

Ask the Regulators: CECL: Weighted-Average Remaining Maturity (WARM) Method (April 11, 2019)

Jim Fuchs: Great. Thank you very much.

Good afternoon, and welcome everybody to our Ask the Regulators session. Today we are coming to you from the Federal Reserve Board of Governors in Washington, DC. Our latest discussion on the current expected credit loss model is on the weighted average remaining at maturity methods. That is our primary focus today.

My name is Jim Fuchs. I'm with the Federal Reserve Bank of St. Louis, and I will help moderate the call. I would specifically like to welcome all of our presenters. We are here in one room, together, to present and to answer your questions today. We have members of the Board of Governors and the Federal Reserve System, the FDIC, the OCC, SEC, CSBS, FASB, and the NCUA all in one room. So we've got a real cross-section, a lot of experts in one room, and I really look forward to getting not only into the content, but really taking your questions and addressing those.

Now, before I ask the presenters to introduce themselves and we jump into the call, I would like to cover a few basic items in regards to how today's call is going to flow. So first off, every Ask the Regulators call is recorded. So the link that you use to register for the session today is how you can access the archive. I encourage you to do so. We understand that we are doing this live and in real time, but there's a lot of folks that you work with that probably will want to hear this. You might hear something today that you want to reference your colleagues to. That archive will be there. It will include not only the presentation, but the Q&A as well. So everything will be archived for your ongoing use and enjoyment.

I want to let everybody know that this session will be eligible for continuing professional education credits, or CPEs. So in order to do that, though, we have a little bit of a process. So first off, make sure you are registered. So if you are sitting around a table with your colleague who registered, it's in your best interest to go out to your respective site and register, because then you will receive the post-event survey. And once you take that, once you take the survey, the very last section of the online survey is where you get to check if you want a CPE credit, and that's how those are tracked.

I want to encourage everybody to ask—this is a Ask the Regulators, so please ask the regulators. We're all here. We have received a number of questions already, but that is not to discourage you from continuing to ask questions. And we have two primary ways to do that. You can e-mail us directly at rapid@stls.frb.org. And for those of you who are using the webinar tool, which I hope is the vast majority of you, because that really does give you the best experience today, please click the Ask Question button.

We have a lot of participants in today's call, so I just want to make one note about the overall audio. The best experience is if you are joining us through the webinar and through

webinar audio, some of you who are calling in via a phone and then, maybe, watching the webinar on a screen, you might notice a slight delay. And I know that can get frustrating. My advice, and actually what we are doing here in this room, is we've just downloaded the presentation, and we're self-advancing. But that's just so that we can kind of keep ourselves on the same page.

But really the best experience today is going to be through live Web audio and going through the webinar tool for advancing the slides. So again, I would encourage you to do that, and we'll send out a couple reminders. The e-mail address, rapid@stls.frb.org, that's for you to ask us questions, but if there are some technical questions along the way, you can use that. That is being monitored throughout the call.

So at this point, I am going to turn the program over to Lara Lylozian. And she's going to introduce herself and today's presenters. Lara?

Lara Lylozian: Great. Thanks, Jim. Good afternoon, everyone. I'm Lara Lylozian from the Federal Reserve.

Bob Storch: Hi. I'm Bob Storch from the FDIC.

John Rieger: John Rieger with the FDIC.

Nicole Cooke: Good afternoon. This is Nicole Cooke with the OCC.

Kevin Vaughn: Good afternoon. This is Kevin Vaughn with the SEC's Office of the Chief Accountant.

Jami Flynn: Jami Flynn, the Conference of State Bank Supervisors.

Shayne Kuhaneck: Shayne Kuhaneck, Financial Accounting Standards Board.

Alison Clark: And Alison Clark, NCUA.

Lara Lylozian: All right. Thank you for everyone on the line for joining us. Our goal today is to confirm that the WARM is one of many acceptable methods to estimate the allowance for credit losses under CECL, and to raise awareness of the FASB staff recently published Q&A on the WARM.

The WARM method covered today is the same method that we walked through last year in February of 2018 on the Ask the Regulators webinar. During that session, we introduced various spreadsheet-based CECL compliant loss rate methods as a starting point to estimate the allowance for credit losses under CECL. And the WARM method was one of those methods.

More recently, on January 10, 2019, just a couple of months ago, the FASB staff issued WARM Q&As reiterating the core content from that Ask the Regulators webinar, and

further confirmed that the WARM method is an acceptable method under CECL. And lastly, the OCC hosted a webinar on March 7th, and they also had consistent messaging around the WARM.

So today's webinar is really bringing all those previously communicated messages together to reiterate that CECL is scalable to institutions of all sizes, and that smaller and less complex institutions are not expected to adopt complex modeling techniques or hire a vendor. CECL permits the use of various methods to estimate credit losses. And smaller and less complex institutions, most community banks and credit unions may use simple and practical methods such as the WARM method to estimate the allowance for credit losses under CECL.

Alison Clark: And this is Alison. I want to mention that if someone on this panel doesn't explicitly say, "And credit unions," it is an inadvertent oversight. This is for all credit unions, as well.

Lara Lylozian: All right. So we'll begin with a quick refresher of what CECL is, and discuss briefly the state of implementation. After that we'll walk you through the WARM method, including considerations around qualitative adjustments. And then we'll also take this opportunity, since we're all together, to highlight key supervisory expectations and a bit of a preview of what you can expect in the coming months across the agencies for institutions, really focused on those institutions with later effective dates. Lastly, at the end, we'll answer, as Jim said, as many questions as possible, so please submit your questions you have throughout the presentation.

With that, let's turn to slide 5 for a quick level set.

Bob Storch: Thanks, Lara. This is Bob Storch. By now I imagine most participants in this webinar know what CECL is, but it never hurts to have a short refresher. CECL stands for current expected credit losses, and it's a methodology that the FASB introduced as a new accounting standard for estimating allowances for credit losses. Now you may hear different people, here on the webinar or in other venues, refer to the standard as Accounting Standards Update, or ASU, 2016-13 or as Accounting Standards Codification, or ASC, Topic 326. We're all talking about CECL, although other parts of the standard do apply to available-for-sale debt securities.

As a reminder, CECL applies not only to loans, but to all financial assets carried at amortized cost. This includes securities classified as held-to-maturity. Also, if your institution has other receivables that are recorded amortized cost, then those balances, as well, are subject to CECL. CECL requires institutions to measure expected credit losses over the contractual term of the financial asset. The objective for this measurement is to present assets subject to CECL at the net amount expected to be collected on the balance sheet.

In concept, on the date of origination or acquisition of a loan or other financial assets subject to CECL, institutions will be required to record an allowance for the cash flows that management does not expect to collect over the contractual term of each financial asset. In

practice, I would expect that banks and credit unions will make this estimate at the end of each quarter, rather than each day that a new loan or other financial asset is first booked.

Two other reminders about this estimation process. First, expected credit losses should be measured on a collective basis; for pools of financial assets with similar risk characteristics, and on an individual basis only when a financial asset does not share risk characteristics with other financial assets.

Second, you'll notice I referred to the contractual term of a financial asset, although that is often shorthand to say "life of loan". It's important to remember that the accounting standard says that expected prepayments should be considered when determining the contractual term of a financial asset, but expected extensions, renewals or modifications should not be considered unless the lending institution reasonably expects it will execute a troubled debt restructuring with a borrower.

Lastly, under today's incurred loss methodology, we primarily use historical loss experience as a starting point for estimating the allowance for loan and lease losses, and then adjust the historical rate upward or downward for current conditions to reflect the extent to which those current conditions differ from the conditions that existed over the historical period.

In contrast, under CECL, institutions must look not only at historical loss experience and current conditions, but management must also consider reasonable and supportable forecasts that affect expected collectability. In other words, CECL is more forward-looking than the incurred loss methodology because it broadens the information that must be considered in the estimation of credit losses.

It's hard to believe that CECL was issued back in June of 2016, which is almost three years ago. Now we have less than a year before SEC filers have to implement CECL in their financial statements and regulatory reports. Non-SEC filers have some extra time, as they must implement in 2021 or 2022, depending on their characteristics.

With this brief review on the basics of CECL behind us, let's talk about the state of implementation. Jami, I believe that CSBS has been participating in a survey that provides insight into community institutions' progress on CECL preparedness. And I think that's on slide 6 if we can turn to that.

Jami Flynn: That's correct, Bob. What you see on slide 6 are the results of the 2018 survey, which included 521 community banks from 37 states. It's released each year at the Community Banking in the 21st Century Research and Policy Conference, which is co-sponsored by CSBS, the Federal Reserve System, and the FDIC.

The survey results show that a majority of the banks are already preparing for the new standard. They are in the process of, or have, fully familiarized themselves with the standard. They're collecting and analyzing data, and have started the discussions with external auditors regarding implementation. Most institutions have also reviewed or are in the process of

reviewing their current methodologies to identify systems and reports that provide needed information and have begun, or are in the process of, evaluating various methods that may be appropriate to estimate the allowance.

However, a majority of the institutions have not yet selected a method that they plan to use under CECL, and are not able to fully reasonably estimate its financial impact. Our presentation today should provide some assistance with this last point on how to select the appropriate method for your institution. Next I'll turn it over to Lara. Please advance to slide 7.

Lara Lylozian: Thanks, Jami, for that summary. So it looks like the majority of institutions are already in the process of identifying the data requirements and system changes needed, but most have not selected or tested the method they plan to use, and that's definitely consistent with what I've been hearing, as well, as I go around the system and do outreach.

I often hear: I've read the standard; I've read the interagency guidance; I've been, retaining data, but I'm just not quite sure where to go next. What are my next steps? How do I actually start? And, as suggested on this slide, we think a good starting point may be an analysis of your charge-off history. Begin with what your institution has historically charged off.

Can you identify any risk characteristics these charged-off loans have in common? Are there any trends or things that are relevant to estimating expected losses? What is the lifetime loss rate for a pool of loans? Once you have your charge-off history, you can use one of the acceptable loss rate methods, including the WARM method that we'll be going over in more detail today in order to estimate your allowance.

The WARM method has similarities to what many community banks and credit unions do today under the incurred loss methodology. An institution, as Bob alluded to earlier, under the incurred loss method starts with developing an average annual net charge-off rate from historical data, and then applying that rate to a current balance of loans. And to that amount, institutions add qualitative adjustments for current conditions that differ from conditions present in the historical data.

Now, under WARM, an institution could start with an average annual net charge-off rate, apply that rate to the current pool balance, and further apply qualitative adjustments. The difference here is that under CECL, we have to factor in this life of loan concept, and that will be a big part of what Shayne and others walk through with the example.

So with that, let's get started and move to slide 9.

Shayne Kuhaneck: So this is Shayne from the FASB. And as we take a look at the slide 9, late last year, we at the FASB, received a number of questions from stakeholders on acceptable, practical methods that may be relevant and appropriate for smaller, less complex pools of assets, and, more specifically, whether the WARM method itself is an acceptable method.

So, as mentioned, in response to these questions on January 10, 2019, the FASB staff issued a WARM Q&A. In this document, the staff confirms that the WARM method may be an acceptable method for calculating expected credit losses. The Q&A also provides an illustrative example, as well as explains certain factors a bank should consider when developing the WARM model for a CECL estimate.

So the link that you see on the slide, if you click on that link that is a live link, and it'll take you directly to the FASB's website and the Q&A that's on the website. And I would encourage all of you to follow that link and go read the full document that's on the website.

So we can go ahead advance to slide 10. So let's dive into the example here, but first, many of you out there may be actually asking, well, what is the WARM method? The remaining life method, as Lara mentioned, may look closest to the traditional loss rate method many of you use today. The WARM method uses an average annual charge-off rate. This average annual charge-off rate contains loss content over several vintages, and is used as a foundation for estimating the credit loss content for the remaining balances of financial assets in a pool at the balance sheet date.

The average annual charge-off rate is applied to the contractual term, further adjusted for estimated prepayments to determine the unadjusted historical charge-off rate for the remaining balance of the financial assets. It's important to note that the calculation of the unadjusted historical charge-off rate does not include a reasonable and supportable forecast period.

The average annual charge-off rate, which is calculated using the same process as today's incurred loss method, is applied to the amortization adjusted remaining life to determine the unadjusted lifetime historical charge-off rate. We laid out a simple formula on this slide to summarize. Average annual charge-off rate, again, calculated similar to today's incurred loss times the amortization adjusted remaining life equals the lifetime historical charge-off rate.

Now, as I mentioned, this doesn't include the reasonable and supportable forecast period. I would like to note, though, that the staff is in the process of developing another Q&A that describes the reasonable and supportable forecast period, some of the things that you need to think about. So the staff will be diving deeper into a reasonable and supportable forecast coming in the near future. So please, stay tuned for that.

Now let's move to slide 11. So what factors should an entity consider when determining whether to use the WARM method? So in the Q&A, the FASB staff asserts that WARM may be appropriate for smaller, less complex pools of assets. Generally short-dated portfolios will require less qualitative adjustments in calculating the allowance for credit losses under the WARM method as they may have more evenly distributed loss rates. The ability to use historical data to predict how an asset pool will behave over its contractual life will result in WARM needing less qualitative adjustments.

The WARM method, which we will walk through in the next several slides, is most effective in cases where both losses and portfolio runoff are generally consistent over the life of the pool. As such, we assumed for purposes of the Q&A, and when I say we, I mean the staff at the FASB, the loss rate is consistent each year over the amortization adjusted remaining life. The consistency in these two variables positively impacts WARM's ability to capture current expected credit losses.

Lara Lylozian: Shayne, this is Lara, can you clarify what you mean there? Are you saying that WARM can't be used in more complex portfolios or ones with longer dated assets?

Shayne Kuhaneck: Not at all. We're not saying that WARM can't be used in more complex portfolios or ones with longer-lived assets or inconsistent losses. However, the institution will need to take these into consideration, which may lead to more reliance on Q factor adjustments.

So the way I've described this in different venues that I've been at is that I really see this on a spectrum. You have a simple portfolio that has losses that occur readily over time, all the way out to a very complex portfolio that has a lot of prepayments, a different mix, different risks, and everything in-between. I think as you move from simple to really complex, there's more reliance on Q factors. And the more you have to rely on Q factors, of course, you have to prove those Q factors out.

And so I think there becomes a point where you have to decide as an institution, is the work that I'm doing to prove the Q factor worth it, or should I maybe use a different model that captures more in the actual model.

So we can go ahead and move to slide 12. So you may recognize this graphic from the previous webinar when we discussed implementation examples and various loss rate methods available to small or less complex institutions. As a reminder, under today's incurred methodology, you start with your unadjusted, historical charge-off experience, often referred to as the annual loss or charge-off rate. Then you add your qualitative adjustments. The sum of these two are then multiplied by the loss emergence period, and then again by the loan category balance, or the ending balance.

This equation results in today's FAS 5 ALLL number. Now I acknowledge that many smaller institutions don't explicitly use a loss emergence period, but rather simply use the annual charge-off rate, and that's okay. You'll see that's not important anyway, under CECL, because the next row shows how we can change today's ALLL formula to tomorrow's CECL formula.

The first step is to eliminate the loss emergence period, which is why I said it's not important if you don't use it today, which is the big red circle you see on the slide. Since CECL requires lifetime losses, the loss emergence period is just simply no longer applicable.

Next we replace the annual unadjusted historical charge-off experience to a lifetime experience. I want to emphasize that going from an annual loss experience to a lifetime loss experience is one of the most fundamental changes between the incurred and CECL models, and we'll spend some time today on this point.

So, for example, let's say you have a commercial loan with a contractual life of three years with an option to renew. Naturally, your annual charge-off rate would be based on one year, and your lifetime would be based on three years. Finally, in addition to making current conditions adjustments, we add additional adjustments for reasonable and supportable forecasts under CECL. In other words, qualitative adjustments under CECL can represent both current conditions and reasonable and supportable forecast adjustments.

And now let's turn to the next slide to talk about the calculation or math behind the WARM method. So the Q&A published in January provided what I will call a generic fact pattern of a generic portfolio and made some simplifying assumptions to really cover the mechanics and the basics of the model. When we get into the details, we will give a few real world examples or practical examples to start to bridge the gap.

As mentioned, the staff is planning to do a reasonable and supportable Q&A. So I just want to be clear that this is a generic portfolio. I know that there have been publications out there that have sort of tried to attach this to an auto loan book portfolio or some specific portfolio, and I have mentioned that we didn't cover all of the specifics on reasonable and supportable, and the adjustments that you need to make to the history. And I realize that, but what I would say is, is that this entire process is an evolution. And so what we wanted to do was start with the basics, get the mechanics of the model down, and then as we move forward, we're going to start doing other Q&As to describe all of those things that people pointed out that weren't taken care of in the first Q&A.

So why don't we go ahead and move to slide 14. On slide 14, I calculate the first part of the equation, the average annual charge-off rate. The table shown here is from the Q&A, and is essentially a repeat of the incurred loss review we did. The only difference here is the red bolded number at the bottom of the chart that says, 36BP, just averaging five years' worth of annual charge-off rates right above the number.

So again, I just want to emphasize that this has already happened. So this is the data that entities should have in their systems already. So when you take a look back at slide 7, and Lara was mentioning, you want to start collecting your charge-off data, this should be data that you have that you can start with to calculate this.

So please remember, though, that the historical time period used to determine the average annual charge-off rate is a significant judgment that will need to be properly supported and documented. For purposes of this first part of the example, assume the entity compared historical information for similar financial assets with the current and forecasted direction of the economic environment, and believes that its most recent five year period is a reasonable period on which to base its expected credit loss rate calculation after considering

the underwriting standards and contractual terms for loans that existed for the historical period in comparison with the current pool.

Additionally, we would assume the entity considered whether any adjustments to historical loss information were needed before considering adjustments for current conditions and reasonable and supportable forecasts, but determined that none were necessary. As I mentioned, this is a simplified example using the generic pool, but we will discuss Q factors in a bit. As I said, this is a process.

So let's move to slide 15. I'll show you step two in two different ways that gets you to the same answer at the end. On slide 15 is what I'll call method one. I encourage you to read the entire Q&A, but as you see here, the first column starts with current period, 2020, amortized cost of the pool, and then projects out the pool balance over the next five years to 2025.

The second column, titled “estimated paydown”, represents your expected payments in the future periods until the pool is expected to fully pay off. You will need to estimate the future paydowns, which includes the pools scheduled payments and prepayments to help determine your remaining life to be used in this calculation. You would not include the expected credit losses in this column.

Calculating the estimated paydown is probably the most difficult component in the calculation. At your banks you can probably obtain this number many different ways, perhaps from your loan system or an approximation from the asset and liability management process. However, what I will say is that determining what the payments are and the prepayments is not unique to WARM. This is not unique to this particular methodology. With any methodology you have to figure out what the life of the loan is, and that's contractual term, and you estimate prepayments within the contractual term. So although it's difficult, it's not unique.

With that being said, once you determine the paydown amounts, the rest is just math. In the third column titled “Projected amortized costs”, you start with \$13.98 million outstanding balance as of your balance sheet date of 12/31/2020. Then you subtract your projected paydowns from the estimated paydown column to estimate your future projected costs for the next five years of the pool of life. You would then take each of the future year's project amortized cost, and simply multiply it by the average annual charge-off rate. You're essentially calculating each of the future five year's losses, and aggregating it to get to your lifetime cumulative losses.

For instance, in the first year, \$13.98M of outstanding balance is multiplied by the average annual charge-off rate of 36 basis points to get to your first year's credit losses of \$50.

Alison Clark: Shayne, from your explanation of the first year calculation of credit losses—this is Alison Clark—I can follow how the projected reductions and the amortized cost of the portfolio over its remaining life are converted into allowance amounts attributable to each remaining year. The bottom portion of the calculations also seems pretty

straightforward. If I'm understanding the math correctly, you can convert your \$126,000 of expected losses over the life of portfolio into a charge-off rate by dividing the \$126,000 by the actual beginning amortized cost of that \$13.98 million. And that results in the historical charge-off rate of 90 basis points.

Then I see that you've added 25 basis points of a qualitative adjustment to arrive at the allowance for credit losses rate of 115 basis points. You then multiply the 115 BPs by the \$13.98 million to arrive at the total allowance for credit losses of \$161,000. I can see where all the numbers come from except for the 25 basis point qualitative adjustment in this example. Would you please explain what's behind this adjustment?

Shayne Kuhaneck: Sure. So a highlight here that the .25% is a significant assumption made by management that will need to be adequately documented and supported. For this example, we can assume the entity considered significant factors that could affect the expected collectability of the amortized cost basis of the pool, and determine that the primary factor is the unemployment rate.

As part of this analysis, assume that the entity observed that the unemployment rate has increased as of the current reporting period date. Based on current conditions and reasonable and supportable forecasts, the entity expects that unemployment rates are expected to increase further over the next one to two years. To adjust the historical loss rate to reflect the effects of those differences and current conditions and forecasted changes, the entity estimates a 25 basis point increase in credit losses, incremental to the .9% historical lifetime loss rate related to the expected deterioration in unemployment rates.

Management estimates that the incremental 25 basis point increase, based on its knowledge of historical loss information during past years in which there were similar trends in unemployment rates. This approach reflects an immediate reversion technique for the loss rate method. It's important to note that the 25 basis point increase reflects the entity's estimate of the incremental losses in years 2021 and 2022 from unemployment, and assumes no incremental losses for the remaining years.

And I'd just like to mention something on unemployment rates in general. You know, we've been asked about unemployment rates and forecasting in general, and does an entity always need to take into account the macro level unemployment rate, so the unemployment rate for the entire country. People have come up to me in various venues and said, "Shayne, you know, I'm a small community bank. I operate in a localized area. Why would I need to take into account the unemployment rate of the entire country?" And I said, "Well, I don't know why you would."

The Board never intended for a small community bank or a credit union to have to apply large macroeconomic variables if they don't operate in the entire nation, if their footprint isn't the entire nation. So I grew up in a small town in Western New York. There was a small community bank and a credit union in that small town in Western New York. There was a large facility that manufactured furniture that employed 50% of the employable people in that small town in Western New York. If that furniture store, or if that furniture

factory went away, either moved, went out of business, something happened, that would be a real problem for that community.

I don't think that has any correlation to the unemployment rate of the entire nation, and so it's important to keep in mind that you look at the variables that are relevant to you, and your institution.

So we'll dive a little bit deeper into Q factors in the next few slides.

Lara Lylozian: Shayne, this is Lara. That was really, really helpful. You mentioned early on that the FASB staff also included a second method, or another way to calculate the allowance using WARM. Can you walk through that next?

Shayne Kuhaneck: Sure. So if we turn to slide 16, I'll go ahead and review this. Method two arrives at the same amounts as method one, but just in a different way. The first three columns labeled "Year End", "Estimated paydown", and "Projected amortized cost" are identical to the calculation in method one. What is changing, there's a last column boxed out in yellow to calculate the 2.52 years of weighted average amortization adjusted remaining life.

This column, titled "Remaining life", is a little bit tricky to explain and to follow, but at a high level, it simply represents the time period the projected amortized costs will remain outstanding. For example, the Q&A simply assumes that all paydowns come in at the last day of the year. In our example, the numbers shown in the estimated paydown column will be coming in on December 31st of every year.

So that means, every single dollar of my 12/31/2020's outstanding amount of \$13.98 million will only have a life of one year, as some of it will be paid down at the end of the following year. Therefore, the remaining life of \$13.98 is one year. So if you apply that same logic to the projected amortized cost balance in year 2021, every single dollar of 2021's ending balance of \$10.28 will have a life of two years.

The remaining life column represents the number of years the entire projected amortized costs will be outstanding. For purposes of this example, the staff made a simplifying assumption that all paydowns occur at the end of the year. Those numbers likely, in reality, will be fractions of years, for example, .5, 1.5, 2.5, so on, depending when the paydowns are estimated to occur throughout the course of the year. All that being said, though, once you have the top part of the chart done, you use all those numbers to calculate your weighted average amortized adjusted remaining life of 2.52 years.

The rest of the slide is very straightforward. You take your 2.52 years we just calculated, and multiply it by the average annual charge-off rate of 36 basis points to get you to 90 basis points. You add your 25 basis points of qualitative adjustments that we just discussed before, and we arrive at the allowance of credit losses rate of 115 basis points. You multiply the 115 basis points by \$13.98 to arrive at the total allowance of credit losses of \$161,000.

And we can move to slide 17. I included slide 17 here just to show you the Excel formula. I'm not going to go in-depth. I know that there's probably people out there that are really curious that said, "How did Shayne get to the 2.52?" This is how you get to the 2.52. It's also in the Q&A. Please take a look at it if you are interested, in case you're going to grab this put it into an Excel spreadsheet and do it yourself.

Alison Clark: Shayne, this is Alison Clark. You mentioned that in the Q&A on WARM, the FASB staff identifies certain key assumptions. Can you talk about what these are?

Shayne Kuhaneck: Sure. So why don't we go ahead and turn to slide 18. Okay, as I mentioned before, you'll see off to the right-hand side of the slide that the amount and number of qualitative adjustments are driven by precision of assumptions and the model. That goes back to my previous comment on simple to really complex models and everything in-between. Obviously your number of qualitative factors is going to fluctuate depending upon where you are on that spectrum, but for purposes of WARM, the major assumptions are laid out here on the screen.

And the first assumption is, the historical period used or what I'll refer to it as, a look-back period. And the look-back period is the time frame over which you look back to calculate the average annual net charge-off rate. The look-back period, similar to today's accounting methods, may vary by loan segment based on the characteristics of the portfolio and whether charge-offs in the look-back period are reflective of the expected future losses.

Depending upon how well a look-back period reflects expected future losses over the pool's remaining contractual life, qualitative adjustment may need to be higher or lower. For example, if the bank acquired another bank with tighter underwriting standards two years ago, losses from three years ago may not best reflect future losses. Banks may also be limited by the amount and sufficiency of historical data.

Keep in mind that if data is not sufficient, the bank may need to either supplement its internal data with external data, or make a qualitative adjustment to the WARM model output.

The next key assumption is paydowns. Paydowns include both contractual principal payments based on loan terms and structure, as well as non-credit related prepayments. Keep in mind that the WARM method is based on applying average loss rates over the average remaining maturity of a pool of assets.

Contractual payments are those based on a loan terms and structure, for example, for an amortizing loan, a reduction or paydown in the amount of principal owed, as with many mortgage loans, reduce potential loss exposure over the life of the asset. The amount repaid is no longer at risk of being a credit loss. Banks should understand the structure of the loans and their asset pools, and adjust the model accordingly if pool characteristics change.

Certain portfolios may be impacted by prepayments more significantly than others, which are essentially early payments, including refinancing. Some banks or portfolios may be

able to leverage information using asset liability management models to estimate the amount of prepayments, while others may require external prepayment studies to support their estimates. External data, such as prepayment information on mortgage backed securities, could be useful for certain portfolios.

Finally, like today's qualitative adjustments or Q factors, they continue to be critical when using WARM or any other method. Q factors and the WARM method can be broken down into two separate components, adjustments for current conditions, which we do today, as well as adjustments for reasonable and supportable forecasts, which you're going to do tomorrow with CECL.

Now let's turn to the next slide and I will stop talking because I'm sure you're sick of my voice at this point, and I'll turn it over to John who will go through some Q factors.

John Rieger: Well, thanks a lot, Shayne. That's a lot to cover. So turning to slide 19, as was just mentioned, Q factors are still relevant under CECL. And we're going to talk about a couple of examples in a few minutes, but before we dive into Q factors, I want to clarify what we mean by forecasting. I know probably out there there are some banks that are panicking over how they're going to be doing this forecasting. Most people think that forecast—the forecasting element of CECL - will require some quantitative or modeling analysis, but the forecast does not need to be quantitative. The standard allows for qualitative adjustments.

The FAB staff Q&A document reminds the readers that qualitative adjustment are acceptable. Now one practical way to apply a forecast on a qualitative basis is through Q factors. Similar to how bankers account for Q factors today, the same approach can be used for forecasting. Now forecasting involves taking any information that management knows today that could impact the performance of the portfolio. And there's a reminder, similar to today's practice, management's rationale for such adjustments must be supported and documented.

Under today's allowance methodology, institutions consider the need to make adjustments to account for current conditions. As you see here on slide 19, institutions should be familiar with this concept of Q factors from the 2006 Interagency Policy Statement on the allowance. However, current accounting rules prohibit banks and credit unions from making adjustments based on the probability of a future event happening.

Under CECL, the banks and credit unions will need to now consider anticipated future events, and how these might impact losses. So adjustments for reasonable and supportable forecasted information is a new concept under CECL.

Turning to slide 20, the purpose of qualitative adjustments is to capture expected future losses not reflected in historical charge-off rates. This is true regardless of whether an institution uses WARM or any other estimation method. As discussed in previous webinars, it is critical for credit unions and banks to understand their loan portfolios, how their

portfolios have changed over time, and what drives credit losses in their portfolios. This is true under today's accounting model, as well.

Under CECL, when considering qualitative adjustments, institutions must first identify the drivers of what impacts collectability of cash flows. For example, in the FASB staff Q&A, the bank determined that the only factor it needed to adjust its historical loss for was unemployment. Understanding drivers of credit losses will help institutions identify whether those factors have changed, which may increase the need to adjust the historical data used to calculate the average annual net charge-off rate used under the WARM method.

Understanding the drivers of credit losses will also help institutions understand whether known or expected forecasted events may also impact credit losses. It's important to remember, if a factor or a data point is not relevant to a management's estimate of credit losses, do not forecast that factor. Banks and credit unions can consider internal and/or external information when implementing CECL. An institution may determine that internal information is sufficient to determine collectability. For instance, knowing that an institution's own underwriting standards have loosened would be internal information about a factor that may significantly impact loan collectability.

Alternatively, external information that a factory in an institution's footprint will close in two years may also impact the collectability of today's loans. National unemployment may or may not drive credit losses. A factor relevant for one institution may not be relevant for another institution. For example, the price of cattle may not significantly impact the bank that primarily has commercial and industrial loans or auto loans.

Additionally, available information may relate to past events, current conditions, and reasonable and supportable forecasts. Forward looking information that can be reasonably supported should be considered for inclusion in the allowance estimate. However, you should not adjust your loan losses for information that is not reasonable and supportable. The impact on credit losses for different credit losses factors may be forecasted and reasonably supported over different periods of time.

These periods of time may be shorter than the contractual term of the group of loans for which the allowance is being estimated. Said another way, while a given credit union or bank may only be able to forecast the impact of unemployment on the collectability of its cash flows for the next 12 months, that 12 month time period limitation should not preclude the credit union or bank from capturing the expected increased losses related to an expected factory closure two years down the road.

Lara Lylozian: John, this is Lara. What about adjustments for current conditions when using the WARM method? Should institutions continue to make those? Can you walk us through that?

John Rieger: Good question, Lara. Turning to Slide 21. Yes. The institution should continue to adjust their allowances for current conditions when using the WARM method. The qualitative factors that institutions include in their allowance methodologies today are for

current conditions and will continue to be important tomorrow. I just want to refer you back to one of the agencies frequently asked questions, Question number 24 where we answer the question whether Q factors are still relevant. As stated in the response to that question, an institution will continue to consider qualitative factors when estimating their allowance for credit losses. Q factors need to be considered under today's incurred loss methodology and an institution will be required to consider Q factors under CECL. As long as it also provides a list of examples of factors that an institution may consider which includes factors that are forward looking.

So, by way example, assuming an institution uses WARM, and has a history of low loan losses primarily due to strict underwriting standards over the last 12 months. However, management and the Board of Directors made a strategic decision to loosen underwriting standards for new originations in order to increase both loan volume and loan yield. As such, we would expect the loosened underwriting standards to result in the increased credit losses compared to its historical credit experience as the institution has assumed more credit risk.

So, if we look back to Slide 14, you can see that the generic portfolio we provided was growing. This could be one reason why. The institution should adjust its allowance estimate to account for this expected increase in credit losses not captured by the institution's average annual net charge off rate under WARM. This increase in risk reflects the management's estimate of expected credit losses independently of how external forces may change loss patterns.

Now, turning to Slide 22, for many banks and credit unions, the determination of how to incorporate qualitative adjustments for forecasted information is perceived as a significant challenge under CECL, particularly for many community banks that do not have predictable loss patterns.

Alison Clark: John, this is Alison. On that point, it's worth noting that the response to Question 5 of the FASB staff Q&A on the WARM indicates that forward-looking information may be included in the allowance calculation using a qualitative approach. The FASB staff Q&A also cautions, "Nevertheless, an entity should maintain appropriate documentation, commensurate it with its complexity and sophistication to support its qualitative adjustments..." This cautionary language is consistent with existing supervisory guidance set forth in the agencies' 2001 and 2006 policy statements on the allowance for loan and lease losses.

John Rieger: That's right, Alison. Adjustments to historical loss experience for current conditions and reasonable and supportable forecasts can be developed under a quantitative or a qualitative approach. The CECL standard requires forecast adjustments when they are relevant to collectability of cash flows. As an example, an agricultural lender may be very dependent upon commodity prices while an institution with factory customers or lending to borrowers involved with government projects may not be affected at all by commodity prices. You have to ask yourself, are you impacted based on what happens at the national level or are you impacted primarily by local economic activity? What is your portfolio mix?

Where are your loans? Are they retail or business? Have you changed underwriting to where you require more or less collateral?

What about customer credit ratings? Has your policy changed today from what it was two years ago? Think about what happens if we have been in a low interest rate environment and rates start to increase. What you often see happen, for example, in the mortgage business is that borrowers begin to think about converting a variable interest rate loan into a fixed rate loan so they don't have to pay the higher interest. In this case, you usually see a lot of refinancing, paying off the variable rate and locking into longer term fixed rates.

Another example might be the case of credit cards where historically the economy has been rolling along fairly steady but then there is a sudden economic slowdown. You might have to consider lengthening the expected repayment period due to higher unemployment factoring in the possibility that customers may find it more difficult to pay off their credit card balances as the economy enters a downturn. We believe the standard does not require a credit union or bank to make forecasted adjustments that cannot be reasonably supported. And that any significant factors that impact collectability that can be reasonably supported should be included in the allowance calculation. Even if other forward-looking information is only reasonably supported for a shorter period of time. Additionally, for these relevant factors, if forecasted on an "input-level" basis, the forecast need only capture the time period affected.

Lara Lylozian: John, this is Lara. Since the reasonable and supportable forecast concept is new under CECL, I think it would be helpful if you could walk us through a more detailed example.

John Rieger: Okay, Lara. So, let's assume an institution uses WARM. The institution's footprint includes a rural community home, and this is very similar to what Shayne just mentioned, community home to a factory that employs 1,000 people. It has been rumored that the owners intend to close the factory. And the community does not have job openings to re-employ those who would be laid off. CECL requires consideration of information about factors that affect the collectability of the loans currently on institution's books. In this case, future charge-offs on these loans are expected to exceed the historical level of charge-offs. Management can likely reasonably support that there will be an increased loan loss due to the expected factory closing in the near future and can likely develop an estimate of the expected losses for the pool of loans and maybe even for certain individual loans.

Even though increased loss expectations aren't correlated to a nationwide unemployment data point, the institution can still qualitatively adjust its allowance. And by the way, you are not required to proof out this lack of correlation. As a banker, you know your local area and what impacts unemployment. You can make this adjustment using a qualitative approach supported by appropriate documentation. As we get closer to the rumored factory closing, the institution finds out additional details and is able to refine its estimate.

Now, assume that the factory will actually close in three months and there are still no expected new job openings in the nearby area. Management believes that some of its borrowers will be affected by the closing and soon thereafter will go into default on their primary mortgages based on existing repayment terms on these mortgages. To mitigate this increased credit risk, the institution proactively begins working with the effected borrowers to restructure their loans. Although management expects that in some cases the institution will need to begin foreclosure proceedings, the institution expects that within the next two years the losses stemming from the factory closure will be realized through charge-offs with no reasonable and supportable estimate of losses from the closure able to be projected beyond the two years.

Alison Clark: John, this is Alison. So, under the CECL standard, how should the institution's management factor this information about the collectability of its existing loan portfolio into its allowance estimate?

John Rieger: Yeah. Good question, Alison. In this scenario, management should not adjust the projected loss over the entire remaining life of the residual mortgage portfolio if it extends beyond two years. But management should instead include a qualitative adjustment for the two years that it can reasonably support its expectation that losses on its current loans will increase. And then revert to the historical losses for the remaining life of the mortgage pool.

So, in summary, Q factors are important and the level of reliance and complexity of the Q factor adjustment will depend on the size of your institution, the complexity, and the quality of your loan mix. And the economics, whether they're local or macro. Now, let's turn to Slide 23 for some key reminders.

Lara Lylozian: Okay. This is Lara. Thanks, John. And thanks, Shayne, for walking us through that example. We just want to remind everyone of a few points here. First is CECL does not prescribe a specific credit loss method that institutions must use. Today's session is focused on WARM, which is just one particular type of loss rate method. And so, as many of us have said, if you haven't already, please, we encourage you to look at the FASB's staff Q&A on the WARM method. And even look back to last year's 'Ask the Regulators' Session.

As we're trying to get into the mindset of community banks and credit unions and trying to think through how can we possibly start, we found out that the WARM method has some similarities to how many community banks and credit unions calculate the allowance for loan losses under today's incurred loss methodology. The WARM is not a regulator preferred method, there is no safe harbor provision here. There are other acceptable loss-rate methods. And in last year's 'Ask the Regulator' webinar we covered open pooling and vintage as two other accessible loss rate methods.

I recall these loss-rate methods because they're built on historical net charge-off rates over a defined period of time. As I had mentioned before the charge-off history is just a great place to start. Lastly, the actual standard provides a list of other loss estimation methods

which include discounted cash flow, roll rate, PD/LGD methods as well as methods that use an aging schedule. And the standard also includes illustrative examples for some of those methods. So, there's a lot of flexibility that's permitted by the standard. And each institution just really needs to find the method that best suits them and their portfolio.

And you don't have to choose one method and apply it across all your portfolios. You can choose to apply the WARM method for a particular portfolio. And then you can do, let's say, discounted cash flow for your mortgage loan portfolio. And if the standard really is scalable and flexible. And that's a key message we are out to the industry with as well as to our examiners. We're really honing in on the scalability and the flexibility of the standard. And I think that's a great segue into the discussion around supervisor expectations. So, with that, let's turn to Slide 24 and I'll hand it over to Jami.

Jami: Thanks, Lara. I'd just like to mention that the FDIC, the Fed Reserve, and CSBS have partnered to develop a plan to evaluate CECL preparedness. We have also partnered to provide tools to assist regulators and financial institutions to begin the dialogue and engage in CECL preparedness efforts. So, there is a lot of inner agency partnerships working to prepare institutions for all the changes occurring with CECL. Now I'd like to turn it over to Bob to provide reminders about some of the first steps in preparing your institution for CECL.

Bob Storch: Thank you, Jami. As part of the CECL preparedness evaluations that Jami mentioned, community banks can expect that examiners will be interested in and asking about how bankers are progressing in their preparation for CECL. In past interagency webinars on CECL, we've mentioned the agencies document entitled Frequently Asked Questions on a New Accounting Standard and Financial Instruments Credit Losses, or the FAQ's for short. I think some of the comments earlier in this webinar also made reference to the interagency FAQ's. The agencies issued the latest set of these FAQs last week on April 3. And the FAQ's include some new questions and responses as well as updates to some of the previously published frequently asked questions.

A link to this latest set of FAQs is included on Slide 30, which, along with Slide 31, identifies various CECL resources. An excellent reference point within the FAQs is FAQ Number 22, which identifies steps in the CECL implementation process that each institution should be taking if it hasn't already begun doing so. Although, as we've mentioned earlier, it's been nearly three years since the new credit loss accounting standard was issued, the findings from examiners on CECL preparedness, for which a portion of the results were shown back on Slide 6, suggest that a few reminders about implementation activities may be helpful to some in our audience even if CECL doesn't have to be implemented until 2022 for particular institutions.

It should almost go without saying that each institution, particularly those individuals who perform the functions of Chief Financial Officer and the Chief Lending or Credit Officer should become familiar with and gain an understanding of the new accounting standard and how the accounting is linked to credit risk management. That will enable you to educate the

Board of Directors and other appropriate staff within your institution about CECL and how it differs from today's incurred loss methodology. Of course, to have a suitable implementation plan and timeline for what is essentially a project management exercise surrounding an accounting change, you have to determine the effective date that applies to your institution.

Finally, don't overlook the need to evaluate and plan for the potential impact of the new accounting standard on your regulatory capital. For banks, this would include consideration of the recently issued CECL Regulatory Capital Transition Rule which is referenced in FAQ 18 and in the Appendix on resources in the latest set of credit losses FAQs. Now I'm going to turn it over to Alison from the NCUA.

Alison Clark: Thanks, Bob. The NCUA approach aligns with that of the other agencies. The NCUA issued a letter to credit unions in December last year that talked about what credit unions can expect from your examiners regarding CECL during 2019. And just as our regulatory counterparts are, we too are assessing the progress of the credit union industry toward implementation. Examiners are asking the same kind of preparedness questions that Jamie's Slide 6 illustrated. These are soft touch, kind of get the conversation started type questions. There will be no administrative actions in your exam report this year relative to CECL or the way that you answer the questions.

For most credit unions, the effective date probably will be January of 2022. If you haven't started, don't panic. But please, please, do not wait any longer. I'll echo Bob's comments. Credit unions too need to become familiar with the standard, read the FAQs, and begin thinking about how the WARM method demonstrated today might work for your portfolio.

Next, Nicole will talk a little about some of the supervisory expectations that will not be changing under CECL.

Nicole Cooke: Thanks, Alison. The agencies have already begun work on developing an updated allowance interagency policy statement. And through this process we've acknowledged and recognized that many, if not all of the primary principles for examining and supervising the allowance remain the same. So, examiners will still be checking to ensure that the allowance analysis is comprehensive, that it's well-documented, and that it's consistently applied, and that the underlying principles, processes and controls are sound. And it's also still true that allowances should be reasonable and supportable. The allowance should make sense for the institution taking into consideration the institution's risk appetite and underwriting standards, the quality of its loans, and the performance and other characteristics of its portfolio.

So, the principles found in the 2001 and 2006 interagency allowance policy statements remain true in that regard. Kevin, I'd like to ask if you could walk us through some of the highlights from the Staff Accounting Bulletin number 102 that are still going to be applicable to SEC filers.

Kevin Vaughn: Thanks, Nicole. Yeah. I'd like to add some additional perspectives that would be relevant for institutions that are registered with the SEC. SAB 102 has its beginnings back in 2001. But even before that, going back to 1986, the Securities and Exchange Commission provided expectations regarding supported documentation for loan losses. And that was in Financial Reporting Release 28.

So, following on from that with additional experience, the SEC staff in 2001 issued Staff Accounting Bulletin 102 which provided additional guidance on the allowance. And FRR 28 and SAB 102 addressed loan losses in the context of the incurred loss model. But the underlying concepts will continue to be applicable in the expected credit loss model. In this regard, SEC staff are currently performing updates to staff guidance to incorporate the change from the incurred loss model to the expected credit loss model.

Registrants should have a systematic methodology to address the development, governance, and documentation to determine its allowance for credit losses. The determination of the appropriate methodology in accordance with ASC 326 is a significant management judgement and will be influenced by entity-specific factors which would include, among other things, the entity's size, access to information, organizational structure, complexity of the loan portfolio, and management information systems. It is critical that the methodologies incorporate management's current judgments about the credit losses expected from the existing loan portfolio on a disciplined and consistently applied basis.

Among other things, SAB 102 directs registrants to ensure their loan loss allowance methodologies consider relevant internal and external factors that may affect loan collectability and be well-documented in writing with clear explanations of the supported analysis and rationale. I do not anticipate this will change under the new staff guidance.

SEC staff remain available for consultation on registrant accounting policies which could include consultation on specific conclusions reached in connection with the implementation of Topic 326. To date we have already received some pre clearances on the new standard primarily related to scoping. If you are unsure about whether a consultation with the SEC's Office of the Chief Accountant would be appropriate, we're also available for informal discussions.

I'll turn it over to Shayne to offer some closing comments relative to the WARM method.

Shayne Kuhaneck: Thank you. Let's go ahead and turn to Slide 28. So, in summary, WARM may be an acceptable method to estimate expected credit losses. WARM is reliant upon average loss rates, current condition adjustments, reasonable and supportable forecasts, and information necessary to estimate future loan balances that may not be readily available in a bank's current systems. Although the method is less mathematically complicated than other acceptable methods, the degree of management judgement involved in the calculation of expected losses using the WARM method is significant just as with other acceptable methods. And potentially more-so if there is more reliance on qualitative adjustments. It's important to remember that any method used to estimate expected losses

must be adequately supported by underlying documentation of the method and all related assumptions.

And lastly, I'll say, as I mentioned before, this is an evolution. We've put out the WARM Q&A as a way to provide the mechanics of the methodology. We will be putting out a future Q&A on reasonable and supportable forecasts and looking at other areas where more Q&As can be developed.

I'll also say that we are intending to host a closed-door workshop on April 30 is a target date for community banks and credit unions. So, if you are out there and you would like to participate in a workshop, please contact us. If you go to the FASB's website, the main page on the website, and you go to the 'About Us' tab, you can find my e-mail in there. If you e-mail me and you're interested in participating in that, I'll forward your name on to the team and we'll try to get you included in that workshop.

And lastly, from the FASB's perspective, we are open for business. So, if you have questions, please contact us. Let us know what other areas you're struggling with and we will develop more Q&As if that is necessary.

Lara Lylozian: Thanks, Shayne. That's very exciting. All that's coming up over the next couple weeks.

We just want to thank everyone for participating in today's webinar and for submitting questions not only in advance but during the presentation. There are a lot of questions that we're going to try and get to here in a bit.

I just want to say that we continue to believe that CECL is an improvement over the existing accounting for credit losses. And we recognize that as with any change, change can be challenging. And that's why we're committed to hosing a series of webinars and providing reference resources. I really encourage you to leverage these resources and start a conversation with your examiner, with your primary regulator, with your auditor if you haven't already to start asking questions about CECL and your implementation efforts. So, with that, I'll turn it over to Jim.

Jim Fuchs: Great. Thank you, Lara. And thanks, really, to all of our presenters today, and also, to the significant number of you who have joined us for this call today. We have had a number of questions come in during this presentation and we have a good number come in even in advance of this presentation. So, we know this is very much on your mind. And, clearly, we have a really great room and a lot of different perspectives here to answer your questions.

So, quick reminder if you have a burning question that you haven't asked yet, you can still ask it by e-mailing us at rapid@stls.frb.org. And through the webinar tool there is that 'Ask Question' button. So, please, feel free to use that. That's probably the most efficient method.

And, again, just another reminder on the audio. So, again, the Q&A will be part of the overall archive. Again, the audio is best synced if you are using the audio through the webinar tool. So, again, those of you, if you feel like you're experiencing a little bit of a delay, I would recommend either switching to the webinar tool because then you can hear everything synced up, kind of, in real time.

So, for our Q&A, we are going to start with the questions that came in in advance. And I'm actually going to turn this over to Kevin Vaughan who is going to moderate the Q&A for us. And, again, we're going to start with the questions that came in. That is not to discourage you from continuing to ask questions. We will do our best in the remaining about 20 minutes to get to as many as we can. So, Kevin, floor is yours.

Kevin Vaughn: All right. Thanks, Jim. So, I think our first question, Lara, I'm going to direct it towards you. And it relates to financial institutions that have minimal to zero loan losses. What methodology, if any, would be best suited, particularly in a situation where net charge-offs for loans is very low, or even zero.

Lara Lylozian: Okay, Kevin. Hi, this is Lara. So, I was just at an outreach event in New York last week and this exact same question came up. I think, this issue of having zero or very low historical losses exist today under the incurred loss methodology. And, you know, it's really not uncommon to see smaller institutions have extremely low or zero net charge-off rates in these recent years. So, I would turn it back to you and say, what do you do today? There's a lot of judgement that you would have to include, incorporate into your allowance. Institution specific analysis. Now, the allowance needs to be supported based on qualitative factors that you've heard John and Shayne talk about, relative to the effective current conditions and reasonable and supportable forecasts on the collectability of the loans in the portfolio. So, there'd be a really heavy reliance on qualitative factors, not unlike what is happening today. And then also think about like, if you enter into a new product. What would you do today? You'd often look to proxy data or pure data to get that historical information.

Kevin Vaughn: Great, thanks. Bob, I'm going to send a question over to you now. And this is a smaller, this came from a smaller institution. And the example talks about a small sample size of home equity line of credits are a material part of the portfolio, but haven't had a loss of them in years. And so, it makes vintage analysis difficult. Any suggestions for this situation that you can offer from your experience?

Bob Storch: I think the question is not dissimilar to the one Lara was just touching on. But I would point out that the standard allows you to use internal and/or external information in your estimates of allowances. Sounds like the internal information suggests a very low loss rate. The question would be, well, should you get external data? Well, you could if it's showing loss experience. But then the challenge is, how do you make qualitative adjustments so it's relevant to your portfolio? Again, a peer group and they have a much larger higher loss rate because the underwriting standards are looser or they have higher loan-to-value ratios which trigger more losses. And that's not comparable to your portfolio. It

brings in some tension between your own low loan loss rate versus the peer data which is higher. But you need to make qualitative adjustments presumably downward to reflect what the actual collectability of your portfolio would be.

Another key thing is that the agencies said in the FAQs that we don't have a target or benchmark level that the allowance has to be. It has to be appropriate for the individual institution. So, if your loss rate on HELOCs is low, you're going to have a lower allowance, arguably, than an institution that has a higher loss rate. And that should be perfectly acceptable. And to the extent that the unused portion of HELOCs are not unconditionally cancelable, from the accounting standpoint, you will need to consider what your exposure is on those, what's the likelihood of more draws? What's the experience on those draws over the period you expect to be contractually obligated and estimate a liability for credit losses on the unused portion to supplement the amount that's already on your books.

Kevin Vaughn: Great. Thanks, Bob. Alison, the next question is credit union related. And I'll try to summarize the question. I think the heart of the question is that there's a lot of talk high level about the different methodologies and, also, the stress on getting started. So, I guess the question is how do credit unions get into the specifics of how the specific methodologies will work, how they're constructed, and more of the nitty-gritty. Where can they find some of that information? Are there examples out there or other resources?

Alison Clark: Well, I would recommend to take a look at this WARM method in a little bit more detail. And it sounds like Shayne is getting ready to put on a workshop where perhaps some more detailed analysis of how to do some of the Excel-type formulas behind the backgrounds. And then he said that there's going to be a FASB staff Q&A that is going to be shared later on this year on reasonable and supportable forecasts. And then, I too, would just say that if you need additional information, you can always contact E and I Mail at NCUA.gov. And that will be forwarded onto my office.

Kevin Vaughn: Great, thanks. We'll keep the credit union theme going. This one relates to a lot of the conversations that have been going on that suggest maybe there could be changes to the standard or changes to how the standard would be rolled out. So, I guess the concern is that I'm making these investments in third party vendors or getting resources to help out on this. And should I wait until it's certain that everything is set in stone before I start making those investments, or should I get going now?

Alison Clark: Well, Kevin, as has been echoed many times around this table today don't wait any longer. Don't panic, but don't wait any longer. I can't speak for the FASB but I'm feeling pretty confident that there will not be any substantive changes in any way. Shayne, do you want to echo in on that?

Shayne Kuhaneck: Sure. Sure. So, from the FASB's perspective we had, we obviously had the large codification improvements document that we just did that'll be coming out toward the end of the month that wrapped up all the TRG issues. We obviously had the meeting on April 3 where the Board considered the regional bank proposal about

splitting the ALLL between income statement and the OCI. And the board voted six-zero to not move forward with that proposal. So, I would not anticipate any major changes to the standard going forward. And I would plan to be ready to implement at your effective date.

Kevin Vaughn: Great. Alison, not to keep you in the spotlight here. But, one more question. For credit unions, will this apply to all credit unions or only credit unions over a certain size?

Alison Clark: Well, for credit unions under \$10 million they don't always necessarily have to follow GAAP. However, within relation to the allowance for loan and lease loss, now under CECL the allowance for credit losses, this applies to all credit unions regardless of size to meet a Regulation 702 that talks about full and fair disclosure. So, yes. All credit unions, even the smallest one-million-dollar credit union will have to follow CECL.

Kevin Vaughn: Great. Thanks. So, Lara, turn it over to you. Now, the Question 43 of the recent CECL FAQ's talks about segmenting credit card exposure into transactors and revolvers. If a bank has insignificant credit card exposure, does the FAQ create the expectation that banks will segment their credit card portfolios into transactors and revolvers?

Lara Lylozian: This is Lara. I'd like to give gold stars to the person who asked that question because not only did they know that interagency CECL FAQs came out last week, but they also read them. And I would say that, no, I don't think Question 43 runs contrary to anything that we've been saying here. I think materiality for financial reporting ends up being a key consideration on what methodology you end up adopting. And then honing in on this point that, the standard is scalable and flexible. So, I would look to materiality to be a key consideration in determining what methodology to use.

Kevin Vaughn: Great. Shayne, the next couple of questions, and I'm actually going to kind of merge them together into one that maybe you can address. They relate to commercial lines of credit, commercial revolvers and other commercial lines of credit. And the questions really get to, how do you determine the life on those and the maturity date? Particularly on ones that may not have a set maturity date? Or in the example of other, one-year lines of credit that maybe they're just the one-year contractual life. So as you think about the weighted average remaining maturity date methodology, how would you think about the life of the loan in this context?

Shayne Kuhaneck: Yeah. So, I think I would break the lines of credit down into a couple of steps and that would be the funded and the unfunded portion. And for the unfunded portion, as long as it's not unconditionally cancelable, I would take a look at the unfunded portion. And, of course, I would do an assessment on what's the probability of that unfunded portion becoming funded? And then I've got to book a loss on that unfunded portion. And that's going to be booked up as a liability. So, I'll set that unfunded portion aside.

And then we take a look at the funded portion. And there's, sort of, two elements of the question here. How do I determine what the life is? And then it sounds like we've got a concern about, one year that I just, sort of, keep renewing, maybe, potentially over and over

again. So, for the first part of that, I would say that for the funded portion, you would figure out the life of that very similar to a credit card. You'd, kind of, look at your history. What is the paydown history? What's the payment stream that's come in? Is there anything you can glean from your historical data to determine what the life of that loan would be? And, as I mentioned, there is a slide in method one of the WARM that predicts what the balance is, what's going to be the payment streams that come in. How do you apply those payment streams, again, a lot like a credit card?

To the, one year, that's sort of the other side of it. I have a year, do I book six months? Well, I don't know. It depends on the answer to my first question, what would the life of that? But I can tell you that, the contractual term is one year. So, you start with the one year and then determine, am I paid off before that one year?

The one caveat that I would put on the year is that the TRG met and they talked about contractual extensions and renewals. And what they, where they landed and what the codification improvements document that comes out at the end of the month will say is, is there's a term embedded within that contract that's that the borrower basically has control of extending that loan out beyond that one year, that you have to consider that. So, it's about credit risk. How much credit risk am I on the hook for? And then figuring out the life of that loan, again, very similar to a credit card.

Kevin Vaughn: Great. Thanks. Bob, the next question relates to loan participations and CECL's impact on that. So, the example given is, a bank purchases from Bank B participations in a pool of automobile loans. The question is, can the bank simply apply its own life of loan credit loss pattern and charge-off history calculations? Or are they required to obtain additional information from Bank B? Is there an additional burden that's imposed under CECL that would not have existed under the incurred loss model?

Bob Storch: I think I'd start out answering that based on safety and soundness considerations. Anytime a bank is acquiring participations, regardless of whether under CECL or incurred loss they're supposed to be doing their own credit analysis, making their own judgement about the risk that they are willing to take on, and not just rely on whoever they're buying them from to assume that they did the credit analysis. So, I think as part of their due diligence, they'd be getting information about the performance of that lender's auto loans, what the underwriting standards are and then, presumably, they need to compare their underwriting standards for auto loans, assuming they make auto loans, to what applies to the ones they bought. So, if they don't really have a loss history from the other lender but they've got their own, to what Shayne said sometime earlier in the presentation, that, kind of, using external data puts some tension on the extent to which you may need to make qualitative adjustments for differences between, your experience versus what might apply here. So, I think you can use your own history. But you need to adjust it for how the portfolio of participations acquired differs from your own loans of that same type. There's a lot of judgment going to be required to support and document what adjustments you're going to make to really reflect how your portfolio of auto loans, assuming you had one, maybe different from the performance going forward of these participations.

Kevin Vaughn: Great. So, the next question we have, Bob, I think you might be good to answer this one as well. It involves recognition of great work by the regulatory agencies, having always done a good job of assessing the adequacy of the loan loss reserve. So, but the question kind of relates to, I think, maybe a little bit of the difference between the regulatory agencies and the FASB accounting standard setting. And getting to, kind of, why the regulatory agencies would want to turn over, if you will, the determination of the loan loss reserve to the FASB versus allowing your own guidance to oversee that.

Bob Storch: Well, I think the first thing to point out is that by law, the accounting standards that the agencies have institutions apply have to be uniform and consistent with GAAP. So, to the extent that GAAP changes, that changes the framework we use for regulatory reporting. And, the agencies, I think, across the board are looking more and more at forward-looking supervision, trying to anticipate where institutions may be going and what risks they have on the horizon. And that's consistent with the new approach in the FASB standard that's taking forward looking information into account and not putting, sort of, your head in the sand and ignoring what may happen in the future to affect the collectability of the loan portfolio.

If you're a good, well-managed institution, presumably the credit risk people are considering what economic factors, whether they're national or local or whatever, the key factors affecting collectability are as they work with their portfolio. So, the standard really brings that into play, which was ignored in the current standards. Which goes back to this whole notion of the incurred loss model resulted in allowances that were too little and too late because when, there's expectations of a downturn, the accounting really wouldn't let you take that into consideration. So, I think the standard, once banks understand it and implement it in an acceptable manner and make a good faith effort to do that, it is going to better align with how we supervise banks and how institutions manage credit risk. And therefore, it should be an improvement in accounting overall and an improvement in the way we assess the institution, its allowance, and the bottom line, the adequacy of its capital as well.

Kevin Vaughn: Great. I think we might have time for one more question. And, Nicole, this question I'll send your direction. The FASB, the effective date for public companies is 1/1/20. The question is, do federal financial regulators provide an exception to the FASB's effective date?

Nicole Cooke: Okay. Thank you for the question. The OCC and Federal Regulators in general are not going to be providing exceptions to their prescribed effective dates in the CECL standard. So, if you are an SEC filer with a calendar year end date, your institution will be required to adopt on January 1 of 2020. Hopefully this webinar and the other resources that are available to you will help assist you with implementation.

If you are having challenges and you're worried about meeting your effective date, we do encourage you to reach out to your regulators. As we have said earlier in this webinar, we are still in an information gathering phase, and we encourage back and forth communication. Thank you.

Kevin Vaughn: Great. I think with that, Jim, we'll turn it back over to you to close us out.

Jim Fuchs: All right. Great. Thanks, Kevin. And, again, thanks to all of our presenters today. This is an hour and a half presentation and it certainly didn't feel like an hour and a half presentation. Just a lot of material to get through. I think on multiple occasions all of our presenters today really highlighted the importance of, you know, staying connected with your primary federal and state regulator. Keep the dialogue going. There's a lot of good resources that all the agencies are putting out individually and collectively. So, I would encourage you to use those.

You will see in the presentation we didn't spend a lot of time on the resources slide. But those are there for your use. So, again, for those of you who participated through the webinar, I would encourage you to go back in and actually download that presentation. Have that readily accessible because, again, a lot of good information. A lot of really great examples and, also, just some good links to resources that I think will ultimately help you.

I would like to, very specifically, thank all of our presenters today; Lara Lylozian, Bob Storch, John Rieger, Nicole Cooke, Shayne Kuhaneck, Alison Clark, Kevin Vaughn, and Jami Flynn for all of the work you put in to this. And also, Sarah Chae behind the scenes who I know put quite a lot of work. And there are lots of hands that go into making this happen. It's really great to see all of the regulatory coordination and cooperation to put on a session on something that we know is very much top of mind based on the feedback you give us, and just based on the questions and the engagement we saw today. So, again, thank you.

This session and the Q&A, as I mentioned before, is archived. You can find that where you downloaded and where you first accessed the presentation. Also, any institution that was able to participate today could also find that on the Ask the Fed website which is just www.askthefed.org.

Don't forget, as I mentioned at the top of the call, this session is available for continuing education units. All you need to do is make sure you're registered for this session, you received that online survey, which I believe will be sent out any minute. Get to the last question, indicate you want credit for this session. And you're good.

And finally, as the regulators of the program and the Federal Reserve Bank of St. Louis, intended only for informational purposes, views are not formal opinions of, nor binding on the Federal Reserve Bank of St. Louis, the Board of Governors in the Federal Reserve System, the FDIC, OCC, FASB, NCUA, SEC, or CSBS. So, again, thanks everyone for joining us. Thanks to our presenters and we look forward to being able to speak with you again in the future.

(END OF RECORDING)