
IASB[®] meeting

Date	May 2024
Project	Post-implementation Review of IFRS 15
Topic	Academic literature review update
Contacts	Ana Simpson (asimpson@ifrs.org)

This paper has been prepared for discussion at a public meeting of the International Accounting Standards Board (IASB). This paper does not represent the views of the IASB or any individual IASB member. Any comments in the paper do not purport to set out what would be an acceptable or unacceptable application of IFRS[®] Accounting Standards. The IASB's technical decisions are made in public and are reported in the IASB[®] *Update*.

Purpose and structure

1. At its March 2023 meeting, the IASB discussed an overview of [the academic literature](#) relevant to the post-implementation review (PIR) of IFRS 15 *Revenue from Contracts with Customers*. Key messages from the March 2023 paper are included in [Appendix A](#). This paper provides a summary of the additional academic literature relevant to the PIR, identified since the initial review.
2. Of the 14 papers in this review:
 - (a) five papers were selected by academics who participated in an IASB workshop with the European Accounting Association (EAA) and EFRAG and who were asked to gather academic evidence relevant to the topics included in the Request for Information (RFI). The same team of academics submitted a comment letter providing a list of academic references that have also been considered in this review.
 - (b) three papers were identified through academic engagement.
 - (c) six papers became publicly available after the March 2023 IASB meeting—they were identified through a search for papers in Social Science Research Network, Google Scholar, and other databases of academic studies.
3. The summary of the academic literature is structured as follows:

-
- (a) [key messages](#);
 - (b) [detailed research findings](#); and
 - (c) [question for the IASB](#).
 4. This paper has one appendix: Appendix A— Key messages from the March 2023 Agenda Paper 6F *Review of academic literature*.
 5. The key messages and detailed research findings are based on academic papers that examine the implementation and application of both IFRS 15 and FASB ASC Topic 606 Revenue from Contracts with Customers (Topic 606). This summary includes papers relevant to Topic 606 because:
 - (a) IFRS 15 is substantially converged with Topic 606.
 - (b) academic papers that examine Topic 606 may highlight issues that are relevant to the PIR of IFRS 15. However, although the IFRS 15 and Topic 606 are substantially converged, findings in the papers based on Topic 606 may not always reflect the experience of IFRS adopters because of the differences in the previous US GAAP and IFRS revenue recognition requirements.

Key messages

Overall assessment of IFRS 15

6. A comment letter by academics based on a review of 25 studies indicated that IFRS 15 has fulfilled its objective in improving the usefulness of financial statement revenue information for users' decision-making, particularly through enhanced disclosures.
7. The academics highlighted that the transition to IFRS 15 had a minimal impact on financial statements but involved high implementation costs due to technology updates and the need to hire skilled staff. IFRS 15 implementation affected management control and information technology systems, leading to improved operational efficiencies despite high initial costs.

The effects of transition to IFRS 15 on entities' financial statements

8. One study focusing on construction and telecommunication entities from nine European jurisdictions, identified changes in practices such as the identification of performance obligations, timing of revenue recognition, measurement of contract progress, and capitalisation of contract-related costs following the transition to IFRS 15.
9. Additional large-sample research from Australia and New Zealand showed that while 63% of entities disclosed no material effects or did not disclose any effects from the transition to IFRS 15 in their financial statements, the remaining 37% of entities disclosed effects that varied between smaller and larger entities and across industry sectors.

The usefulness of revenue information for users' decisions

10. The implementation of IFRS 15 was not associated with an overall change in the value relevance of financial statement information although the effects on revenue usefulness varied depending on the timing of revenue recognition, use of accounting discretion and revenue disclosures.
11. In the US, Topic 606 was associated with improved financial report informativeness in the short term but influenced the accuracy of analysts' forecasts negatively over time; there was evidence of increased liquidity and comparability in financial reporting.

Other topics

12. Academic studies showed significant differences in compliance with IFRS 15 disclosure requirements between sectors and regions. Evidence based on a European sample showed that telecommunication entities' compliance with IFRS 15 disclosure requirements was higher compared to construction entities. A study of South African entities showed a high degree of compliance with the

disclosure requirements despite some concerns regarding consistency and specific disclosure requirements.

13. One academic study found that IFRS 15 had an effect on entities' strategic decisions and market share—entities simplified their operations to reduce their implementation and ongoing costs related to IFRS 15, which led to a decrease in market share for smaller entities.

Detailed research findings

14. This section provides more detailed information about the academic research findings summarised in the key messages section of this paper. Specifically, it summarises findings on:
 - (a) [overall assessment of IFRS 15 implementation](#);
 - (b) [the effects of transition to IFRS 15 on entities' financial statements](#);
 - (c) [the usefulness of revenue information for users' decisions](#); and
 - (d) [other topics](#).

Overall assessment of IFRS 15 implementation

15. In their comment letter, based on a review of 25 academic studies, a team of EAA academics noted that:¹
 - (a) the overall effect of IFRS 15 transition on the financial statements was minimal.
 - (b) the implementation costs for entities were high, mainly related to technological changes, new internal controls and the need to hire skilled staff.

¹ Barone, E., Mason, S., Mora, A., and Procházka, D. (2023), 'Comment Letter by the Financial Reporting Standards Committee of EAA to the Request for Information PIR of IFRS 15 *Revenue from Contracts with Customers*'.

-
- (c) the decision-usefulness of information has increased, as evidenced by improved liquidity, reduced bid-ask spreads, and higher comparability across reporting entities, but the effects of IFRS 15 implementation on analyst forecast accuracy and forecast dispersion have been mixed, indicating, in the researchers' view, initial challenges in interpreting the new revenue information.
 - (d) the disclosures provided applying IFRS 15 were viewed as useful by users and preparers responding to a survey. Evidence of variation in disclosures across industries was attributed to entities applying different business models. In some industries, such as the construction sector, the researchers noted insufficient disclosures in entities' financial statements about the effect of variable consideration or a financing component on the transaction price.
 - (e) most entities have elected to apply the modified retrospective transition method.
 - (f) after the implementation of the new revenue recognition requirements there was evidence of:
 - (i) increased research and development investment resulting from increased transparency of revenue recognition and lower information asymmetry between managers and investors;
 - (ii) increased use of revenue recognition jargon in sales contracts;
 - (iii) extended contract periods by some entities (for example, those with longer revenue cycles) which, in the researchers' view, may be viewed as an attempt to compensate for the accelerated revenue recognition after adoption; and
 - (iv) changes in internal control systems that, according to preliminary evidence, have a positive effect on entities' operational efficiency.
16. Based on a global survey of 244 respondents (196 preparers and 48 users of financial statements (of which 21% auditors, 21% consultants, 21% academics, 14% investors, 4% regulators and 17% other users), six semi-structured

interviews with auditors or preparers involved in IFRS 15 implementation and nine interviews (six preparers and three users pre-testing the survey), conducted for an academic report commissioned by EFRAG, researchers found:²

- (a) users said that the disclosure requirements introduced by IFRS 15 improved the usefulness of financial statement information for predicting future entity performance and for monitoring management performance; users highlighted that disaggregation of revenue improved their ability to forecast future performance.
- (b) users also said that comparability between entities applying IFRS Accounting Standards and US GAAP had increased after the implementation of the new revenue recognition requirements.
- (c) users said that industries such as telecommunications, construction, and software were more significantly affected by IFRS 15 implementation; they said the main changes resulting from implementation of IFRS 15 were related to the recognition and timing of revenue and enhanced information disclosed.
- (d) preparers said that implementation of IFRS 15 led to significant and costly changes in management control systems, including updates to information technology systems, staff training, and modifications to how key performance indicators were measured and reported internally.
- (e) preparers also said that despite high implementation costs, changes in management control systems led to enriched internal data and influenced their decision-making processes, including product pricing, contracting practices, internal operations.

17. Having identified IFRS 15 effects on changes in information technology and management control systems through the survey and interviews described in paragraph 16, the same team of researchers examined a large sample of 8,550 IFRS reporting entities from 43 jurisdictions over the 2007–2021 period for other

² Garcia Osma, B. G., Gomez-Conde, J., and Mora, A. (2023), 'Intended and Unintended Consequences of IFRS 15 Adoption', EFRAG Research Report.

unintended consequences of IFRS 15 (and IFRS 16) implementation.³ They found that the costly changes in management control systems related to implementing the IFRS Accounting Standards also had benefits in terms of improved operational efficiency and strategic decision-making. Specifically, they documented:

- (a) improvements in entities' various decision-making processes including more informed product pricing, product mix, lease or buy, and resource allocation decisions, enabled by more integrated and updated information systems.
- (b) better financial performance as evidenced by metrics such as EBITDA per employee, net cash flow from operating activities per employee, and income before extraordinary items per employee.
- (c) operational efficiency gains arising from more effective processing of information, thereby enhancing overall operational performance.
- (d) better control over organisational behaviours which included effects like reduced earnings manipulation, improved subsidiary control, and alignment of internal practices with strategic goals.
- (e) improvements in the quality of internal information used in management control systems, including availability of more precise, more granular, more timely and complete information, information that is useful for decision-making; and information that is better integrated between departments.

The effects of transition to IFRS 15 on entities' financial statements

18. The key messages from the academic papers examining the effects of transition to IFRS 15 discussed at the March 2023 IASB meeting were that:

³ Garcia Osma, B. G., Gomez-Conde, J., and Mora, A. (2024), 'Externalities of Financial Reporting Regulation on Management Control Systems', Working paper.

-
- (a) the effects of transition to IFRS 15 on reported numbers varied across entities with around half of the examined entities disclosing material effects from the implementation of IFRS 15; and
 - (b) entities increased their revenue-related disclosures after the implementation of IFRS 15.
19. Since the initial literature review, the staff identified two further academic papers examining the effects of transition to IFRS 15. Using a sample of 11 construction entities and 11 telecommunications entities from nine European jurisdictions (France, Germany, the Netherlands, Sweden, Belgium, Spain, Italy, Austria and Finland) in 2018—the year of implementation, one academic study found:⁴
- (a) *identifying performance obligations*—three construction entities and eight telecommunication entities changed their approaches to identifying performance obligations. For example, for telecommunication entities IFRS 15 implementation led to the identification of separate performance obligations for a sale of a mobile phone and services in a bundled contract and to changes in allocating the transaction price to these performance obligations. In the authors’ view, these changes led to acceleration of revenue recognition.
 - (b) *timing of revenue recognition*—four construction entities had previously recognised revenue at a point in time and started recognising revenue over time; two telecommunication entities started recognising revenue at a point in time from previously recognising it over time. These changes affected only certain revenue streams in the entities’ operations.
 - (c) *recognition of revenue for variable consideration*—three construction entities and one telecommunication entity increased their threshold for probability of recognition. For example, one of the construction entities disclosed that the main effect of IFRS 15 on its revenue recognition policies was the rise in the level of customer approvals required to recognise revenue coming from

⁴ Kobbi-Fakhfakh, S. and Boujelben, S. (2021), ‘The Effects of IFRS 15 Mandatory Adoption on Financial Statements’, *IUP Journal of Accounting Research & Audit Practices*, 20 (3), 7-32.

modifications of the initial contract. The telecommunication company disclosed that it changed the threshold for recognising revenue for variable considerations from probable to highly probable as a result of IFRS 15 implementation.

- (d) *measuring progress on contracts*—three entities from the construction sector disclosed that they changed the measurement of progress on contracts when revenue is recognised over time. For example, two of the three entities disclosed that they took into account the land in measuring the proportion of progress on contracts leading to an increase in revenue recognised in the income statement.
- (e) *costs of obtaining and costs to fulfil a contract*—10 telecommunication entities and two construction entities disclosed that they started capitalising costs of obtaining and fulfilling contracts that had previously been expensed.
- (f) *using new terminology and reclassifications in the financial statements*— six construction entities and nine telecommunication entities started using the IFRS 15 terminology (for example, relabelled ‘deferred income’ as ‘contract liabilities’) and reclassified certain accounts (for example, conditional contract receivables to ‘contract assets’).
- (g) *materiality of IFRS 15 implementation effects*—six entities disclosed material effects of IFRS 15 implementation; nine entities disclosed that the effects were not material, and the rest of the entities did not discuss materiality of IFRS 15 implementation effects.

20. Additional evidence on the effects of IFRS 15 implementation on entities’ financial statements is based on a sample of 396 entities from Australia and New Zealand in 2018.⁵ The study’s findings were:

⁵ Kabir, H. and Su, L. (2022), ‘How did IFRS 15 Affect the Revenue Recognition Practices and Financial Statements of Firms? Evidence from Australia and New Zealand’, *Journal of International Accounting, Auditing and Taxation*, 49, 100507.

-
- (a) 46% of the entities applied the modified retrospective method; 22% applied the retrospective method and the rest of the entities did not disclose which method they applied. Entities that applied the modified retrospective method were on average smaller than entities applying the retrospective method, which in the authors' view indicated that the choice of transition method was influenced by cost-benefit considerations.
 - (b) 63% of the entities reported either no effect or no material effect of transition to IFRS 15 on their financial statements; the remaining 37% of the entities disclosed IFRS 15 effects that varied by sector and entity size.
 - (c) for entities that disclosed effects of transition to IFRS 15, operating revenue was the most affected item (an average decrease of 1% for all entities in the sample), followed by cost of goods sold, contract liabilities and profit after tax. The effects of transition to IFRS 15 on reported numbers varied across sectors.
21. In summary, the additional evidence on the effects of IFRS 15 reinforces the previous evidence that the effect of IFRS 15 implementation on entities' financial statements varies across sectors and entity characteristics (for example, size). Less than half of the examined entities disclosed material effects of IFRS 15 on financial statements and some entities did not disclose whether the effects were material or not.

The usefulness of revenue information for users' decisions

22. The key messages from academic research on the usefulness of revenue information for users' decisions discussed at the March 2023 IASB meeting were:
- (a) the predictive ability of revenue for future earnings and the comparability of revenue information increased after the implementation of the revenue recognition model for a sample of Chinese entities applying Chinese Accounting Standard for Business Enterprises 14 *Revenue*; and
 - (b) the evidence on the usefulness of revenue information for users' decision-making following the implementation of Topic 606 was mixed.

-
23. The staff identified seven more studies on the decision-usefulness of revenue information—two studies focusing on the application of IFRS 15 and five studies focusing on the application of Topic 606.
24. Using a sample of 94 largest entities listed on the Australian Stock Exchange, one academic study examined the effect of IFRS 15 implementation on the value relevance of financial statements—measured as association between share price and earnings and book value of equity.⁶ Their findings were:
- (a) less than half of the entities disclosed material effects from transition to IFRS 15 and most of the entities with material effects reported lower earnings or lower retained earnings as a result of transition to IFRS 15.
 - (b) not all entities that disclosed material effects from transition to IFRS 15 applied the retrospective approach to transition—in the authors’ view, transition approaches with limited disclosures should be restricted to entities with immaterial effects from transition to a new standard.
 - (c) the implementation of IFRS 15 was not associated with a change in the value relevance of earnings and book values neither for all entities nor for the entities with material effects from transition to IFRS 15. In the two years prior to the implementation of IFRS 15 the value relevance of earnings and book values of the entities with material IFRS 15 effects had been lower compared to entities with no material IFRS 15 effects.
25. Similar evidence was provided by an academic study examining 5,429 entity-year observations of 729 entities from 23 European jurisdictions in the period 2013 to 2022⁷. Comparing the usefulness of revenue information—measured as share price response to revenue announcements and the annual returns to a buy-and-hold strategy of a group of entities that had material effects of transition to IFRS 15 and a group of entities that were less affected by IFRS 15

⁶ Onie, S., Ma, L., Spiropoulos, H., and Wells, P. (2023), ‘An Evaluation of the Impacts of the Adoption of IFRS 15 Revenue from Contracts with Customers’, *Accounting & Finance*, 63, 953-73.

⁷ Karampinis, N. and Lessis, G (2024), ‘The Revenue Usefulness after IFRS 15’, Working paper.

implementation—the researchers concluded that IFRS 15 did not enhance the usefulness of revenue information for users’ decision-making for the whole sample of entities. The authors further examined the effect of IFRS 15 implementation for sub-samples of entities and found:

- (a) the usefulness of revenue information increased (decreased) for entities for which IFRS 15 implementation resulted in more (less) timely recognition of revenue.
- (b) the association between announcement returns and revenue information increased for entities that had nearly missed or nearly met earnings expectations suggesting, in the authors’ view, that estimates used applying IFRS 15 can be beneficial to users if managers used them in an informative way. However, the association between buy-and-hold returns and revenue information for these entities decreased, indicating, in the authors’ view, users’ concerns about information asymmetry. In the researchers’ view, the implementation of IFRS 15 improved the usefulness of revenue information around revenue announcements but decreased its usefulness for performance evaluation.
- (c) the usefulness of revenue information was found to be higher for entities that increased their revenue disclosures; however, beyond a certain point the marginal benefit of increased disclosure decreased which in the authors’ view was an indication of commercial sensitivity.

26. The academic papers that examined the effect of Topic 606 implementation on the decision-usefulness of revenue information found:

- (a) based on a sample of 1,829 US entity-quarter observations drawn from various industries in the period 2017–2019, that the implementation of Topic 606 enhanced the informativeness of revenue—measured as association between revenue surprises and cumulative abnormal returns—in the initial two quarters

post-adoption but led to a decrease in the accuracy and consensus of analysts' revenue forecasts afterwards.⁸

- (b) using a sample of 24,675 entity-quarter observations of 3,475 US entities in the period 2017–2019, that the implementation of Topic 606 was associated with increased share price liquidity, which the authors attributed to better representation of economic events in financial reports and improved comparability across entities.⁹
- (c) based on a sample of 121,498 earnings announcements of 6,511 US entities in the period from the fourth quarter of 2013 to the fourth quarter of 2021, that the implementation of Topic 606, was associated with:
 - (i) increased liquidity;
 - (ii) lower return volatility and information asymmetry;
 - (iii) quicker incorporation of earnings information into share prices;¹⁰ and
 - (iv) increased earnings information usefulness—in the researchers' view, based on the empirical results described in paragraphs 26(c)(i)– (iii).
- (d) based on a follow-up work to the study summarised in paragraph 26(b), that the increased liquidity after the implementation of Topic 606 is attributable to enhanced comparability and information processing efficiency and not only to an increase in disclosure.¹¹
- (e) using a sample of 1,014 US entities, and 14,581 entity-quarter observations from 2015 to 2021, that entities with material effects from transition to

⁸ Hao, J. and Pham, V. T. (2023), 'The ASC 606 Standard, Revenue Informativeness, and Analysts Forecast Quality', *Accounting & Finance*, 63 (2), 2621-2652.

⁹ Ferreira, P. H. (2021), 'The Liquidity, Precision, and Comparability Effects of ASC 606: Revenue from Contracts with Customers', Working Paper

¹⁰ Chung, K. H. and Chuwonganant, C. (2019), 'Effects of Earnings Announcements on Liquidity and Price Efficiency: New Evidence from ASC 606', Working paper.

¹¹ Ferreira, P. P. and Jiang, X. (2023), 'The Economic Consequences and Underlying Mechanisms of Implementing Common Accounting Standards', Working paper.

Topic 606 provided more non-GAAP revenue disclosures post-adoption.¹² This increase was associated with improved analyst forecast accuracy and predictability of future revenue growth.

27. In summary, the additional evidence included in this paper indicates that IFRS 15 implementation was on average not associated with an increase in the value relevance of revenue information although the effects on revenue information usefulness varied depending on the timing of revenue recognition, use of accounting discretion and revenue disclosures. The evidence based on US studies remains mixed.

Other topics

Compliance with disclosure requirements

28. The staff paper discussed at the March 2023 IASB meeting did not include direct evidence on compliance with IFRS 15 disclosure requirements. Evidence from a study focusing on Topic 606 showed detailed qualitative disclosures accompanying disaggregated revenue information enhanced the decision-usefulness of revenue information.
29. Newly identified academic evidence focusing on compliance with IFRS 15 disclosure requirements is based on two academic studies. Their findings were:
- (a) based on the sample of entities described in paragraph 19, that not all entities complied fully with IFRS 15 disclosure requirements, and there were significant differences in compliance between the telecommunication and construction sectors.¹³ For example, 91% of telecommunication entities disclosed costs to obtain a contract and only 27% of construction entities

¹² Baik, B. and Park, D. (2023), 'New Revenue Recognition Standard and Non-GAAP Revenue Disclosures', *한국회계학회 학술발표논문집*, 2023 (3), 1-44.

¹³ Boujelben, S. and Kobbi-Fakhfakh, S. (2020), 'Compliance with IFRS 15 Mandatory Disclosures: An Exploratory Study in Telecom and Construction Sectors', *Journal of Financial Reporting and Accounting*, 18 (4), 707-28.

disclosed the same information. In the authors' view, telecommunication entities showed a higher degree of compliance possibly due to the complexity and diversity of their revenue contracts compared to those of construction companies.

- (b) using a sample of 60 entities from South Africa in 2018 (year of transition to IFRS 15), that entities' revenue disclosures were overall compliant with the requirements of IFRS 15.¹⁴ The researchers used a disclosure checklist to assess compliance and documented high levels of compliance in relation to disaggregation of revenue, accounting policies and the transitional requirements. The researchers identified two main concerns: misalignment between the IFRS 15 related information in the annual report and in the interim report, and insufficient disclosure about specific assumptions and judgements relating to revenue recognition, determining the transaction price and measuring obligations for returns.

30. In summary, the evidence on compliance with the disclosure requirements of IFRS 15 suggests that disclosures by entities that have implemented IFRS 15 vary by industry sector and by disclosure item.

Real effects of revenue recognition on entities' strategic decisions and market share

31. One study examined the real effects of IFRS 15 implementation on entities strategic decisions and market share. Using a sample of 27,370 entity-year observations of 4,391 European entities in the period 2012–2022, the findings were:
- (a) entities increased their investments in intangible assets to meet implementation requirements for advanced information technology systems and internal systems;

¹⁴ Coetsee, D., Mohammadali-Haji, A., and Van Wyk, M. (2022), 'Revenue Recognition Practices in South Africa: An Analysis of the Decision Usefulness of IFRS 15 Disclosures', *South African Journal of Accounting Research*, 36 (1), 22-44.

-
- (b) entities sought to minimise excess operating costs by standardising investing, selling and contracting policies; and
 - (c) these strategic decisions had an adverse effect on the market share for entities with smaller market share in the pre-implementation period. In researchers' view, this may raise a question whether the costs of the Standard for those entities outweigh its benefits.

Question for the IASB

Question for the IASB

Do the IASB members have any questions or comments on the updated review of academic literature summarised in this paper?

Appendix A—Key messages from the March 2023 Agenda Paper 6F *Review of academic literature*

- A1. Evidence on the effects of transition to IFRS 15 on entities' financial statements is based on two academic papers—a working empirical paper and a published paper based on a review of corporate annual reports, comment letters and interviews. In summary:
- (a) the effects of transition to IFRS 15 on reported numbers varied across entities;
 - (b) around half of the examined entities disclosed material impact from the implementation of IFRS 15; and
 - (c) the length of entities' revenue-related disclosures increased after the implementation of IFRS 15.
- A2. One published paper based on surveys of preparers examined the implementation process of Australian Accounting Standard AASB 15 *Revenues from Contracts with Customers* (AASB 15) and three working papers examined the implementation of Topic 606.¹⁵ The findings were:
- (a) in the paper on the implementation of AASB 15:
 - (i) the progress in implementing AASB 15 varied across entities at the end of the year before the effective date of AASB 15;
 - (ii) there was variation in preparers' responses about the cost of implementing AASB 15; and
 - (iii) preparers were concerned about potential effects resulting from the disclosures required by AASB 15—including disclosing information to competitors and increased scrutiny by external stakeholders.
 - (b) in the papers on the implementation of Topic 606:

¹⁵ In Australia IFRS 15 is adopted in full and referred to as AASB 15. AASB 15 was issued by the Australian Accounting Standards Board in December 2014 and replaces all revenue recognition requirements, including those as set out in Australian Accounting Standard AASB 118 *Revenue*.

-
- (i) after the implementation of Topic 606 the average length of a revenue recognition cycle decreased;
 - (ii) entities incorporated Topic 606 terminology in their sales contracts to make the implementation of Topic 606 easier; and
 - (iii) entities' choice between the retrospective and the modified retrospective transition method varied with entity-specific characteristics, industry and costs of compliance with the revenue recognition requirements.
- A3. The academic evidence on the comparability and predictive ability of revenue for future earnings is based on one Chinese-based and two Topic 606-based empirical papers. These papers are generally in agreement that the quality of revenue and the comparability of revenue information increased after the implementation of the revenue recognition model although the findings of one Topic 606-based paper suggest that comparability was reduced for entities with previous industry-specific guidance.
- A4. There is no empirical evidence on how the application of IFRS 15 has affected analysts' ability to forecast entities' revenue. However, there is evidence on this topic relevant to Topic 606:
- (a) two papers showed that analyst revenue forecast accuracy increased and revenue forecast dispersion decreased suggesting that the usefulness of revenue information increased after the implementation of Topic 606.
 - (b) another two papers showed the opposite effect—analyst revenue forecasts became less accurate and analyst disagreement increased which, in the authors' views, reflected analysts' needing to get familiar with the requirements of the new standard.¹⁶

¹⁶ These mixed findings may be due to the sensitivity of the analyses to choices made by the researchers like sample size and type and empirical model specification. Although the results reported in these working papers may change before their publication, these papers have been included in this review because they may be relevant to the PIR.

-
- (c) another paper showed that the decrease in analyst forecast accuracy after the implementation of Topic 606 dissipated over time while the increase in analyst forecast dispersion persisted. The decrease in analyst forecast accuracy and increase in dispersion were smaller for entities applying the retrospective method.
- A5. Research examining the overall market reaction to Topic 606 found that the positive association between share returns and earnings or revenue increased after the implementation of Topic 606 suggesting that revenue information became more useful. This effect was strongest for entities that applied the retrospective method.
- A6. Two academic papers using US data on the application of Topic 606 examined if managerial judgement required by Topic 606 affected the amount and timing of revenue. The findings were that managers used the judgement on application of the revenue recognition model opportunistically.
- A7. Researchers examined whether the characteristics of entities with principal or agent considerations were different from the characteristics of other entities and whether the implementation of Topic 606 influenced these entities' compliance risk, audit fees, revenue quality and the processing of these entities' revenue information by financial statement users. The study found evidence that after the implementation of Topic 606 the compliance and audit risk of these entities decreased, and the higher analyst forecast errors associated with entities with principal or agent considerations remained unchanged.
- A8. An academic paper focusing on revenue disaggregation showed that Topic 606 led to increased decision-usefulness of revenue information. These benefits were primarily present when:
- (a) disaggregation was accompanied by detailed qualitative disclosures;
 - (b) the categories used for disaggregation were comparable with those of other entities in the industry; and
 - (c) the granularity of segment information was low.

-
- A9. An empirical paper provided evidence that Topic 606 led to higher innovation by entities in the life sciences industry through an increase in investment resulting from increased transparency of revenue recognition and lower information asymmetry between managers and investors.