The accounting effects of a new standard can have several different outcomes (Napier and Stadler, 2020). A new accounting standard necessarily leads to accounting effects, including changes in recognition, measurement, presentation, and/or disclosures. While these are direct effects of the standard, they may also affect how companies communicate accounting information to stakeholders and how external and internal users understand it. In the case of public firms, these accounting effects might have capital market implications (*e.g.*, market capitalisation, cost of debt, trading volume). Finally, a new standard will likely result in implementation and ongoing application costs and may (unintentionally) influence companies' business decisions (for example, forcing entities to consider accounting requirements when structuring their transactions), which might have additional costs or benefits. Ultimately, these business decisions will influence company cash flows.

In response to this question on "the overall assessment of IFRS 15," we classify and summarise the empirical evidence on IFRS 15 (or ASC 606) according to the accounting, information, capital market, and real effects, dividing between implementation costs and other real effects and unintended consequences. Most studies mentioned in response to Q1 are developed further later in this comment letter when we provide answers to more specific PIR questions.

Accounting effects

Napier and Stadler (2020), using the STOXX Europe 50 companies on 31 December 2018, found that IFRS 15 had relatively little impact on the recognition and measurement of revenue. Similarly, Ali and Tseng (2023) found no significant change in revenue amounts after ASC 606 adoption using a sample of U.S. firms over 2013-2020. In a survey of users and preparers (García Osma, Gómez-Conde, and Mora, 2023), all respondents agree that the impact on the income statements and balance sheet is minimal, while financial statement disclosures have the highest impact. Finally, Choi, Kim, and Wang (2023) and He (2023) identify a higher quality of sales accruals and a better mapping of revenue into cash flows.

Information effects and capital market effects

Here, we focus on information effects for external users and capital market effects and analyse the information effects for internal users in the section on real and other relevant effects. The empirical literature provides evidence of an increase in informativeness after adopting the new revenue standard. An example of this evidence is the positive impact on the liquidity of shares (measured by the bid-ask spread). For a sample of U.S. drug development firms adopting ASC 606, Cetin (2022) shows that increased disclosure reduces information asymmetry between managers and investors, resulting in significantly lower bid-ask spreads and better access to external capital. However, their finding on access to capital is conditional on an acceleration in revenue.

Ferreira (2021), analysing 3,475 U.S. firms, finds that the implementation of ASC 606 increases liquidity through the precision channel (the change in the accounting report's ability to reflect economic events) and the comparability channel (the increase in comparability across reporting entities). In a large US sample study, Chung and Chuwonganant (2019) show that earning announcements accompany larger decreases in the bid-ask spread, the price impact of trades, return volatility, and larger increases in the quoted depth, trading volume, and price efficiency after implementing ASC 606. These results indicate that ASC 606 has improved the informativeness of earnings and changed the effect of earnings announcements on the firm's information and trading environments accordingly.

However, the effect on analysts' forecast errors and dispersion is mixed. On the one hand, a study of Russell 3000 firms by Lee, Lee, and Sadka (2022) shows that firms experience increases in uncertainty regarding future earnings captured by both higher analyst absolute forecast error and analyst forecast dispersion. Hao and Pham (2023) consider early adopters of ASC 606 and find it decreases in analyst forecast accuracy and consensus. Specifically, their results reveal that revenue forecast dispersion and error increase by approximately 16% and 11%, respectively, after adoption. This finding suggests that the standard's complexity makes it difficult for analysts to forecast revenue after adoption. However, the authors conclude that the adoption effects are mainly temporary and focused on firms more affected by the new standard.

Temporal results demonstrate that the post-adoption increase in analyst forecast errors is strongest in the first two quarters after adoption, which fade to insignificance as analysts become

adept at predicting revenue under the new standard. However, the post-adoption increase in analyst dispersion primarily occurs after the second quarter, suggesting that analysts may experience a prolonged shift in consensus after the new standard's implementation. The authors also find that firms using the modified retrospective method are associated with a higher analyst forecast error than firms using the full retrospective adoption method.

On the other hand, Ali and Tseng (2023) identify a moderate decrease in the value relevance. Further, they attribute the evidence of a moderate increase in forecast errors and dispersion to the trade-off between timeliness and precision and the impact of requirements concerning the accounting treatment of variable consideration. They find a moderate reduction in the revenue-return relation and increased analyst errors and dispersions for long-revenue-cycle firms post-ASC 606. The standard's requirement to recognise variable considerations before resolving the uncertainty partially explains their findings and highlights the trade-off between timeliness and precision.

Regarding the specific disclosure requirements (disaggregation of revenue), Hinson, Pundrich, and Zakota (2022) focus on predictive value as captured by analysts' revenue forecast accuracy and dispersion and find that disaggregating firms experience an increase in analyst revenue forecast accuracy and a decrease in dispersion, suggesting that the disaggregation requirements significantly improved decision-usefulness. We review this paper study in more detail in response to Q7. He (2023) shows an increase in future cash flow predictability that comes from the guidance on contract revenue (ASC 606) and the guidance on contract costs (ASC 340-40), along with an increase in the combined information content of financial statements and the capital market efficiency.

For comparability, Choi, Kim, and Wang (2023) find that a principles-based system enhances comparability across firms in a given industry in the US context (ASC 606)[2], and this positive effect materialises in a higher value relevance of revenue information. Tillet (2023) also found that firms in different industries with similar revenue-generating transactions experience increased revenue comparability and decreased revenue comparability for firms in the same industry with similar revenue-generating transactions. These findings are consistent with theoretical research that shows that, despite regulators' emphasis on comparability, the optimal accounting standard is unlikely to achieve perfect comparability across all firms under the same regime (Wu and Xue 2023). We analyse additional comparability evidence from specific disclosure requirements aspects in response to Q7.

Lessis and Karampinis (2023) find no evidence of change in value relevance, as well as evidence that uncertainty regarding future earnings increases the cost of debt for affected firms as covenants are used less in debt contracts due to the decreased effectiveness of earnings-based covenants (Lee, Lee, and Sadka, 2022).

[2] The study is conducted for ASC 606 on a sample of US firms from software and electronic industry. We note that the US GAAP pre-adoption context (the existence of industry-specific guidance, often inconsistent) was different compared to IFRS.

Implementation and ongoing costs

Ali and Tseng (2023) show that ASC 606 imposes substantial implementation costs on all adopting firms. Further, Altaji and Alokdeh (2019) find that companies face difficulties in applying IFRS 15 when preparing financial statements from the viewpoint of Big Four auditors in Jordan and attribute this change in the information technology used, the establishment of new internal controls, and the availability of qualified human resources to meet the application requirements of the standard.

Arguing the limited access to data, Enache, Moldovan, and Huang (2023) attempt an indirect estimate of the lower bound by examining the number of accounting job postings related to adopting IFRS 15 (and IFRS 16). Firms posted more job advertisements for the revenue recognition positions (continuously over a more extended period), with 0.4 additional revenue recognition jobs and $40,000 in additional personnel costs per year. As expected, they identify a higher impact for the firms with more complex business models.

Studies employing interviews and/or surveys of preparers provide more direct analyses of the implementation and ongoing costs. For the preparers' views, Napier and Stadler (2020) highlight that there is indirect evidence that implementing and applying IFRS 15 is costly because it requires investments in information systems and related processes. Davern, Giles, Potes, and Yang (2019) examine the process of implementing AASB 15 with a survey of 143 preparers reflecting on the issues they confronted while implementing AASB 15. Preparers in the study of García Osma, Gómez-Conde, and Mora (2023)[3] also argue that the transition to IFRS 15 has significant implementation and ongoing costs. However, those changes in the IT systems and MCS drive changes in business decisions and have real effects that might be beneficial. The vast majority of the changes in the IT and MCS are due to the new disclosure requirements. We analyse this evidence in more detail in Q7 and Q11.

Conclusion

Although the research is not yet complete, it appears that IFRS 15 is decision-useful for many stakeholders.

There are several effects of the new standard. Regarding the accounting effects, the highest impact is on disclosures. These accounting effects generate positive information and capital market effects. Revenues map better into cash flows, supporting the increased perceived relevance and faithful representation. Further, required disclosures provide more useful information for decision-making. The comparability of financial statements, except for certain limiting factors, has increased. Increased disclosures mitigate the information asymmetry problem and, thus, reduce bid-ask spreads. More faithful representation increases the value relevance of revenue (earnings). Identified higher errors and dispersion in analysts' forecasts tend to be short-term and can be attributed to the

[3] More details on this study, mostly on the descriptives of the survey results can be found in a report prepared by the authors addressed to EFRAG and available in its website.

complexity of the standard and the time required to assess its impact on companies' business models.

The uncertainties surrounding the implementation also had some negative real effects, mainly an increase in the cost of debt. The adoption of the new standard involved significant implementation costs. Entities faced challenges mainly related to technological changes, internal controls, and the availability of skilled human resources. On the other hand, the implementation also resulted in many unexpected benefits.[4]

Question 3—Determining the transaction price
(a) Does IFRS 15 provide a clear and sufficient basis to determine the transaction price in a contract—in particular, in relation to accounting for consideration payable to a customer? If not, why not? Please describe fact patterns in which the requirements on how to account for incentives paid by an agent to the end customer or for negative net consideration from a contract (see Spotlight 3) are unclear or are applied inconsistently. If diversity in application exists, please explain and provide supporting evidence about how pervasive the diversity is and explain what causes it. Please also explain how the diversity affects entities' financial statements and the usefulness of the resulting information to users of financial statements. **(b) Do you have any suggestions for resolving the matters you have identified?**

Evidence from research

Accounting research provides somewhat fragmented evidence concerning the challenges and outcomes associated with determining the transaction price. Studies primarily focus on evaluating compliance with disclosure requirements, such as those pertaining to paragraphs 120-122 and 126 of IFRS 15.

In this context, Boujelben and Kobbi-Fakhfakh (2020) investigate the disclosure compliance of the 22 largest European Union firms, spanning the telecommunications and construction sectors. These firms furnish general insights on how transaction prices are established, with full disclosure chosen by 100% of entities in the Telecommunication sector and 82% in the Construction sector. Nevertheless, there exists a notable divergence in the extent of disclosure of other critical information and judgments between these two groups.

Specifically, the Telecommunication sector is more compliant in disclosing information regarding the allocation of the transaction price to performance obligations and the effects of any fi-

[4] Detailed analysis in our response to Q7.

nancing component and discounts. Conversely, the Construction sector has a moderately higher frequency of disclosing details about variable consideration and contract modifications. Still, the frequency of disclosing judgments, including those related to stand-alone selling prices, variable consideration, discounts, and refunds - which could potentially influence the transaction price - remains relatively limited in both sectors. Coetsee, Mohammadali-Haji, and van Wyk (2022) reached similar conclusions regarding the absence of entity-specific judgments related to transaction price when examining a sample of 60 listed firms in South Africa.

Conclusion

Despite limited empirical evidence, we conclude that financial statements often lack sufficient disclosures regarding the uncertainty surrounding the determination of transaction price, potentially impeding the decision usefulness of revenue information. Cross-industry variance in specific disclosures is attributable to differences in the business models of various industries. However, evidence of generally rare disclosures concerning the impact of variable consideration or financing component on the transaction price in the financial statements of entities, *e.g.*, within the construction industry, does not align with customary business practices in this sector.

Question 4—Determining when to recognise revenue
(a) Does IFRS 15 provide a clear and sufficient basis to determine when to recognise revenue? If not, why not? Please describe fact patterns in which the requirements are unclear or are applied inconsistently—in particular, in relation to the criteria for recognising revenue over time (see Spotlight 4). If diversity in application exists, please explain and provide supporting evidence about how pervasive the diversity is and explain what causes it. Please also explain how the diversity affects entities' financial statements and the usefulness of the resulting information to users of financial statements. **(b) Do you have any suggestions for resolving the matters you have identified?**

Evidence from research

In the context of revenue timing, scholarly papers primarily examine the effects of the new standard on recognised revenue amounts compared to the prior guidelines. Due to limitations stemming from data accessibility, the principal methodology involves scrutinising the financial statements of preparers before and after adopting IFRS 15 or analysing disclosures concerning the transition impact in the year of adoption.[5] In a study encompassing a subset of 48 major European enterprises in

[5] *I.e.*, by comparing original figures from the 2017 financial statements with restated figures for 2017 in the 2018 financial statements under the full retrospective method or by referring to the disclosed cumulative effect in the notes under the modified retrospective method.

the STOXX Europe 50 index, Napier and Stadler (2020) ascertain that 48% of these enterprises disclose the IFRS 15 impact as immaterial. The average absolute difference in revenue is 0.72%, with merely 17% of non-financial entities undergoing alterations exceeding 1% between the IAS 18 (IAS 11) and IFRS 15 figures.

Correspondingly, Kabir and Su (2022) proffer similar findings using a sample of 396 firms from Australia and New Zealand. Of these companies, 63% indicate no or immaterial effect resulting from IFRS 15; the mean change in revenue is -1.03%. Notwithstanding, the authors identify significant cross-industry differences, with the highest increase in Real Estate (14.31% on average) and the highest decrease in Information Technology (-7.02% on average). The presence of smaller firms in the sample is a potential source of higher variance in the impact of IFRS 15 on revenue recognised (compared to the previous figures). On the other hand, there are negligible effects within sectors such as Utilities, Industrials, or Communication Services.

Comparing restated figures to their original counterparts may not effectively capture the precise implications of a new standard, given that the restated period could be influenced by one-time factors that are not directly comparable to other periods (such as alterations in an entity's business model; the introduction of new markets, products, or customers; or the influence of economic cycles). Furthermore, implementing a new standard might motivate firms to manage earnings in both downward and upward directions.

To overcome this concern, Ali and Tseng (2023) apply an alternative methodology to encapsulate overlapping revenue recognition cycles. Specifically, they utilise time-varying industry shocks (exogenous to companies) to eliminate one-time effects and facilitate the evaluation of revenue recognition patterns over complete business cycles. In a sample of U.S. firms from 2013 to 2020, they found no significant change in revenue amounts after adopting ASC 606. An acceleration in revenue recognition partially observed relates to a subset of 30% of firms characterised by a long revenue cycle, while the new standard has not had any discernible impact on 70% of firms with a short revenue cycle.

Kabir and Su (2022) also investigate the channels through which IFRS 15 affected revenue recognition practices. Despite a high degree of variation across industries, some patterns are common, including the timing of revenue. By examining the disclosed transition effects of IFRS 15, they find that in instances where revenue recognition is at a point in time, the timing consequences mainly stem from the transition from a "risk and reward" model to the "control-based" concept. For revenue streams recognised over time, major changes relate to the updates of methods applied to determine the stage of completion (or progress towards complete satisfaction of the performance obligation, respectively) or when the revenue calculation includes non-project-related works in progress.

He (2023) shows that sales-related accruals quality improves after adopting new revenue standards, as demonstrated using a sample of U.S. firms.

Conclusion

Academic accounting research provides evidence of how the new accounting guidance affected the timing of revenue recognition. The overall impact is immaterial for most entities, albeit some industries have more variations than others. Evidence of more pronounced effects for firms with a longer operating cycle exists. Overall, empirical studies do not identify any significant discontinuity from previous practice, but the new standard appears to bring more consistency and comparability in application, at least within industries.

Question 5—Principal versus agent considerations
(a) Does IFRS 15 provide a clear and sufficient basis to determine whether an entity is a principal or an agent? If not, why not? Please describe fact patterns in which the requirements are unclear or are applied inconsistently—in particular, in relation to the concept of control and related indicators (see Spotlight 5). If diversity in application exists, please explain and provide supporting evidence about how pervasive the diversity is and explain what causes it. Please also explain how the diversity affects entities' financial statements and the usefulness of the resulting information to users of financial statements. **(b) Do you have any suggestions for resolving the matters you have identified?**

Evidence from research

Based on a sample of U.S. firms from 2010 to 2020, Du, Louis, and Wang (2023) distinguish preparers as those with principal-agent (PA) exposure and those without and then classify firms with PA exposures into three subgroups (Principal only, Agent only, Mixed model), deriving the coding from a textual analysis of the SEC's fillings and searching for keywords indicating the exposure (for each firm and year individually). They show that the number of firms with PA exposure increases around the issuance of the new standard (from 14% to 25%), with 38% categorised as Principals, 22% as Agents, and the remaining as Mixed. Their findings demonstrate that firms with PA exposures generally face higher compliance risk and audit fees. They highlight that ASC 606 adoption has a positive impact and decreases compliance risk and audit fees for pure Principals and Agents, but not necessarily for Mixed-type firms. For revenue informativeness, the authors do not find any considerable impact on revenue quality. Furthermore, financial analysts experience difficulties forecasting revenue for firms with PA exposure, especially for entities with the Mixed model. Challenges to estimating future revenue streams materialise as a lower sensitivity of their reaction to revenue surprises. On the other hand, a greater weight to revenue surprises is identified for Agents.

Conclusion

There is limited literature on the principal versus agent consideration due to limited access to data. However, a study that attempts to assess the new standard's impact indirectly in this area confirms that revenue recognition for PA is highly relevant from a user perspective. To some extent, the new standard mitigates the compliance risk for "pure principals" and "pure agents" but not necessarily for entities exposed to both sides of the relationship.

Question 7—Disclosure requirements
(a) Do the disclosure requirements in IFRS 15 result in entities providing useful information to users of financial statements? Why or why not? Please identify any disclosures that are particularly useful to users of financial statements and explain why. Please also identify any disclosures that do not provide useful information and explain why the information is not useful. **(b) Do any disclosure requirements in IFRS 15 give rise to significant ongoing costs?** Please explain why meeting the requirements is costly and whether the costs are likely to remain high over the long term. **(c) Have you observed significant variation in the quality of disclosed revenue information? If so, what in your view causes such variation and what steps, if any, could the IASB take to improve the quality of the information provided?**

Evidence from research

Many papers not focused explicitly on disclosure requirements (analysed in response to Q1) indirectly evidence the impact of new disclosure requirements as it is the most significant accounting impact of the new standard. There is some (limited) evidence on the "perception" of users based on surveys and interviews, as well as archival evidence on the effect of those new disclosures on analysts' and investors´ decisions through its effect on relevance and comparability.

(a) Do the disclosure requirements in IFRS 15 result in entities providing useful information to users of financial statements?

As part of a broader analysis, García Osma, Gomez-Conde, and Mora (2023) surveyed 48 users (21% external auditors, 21% consultants, 21% academics, 14% professional investors, 17% lenders and others, and 4% regulators and supervisors) and interview 3 analysts. As mentioned in response to Q1, their respondents agree that disclosures are the area most impacted by the new standard, with some industries being particularly more affected. Their results indicate that users perceive that all new requirements items are increasing in decision-usefulness as they enhance the ability to make estimates of future cash flows. Respondents rate the "Disclosures of disaggregation of revenue" as having the highest positive impact, and over 75% consider such disaggregation improves the usefulness of the information. "Disclosures of changes in contract assets and contract liabilities"

is a close second. More than 70% of respondents perceive that IFRS 15 significantly increases comparability between and within industries. However, around 10% considered the comparability lower, even in the same industry.

Hinson, Pundrich, and Zakota (2022) examine the usefulness of the “disaggregation of revenue” under ASC 606 on a sample of U.S. firms (before and after ASC 606 disclosures become available). Prior literature shows that disaggregation can enhance decision-usefulness; however, these authors argue that due to the significant judgment associated with this principles-based standard (compared to the previous rules-based US GAAP revenue standard), it is unclear whether the new disclosures increase decision-usefulness or are uninformative or detrimentally confusing. Further, they suggest that the lack of rules could provoke inconsistencies, which inhibit comparability, and that users might require additional resources to understand differences or lack of comparability across firms, which may outweigh the benefits of disaggregation.

The authors focus on predictive value as captured by analysts' revenue forecast accuracy and dispersion and find that disaggregating firms experience a 12.5% increase in quarterly analyst revenue forecast accuracy and an 8% decrease in dispersion, suggesting that the disaggregation requirements significantly improved decision-usefulness. They also investigate whether qualitative disclosures enhance the usefulness of quantitative revenue disaggregation and find that the benefits of forecast accuracy and dispersion are only present for the set of firms with above-median qualitative disclosures. When examining the comparability of disaggregated revenues of industry peers, they find that disaggregation is associated with higher analyst forecast accuracy and lower analyst forecast dispersion for firms with above-median comparability but not those with below-median comparability.

The results in Hinson, Pundrich, and Zakota (2022) are consistent with the idea that differences in implementation under a principles-based standard constrain the benefits of disaggregation and suggest that detailed qualitative revenue information is essential to the usefulness of principles-based revenue disaggregation. Their findings also suggest that disaggregation may not enhance decision-usefulness for firms with relatively high levels of disaggregation in the pre-adoption of ASC requirements. Their supplemental analysis examining the long-term consequences of disaggregation finds that the benefits to forecast accuracy and dispersion persist two years after adoption.

Finally, when investigating whether incorporating granular revenue information requires a greater commitment of analyst resources, Hinson, Pundrich, and Zakota (2022) find that analysts issue fewer revenue forecasts with longer delays for disaggregating firms in the year of adoption. These results substantially attenuate two years after adoption, consistent with analysts “learning” over time, as already mentioned in response to Q1.

In summary, the benefits are primarily present when detailed qualitative disclosures accompany disaggregation, when disaggregated revenues are comparable, and when the granularity of segment information was low before adoption.

Other studies make inferences on disclosure requirements. *For example*, Tillet (2023) uses a more complex proxy, a comprehensive measure, as a proxy of "revenue comparability" to examine if FASB´s guidance under ASC 606 influences revenue comparability in U.S. firms across firms and industries. Tillet (2023) found that analysts are more likely to forecast revenues when firms have higher revenue comparability, and this benefit of revenue comparability is less pronounced as firms transition to ASC 606. However, upon adopting ASC 606, analysts likely expend effort to understand the effects of the standard on individual firms prior to comparing disclosures across firms (Ray 2018). This finding suggests that the ASC 606-related changes to revenue comparability impose disclosure-processing costs on analysts.

Choi, Kim, and Wang (2023) documented significant disclosure quality increases for software firms compared to electronic computer firms for ASC 606. Both industries increased their revenue disclosure quantity from 2016 to 2019 (i.e., two years before and after the ASC 606 adoption).

Conclusion

Because most studies we included primarily focused on ASC 606, not all findings will have direct implications for IFRS 15. However, the general conclusions include:

I) The new disclosure requirements increase the usefulness of accounting information for external users in the capital markets as the relevance of disclosures in making predictions increases.

II) Comparability among and within industries seems to increase, depending on the proxy used to measure comparability and industry-specific situation.

III) The quality of the information seems to have improved, although qualitative information is necessary for this significant improvement.

(b) Do any disclosure requirements in IFRS 15 give rise to significant ongoing costs?

Although standard setters tend to focus on the benefits to users and the costs to preparers, the costs and benefits of IFRS implementation are allocable among users and preparers. However, we focus on the costs for preparers in response to this question.

For the preparers' views, Napier and Stadler (2020) note that interviewed respondents highlight the cost of building a new, highly complex MCS connected to several databases (performance obligations database, stand-alone selling prices database, tools for determining transaction prices, etc.). Furthermore, "operating this IT system would require substantial manpower with regards to permanent monitoring, data update, making assessments and estimates." According to those interviewed, this connection between a complex IT solution and permanent manual assistance "will inevitably cause tremendous costs." Similar items were highlighted in numerous comment letters sent to IASB and EFRAG (such as money paid for licenses and the adaptation of the standardized software and the consequent changes in MCS systems, auditing and consulting fees, the opportunity cost of human capital, i.e., time spent training the staff, among others).

Davern, Giles, Potes, and Yang (2019) examine the Australian version of IFRS 15 (AASB 15) and provide insight into preparers' perspectives on the challenges, costs, and benefits experienced in implementing the standard using a survey of 143 respondents. Results show that 63% believe that the implementation affects the whole organisation and that the effects cross multiple functional areas beyond accounting. The authors conclude that the implementation is not simply an accounting policy change but "a substantive business change" and point out that while the results of the survey clearly show the cost of implementing an accounting standard, it can be inferred that this additional cost burden of IFRS 15 compared to other standards needs to be carefully interpreted. They conclude that it is possible that any additional costs are being driven more by the need to update and enhance the business rather than implement the new accounting standard, which would be consistent with preparers' concerns about IFRS 15 regarding the ability of existing systems to provide the necessary data to comply with the proposed additional disclosure requirements.

On the ongoing costs, these authors highlight that some preparers suggest that changes in disclosure requirements have the potential to damage their firms either reputationally or competitively. Results indicate that 54.6% believe the new disclosures will be useful to competitors, and 51.1% suggest it would be in the entity's best interests if they could avoid making the disclosures AASB 15 requires. Moreover, 59.5% of respondents expected that their entity would be subject to greater scrutiny from external stakeholders. While this perception has not been empirically evidenced (to date), none of the respondents mention the potential decrease in information asymmetry.

Along this line, García Osma, Gomez-Conde, and Mora (2023) conducted an international survey of 196 preparers complemented by interviews to analyse the extent the MCS changed because of the implementation and if there have been unintended effects of IRFS-related changes on firm efficiency. Managers indicated substantial changes in the MCS and highlighted the costs of implementation. Findings include that the standard took between 12 and 36 months to implement with the same costs as previously mentioned. Apart from the accounting and consolidation departments, participants highlighted the involvement of the internal control departments. Participants also highlighted that training the commercial staff and increasing the interaction between the accounting department and the department in charge of designing the contracts was a significant (unusual) effect of IFRS 15 implementation.

Davern, Giles, Potes, and Yang (2019) asked survey respondents to assess the expected benefits along several dimensions. Only 20% highlighted a potential reduction in the cost of doing business, although 38.5% expected at least some cost reduction benefit. Nevertheless, considering the preparers' expectations, the costs outweigh the benefits. Similarly, García Osma, Gómez-Conde, and Mora (2023) show that, in general, preparers were reluctant to acknowledge the potential benefits of these changes in MCS and IT systems, at least explicitly in the case of the interviewees. While most comments on the implementation process were negative, managers noted some benefits, such as more available information, timelier information, more integrated procedures, and more interrelation of the accounting department with other departments.

As pointed out by Davern, Giles, Potes, and Yang (2019), this finding is consistent with the fact that preparers, particularly during implementation, are more likely to overstate costs (which are real and present). They are also more likely to underestimate benefits (which are expectations of the future) as predicted by the notion of temporal discounting in behavioural economics (Frederick, Loewenstein, and O'Donoghue 2002) and with construal level theory (Weisner 2015).

Conclusion

Academic evidence shows that IFRS 15 disclosure requirements impose high costs on preparers due to significant changes in MCS. These changes, however, vary across industries. In some industries, the significant changes in MCS and IT affect the whole organisation and have unintended consequences beyond the accounting change (in the reporting).

Question 8—Transition requirements
(a) Did the transition requirements work as the IASB intended? Why or why not? Please explain: (i) whether entities applied the modified retrospective method or the practical expedients and why; and (ii) whether the transition requirements in IFRS 15 achieved an appropriate balance between reducing costs for preparers of financial statements and providing useful information to users of financial statements.

Evidence from research

According to Davern, Giles, Potes, and Yang (2019) survey, despite data collection in late 2017, many companies had not initiated the implementation process, with 48% of firms undecided about the transition method. Such delays can generally undermine the transition process's quality and smoothness, negatively affecting financial statement users. Concerning these findings, the authors see little benefit in extending effective dates for new standards, as entities do not utilise the additional time to proceed with the implementation properly.

Delays and other challenges associated with the implementation process can account for the findings from research, wherein the modified method is prevalent during the transition. Analysing 396 firms from Australia and New Zealand, Kabir and Su (2022) discovered that only 22% of firms selected the full retrospective method, while 46% opted for the modified approach (with 32% not providing the transition approach chosen). These results are consistent with Onie, Ma, Spiropoulos, and Wells (2023), who examined the financial statements of 94 Australian listed firms. Thirty percent restate figures for prior periods, 54% adopt the modified approach, and the remainder do not disclose the chosen transition method.

Krupová and Partac (2023) also observe widespread preference for the modified cumulative approach, with 71% of European construction firms selecting this method during implementation. In

a sample of US firms (Hao and Pham, 2023), only 11.5% of preparers opt for the full retrospective method. Coetsee, Mohammadali-Haji, and van Wyk (2022), who analysed 60 South African listed firms spanning various industry sectors, is the sole study demonstrating an even distribution of both methods. Most companies in the study disclose their transition method, and of approximately 53% of firms disclosing the existence of material effects of IFRS 15, there is an even division between a preference for the full retrospective and modified approaches.

Permitting two options in transitional provisions of new standards, including IFRS 15, generally yields a favourable effect on the implementation costs borne by preparers. However, as evidenced by Hao and Pham (2023), investors exhibit a stronger reaction to revenue surprises by companies applying the full retrospective method for ASC 606 adoption. Furthermore, analysts' forecast errors are lower for those firms adopting the full retrospective method. From a capital market perspective, the full retrospective approach is more informative, furnishing financial analysts with more useful information.

Conclusion

Most entities have elected to apply a modified (cumulative) approach to transition. This approach reduces preparer costs but also provides benefits to investors. The full retrospective approach, although more complex, provides users with more useful information to assess the new standard's impact. However, any negative effects identified appear to be temporary.

Question 11—Other matters
(a) Are there any further matters that you think the IASB should examine as part of the post-implementation review of IFRS 15? If yes, what are those matters and why should they be examined? Please explain why those matters should be considered in the context of this post-implementation review and the pervasiveness of any matter raised. Please provide examples and supporting evidence.

Evidence from research

Changes in accounting standards may (unintentionally) influence corporate decisions about how to conduct business. These potential real effects may be translated into real actions when entities consider how to structure their transactions to affect, for example, cash flows, considering the impact of accounting requirements.

Napier and Stadler (2020) distinguish several types of real effects, such as implementation costs (already analysed in response to Q1 and Q7), contractual changes, behavioural effects, regulatory effects, distribution effects (*e.g.*, taxes, dividends), and other effects (*e.g.*, bonus plans). They also provide a preliminary indication of the potential extent of such real effects by referring to the comment letters submitted by preparers during the IFRS 15 due process. We highlight the findings of

Ali and Tseng (2023), who identify two major sources of the real effects. By running a textual analysis on a sample of 505 sales contracts by 67 distinct US firms, they identify an increasing use of ASC 606 jargon in sales contracts post-adoption. Secondly, long-cycle firms extend their contract horizon after implementing ASC 606, potentially offsetting the accelerated recognition by the new standard. As minor findings, the textual analysis shows that using ASC 606 jargon in sales contacts negatively correlates with their readability while positively associated with uncertainty and redaction terms.

Davern, Giles, Potes, and Yang (2019) show that the impact is not just on accounting but is spread across several functional areas, indicating that the standard represents a substantive business change that has real effects on organisations. Consequently, implementation costs directly related to the transition to IFRS 15 cannot be easily identified as entities have utilised this substantial business change to justify funding strategically important ICT initiatives. The investments in ICT and the reorganisation of internal processes brought unintended benefits. The authors conclude that standard-setters should communicate about the new standard from a business improvement and not from a compliance perspective. Respondents to the Davern, Giles, Potes, and Yang (2019) survey note that it is not just the implementation costs that matter. The role of proprietary costs moderates the implementation process. Consequently, preparers take a more pragmatic view of compliance than standard-setters.

Similarly, preparers surveyed in García Osma, Gómez-Conde, and Mora (2023) argue that the transition to IFRS 15 has significant implementation costs. However, many expenditures relate to changes in IT and MCS, which influence decision-making, internal procedures, and contract designs. These changes in MCS lead to efficiency gains. García Osma, Gomez-Conde, and Mora (2023) also analyse archival data to test the impact of regulatory-driven changes to MCS on firm efficiency and triangulate it by collecting financial statements data from a broad sample of IFRS adopters worldwide. They have some preliminary evidence from 2007-2021 that the changes in MCS caused by the implementation requirements of IFRS 15 (and IFRS 16) have performance or efficiency benefits. Their results suggest that, in firms that substantially changed their MCS due to IFRS adoption, some expenses and costs (and returns and earnings) decrease (increase) after the implementation compared to the change experienced by firms that did not substantially change their MCS.

Cetin (2022) examines the effect of ASC 606 on drug development firms' investments in R&D alliances and innovation outcomes from 2014 to 2019 and finds that drug development firms that rely on R&D alliances accelerate revenue recognition under ASC 606 while simultaneously increasing disclosure. This, in turn, reduces information asymmetry between managers and external stakeholders, allowing firms with better access to capital to finance investments in R&D. Increased investment provides an opportunity to form more R&D alliances. In particular, entities primarily providing technology for payment before ASC 606 are more likely to pay and acquire technology after ASC 606. The adoption of ASC 606 has real-world implications in that it is associated with significant changes in the structure of alliances within the industry.

Lessis and Karampinis (2023), using a sample of 4,632 unique firms from 45 countries, find that the new standard encourages firms to reassess their credit policies. Firms with strict credit policies before implementation loosen them after targeting the positive information effects, while firms with lenient policies tighten them to limit the implementation costs. Moreover, the reassessment of credit policy has a lagged effect on the quality of the credit provided.

Conclusion

The new standard has several positive effects, such as increased R&D investment or better communication within a company. It also has neutral effects, such as increased revenue recognition jargon in sales contracts after adoption. On the other hand, there has been an impact on contract design. Some companies, especially those with a longer revenue cycle, extend the contract period in sales contracts to compensate for the accelerated revenue recognition after adoption. These findings may raise doubts as to whether the immaterial impact of the new standard on the amount of revenue recognised (see Q1) is due to revenue management practices rather than a relatively moderate impact of the standard.

In general, changes in MCS might provide benefits that have not been considered a priori or during the implementation. The significant and relevant changes in the internal system might affect the management's internal decision-making, and preliminary evidence suggests those changes positively affect efficiency outputs.

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