IASB® meeting

Date	**February 2023**
Project	**Post-implementation Review of IFRS 9—Impairment**
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 the expected credit losses (ECL) requirements in IFRS 9 *Financial Instruments*. The academic papers reviewed consist of:

    (a) papers identified through a search for papers on topics relevant to the PIR in Social Science Research Network, Google Scholar and other databases of academic studies;

    (b) a paper submitted to the *Australian Accounting Review*'s Special Issue on 'Research on Application and Impact of IFRS 9'; and

    (c) five papers submitted to the joint conference of the International Accounting Standards Board, Financial Accounting Standards Board and *The Accounting Review* 'Accounting for an Ever-Changing World' in November 2022.

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

    (a) Key messages;

    (b) Detailed research findings; and

    (c) Question for the IASB;

Key messages

3. There is evidence from several academic papers that the loss allowances for credit losses increased on transition to IFRS 9. However:

    (a) one paper found there was a decrease in allowances on transition to IFRS 9 and at the end of the first year of implementation of IFRS 9, compared to the year before implementation; and

    (b) evidence based on a sample of Chinese entities showed that on transition to Chinese Accounting Standard (CAS) 22 *Recognition and Measurement of Financial Instruments*—which is substantially converged with IFRS 9—the allowance for credit losses on financial assets of most entities did not change.[1]

4. Banks with regulatory capital constraints were more likely to adopt the Basel Committee on Banking Supervision (BCSB)'s capital transitional arrangements. The entities that adopted the arrangements decreased their exposure to systematic risk.

5. Researchers generally agree that applying the ECL model resulted in more timely recognition of allowances for credit losses. This is evidenced by an increase in the positive association between allowances for credit losses in the current period and non-performing loans in the next period.

6. Application of the ECL requirements in IFRS 9 resulted in more useful information for the purposes of predicting credit and equity risk, compared to the incurred loss model applying IAS 39 *Financial Instruments: Recognition and Measurement*.

7. Market participants reacted positively to IFRS 9 related news announcements before the IFRS Accounting Standard became effective, suggesting that investors viewed IFRS 9 as enhancing wealth for shareholders.

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[1] China's Ministry of Finance replaced the old CAS 22 with new CAS 22 on 31 March 2017. CAS 22 is substantially converged with IFRS 9. It became effective on 1 January 2018 for Chinese firms listed domestically and overseas; from 1 January 2019 for banks listed domestically, and from 1 January 2021 for unlisted banks.

8.   There was mixed evidence on whether managerial discretion on application of ECL model resulted in increased earnings management after the implementation of IFRS 9. One paper suggested the extent to which banks managed earnings through recognition of allowances for credit losses increased after the implementation of IFRS 9. Another paper noted no such evidence.

9.   One academic paper concluded that while the ECL model in IFRS 9 is less procyclical than the incurred credit losses model in IAS 39, it is more procyclical than the FASB's current expected credit losses (CECL) model. Evidence from another paper shows that the timing and size of cyclical effects depend on the anticipated and unanticipated duration of a recession—a longer unanticipated duration exacerbates the cyclical effects.

10. On the interaction between IFRS 9 and the supervisory rules, researchers concluded that IFRS 9 might enhance financial stability through reducing the build-up of losses and overstatement of regulatory capital and through extended disclosure requirements. IFRS 9 could also increase the volatility of regulatory capital because of the reliance on a point-in-time estimates and the application of judgement for the purposes of recognising ECL.

11. One paper compared US banks with subsidiaries applying IFRS 9 with US banks without such subsidiaries. The study found that the banks with subsidiaries applying IFRS 9 charged higher loan fees to their customers than banks without such subsidiaries. In the authors' view, the cost of implementing ECL model was passed on to customers of the whole group, including customers of subsidiaries that do not apply IFRS 9.

12. There is some evidence that implementing the ECL requirements were followed by a decrease in lending to small and medium enterprises (SMEs).

13. Evidence based on a sample of Chinese entities showed that entities incurred higher audit fees after transition to IFRS 9.

14. The IASB acted as an independent standard setter in developing IFRS 9. Also, IFRS 9 did not violate any of the European Union (EU)'s endorsement criteria.

15.   The IASB developed the ECL model by balancing the objective of faithfully reflecting economic reality with being operationally feasible for its stakeholders.

Detailed research findings

16.   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)   The effects of transition to IFRS 9 on loss allowances;

(b)   Timeliness of ECL recognition[2];

(c)   Usefulness of ECL to predict credit and equity risk;

(d)   Market reaction to IFRS 9 related news announcements;

(e)   Investigations of earnings management;

(f)   ECL model and financial stability;

(g)   Costs of transition to ECL;

(h)   Lobbying behaviour and standard-setting; and

(i)   Theoretical foundation of IFRS 9.

A.   The effects of transition to IFRS 9 on loss allowances

17.   Evidence about the effects of transition to IFRS 9 is based on six empirical academic papers—four published and two working papers. The findings are:

(a)   based on a sample of 1,233 observations—293 banks from 74 countries—in 2014–2019 (189 banks that adopted IFRS 9 during fiscal year 2018 and 104

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[2] Timeliness of loss allowances for credit losses is measured by a positive association between loss allowances for credit losses in the current year and changes in non-performing loans from the current year to the following year—a higher association after the implementation of IFRS 9 implies timelier recognition of loss allowances.

control banks in non-IFRS countries or countries where IFRS 9 was not implemented in fiscal year 2018): [3,4]

  (i)   in more than 90% of cases the implementation of IFRS 9 (first-day impact of IFRS 9) was an increase in loss allowances for ECL, and the mean (median) increase was 20% (14%).

  (ii)   most of the increase in loss allowances was related to loans that were not in default (ie the loss allowances for ECL disclosed for the first time under IFRS 9).

  (iii) the increase in loss allowances for credit losses was larger in countries experiencing an increase in the country's own credit risk.[5]

(b)   based on a sample of 61 banks from 19 European countries in 2017-2018:[6]

  (i)   after the implementation of IFRS 9 the impairment effect on equity was an average (median) decrease of 3.9% (1.8%) of banks' equity—the decrease in equity varied by bank size, credit risk management approach and bank's country of origin.

  (ii)   the aggregate level of ECL loss allowances at the end of the first year of implementing IFRS 9 was 18% lower than in the year before implementation.[7]

  (iii) the total loans and bonds at the end of the first year of implementing IFRS 9 were 9% lower than in the year before implementation.

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[3] Lopez-Espinosa, G., Ormazabal, G., and Sakasai, Y. (2021). 'Switching from Incurred to Expected Loan Loss Provisioning: Early Evidence', *Journal of Accounting Research* 59 (3), 757–804.

[4] The sample includes all publicly traded banks designated as "Globally Systemically Important Banks" by the Financial Stability Board (FSB) in 2019 except one that was not publicly traded during the sample period.

[5] The increase in the country's own credit risk is measured as the change in the spread of the five-year sovereign credit default swap corresponding to the country.

[6] Löw, E. Schmidt, L. and Thiel, L. F. (2019). 'Accounting for Financial Instruments under IFRS 9 – First-Time Application Effects on European Banks' Balance Sheets', Working paper, Frankfurt University.

[7] The authors note that before the implementation of IFRS 9 it was expected that the level of loss allowances might increase or might not change after implementation. In their view, the 18% decrease in the level of loss allowances is partly explained by the reduction in bonds and loans in their sample; by the small proportion of stage 2 loans (6% - 7%) in their sample; and by the favourable economic outlook in 2018.

(c)   using an experiment to test in a simplified setting whether the incentives created by the change to the ECL model led to the expected results: [8]

   (i)   the amount and adequacy of ECL loss allowances on trade receivables increased applying IFRS 9—that is, after the implementation of the simplified approach to ECL;

   (ii)   providing participants with more detailed information about the likelihood of credit losses on trade receivables further increased the adequacy of loss allowances for ECL.

(d)   based on a sample of Slovenian banks, the transition effect of IFRS 9 on ECL banks' loss allowances and equity varied on whether the banks were subject to regulatory intervention by the state—banks that underwent state assisted portfolio improvements recognised additional allowance for credit losses on transition to IFRS 9 but banks that performed state assisted loan portfolio restructuring did not.[9]

(e)   using a sample of 3,355 publicly listed Chinese entities, on transition to CAS 22, the allowance for credit losses on financial assets of most entities did not change. ECL reported by financial entities and entities with a Big Four auditor became more value relevant—having a stronger negative association with share prices and returns—after the implementation of IFRS 9.[10]

(f)   based on a sample of 101 publicly listed European banks in 2016–2019, banks with regulatory capital constraints were more likely to adopt the BCSB's capital transitional arrangements (CTA) and CTA adopters decreased their

[8] Gomaa, M., Kanagaretnam, K., Mestelman, S., and Shehata, M. (2019). 'Testing the Efficacy of Replacing the Incurred Credit Loss Model with the Expected Credit Loss Model', *European Accounting Review* 28(2), 309-334.

[9] Zaman, M., and Morec, B. (2020). 'IFRS 9 Transition Effect on Equity in a post Bank Recovery Environment: The Case of Slovenia'. *Economic Research* 34(1), 670–686.

[10] Bushman, R., Guo, Y., Mei, B., and J. Ye. (2022).'Challenges and Economic Consequences of IFRS 9: Evidence from China', Working paper.

exposure to systematic risk. In the authors' view, banks signalled their inability to absorb a 'capital' shock upon the application of the ECL model in IFRS 9.[11]

B. Timeliness of ECL recognition

18. The academic literature examining the timeliness of recognising ECL by entities applying IFRS 9 is based on three empirical papers—one published paper and two working papers— and a case study. The findings are:

   (a) based on a sample of 50,175 quarterly observations from 33 countries (20 countries that implemented IFRS 9 and 13 countries that did not) in 2017–2018, that: [12]

      (i) the implementation of IFRS 9 resulted in more timely recognition of expected credit losses.

      (ii) riskier banks and banks that recorded smaller loss allowances before the implementation of IFRS 9 recognised larger and more timely loss allowances after the implementation of IFRS 9.

   (b) Based on a sample of 1,426 quarterly observations of 69 banks from 24 countries during 2014–2018, banks recognised more timely allowances for ECL after the implementation of IFRS 9.[13]

19. One working paper provided additional evidence on the timeliness of loss allowances for ECL for a sample of Chinese banks applying CAS 22. Based on 1,331 observations of 326 banks in 2015-2019, the researchers found that after the implementation of the ECL model the amount and timeliness of allowances for credit losses:[14]

   (a) did not change for state-owned banks;

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[11] Dong, M., and Oberson, R. (2021). 'Moving toward the Expected Credit Loss Model under IFRS 9: Capital Transitional Arrangement and Bank Systematic Risk', *Accounting and Business Research* 52 (6), 641-679.

[12] Kim, J.B., Ng, J. and Wang, C. (2021). 'The Effect of the Shift to the Expected Credit Loss Model on Loan Loss Recognition Timeliness', Working paper, City University of Hong Kong.

[13] Oberson, R. (2021). 'The Credit-Risk Relevance of Loan Impairments Under IFRS 9 for CDS Pricing: Early Evidence', *European Accounting Review* 30(5): 959-987..

[14] Mingyi, H. and Yi, R. and Guoman, S and Wang, L. L. (2022), The Politics of Underreporting Loan Losses: Evidence from the Mandatory Shift to Expected Credit Loss Provisioning in China, Working paper.

(b)   increased for state-owned banks with weak political influence—the increase was lower for state-owned banks governed by local officials with strong career incentives and connections with asset management companies; and

(c)   increased for non-state-owned banks.

In the authors' view, strong regulatory monitoring can facilitate effective implementation of the ECL model in emerging economies.

20.   Researchers applied the principles of IFRS 9 in a case study of Greek government bonds in 2009–2011 when Greece's credit rating declined sharply. In the researchers' view, IFRS 9 relies more on management expectations and would lead to timelier recognition of ECL. However, in their analysis these estimated loss allowances applying IFRS 9 appeared delayed and low compared to the fair value losses of the bonds.[15]

C. Usefulness of ECL to predict credit and equity risk

21.   Evidence on the usefulness of ECL for the purposes of predicting equity and credit risk is based on two published empirical academic papers. The findings are:

(a)   using a sample of 1,426 quarterly observations of 69 banks from 24 countries during 2014–2018:[16]

(i)   loss allowances for credit losses applying IFRS 9 are more informative to participants in credit default swap (CDS) markets than allowances for credit losses applying IAS 39—the positive association between CDS prices and allowances for credit losses was higher after the implementation of IFRS 9. The increase in usefulness of information was larger for:

1.   banks with weaker pre-IFRS 9 information environments[17];

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[15] Gebhardt, G., (2016). 'Impairments of Greek Government Bonds under IAS 39 and IFRS 9: A Case Study', *Accounting in Europe* 13 (2), 169-196.

[16] Oberson, R. (2021).

[17] By research design, banks with weaker information environments were identified as those with higher analyst forecast errors and higher analyst forecast dispersion.

2. CDS contracts with medium and long-term maturity;

3. countries where loss allowances for credit losses incorporate more forward-looking information (loss allowances as a result of loans moving from stage 1 to stage 2); and

4. countries where the application of judgement in IFRS 9 for the purpose of recognising loss allowances for credit losses resulted in less earnings management after the implementation of IFRS 9. [18]

    (ii)   the volatility of CDS spreads decreased after the implementation of IFRS 9—the decrease was larger for banks with weaker pre-IFRS 9 information environments and CDS contracts with a medium and long-term maturity. In the authors' view, after the implementation of IFRS 9, the views of credit investors about banks' credit risk became more homogeneous.

(b)   based on a sample of 1,233 observations of 293 banks from 74 countries during 2014–2019 (189 banks that adopted IFRS 9 during fiscal year 2018 and 104 banks in non-IFRS countries or countries where IFRS 9 was not implemented in fiscal year 2018):[19]

    (i)   ECL information applying IFRS 9 was more predictive of (ie more positively associated with) future equity risk compared to credit losses applying IAS 39 in countries experiencing deterioration in credit conditions.[20]

    (ii)   in the authors' view, the higher predictive ability of ECL for future credit risk resulted from banks' disclosures of ECL for loans on stage 1 and stage 2.

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[18] In the academic literature the term 'earnings management' unlike 'earnings manipulation' is used not to describe misapplication of requirements but application of judgement that aims to portray the company in a more favourable light.

[19] Lopez-Espinosa, G. et al.(2021).

[20] Future equity risk was measured as the standard deviation of daily share returns or the average of absolute value of daily share returns, both calculated over one year from the filing of an entity's annual report.

D. Market reaction to IFRS 9 related news announcements

22. One published empirical paper examined the market reaction to 13 IFRS 9 related news announcements by the IASB and EFRAG in 2009–2012. Using a sample of 5,480 entities from 17 countries, the researchers found:

    (a) the overall market reaction—the three-day market-adjusted return to a portfolio of the 5,480 entities—to those announcements was positive. In the authors' view, investors viewed the adoption of IFRS 9 as enhancing wealth for shareholders.

    (b) the market reaction was stronger for entities in countries with higher convergence between local GAAP and IAS 39.[21]

E. Investigations of earnings management

23. Evidence on whether managerial discretion on application of the ECL model has resulted in earnings management is based on two published empirical papers and one published experimental study.

24. The findings of the empirical papers are:

    (a) based on a sample of 1,426 quarterly observations for 69 banks from 24 countries in 2014–2018, the association between allowances for credit losses and return on assets increased after the implementation of IFRS 9. In the authors' view, this means the extent to which banks managed earnings through recognition of allowances for credit losses increased after the implementation of IFRS 9.[22]

    (b) using a sample of 1,233 observations from 293 banks from 74 countries in 2014–2019 (189 banks that adopted IFRS 9 during fiscal year 2018 and 104 control banks in non-IFRS countries or countries where IFRS 9 was not

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[21] Onali, E. and Ginesti, G. (2014). 'Pre-adoption Market Reaction to IFRS 9: A Cross-country Event Study', *Journal of Accounting and Public Policy*, 33 (6), 628-637.

[22] Oberson, R. (2021).

implemented in fiscal year 2018)[23], there was no evidence that entities recognised loss allowances for credit losses to manage earnings or to meet regulatory capital requirements when applying IFRS 9 relative to IAS 39.

25. One academic paper conducted an experiment to test whether the managerial discretion in applying the ECL model affected earnings management using three different compensation schemes: [24]

   (a) a scheme that provided managers with incentives to maximise profits over the economic cycle;

   (b) a scheme that provided incentives to managers to maximise profit in the current period at the expense of profits over the economic cycle; and

   (c) a bonus compensation scheme that awarded managers a bonus when profits were above a threshold and did not exceed a limit.

26. The findings from the experiment are that:

   (a) earnings management:

      (i)   increased less than predicted;[25]

      (ii) did not increase for the compensation scheme that was focused on maximising profits over the economic cycle of the entity; and

      (iii) varied across the compensation schemes providing managers with incentives to achieve target profits in the short-term.

   (b) the increase in earnings management did not offset the benefits of the improved adequacy of reserves held to manage expected credit losses across compensation schemes.

27. Additional evidence on the effect of IFRS 9 on earnings management was provided by the experiment described in paragraph 17(c). The findings are that the choice of

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[23] Lopez Espinosa, G. et al. (2021).

[24] Gomaa et al. (2019).

[25] The researchers developed predictions based on the outcomes of simulations for desired ending balances and adequacy of ending balances under the different credit-loss rules and compensation schemes.

compensation scheme affected both the amount and adequacy of ECL. In the authors' view, whether allowing managers more discretion leads to higher earnings management is conditional on the type of compensation schemes of the entity.

F. ECL model and financial stability

28. Evidence on the impact of the ECL model on financial stability is based on three analytical working papers and one interpretative published academic paper. The findings are:

(a) when the economy moves from expansion to contraction:

    i) the loss allowances recognised applying IFRS 9 and FASB's ASU 2016-13 *Financial Instruments—Credit Losses* (Topic 326) will increase more suddenly compared to the loss allowances for credit losses applying the predecessor models;[26] and

    ii) regulatory capital (common equity tier 1) will decline more severely compared to the decline in regulatory capital when applying the predecessor models;

    iii) the ECL model could decrease procyclicality by inducing banks to recognise more loss allowances for credit losses in the early stages of an economic recession while decreasing loss allowance recognition at the peak of the crisis; and

    iv) the timing and importance of cyclical effects depends on the anticipated and unanticipated duration of a recession—a longer unanticipated duration exacerbates the cyclical effects, while greater capacity to anticipate the arrival of a contraction allows entities to absorb part of the cyclical losses prior to the start of the contraction.

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[26] Abad, J., and Suarez, J. (2018). 'The Procyclicality of Expected Credit Loss Provisions.', CEPR Discussion Paper No. DP13135, CEMFI, 2018.

(b)   comparing the procyclicality implications of IAS 39, IFRS 9 and ASU 2016-13:[27]

   i)   IFRS 9 is less procyclical than IAS 39 because credit losses applying IAS 39 are recognised once the default occurs and IFRS 9 losses are recognised before default.[28]

   ii)   IFRS 9 is more procyclical than FASB's ASU 2016-13. In general, IFRS 9 initially requires 12–month ECL for newly issued loans whereas ASU 2016-13 requires lifetime ECL. However, the lower procyclicality of FASB's CECL model comes at cost of a large increase in loss allowances for expected credit losses.

(c)   using a loan-level credit risk model and a sample of Irish residential mortgages:[29]

   i)   approximately 30 per cent of the performing mortgage portfolio at the end of 2015 was subsequently classified as underperforming, that is at stage 2.

   ii)   loan stage assignment can be highly procyclical; calculating backward-looking, static estimations of stage 2 mortgages between 2008 and 2015 showed that the share of stage 2 among performing mortgages rose during the economic downturn and peaked in 2013. As the economy improved, large transitions were assigned from stage 2 into lower risk performing loans.

(d)   examining the interaction between IFRS 9 and supervisory rules, that IFRS 9 might:

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[27] Buesa, A., Población, F. J. and Tarancón, J. (2020). 'Measuring the Procyclicality of Impairment Accounting Regimes: A Comparison Between IFRS 9 and US GAAP.' ECB Working Paper Series No. 2347, European Central Bank.

[28] Giner and Mora (2019) examine the differences between the ECL and CECL and note that while both models are more conservative than the incurred loss approach, each portrays a different type of conservatism, whose ability to provide information will depend on the bank's business model.

[29] Gaffney, E., and McCann, F. (2019). 'The Cyclicality in SICR: Mortgage Modelling Under IFRS 9.' Research Technical Paper, ESRB: Working Paper Series No. 2019/92.

(i)   enhance financial stability through:[30]

1.   reducing the build-up of losses and the overstatement of regulatory capital;

2.   extended disclosure requirements contributing to more market discipline; and

(ii)   increase the volatility of regulatory capital for some banks due to:

1.   the reliance on point-in-time estimates of the main input parameters (probability of default and loss given default)

2.   increased scope for managerial discretion allowed by the ECL model.

G.   Costs of transition to ECL

29.   Evidence on the costs of transition to ECL model is based on one empirical published paper and two empirical working papers.

30.   One paper examined the effect of implementing the ECL model on loan pricing and loan securitisation for US banks with foreign subsidiaries that had implemented IFRS 9. Comparing 1,543 US banks with subsidiaries that applied IFRS 9 with US banks with domestic subsidiaries that had not yet implemented the current expected credit loss model required by Accounting Standards Codification (ASC) 326 in 2018–2019, the findings of the paper are that in the two years after implementation of IFRS 9:[31,32]

(a)   US banks with subsidiaries in IFRS reporting jurisdictions increased the spreads included in loans' interest rates more than US banks with domestic subsidiaries. There had been no difference in the changes in loan spreads

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[30] Novotny-Farkas, Z., (2016). The Interaction of the IFRS 9 Expected Loss Approach with Supervisory Rules and Implications for Financial Stability, *Accounting in Europe*, 13:2, 197-227.

[31] US banks with major subsidiaries in IFRS adopting countries are subject to dual reporting requirements and started transitioning to the expected credit loss model when they implemented IFRS 9 in their IFRS reporting subsidiaries in 2018. Other domestic US banks were not required to implement the expected credit loss model until ASC 326 became effective in 2020.

[32] Lin, Y., Xu W. and R. Zhang (2022). 'Spillover Effects of Expected Credit Loss Model Implementations: A Perspective of Implicit Taxes', Working paper.

between the two groups of banks in the two years before implementation of IFRS 9. [33]

(b) Banks with higher than the median number of wholly-owned IFRS reporting subsidiaries increased their loan spreads more. In the authors' view, the cost of implementing the ECL model to IFRS reporting subsidiaries was passed on to the customers of the whole group, including customers of subsidiaries outside IFRS reporting jurisdictions in the form of higher loan prices.

(c) US banks with subsidiaries in IFRS reporting jurisdictions were more likely to securitise their loans than US banks with domestic subsidiaries. In the authors' view, banks with subsidiaries in IFRS reporting jurisdictions were more likely to securitise their loans to mitigate the higher cost of loan issuance. Banks increased their loan spreads more when their customers were less likely to find alternative financing.

31. Evidence on lending effects for banks moving from the incurred losses to the ECL model is based on a sample of 80 large banks from 21 countries in 2014–2019. The findings are that:

(a) in the two years after implementing IFRS 9 banks decreased credit amounts and loan maturities and increased interest costs and collateral requirements for small and medium size enterprises (SMEs) more than banks that did not implement IFRS 9. [34,35]

(b) publicly traded banks and banks with a higher ratio of CEO's variable compensation to total compensation decreased their lending to SMEs more—in

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[33] The researchers reach this conclusion by examining the changes in loan spreads for banks with subsidiaries applying IFRS 9 and banks with no such subsidiaries from the year before implementation to the year after implementation of IFRS 9 after controlling for other factors such as borrower size, profitability, leverage, tangible assets, and R&D expenses and common industry, geography, and time trends in loan spreads.

[34] Ertan, A. (2022). 'Expected Losses, Unexpected Costs? Evidence from SME Credit Access under IFRS 9', Working paper, London Business School.

[35] The paper estimated the reduction in lending to be 16-20%. The main hypothesis in the paper is that SMEs are opaque and risky entities and banks may decide to reduce lending to them in order to decrease expected losses.

the authors' view, these banks decreased their lending to SMEs because of concerns that ECL would increase their earnings volatility;

(c)   smaller banks and banks with higher audit fees per dollar of assets decreased their lending to SMEs more—in the authors' view, this is because of cash costs and implementation difficulties; and

(d)   there is no evidence of banks reducing their lending to SMEs because of capital constraints or banks' learning.

32.   An academic paper using a sample of publicly traded non-financial Chinese entities examined the implementations costs of CAS 22 that became effective in 2018. The findings are: [36]

(a)   entities were subject to higher audit fees after CAS 22 was implemented.[37] Most affected were non-state-owned enterprises and entities audited by the Big Four firms; and

(b)   in the authors' view, implementing IFRS 9 was costly for non-financial entities.

H.   Lobbying behaviour and standard setting

33.   Two published interpretative academic papers examined the influence of stakeholders on the IASB's standard setting process during the development of IFRS 9. The findings are:

(a)   based on content analysis of 327 comment letters to the 2009 Exposure Draft *Financial Instruments: Amortised Cost and Impairment* (2009 ED) and the 2011 Supplement to Exposure Draft *Financial Instruments: Amortised Cost*

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[36] Fang, X., Guo, Y., Mei, B., and J. Ye. (2022). 'Implementation Costs of IFRS 9 for Non-financial Firms: Evidence from China'. *Accounting & Finance* 62(2): 2,781-2,805.

[37] The authors also documented that entities' rate of disposal of available for sale securities increased after the implementation of IFRS 9.

and Impairment (2011 SD) and qualitative analysis of the meeting summary of the Advisory Panel and documents on the IASB's outreach activities: [38]

(i)   the IASB acted as an independent standard setter by not allowing significant influence by any stakeholder group; and

(ii)   the IASB used its due process to solicit professional advice from stakeholders that contributed to making the expected credit loss model more operational, less complex and capable of producing more comparable financial information.

(b)   based on interpretation of the EU's IFRS endorsement criteria in the context of IFRS 9, IFRS 9 met the EU's endorsement criteria—'true and fair' criterion; a list of qualitative criteria (understandability, relevance, reliability and comparability'); and the 'European public good' criterion. [39]

I.   Theoretical foundation of IFRS 9

34.   One published qualitative academic paper examined the theoretical foundation of the ECL model in IFRS 9. drawing on an analysis of four consultation documents, 27 staff papers and 683 comment letters in 2009–2014 and interviews with five IASB staff members and 20 IASB stakeholders in 2014–2016, the findings are: [40]

(a)   The initially proposed 2009 model in the 2009 ED had strong theoretical foundations in financial economics but would present practical difficulties to preparers.

(b)   The IASB developed the ECL model by balancing the objective of reflecting economic reality that incorporated other matters of concern—the 12-month loss horizon presented a workable solution for its stakeholders.

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[38] Hewa, I. S., Mala, R., and J. Chen. (2020). 'IASB's Independence in the Due Process: An Examination of Interest Groups' Influence on the Development of IFRS 9', *Accounting & Finance* 60 (3), 2585-2615.

[39] Bischof, J. and Daske, H. (2016). 'Interpreting the European Union's IFRS Endorsement Criteria: The Case of IFRS 9', *Accounting in Europe*, 13 (2), 129-168.

[40] Pucci, R., and Skaerbaek, P. (2020). 'The Co-Performance of Financial Economics in Accounting Standard-setting: A Study of the Expected Credit Loss Model in IFRS 9', *Accounting, Organisations and Society* 81.

Question for the IASB

Questions for the IASB
1. Do the IASB members have any questions or comments on the academic literature summarised in this paper?