IFRS Accounting

# Staff paper

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**IASB® meeting**

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| Date | **March 2025** |
| Project | **Post-implementation Review of IFRS 16 *Leases*** |
| Topic | **Review of academic literature** |
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## Purpose and structure

1. This paper provides an overview of the academic literature relevant to the Post-implementation Review (PIR) of IFRS 16 *Leases*. The academic papers reviewed consist of:
   (a) nine papers submitted to the joint conference of the International Accounting Standards Board (IASB), Financial Accounting Standards Board (FASB) and *The Accounting Review* 'Accounting for an Ever-Changing World' in November 2022;
   (b) three academic papers collected by FASB staff for the PIR of FASB ASC Topic 842, Leases;
   (c) a project report from the KPMG and International Association for Accounting Education and Research (IAAER) research programme;
   (d) seven academic papers sent to staff by academics; and
   (e) 23 papers identified through a search for papers on topics relevant to the PIR of IFRS 16 in databases of academic studies.[1]

[1] Even though the results of working papers may change prior to publication, working papers were included in this review for the purpose of outlining the scope of lease-related topics that researchers have addressed.

2. The summary of the academic literature is structured as follows:

   (a) key messages (paragraphs 4–10);

   (b) detailed research findings (paragraphs 11–57);

   (c) a question for the IASB; and

   (d) Appendix A—List of academic references.

3. The key messages and detailed research findings are based on academic papers that examine the implementation and application of IFRS 16, Topic 842 or in a few cases both accounting standards. We reviewed papers relevant to Topic 842 because:

   (a) the IASB and the FASB have reached the same conclusions in many areas of their standards on leases, including requiring leases to be reported on the balance sheet, how to define a lease and how lease liabilities are measured.

   (b) the IASB's call for research papers to inform the PIR of IFRS 16 was issued jointly with the FASB and *The Accounting Review*.

   (c) academic papers that examine Topic 842 may highlight issues that are relevant to the PIR of IFRS 16. However, there are some differences between IFRS 16 and the FASB model and therefore, findings in the papers based on Topic 842 may not always reflect the experience of IFRS adopters.

## Key messages

4. Academic studies of the effects of transition to IFRS 16 showed that:

   (a) IFRS 16 had significant effect on most entities' financial statements, with most significant effects documented in lease intensive industries. Evidence from a large sample of European entities and a New Zealand case study showed increases in assets and liabilities and particular financial metrics (such as earnings before interest, tax, depreciation and amortisation and leverage ratios) and mixed effects on profitability ratios (such as return on assets, return on equity or earnings per share).

(b) the information disclosed applying IFRS 16 did not affect financial statements' readability.

(c) entities' compliance with IFRS 16 disclosure requirements varied but improved over time.

(d) most entities used the retrospective application approach without restating comparative information.

5. The findings of research that examined the effects of transition to Topic 842 were:

(a) disclosures of expected effects of the new requirements on the entities' financial statements in the period before Topic 842 implementation were long and complex and were useful mainly to investors capable of processing complex information.

(b) the implementation of Topic 842 was associated with increased labour costs for preparers.

(c) the use of variable lease payments was common and their properties (such as persistence over time and predictability) were found to be similar to those of operating and finance lease expenses. The research found weak evidence of differences in the responsiveness of variable lease payments to changes in revenues compared to the responsiveness of operating and finance lease expenses to changes in revenues.

6. Academic research has provided evidence that IFRS 16 has improved the transparency of lease-related information provided by entities. One study showed that IFRS 16 has improved analysts' forecast accuracy and reduced analysts' disagreement, particularly for lease-intensive entities, thereby achieving its goal of improving comparability of lease-related information. Other research showed that the implementation of IFRS 16 provided new relevant information to users of financial statements (users).

7. Studies showed mixed evidence on whether the implementation of IFRS 16 and Topic 842 improved the comparability of financial information among entities. Some studies documented enhanced comparability of balance sheet information not only

between entities applying the same standard for leases but also between lease-intensive entities applying either of the two standards. However, another study provided evidence that differences in lease terms and discount rates (the latter impacted by economic factors such as interest rates or exchange rates) reduced comparability between entities—for example, entities with longer lease terms reported larger amounts of right-of-use assets and lease liabilities, and those renegotiating contracts experienced significant volatility in reported values.

8. A large number of academic papers examined the usefulness of lease-related information provided applying Topic 842 for users' decisions. Examples of these papers' findings are:

   (a) the new lease requirements improved entities' financial reporting quality;

   (b) changes to the balance sheet and information provided by entities in accordance with Topic 842 were useful to both creditors and non-professional investors;

   (c) the association of operating lease information with risk measures increased after Topic 842 implementation, indicating that the market's ability to assess risk improved;[2]

   (d) the information about leases that entities present and disclose applying Topic 842 helped users assess right-of-use assets which are part of entities' revenue-generating assets and, therefore, improved the analysts' ability to forecast revenue.

9. Researchers examined whether the new lease requirements have influenced entities' business decisions—consequences commonly known in the academic literature as real effects. The evidence on real effects of IFRS 16 is limited and most evidence is

[2] A positive (negative) association between two variables means that higher levels of one variable are associated with higher (lower) levels of the other variable. An increase in the positive association between operating lease information and risk measures indicates that, in the authors' view, investors started to factor in more of the impact of operating lease liabilities into their risk assessments because information about operating leases has become more transparent after Topic 842 implementation.

focused on Topic 842 effects. The evidence shows that the new lease requirements led to operational, financial and strategic adjustments. For example, entities:

(a) needed to update internal processes, IT systems, and staffing to meet new reporting requirements.

(b) altered lease contracts, renegotiated financial covenants, switched from leasing to purchasing assets and from debt to equity financing.

(c) increased their use of variable lease payments and short-term leases.

(d) improved their leases management and investment efficiency. However, one study showed that entities faced reduced operational flexibility.

10. Survey-based evidence of a large group of investors' views on leases in the cash flow statement revealed that investors:

(a) often reclassify lease payments from financing to operating activities;

(b) would find more detailed disclosures of information on lease interest expense and right-of-use asset amortisation useful; and

(c) believe simplifying lease-related cash flow presentation and categorisation would improve financial statement usefulness.

## Detailed research findings

11. 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 the following areas:

(a) implementation of the new lease requirements (paragraphs 13–21);

(b) the usefulness of lease-related information for users' decisions (paragraphs 22–32);

(c) the real effects of the new lease requirements (paragraphs 33–50); and

(d) other topics (paragraphs 51–57).

12. The summaries in each section, where evidence is available, are organised into:

    (a) IFRS 16-related papers;

    (a) IFRS 16 and Topic 842-related papers—such papers focus on the implementation of both standards; and

    (b) Topic 842-related papers.

### *Implementation of the new lease requirements*

13. This section summarises academic research on:

    (a) the effects of transition to IFRS 16 on entities' financial statements (paragraphs 14–17);

    (b) entities' compliance with the disclosure requirements in IFRS 16 (paragraph 18);

    (c) the effects of transition to Topic 842 on entities' financial statements (paragraph 19);

    (d) the implementation costs of Topic 842 (paragraph 20); and

    (e) the use of variable lease payments (paragraph 21).

#### *IFRS 16-related papers*

##### ***Effects of transition to IFRS 16 on entities' financial statements***

14. Lopes and Penela (2025) examined the effect of transition to IFRS 16 on 74 European entities' financial statements and key financial ratios in the year of implementation. The sample included entities from five tourism-related sectors and 21 jurisdictions. The findings were:

    (a) the implementation of IFRS 16 had, on average, a significant effect on entities' financial statements—specifically, the authors documented changes in entities':

        (i) assets (increase by 18.6%);

(ii) liabilities (increase by 31.3%);

(iii) equity (increase by 1.0%);

(iv) earnings before interest, taxes, depreciation and amortisation (increase by 17.3%);

(v) operating income (increase by 5.1%);

(vi) interest expenses (increase by 3.5%);

(vii) leverage ratio (increase by 8.8%), measured as total assets divided by total liabilities; and

(viii) liquidity ratio (decrease by 7.9%), measured as current assets divided by current liabilities.

(b) the implementation of IFRS 16 had no statistically significant effect on:

(i) entities' profitability ratios (return on assets, return on equity and earnings per share). Upon further examination, the authors showed that the effect of IFRS 16 on profitability ratios varied among entities, potentially explaining the lack of significant total effect for the overall sample; and

(ii) earnings before taxes, which in the authors' view, may reduce concerns about entities' engaging in earnings management after IFRS 16 implementation.

(c) in the authors' view, the significant changes in entities' assets and liabilities after the implementation of IFRS 16 provides evidence that IFRS 16 achieved its objective of improving transparency about entities' lease assets and liabilities which were underreported in the financial statements when applying IAS 17 *Leases*.

15. In a case study of a New Zealand retailer, Bradbury (2024) examined the effect of IFRS 16 implementation on the entity's 2020 financial statements. The researcher used information in the 2020 financial statements prepared applying IFRS 16 to estimate the financial statement items related to operating leases 'as if' IAS 17 had

been applied. He then used (a) 'as-if' IAS 17 amounts; and (b) assumptions that analysts made when estimating assets and liabilities arising from leases when entities applied IAS 17[3] to estimate IFRS 16 amounts. The researcher compared the estimated IFRS 16 amounts with the actual IFRS 16 amounts. The study showed that transition to IFRS 16 resulted in 19.6% higher assets, 59.7% higher liabilities and 4.7% lower equity than those assets, liabilities and equity that would have been if estimated by analysts based on IAS 17 amounts. The effects on commonly used ratios (leverage, interest cover, current ratio, working capital ratio, and return on earnings) were also significant, indicating, in the author's view, that IFRS 16 likely had material effect on entities' financial statements and analysts' valuation models.

16. Matos (2024) analysed whether IFRS 16 affected financial statements' readability. Using a sample of UK entities listed in FTSE 100 index, the researcher compared the readability of financial statements in the year before implementation and the first two years of application of IFRS 16. To assess readability, researchers used widely recognised readability indices in academic research. The study provided inconclusive evidence on whether the text in the notes related to leases in post-IFRS 16 financial statements became more difficult to understand. In the authors' view, the transition to IFRS 16 had a minimal impact on the overall readability of financial statements.

17. Onie, Spiropoulos and Wells (2024) examined the transition to IFRS 16 of 88 large Australian listed entities (that reported operating lease commitments at the date of transition to IFRS 16), using data from 2013 to 2018.[4] Their findings were:

[3] These assumptions are based on academic studies replicating analysts' estimations of lease assets and liabilities from information disclosed applying IAS 17. The assumptions included: spreading the 3-to-5-year future operating lease payments into annual 'time buckets' and the last 'lump sum bucket' into future time periods; estimating the interest rate to discount the future operating lease payments; estimating the likely debt to asset ratio and the time period over which to depreciate the leased asset; and assuming no tax or deferred tax consequences.

[4] Onie, Spiropoulos and Wells (2024), Onie, Spiropoulos and Wells (2025b) (see paragraph 22) and Onie, Spiropoulos and Wells (2025a) (see paragraph 36) examine entities applying Australian Accounting Standard AASB 16 Leases which has identical requirements for public entities to those of IFRS 16. In their papers the authors refer to the lease standard as IFRS 16.

(a) most entities (92%) used the retrospective application approach without restating comparative information. The authors questioned whether the application of this transition approach should be available to all entities or depend on the magnitude of the effect on financial statements.

(b) around one third of the entities restated information about operating lease commitments disclosed in accordance with IAS 17 in their 2013–2018 financial statements. In the authors' view, that might have been the result of the entities' performing a thorough analysis of their leases in the period before IFRS 16 implementation which led to 21 upwards and 16 downwards restatements.

(c) the effects of transition to IFRS 16 on entities' financial statements, measured by the ratio of recognised right-of-use assets to total assets and the ratio of recognised lease liabilities to total liabilities varied among entities and were insignificant for many entities. The most significant effects were documented in sectors with high levels of land and building leases, particularly, leases of retail space, such as in sectors of consumer essential goods, consumer non-essential goods, and healthcare.

(d) the evidence on whether users were able to estimate the effects of operating lease capitalisation before the transition to IFRS 16 was mixed and was dependent on the method used.[5] Based on the evidence that users could estimate some of the effects from lease-related disclosures before the implementation of IFRS 16, the authors questioned whether the benefits of IFRS 16 justified entities' transition costs.

[5] The researchers used 4 methods to estimate the effects of operating lease capitalisation. The first method discounts non-cancellable operating lease commitments to present value using a set discount rate. The second method is a modified version of the first method, incorporating the entity's incremental borrowing rate and average lease term for each industry. The third and fourth methods apply a multiple to the rent expense and compare it to the present value to determine the capitalised value of non-cancellable leases.

#### *Entities' compliance with the disclosure requirements in IFRS 16*

18. Silva, Gonzales, and Santos (2022) examined whether entities complied with the disclosure requirements of IFRS 16. They analysed 127 financial statements of 27 Brazilian publicly listed entities in 2019 and 2020.[6] Based on the use of a checklist of 12 items to assess compliance, the findings were:

    (a) on average, entities complied with 58% of the disclosure requirements of IFRS 16 (maximum of 92% and minimum of 25%);

    (b) compliance improved over time; and

    (c) compliance in the annual report was higher than in the quarterly reports.

### *Topic 842-related papers*

#### *Effects of transition to Topic 842 on entities' financial statements*

19. Enache, Griffin, and Moldovan (2023) analysed the content and readability of disclosures of expected effects of the new requirements on entities' financial statements in 10-K filings in the period 2016–2018 between the issuance and the adoption of Topic 842, using a sample of 2,710 US listed entities.[7] The findings were:

    (a) the disclosures became lengthier, less readable and more dissimilar each year during the sample period with the proportion of entities discussing assessments of materiality of the expected effects increasing from an average of 47% in the first two years to 67% in the final year. In the authors' view, these changes were influenced by the focus in the US Security and Exchange Commission's guidance on detailed disclosure of expected effects of Topic 842 on future financial statements.

    (b) analysts' earnings forecasts following annual report filings were delayed by an average of 1.5 days over the period, reflecting, in the authors' view, an

[6] The entities were from the following industry sectors: personal use products, agriculture, sugar and alcohol, various foods, meat and meat products, beer and soft drinks, foods, and cleaning products.

[7] The sample includes entities' financial statements filed in the period 28 February 2016–15 December 2018.

increase in analyst information processing effort due to the greater complexity of the disclosures.

(c) information asymmetry, measured by share return volatility, increased over the period, indicating, in the authors' view, that mainly investors capable of engaging in costly information processing found the transition disclosures useful, thereby increasing information asymmetry among investors.

(d) in the authors' view, standard-setters and security regulators should balance the requirements for detailed disclosure of information with the need for clear and understandable communication for all investors.

***Implementation costs of Topic 842***

20. Huang, Enache, Moldovan, and Srivastava (2024) provided evidence on the costs of implementation of the new lease requirements[8], focusing on labour costs. Using a dataset of job postings in the US and focusing on three years before and three years after Topic 842 was issued (5,978 observations), the authors showed that entities' labour costs increased during implementation—on average, 4.5 new accounting jobs were advertised, equivalent to an increase in labour cost of $450,000 (assuming an average cost of hiring a new accounting employee of $100,000).[9] The study also showed that this compliance cost was higher for entities that adopted Topic 842 early, entities that were most affected by the new lease requirements (entities with higher off-balance-sheet lease commitments in the pre-Topic 842 period) and smaller entities.[10]

[8] The authors also examine the costs of implementation of Topic 606, Revenue from Contracts with Customers.

[9] The authors identify new job postings related to the implementation of Topic 842 by searching for keywords in the full text of the accounting job postings that are related to the lease accounting standard.

[10] Measured by accounting complexity and early adoption behaviour.

*Use of variable lease payments*

21. Heese, Shin, and Wang (2024) focused on variable lease payments reported by a sample of US entities listed in the Russel 3000 index during 2015–2021.[11] The authors showed that:

(a) variable lease payments were common and economically significant:

(i) more than 40% of entities with operating leases reported variable lease payments; and

(ii) the ratio of variable lease payments to operating lease expenses for these entities increased from 24% in 2020 to 26.5% in 2022.

(b) variable lease payments had similar properties to operating lease and finance lease expenses, specifically:

(i) similar persistence—measured as the standard deviation of lease expenses over time—to operating lease and finance lease expenses;

(ii) similar predictability—measured by the accuracy of forecasting future lease expenses from past expenses—to operating lease expenses;

(iii) changes in variable lease payments were more responsive to changes in revenues compared to operating and finance lease expenses although the difference was not economically large.[12]

(c) in the authors' view, despite being designed to respond to changes in economic conditions, the variable lease payments reported by entities have similar properties to those of operating and finance lease expenses, challenging the rationale to keep variable lease payments off balance sheet.

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[11] In accordance with Topic 842, a lessee (and a lessor) excludes most variable lease payments in measuring lease assets and lease liabilities, other than those that depend on an index or a rate or are in substance fixed payments (similar to the requirements in IFRS 16).

[12] The authors showed that a 1% increase in revenues corresponds to a 0.135% increase in variable lease payments and 0.12% increase in operating and finance lease expenses.

### *The usefulness of lease-related information for users' decisions*

*IFRS 16-related papers*

22. Onie, Spiropoulos and Wells (2025b) examined whether the implementation of IFRS 16 provided new relevant information to users. The study focused on a sample of 155 Australian entities (that reported operating lease commitments at the date of implementation of IFRS 16) selected from the Australian Stock Exchange 500 (ASX 500) index. The analysis is based on the 2018–2019 pre-implementation period, the year of implementation 2020 and the 2022–2023 post-implementation period.[13] The research's findings were:

    (a) 'as-if' capitalised lease assets and liabilities estimated by the researchers from IAS 17 operating lease commitments disclosures were value relevant—significantly associated with share prices—before IFRS 16 implementation but only for entities with small amounts of leases;

    (b) after the implementation of IFRS 16, the recognised operating lease assets and lease liabilities provided value relevant information to users, for all entities regardless of their lease intensity; and

    (c) in the authors' view, IFRS 16 enhanced the decision-usefulness of lease-related information, by increasing the value relevance of book value and improving comparability and transparency across entities.

23. Similar to the conclusion by Onie et al, Bradbury (2024) showed that IFRS 16 brought superior and more reliable information to users. As described in paragraph 15, the researcher examined whether users could have used the information disclosed applying IAS 17 to make reasonable estimates of assets and liabilities arising from off-balance-sheet leases. The researcher concluded that the typical estimation

[13] The researchers tested multiple pre- and post-implementation periods to ensure that the effects of IFRS 9 and IFRS 15 in the pre-implementation period and the effects of the covid-19 pandemic in the post-implementation period do not unduly influence their findings.

procedures could not replicate the financial statement impact of IFRS 16 accurately and that IFRS 16 provided new and relevant information to users.

24. Hanlon, Khedmati, Limand and Tan (2024) examined whether the implementation of IFRS 16 had an effect on analyst forecast accuracy and forecast disagreement among analysts.[14] They used a sample of 2,402 observations of IFRS reporting entities from 19 jurisdictions in the period 2016–2022.[15,16] The findings were that:

   (a) after the implementation of IFRS 16:

      (i) forecast accuracy increased and disagreement among analysts decreased for entities that started capitalising their previously expensed operating leases compared to entities whose recognition of leases was not affected by the adoption of IFRS 16;

      (ii) forecast accuracy increased and disagreement among analysts decreased more for lease-intensive entities—entities with lease assets above the industry median in a given year—and for entities operating in lease-intensive industries;[17] and

   (b) in the authors' view, IFRS 16 achieved its objective of improving the comparability of lease-related information provided by lessees.

25. Davern, Gyles, Hanlon, and Frick (2020) examined the effect of Australian Accounting Standard AASB 16 *Leases* (AASB 16) on user decision-making, based on

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[14] Analyst forecast accuracy in the academic literature is calculated as the absolute difference between actual and forecasted metrics; forecast disagreement is calculated as the standard deviation of all analyst forecasts for a given entity.

[15] The highest proportion of observations were from the UK (21%), Australia (14%), Italy (9%), France (5%) and India (5%). The rest of the countries in the sample were Germany, Malaysia, Thailand, Norway, Netherlands, Singapore, Sweden, Spain, Belgium, Philippines, Switzerland, New Zealand, Mexico and Greece.

[16] The sample included various industry sectors with the highest representation by manufacturing entities (33%) and service entities (16%).

[17] The study classifies these industries as lease-intensive: retail, professional services, healthcare, textile and apparel, wholesale, travel and leisure, transport, telecommunications, energy, media, distributors, and information technology.

interviews with Australian users with 16 years of experience on average. The interviews were conducted from April to June 2020. The findings were:

(a) users said AASB 16 has improved transparency and comparability among entities.

(b) the effect of IFRS 16 on entities' financial statements varied across industries and depended on the length of leases. Industry sectors such as aviation and retail were most affected by the implementation of AASB 16 due to their reliance on long-term leases.

(c) users had mixed views on whether AASB 16 reduced the need for adjustments and non-GAAP measures. Users' concerns included:

    (i) AASB 16 disrupted data series and diminished comparability of historical data, thus hindering users' ability to analyse trends over time. This led some users to continue using pre-AASB 16 models for decision-making. Even though non-recurring, these costs were significant during the transition period.

    (ii) concerns about the disconnect between cash flow and profit in AASB 16. They noted inconsistencies in cash flow disclosures among entities and highlighted issues such as the lack of uniformity in reporting cash interest paid, which complicated their understanding of cash generation through an operating cycle.

    (iii) concerns about whether entities were reporting material information adequately. They noted a disconnect between what preparers and users consider material, with materiality perceptions varying among users. In some users' view there was material lease-related information that entities were not disclosing.

26. Kusano and Yamashita (2024) examined the effect of operating lease recognition on entities' loan spreads—a measure of investors' perception of how complete the accounting information provided by an entity is. Based on a sample of 2,737

observations of voluntary adopters of IFRS Accounting Standards in Japan and entities applying Japanese GAAP in the 2016–2021 period, the findings were:

(a) after the implementation of IFRS 16, the loan spreads of IFRS reporters decreased more than the loan spreads of entities applying Japanese GAAP.[18] In the authors' view, the implementation of IFRS 16 was associated with reduced information risk.

(b) among IFRS reporters, loan spreads of entities that had lower operating lease intensity before implementation of IFRS 16 (measured as total operating lease commitments divided by the sum of debt and total operating lease commitments) decreased more than loan spreads of entities with higher operating lease intensity. In the authors' view, the entities with lower intensity of operating leases had fewer incentives to use short-term leases (which can remain off balance sheet applying IFRS 16), thus reducing the perceived risk of incomplete information and enhancing transparency.

### *IFRS 16 and Topic 842-related papers*

27. Bandeira, Lyons and Trabuco (2022) examined the effect of IFRS 16 and Topic 842 implementation on financial statements comparability and transparency in 2020 for three airlines, Azul and Gol (Brazilian IFRS reporting entities) and JetBlue (a US GAAP reporting entity). The findings were:

(a) even if underlying assets were used in a similar way, airlines could determine different lease terms and reported different amounts of right-of-use assets and lease liabilities. In the authors' view, such differences in determining lease

[18] The study used a difference-in-differences approach to estimate causal relationships (the effect of IFRS 16 implementation on entities' loan spread in this context). It compared the changes in outcomes over time between a treatment group that is exposed to an intervention (IFRS 16 implementation) and a control group that is not (entities applying Japanese GAAP). The key assumption is that, in the absence of the treatment, the difference between the two groups would have remained constant over time. This method helps control confounding variables and unobserved factors that could affect the outcome, allowing researchers to isolate the effect of the intervention.

terms in similar circumstances negatively affected comparability between entities.

(b) entities that renegotiated their contracts and reset their incremental borrowing rates were likely to experience significant fluctuations in the reported values of their lease liabilities and assets from one year to the next. In the authors' view, such fluctuations, driven by economic factors (changes in interest rates and exchange rates) rather than operational changes, affected comparability across entities. The authors commented that restricting judgement in determining the incremental borrowing rate calculation could improve transparency and comparability across entities.

28. Christensen (2024) examined whether the dual classification model in Topic 842 provides useful information to equity investors compared to the single classification model in IFRS 16.[19,20] The study used a sample of 2,398 entities from four jurisdictions (Australia, Canada, the UK and the US) and examined the changes in information asymmetry, measured by bid-ask spreads, upon adoption of IFRS 16 and Topic 842. The researcher focused on three signals provided by the dual-classification model:

(a) risk signal— information about the underlying risk of entities' leases, based on the different risk profiles of finance and operating leases;

(b) bankruptcy signal—information about entities' expected financial distress costs, which arises in jurisdictions where bankruptcy law distinguishes between finance and operating leases in a manner similar to accounting; and

[19] IFRS 16 applies a single lessee accounting model, which views all leases recognised on balance sheet as providing finance. The FASB decided upon a dual lessee accounting model that requires a lessee to classify leases in a similar manner to the previous US GAAP requirements for distinguishing between operating leases and capital leases.

[20] The author measured the usefulness of information using the bid-ask spread as a proxy for information asymmetry—lower information asymmetry is associated with more useful information.

(c) tax signal—information about entities' taxable income, which arises in jurisdictions where tax law distinguishes between finance and operating leases in a manner similar to accounting, increasing book-tax conformity.

29. The study found that in jurisdictions where bankruptcy and tax laws distinguish between finance and operating leases in a manner similar to the previous accounting, the removal of the dual classification model in IFRS 16 was associated with an increase in information asymmetry due to the loss of bankruptcy and tax signals. However, the study did not find evidence of change in information asymmetry related to the risk signal, indicating, in the author's view, that the dual classification system does not provide useful information about the underlying risk of entities' leases. The researcher highlighted that the dual classification system is useful to users when bankruptcy and tax laws distinguish between finance and operating leases in a manner similar to accounting. In the author's view, the evidence is supportive of the IASB's and FASB's decision to diverge in lease classification because the IFRS Accounting Standards are applied in many jurisdictions, including some that do not distinguish between financial and operating leases for bankruptcy or tax purposes and therefore the benefits of dual classification in such jurisdictions are less obvious.

30. Sarquis, Santana, Lourenço, and Santos (2025) examined the capital market effects of the new lease accounting requirements using a sample of entities from 19 jurisdictions.[21] The study's sample consisted of 6,324 entities, divided into a treatment group of 3,162 entities with significant lease operations (that applied IFRS 16 or Topic 842) and a control group of 3,162 entities without leases. The period 2016–2021 included both pre-implementation and post-implementation years of the new lease accounting standards. The study found that IFRS 16 and Topic 842:

[21] The authors manually collected from the notes to the financial statements the following data: information about entities' lease liabilities and total liabilities, detailed information on the transition to Topic 842 and IFRS 16, carrying amounts of the right-of-use assets and lease liabilities, information about lease payments, interest expense and rental expenses, and, for entities applying Topic 842, information about classification of leases (finance or operating).

(a) improved the comparability of financial information between entities with significant leases and those without leases (that is, entities that borrow to buy assets instead of leasing). The improved comparability:

   (i) was documented for IFRS reporters in all 19 jurisdictions and for the US GAAP sample.[22]

   (ii) was mainly attributed to changes in the balance sheet (recognition of right-of-use assets and lease liabilities) and not to changes in the income statement.

   (iii) did not depend on the significance of leases to entities' business operations.

(b) reduced information asymmetry (measured by bid-ask spreads) among investors. The decrease in information asymmetry:

   (i) was documented for both IFRS and US GAAP samples.

   (ii) (in the IFRS sample) was concentrated in the Anglo-Saxon jurisdictions with larger and more developed capital markets.

   (iii) (in the US GAAP sample) was concentrated in entities with material leases[23] and in industries that heavily relied on leases[24].

   (iv) was partially driven by the increase in comparability. In the authors' view, the new accounting standards on leases enhanced the comparability of financial information, subsequently reducing the information asymmetry.

31. Altamuro, Chen and Li (2024) examined the effect of the new accounting standards on leases (Topic 842 and IFRS 16) on the comparability of accounting information

[22] The authors classified the 19 jurisdictions that adopted IFRS Accounting Standards into 6 clusters, based on the similarities and differences in their institutional environment. The authors reported that IFRS 16 improved comparability in all clusters.

[23] Entities with material leases were identified as those whose lease liabilities represent more than 10% of their total liabilities.

[24] Based on previous literature, these industries are airline, retail, and accommodation.

between US and IFRS reporting entities. Using a sample of 2,652 US entities and 7,823 IFRS reporting entities from 28 jurisdictions,[25] based on the median lease intensity in each jurisdiction before the implementation of the leases standards, the authors classified the sample into entities with high lease intensity (more affected by the new standard) and entities with low lease intensity (less affected by the new standard). The main findings were that after implementation of the new leases standards:

(a) the comparability of accounting information between lease-intensive IFRS reporters and lease-intensive US entities increased.[26]

(b) the increase in the comparability was associated with changes in the balance sheet (recognition of right-of-use assets and lease liabilities). There was mixed evidence on whether changes in the presentation of leases in the income statement contributed to the increase in comparability.

(c) the increase in comparability was more noticeable in IFRS jurisdictions with stronger accounting enforcement.

(d) eighty per cent of entities did not change their lease intensity (from either high to low or low to high lease groups). In the authors' view, the new lease standard did not lead to an economic change in leases usage by entities.

(e) operating lease-intensive US (IFRS reporting) entities attracted more IFRS-focused (US-focused) analysts to provide book-value per share estimates. In the authors' view, the new lease requirements have benefited global financial statements users, who invest in both US GAAP and IFRS reporting entities.

[25] Australia, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Hong Kong, India, Italy, Malaysia, Mexico, Netherlands, New Zealand, Norway, Pakistan, Philippines, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Thailand, the United Kingdom.

[26] This is measured by comparing how US GAAP and IFRS entities report financial outcomes for similar economic activities, using models that assess differences in share prices, returns, and cash flows.

*Topic 842-related papers*

32. Some academic papers examined the usefulness of Topic 842 for users in making decisions. The findings of these papers have limited applicability to IFRS 16 implementation due to the differences between IFRS 16 and Topic 842. Brief summaries of these papers are presented in the table below:

| Author(s), year and scope | Overview of paper's findings and conclusions |
|---|---|
| Kim and Xie (2024)<br><br>33,955 observations of US listed entities, 2010–2022 | Entities **improved the quality of their financial reporting**:<br><br>(a) in the post-announcement period of Topic 842 (28 February 2016 to 15 December 2018) compared to the pre-announcement period (1 January 2010 to 28 February 2016); and<br>(b) in the post-implementation period (from 15 December 2018 to 31 December 2022) compared to the post-announcement period (28 February 2016 to 15 December 2018).<br><br>Financial reporting quality improved more significantly for entities with financial constraints (measured by smaller size) and entities with higher information asymmetry (measured by high analyst forecast dispersion).<br><br>Entities with improved financial reporting quality were more likely to use debt financing following the implementation of Topic 842. In the researchers' view, entities improved their financial reporting quality to reduce information asymmetry and mitigate the potential increase in the cost of financing, in response to investors' perception that entities' financial positions have become riskier due to the capitalisation of operating leases. |
| Milian and Lee (2024)<br><br>2,087 US listed entities' earnings announcements in the first quarter of 2019 (post-Topic 842 adoption) and 41,279 earnings announcements in the first quarters of 1996–2018 (pre-Topic 842 adoption) | Entities with significant operating leases in the top decile of the sample experienced **negative share returns around the initial recognition of these leases**. On average, these entities recognised operating lease assets equal to 21% of their total assets and operating lease liabilities equal to 39% of their total liabilities and 64% of their total debt. In the authors' view, the negative share price reaction indicated a lack of investor attention to lease-related information disclosed in the notes to the financial statements before the adoption of Topic 842.<br><br>The negative association between recognised operating leases and share returns was consistent across entities, regardless of the level of investor attention, as measured by analyst coverage, institutional ownership or share turnover. In the authors' view, this consistency indicates a widespread market inattention to operating lease information. |

| Author(s), year and scope | Overview of paper's findings and conclusions |
| --- | --- |
| Cheng, Geng and Zhao (2022)<br><br>3,038 US entities (22,201 observations), pre-implementation period 2011–2018 and post-implementation period 2019–2020 | Estimates of entities' operating lease liabilities—calculated as the present value of future lease payments and divided by total liabilities—were more strongly associated with entities' risk measures, such as share return volatility and equity beta, after the implementation of Topic 842 compared to the pre-implementation period. In the authors' view, the more detailed Topic 842 information disclosed in the notes explained the stronger association in the post-implementation period.<br><br>The researchers also found that entities' actual operating lease liabilities divided by total liabilities reported applying Topic 842 were more strongly associated with entities' risk measures than the estimates of their operating lease liabilities.[27]<br><br>In the authors' view, the additional information entities provide (presented and disclosed) applying Topic 842 has **improved users' ability to assess entity risk.** |
| Nissim (2025)<br><br>72,120 observations of US listed entities, 2000–2022 | The researchers showed that they could accurately estimate right-of-use assets using information provided by entities after the implementation of Topic 842.<br><br>Adding the estimated right-of-use asset to reported operating assets for pre-ASC 842 observations improved the ability of operating assets to explain cross-sectional and time-series variation in sales. It also increased the ability of growth in operating assets to predict sales growth and to explain analysts' revenue growth forecasts.<br><br>Similarly, the researchers showed that adding reported right-of-use assets after Topic 842 implementation to other operating assets improved the predictive ability of operating assets to explain and forecast sales.<br><br>In the authors' view, the implementation of Topic 842 **improved the usefulness of lease-related information to predict sales growth and explain analysts' revenue growth forecasts**, which is useful to equity analysts. |
| Heltzer (2022)<br><br>Home Depot financial statements 2018–2020 | Using Home Depot's financial statements as a case study, the authors compared estimated operating lease liabilities with actual amounts reported in accordance with Topic 842. They employed a methodology commonly used before Topic 842 adoption. The |

[27] The difference between estimates of entities' operating lease liabilities based on lease information disclosed in the notes (using previous methods) and reported lease liabilities post-Topic 842 implementation arise because the researchers' estimation process involves assumptions and models that may not fully align with the information that the entity's management has.

| Author(s), year and scope | Overview of paper's findings and conclusions |
|---|---|
| | authors showed that certain commonly used **assumptions in estimating lease assets and liabilities are inaccurate** when compared with the information entities provided applying Topic 842. Examples of such inaccurate assumptions included:<br>(a) using weighted average discount rate for both operating and finance lease future payments; and<br>(b) assumptions related to the timing and amounts of future lease payments.<br>In the author's view, the findings provide useful information to users for adjusting their methodologies, as analysts' models often rely on historical data, including pre-ASC 842 data. To ensure continuity in their analyses, they may need to adjust pre-ASC 842 estimates to maintain consistency with post-ASC 842 figures. |
| Burden and Wilson (2025)<br>Experiments with 164 participants:<br>103 online MBA students as proxies for non-professional investors, between the ages of 18 and 69, with an average of 11 years of work experience; and<br>61 experienced creditors, ages of 30 or older, with 11 years of work experience | Examining how creditors and non-professional investors used information provided before and after the implementation of Topic 842, the researchers found that the changes to the balance sheet and information disclosed by entities applying Topic 842 were **useful to both creditors and (non-professional) investors**. Investors perceived the effect of Topic 842 on entities' financial statements as more useful than creditors. |
| Beckman and Kale (2023)<br>2019 financial statements associated with 184 US loan syndication transactions | Topic 842 improved **the usefulness of financial statements for creditors' decision-making**. Specifically, the findings were:<br>(a) there were significant differences between capitalised operating leases, weighted average lease terms, and discount rates reported by entities applying Topic 842 and the previous estimates of these items derived using Standard & Poor's methodology. In the authors' view, the newly disclosed information has resolved asset measurement uncertainty.<br>(b) entities whose estimated and reported weighted average discount rates differed by 3% or more, experienced a |

| Author(s), year and scope | Overview of paper's findings and conclusions |
|---|---|
| | significant positive relationship between the size of this difference and loan credit spreads. In the authors' view, the lease discount rate information provided by entities applying Topic 842 proved useful information for credit analysis, as evidenced by its association with loan spreads. |
| Jung and Scarlat (2024)<br><br>6,403 bond-day observations around the first quarter of 2019 earnings announcements | Entities that reported underestimated operating lease liabilities saw **significant increase in their bond yields** in the three days around their first quarter 2019 earnings announcements. Entities with underestimated leases are entities with large differences between reported operating lease liabilities in the first quarter of 2019 and operating lease liabilities estimated using pre-Topic 842 information.<br><br>The effect was stronger for entities:<br>(a) with more complex organisational structures—entities with higher number of business segments—relative to the average entity in the sample;<br>(b) operating in poor information environments— entities with lower institutional ownership and higher analyst forecast dispersion; and<br>(c) with higher lease intensity—entities with higher ratio of reported operating lease liabilities to total assets.<br><br>In the authors' view, credit analysts adjusted their valuations in response to information provided applying Topic 842, indicating that this information is useful. |
| He, Lourie, Ma, and Zhu (2023)<br><br>618 US entities, 2018–2021 | Using a dataset of internal bank ratings of client entities, the researchers showed that **banks' perceived risk of their client entities decreased** after the entities released their first financial statements applying Topic 842, contrary to entities' concerns that the new lease requirements would lead to higher perceived credit risk by banks because of the increase in reported leverage. In the authors' view, the recognition of operating leases on the balance sheet and the increased disclosure requirements reduced banks' uncertainties during credit assessments and decreased the banks' perceived risk of their clients. |

### *The real effects of the new lease requirements*

33. Some researchers have examined whether the new lease requirements have influenced entities' business decisions. These effects are commonly known in academic literature

as real effects. The evidence on real effects of IFRS 16 is limited. Most of the academic research on this topic focused on the real effects of Topic 842 implementation.

### *IFRS 16-related papers*

34. Großkopf, Sellhorn, and Weiß (2022) examined whether stakeholders' concerns about real effects influenced the development of IFRS 16. The researchers analysed 2,153 public documents, including 1,727 comment letters and 357 staff papers, and 69 IASB meeting transcripts in the period from 2006 to 2018. They identified 2,721 real effect arguments within five categories:

    (a) operating—entities may need to change their internal processes, such as updating information technology systems or hiring additional staff, to implement the new requirements for recognising right-of-use assets and lease liabilities on the balance sheet;

    (b) financing—entities may alter their lease contracts, renegotiate debt covenants due to changes in financial ratios, or shift from leasing to purchasing assets to manage the effect on their financial statements;

    (c) investing—entities may adjust their investment strategies, for example, reduce capital expenditures or change the mix of leased and owned assets, in response to the new lease accounting requirements;

    (d) market-wide—IFRS 16 could lead to broader economic effects, such as changes in the leasing industry, potential job losses, or shifts in market competitiveness as entities implement the new requirements; and

    (e) unspecified—unintended consequences of IFRS 16 might arise.

35. Großkopf et al's findings and comments were:

    (a) stakeholders' concerns about real effects were mainly related to entities' financing;

(b) the real effect arguments discussed by the IASB were a portion of the arguments raised in comment letters;[28]

(c) the PIR of IFRS 16 should consider stakeholders' concerns that were raised during the standard-setting process, provide assurance that they have not materialised and confirm that the Standard has met its objectives without causing adverse economic impacts.

36. Using a sample of 148 large listed Australian entities (1,036 entity-year observations) for the periods 2012–2015 and 2017–2018,[29] Onie, Spiropoulos and Wells (2025a) examined whether entities decreased the use of leases and increased capital expenditures in anticipation of IFRS 16 implementation and its potential effect on entities' financial statements. In the authors' view, entities' motivation for making such changes was to avoid triggering financial covenant constraints due to recognition of more lease liabilities. The findings were:

(a) all entities reduced their operating lease commitments following the issuance of IFRS 16. However, the adjustments by high-lease intensity entities were smaller than those of entities with fewer operating lease commitments.

(b) entities' leverage had no effect on these adjustments, indicating, in the authors' view, that entities with high lease intensity may have been able to renegotiate debt contracts with lenders prior to the implementation of the Standard, rather than being forced to reduce their leasing activities.

(c) high lease intensity entities increased their capital expenditures in the post-issuance period unlike other entities indicating, in the authors' view, entities' efforts to substitute leasing with ownership.

[28] We note that IASB technical staff usually redraft the arguments and comments from comment letters to align with the IFRS Foundation's Style Guide. The semi-automated content analysis approach that the researchers used relied on keyword matching and text extraction to verify whether the key word is used in a real effect argument context. This approach looked for arguments as they were worded by stakeholders and might not have captured all the differences and variations in the wording of the same or similar arguments.

[29] The authors excluded 2016 (the year the Standard was issued) from the sample to avoid ambiguity regarding entities' capacity to undertake and execute substantial lease-related decisions or capital expenditure initiatives within such a constrained timeframe.

(d) in the authors' view, lease intensive entities faced challenges in balancing leasing and ownership decisions upon IFRS 16 implementation.

37. Davern, Gyles, Hanlon, and Shah (2019) examined preparers' implementation processes, focusing on AASB 16. The authors surveyed 140 preparers, or advisers to preparers, representing a broad range of industries in Australia in June and July 2019. The findings were:

(a) most entities relied on existing internal resources instead of external consultants for the implementation of AASB 16;

(b) entities' key implementation challenges were related to the need for additional data gathering and system implementation; and

(c) entities improved their data and systems during the implementation which, in the authors' view, is an often-overlooked benefit of standard-setting.

### *Topic 842-related papers*

38. Research on the real effects of Topic 842 implementation examined its impact on entities':

(a) use of variable lease payments and short-term leases (paragraph 39);

(b) efficiency (paragraphs 40–45);

(c) capital structure (paragraphs 46–48); and

(d) debt contracts (paragraphs 49–50).

#### ***Use of variable lease payments and short-term leases***

39. Academic studies showed that Topic 842 influenced entities to increase the use of variable lease payments and decrease their operating lease costs. Research also showed that entities decreased the use of long-term leases and increased the use of short-term leases and capital expenditure. In the authors' view, the entities' motivation was to reduce reported liabilities and improve their leverage ratios,

indicating that the new lease requirements have not effectively prevented entities from keeping liabilities off balance sheet. The studies' findings were:

(a) Heese, Shin, and Wang (2024) showed for a sample of Russel 3000 Index entities that:

(i) operating lease expenses decreased while variable lease payments increased after the implementation of Topic 842.[30]

(ii) equity betas—measuring entities' risk compared to the overall market—and credit ratings showed no association with variable lease payment expenses post-implementation, indicating, in the authors' view, that investors and credit rating agencies may not consider variable lease payments in assessing entities' financial liabilities and risks.

(iii) estimating the effects of potential recognition of variable lease payments on the balance sheet indicated that total debt would increase by an average of 7.1% with even higher increases in industries where variable lease payments represent a large portion of total leases, such as consumer goods, food and essential goods retailing, transportation, and pharmaceuticals.

(b) Yoon (2022) showed for a sample of 6,279 observations of 1,640 US listed entities from the 2016–2019 period that in the first year of Topic 842 implementation, lease-intensive entities and entities with low leverage:[31]

[30] To determine how much expenses related to variable lease payments increased, the researchers looked at the difference between the current rental expenses and what the company had previously committed to pay in operating leases for the upcoming year. They divided this difference by the company's total assets from the previous year.

[31] Lease-intensive entities are entities with high level of operating leases use before the adoption of Topic 842. In the authors' view, these entities are likely to have benefited the most from the off-balance-sheet treatment of operating leases. Entities with lower leverage have lower debt-to-equity ratios compared to other entities in the sample. These entities are more sensitive to changes in operating leases because their debt-to-equity ratios are more affected by the capitalisation of leases applying Topic 842. As a result, in the authors' view, these less-levered entities are more incentivised to alter their leasing decisions.

(i) decreased their operating lease expenses by up to 4.2% of total assets relative to the pre-implementation period.

(ii) increased expenses relating to short-term leases and variable lease payments from 9% in 2018 to 24% of rental expenses in 2019 (rental expenses were defined as the sum of short-term lease expenses, variables lease expenses and operating lease expenses).

(c) using a sample of 227 US entities from 2013 to 2020, Christensen, Linsmeier, and Wangerin (2025) showed that after Topic 842 implementation, entities whose financing costs are sensitive to changes in their debt levels decreased the duration of minimum lease payments for new operating leases by 22%.

(d) using a sample of 1,742 US entities from 2011–2019, Ma and Thomas (2023) provided evidence that after Topic 842 implementation entities increased their use of short-term leases, decreased their use of long-term leases, and increased their capital expenditures.[32] However, the researchers found no evidence of negative economic consequences (such as decrease in entity value, increase in risk, financial covenant violation or changes in employment) indicating, in their view, that the new lease requirements reduced the reporting incentives for using operating leases without harming financial performance.

***Effects of Topic 842 implementation on entities' efficiency***

40. The evidence on how Topic 842 affected entities' efficiency is mixed. Three studies showed positive effects on entities' lease portfolio management and investment efficiency. One study documented negative effects on entities' operational efficiency. Another study developed a model showing that the effects of Topic 842 on investment efficiency depend on lease-related factors such as the discount rate for determining the present value of future lease payments.

[32] Ma and Thomas (2023) show that this change from operating leases to capital expenditure is larger for entities with (i) greater incentives to report higher earnings before interest, taxes, depreciation and amortisation, (ii) higher operating cash flows, (iii) higher sales growth, and (iv) higher ratio of long-term leases to total leases.

41. Using a sample of 2,170 entities during the 2013–2019 period,[33] Christensen, Lynch, and Partridge (2022) showed that entities that materially changed their internal controls to comply with Topic 842 improved their investment efficiency in the transition year compared to entities that did not.[34] The researchers demonstrated that the improvements in entities' internal processes led to improved investment efficiency. The preparation for implementing the new lease accounting standard required entities to gather and centralise lease data, which improved their internal information management.

42. Kim (2022) examined US public and private entities' lease transactions and purchase transactions (for machinery and other equipment) in the period around Topic 842 implementation (840,274 observations)—that is, 2017–2019. The study found that after the implementation of Topic 842:

   (a) publicly listed entities, particularly those with complex organisational structures, reduced their use of operating leases more than private entities. In the authors' view, Topic 842 led to reduction of internal information asymmetry, allowing for better monitoring which enabled these entities to identify and address inefficient leasing practices, thereby reducing their reliance on operating leases in favour of potentially more efficient investment decisions.

   (b) public entities' total factor productivity was higher by approximately 7% compared to total factor productivity of private entities, indicating, in the authors' view, that the new lease requirements led to better investment decisions by public entities.[35]

[33] The authors are using the final year of ASC 842 pre-adoption period as the treatment period.

[34] Section 302 of the Sarbanes-Oxley Act requires entities to disclose all material changes in internal controls and the reasons for the changes, so the authors were able to identify entities that made Topic 842-related changes.

[35] The researchers measured total factor productivity as the unexplained residuals from regressions of revenue on total value of purchased or leased equipment and labour cost.

43. Chatterjee (2023) also showed that Topic 842 had a positive effect on internal decision-making through better management of lease portfolios. Based on a sample of 36,304 observations of US entities from 2007 to 2018, the researchers showed that:

(a) during the 2017–2018 transition period, lease-intensive entities reduced their operating lease contracts and increased their profitability unlike non-lease-intensive entities. Entities with internal control weaknesses and complex organisational structures experienced the highest increases in profitability. The increase in profitability was explained by a reduction in operating lease expenses, indicating, in the authors' view, improved operating efficiency.

(b) entities that lobbied against Topic 842 also benefited from its implementation, as evidenced by realised efficiency gains from reducing lease portfolio inefficiencies.

(c) during the transition period, the market reacted more positively to earnings announcements by entities with higher proportions of operating leases in their lease portfolios compared to entities with lower proportions of operating leases. In the authors' view, investors anticipated that the new leases standard would lead to better information processing and managerial learning from the enhanced disclosures, potentially increasing entities' profitability.

44. Using data from 28 airline entities (14 publicly listed and 14 private) over the period 2013–2018, Li and Venkatachalam (2024) showed that public airlines significantly reduced their use of operating leases by about 7%–10%, substituting leased aircrafts with purchased ones. This shift led to decreased operational flexibility, evidenced by more idle capacity and shorter flying routes, potentially increasing wear and tear on the fleet.

45. Lu, Ruan, Wang, and Yu (2023) developed a model to explore how lease accounting affected investment efficiency. They showed that whether recognising operating leases on balance sheet leads to higher efficiency depends on three factors: the discount rate for determining the present value of future lease payments, the productivity ratio (comparing lease investment productivity to organisational capital

productivity) and the stability of short-term investment returns over time. High values of these factors favour keeping leases off balance sheet while low values favour capitalisation. The authors suggested that standard-setters should consider these factors when assessing lease requirements.

***Effects of Topic 842 implementation on entities' capital structure***

46. Academic papers examined whether entities managed their liabilities to avoid violating financial covenants in anticipation of an increase in their leverage ratio post-Topic 842 implementation. The evidence was:

(a) entities substituted debt financing with equity financing;

(b) entities reduced other liabilities in response to the increase in their lease liabilities;

(c) as a result, entities quickly adjusted their liabilities to their target leverage.

47. Using a US sample of 2,822 entities from 2018 to 2020, Ferreira, Landsman, and Roundtree (2024) showed that entities reduced their liabilities unrelated to leases by 7%–10% as their lease-related liabilities increased by 5%. This decrease in non-lease liabilities was larger in entities with higher likelihood of violating financial covenants, and entities whose financial statements were more affected by Topic 842. In the authors' view, contracting costs (such as costs of renegotiating financial contracts and increased borrowing costs that entities might face if they appear riskier due to higher leverage ratios after capitalising operating leases) influenced entities' financial decisions upon transition to the new lease accounting requirements.

48. Based on a sample of 24,945 entity-year observations from 2012 to 2020, Kim and Xie (2023) found that after the issuance of Topic 842, entities started adjusting their debt levels to their target leverage ratio more quickly. In the authors' view, the recognition of operating leases on the balance sheet and more detailed lease-related information disclosed in the notes brought transparency to entities' financial obligations and risk. Therefore, the accounting change prompted entities to adjust their capital structures more quickly to align with their target leverage.

***Effects of Topic 842 implementation on debt contracts***

49. Cheng, Jaggi, Yan, and Young (2022) used a sample of 1,537 debt contracts issued between 2012 and 2018 and examined how these contracts were affected by Topic 842. The findings were:

   (a) thirteen per cent of contracts did not have provisions to exclude or renegotiate the effects of Topic 842.

   (b) eighty seven per cent of contracts either excluded or provided an option to exclude the effects of Topic 842.

   (c) the propensity to exclude the effects of Topic 842 was explained by factors such as the size of operating lease obligations and the period of time between loan initiation and the effective date of Topic 842.

   (d) after Topic 842 became effective, some loan contracts began to include clauses that allowed the contracting parties to use pre-Topic 842 requirements and to avoid the impact of the new lease accounting requirements on the contractual definitions of financial metrics.

50. In the authors' view, the introduction of the new lease requirements allowed some entities to replace long-term operating leases with short-term leases. thus reducing interest costs and redistributing financial benefits from lenders to borrowers, and leading to fewer loan contracts using accounting-based performance pricing provisions.

### *Other topics*

51. This section summarises evidence on other topics related to the application of IFRS 16 and Topic 842. It includes:

   (a) a summary of findings from an academic literature review on the consequences of IFRS 16 (paragraph 52);

   (b) survey-based evidence on investors' views related to leases in the cash flow statement (paragraph 53);

(c) academic discussion of the IFRS Interpretations Committee's agenda decisions on lease-related questions (paragraphs 54–55); and

(d) academic commentary on the standard-setting process of developing IFRS 16 (paragraphs 56–57).

52. Xue and Huang (2024) conducted a literature review of 40 academic papers available in major databases of academic studies[36] on the consequences of IFRS 16. Many of the observations were similar to the findings of the various academic studies described earlier in this paper. The authors categorised the evidence into three primary topics:

(a) effects on financial statements—the implementation of IFRS 16 significantly increased entities' assets and liabilities, affecting entities' financial ratios (mainly leverage and profitability ratios);

(b) capital market effects:

(i) users initially reacted negatively to the capitalisation of operating leases because of the increase in leverage ratios;

(ii) this negative reaction is compensated by improved information transparency and enhanced financing and investment decisions, which in turn increases entity value;

(iii) IFRS 16 affected borrowing costs for lessees because creditors adjusted previously underestimated (increase in borrowing costs) or overestimated (decrease in borrowing costs) lease-related liabilities;

(iv) lease-related information is more faithfully represented on the balance sheet as IFRS 16 requires the recognition of lease liabilities and right-of-use assets, enhancing the accuracy and transparency of financial reporting;

(v) lease-related information became more value-relevant after IFRS 16 implementation; and

[36] Google Scholar, JSTOR, EBSCO, ScienceDirect, and SSRN.

(vi) the evidence on whether accounting information has become more comparable post-IFRS 16 is mixed; and

(c) effects on entities and their management:

(i) IFRS 16 prompted entities to strengthen internal controls and information systems, which in turn improved investment efficiency;

(ii) entities shifted from operating leases to purchasing assets or from long-term to short-term leases; and

(iii) (to mitigate debt default risk) entities adjusted their capital structure to reduce reliance on non-lease-related liabilities and compensate for the increase in lease liabilities after IFRS 16 implementation.

53. In a current project from the KPMG–IAAER research grant programme aiming to understand investor views on the cash flow statement, Anderson, Crandall, Garavaglia and Mongold (2024) surveyed over 200 investors. Their findings related to leases in the cash flow statement were as follows:

(a) respondents said they often reclassified lease payments from financing to operating activities;

(a) investors called for more detailed disclosures related to lease interest expense and right-of-use asset amortisation, as it can sometimes be challenging to reconcile these with actual cash flows related to leases; and

(b) respondents said that simplifying the presentation and categorisation of lease-related cash flows would enhance the usefulness of the financial statements.

54. Molina-Sánchez, Vicente-Lama and del Mar Ortiz-Gómez (2025) analysed the IFRS Interpretations Committee's agenda decisions relating to IFRS 16. In the authors' view, entities often interpreted and applied IFRS 16 inconsistently due to:

(a) lack of explicit guidance in the Standard on liabilities, particularly considering jurisdictional legal frameworks. For example, the assessment of cancellability of lease contracts was influenced by jurisdictional legal interpretations and varied among entities in different jurisdictions.

(b) complexities arising from the interaction with IFRS 9 *Financial instruments* concerning lease liability derecognition. For example, the overlap in lease derecognition requirements in IFRS 9 and IFRS 16 led to confusion and inconsistent application by different entities.

(c) challenges arising from the treatment of variable payments and lease terms. For example, interpretations differed on whether certain variable payments should be included in the measurement of lease liabilities, and how lease terms should be determined when considering options and penalties, leading to inconsistent reporting practices.

55. By analysing these matters and exploring the implications of events like the covid-19 pandemic on lease contracts, the authors recommended that the IASB issue clearer guidance to maintain the Standard's principles-based approach and ensure more consistent and faithful financial reporting.

56. Kabir and Rahman (2018) examined how the IASB applied the *Conceptual Framework for Financial Reporting* (*Conceptual Framework*) in developing IFRS 16. The researchers analysed:

(a) three consultation documents—a discussion paper, an exposure draft and a revised exposure draft;[37]

(b) three IASB/FASB staff papers summarising stakeholders' feedback on these documents;

(c) the bases for conclusions on the two exposure drafts and the Standard;

(d) 302 comment letters on the Discussion Paper;

(e) 786 comment letters on the 2010 Exposure Draft; and

(f) 641 comment letters on the 2013 Exposure Draft.

[37] Discussion Paper *Leases Preliminary Views* issued in 2009, Exposure Draft *Leases* issued in 2010 (2010 Exposure Draft) and Revised Exposure Draft *Leases* issued in 2013 (2013 Exposure Draft).

57. The study's findings were that:

(a) the IASB applied the *Conceptual Framework* in developing the new lease requirements;

(b) for particular lease requirements, the IASB applied concepts that were not included in the *Conceptual Framework*—for example, the requirement that the right-of-use asset and the lease liability be measured at the commencement date and not at the inception date was based on ensuring consistency with the lessor accounting model and the measurement date for other assets, and a lessee not recognising any gain or loss on initial recognition of the asset and liability;

(c) to address constituents' concerns about high implementation costs, the IASB introduced recognition exemptions for short-term leases and leases of low-value assets; and

(d) in the authors' view:

(i) the IASB balanced the complex interplay between conceptual and political considerations in developing IFRS 16; and

(ii) the PIR of IFRS 16 should consider whether any deviations from the *Conceptual Framework* have had an effect on the application of the Standard.

## Question for the IASB

| Question for the IASB |
|---|
| Do IASB members have any questions or comments on the academic literature summarised in this paper? |

## Appendix A—List of academic references

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