

IFRS 9, IMPAIRMENT AND PROCYCLICALITY: IS THE CURE WORSE THAN THE DISEASE?

After examining the conceptual issues underlying the debate on provisioning and procyclicality, and assessing possible financial statement impacts, this paper indicates that the accounting treatment of loan loss provisioning provides only a delayed, second-order effect on procyclicality. It also suggests that the introduction of IFRS 9 may result in some perverse consequences due to the level of subjectivity and modelling complexity involved in assessing the level of expected future credit losses.



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The global financial crisis (GFC) has highlighted the interaction between financial institution and accounting regulatory requirements in relation to loan loss provisioning. From an accounting viewpoint, provisions represent reductions in the carrying amount of a loan, or a group of loans, based on evidence of impairment. Although there are some differences across jurisdictions, the accounting model currently applied under IAS 39 *Financial Instruments: Recognition and Measurement* (a measure of instrument set by the International Accounting Standards Board (IASB)) is based on the notion of incurred loss. In contrast, the financial institutions regulatory framework assumes that provisions will be set aside to cover expected losses and that capital is then used to cover unexpected losses. Shortfalls in actual provisions relative to expected losses directly affect capital.

Some commentators have suggested that the IAS 39 accounting incurred loss provisioning framework has contributed to procyclicality. The contribution of provisioning to the procyclicality of capital depends on the measurement and timing of provisions relative to the economic cycle. The IASB has issued an exposure draft International Financial Reporting Standard (IFRS) 9 *Financial Instruments: Amortised Cost and Impairment* in which there is a movement towards the use of an expected loss model of provisioning. This paper examines the conceptual issues underlying the debate on provisioning and procyclicality and assesses possible financial statement impacts. It suggests that the introduction of IFRS 9 may result in some perverse consequences due to the level of subjectivity and modelling complexity involved in assessing the level of expected future credit losses.

Loan loss provisioning and procyclicality

A major feature of the global credit boom between 2001 and 2007 was the extraordinary growth of loans by financial institutions. In broad terms, the Basel II regulatory framework attempts to align the calculation of banks' risk-weighted assets with actual risk, especially when banks are accredited to use Advanced Internal Rating Based (IRB) models. This alignment, in itself, can generate cyclicity in capital requirements, where higher capital is required in bad times and lower capital in good times. However, it can also result in procyclicality, which involves an amplification of natural fluctuations in the financial system.

As noted by Arjani,² during a period of sustained economic growth, estimated probabilities of default are likely to fall, prompting lower minimum capital requirements per unit of risk-weighted assets under Basel II. This capital relief presents an opportunity for banks to increase their supply of loans, or to purchase other assets at a stage of the cycle when lending conditions tend to be easy and asset prices may be rising rapidly. From the perspective of a single bank, putting this excess capital to work seems

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rational, given its objective of maximising the return to its shareholders. When many banks collectively follow the same strategy, however, risk in the broader financial system will increase. That is, the ensuing higher leverage in the banking sector could amplify the severity of a real or financial shock such that banks' capital may be insufficient to manage the unanticipated loan losses and asset write-downs that accompany such a shock. Rising default risk associated with a subsequent economic downturn will also raise minimum required capital under Basel II, further adding to this strain.

Since it can be difficult for banks to raise new capital during such conditions, they may be required to restrict loans or liquidate investments to continue to meet minimum regulatory capital requirements and, ultimately, avoid insolvency. Once again, from the perspective of a single bank, this would appear to be a prudent action. However, when all banks are forced to engage in this deleveraging process at the same time, the widespread reduction in loans and the excessive fall in asset prices will further aggravate the downturn. This, in turn, could place even greater strain on the capital positions of banks and, ultimately, undermine economic and financial stability.

The contribution of provisioning to the procyclicality of capital depends on the measurement and timing of provisions relative to the economic cycle. This is supported by academic studies³ that have found that lower provisions are observed during periods of higher real GDP, loan growth, asset prices and earnings. The relationship between provisioning and the economic cycle is determined by the timing of the creation of the provision relative to the occurrence of the losses.

In making loans, banks face the risk that borrowers will default and the full amount of the loan will not be recovered. When objective evidence of a loan loss occurs, a bank will make a charge to the profit and loss statement to create a loan loss provision that is shown on the balance sheet. When the full amount of principal and interest on the loan becomes uncollectible, the loan balance is reduced through a charge to the loan loss provision.

Two views exist in relation to when provisions should be set aside:

- > *Incurred loss approach:* Provisions should be set based on objective evidence of a loss trigger event or it is highly probable that a loss has occurred but has not been reported as yet. This amounts to recognition of a factual state rather than its anticipation. In this case, the timing of losses and provisions coincide.
- > *Expected loss approach:* Provisions should be set aside to cover the expected loss between the origination of the loan and its maturity. In this case, provisioning does not depend on any evidence of deterioration in credit quality and is unrelated to the actual occurrence of losses.

Following the GFC, there has been widespread criticism of role of IAS 39's fair value accounting in exacerbating the effects of the market downturn, resulting in procyclicality. While empirical scholarly and regulatory analyses have not supported this contention, there have nevertheless been reforms set in train for the regulation of financial reporting in this area.

As noted by Misina,⁴ the relationship between expected and incurred losses over the business cycle is complex, but, in general, it can be characterised as follows:

- > During economic downturns, both expected and incurred losses will increase. While the initial recognition of losses may coincide, the expected loss approach is more conservative requiring the recognition of the total expected loss, whereas the incurred loss model waits for each periodic assessment of incurred loss. During downturns, these different dynamics may result in persistent shortfalls and, thus, in reductions in regulatory capital precisely when it may be needed the most.
- > During prolonged economic upturns, both expected and incurred losses will tend to be low. It should not be taken for granted, however, that these periods will generate persistent excess provisions over expected losses and, hence, consequent increases in regulatory capital.

The Financial Stability Forum⁵ asserted that early recognition of loan losses through an expected loss model could have dampened cyclical moves during the GFC. Under the current accounting requirements (IAS 39) of an incurred loss model, a provision for loan losses is recognised only when a loss impairment event or events have taken place that are likely to result in non-payment of a loan in the future.

While the timing of crises is essentially unpredictable, severe financial sector distress is preceded by unusually strong credit and asset price growth, and by prolonged periods of unusually low risk premia. Amplifying feedback mechanisms can be as potent in the expansion phase of the cycle as they are in downturns. As the economy grows, cash flows, incomes and asset prices rise, risk appetite increases and external funding constraints are eased which, in turn, facilitates risk-taking. The financial system typically does not build up sufficient capital and liquidity buffers during benign economic conditions, when it is easier and cheaper to do so, to protect it during more challenging times. In addition, the system is encouraged to deepen exposure to the same types of risk because of the biases inherent in regulatory capital prudential requirements.

The primary drivers of procyclicality have been identified by the Financial Stability Forum⁶ as limitations in risk management frameworks and distortions in incentives between providers and users of funds (i.e. not accounting regulation). For example, near-horizon estimates of quantitative inputs such as short-term volatility, asset and default correlations, probabilities of default and loss given default all move procyclically. As a result, measures of risk often spike once events occur in the real or financial markets, but may be quite low even as risk builds up during the expansion phase.

IFRS 9 Exposure Draft

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As part of their response to the GFC, in April 2009, the G20 agreed that accounting standard setters should take action by the end of 2009 to:

- reduce the complexity of accounting standards for financial instruments;⁸
- strengthen accounting recognition of loan loss provisions by incorporating a broader range of credit information;
- improve accounting standards for provisioning, off-balance sheet exposures and valuation uncertainty;
- achieve clarity and consistency in the application of valuation standards internationally, working with supervisors;
- make significant progress towards a single set of high-quality global accounting standards; and
- within the framework of the independent accounting standard setting process, improve involvement of stakeholders, including prudential regulators and emerging markets, through the IASB's constitutional review.

In addition, in August 2009, the Bank of International Settlements⁹ issued the following principles in relation to provisioning and impairment:

- Loan loss provisioning should be robust and based on sound methodologies that reflect expected credit losses in the banks' existing loan portfolio over the life of the portfolio. The allowance or provision should be presented separately from total loans. The accounting model for provisioning should allow early identification and recognition of losses by incorporating a broader range of available credit information than presently included in the incurred loss model and should result in an earlier identification of credit losses. For the purpose of these principles, expected credit losses are estimated losses on a loan portfolio over the life of the loans and

considering the loss experience over the complete economic cycle.

- The provisioning approach should allow for the exercise of professional judgement while using leading economic indicators, changes in underwriting standards and collection practices, and other relevant information when estimating provisions or allowances. Judgement related to these provisions should be well evidenced.
- The new standard should allow for provisions for groups of loans with similar risk characteristics.
- The new standard should utilise approaches that draw from relevant information in banks' internal risk management and capital adequacy systems where possible (e.g. approaches that build upon or are otherwise consistent with loss estimation processes related to bank internal credit grades may be useful).
- The approach should encourage provisioning to address credit losses across the entire range of bank internal credit grades for loan portfolios.
- The new standard should apply the same impairment approach to all financial assets measured using amortised cost.

These principles reflect lessons learned from the financial crisis, particularly the need for earlier recognition of loan losses based on sound methodologies that capture expected credit losses, including changes in loss expectations as conditions affecting borrowers change.

Responding to the call by the G20 outlined above, the IASB embarked on a multi-stage project to replace IAS 39. Phase II of this project is the issuance of the exposure draft IFRS 9 *Financial Instruments: Amortised Cost and Impairment*, which was open for comment until 30 June 2010. The proposals by the IASB are broadly in line with the high-level principles issued by the Bank of International Settlements in August 2009.

Under the present incurred loss model applied in IAS 39, loans may be classified as impaired only when there is objective evidence that a loan or portfolio of loans will not be repaid in full. Such evidence (known as a trigger event) may be specific to an individual loan (e.g. bankruptcy) or an occurrence of an event that is likely to lead to defaults across a portfolio of loans (e.g. increase in unemployment and a downturn in the property market that may lead to an increase in mortgage defaults). Expected future credit losses are not recognised until a trigger event has occurred.

This approach received criticism during the GFC for failing to account for loss expectations even though such losses are factored in (based on historical experience or judgments made by lenders about likely default experience) when loans are made and priced by banking institutions. As a result, the recognition of expected losses is delayed, while interest revenue is generally overstated before the trigger event occurs. The subsequent recognition of credit losses, in turn, causes abrupt

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adjustments to income levels of banking institutions when a trigger event occurs. Inconsistencies among banking institutions in defining and assessing trigger events have further reduced the comparability of impairment provisions for similar financial assets across institutions.

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The IASB exposure draft IFRS 9 *Financial Instruments: Amortised Cost and Impairment* proposes a revised

impairment methodology based on expected credit losses and expected cash flows for all financial assets measured at amortised cost. Under this approach, impairment losses are recognised over the life of the financial asset by including expected losses in the computation of the effective interest rate (EIR) when the asset is first recognised. Changes to credit loss expectations are to be reflected in adjustments to profit and loss. The key differences in the approaches are detailed in Table 1 below.

While the expected loss approach is moving the accounting requirements closer to the regulatory Basel II requirements, distinct differences still remain. The key differences are summarised in Table 2 below.

The transition from IAS 39 to IFRS 9 in its current format will be operationally very challenging for financial institutions. Issues for consideration include:

- There will be increased subjectivity involving greater judgement in the assessment of expected future credit losses and the estimation of future cash flows.
- It will be very difficult to estimate losses on a forward-looking long-term horizon. To do so effectively will require estimation and continuous revision of probability of default by tenor.
- Data requirements for implementation may not be readily available at transition as Basel II data requirements are significantly different.

TABLE 1: Comparison of incurred loss and expected cash flow approach*

Current incurred loss approach	Proposed expected cash flow approach
Interest revenue for financial assets is recognised on the basis of expected cash flows excluding expected credit losses.	Interest revenue for financial assets is recognised on the basis of expected cash flows including expected credit losses.
Impairment is recognised only when a loss event occurs (i.e. an impairment trigger).	Expected credit losses are continuously re-estimated, hence there are no loss events or impairment triggers.
Losses that are expected to arise from future events are not recognised.	Impairment is recognised from an adverse change in credit loss expectations and can be reversed by subsequent favourable changes.
Interest revenue can be viewed as overstated in periods before loss occurs.	Interest revenue reflects the total net return expected at inception.
There is a complex interplay between individual and collective impairment (e.g. incurred but not reported losses).	Individual or collective assessment only depends on what facilities the cash flow estimate.

* Ernst & Young 2009, 'New Proposals for financial instruments at amortised cost', Supplement to IFRS Outlook, Issue 61, November.

TABLE 2: Comparison of Basel II and expected cash flow approach

Basel II approach	Proposed expected cash flow approach
Uses long run through-the-cycle averages to calculate probability of default.	A point-in-time assessment of the loan portfolio is used to estimate the expected cash flows and therefore the impact of the probability of default.
Loss given default is measured as a downturn LGD.	Loss given default should reflect the loss given default at the point in time.
Prudential requirements require specific caps and floors to certain parameters to be applied in capital measurement (e.g. LGD applicable to mortgage loans).	No caps or floors are applicable.
Assessment of loss is over a one-year expected loss outlook.	Assessment of loss for IFRS 9 is over the expected life of the asset.

- Stress testing will play an increasing role in assessing forward-looking long-term horizon outcomes.
- If errors occur in estimation of expected cash flow outcomes, this will cause volatility in the provisions and the need for significant catch-ups.
- The approach may result in the earlier recognition of losses and if the majority of the losses occur in the earlier years, this may result in provisions accrued in the IFRS 9 approach being less than under the incurred approach of IAS139.
- The proposed approach does not simplify but rather makes the accounting treatment more complex due to the need for the EIR calculation of the expected cash flows. This is in direct contradiction of the IASB's objective of reducing the complexity in accounting for financial assets.
- The treatment of structured loan types is not considered in IFRS 9, for example, fixed to floating loans or partial fixed/ floating loans.
- The expected loss approach implicitly assumes that financial institutions have closed portfolios of loans when, in reality, they have open revolving portfolios that allow pre-payment, refinancing and new business.
- There will be transitional impacts on financial reporting at the time of initial adoption.
- Interaction and communication with stakeholders including analysts will need to consider the impact of changes in financial reporting, in particular, given that interest and impairment are often considered separately by analysts.

As discussed above, procyclicality is a direct result of the application of the banking regulatory framework rather than of the accounting framework. There is no direct evidence to suggest that the accounting treatment of loan loss provisioning does itself cause procyclicality. In addition, it is possible that the introduction of IFRS 9 may

result in some perverse consequences. This is due to the degree of subjectivity that is required to assess the level of expected future credit losses, both at inception of a loan and throughout the life of the loan at each balance date. For example, in periods of economic downturn, pessimism is at its highest, which may lead to significant increases in credit loss expectations, which may also then translate into larger expected losses than may actually be realised. Similarly, in positive outlook periods optimism may lead to relative under-provisioning.

Conclusion

Earlier identification of credit losses is consistent both with financial statement users' needs for transparency regarding changes in credit trends and with prudential objectives of safety and soundness. However, as noted by Barth and Landsman,¹⁰ the information required by bank regulators for prudential supervision is not necessarily the same as the information accounting standard setters are mandating be provided to capital market participants. Bank regulators are responsible for ensuring the stability of the financial system, while accounting regulators are responsible for financial reporting that reflects the underlying economic reality of reporting entities.

Procyclicality is a result of application of the banking regulatory framework rather than of the accounting framework. Rather than directly producing procyclical effects, the interaction of the economy, financial institutions regulation and the accounting standards means that the accounting standards provide a second-order delayed impact on procyclicality since they are merely reporting the observed economic changes. The application of IFRS 9 may at best provide early information regarding the quality of bank loan books. At the same time it introduces increased subjectivity and complexity in modelling. It is by no means a cure for procyclicality.■

Notes

1. The author acknowledges helpful comments regarding an earlier draft of this paper from participants at the 2010 Melbourne Money and Finance Conference, Anne-Marie Cam, David Robinson and Kevin Stevenson.
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3. Examples include: Bikker, J. A. and Metzmakers, P. 2005, 'Bank provisioning behaviour and procyclicality', *Journal of International Financial Markets, Institutions and Money*, vol. 15, pp. 29-51. Borio, C., Furfine, C. and Lowe, P. 2001, 'Procyclicality of the financial system and financial stability: issues and policy options', BIS Papers, no. 1. Bouvatier, V. and Lepetit, L. 2008, 'Banks' procyclical behaviour: does provisioning matter?', *Journal of International Financial Markets, Institutions and Money*, vol. 18, pp. 513-26. Craig, R. S., Davis, E. P. and Pascual, A. G. 2006, 'Sources of procyclicality in East Asian financial systems', in S. Gerlach and P. Gruenwald (eds), *Procyclicality of Financial Systems in Asia*, pp. 55-123. Davis, E. P. and Zhu, H. 2005, 'Commercial property prices and bank performance', *BIS Working Papers*, no. 175, pp. 1-37.
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6. Financial Stability Forum 2009, 'Report of the Financial Stability Forum on addressing procyclicality in the financial system', 2 April.
7. See, for example, Laux, C. and Luez, C. 2010, 'Did fair-value accounting contribute to the financial crisis?', *Journal of Economic Perspectives*, pp.93-118, and Shaffer, S. 2010, 'Fair value accounting: villain or innocent victim? Exploring the links between fair value accounting, bank regulatory capital and the recent financial crisis', Federal Reserve Bank of Boston working paper no. QAU10-01.
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