3rd Annual International Conference on Accounting Development (ICAD 2026)
Department of Accounting, Ahmadu Bello University Zaria · 2–4 September 2026

LOAN LOSS RECOGNITION TIMELINESS AND PROCYCLICALITY OF LENDING: A CONCEPTUAL FRAMEWORK

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DOI: https://doi.org/10.67203/sp.ICAD.2026

ABSTRACT

Procyclicality of lending remains a critical source of financial instability as banks excessively increase lending during expansions and sharply reduce lending during recessions, thereby intensifying the business cycle volatility. This paper explored whether loan loss recognition timeliness has implication for banks' procyclicality of lending. The paper identified an unresolved question within the accounting literature: whether more timely, forward-looking loan loss recognition under IFRS 9 mitigated procyclicality of lending by using a three stage approach to recognising expected credit losses, as intended by standard-setters or instead worsens it by triggering larger loan loss provision increases at the start of a recession, a concern raised repeatedly by prudential regulators. Based on this, the paper developed a conceptual framework in which loan loss recognition timeliness influence procyclicality of lending, proxied by loan growth, with the relationship conditioned by GDP growth. Two propositions were advanced to guide future empirical studies, with particular relevance to emerging African banking systems that recently transitioned to IFRS 9 reporting. The paper concluded with implications for accounting standard-setters, auditors, and accountants.

Keywords: *loan loss recognition timeliness; expected credit loss; IFRS 9; procyclicality of lendin*

1.0 INTRODUCTION

There has been an extensive debate on procyclicality of lending among investors, regulators and accounting standard-setters. Bank lending has been argued to intensify the business cycle fluctuations as lending increases excessively during expansions and reduces sharply during recessions. This phenomenon known as procyclicality of lending transforms the business cycle fluctuations to a source of severe credit losses and economic crisis. Typically, as a result of excessive lending, banks' profits will be high and economic expansion will intensify. Nonetheless, this high profit and economic expansion are unsustainable because credit risk accumulates during this period (Borio, 2018). Eventually, banks' excessive lending during the expansion period causes a recession, during which the accumulated credit risk will become evident, leading to collapse of banks and deeper recessions. (Borio et al., 2001; Borio, 2018). Thus, effectively mitigating procyclicality of lending protects banks from financial instability, ensures optimisation of profitable lending opportunities and economic growth.

The 2007-2009 global financial crisis brought about a controversy over the role accounting play in procyclicality of lending (Basel Committee on Banking Supervision (BCBS), 2021). The crisis was triggered by the collapse of the U.S. mortgage market and one of the central issues of the crisis was accounting for loans, specifically the incurred loss accounting approach to loan loss provisioning (Du et al., 2022). Under this approach, loan loss recognition was delayed until trigger events such as failure to pay the principal of loans occurred (IAS 39, para. 59(b). During the expansion period before the crisis, banks in the US engaged in excessive high risk lending (Brunnermeir, 2009). However, the Financial Stability Forum (2009) opined that the banks failed to build adequate loan loss provision levels during the expansion period due to the trigger event requirement of incurred loss accounting which resulted in the crisis. Furthermore, Ahzar (2022) posited that the delay in recognising loan losses affects the capacity of loan loss provisions to cover credit losses during a financial crisis. Thus, the banks had to suddenly recognise high losses in their financial statements which reduced their capital (Shaffer, 2010). This contributed to the near collapse of the banking sector with high ranking

banks including Lehman Brothers adversely affected by the crisis (Brunnermeier, 2009). By late 2008 and early 2009, the crisis had spread to the United Kingdom and caused recession in major economies (Barth & Landsman, 2010).

Critics of the incurred loss accounting approach to loan loss provisioning such as the financial stability board had a consensus that the approach played a major role in the severity of the 2007-2009 crisis. The Group of 20 (G20) therefore made a request for modifications in the accounting for loans requiring actions from accounting standard setters to prevent a repeat of the crisis (Barth & Landsman, 2010). The Financial Accounting Standard Board (FASB) and International Accounting Standard Board (IASB) responded with modifications focused on enhancing transparency in the accounting for credit losses (Novotny-Farkas, 2016). Therefore, FASB developed the current expected credit loss model for US banks, while IASB developed the expected credit loss model for banks in International Financial Reporting Standard (IFRS) adopting countries.

The extant accounting studies provide evidence that procyclicality of lending can be affected by factors such as loan loss recognition timeliness, loan loss provision and expected credit loss disclosure. This study focused on loan loss recognition timeliness (Bhat et al 2019; Kim et al., 2023; Novotny-Farkas et al., 2024). Loan loss recognition timeliness is one of the factors that can affect procyclicality of lending. Stephanou (2010) opined that the timeliness of available information about risk exposures can significantly enhance the effectiveness and efficiency of regulators monitoring of banks. IFRS 9 expected credit loss model was developed to solve the "too little too late" problem of the incurred loss accounting model with the timely recognition of loan losses. One of the features of the model that is central to timely recognition of loan losses is stage classification (Novotny-Farkas et al., 2024). Furthermore, Behn and Couaillier (2023) posited that the loan staging approach of IFRS 9 ECL accounting is intended to accurately capture the level of credit risk.

The accounting modification of IFRS 9 has generated a new, unresolved debate directly relevant to the procyclicality of lending problem which this paper addressed. Whether more timely loss recognition under IFRS 9 ultimately reduced or exacerbated the procyclicality of lending remains an open question, and one that has been examined using mostly developed market evidence, with little evidence from African banking systems that has adopted IFRS 9. This paper developed a conceptual framework addressing this gap. Section 2 reviewed the literature on procyclicality of lending and its theoretical framework. Section 3 presented the conceptual framework linking loan loss recognition timeliness to the procyclicality of lending, conditioned by GDP growth, and advanced two propositions as the paper's core contribution. Section 4 discussed implications of the study, and Section 5 conclusion and recommendations were made.

2.0 LITERATURE REVIEW/THEORETICAL FRAMEWORK

Procyclicality is a banking feature that is inherent as financial variables naturally respond to business cycle fluctuations. However, excessive procyclicality is detrimental because it threatens financial stability of banks as well as that of the economy (Borio et al., 2001; Adrian & Shin, 2010; Borio & Zhu, 2012). This is why Landau (2009b) argued that procyclicality becomes an issue of concern from a financial stability point of view if it happens from within the banking system and does not reflect the dynamics of the economy. Procyclicality is not consistently defined within the literature, for example BCBS (2021) opined that there are two views about procyclicality. The first view referred to procyclicality as an association between business cycle and financial variable, wherein financial variables move in the same direction as the business cycle. In line with this, Landau (2009b) viewed procyclicality as a term that is used to explain the tendency of financial variables to fluctuate in the same direction as the fluctuations of the business cycle. This means that these variables have a correlation with the business cycle, during expansion these variables rise and during recession the variables fall.

The second view conceptualised procyclicality beyond correlation of financial variables and the business cycle. In line with this, Borio et al. (2001) opined that procyclicality is the mutual reinforcing relationship between the business cycle and the financial system, whereby the financial system exhibit the tendency to cause fast economic growth and sudden sharp collapse of economic activity. In line with this, Financial Stability Forum (2009) viewed procyclicality as the tendency of

any financial variable of banks to move with the business cycle and thus cause financial stress for banks, borrowers and the economy as a whole.

Procyclicality is manifest in various banking activity, including lending, loan loss provisions, and capital (BCBS, 2021). The focus of this study is on procyclicality of lending. Berger and Udell (2004) referred to procyclicality of lending as the tendency for lending to increase significantly during expansion period and decrease significantly during recession period. However, the correlation of financial variables and the business cycle is not a cause for concern from the perspective of accounting standards (Novotny-Farkas, 2016). Rather, the situation where accounting standards may be a cause or intensify unavailability of loans during recession is more important to regulators and accounting standard setters (BCBS, 2021).

Borio et al., (2001), opined that procyclicality of lending is a situation where during expansion, banks tend to be very optimistic, resulting in increased lending against weak lending standards. Though during expansion banks experience higher profitability, they however accumulate credit risk which only manifest during recession, leading to strict lending standards and thus a fall in lending volume. This fall in lending volume makes the recovery from a recession very slow. Typically, periods of high lending volumes are followed by periods of sharp increase in credit risk which threatens banks resilience and sustainable economic growth (Caporale et al. 2014; Borio, 2018). This is why Sitorus et al. (2023) pointed out that excessive lending during expansion causes loans to exceed what is needed in conformity with economic conditions, which creates a build-up of higher risk leading to increased vulnerability to banks' failure. While during recession, bank lending decline significantly and leads to deeper recession. This means that as a result of being sensitive to the business cycle, banks' lending pattern can cause bank failures and collapse of economic activities.

The accounting literature examined loan loss recognition timeliness as a determinant of procyclicality of lending. Loan loss recognition is a process that involves ascertaining banks credit risks, managerial assessment and making provisions (Balakrishnan and Ertan, 2021). It is concerned with when losses are recognised relative to the underlying deterioration in credit quality. The concept became popular in the incurred loss regime under IAS 39 which conceptually involved delaying the recognition of loan loss and it is a major reason for developing IFRS 9 ECL accounting model (Financial Stability Forum, 2009). Consistent with this, IASB (2014) stated that the standard requires entities to recognise loan losses using a three stage approach, which is intended to improve the timeliness of loan loss recognition.

Several authors have explained loan loss recognition timeliness in different ways. According to Bhat et al. (2019), loan loss recognition timeliness is the extent to which loan loss provisions promptly capture deteriorating loans in the loan portfolio of banks. Also, Yang (2024) explained that earlier recognition of loan losses has cost implications on banks because the accounting entry on the financial statement reduces earnings and overall lending, which is more evident during a downturn. Timely loss recognition is seen as the mechanism banks utilise in protecting themselves against future unwanted outcomes under distress conditions (Balbao et al., 2026).

Wheeler (2019) investigated the role of timeliness of loan loss recognition on procyclicality of lending. The period of the study covered between the 1990- 2014. The sample of the study consisted of 6,980 US commercial banks. The finding of the study showed that banks with insufficient loan loss allowances were put under restrictive lending actions by regulators, leading to decline in the banks' lending during downturn. Bischof et al. (2021) explored the relationship between banks' disclosures and recognition of loan losses during the 2007–2009 financial crisis. The study utilised a sample of 237 banks in the US. One of findings of the study is that loan losses are recognised late during the crisis relative to the expectations of the market. This delay in the recognition of loan losses aligns with the common concept of "too little too late" in the incurred loss accounting model which encourage procyclicality of lending.

Gallemore (2023**)** analysed the relationship between bank financial reporting opacity, represented by delay in the recognition of anticipated loan loss and regulatory intervention**.** The sample of the study was US commercial banks during the 2007-2009 financial crisis. The study's findings showed that delay in the recognition of anticipated loan loss is negatively related with the regulatory intervention. This means that regulators did not compel banks that delayed the recognition of loan losses to be more transparent in the recognition of loan losses to stakeholders during the crisis.

This act has consequence for procyclicality of lending because such banks reduce lending during recessions when credit risk becomes evident.

The findings of the studies reviewed above suggest policy implications that support the adoption of forward-looking loan loss accounting model such as IFRS 9 and faster corrective actions from banking supervisors to enhance timely recognition of loan losses that can help mitigate procyclicality of lending.

In a second strand of studies, previous studies examined the association between the expected loss accounting model and procyclicality of lending. Lopez-Espinosa et al (2021) conducted a study on the impact of changing from incurred loss model to expected credit loss model. The sample of the study consisted of well capitalised banks from 74 countries. The findings of the study specifically showed that the expected credit loss accounting model is more predictive of bank future risk than the incurred loss model. Beatty and Liao (2020) argued that the measurement of loan loss recognition timeliness proposed by Basu et al. (2020), who disputed that changes in nonperforming loan estimate credit quality. To assess the correctness of the Basu et al. (2020) proposed approach to addressing wrong estimation in measuring credit quality, the study utilised a direct measure of additions to nonaccruals. The study's findings suggested that using additions to nonaccrual loans to estmate loan loss provision timeliness based on bank specific regression R^2 produce very much alike conclusions concerning procyclicality of lending to using changes in nonaccrual loans in linear models without controlling for net charge-offs allowance

Similarly, Kim, et al. (2021) examined whether the change from Incurred loss model to expected credit loss model affect the timeliness of loan loss recognition. Using a sample of international banks from 33 countries, the study utilised Difference-in-Differences research design to compare the changes in timeliness of loan loss recognition between banks in countries adopting IFRS 9 and banks in non-adopting countries. The study found that the change to IFRS 9 expected credit loss model significantly improved the timely recognition of loan losses for adopting countries, which is more pronounced in banks making larger provisions for stage 2 loans after the change to the expected credit loss model. The finding of the study implied that the expected credit loss accounting model can effectively prevent procyclicality of lending as predicted by IFRS 9.

Behn and Couaillier (2023) examined the impact of the adoption of expected credit loss accounting of IFRS 9 on loan loss recognition timeliness**.** Using a period spanning from 2018-2022, with a sample from the euro area, the study found that provisions under IFRS 9 are higher before actual default and more sensitive to shocks. Furthermore, provisioning still majorly occurred at the time of default and default events were similar to pre-existing national GAAP. This means IFRS 9 has not adequately mitigated procyclicality of lending.

Also in China, Li, et al. (2026) analysed whether forward-looking provisioning under the expected credit loss model affect systemic risk more compared to the incurred loss model. The study found that for minor economic shocks, systemic risk reduced under the expected credit loss model when banks accurately estimated losses, but when losses were overestimated risk increased resulting from excessive decrease in capital, suggesting that IFRS 9 can effectively reduce procyclicality of lending. More so, when shocks got worse, the expected credit loss model enhanced resilience by prompting banks to reserve larger capital in preparation of crisis.

The studies reviewed above provide evidence that suggest support for the expected credit loss accounting that should be considered in the policy debate on procyclicality of lending. Novotny-Farkas et al (2024) revealed delay in loan loss recognition using European bank-quarter data from 2018 – 2022 and Ordinary Least Squares regression model. The finding of the study suggested that the use of staging for loans under IFRS 9 expected credit loss model lead to more risk sensitivity but however most of the provisioning for loan losses still happened at the time of defaults (stage 3), thus the result indicated that IFRS 9 has not been able to end all the inadequacies of incurred loss model under IAS 39. The result further suggested that economic down turn can pose a challenge for the efficient use of the ECL model. The authors admitted that future research is needed to examine longer term impacts of the ECL accounting framework. The finding of the study is relevant for policy debates on the costs and benefits of ECL accounting particularly under IFRS 9. The study's finding also provides evidence that suggest support for improving the transparency in bank practices on the estimation of loan losses.

The study is underpinned by the capital crunch theory which was propounded by Bernanke and Lown (1991) and later expanded by Peek and Rosengren (1995). The theory posits that when bank experience a reduction in capital through loan losses, mandatory regulatory capital requirements can force them to curtail lending to even credit worthy borrowers during downturns when fresh equity is costly to raise in distressed markets. The assumptions of capital crunch theory includes; banks with untimely recognition of loan losses and inadequate allowances must record abnormally large loan loss provisions during recessions as credit problems become evident, bank managers are no longer able to justify their allowance levels and these banks cannot access outside regulatory capital, and capital constraints are binding (Wheeler 2019). The capital crunch theory supports this study on Procyclicality of lending because the theory provides a robust theoretical explanation for the procyclicality of bank lending arising from balance sheet pressures and capital constraint particularly during recessions (Peek & Rosengren, 1995). As regards loan loss recognition timeliness, the capital crunch theory predicts that delayed recognition of loan losses worsens procyclicality. When losses are recognized late especially during recessions, the resulting capital shock forces banks into aggressive balance sheet adjustment, thereby deepening credit contraction (Laeven & Valencia, 2018). However, if banks recognise expected credit losses earlier, it reduces the tendency of procyclicality of lending (Financial Stability Forum, 2009). The theory therefore explains that banks with timely loan loss recognition exhibit less procyclicality of lending, while banks with delay in the recognition of loan losses exhibit more procyclicality of lending.

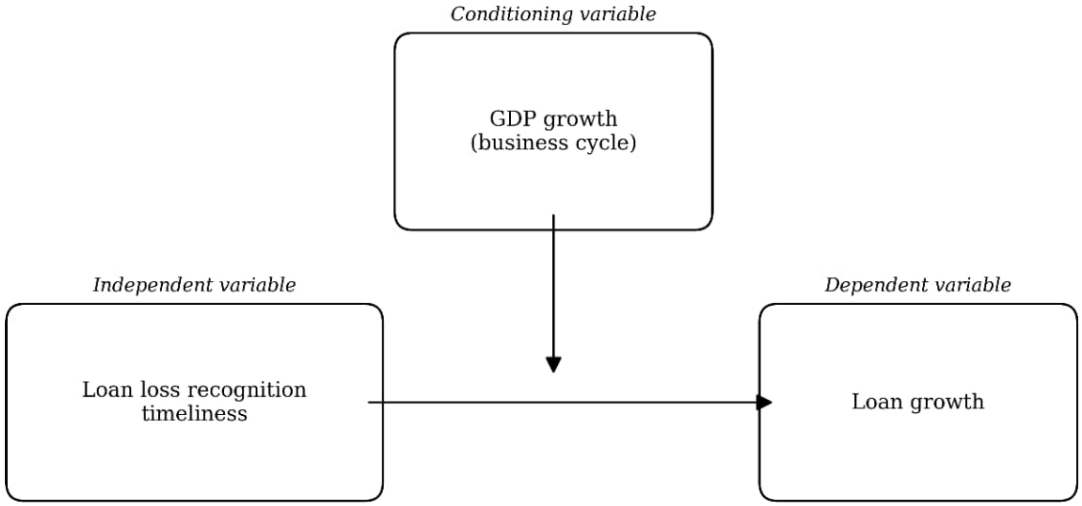
3.0 CONCEPTUAL FRAMEWORK

This paper's core contribution is a conceptual framework in which the procyclicality of bank lending, proxied by loan growth is explained by loan loss recognition timeliness, with the relationship conditioned by GDP growth in emerging markets. Furthermore, loan loss recognition timeliness is estimated using stage 1, stage 2 and stage 3 allowance for credit losses (ACL) determinant models**.** At its core, the framework proposes that more timely loss recognition, meaning loss recognition that occurs earlier relative to the increase of credit risk, reduces the capital reductions in recessions, and is therefore associated with less procyclicality of lending. Conversely, delayed loss recognition is expected to produce sharper capital reduction at the point of recognition, triggering lending reduction consistent with capital crunch theory. The paper therefore advanced two propositions;

Proposition 1: Loan loss recognition timeliness is positively associated with loan growth, such that banks whose loss recognition is more timely exhibit less capital constraint, and therefore have more lending capacity than banks whose loan loss recognition is delayed.

Proposition 2: The relationship between loan loss recognition timeliness and loan growth is conditioned by GDP growth, such that the relationship weakens during expansion period (high or positive GDP growth) or strengthens during recession period (low or negative GDP growth).

This relationship is rooted in the capital crunch theory and it implies that during expansion when GDP growth improves the repayment capability of borrowers, banks do not make sudden large provisions for loan losses, they do not face capital reductions and thus loan growth increases regardless of whether they delay or recognise loan losses in a timely manner. Conversely, during recession banks face rise in credit default and banks that had delayed the recognition of loan losses are forced to make sudden large loan loss provisions, which reduces capital and thus loan growth is reduced to meet regulatory capital minimums. However, if the banks' recognition of loan losses is timely, they do not experience capital reductions that could make them vulnerable to financial instability and cause deeper recessions. Thus, positive or high GDP growth during expansion weakens the relationship between loan loss recognition timeliness and loan growth by masking the difference between the lending pattern of banks with timely and delayed loan loss recognition, While negative or low GDP growth during recession strengthens the relationship between loan loss recognition timeliness and loan growth by exposing the difference between the lending pattern of banks with timely and delayed loan loss recognition.



Researchers' illustration (2026)

Figure 3.1: Conceptual Framework

Figure 3.1 explain the association between the independent variable; loan loss recognition timeliness and the dependent variable; procyclicality of lending proxied by loan growth, with the association conditioned by GDP growth.

4.0 IMPLICATIONS OF THE STUDY

This paper positions loan loss recognition timeliness as an accounting-based explanation for the procyclicality of lending. By tracing this accounting recognition and measurement choice focusing on the shift from an incurred loss to an expected credit loss model which affects the timing of capital reduction through capital crunch theory, the timing of lending reduction, the paper situates procyclicality of lending as a central issue within accounting research, specifically within the financial reporting measurement and standard-setting literature, alongside its established place in banking and macroeconomic research. The paper thus has implication for accounting standard setters, accountants and auditors.

4.0 CONCLUSION AND RECOMMENDATION

This paper has examined loan loss recognition timeliness, an accounting recognition and measurement construct, grounded in capital crunch theory and informed by the literature on the shift from incurred loss to expected credit loss provisioning. The framework's central contribution is to identify GDP growth as a conditioning variable that determines whether more timely, forward-looking loan loss recognition reduces or increases the procyclicality of lending problem, resolving an ambiguity left open by the existing literature. The propositions advanced are intended to be empirically tested within accounting research designs.

In line with the findings and gap identified in the literature, the study recommended that future research should use cross-country panels covering African banking systems such as Nigeria, South Africa, and Kenya because these countries have the most dominant banking market in Africa (European Investment Bank, 2023). More so, central African countries are not considered because most countries in this region in the classification of the World Bank are low income countries (Serajuddin & Hamedeh, 2020) and IFRS adoption in low income countries are characterised by weak enforcement (Leuz & Wysocki, 2016). Furthermore, banks in Nigeria, South Africa and Kenya adopted IFRS 9 at similar times but operate with differing macroeconomic environment, which would provide a valuable setting for testing the propositions and for extending the largely developed market evidence base on this procyclicality of lending problem into an accounting environment of direct relevance to emerging market standard setters and regulators.

Lastly, the study recommended that future studies should link the relationship between loan loss recognition timeliness and procyclicality of lending proxied by loan growth, with GDP growth

conditioning the relationship and also estimate loan loss recognition timeliness using models with the features of forward-looking variables such as stage classification of loan loss provision or allowance for credit losses, indicators of credit risk and macroeconomic variables, which is in line with IFRS 9 expected credit loss accounting model and Novotny-Farkas et al. (2024).

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