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Institute of
Accounting Research

CECL: The New Accounting Standard for Measurement of Credit Losses on Financial Instruments

Date/Time: **Monday, December 4, 2017**
4:00PM - 6:00PM Roundtable Discussion
6:00PM - 7:00PM Networking Reception.

Location: **NYU Stern School of Business | Kaufman Management Center**
44 West 4th Street
Gardner Commons, Room KMC 1-100

Roundtable Overview:

The Ross Institute of Accounting Research is hosting a Roundtable on FASB *Accounting Standards Update 2016-13, Measurement of Credit Losses on Financial Instruments*. One of the most significant financial reporting changes in recent decades, the new standard will have a major impact on how financial institutions and other lenders measure credit losses on loans. In addition to affecting these firms' financial statements, this rule should encourage lenders to issue capital prior to or early in economic downturns and thereby should enable them to lend more during downturns. Such effects would enhance the stability of the economy.

Current GAAP generally requires firms to accrue for credit losses on loans using the Incurred Loss Model (ILM), wherein credit losses are recognized only when these losses have been incurred, are probable, and are capable of reasonable estimation. The ILM has been criticized as backward looking, specifically, that it ignores losses that are expected but have not yet been incurred, or are not probable, or are not capable of reasonable estimation. The financial crisis highlighted the deficiencies of the ILM, since the financial statements of financial institutions did not reflect their deteriorating loan quality on a timely basis as the crisis first approached and then worsened.

The new Current Expected Credit Loss (CECL) model aims to correct this deficiency, by incorporating reasonable and supportable forecasts of future economic conditions and loan performance over the remaining life of loans in the determination of credit losses on loans.

The Roundtable will consist of brief presentations from a panel of experts from financial institutions, regulatory agencies, public accounting, and academia to debate the key issues related to the proposed accounting standard. A networking reception with hors d'oeuvres will follow.

Confirmed Roundtable Presenters:

- Larry Cordell, **Vice President, RADAR Group**, Federal Reserve Bank of Philadelphia
- Frederick Currie, **Partner**, PwC
- Jason Goldberg, **Director**, Barclays
- Kevin Guckian, **Partner**, EY
- Masha Muzyka, **Senior Director**, Moody's Analytics
- Richard Ebil Ottoo, **Vice President**, Global Association of Risk Professionals
- Stephen Ryan, **Charlotte Lindner MacDowell Faculty Fellow, Professor of Accounting**, NYU Stern
- Harold Schroeder, **Board Member**, Financial Accounting Standards Board

Ross Roundtable

CECL: The New Accounting Standard for Measurement of Credit Losses on Financial Instruments¹

December 4, 2017

Reporter: Amal Shehata, Clinical Associate Professor of Accounting, NYU Stern School of Business

True to its mission, the Ross Roundtable invited representatives ranging from professional accountants, academics, standard setters, financial statement preparers, analysts, risk management professionals and more to discuss the new accounting standard for measurement of credit losses on financial instruments. The discussion considered the many factors that influence the new standard, ranging from the history of developing the current standard, the current research evidence, speculation on future behavior, the impact on risk management, and many more. For many years, the Roundtables have successfully generated public dialogue, engaging in topics that benefit many sectors of society and this event proved to be no different.

Background on the topic:

One of the most significant financial reporting changes in recent decades, the FASB Accounting Standards Update 2016-13, *Measurement of Credit Losses on Financial Instruments*, will have a major impact on how financial institutions and other lenders measure credit losses on loans. In addition to affecting these firms' financial statements, this rule is intended to encourage lenders to issue capital prior to or early in economic downturns and thereby should enable them to lend more during downturns. Such effects would enhance the stability of the economy. Current GAAP generally requires firms to accrue for credit losses on loans using the Incurred Loss Model (ILM), wherein credit losses are recognized only when these losses have been incurred, are probable, and are capable of reasonable estimation. The ILM has been criticized as backward looking, specifically, that it ignores losses that are expected but have not yet been incurred, or are not probable, or are not capable of reasonable estimation. The financial crisis highlighted the deficiencies of the ILM, since the financial statements of financial institutions did not reflect their deteriorating loan quality on a timely basis as the crisis first approached and then worsened. The new Current Expected Credit Loss (CECL) model aims to correct this deficiency, by incorporating reasonable and supportable forecasts of future economic conditions and loan performance over the remaining life of loans in the determination of credit losses on loans.

Professor Zarowin began the discussion by providing a few visual graphs with data from the 2007 financial crisis. The graphs clearly suggest that although economic conditions indicated losses, firms trailed in recording actual credit loss write-downs. Hopefully the change from ILM to CECL will create timelier financial reporting of the losses.

Professor Zarowin turned the discussion over to the panelists, starting with a representative from the FASB who created the new standard. Note that the panelists provided their personal viewpoints and they do not necessarily represent the opinions of their organizations.

Viewpoint from Financial Accounting Standard Board (FASB):

Hal Schroeder, FASB Board Member:

Hal launched the panel discussion by acknowledging that his personal perspective is influenced by his role as a FASB board member and through his prior experience as a professional in public accounting and the investment industry. “Most people think that the banks lend to perfection but ...if they lend to perfection, they won’t make any money....they have an expectation of loss from day one”. Hal provided visual graphics contrasting the different ways banks account for losses under current US GAAP as written and applied and under CECL, clearly indicating that regardless of the methodology, the cumulative losses recognized are the same over time. “Accounting does not change the economics, it just (provides) various ways of reflecting the economics in these transactions.” The new CECL standard should align the accounting more closely with the risk management function; it is a balance sheet-focused standard, requiring that lenders record as an asset the *net* amount they expect to collect at the origination of the loan. CECL will also provide a significant increase in the amount of data that will be collected and disclosed to readers of financial statements.

Viewpoints from the Big 4 Accounting firms:

Kevin Guckian, Partner, EY

Kevin focused his attention specifically on how the time frame of loans are determined under CECL and the practical considerations involved. Kevin started by sharing background on the requirements: the new standard requires firms to estimate future credit loss over the entire contractual life of the asset using all relevant, reliable information about past events, current conditions and reasonable and supportable forecasts. Kevin highlighted that the notion of “reasonable and supportable” forecasts is a new element for loan loss calculations. He went on to stress that firms are required to create a forecast; however, there is no explicit requirement on how far in the future they must forecast, other than until it is no longer reasonable and supportable. Once they reach this threshold, firms are required to revert to historical data. When reverting to historical data, there is flexibility on how to shift from reasonable and supportable to historical data; however, firms should not simply adjust the data for current conditions. Although these concepts are discussed separately, Kevin stressed that, from a practical perspective, they must be considered in the context of the entire estimate, a more holistic perspective.

Regulators are encouraging lenders to think about the longer time period which would entail more credit risk and thus require larger reserves. Kevin, however, shared various scenarios that are similar in substance but may not result in the same outcome, all related to interpretation of the contractual life.

Scenario 1: a 5-year loan that has 1-year prepayment options as compared to a 1-year loan that is renewable with four 1-year extension options. Economically, these are very similar, however, there are variables that must be considered for each loan. For example, if the lender cannot limit the extensions and thus is clearly exposed to increased credit risk, then the longer time frame should be used in estimating credit losses as compared to a scenario in which the borrower is required to meet substantive conditions in order to qualify for the extension options, the longer life should not be used.

Scenario 2: A contract that does not include explicit extension options but the lender has a history of extending loans, such as a 1-year loan granted for a 5-year construction project. This is a scenario in which the lender likely expects to renew the loan so even though there is not an explicit extension option, should you extend the contractual life? Some would argue if the lender expects to continue to fund the loan, then their credit risk period is greater than 1 year and thus the longer time period should be used.

In all scenarios, some critics would argue that regardless of the contractual provisions, the new standard is clear that thinking of a loan beyond the contractual life is measurement that could be viewed as “life of relationship” which the FASB clearly did not intend.

Frederick (Chip) Currie, Partner, PwC:

Chip began his discussion by identifying two primary issues that will need to be addressed with adoption of the new provision. First, how do we interpret the accounting issues (similar to issues Kevin highlighted)? There is significant impact and many constituents anxiously waiting for guidance and information, including banks, financial statement preparers, regulators, auditors and investors.

Fortunately, there has been collaboration across many groups and for questions where there is not a consensus, FASB created the Transition Resource Group to provide clarification and additional guidance. The American Institute of CPA’s will also be a useful forum with broad outreach to diverse groups of accountants to provide public Q&A and publish findings.

The second issue that Chip identified is the significant modelling challenges. The standard covers a diverse group of products including commercial loans, mortgage loans, credit cards, leases, and many more. This represents a dramatic portfolio of assets with varying credit drivers, coupled with economic factors that could impact the credit losses differently. Finally, the standard must consider the different size institutions; big banks have the ability to run sophisticated, complex models but community banks and smaller institutions do not have these resources. Thus the standard must have flexibility to handle these different elements in a practical, implementable and transparent way. Models, if sophisticated and complex, must be understandable.

Chip praised the FASB for their responsiveness and openness, acknowledging that many groups are working through the questions and publishing the answers so preparers have the most meaningful guidance.

Chip moved on to address another common question regarding whether the larger reserve requirement applies to all financial assets. The technical answer is no, indicating that the standard provides 2 instances when a reserve is not required as follows:

1. If you have a collateral-dependent loan and if the fair value of the collateral is greater than the amortized cost-basis of asset, there is no required allowance.
2. If you have an asset that, in the case of default, you are guaranteed recovery. The standard requires judgment in this area and a few factors to consider include the market-price of instrument (is it a risk-free rate?), reviewing the history of credit-losses or no credit losses. For example, a government-sponsored instrument that survived the crisis without losses, or if the US Treasury defaults, you are guaranteed recovery.

Overall, adopters will encounter a number of accounting areas that will not have prescriptive or specific answers but guidance will be provided on how to apply judgment.

Viewpoint from the Banking/Analyst/Risk Professional perspective:

Jason Goldberg, Director, Barclays

Jason opened up with the following statement, “We see CECL as the biggest change to bank accounting in at least my 90 quarters.” He indicated that the industry recognizes there are advantages to the changes, coupled with concerns and unanswered questions.

One of the advantages Jason noted was the single-measurement objective; CECL will be applied to all financial assets, including loans both originated and acquired, as well as securities. This should greatly simplify the accounting methodology and improve the bias in the current ILM, which he acknowledged, contributed to the losses recognized in the downturn; ILM was “too little, too late”.

However, he noted many concerns and questions, such as:

- Given that expectations are a factor in the required estimates of credit losses, if expectations for future economic conditions diverge, this could result in comparability issues. What disclosures will be made to allow analysts to adjust for this variability?
- In the past, banks that reserved for future economic downturns were sometimes criticized for earnings management, especially by the SEC; how will this be handled under CECL?
- Some banks have calculated that, had they precisely forecast the financial crisis, CECL capital reserves would have been recorded at levels below regulatory minimums; if that happens now, will regulators recommend raising capital minimums?
- Had CECL existed prior to 2009, many banks would have *reduced* reserves in 2009, resulting in record profits, just when charge-offs were peaking; would regulators allow reserve releases and how would investors respond?
- Significant and costly operational issues, including complex implementation, data collection, documentation and disclosures.
- Concerns that the CECL model concepts are inconsistent with economics, a mismatch of losses recognized immediately whereas revenues are recognized over the life of loan; regional banks expressed concern to the SEC that this could adversely impact pricing, availability and structure of credit.
- Economy is currently in the 3rd longest expansion cycle in history so the outlook for CECL implementation in 2020 is uncertain. Most banks will likely prepare to take a one-time increase in their loan loss reserve through a reduction of capital. Citibank has publicly estimated a 10-20% increase to their credit reserve, which will result in significant impact on loans and risk-weighted assets. He hopes more banks will disclose the estimated impact prior to adoption.

In his final remarks, Jason referenced the June 2017 US Treasury’s review of the regulatory framework for the depository sector² which recommended “potential impact on capital levels be carefully reviewed by US regulators with view towards harmonizing the application of the standard while questioning if changes are even needed.”

Clearly, the banking industry will be anxiously awaiting the answers to the questions that Jason has raised.

Masha Muzyka, Moody's Analytics, Senior Director

Masha returned to the topic raised by Kevin earlier regarding the CECL requirement of “reasonable and supportable forecasts”. She started by defining a good forecast, noting that it must “incorporate inter-relationships...so that a shock to one factor impacts all other factors over time” and it should “provide information ... of geographic aggregation to capture local economic effects”.

CECL does not require banks to have a forward-looking forecast over the *entire* life of the asset, they could have it for some period and then revert to historical data; so she discussed how firms will define the time period. Forecast models have uncertainty and errors that grow over time. Moody's position is that they can reasonably predict the economic outlook for 2-4 years and after that point, they revert to long-term economic trends.

Masha shared several different scenarios, ranging from reverting to historical data immediately, gradually or not at all (in cases where reversion is already built in). The other decision is whether to use one forecast or multiple forecasts. When using multiple forecasts, it allows you to adjust based on economic changes, thus smoothing the volatility and choppiness.

Moody's has completed several modelling scenarios assuming CECL was already implemented that Masha shared with the audience. To test their results, they first modeled conventional residential mortgages under current ILM, resulting in an estimate that was very accurate as compared to actual published results (their model resulted in \$42 billion in estimated credit losses as compared to actual losses of \$41.5 billion).

They then applied CECL requirements to the same scenario to determine the difference if CECL were in effect; the estimated credit losses doubled! This is clearly much higher than the 10-20% increase that has been predicted. She did note that the assumptions made have a dramatic impact on the modelling results.

The final study she shared was modelling commercial and industrial loans but in this scenario, Moody's used the data from the financial crisis, loans that were originated in 2007, evaluating a 3-year period. They found that using different reversion time frames (no reversion, 1 year, 2 year) resulted in very different calculations under CECL.

Masha concluded by stressing that since CECL is not prescriptive, the choices and assumptions that a company makes in their models will have dramatic impact on the calculations.

Richard Ebil Ottoo, Vice President, Global Association of Risk Professionals:

As a representative of a global organization, Richard was able to bring the changes to the corresponding international accounting rule, IFRS 9³, into the discussion. But first, Richard began his remarks noting how many investors attempt to evaluate risk from the balance sheet, specifically the liability and equity side. “But the most important risk is on the operating side of the firm. For banks and financial institutions.... credit is a substantial part of the asset and it is not easy to price a loan.”

Richard noted that if a loan asset is properly priced, there is little need for expected credit loss estimates. Why is the pricing of a loan so difficult and how is this challenge motivating the new US and international standards? As we have seen, banks tend to lend a lot in good times but reduce lending when the economy has a downturn. Many argue that CECL and IFRS 9 will exert binding constraints on banks to deter this procyclical behavior.

Richard then turned his attention to the modelling aspect, particularly the inputs to the model. He stressed the importance of modelling the probability of default, the loss given default and the exposure to default. Richard also discussed a key difference between CECL, which will be adopted by most lenders in 2020 as compared to IFRS 9, which was adopted January 2018. For CECL, the estimate of credit loss is over the lifetime of the asset whereas IFRS 9 has the estimate in stages³. Stage 1 recognizes losses expected in the first year of the contract, stage 2 requires the full lifetime expected credit losses if credit risk has increased significantly, and stage 3 takes it a step further and alters the interest revenue calculation.

In both standards, banks should consider multiple economic scenarios that are forward-looking when they calculate their estimated credit losses.

Richard went on to highlight the capital adequacy requirement, another key risk management factor. Both standards will have an impact on capital requirements and certain credit ratios will likely fall as compared to the current standard as firms will have to recognize the credit loss immediately. He acknowledged that this may not be a bad thing so long as there is total transparency.

Richard wrapped up his remarks noting that these new provisions will not only impact the accounting side, but will also impact the professionals in terms of risk management of the business; they have to look at the business wholly. He hopes this will generate more conversation among the accountants, the equity analysts and the credit side.

Viewpoint from the Regulators:

Larry Cordell, Vice Present, RADAR Group, Federal Reserve Bank of Philadelphia (FRB)

Larry focused his remarks on how theory meets reality, “This might be the only time you will hear an economist lecture accountants on how their theory may not match reality!”

Larry’s reality entails overseeing the Federal Reserve’s annual bank stress test, Comprehensive Capital Analysis and Review (CCAR), for the core retail portfolio which includes mortgages, credit cards, home equity and automobile loans. The bank holdings in these assets are substantial and represent approximately 40% of CCAR losses. Additionally, CCAR banks hold approximately 75% of all credit card accounts and service about 50% of all mortgages so this is clearly representative of the market.

As with many other panelists, Larry began his comments noting that he has been supportive of CECL as a superior alternative to ILM, “holding more capital in good times means that when economic downturns come, banks would be required to add less capital than they otherwise would under ILM which should mean more capital for lending through these cycles.”

As this relates to mortgages, the most mature modelling framework, the standard approach recognizes the competing risks being that borrowers can default or they can prepay the mortgage. Each of these will impact the life of the mortgage and the ultimate losses.

Larry provided a brief explanation of the “Monte Carlo simulation”, a statistical technique that estimates losses using thousands of house price and interest rate scenarios, resulting in an average to calculate an overall credit loss estimate. By incorporating different types of scenarios, Monte Carlo simulation can consider a full range of potential outcomes of credit loss estimation. He stressed the importance of this range as different types of losses will come disproportionately from more severe scenarios of declining house prices; if you combine declining house prices and rising interest rates, the losses will be even worse.

Larry noted that the tricky part is how to get benefits of the complex simulation, incorporated into the more simplistic approaches; he feels empirical work will aid in this effort.

Larry continued on to the far more challenging case of credit cards. Credit cards include the notion of “unconditionally cancellable claims”, this means lending on undrawn credit lines can be cancelled at any time. The FASB explicitly indicates that lenders should not reflect undrawn lines on any reserves; i.e., CECL only considers the current account balance.

Many banks would like to use their current CCAR models of expected credit losses for CECL calculations so Larry proceeded to contrast the two approaches. As reported by the Dodd Frank Stress Test 2017 Publication⁴, total credit losses in a severely adverse scenario for credit cards were \$100 billion in the CCAR stress test; 3 challenges for CECL that Larry highlighted:

- A substantial portion of credit cards had a zero balance in any given month; CCAR losses on these accounts were small but still non-trivial, however CECL would say recognize zero losses on these accounts.
- Many of these accounts are “transactors”; holders mostly pay off in the month they are due and since CECL prohibits considering future draws, the expected future life of a transactor account is 1 month. It would be difficult to estimate losses if the average life is 1 month.
- The next group of borrowers are revolvers, those who do not pay off the balance each month, however, since banks are prohibited from considering future draws, exposure at default is never going to be greater than the current balance.

These scenarios highlight that, by not considering future draws, lenders may be underestimating expected lifetime losses under CECL.

Larry concluded his remarks by noting that home equity lines of credit do not include unconditionally cancellable claims but they frequently compete with credit cards. Would this mean that we would require different accounting standards for these different assets? Clearly, there are still unanswered questions when theory meets reality.

Viewpoint from Academia:

Stephen Ryan, Charlotte Lindner MacDowell Faculty Fellow, Professor of Accounting, NYU Stern

Professor Ryan researches loan loss reserves and teaches financial instruments at the NYU Stern School of Business. He began by sharing that he finds CECL, conceptually, to be simple in principle. However, he focused his remarks on the elements that do not make sense, would be difficult to teach and accordingly result in questions for the research community.

Professor Ryan started with a discussion of the original FAS 5 standard that requires firms to accrue losses only if incurred **and** if they are probable. This definition requires that there be high probability the losses will be realized in the future and that they are reasonably estimable. In contrast, CECL removes the “probable” threshold and broadens the notion of “incurred and reasonably estimable” to include “reasonable and supportable” forecast discussed previously.

For homogenous loans, meeting “probable” threshold is straightforward so the focus for these assets would be on meeting the new criteria. However, for heterogeneous loans, such as commercial and industrial loans, the “probable” threshold was often triggered once the loan was close to default, so this change away from “probable” is significant.

Professor Ryan continued, “I know the FASB has taken a balance sheet approach but there *is* an income statement and I don’t like the income statement (impact).” His criticism is due to the violation of the matching principle; the income statement will recognize the entire expected credit loss in the period of origination but it is not matched to any benefit. Professor Ryan provided two potential solutions. The first (and easiest) would be for lenders to disclose the amount of credit loss recorded at the origination of the loans so analysts can reverse it analytically. This does not impact the effective rate, interest revenue or any other calculations. This is similar to what property insurance casualty companies disclose for their claim loss reserves and this would be an improvement.

The second solution (and Professor Ryan’s preference), would be to calculate an effective interest rate that equates the amount lent to the present value (PV) of the *expected* payments, which would be recognized as the Net Book Value (NBV) of the loan; thus the gross asset at origination (this is the PV of the *promised* payments) at the effective rate is *above* the NBV of the loan. The allowance for loan losses would be the difference between the PV of the promised payments and the NBV of the loan (PV of the expected payments). This would result in zero expense on the income statement but the expected credit losses would still be fully disclosed on the balance sheet via the allowance account. As time lapses, the effective rate would decrease as the firm equates the amount lent to expected payments; in this case, revenue would not reflect the benefits of providing risky loans and the expense would be recognized when expectations change thus appropriately matching with the period the change occurred. Professor Ryan noted that this would be consistent with how a risk manager would analyze the issue.

He went on to share the current research evidence which focuses on whether attributes of loan loss provisioning are associated with good decision making by banks at the individual level as well as at the systemic level. The main evidence indicates that timelier loan loss reserving has a positive impact. For example, banks that reserve on a timelier basis for loan losses under FAS 5 have superior behavior, such as issuing more capital in both good times and bad times, and they tend to issue more capital when it declines which allows them to continue providing loans during recession periods.

Although it appears that CECL requirements will have a positive impact during stable periods and good periods, the evidence is inconclusive on the impact during bad periods due to two different effects. First, there is a longer time horizon to accrue for losses and second, the longer time horizon could result in mean reversion back to the average loss rate (as compared to bad times). Thus, mean reversion represents an improvement in the loss rate, but it will tend to reduce the reserve, because actual losses may exceed the provision; which of these counter-effects will dominate, the longer time horizon or mean reversion? Time will tell.

CECL will result in an increase in loan loss for most banks; will this requirement expand the benefits for firms who have not been recording under FAS 5? Professor Ryan shared that research evidence is inconclusive but there are suspicions. If the mechanism is capital, then going from FAS 5 to CECL will tend to force firms to report losses on a timelier basis, reduce capital most of the time and therefore be more willing to provide loans and perform other systemically good behavior in bad times. Professor Ryan feels this will be a more subtle impact.

Professor Ryan was particularly enthusiastic about CECL’s potentially most beneficial effect; lenders will have to improve their credit loss modelling, thus improving their risk management and economic decision-making. He expressed concern that the FASB explicitly stated that lenders can build on their existing risk-models and they are not required to “reinvent the wheel”; if lenders build on existing (weak) models instead of creating robust, improved models, the benefits of CECL could be relatively mild.

“My final point...the million dollar question in all of this, will credit risk modelling systems improve? The literature doesn't have a clue...it depends on what banks do, what banks are encouraged by regulators, investors, credit-rating agencies and risk managers...”

Question and Answer Highlights

A brief Q&A session followed the panelists' remarks before the reception. Below are some highlights:

Discussion around CECL creating opportunity for firms to manipulate earnings:

“There is a time component and an amount component. We have eliminated the time component as it will be upfront, so now they can only manage the amount and there will be (more) disclosures.”

“The reason they are entering or exiting a line of business is not because of the accounting, it is because something is more transparent than it may have been in the past...This is not an economics debate, this is whether accounting is reflecting the economics.”

“We tried the income statement approach from 1938 - 1972 and it failed miserably, that is why we shifted to a balance sheet approach”. Hal Schroeder, FASB Board Member

“There is debate on whether banks will be forced to lend to different types of borrowers and close certain types of products that they currently offer today. There is huge speculation...none (of the bankers) have made a decision yet that are related to CECL or IFRS 9.” Masha Muzyka, Senior Director, Moody's Analytics

Discussion around modelling:

“Increasing the level of complexity of the model, what does it do for me from a precision standpoint? How much of a better economic model? Massive additions of complexity give you very little benefit...the more complex the model becomes, the more difficult it is to explain it.” Chip Currie, PwC Partner

Discussion around the required discount rate:

“This (discount rates) is a good example of an issue that was raised and resolved...we found that the interest income model and credit loss model were disconnected so we were in some cases using discount rate that was calculated over a period of time that didn't match the expected cash flows. So the FASB transition resource group identified an alternative where you could align your discount rate with the timing of cash flows... so a few different options largely based on accounting effective rate but can get more complex with prepayments.” Chip Currie, PwC Partner

“Investors don't want to mingle losses with the contractual rate; they want to see what you earned on contractual basis and keep credit loss separate. So the standard focused on keeping these apart.” Hal Schroeder, FASB Board Member

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1. [FASB CECL Project Update:](http://www.fasb.org/jsp/FASB/FASBContent_C/ProjectUpdatePage&cid=1176159268094)
http://www.fasb.org/jsp/FASB/FASBContent_C/ProjectUpdatePage&cid=1176159268094
 2. [Treasury White Paper Summary of Recommendations for Reg Reform:](https://www.treasury.gov/press-center/news/Pages/Summary-of-Recommendations-for-Regulatory-Reform.aspx)
<https://www.treasury.gov/press-center/news/Pages/Summary-of-Recommendations-for-Regulatory-Reform.aspx>
 3. [IFRS 9 Standard](http://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/)
<http://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/>
 4. [Dodd Frank Stress Test 2017](https://www.federalreserve.gov/publications/files/2017-dfast-methodology-results-20170622.pdf)
<https://www.federalreserve.gov/publications/files/2017-dfast-methodology-results-20170622.pdf>