Disclosures and Discussions of Credit Risk Under CECL

A Discussion Paper of the

AMERICAN BANKERS ASSOCIATION

ABA Contacts:

Michael L. Gullette
SVP, Tax and Accounting
mgullette@aba.com
202-663-4986

Joshua Stein
VP, Accounting and Financial Mgmt
jstein@aba.com
202-663-5318

Qualification: ABA does not give financial reporting, legal, or accounting advice and our views on these issues are not authoritative. The ideas conveyed in this paper are meant to provoke thoughtful discussion between bankers, auditors, and regulators related to implementation of the CECL accounting standard. Unless otherwise noted, the ideas are not meant to reflect minimum requirements or best practices, but implementation processes that will address the practical and ongoing issues that can be expected in estimating and managing expected credit losses.

Table of Contents

Qualification: ABA does not give financial reporting, legal, or accounting advice and our views on these issues are not authoritative. The ideas conveyed in this paper are meant to provoke thoughtful discussion between bankers, auditors, and regulators related to implementation of the CECL accounting standard. Unless otherwise noted, the ideas are not meant to reflect minimum requirements or best practices, but implementation processes that will address the practical and ongoing issues that can be expected in recording and managing expected credit losses.

Summary of Discussion Points

Introduction and Scope

1. While the operational challenges of measuring credit risk on a lifetime basis are significant, similar challenges may be faced in developing systems to support CECL-related disclosures and to respond to foreseeable questions from investors and bank board members. Trends in current credit performance metrics (such as past dues and risk ratings) will no longer necessarily be directionally consistent with the level of credit loss provisions, as credit performance should have been anticipated at origination. Additionally, the anticipated impact of changes to a bank's forecast of future economic conditions on financial results will cause stakeholders to pursue more detail in understanding how credit risk has changed during the period.

2. This paper is not meant to address all CECL-related disclosures, but focuses on specific disclosures that are meant to inform investors of credit risks in the loan portfolio (not debt securities). Given this, there are foreseeable questions that will arise during investor calls and board of director meetings and this paper addresses many of those. As a result, some of the issues may pertain to disclosures normally associated today with Management's Discussion and Analysis submitted by an SEC registrant. The CECL standard, however, includes a requirement to discuss changes in credit risk throughout the period and, thus, is considered "MD&A-like". Whether or not required in MD&A or in the CECL Standard, the issues addressed herein are meant to assist bankers in discussing credit risk within the financial statements in a credible fashion.

3. The purpose of this paper is meant merely to start the discussion within the banking industry that is needed to coalesce around common expectations of systems and model development, investor relations, and certain aspects of corporate governance. As such, any and all suggestions are welcome. We hope that this discussion paper evokes many suggestions that will improve bank financial reporting by the effective date.

Overall

Greater Emphasis Will be Placed on Disclosures

4. The measurement of credit losses under CECL is assumed to be highly judgmental, adding significant subjectivity to what is already experienced with current accounting. Thus, the comparability of credit loss estimates between banks – a key aspect of analysis conducted by investors, analysts, and bankers – should significantly decline over the foreseeable future. As a result, the importance of disclosure will be magnified under CECL. Regulators, investors and bankers may need to work together in determining disclosure expectations related to the granularity of information provided.

Detailed Credit Risk Attribution Rollforward will likely be Needed

5. The fundamentally different intent of the CECL measurement objective (lifetime vs. incurred) will require more qualitative discussion about changes in credit risk expectations since the prior period. The new vintage-based credit quality disclosures will both help with the discussion of the changes in credit loss expectations and provide a backdrop against which investors, analysts, and board members can ask more pointed questions about changes in risk. As a result, bankers will likely need to respond by enhancing such disclosures in anticipation of such questions. A granular attribution analysis that rolls forward the period-over-period change in credit risk may become an industry standard expectation.

Specific Observations

Current Credit Metrics Under CECL May Need Forecasting

6. Current credit metric trends are largely decoupled from credit loss provision trends under CECL, as those trends should now be anticipated within the credit loss estimates recorded at origination. Therefore, bankers may be expected to forecast changes in the credit quality indicators for the next quarter or year in order to support whether credit loss forecasts of the future should change from the previous period. In light of CECL's requirement to consider "current conditions" within a credit loss estimate, and since such information will continue to be a focus of investor inquiry, such a step appears critical to both the estimation and disclosure processes.

Understanding and Modeling Credit Trends: Vintage-based Disclosures

7. By using amounts included in the vintage-based schedules of credit risk indicators by amortized cost, charge-offs and recoveries, investors will be able to perform certain vintage and migration-based analyses, as well as credit loss modeling for certain assets. Bankers will likely need to integrate migration and vintage-based analyses into their processes, no matter the estimation method primarily used by the bank. Investors will likely inquire about such trends, since those trends will be presented plainly within the disclosures.

8. Bankers that detail their credit risk indicators by internal risk ratings may need to consider providing more disaggregation among "Pass" classification loans within their analyses and to also consider whether individual risk ratings reasonably reflect differences in the likelihood of loss (for example, a risk rating of "4" implies a meaningfully higher probability of default than a rating of "3").

Limitations of CECL and Vintage-based Disclosures

9. Inherent in CECL is the principles-based approach to not only credit loss estimation modeling and the specific critical assumptions within those models, but also the levels of detail used in disclosure. This will challenge investors who are looking for comparability. Depending on the product, proprietary information may also influence the amount of granularity in vintage-based disclosures for public filers. For example, detailed quarterly disclosures of amortized cost could otherwise indicate changes in portfolio mix that align with strategic market share objectives.

10. Despite the usefulness of vintage-based disclosures to many loan products, limitations will exist for other products, such as student loans, credit cards and other revolving lines of credit, and certain renewable commercial facilities. In these instances, supplemental (and possibly non-GAAP) information will be needed to help investors understand changes in credit risk.

Note for Non-Public Business Entities

11. Though vintage-based disclosures are not required for private entities, ABA believes the schedule will be a highly useful tool in assessing credit risk and loan performance for many smaller banks. Where credit losses and classified loans are often anecdotal, smaller banks may even use the schedule to identify individual borrowers and loan officers as key points of discussion during board meetings.

Note for Possible Technical Correction

12. Vintage-based charge-off and recovery information is not required to be disclosed per the CECL standard text, though it is detailed within the Illustrations of the standard. Considering that FASB representatives are publicly recommending analyses based on this information, a technical correction may be necessary to clarify whether such information is required for disclosure.

Understanding Changes to Credit Risk: Attribution Rollforward

13. For certain products, investors will also be able to use the vintage-based schedules of credit risk indicators and charge-offs to perform an attribution analysis of the CECL allowance coverage ratio. In other words, they will estimate how the overall level of credit risk changed due to new business, to aging, pay-downs and charge-offs of existing business, and due to changes in forecasted economic factors. As CECL has an MD&A-like requirement to discuss the changes in credit risk throughout the period, all bankers – SEC registrants or not – will need to be ready to reconcile their explanations to such an analysis. Due to the attribution just noted, discussions could also address spreads and pricing of new business.

14. This discussion paper suggests that all bankers should consider building a process to construct an attribution analysis that rolls forward the CECL allowance coverage ratio. Appendix II provides a way non-sophisticated bankers can construct the rollforward. While not required in the CECL standard, such a rollforward will allow bankers to analyze how changes in credit risk affects the credit loss provision and to credibly respond to stakeholder questions related to credit risk.

15. In addition to the MD&A-like requirement, bankers will also disclose their estimation process that considers past events, current conditions, and reasonable and supportable forecasts about the future. While this disclosure will likely be general in nature, the process will need to be documented and will be subjected to increasingly stringent auditing standards. Assessment of key assumptions, as well as sensitivity testing of alternatives appear to be a minimum governance expectation for banks.

Assessing the Forecast of the Future

16. As the change in forecasted macroeconomic factors is anticipated to have significant impact to each period's credit loss provision, investors will focus on its underlying assumptions. As of the date of this paper, bankers are currently assessing various options regarding specific macroeconomic forecasts, the length of the forecasts, and when the related factors should revert to long-term historical levels. Based on the specific assumptions used, the amount and volatility of the allowance for credit losses can differ widely from company to company and could change significantly throughout an economic cycle.

17. In order to minimize perceived bias in their forecasts of future credit losses, many bankers are initially looking to third-party economic forecasting organizations to provide macroeconomic forecasts. The timeliness, however, in forecasting during the financial crisis was not good, severely putting into question of the expectation of significantly higher credit loss allowances going into a recessionary period.

18. While not required under CECL, bankers should be ready to provide some level of sensitivity analysis using different key economic factors, as well as estimated ranges of credit loss. In addition to the expected wide range of possible outcomes, such analysis appears to be consistent with auditor expectations, based on outstanding auditing standard proposals. Further, a general understanding of various assumptions and their impacts will be a critical aspect of the process when dividends and other regulatory capital issues are discussed.

19. Investors will also likely need transparency relating the long-term historical averages to provide a yardstick against which the forecasts are measured. This discussion paper suggests a tool that non-sophisticated bankers can use to communicate how its forecasts can be interpreted in light of previous forecasts and long-term credit loss rates.

Comparison to Loan Fair Values

20. While disclosure related to loan fair values (now on an "exit price" basis) is not currently a point of interest among investors, ABA believes that, in the long run, banks will need to generally discuss why significant differences might exist between the changes in fair value-based credit loss expectations (as exhibited through credit spreads) and changes in CECL-based net loan balances.

Other Considerations

21. The decoupling of trends in credit risk metrics from the direction of the credit loss provision presents a challenge for bankers in educating key stakeholders (including not only investors and board members, but also employees) as to how bank performance should be assessed under CECL. Many stakeholders will need education to understand how credit risk changes for banks, recognizing that credit risk changes come in non-linear fashions and can also change over time.

22. Communicating changes in lifetime probability of default and loss given default in scalable manners could become key aspects of any financial report. Contextualizing such changes (and forecasted changes) in metrics to their long-term historical loss rates (whether higher, the same, or lower) may enable an investor to better understand their impact on lifetime credit loss expectations.

Format of this Paper

23. The term “banker” is used throughout this paper to refer to controllers and chief financial officers who are preparers of the information and often the ones addressing investor questions. The term “investor” is used to refer to any user of the financial statements (including board members) and can also refer to regulators and auditors during examinations. This discussion paper is written with the belief that bankers, investors, board members, regulators, and auditors all have the same general reporting objective under CECL: Provide a credible (not necessarily accurate) estimate of expected credit losses, based on the risks that were considered, and on the changes in the risks from one period to the next. The disclosures and the issues discussed herein are largely meant to enable all these parties to evaluate that process. These considerations are not meant to be either minimum guidelines or best practices. However, given the expected wide range of lifetime expected credit loss estimates, they are meant to address common and foreseeable questions that will arise when an estimate could mean the difference between a distributing a dividend or not.

24. This paper will focus on two separate aspects of CECL disclosures:

    a. Challenges and Opportunities facing investors in analyzing credit risk, and
    b. Challenges that bankers will face in preparing the necessary disclosures and in addressing foreseeable questions by investors.

    Since many readers of this paper will be investors or analysts, each of these issues are addressed in separate sections, with all investor concerns listed first and banker (preparer) concerns listed afterward. The banker section describes more color for the preparer, including the mechanics relating to obtaining and/or constructing the information in a non-complex environment. It is critical for the banker to read the investor sections. It is not critical for an investor to read the banker section. However, it will help the investor to understand the challenges a banker will face. Due to the format of the discussion points (some for investors and some for bankers), there may be some redundancy in discussion points.

INTRODUCTION

Throughout much of 2018, implementation efforts of the CECL accounting standard have mostly focused on performing narrowly defined calculations and the operational changes (and costs) required therein. Significant changes related to data, operational processes, and internal controls will be necessary to estimate the allowance of loan and lease losses (ALLL) at most banks. In addition to the initial calculations based on specific modeling methods, supplemental analyses that address various credit risk factors will also be performed to adjust the initial calculations. Many bankers may then find additional challenges in designing systems that will inform investors and board members of the credit risk inherent in their loan and debt security portfolios and the changes in credit risk that have taken place during the period. This paper, therefore, addresses the challenges that bankers, their board members, and their investors will have in analyzing and discussing CECL-based results.

Compliance with CECL disclosure requirements and credibly addressing the natural questions that would be expected by directors, investors, bank examiners, and auditors may prove to be a very challenging part of a CECL implementation. Bankers will need to consider expanding the gap analyses they perform for CECL beyond merely performing expected loss calculations for several reasons:

- Recent historic experience (including current credit metrics) will often have significantly diminished relevance to the credit loss provision (since such activity should effectively be anticipated upon origination),
- The wide range of possible outcomes, in light of the nonlinear relationship between changes in the levels of credit risk and changes in credit loss provisions, may make sensitivity testing a critical element of credit risk analysis,
- The significant impact of changes in very subjective forecasts of future credit conditions, and
- The transparency presented by the vintage disclosure of the amortized cost of assets subject to CECL.

As a result, bankers should plan for ongoing processes to educate company executives, board members, and investors in preparation for the 2020/21 implementation. Incremental data requirements and analysis should be considered to address anticipated concerns when the economy is stable as well as in recession.

This discussion paper addresses the challenges investors will face in understanding how credit risk has changed during the reporting period, as well as the opportunities they will have in assessing a bank’s credit risk due to new disclosure requirements. Discussion is then held of the challenges facing bankers in forecasting future credit losses and addressing the questions investors will be expected to ask.

DECOUPLING OF REPORTED CREDIT METRICS UNDER CECL

Investor Challenges

Many investors currently use recent historical annualized charge-off data as a basis for forecasting future charge-offs. Combined with adjustments derived from analysis of current loan performance, charge-off trends roughly translate to forecasts of future incurred credit loss expenses and, as a result, net income and capital. Most of the current credit risk-related disclosures will continue to be disclosed. These metrics include:

- Past due status (Accounting Standards Codification (ASC) Paragraph 326-20-50-14 to 15)
- Nonaccrual status (326-20-50-16 to 17)
- Troubled Debt Restructurings ("TDRs" – 310-10-50-31 to 34)
- Loans in Process of Foreclosure (310-10-50-35)
- Writeoffs charged against the allowance (as part of the Rollforward of the Allowance for Credit Losses – 326-20-50-13)
- Current risk ratings (which will also be presented by vintage year – this will be discussed in more detail in a later section of this paper).

With its requirement to record expected lifetime credit losses at the time of origination, CECL presents a new paradigm of measuring future credit risk. Under current accounting, for example, increases in the proportion of past due loans (or of criticized loans) will typically coincide with higher allowance levels and higher credit loss provisions (and vice versa). This relationship is significantly diminished under CECL, as credit performance should effectively be anticipated at origination. During a period of increasing loan delinquency, for example, the Allowance for Loan and Lease Losses (ALLL) and credit loss provisions under CECL may:

- Decrease because the levels of delinquency were less than expected at the time of origination (or at the time of the previous estimate).
- Decrease because, while levels of delinquency were greater than expected at the time of origination (or at the time of the previous estimate), new forecasts of improvement in future macroeconomic conditions and collateral prices will more than make up for the credit deterioration experienced to that point.
- Decrease because, while levels of delinquency were greater than expected at the time of origination (or at the time of the previous estimate), a significant drop in new loans originated during the period, coupled with aging and payoffs of seasoned loans, has decreased the outstanding loan exposure of the bank.[1]

[1] In practice, this phenomenon occurs often, though not to the extent anticipated under CECL.

With this in mind, investors will need further guidance from bankers as to how current credit metrics do relate to the current credit loss provisions.

Banker Challenges

Forward-looking Guidance of Current Credit Metrics May be Expected

ABA believes that, as they relate to understanding a bank's credit loss expectations, current credit metrics will continue to have primary relevance when making quantitative estimates of credit loss for most wholesale/commercial borrowers, with lower relevance for consumer portfolios. Whether considered relevant or not by the bank, current credit metrics will, nonetheless, be disclosed and bankers will, thus, need to be prepared to credibly respond to questions related to such trends. Therefore, though required in CECL only as they relate to reasons for significant changes in the level of charge-offs (326-20-50-11f) from period to period, banks will need to be ready to assess and explain changes in the current credit metric trends and how they affect the current forward-looking estimate of credit losses.[2]

Forward-looking guidance related to expectations of credit metric trends may, therefore, be expected. For example, a bank may explain "Within our current estimate of credit loss, we are expecting the level of past due loans to increase by X basis points over the next year for our auto loan portfolio, due to the large increase in production experienced last year." Such a statement will provide credibility when the level of past due loans does increase, though credit loss provisions remain flat or decrease. For commercial portfolios, a similar expectation might be expressed (and perhaps quantified) based on how they anticipate their internal risk ratings to change over time.

Bankers should also be ready to segment their portfolios in more granular terms to enable a risk-sensitive analysis. For example, breaking out their analysis by vintage or between non-prime and prime customers should enable a banker to credibly discuss differences in past due and future charge-off expectations (borrowers of lower credit quality will be impacted much more from changes in the economic factors than higher rated borrowers). In this regard, for the purposes of implementation planning by community banks, it is likely not nearly as important to perform the analysis in a detailed fashion at the effective date, but to merely be able to segment in such detail thereafter, if needed.

A more detailed discussion on analysis by vintage is provided below within the discussion of the schedule of credit quality indicators by vintage. Note also that ABA has published a Discussion Paper "Analyzing Current Credit Performance Under CECL" to discuss the operational

[2] Practice related to the level of detail of the reasons given for significant changes in charge-offs will evolve over time. ABA expects that initially such reasons will be general in nature and focus on previous loan production levels, underwriting mix, and deterioration of economic indicators, such as unemployment or collateral prices. Of course, since charge-offs normally occur after credit loss provisions are recorded, banks will need to clarify whether specific charge-off levels were expected or not.

challenges facing bankers on this. This and other CECL-related papers can be found at ABA.com/CECL.

UNDERSTANDING AND MODELING CREDIT TRENDS: VINTAGE-BASED DISCLOSURES

Investors Challenges/Opportunities

In paragraph 326-20-50-6 of the CECL standard, the amortized cost of the class of financing receivable (normally, the loan portfolio in which the allowance will be estimated) is required to be disclosed, based on the relevant credit quality indicators. Such a schedule is not new to GAAP. Typical credit quality indicators today include internal risk ratings, though some larger banks may base their allowance on loan-to-value and/or FICO scores. However, the new standard adds two critical aspects to the schedule: All balances will be reported by vintage year and charge-offs and recoveries will, likewise, be presented by vintage year (See discussion below related to charge-offs and Appendix I for an example from the CECL standard). Over time, this will enable an investor to perform various analyses:

1. Migration trends between credit quality, all the way to charge-off, can be observed from year to year.

   With the disaggregation of amortized cost balances of credit quality indicators by vintage, along with the addition of charge-offs and recoveries by vintage, simple models can be constructed to forecast deterioration to charge-off. For example, loans that are internally rated "5" can be forecast, based on those loans from the same vintage the previous year that were rated "4".[3] Over time, this schedule may provide an estimate of expected loss by each risk indicator, as well as average losses by vintage.

2. Changes in underwriting standards can be inferred, based on year-to-year amounts of the current year vintage.

   When current vintage year amortized cost balances show a difference in the mix of credit quality indicator or charge-offs during the first vintage year (compared to the first vintage in the previous year), it likely indicates a change in underwriting standards, which can change the forecasted charge-offs compared to previous vintages. Loans issued during years of high

[3] Bankers should note that this simplified methodology would not likely pass audit muster, as such an estimation ignores that some loans rated "6" one period can improve to "5" or better, some loans rated "5" can stay at "5", and some loans rated "4" one period can be charged-off the next. For the purposes of this investor analysis, however, short-cuts can be applied that will be sufficient to spot credit risk trends.

loan growth or in advanced stages of an economic cycle may also often be assumed to be of lower credit quality.

3. Vintage-based charge-off rates can be observed, showing cyclical trends and product loss curves.

   Many consumer portfolios show patterns in charge-offs by age and, thus, provide an indication of future charge-offs for certain vintages. "Loss curves," referred to as "historical or expected credit loss patterns" in paragraph 326-20-55-5 of the CECL standard, can also be based on credit quality.

4. Changes in credit risk can be observed, based on the allowance coverage ratio (to be discussed below), including the impact from newly issued loans, aging, payoff, and charge-off of existing loans, and the company's forecast of the future.

   Using information from the vintage-based schedule, along with assumptions of interest income, estimates of credit loss allowances can be made to make sense of changes of credit risk during the period.

In summary, given sufficient detail in the credit quality indicator disclosures, an investor will be able to perform certain modeling of future charge-offs and, ultimately, credit loss provisions and allowance balances based on the current portfolio.

Banker Challenges

Charge-off Analysis Will Likely be Necessary

Note that paragraph 326-20-50-6 does not address charge-off information in the disclosures of vintage-based credit quality indicators. Therefore, technically, the CECL standard does not require charge-offs to be reported by vintage year. That said, charge-offs by vintage year are reflected within Example 15 of the "Illustrations" in paragraph 326-20-55-79. Further, within their outreach to investors and analysts, FASB representatives refer to vintage-based charge-off analyses that analysts can perform. Therefore, it seems clear that FASB intended such information to be disclosed. With this in mind, FASB should consider whether a technical correction to the disclosure requirement is needed.

Whether the vintage-based charge-off information is required or not, ABA believes that bankers should be ready to disclose and discuss any such trends. Vintage-based charge-off information will assist in discussing the reasons for significant changes in writeoffs, as required in paragraph 326-20-50-11F. Considering the importance placed on vintage year during many discussions related to mortgage securities and loans during the Financial Crisis, it is likely vintages will be a primary focus of many investors in the future. Therefore, ABA believes such a charge-off analysis will be a common expectation during the periodic reporting process.

More Detail May be Needed to Reflect Credit Migration

While there are no CECL requirements related to the level of detail that is presented in the schedule of credit quality indicators (in fact, the Illustration example notes that more or less detail may be presented, compared to the level shown in the example), during the CECL standard-making discussions, it was argued by certain FASB members that the example in current GAAP (in paragraph 310-10-55), which refers to a current quality indicator merely as "Pass", does not have the level of specificity that an investor desires in order to see migration of credit quality over periods of time. While "Pass" complies with the current standard, the board members felt that presenting "Pass" within the example unintentionally set an inappropriate precedent that most banks currently follow.[4]

This is consistent with feedback received by ABA from banking analysts, indicating they want to be able to observe the migration of good loans going bad over time and not just a "breakout of good and bad loans." For example, the amount of loans rated "2" may have deteriorated during the year, but still be disclosed as "Pass." Investors want information to forecast further credit deterioration (or improvement). As a result, FASB changed the level of detail presented in the internal risk rating part of the example to show the "Pass" loans broken out between those loans rated "1-2" and those rated "3-4."[5]

Credit Risk Indicators Should Indicate Differences in Risk

The credit quality indicator schedule brings into question the accuracy of internal risk rating systems themselves. Paragraph 326-20-50-8 requires that **"**If an entity discloses internal risk ratings, then the entity shall provide qualitative information on how those internal risk ratings relate to the likelihood of loss." This does not mean that there needs to be detailed explanations of how expected credit losses are calculated when using a risk rating system. However, it does imply that there needs to be *some* consistent relationship between risk ratings and default (or loss).

[4] It should be noted that the "inappropriate level of detail" does not mean that bankers want to hide anything. The level of detail today merely reflects how banks generally perform their current incurred loss estimates. "Pass" loans are normally pooled for collective impairment as part of the ASU 450-20 estimate, while loans that are "classified" normally are evaluated individually for impairment.

[5] While the example in 326-20-55-79 shows consumer loans assigned a risk rating, ABA believes that risk ratings will normally be assigned only to commercial loans. ABA expects metrics such as FICO scores and/or loan to value ratios to be relevant metrics for consumer portfolios.

Anecdotes from consulting firms that currently work with banks on understanding credit risk in their portfolios note that risk ratings are often inconsistent within portfolios (e.g. "3" rated loans have higher incidence of default than "4" rated loans, though "4" should indicate lower credit quality). With this in mind, banks that disclose internal risk ratings will likely need to test their risk rating systems for such consistency.

Practices within Risk Rating Analysis Should Evolve

ABA believes that underwriting and internal risk rating systems at many community banks are not currently structured to capture changes in underwriting in a way that would provide consistent distinction between levels of credit risk within "Pass" ratings. With this in mind, at the effective date, most banks that disclose amortized cost balances by internal risk rating will likely do so in accordance with current normal practice of aggregating all "Pass" loans. For banks, this will likely greatly alleviate the pressure to differentiate the likelihood of loss in compliance with the disclosure requirements, as the qualitative discussion should not be difficult to assemble. Non-Pass loans typically resolve within the next year or two.

In the long run, however, investors and board members will likely want more disaggregation of risk ratings in order to provide earlier warnings to ultimate charge-off and to enable more precise credit loss measurement. With this in mind, bankers should consider collecting data for analytical purposes (not for immediate disclosure purposes) that include the kinds and number of policy exceptions that are granted, as well as the individual credit metrics that feed the internal risk rating decision, such as the debt service coverage ratio. Over longer periods of time, while internal risk rating systems between banks may not be consistent, trends may be determined based on the common metrics.[6]

Vintage-based Analysis May be Necessary, No Matter the Bank's Methodologies

While vintage analysis may be the basis for credit loss estimates on certain portfolios (such as auto loans), estimates on C&I portfolios will often be based on the most recent risk rating. Collateral-based portfolios will also often be based (partially) on the most recent estimate of loan-to-value ratios.

With that in mind, it seems difficult to imagine dismissing vintage information, even when it is not primarily applied in credit loss estimates.[7] Vintages are often referred to when addressing

[6] The timeliness of the risk rating process will also initially be of concern at many banks. ABA believes, however, that compliance with regulatory loan review standards should be sufficient to rely on such ratings. Current practice considers the timing and extent of such processes to apply qualitative adjustments to initial estimates and ABA expects such practices to continue.

[7] During one of the final meetings prior to the issuance of ASU 2016-13, one FASB member noted "We have built a vintage model." Therefore, it is clear that FASB members believe vintage is a relevant factor in credit loss estimates, no matter the instrument.

underwriting standards (since underwriting standards are often linked to specific periods in which a bank's strategy is executed) and, as was the case during the Financial Crisis, are often used as benchmarks by investors when estimating loan to value ratios of mortgage loans. Vintages can also be linked to performance during specific points of an economic cycle. Therefore, vintage analysis is likely to become an integral part of the "Qualitative Factor" analysis performed to assess adjustments to the bank's initial estimates. With that in mind, no matter the primary method used to perform the credit loss estimate, bankers will need to address vintage-based underwriting and performance when addressing the Board and investors.

LIMITATIONS OF CECL AND VINTAGE-BASED DISCLOSURES

1. Inherent to CECL is non-comparability related to critical aspects of credit risk management: differing measurement techniques and differing forecasts of the future between companies. The credit quality disclosures will likely partially mitigate this non-comparability over time, as bankers address questions from investors and board members. However, underlying a challenge many bankers will face is the level of disaggregation that will be applied within the disclosures. Under incurred loss accounting, for example, risks of an incurred loss are focused on classified risk ratings and past due status, since these loans are most likely to be charged-off in the near future. Under CECL, however, the risk of lifetime loss at origination may require greater disaggregation, as past due status, for example, is often meaningless for newly originated loans.

   The needs for greater disaggregation could often conflict with competitive concerns, as proprietary strategies could be unintentionally disclosed. For example, as disclosures of the amortized cost of loans are presented by vintage year, a large increase of loans issued in the current quarter to borrowers with low credit ratings may be reflected. For smaller community banks, large loans may often be attributed to specific high-profile borrowers – something the specific borrower will likely not desire if a specific risk rating is presented. Bankers will need to strike a balance, therefore, between disclosures of credit risk that are meaningful to their board and investors and those that divulge competitive strategy and confidentiality.

2. CECL's principle-based approach may cause inconsistent application of the standard (at least at first), as well as produce results that may require discussion of non-GAAP credit metrics for certain specific loan products.

   a. It is clear that the unfunded open commitment of a credit card account and certain home equity lines of credit will not be provided for under CECL. However, there appears to be no consensus yet on how payments received after the balance sheet date will be applied to the outstanding balance (whether subsequent receipts should be applied to subsequent charges or not). As a result, large variances between companies could result in measuring the life of the funded balance and the resulting credit loss expectation. Further, additional supplemental information and guidance will likely be needed to address the impact that unfunded balances may have on future credit performance.

b. It is also clear that the CECL loss estimate does not generally go beyond the contractual life of the loan, despite the likelihood of loan renewal. While this could result in seasonal or yearly fluctuations in credit loss measurement, this also may affect loan portfolios in which different instruments are linked, such as bridge-to-permanent or construction-to-permanent financing. Board members and investors may need supplemental information on how to assess the risks of such common arrangements.

3. The relevance of vintage-based amortized cost balances will be questionable for certain long-term loan products. For example, unsecured student loans are issued with long periods before payment begins and there is little visibility into any data during this time that indicates current credit quality or that would enable a forecast of future credit quality. Charge-offs would normally apply to loans that have been outstanding for greater than five years old and amortized costs would apply to vintages not likely to enter the payment phase within the scope of the schedule.

   Fortunately, other long-term products (for example, residential mortgages) often have loss curves that indicate insignificant expected charge-offs after five years. Therefore, until loan products are structured so that charge-off risk occurs greater than five years after origination, this analysis should provide significant relevance.

4. Conversely, loans that have tenors of less than five years may often renew and the amortized cost be reflected twice or more in the schedule of credit quality indicators by vintage. Such replication, which is most likely to occur for commercial and industrial loans, could confuse board members and investors in assessing underwriting quality. For example, it may be common for loans that have suffered credit deterioration (without qualifying as a troubled debt restructuring[8]) to contractually renew. Such loans may have a different credit risk

[8] For a loan modification or renewal to be considered a Troubled Debt Restructuring, the borrower must be suffering financial difficulty and the lender must provide a concession. Such a TDR-based renewal is not considered a new loan. A loan to a borrower who has suffered credit deterioration, though not be in "financial difficulty", would be considered a new loan and vintage.

profile from those procured as new business. Bankers should, then, be prepared to address the amount of loans of the current vintage that are related to renewed loans.

5. Due to its questionable relevance of vintage-based amortized cost detail on revolving loans (balances can represent draws in different years and will often be unrelated to the year in which underwriting occurred), the outstanding amortized cost amount is not required to be detailed by vintage year. With this in mind, however, banks will need to address the concerns of board members and investors related to the credit risk on outstanding unfunded commitments.

   ABA believes that bankers should anticipate requests from investors for non-GAAP disclosure of vintage-based unused/unfunded commitments, with vintage being based on the time of commitment (in case there was a difference between the commitment and the origination/funding year). Currently, public companies often disclose unused and unfunded commitments by contractual maturity, and this would further supplement such a schedule.

<u>NOTE FOR NON-PUBLIC BUSINESS ENTITIES</u>

The schedule of credit quality indicators is not required to be broken out by vintage for banks that are not public business entities, as defined by GAAP. ABA, however, believes that this schedule is particularly useful for small bank officers and board members as a management tool. While trends, such as loss curves and credit deterioration, will often be difficult to identify, specific problem loans and charge-offs can often be identified because of the disaggregation by vintage. It is possible that some banks will be able to link certain amounts to specific loan officers or chief lending officers. This schedule could, therefore, become an integral part of the small bank internal control process.

UNDERSTANDING CHANGES TO CREDIT RISK: ATTRIBUTION ROLLFORWARD

Investor Opportunities/Challenges

All stakeholders will need to "re-learn" the meaning of the current credit risk metrics and how credit risk changes during the reporting period. While this may initially appear to be a best practice for a banker, paragraph 326-20-50-11 c-d appears to require a banker to do so, as a discussion very similar to an SEC registrant's "Management's Discussion and Analysis" must be presented:

c. A discussion of risk characteristics relevant to each portfolio segment

d. A discussion of the changes in the factors that influenced management's current estimate of expected credit losses and the reasons for those changes (for example, changes in portfolio composition, underwriting practices, and significant events or conditions that affect the current estimate but were not contemplated or relevant during a previous period)

With this in mind, ABA expects that the discussion will likely describe mere directional impacts, with little, if any, quantitative detail. Banks that are public business entities, nevertheless, should be prepared to get into such detail, as investors will need such information and discussion of this will be expected within MD&A for SEC registrants. In light of the decoupling of current credit metrics to the credit loss provision expenses, ABA believes the easiest way an investor can understand changes in the credit risk facing a bank is to focus on the metric that is often used now for incurred loss estimates: the allowance coverage ratio (allowance as a percentage of the amortized cost) and a detailed rollforward of the ratio attributing the change during the period to different components.

With information that can be derived from the vintage-based schedule of credit quality indicators and charge-offs, as well as other disclosures (described below), and by using certain simple assumptions, investors should be able to assemble such an attribution rollforward. In fact, as noted in CECL's Basis for Conclusions paragraph 110 through 114, FASB's requirement to present amortized cost information by vintage (discussed in more detail below) appears specifically in order to allow an investor to perform such a rollforward. The attribution rollforward would provide insight into changes in credit risk from the beginning of the period. Procedurally, both the beginning balance of amortized cost and the allowance coverage ratio would be reconciled to the ending balances through those amounts attributed to:

- New loans issued,
- Previously existing loans paid off/down and of those aging,
- Loans charged off, and
- Changes to the forecast of the future.

The allowance coverage ratio can be performed independent of any detailed analysis of credit metrics, so any confusion from the direction of credit metrics can be avoided. While an investor may not necessarily be precise in preparing it, it is a simple way to present how credit risk has changed. For example, it quickly shows the investor that:

- The biggest factor in the yearly loss provision will often be the addition of new loans onto the books. More loans will equal more risk.
- Loss curve patterns have a big impact on credit risk. Credit risk often subsides significantly as loans age past key points in a loan's life. For example, most residential mortgage loans experience very little loss after five years, as the borrower has normally built significant equity in her/his home (in these cases, the loan to value ratio has dropped significantly).
- Underwriting should matter on day 1. Coverage ratios for new business should correspond to the effective yields of loans originated during a year. An increase in the coverage ratio for newly originated loans is not a bad thing, if the bank is paid for it. This is one of the biggest concerns FASB was trying to address by requiring the vintage information: the level of new business being put on the books and at what cost, and
- Forecasting the future is a critical part of bank management, due to its impact on profitability.

In this case, the attribution rollforward naturally answers the question of why provisions may be increasing when past due loans are decreasing (The most common answer will likely be that new loans are being put on the books). However, the attribution rollforward also opens the door to many questions related to bank operations and may even compel the board to focus on questions of product pricing, as the coverage ratio for current year loan production can be relatively simple to estimate.

Banker Challenges

An Allowance Coverage Attribution Rollforward May Not be an Option

Whether or not bankers would like to address their explanations of changes to credit risk through the allowance roll forward is likely irrelevant – investors will be doing it for themselves (as FASB expects). However rough those estimates might be, bankers will still need to address related questions in a credible fashion.

See Appendix II for a suggested way for non-sophisticated bankers to assemble the attribution rollforward, including how to address the forecast of the future. Much of the information that is used in a coverage attribution rollforward can be found in the vintage-based schedule of charge-offs/recoveries and the amortized cost of credit quality indicators. The attribution rollforward provides a framework for providing CECL's "MD&A-like" disclosure (as required in 326-20-50-11).

In addition to assisting in explaining changes in credit risk throughout the year, a detailed rollforward may be a focus of internal discussions, as it sets expectations of future profitability and risk and, thus, can become a key point in long-term business planning and governance. This will be a significant challenge for banks that estimate credit losses on simple "loss rates" without regard to quantitative analysis of loan age (vintage) or credit risk rating.

An "MD&A-Like Disclosure" is not a "Q Factor Analysis," Which Must Also be Disclosed

It should be emphasized that the requirements in 326-20-50-11d are not akin to describing a bank's risk factor analysis (currently referred to as "Q factor analysis") that supplements starting point credit loss estimates. Such a discussion is part of 326-20-50-11a and b:

a. A description of how expected loss estimates are developed,
b. A description of the entity's accounting policies and methodology to estimate the allowance for credit losses, as well as a discussion of the factors that influenced management's current estimate of expected credit losses, including:
    a. Past events
    b. Current conditions
    c. Reasonable and supportable forecasts about the future.

The Q factor analysis is fundamentally different from the discussion of changes in risk factors. In a Q factor analysis, a banker will normally compare current and forecasted risk factors to consider adjustments to historical credit loss rates. In contrast, in the 326-20-50-11d (MD&A-like discussion of risk factors), a banker will normally compare current and forecasted risk factors to those same factors that existed in the previous reporting period. For example, a Q factor analysis could indicate no need to adjust historical loss rates though forecasted macroeconomic factors changed from the previous period.

ABA believes the discussion within 326-20-50-11b will be very general in nature, though it will be important for bankers to understand this process in systematic terms. Without a systematic process, reconciling this process with the description of changes in credit risk (326-20-50-11d) may be confusing.

Bankers should document their process with specific reference to:

1. Past Events: Past events can refer to the specific historical experience used. For life of loan loss estimates, banks may will attempt to use one or more complete economic cycles as starting points. Most importantly is for the bank to communicate the thought process around evaluating the relevance of data that is used. For smaller banks, such a thought process will also often include consideration of market-based data, comparing it to the bank's own experience.

   Current conditions: Banks will assess changes in portfolio mix to determine whether the historical experience used needs adjustment to take into account the actual current credit characteristics of the portfolio or whether wholly different segmentation of the portfolio is necessary. Additionally, current loan performance, including past due trends and internal risk ratings, will also be a part of this aspect of the process. As noted above, such trends do not necessary mean that credit loss estimates will increase or decrease based on the trends, but will inform the banker as to whether previous expectations should change.

2. Forecast of the future: Given the expected wide range of reasonably possible lifetime credit loss estimates, it may be important for investors to understand the long-term, through-the-cycle historical averages assumed within each portfolio, as well as the point in the economic cycle the bank believes it is in. This will provide a basis to understand the overall extent of the Q factor adjustments. Bankers will likely need to communicate to investors as to how their estimates relate to long-term historical loss rates. (See more discussion below).

With this in mind, banks will need a governance structure that reviews the process to explain these impacts. Selection of key assumptions, including sensitivity testing of alternatives, appears to be a minimum expectation for all banks, as these processes appear central to the currently proposed changes to auditing standards over accounting estimates. These proposals (one from the PCAOB and one from the International Auditing and Assurance Standards Board (IAASB))[9] also encourage the auditor to maintain "professional skepticism," which implies challenging the reasonableness of bank assumptions. While priorities will surely evolve, ABA believes that transparency to the processes of risk factor analysis and of assumption selection, rather than accuracy, will be the focus of auditors and of investors for the first several years of CECL.

ASSESSING THE FORECAST OF THE FUTURE

Investor Challenge

When rolling forward the coverage ratio, the forecast of the future inevitably becomes the "plug" allowance factor that links the other activity (originations, aging, pay downs, and charge-offs) to the ending ratio.[10] In many cases, the dollar impact of the macroeconomic forecast will be significant. In virtually all cases, there could be a wide range of possible macroeconomic forecasts that a bank may select and each will then have a wide range of possible financial impacts. Further, changes in expected credit loss should not normally be proportional to changes in economic or credit assumptions, and that relationship will change, based on the point in the economic cycle. For example, a decline in housing prices may have a very different impact on credit loss expectations, depending on whether resulting mortgages end up being "underwater" or not. Among other things, this nonlinear relationship of assumptions to loss provisions will make forecasting future charge-offs a big challenge to investors.

Understanding how loss expectations can change if forecasted assumptions turn out significantly different from actual will be critical, especially for those investors weighing whether (and how much) to fund capital raising needs in order to conform to regulatory minimum levels. For those banks and for SEC registrants, this will mean sufficient transparency as to key assumptions

[9] The proposed revision to the IAASB auditing standard over accounting estimates acknowledges that auditor's estimates may often be "multiples of materiality for the financial statements…"

[10] Depending on how a bank will analyze such activity, changes in the credit loss estimate due to changes in loan performance (informed by, say, the level of past dues or by changes in risk ratings) may be a part of aging, pay downs, or within the macroeconomic forecast of the future.

made, as well as some kind of sensitivity analysis relating to credit losses expected under various forecasted scenarios.

Length of the Macroeconomic Forecasts

A key assumption that bankers are considering is the length of the "reasonable and supportable" forecast period (R&S). Credit cycles are characterized by long periods of very low credit losses, followed by one to two years of acute stress. Banks that use one year as an R&S (meaning their individual forecast of future economic trends extends one year into the future, while effectively reverting to long-term historical loss rates over the remainder of the portfolio life) are likely to maintain allowance levels during benign economic periods that are vastly different from those that forecast an R&S over longer periods (say, three years) before reverting to long term trends. Those relative levels, and the corresponding level of volatility, will also significantly differ (they effectively flip) during periods of stress. Similar differences can occur if the period after the R&S that represents the time when loss rates transition to long-term historical averages is either short or long.

Such differences can be a reason for significant inconsistency in credit loss provisioning and has been recognized by banking regulators:

> "Under the incurred loss standard, higher provisioning levels correspond directly to increased losses. By incorporating somewhat opaque, bank-specific idiosyncratic modeling decisions, the tight link between ALLL and actual losses may be relaxed – high risk portfolios under optimistic expectations could be confounded with low risk portfolios with more conservative expectations. Market participants could face difficulty in disentangling the degree to which variation in ALLL is driven by modeling assumptions as opposed to differences in underlying risk."[11]

With this in mind, understanding a bank's overall approach to how it's forecasts eventually revert to long-term historical averages will allow an investor to understand the level of volatility that may occur throughout the economic cycle.

Use of Reputable Forecasts

While forecasts of macroeconomic factors are presumed to be highly subjective, due to the anticipated scrutiny over the selection of their forecasts,[12] many banks are initially considering

---

[11] See Sarah Chae, Robert F. Sarama, Cindy M. Vojtech, and James Wang (2018). "The Impact of the Current Expected Credit Loss Standard (CECL) on the Timing and Comparability of Reserves," Finance and Economics Discussion Series 2018-020.

[12] Based on experience over the past twenty years, forecasts that are too pessimistic may be subject to "earnings management" concerns, while forecasts that are too optimistic will be branded "too little, too late." Bankers might also face public relations scrutiny, as CECL's theoretical build-up of allowances prior economic stress could result in allowances being released – and record earnings being reported – just as past due loans, foreclosures, and charge-offs are at their highest.

basing their reasonable and supportable forecasts of economic indicators on reputable reports such as the Blue Chip Economic Indicators or forecasts published by Moody's Analytics. Smaller banks will likely use internal forecasts, based on trends relating to macroeconomic factors noted from Federal Reserve Economic Data published by the St. Louis Federal Reserve Bank. Some of these smaller banks will observe little correlation between macroeconomic factors and credit losses and, therefore, lend little credence to such a forecast: changes to underwriting standards will be the key variable in their forecast.

Accuracy of Macroeconomic Forecasting

Those banks that are currently considering applying reputable macroeconomic forecasts have observed that these forecasts have not historically been accurate in forecasting a turn in the economic cycle. In fact, reliance on such forecasts if CECL were effective prior to the Financial Crisis would have resulted in earlier loss recognition, though far less significant than many anticipate. Worse, however, is that once the turn in the economy was forecast, adverse economic trends forecast by these organizations were both significantly worse than actually experienced and for a much longer time than actually experienced. Unemployment forecasts, for example, were relatively benign until 2009, and did not start drastically increasing until 2010. By 2010, however, forecasts "over shot" the actual unemployment rates, with forecasted improvement far less than actual. With this in mind, the reliance on the reputable forecasts may not result in significantly higher allowances going into a recession.

Sensitivity of Estimates

CECL assumes high subjectivity of estimated credit losses, based on forecasted macroeconomic factors. Preliminary modeling has confirmed that expectations of a stable economy will normally result in low credit losses and expectations of a recession result in very high credit losses.

The importance of sensitivity analysis increases significantly under CECL due to the nature of credit risk. There are inflection points in economic metrics where the trajectory of losses in a portfolio accelerate and reach a peak – credit losses expected when unemployment rates are 7% will normally not merely be the average of the losses estimated when unemployment is forecast to be at 6% and at 8%. Depending on the portfolio, the estimate at 7% could be far higher.

Discussions related to the sensitivity of assumptions and reasonable ranges will likely be critical to the investor. [13] Further, since reversion to long-term loss rates will be an important part of

[13] Such sensitivity analysis of accounting estimates is already required under SEC MD&A guidance. See https://www.sec.gov/rules/interp/33-8350.htm. Specifically, "… a company should analyze their specific sensitivity to change, based on other outcomes that are reasonably likely to occur and would have a material effect. Companies should provide quantitative as well as qualitative disclosure when quantitative information is reasonably available and will provide material information for investors."

many bank estimates, banks should be able to inform investors as to how their estimates relate to the long-term rates.

Consideration of Smaller Bank Forecasts

When there is a lack of critical mass in a portfolio, banks may apply market or peer historical credit loss data acquired from third parties. Such data may need manipulation, based on the forecast of the future. With that in mind, however, investors need to understand that while applying peer data may provide more credible estimates of credit loss, a smaller bank's actual performance may still be significantly different from the peer data. Investors will want to understand a bank's process in evaluating how and when peer data should be applied and how capital buffers are maintained in response to such challenges. While this situation applies today under current accounting, the bigger life-of-loan playing field increases the importance of such a process.

Banker Challenges

Communicating Macroeconomic Forecasts

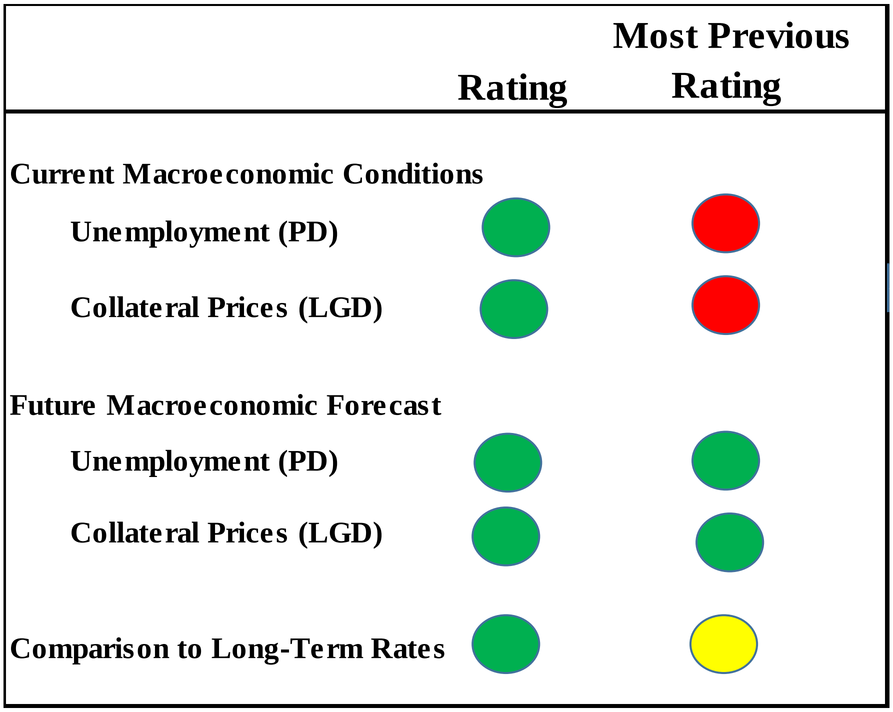
While a detailed calculation will not often be necessary for community banks, general guideposts should be helpful to inform board members and investors on the reasonableness of the impact of such forecasts. Given the decoupling of current credit metrics to credit loss provisions, board members must first understand the metrics that will continue to move consistently with a bank's provisioning, because long-term CECL credit loss provisions are ultimately about those metrics. This is especially important in context of quarterly reporting. Discussions of changes in credit loss expectations will need to be conducted in light of the previous year-end, as well as the previous quarter. In light of comparative financial statements, changes in long-term credit loss expectations can compound the complexity. Therefore, simplicity will be critical.

ABA believes the simplest way to explain levels of credit risk are currently reported by certain large banks through analyzing the likelihood that a loan will go bad and then estimating the severity of the loss if it does go bad. Changes in the probability of a default (PD) and the loss given default (LGD) are normally directionally consistent with CECL credit loss provisions and can be categorized simply in an analysis[14]. For example, improvement in underwriting standards and internal risk ratings usually result in decreased PD and increases in collateral values result in lower LGD. Macroeconomic factors such as unemployment (for PD) and home price indices (for LGD) can be understood likewise.

While community banks will not necessarily need to calculate or forecast specific PD and LGD ratios, they can provide directional signposts in order to indicate when risks are rising or falling. When risk of loss and severity are forecast to increase, unless there is a decrease in loan

[14] Exposure at Default (EAD) is also a part of most detailed PD/LGD analyses. However, to simplify discussions with investors and board members, ABA believes that EAD may be considered merely as a factor of loss given default.

production, credit loss provisions will increase. Within a governance process that reviews the assumptions used in CECL estimates, ABA believes that community bankers should consider "red light, yellow light, green light" signals to help their boards to understand how its assessment of current conditions and forecasts of the future should affect their credit loss provisions. As noted, a current rating, a rating in relation to the previous period's rating, and a rating that compares the current lifetime credit loss estimate to long-term historical results may be considered.



The bank above identifies unemployment as a major driver to probability of default on this loan product, and collateral prices as a major driver to the loss given default. With red showing pessimism and green showing optimism, this chart shows ratings typical of a bank that might be coming out of a recession.

- Current economic conditions are positive (green), which is an improvement from the negative conditions during the previous reporting period. The forecasts of future economic conditions in both the current period and the previous period indicate positive conditions (green). This indicates that the bank accurately forecasted improvement, which is continuing, from the trough of a recession.

- With favorable current economic conditions and a favorable forecast, current expected lifetime credit losses are favorable (lower) to the rates experienced long-term by the bank. This is an improvement from the previous comparison (yellow), which, because of forecasted improvement from negative conditions, would result in loss rates approximating those long-term rates.

ABA believes a simple color-based reporting system like this can help a Board become acclimated to the forecasting process at the bank and how forecasting impacts lifetime expected loss rates.

COMPARISON TO LOAN FAIR VALUES

Investor Challenges/Opportunities

During 2018, fair values of loans will, for the first time, be disclosed at their "exit price". For most banks, current fair value disclosures do not contain a life of loan loss assumption. In contrast, exit price fair values are consistent with a CECL lifetime credit loss measurement objective, as the credit spread should represent the lifetime risk of expected loss. Therefore, in theory, changes in expected credit loss estimates per CECL should have some consistency with changes in credit spreads per fair value estimates.

Current fair value practice also does not normally apply discounts for changes in liquidity spreads in loans that would be included in an exit price. Of course, liquidity spreads can be volatile within fair value estimates, based on the loan type, credit quality, geographic region, etc. thereby making the comparison of loan fair values to CECL-based net loan balances highly difficult. ABA believes that this is why investors are currently unsure of the relevance of fair values on an exit price, as they largely ignore current fair value disclosures.

That said, investors should expect general explanations when there are significant differences between the changes in fair values of the loan portfolio and the changes in the net-of-allowance loan balance. Significant differences between changes in the two could indicate that the bank has not considered deterioration (or improvement) in market credit conditions within its CECL estimates.

Banker Challenges

Banks will need to consider such differences within their governance processes, whether investors pursue such explanations or not. When there are large changes to market spreads, banks will need to evaluate how such information should inform their forecast of the future. As a result, this may require significant change in the timing of their fair value estimation processes, compared to today. The fair value estimate is currently performed late in the closing process, often by a third party consultant, and this process may need to be moved up significantly in order to comply with filing deadlines.

OTHER CONSIDERATIONS

Educating Stakeholders on Lifetime Credit Risk Concepts

Bankers must be mindful to educate their board members of credit risk concepts, the measurement of them through CECL, and how it they are different from incurred loss credit loss analyses. Many currently think of credit loss provisions in terms of multiples of annual charge-off rates or of loss emergence periods (which are based on annual charge-off rates). A loss emergence period of two years normally means that the annual charge-off rate is multiplied by two. Under CECL, such thinking must be "un-learned" because it implies that twice the risk means twice the credit losses. This is untrue because, while charge-offs often act in a linear and serial fashion (meaning that recent history can be a reasonable basis for what is occurring today), credit risk is nonlinear. Double the risk metric does not mean twice the provision: For example:

- A pool of loans with a third of the borrowers possessing FICO scores of 800, a third with 700, and a third with 600 may have a weighted average FICO of 700. FICO scores of 700 generally equate to an 8% expected rate of severe delinquency. However, borrowers with FICO scores of 800 have an expected severe delinquency rate of 1%, and those with scores of 600 have rates of 28%. Therefore, the actual expected severe delinquency rate of your portfolio is over 12%, over 50% higher than the rates of an "average FICO rate". Default rates on publicly rated bonds have the same characteristic. As the instrument creeps down the rating scale, the default risk can jump logarithmically.

- Losses upon default for collateralized loans naturally are very small until the loan to value ratio approaches 100. That is easy to picture – banks can foreclose on a loan that has an LTV of 90 and still sustain no loss. Once that 100% LTV threshold is reached, however, credit losses are experienced. Assumptions of future collateral prices can often have a "cliff effect." When collateral prices in a geographic area decline so that LTVs near 100%, portfolio losses are likely to jump dramatically.

In addition to non-linearity in credit risk, loans also often have non-linearity related to age – the age of the loan often matters when expecting a default. "Loss curves" is a term many a board member should be familiar with, as it will often explain portfolio delinquency patterns. Loans do not go bad during the first year of their lives unless a significant underwriting mistake or unexpected economic shock occurred. However, as loans season, they normally reach points in which problems are more likely to be faced. Past that time, the likelihood of default diminishes.

For example,

- Once residential mortgage borrowers have been in their house for a few years, "sweat equity" and "financial equity" begin to take over. They do not want to move again (therefore, any loss in job by a breadwinner is accompanied by a frantic search for a new one) and the principal in their loan starts to be paid down. Delinquencies and resulting losses after that time become rare as the loan to value ratios drop.

- If a small business survives its first year after the free-rent period on its office space ends, it normally will last several years (by then, the loan gets paid-off).
- On the other hand, many commercial real estate projects have interest-only terms until the project nears the agreed upon absorption timeframe. Delinquencies before that time would be unexpected.

Understanding how the various loan portfolios perform based on loan age is a critical aspect of credit risk. Reporting on and assessing CECL expected losses based on the loan's age can allow the bank's board of directors to understand what risk is behind it and what still lies ahead. This is a big reason why FASB decided to integrate vintage information into the schedule of amortized cost by credit quality indicator.

Reports analyzing loan portfolio risks by credit quality, by loan to value ratios, and by seasoning are often included in loan review committees today. Under CECL, the same reports will also be reviewed by the audit and finance committees. In this aspect, CECL could actually simplify the board reporting process, as the outlook of management is directly reflected within the numbers.

Communicating Probability of Default/Loss Given Default

The lack of directional consistency many credit metric trends will have with the credit loss provisions now begs for metrics that <u>will</u> have such consistency. Changes in the allowance coverage ratio will have such consistency, but metrics are needed to point to whether the ratio itself should increase or decrease. Simply put, when it is more likely that a loss will occur, or when that loss will be more severe, credit risk increases (and vice versa). This concept underlies the terms "probability of default" (PD) and "loss given default" (LGD).

PD and LGD concepts are already often applied by banks of all sizes. For example, loss given default is already being discussed by many banks, large and small, in estimating CECL allowances through loan-to-value ratios, which inform LGD estimates. Further, the "red light-yellow light-green light" system proposed in this paper related to macroeconomic forecasting is merely a way that non-complex banks can convey changes in PD and LGD.

Large, sophisticated banks are already reporting detailed PDs and LGDs for certain portfolios under Pillar 3 regulatory requirements, as well as in accordance with recommendations from the Enhanced Disclosures Task Force, initially published in 2012. While the CECL standard has no such requirements, ABA believes that practice will evolve so PD/LGD information is commonly discussed, even if such discussions merely point to general increases and decreases. Bankers are urged to consider identifying data points that, over time, will allow quantitative measurement of PD and LGD in their estimates.[15]

---

[15] Per its February 2018 webinar, the Office of the Comptroller of the Currency believes that simple approaches to PD/LGD estimates can be closely aligned to how smaller and less complex institutions think about their portfolios.

APPENDIX I: Example Vintage-based Schedule of Credit Quality Indicators

Term Loans Amortized Cost Basis by Origination Year As of December 31	20X5	20X4	20X3	20X2	20X1	Prior	Revolving Loans Amortized Cost Basis	Total
Residential mortgage:								
Risk rating								
1-2 internal grade	$-	$-	$-	$-	$-	$-	$ -	$-
3-4 internal grade	-	-	-	-	-	-	-	-
5 internal grade	-	-	-	-	-	-	-	-
6 internal grade	-	-	-	-	-	-	-	-
7 internal grade	-	-	-	-	-	-	-	-
Total loans	$-	$-	$-	$-	$-	$-	$ -	$-

Term Loans Amortized Cost Basis by Origination Year As of December 31	20X5	20X4	20X3	20X2	20X1	Prior	Revolving Loans Amortized Cost Basis	Total
Residential mortgage:								
Residential mortgage loans								
Current-period gross write-offs	$-	$-	$-	$-	$-	$-	$ -	$-
Current-period recoveries	-	-	-	-	-	-	-	-
Current-period net write-offs	$-	$-	$-	$-	$-	$-	$ -	$-

Qualification: ABA does not give financial reporting, legal, or accounting advice and our views on these issues are not authoritative. The ideas conveyed in this paper are meant to provoke thoughtful discussion between bankers, auditors, and regulators related to implementation of the CECL accounting standard. Unless otherwise noted, the ideas are not meant to reflect minimum requirements or best practices, but implementation processes that will address the practical and ongoing issues that can be expected in recording and managing expected credit losses.

APPENDIX II: Short-Cut Process to Roll Forward the Allowance Coverage Ratio

The following provides ideas on how a smaller bank can produce such a rollforward by largely using information from within the schedule of credit quality indicators by vintage.

1. Start with the beginning ALLL coverage ratio
   - Formula: Previous period ending ALLL, divided by previous period ending amortized cost.

2. Analyze current period activity
   - New Business: Allowances added by originations and new commitments
     - Assume all new business was issued on last day of quarter: Amortized cost at period end for the most recent vintage (per disclosure table) equals the new originations.
     - Assume that the credit loss provision applying to new business is based on the coverage ratio at the previous period end. This calculates the dollar of allowance added from new business.
       - More-detailed calculations can be provided if initial credit spreads are tracked on newly-issued loans.
     - For new commitments, a separate schedule will be needed, as open commitments will not be disclosed by vintage.
   - Borrower activity: Allowances reduced by loans paid down and paid off
     - Calculate a change in amortized cost balances throughout the year for those loan vintages outstanding at the beginning of the year. More detail can be applied by companies that:
       - Include only loans that are not nonaccrual (also see below).
       - Impute and integrate interest income in the calculation to arrive at a more detailed representation of the amount paid down.
       - Perform the calculations within the context of the vintage disclosure by determining the change by each loan age-period, also considering charge-offs by vintage.
     - Assume the coverage ratio from the previous period-end to determine the applied allowance. This calculates the dollar of allowance added from loans existing as of the previous year.
       - More detail can be applied by companies that use a vintage analysis, as charge-off rate by age of loan can be applied.
   - Borrower activity: Loan quality changes due to aging
     - This is generally performed when a vintage analysis matrix is used in estimating credit losses by age or when analysis of vintages is performed as a supplemental analysis.
     - Within a vintage analysis, calculate the difference in the amortized cost balances for each vintage year from the previous reporting period. For example, the

amortized cost balance at year-end 2021 for vintage year 2020 would be compared to the balance at year-end 2022 for that same vintage year. Excluding the amounts calculated as paying down/off and those charged-off (as above), the difference would be the amount of amortized cost that aged.
    - If using a vintage-based estimation method, the difference between charge-off rates by each age would be reflected in the numerator. For example, the charge-off rates for loans two years old are 25 basis points higher than those experienced during the loan's first year after origination. The 25 basis point difference can be applied to the change in amortized cost balances to arrive at the dollar amount of change due to aging.
- Borrower activity: Loan quality changes due to changes in risk ratings/past dues
    - This is performed when a migration analysis is used in estimating credit losses by credit quality or when used as supplemental analysis.
    - Considering the processes above, calculate the difference in the amortized cost balance for each risk rating. For example, the amortized cost balance at year-end 2021 for loans rated 1-3 would be compared to the balance at year-end 2022 for those loan ratings. Excluding the other processes above, such as new originations, the difference is assumed to be the amount of amortized cost that deteriorated or improved.
    - From the migration analysis, applying the loss rates by risk rating per the previous year to the change in amortized cost provides the dollar amount of allowance that changed due to changes in loan performance.
- Borrower activity: Loan quality changes due to charge-offs
    - Assuming all charge-offs previously had 100% allowance coverage or assuming a common allowance coverage based on the balances of individually impaired loans, collateral dependent loans, or nonaccrual loans in previous periods can provide an estimate of the allowance change from charged off loans.

3. Determine the impact of the change due to the forecast of the future: The impact of the change in the forecast of the future will often be merely a "plug" number that bridges the previous allowance/coverage ratio impacts to the ending allowance/coverage ratio, considering the other activity calculated above.

Note on the Methodology

By mainly assuming that changes in credit risk are based on the previous period's ending allowance coverage ratio, this is a non-complex way to estimate changes in credit risk from one period to the next. In order to obtain more precision, the credit loss provisions applied to originations and other activities in the rollforward can also be performed with different assumptions. In other words, based on a bank's specific approach to managing credit risk, the basis for the credit loss attribution can differ.

The key to the attribution analysis is the transparency in assumptions and assessing the reasonableness of the attribution. Many banks may want more detail in understanding the allowance ratio for new business and, instead of merely applying the ending ratio of the previous period, will base credit loss allowances on the current credit spreads at the time of origination. Additionally, preliminary results in various aspects of the rollforward may also indicate that further investigation and detail is needed. For example, large changes to the loss provision attributed to a change in the forecast of the future in the midst of an otherwise stable environment may indicate that other aspects (change in borrower performance, aging, etc.) may not be reasonably measured. With this in mind, such an analysis can be a key internal control within the CECL governance process.

Appendix III: Excerpts of Relevant CECL Disclosure Requirements

Accounting Standards Update 2016-13

> General
326-20-50-2 The disclosure guidance in this Section should enable a user of the financial statements to understand the following:

a. The credit risk inherent in a portfolio and how management monitors the credit quality of the portfolio
b. Management's estimate of expected credit losses
c. Changes in the estimate of expected credit losses that have taken place during the period.

> Credit Quality Information
326-20-50-4 An entity shall provide information that enables a financial statement user to do both of the following:

a. Understand how management monitors the credit quality of its **financial assets**
b. Assess the quantitative and qualitative risks arising from the credit quality of its financial assets.

326-20-50-5 To meet the objectives in paragraph 326-20-50-4, an entity shall provide quantitative and qualitative information by **class of financing receivable** and major security type about the credit quality of financial assets within the scope of this Subtopic (excluding off-balance-sheet credit exposures and repurchase agreements and securities lending agreements within the scope of Topic 860), including all of the following:

a. A description of the **credit quality indicator(s)**
b. The **amortized cost basis**, by credit quality indicator
c. For each credit quality indicator, the date or range of dates in which the information was last updated for that credit quality indicator.

326-20-50-6 When disclosing credit quality indicators of **financing receivables** and net investment in leases (except for **reinsurance receivables** and funded or unfunded amounts of **line-of-credit arrangements**, such as credit cards), an entity shall present the **amortized cost basis** within each credit quality indicator by year of origination (that is, vintage year). For purchased financing receivables and net investment in leases an entity shall use the initial date of issuance to determine the year of origination, not the date of acquisition. For origination years before the fifth annual period, an entity may present the amortized cost basis of financing receivables and net investments in leases in the aggregate. For interim period disclosures, the current year-to-date originations in the current reporting period are considered to be the current-period originations. The requirement to present the amortized cost basis within each credit quality indicator by year of origination is not required for an entity that is not a **public business entity**.

326-20-50-7 An entity shall use the guidance in paragraphs 310-20-35-9 through 35-12 when determining whether a modification, extension, or renewal of a financing receivable should be presented as a current-period origination. An entity shall use the guidance in paragraphs 842-10-

25-8 through 25-9 when determining whether a lease modification should be presented as a current period origination.

326-20-50-8 If an entity discloses internal risk ratings, then the entity shall provide qualitative information on how those internal risk ratings relate to the likelihood of loss.

326-20-50-11 To meet the objectives in paragraph 326-20-50-10, an entity shall disclose all of the following by portfolio segment and major security type:

c. A description of how expected loss estimates are developed
d. A description of the entity's accounting policies and methodology to estimate the allowance for credit losses, as well as a discussion of the factors that influenced management's current estimate of expected credit losses, including:
    a. Past events
    b. Current conditions
    c. Reasonable and supportable forecasts about the future.
e. A discussion of risk characteristics relevant to each portfolio segment
f. A discussion of the changes in the factors that influenced management's current estimate of expected credit losses and the reasons for those changes (for example, changes in portfolio composition, underwriting practices, and significant events or conditions that affect the current estimate but were not contemplated or relevant during a previous period)
g. Identification of changes to the entity's accounting policies, changes to the methodology from the prior period, its rationale for those changes, and the quantitative effect of those changes
h. Reasons for significant changes in the amount of writeoffs, if applicable
i. A discussion of the reversion method applied for periods beyond the reasonable and supportable forecast period
j. The amount of any significant purchases of **financial assets** during each reporting period
k. The amount of any significant sales of financial assets or reclassifications of loans held for sale during each reporting period.

326-20-50-13 Furthermore, to enable a financial statement user to understand the activity in the allowance for credit losses for each period, an entity shall separately provide by portfolio segment and major security type the quantitative disclosures of the activity in the allowance for credit losses for financial assets within the scope of this Subtopic, including all of the following:

a. The beginning balance in the allowance for credit losses
b. Current-period provision for expected credit losses
c. The initial allowance for credit losses recognized on financial assets accounted for as purchased financial assets with credit deterioration (including beneficial interests that meet the criteria in paragraph 325-40-30-1A), if applicable
d. Writeoffs charged against the allowance

e. Recoveries of amounts previously written off, if applicable

> Past-Due Status
326-20-50-14 To enable a financial statement user to understand the extent of **financial assets** that are past due, an entity shall provide an aging analysis of the **amortized cost basis** for financial assets that are past due as of the reporting date, disaggregated by **class of financing receivable** and major security type. An entity also shall disclose when it considers a financial asset to be past due.

326-20-50-15 The requirements to disclose past-due status in paragraph 326-20-50-14 do not apply to receivables measured at the lower of amortized cost basis **fair value**, or trade receivables due in one year or less, except for credit card receivables, that result from revenue transactions within the scope of Topic 605 on revenue recognition or Topic 606 on revenue from contracts with customers.

> Nonaccrual Status
326-20-50-16 To enable a financial statement user to understand the credit risk and interest income recognized on **financial assets** on nonaccrual status, an entity shall disclose all of the following, disaggregated by class of **financing receivable** and major security type: The **amortized cost basis** of financial assets on nonaccrual status as of the beginning of the reporting period and the end of the reporting period

a. The amount of interest income recognized during the period on nonaccrual financial assets
b. The amortized cost basis of financial assets that are 90 days or more past due, but are not on nonaccrual status as of the reporting date
c. The amortized cost basis of financial assets on nonaccrual status for which there is no related allowance for credit losses as of the reporting date.

> Past-Due Status
326-20-50-14 To enable a financial statement user to understand the extent of **financial assets** that are past due, an entity shall provide an aging analysis of the **amortized cost basis** for financial assets that are past due as of the reporting date, disaggregated by **class of financing receivable** and major security type. An entity also shall disclose when it considers a financial asset to be past due.

Appendix IV: Excerpt from ASU 2016-13 Basis for Conclusions related to Vintage Disclosure

BC110. Furthermore, the December 2012 Exposure Draft initially would have required rollforward disclosures for financial assets, particularly an incremental disclosure that would have required a rollforward of the amortized cost basis of financial assets.

BC111. Users of financial statements supported those rollforward disclosures because those disclosures would have provided information to aid in users' understanding of how current-period originations affected the allowance for expected credit losses. User respondents also provided feedback that disclosures were needed to separately present the portion of the credit loss expense that relates to current-period originations. Users were interested in this information because it would increase their ability to understand the credit quality of originations by period and assess the interrelationship of credit quality and loan growth. It also would provide information that could be used to understand the extent the allowance has changed as a result of changes in estimates on loans originated in prior periods.

BC112. The Board received significant opposition to these disclosures from preparer respondents. Preparers challenged the usefulness of an amortized cost rollforward disclosure when analyzing credit quality. Preparers highlighted that the allowance for expected credit losses would be estimated as of the end of a reporting period. Originations presented in an amortized cost basis rollforward may have been partially or fully repaid during the reporting period and, therefore, the relationship between originations and the current-period credit loss expense determined as of the reporting date may not always be meaningful information. Preparers also highlighted significant costs that would be incurred to adjust their external financial reporting systems to track the high volume of daily cash flow activity of various types of loans, particularly for those with multiple products in various jurisdictions. Preparers also stated that it is unclear when draw-downs on revolving lines of credit would be classified as an origination in the amortized cost basis rollforward. The underwriting decisions for various revolving lines of credit may have occurred many periods before the date they were drawn, so the origination information may not align with the time period of the credit decisions. Alternatively, if a line of credit was drawn down and then fully repaid in the same reporting period, there would be an origination to report in the amortized cost rollforward that is unrelated to the allowance determined based on the amortized cost at the reporting date; with variations of these fact patterns exacerbating the complexity of this disclosure.

BC113. Preparers opposed a requirement to disclose separately the credit loss expense that is attributable to originations. They stated that the allowance for credit losses is determined at the end of each reporting period and, therefore, would result in highly subjective estimates needed to allocate the total credit loss expense to current-period originations and changes in estimates of previously originated assets. Allocations would be highly subjective because pools may have loans originated in various periods. Alternatively, expected credit loss estimates may comprise both quantitative and qualitative factors that take into account their loans portfolios, current methodologies, and systems and processes. Those components of the estimate could be allocated to an origination, but the allocation methodology would be highly subjective and arbitrary to such an extent that the costs of preparing that disclosure may not justify the added benefits.

BC114. The Board understands the informational needs of the user respondents and the operability constraints of preparers to provide this information. As a result, the Board decided to require that the existing credit quality disclosures of the amortized cost basis for financing receivables and net investment in leases be presented in greater detail by vintage year of origination for public business entities. The Board performed extensive outreach on the disclosure requirements after hosting a roundtable meeting to listen to the perspectives of both preparers and users. Preparers indicated that vintage-year disclosures are more operable than amortized cost basis rollforward disclosures, and users supported the additional information that would be provided by vintage disclosures about credit quality trends. The Board concluded that the vintage disclosure requirements for financing receivables and net investment in leases will allow users to understand the credit quality trends within the portfolio from period to period. In addition, by utilizing information disclosed in other areas in the financial statements and assumptions from public sources, users may be able to derive their own rollforward of the balances and related allowance for credit losses for each origination year. This will provide useful information because it will help users develop estimates of (a) originations by period for each class of financing receivable, (b) an estimate of the initially expected credit losses and subsequent changes to the estimate, and (c) an estimate of the current-period provision that is attributable to originations and changes in expected credit losses on previously originated loans. This disclosure requirement is applicable to public business entities only because investors in private companies generally have greater access to management to obtain the information they believe is necessary. The Board considered exempting public business entities that are not SEC filers because small community banks may meet the public business entity definition, but the Board concluded that a distinction among public business entities (that is, public business entities that are not SEC filers) is inappropriate. The Board believes the disclosures are relevant for users in all public business entities; however, given cost considerations, the Board decided to allow public business entities that are not SEC filers further transition relief in order to prepare for the disclosure requirements and decided not to require this disclosure for entities that are not public business entities.