

## NYU Stern's Ross and Salomon Roundtable on CECL: Transparency or Opacity? Implementation and Effects on Lending and Pro-Cyclicality Transcription

Joshua Ronen:

I'm Joshua, at New York University Stern School of Business and I like to welcome you all to our combined Ross and Salomon Center roundtable. Let me just... We're going to have the panelist talking in sequence, from left to right, just a circle. What I'd like to do is just to make very brief comments about the panelists. Some of them are well known so you don't need to hear about them. But in sequence from left to right, we have Hal Schroeder, who is a member of the FASB. Next to him is Mike Gullette, Senior Vice President Tax and Accounting of the American Banking Association. Then next to him is Maria Mazilu, is that the right pronunciation?

Maria Mazur:

Very good.

Joshua Ronen:

She's the Vice President and Senior Accounting Analyst on the financial institutions group of Moody's Investor Services. Then Nathaniel Royal is the North American Executive for the not-for-profits Credit Risk Associations, Global Credit Data. James Finch is representing the Solomon Institute of the Department of Finance of Stern. Then we have, where's Bobby? Bobby is here. Bobby Bean.

Bobby Bean:

Present.

Joshua Ronen:

Who was the associate director of the FDIC's Capital Market branch. Cindy Vojtech, she already told me how to pronounce her name properly. She's a Principal Economist at the Federal Reserve Board in Washington. Jason Jacobs is the Global Head of Accounting Policy at AIG. And then Robert Hetu?

Robert Hetu:

Hetu.

Joshua Ronen:

Is it Hetu or...

Robert Hetu:

Hetu, yeah, very good.

Joshua Ronen:

Hetu, Robert Hetu is the Head of U.S. Private Debt at Caisse de depot de placement du Quebec's New York office. I can pronounce French but with zero understanding.

Okay, so what we'll do is we'll have all the panels making their presentations, about 10 to 15 minutes each, and then we'll open it to questions and answers. Our first presenter is Hal Schroeder from the FASB. The floor is yours.

Hal Schroeder:

Thank you, thank you.

Joshua Ronen:

Oh, I forgot one thing. Next to me is Paul Zarowin, who is the Chair of the Accounting Department, until very recently the Director of The Ross Institute of Accounting Research, and that's about it. As I said James Finch is representing the Solomon Institute of the Department of Finance, please.

Hal Schroeder:

Thank you. Great. Let me just get the disclaimer out of the way, the views expressed today are solely my own. Now we got that out of the way.

Every time I think about doing these types of presentations, this is like the third or fourth one I've done on CECL today. Talking to a lot of investors so it kind of brought back a lot of old memories. I was an investor for 15 years before I joined the board. And they put me on the board, it's not my accounting skills, I can assure you. But they wanted somebody who actually understood how investors think. So a lot of what you're going to hear from me today, is really about the way I think about investors, and the types of skills that I look for.

Having accounting knowledge, the accounting knowledge, because it's the language of business. So I wanted them to have accounting knowledge. I wanted them to be comfortable with numbers. I liked math majors, engineering majors, people who've dealt with a lot of information, a lot of numbers. And I liked history majors, because they realize that history didn't start the day they started work. Things happened in the past that kind of built up.

So when I look at this question, and oh by the way guys, I stole this, and I've used your question here in several of the presentations to them.

Joshua Ronen:

You're not the only thief here.

Hal Schroeder:

Okay, good. As long as we're okay and you don't have to charge for it, okay? But the question has been asked and answered over and over, in accounting cycles, and in fact I like history so much. I noticed that I do not know what the C. Walter Nichols award is for, but I know that Walter Wriston, in 1974 was

awarded the C. Walter Nichols award, along with Alan Greenspan and Paul Volcker. You'd recognize a few of these names. I mentioned Wriston because in 1974 he was the CEO and chairman of Citibank, group, whatever the name was at that time. The Citi thing that we all know about. And he testified at a hearing in the UN in 1975, and he told you about this accounting standard that was going to absolutely ruin the banking industry, and in fact it was so bad that if they had known this accounting statement was going to go in effect, they would not have refinanced New York City.

Okay, now remember 1975, on the verge of bankruptcy, technically they will file for bankruptcy. And to see that, it just reminds me there's a lot of history here and there's a lot of discussion, particularly when you start seeing headlines like this. I'd like to put people in the context of history, can accounting really destroy the economy? Is it going to have, and no offense to some of our speakers, disastrous effects on the economy, and all these things that are out there? I would question it and after Wriston testified 1975 that again, this particular accounting standard that related to banks was going to ruin the economy. It actually turned out to be the world's best accounting standards that the boards ultimately put out. It had to do with trouble debt restructurings and the recognized recognition of losses, basically early. Very similar fact covered all the hyperbole that was out there at the time proved not to be true.

So as I go through my slides, I'm sorry, I'm not going to talk a lot about accounting, but I'm going to try to give you a little bit of accounting, a little bit of data, and a little bit of history all wrapped into one. And I'm going to go relatively quickly to give all the other speakers' time. If there's ever a question about the number of data points here, this is market data. We're talking about billions and trillions of data points, and if you listen to nothing else, and you stop and think about, stop and study an accounting standard. Basically this tells you that the market did something a year and a half before the crisis. Something happened here. This is values of non-financials, values of financials, and some difference here between those two. Can you pick out where something different happened?

So the next slide says basically what did investors know when they started to devalue bank stocks? Investors started to devalue bank stocks right about here, and they stopped right at the beginning of the recession, right? They knew something. Well what did they know? They knew that loans in the banking industry went up 35%. Big number for three year growth. Reserves set aside for problem loans went down 10% in absolute terms, not relative, went down. Those 35 new loans must have been perfect, because they had no loss content. They were so good, they heal pass ends, like the problem loans on the books. Now we know that's not true, we knew that that green shaded area was a high risk area, and the accounting was completely out of step. Okay. This is history, this is what happened. And banks shut down and we know the rest from that point on.

Okay, so what does the board do in a situation like this? We looked at the accounting. A lot of folks are involved. We lay out pretty much every scenario you can think of in terms of accounting. Anything from ignore losses, probably not a good strategy since the market is already estimating fair value, right. Not well loved by the banking industry. The incurred model, which is what we have today, and then a bunch of other thing. We settled on CECL. The point of this slide is that we didn't just come up with CECL on day one. It was a lot of discussion and debate, a lot of giving and taking between this. It's not perfect. I don't agree with everything in CECL, but it was the best of the relative options that we had available.



Now, a lot of the transparency, I'm trying to focus on transparency. One of the things you hear about is we're going to destroy comparability. Well, I was on that other side. I don't believe there's comparability today in accounting standards. So what I tried to get across here is that there are two big things that are changing in the accounting standards. When do you book a reserve, and how much. Fancy way of basically saying today the range of win is relatively wide in accounting, is because we have a threshold called probable. Not all accountants agree on what probable is.

So the range is relatively wide. And then we've had regulatory influences that didn't like the accounting, so they've stepped in from a regulatory standpoint that started to push you. So the red bar show what accounting would be. You book loans today, you book a reserve several years after, under strict accounting. The regulators have kind of moved it in this direction, book reserves earlier. What debated the issues, we ultimately said it's easier to book it on day one and move on. All right?

Oh, well let me just... And then the other, the when is then reduced to day one, but how much, we've seen a fairly wide range of how much reserve. 12 months versus as much as contractual life of a loan plus renewals. We ended up with contractual life. Not perfect, but it narrows it. So in both cases we've actually increased transparency because we've narrowed the range of outcomes.

Now, nice thing, you know, investors always tell us, nice to tell the bank to tell me the numbers, but I don't trust them. Okay? Now, I subscribe to that because I was there as well, so we've adopted what I think of as the trust but verify approach. Yes, a little Regan-esque here. Today banks disclose a bunch of detailed information about loan portfolios. We're going to say, let's break that out and provided a more, about seven or eight fold increase in the amount of data. Now Mike Gullette is going to be talking, and Mike I'm going to throw you under the bus here. Even the ABA, the American Bankers Association likes this disclosure, right? They think it's a good disclosure and recommended even banks that do not have to apply it, we gave some exceptions to smaller banks. He still thinks that this is a good standard, good disclosure.

So Mandarin makes its own estimate. We give some data to help verify it. Overall, we think that's a good package. Know their earnings volatility, what I'd like to point out is that this is basically the expense going through the income statement, and we see low points and high points under current accounting. The red is an estimation of what would happen under CECL, and what you see is basically it pushes up the bottoms and trims off the tops. That's what CECL does. And it does that because frankly accounting can't change the ultimate loss.

That's why I had zero here. Whether you have the incurred model or the CECL model. You end up with the same loss over a cycle. So all CECL does is moves the timing, or this case pushes up the bottoms and trims out the top. You have to end up in the same loss regardless. Okay?

Procyclicality is going to have a big impact on lending, so we've moved from transparency to lending. Very quickly, [inaudible 00:11:43] this is what the reserves in the banking system look like. And what you very quickly see is that reserves went from here to here, from beginning of recession, a 264% increase. Pretty sizeable, and it took nine quarters to do that. Under CECL, estimates more like a 30% 29% in this case, and a five quarter. Now you say, "Hmm, that's not that big of a difference." There is plenty of

academic studies out there that showed, not only in the U S but globally, a fact.

The fact is, is that banks that defer recognition of losses longer, are less likely, in fact cut lending in a recession. Those that recorded reserves earlier, even under a flawed incurred model, those that record earlier, are better positioned to lend, and can pick up lending even in a recession. Right? So I think there's a lot of the empirical data, and this particular study I cite here is over a 16 year period, two recessions, almost 25,000 bank quarters of data. It is not light on data. The math alone made my head spin, but I've read it several times. Fascinating study.

I think the real issue may actually be more about buybacks. This is a topic that came up with several investors today. The issue is yes, regulatory has changed and loan growth, the gray areas have been tamped down. A lot of reasons for that. Buybacks have picked up. The buybacks looked pretty big, and they're much bigger, they're multiples of any change that would happen in the accounting standard for CECL. So I would argue that it's not the loans that'll be affected in this, that'll have an impact on the economy and lending, may have some impact on the level of buybacks that the banks are making.

And then we can have a lengthy debate about whether buybacks are good or not. But I would argue that the impact, and this is the buybacks for the 30 largest banks. Over a hundred billion this year, in this past year. CECL, for those same banks, something in new order of below 20 billion of increase in reserves as a result of this. I would say they're still going to be buying back stock, they're still going to be able to make loans. Accounting does not change the economics alone, it just changes the timing of recognition.

We've quite often heard tremendous cost of applying a new accounting standard. I spend a lot of time inside banks really understanding what they're doing. I've had to sign nondisclosure agreements in a number of cases. We hear a lot about technology advances, more data, better data quality, faster processing speeds, more AI. And as the cycle continues, because once you get faster speeds and more AI, you need more data, and it just is a constant loop. You put accounting standard like this around that, and what we're consistently hearing from the largest to the smallest bank is, we're ending up with better data, better internal controls, better estimation processes, better internal communications, better coordination. Yep. There's taking some time to clean up data, improve internal... We've got some time, but it's going to give us benefits.

So what we've consistently heard is most of the banks, particularly the major banks, are taking what I call a business approach to adopting accounting standards. Instead of trying to get by with a minimum, it's just an accounting issue, I'll do the least amount of work, I'll do it back of the envelope. What you're hearing is we're looking at the flow of information from beginning to end, considering how cloud computing is coming on. It's been a fascinating discussion. Unfortunately, you never hear this part of the story, because there's a lot of more attention focused on capital and other issues.

Let me just see if I can wrap it up here. I don't want to spend any time on this, other than that, this gives you a little bit of a timeline, and the top part is kind of regulatory actions, legislative actions, the real big things left to focus on. There are some what's called report language attacks attached to the house and Senate appropriations bills, that encourage and direct the SEC or the Treasury Department to do a study of regulatory capital. I frankly support that, and I think that it makes a lot of sense. But they really aren't

focused on changing the accounting rules, it's focused on more the regulatory capital implications here and should regulatory capital be changed. I think that's a fair question to ask and I think the regulators would have done it with or without any legislation. So with that, I will turn it over to Mike.

Joshua Ronen:  
Thank you, Michael.

Mike Gullette:  
There we go. Okay. So I will mainly talk about things that the banks that our members have been telling us, kind of from the bank's point of view. Actually I'm not really going to try to do much of refuting anything that or much of what Hal was saying, except for one. I think that this whole thing, yeah, exactly. The whole thing... The last time that there was real concern in regards to accounting standards that were changing was fair value. It came in around 2007 or something like that, and how it impacted OTT, other than temporary impairment. And then I think the thing that investors were seeing back then, was the decline or kind of the collapse of the debt securities market and how that was impacted. So there, there are some things that I'm not going to go so far that accounting has no impact on the economy or what have you.

But in any event, there have been studies performed on whether CECL is procyclical or not, and I'm going to focus really on that issue there. Our position is really based on, at least my position is based on bank modeling, as that the banks have been showing us. If this is an expected loss standard, then what would they be expecting to lose during specific parts of the economic cycle in specific economic conditions.

So, here we have a pretty good sized regional banks initial modeling of what would have occurred from the end of 2006 through 2010. This is a pretty big exercise for almost all banks, not just to see that whether CECL is pro-cyclical or not, but just to understand better how detailed analysis, or their analysis needs to be, and how to explain quarter to quarter changes. Okay? So that's something that the banks are doing. So going from left to right are the allowance coverage ratios from December 31st, 2006 seven eight nine and 10. And just to let you know, the company this company excluded loan products and footprints that they're no longer participating in. And so it's pretty much would be reflective of what their current portfolios.

Now the red line there at the bottom shows they're incurred loss balances, which are pretty low. Right? From about 20 basis points in 2006 to 50 basis points in 2008 and then peaking in 2009 in 2010 to about 120 basis points. The green line there is what we refer to as perfect foresight. If you knew exactly what would have happened when you issued the loan, here's the loss you'd record under CECL. And so this is based on ultimate losses by vintage. Okay. And then the blue line there is CECL, but it's based on the then current forecasts of unemployment, and of housing prices per the forecast of a Federal Reserve and Moody's, and they're all pretty consistent with each other. But most all economic forecasting has been the late in calling the turn in the economy, at both when it goes into recession and in recovery. I think that's the main problem here that the banks are talking about.

So if you see that blue line, if you compare it to the red, right? You do see earlier loss recognition, but

it's something like only around 65 basis points there. It's not really enough to turn your heads. Then you see the CECL allowance building until 2009, and there where it spikes to almost 900 basis points. And so while there is a mild counter cyclical in the benign times, it does spike in the middle of a recession. And I think that's sort of consistent with what Hal was showing, and then continuing out further out, and that's the procyclical problem, and how that impacts bank capital, and ultimately how they're able to lend. Okay.

So why is this so high? Why is that like 900 base points? Well, because the economic forecasts in 2007 and 2008 still had, I mean both the indicators of unemployment and of housing prices, they're indicating relatively mild recessions until 2009, and then continuing that mild trend. But once the recession, which was severe, once that was called in 2009, then the continuing severe recession was forecast to continue for another couple of years. Now this modeling is really tricky, and remember that the banks in the DFAST and the CCAR levels had been told to model credit risk based on probability default, and loss given default. Okay. So and also remember that with individual collateralized assets, right? You really have pretty low losses. You foreclose off the property and most of the time you don't have very much loss, until you actually reached that kind of the underwater point, when the borrower, yeah, goes under water on her mortgage, right?

So there also is a similar point in portfolio modeling when those kind of expectations, really those loss expectations spike. So there are a couple of other studies on procyclicality that kind of use that perfect foresight in particular, to estimating loss when a mortgage defaults. So it might not be forecasting foresight of what the economic, things on how unemployment deals with your likelihood of default, but the problem here is, I think, is how it fits into the loss given default.

So the Moody's study, there was a Moody's study that actually did this, and I think that this caused a lot of their early recognition in their model. They assumed a 35% loss from day one. Okay, so that would have been like 2005, early 2006. When I look at kind of information back then, any bank assuming, probably wouldn't have done that until the 2008-ish timeframe. I think they would have probably been using more of a 20%, so you're bumping it up, and trying to catch up for all things going forward. So it's a lot of what goes on is kind of a catch up.

And so then in any event, how we figure out what this loss given default and how we feel that will be in practice, I think is a big thing that we're going to have to work through, in regards to, like whether it's, there's a separate study or whether there's a really intimate discussions with auditors and the regulators. So remember that this isn't just the recognition of the recession that comes late, but it's also the continuing trend. Okay? So once you've called it, and that's why 2009 looks bad, because unemployment, housing, these, they started tanking, and then their being forecast to continue to deteriorate. And so those kinds of things really affect the loss given default.

Now we had somebody in from the agencies tell us, "Okay, well CECL allows you to a one year forecast, and then you, which is called a reasonable and supportable period, and then just do that. Just use one year, and then revert to the mean after that." And that would. That would flatten out the impacts. You know, how do you get that number so it's a little more manageable? So that's one thing that could be. One of the studies by the Fed actually does this and uses that. The Moody's study also recommended a



use of probability weighting of alternative scenarios, and that in itself, especially during a benign time would increase and do some more loss recognition, make that a little bit flatter. And those two things are allowable in a CECL.

In fact, I don't know of any bank that's not going to do some level of trying to get this reasonable and supportable period limited in some way. I'm hearing that the actual lengths are varying by company. I'm also observing that auditors and regulators are pushing back on the use of anything less than maybe a two year, but there are companies out there that are still standing, and by something at one year, but that certainly seems to be the exception. Okay? So I'm doubtful that there'd be many banks that would have a 900 basis point reserve at any point. But I still have concerns on those practices, which is basically truncation exercise. First, I think there are regulatory model risk or model validation issues that need to be addressed, and maybe a formally changed, quite honestly, in regards to that. Yeah. I think when all of a sudden done, is this a reasonable expectation? Would it be a reasonable expectation of losses during a time of stress, to not use the forecast that economists are making at that point.

There's also the issue of the auditing industry, as new auditing standards that are intended to mitigate management bias, which is really another word for earnings management. Okay. This is going to be a... So this turns in, it will be a cumbersome effort to assign, for example, specific probabilities and waiting's and such, much less making much changes of adjustments to forecast that professional economists up with, so. And making sure that that's all without bias. So that's a struggle. I think that's something that we need to know more about, regards to the auditing industry. Remember this is an auditing standard that's actually going into effect January one, aligning with the CECL.

So, and the sensitivity of the different assumptions, can have very large impacts, of whether we get up to our 900 or back down toward 300 or 400 or what have you there, so. And to show that is without bias that will be certainly a challenge. And we quite honestly, from my perspective, any intended flattening of results is considered earnings management, right? I think that's how it's been interpreted over the past dozen or 20 years. So earnings management was a very big issue in the banking industry back around 2000, 2005-ish or so.

So one thing I did want to also address on this slide, is that fortunately for the modeling, the financial crisis had no real double dips. So if there becomes a double dip, I think depending on the dip, I think you could see a whipsaw line of allowance levels. And that would not be a fun thing from a capital management perspective.

So anyway, that's one bank. That's residential mortgage, so, anyway banks don't normally specialize solely in residential mortgage, so this next slide just shows what another bank is showing to their board, okay. Like many smaller banks, this one concentrates on commercial lending, with some consumer lending, okay. So residential mortgage being really a consumer product.

They were lending, okay, so residential mortgage being really a consumer product. They're showing their board that over an entire cycle, they said they're going here with a recession and then benign periods after that. They're showing over the entire cycle, what their total allowance levels should look like, given their total portfolio mix. The red line is how their incurred loss allowances have acted over an



economic cycle and the blue line shows how it thinks they will act under CECL.

As you might have read in various press accounts, commercial loan credit loss allowances can often be lower than in benign economic [inaudible 00:30:48] than they are under the incurred. You can see that as the CECL blue is lower than the red there. But it does go higher there. There will be a still more pro cyclical on there. But this does show that product mix does matter. We're not going back to that, but we're getting a little milder based on the whole portfolio mix.

Speaking of product mix in May, we asked a number of banks, ah, there we go, to provide the estimates they were giving to their boards back then, based on product and that's what this shows. It's shown by their call report designation, so you have single family residential mortgages at the top. We have none owner occupied commercial real estate next, followed by commercial and industrial credit card, that's a CC, and then audit loans. Then across the top you see that the industry is currently reserving first their 70 basis points on family, and this is all as of May. Then you have these bank responses under both a benign period, probably much like we're in now and under a stress period. These banks actually collectively hold about 10% of the loans in the industry.

The numbers that we show there, not as true range, but the means and the medians, because the ranges actually were quite wide in each product. Now we have a whole bunch of qualifiers on these numbers and we're not going to draw many conclusions on it but what they do show is what banks expect, or at least they're telling their boards, this is what they're telling their boards, to expect the allowance levels to spike during a recession.

They expect allowances to be more volatile, which is more procyclical. Now, as you can see, the levels can vary greatly between and consumer lines. Residential, mortgage, credit card and auto, they seem to have the more volatility there from between benign and stress periods. That's why I think Congress is now having a lot of concern. What does it do? There's a consumer group out there. What is this going to do to consumer lending?

We'd sometimes like to say, okay, well based in a stress time or whatever, but well it could impact over the whole economic cycle, what does that do? As CECL is really about credit risk, I think it just naturally will have reflected in product by product changes and that could affect the pricing of these different products. Now it doesn't change the economics, it does change the timing, which is a big thing when you're dealing with credit, when you're dealing with a specifically made capital standards. Timing is a big thing when you're recognizing income in the meantime. Those are the things that really have the background where banks are looking and why I think or some of the reasons why Congress and others are getting interested.

Since minimizing or at least reducing pro cyclical was one of the primary reasons why this got on FASB docket in the first place, as well as the International Accounting Standards Board. This seems to be pretty much the opposite of what at least I think the intended result would be, at least when it came out to reduce pro cyclical. I have a lot of other things to say and talk and we can get into it, but that's kind of what the banks are looking at. Thanks.

Joshua Ronen:

Thanks Michael. So I guess it's my turn. Let's see.

The recorder. So this is it. I'm going to address ... what's going on? Okay, so I'm going to address a very specific point, but I believe it's very important. Can you hear me out there?

Speaker 4:

No.

Joshua Ronen:

Nope. You can't hear me? Okay. But I believe it's very important even though it looks like a very specific point, a technical point, but it goes to the very issue of how conceptually you're going to look at expected losses and how you measure those losses.

I'm going to address myself specifically to loss on origination. What I'm going to do is first to tell you what the standard says when you use the discounted cashflow method. Now while you do not have to use a discounted cash flow method under CECL.

Speaker 4:

Can you use the microphone? It's hard to hear you. Can you use the microphone?

Joshua Ronen:

I need the microphone. Okay. All right. Is this better?

Speaker 5:

Much better.

Joshua Ronen:

All right. This kind of cash flow is not a mandatory method to use, but nonetheless, conceptually it is made to be consistent with all other ways of estimating the loss under the loan loss ratio and the rolling rate and everything. Basically, the methods of estimation are all consistent with the discounted cash flow method, at least in concept.

What do you have to do? You have to expect your losses and then you have to discount your expected cash collections using the contractual rate, which is the rate that the lender actually charges on the loan extended, or if you went the weighted average rate on a portfolio. This is a definition of the effective interest rate under this standard.

What I want to do is to basically say that the standard is ignoring the fact that rational lenders who do not want to incur losses on extending loans, they will charge such interest rates or other loan terms that would make them whole, otherwise you would not be rational in, in fact, expecting a loan or extending a loan where you expect a loss. Unless you sometimes may want to extend a loan with a loss in order to maintain business relationships with the client that otherwise compensate you for that loss. This is

essentially what I'm going to show, and in order to do that, I'm going to use a very simple example that's easy to understand.

Suppose you extended the loan, it doesn't matter that this is one loan as opposed to a portfolio. You can always aggregate loans into a portfolio and apply the same kind of logic. Suppose you extended the loan of \$1,000 with a three year maturity, with a face value of \$1,000 and annual interest payments. So the hurdle rate, what is the hurdle rate? This is a rate that you would normally charge if you expect zero losses. That could be, if you wish, the risk-free interest, plus whatever expenses that bank is incurring, plus the entrepreneurial profit that the bank has to generate.

Basically it's the cost of capital, but let's say that if you extended a loan with zero expected losses, you would charge a particular hurdle rate. I'm assuming in this case, the hurdle rate is 10%. Now let's say that you're expecting non collection of \$100 on maturity. \$100 out of the \$1,000 principle is expected not to be collected, but you expect to collect all interest payments.

In order to cover yourself, so you'd have zero loss, you're going to charge 13.0213%. When you charge 13%, you'd be essentially be made whole. If you discount the expected cash collections at the 10% hurdle rate, you get a present value of 1000, which is equal to the amount of loan you extended and there would be zero loss.

The present value, however, now the standard requires that your discount at the contractual rate of 13%. If you do that, you'd get a present value of \$930.73, which would generate a credit loss of \$69 or approximately 7% of the face value of the loan where the economic loss is strictly zero. Now this is not only a question of matching revenue over expenses over time because unless you have the very unlikely scenario of a steady state where you basically replace every loan at a very steady rate over time, unless you do that, your accounting losses that would be upset against your capital will continue to grow over time. It's not an issue of matching.

Now, curiously enough, suppose since you have to use a contractual rate as a discount rate in this very simplistic example that I showed you, if you want to charge such a rate as to show zero accounting loss consistent with zero economic loss, you would have to charge 4694% interest rate to avoid showing accounting losses. Of course in that scenario you would have a very, very huge economic profit, which is not feasible if you're competitive. Of course.

Okay, so irrational lenders who do extend loans that are losses or lenders who extend a loan purposefully with the loss because of maintaining other business relationships or other business transactions. In that case, if you actually do generate an economic loss, then the present value of this case of loan at 10% of cash collections would be \$924, generating \$75 accounting loss. Now that \$75 accounting loss is also equivalent to the economic loss and it's the proper loss to should be shown. But you'd only be showing that proper accounting loss, which equals economic loss when you do not use a contractual rate, but you use the hurdle rate.

So to conclude, CECL penalizes rational lenders who cover themselves against credit losses by requiring a discount rate to be the contractual rate. CECL create accounting losses on origination when there is no

economic loss. I would not call this to be transparent accounting, I would believe its opacity. Third, loan growth will increase recorded credit loss over time. Four, this will adversely affect capital, hence reducing lending, especially to poor or higher credit risk borrowers because the contractual rate on those borrowings is apt to be higher. The cure is to change the estimation methods, such that only economic losses are reflected as accounting losses upon origination. This can be done by using the hurdle rate. When lenders do not adjust for expected losses require them then to use the hurdle rate will give rise to accounting losses that equal the economic losses, inducing those bankers to become more prudent. If GAAP is not amended, I suggest that the regulators should require the change into a hurdle rate instead of contractual rate. Thank you. All right, Maria.

Maria:

Hello, I plan to focus today on CECL's impact from a credit analysis perspective. First of all, let me see how this works, first of all, just a summary of what you have heard before from previous speakers is basically how do we expect CECL to impact the bank's financial statements?

We do expect to see earlier reserve recognition because expected lifetime credit losses are now recorded at origination. It's even earlier than in the IFRS 9 model that only requires 12 months of losses at origination. We do believe that earlier reserve recognition is good for bondholders and creditors, although we do acknowledge that it is a mismatch in the income statement because you end up recording your expected losses, while the interest spread that the bank is charging to cover those expected losses will come in later over the life of the loan.

We also expect higher volatility in reserves, which would impact PNL and capital, especially from the requirement to consider reasonable and supportable forecast. We have seen higher volatility in IFRS 9 reporters after adoption, but it wasn't really significant when compared to volatility from market factors, so we'll have to see under [US Gov 00:15:03].

Most of all we are concerned about reduced comparability, which will come both from the reasonable and supportable forecast because banks will likely have different views about the future of macroeconomic assumptions and also from the significant optionality in the standard. It is very true that currently under US Gov there is a variety of reserving practices and some banks are more aggressive and other banks are more conservative in how they establish their reserves and this is something we consider right now, but there is significant much more judgment in the new standard.

Not only the methodology, but a lot of the assumptions in the model. How many macroeconomic scenarios do you look at? Do you consider only one or do you look at more, like you're required to do under IFRS 9? How do you reverse to historical losses? How do you make your life estimate? Especially in the case of credit card portfolios. There were long discussions over how do you apply the payments and that whatever the bank decides to do would have a significant impact on the life of a credit card portfolio. Therefore, a significant impact on the reserves and it's not necessarily, doesn't have the support of the economics behind it.

We do hope that disclosure will help and we do like the new disclosures in the standard. The results we have seen under IFRS 9 are not very encouraging. We did a review of Asian banks recently and we had

the report on that published in August. Except for some large banks that are based in Hong Kong, most other banks really fell short of the disclosure required objective in the standard. They did comply with the check listed items in IFRS 9 but they didn't really comply with the disclosure objective, the principles based objective. As a lesson learned, the more standardized and clear disclosures are and less principle-based, we think the more useful they would be in helping with peer analysis.

Moving on, so how is CECL really impacting our rating process? Modis has one banking methodology that is applied globally and it helps us assess risk across a variety of accounting frameworks. This slide basically pictures the financial profile component of that methodology. You can see here that Modis views, a bank's financial strength is really determined by solvency and by its liquidity.

This whole financial profile is where CECL has an impact because each of these factors has a historical ratio at its basis, which is based on the historical financial statement. Then Moody's methodology has a score card, which is basically a mapping that tells you if your historical ratio is this much, then your score is A1 or AB1 or BB1.

That's the initial score. Then the analyst applies judgment and moves that to the final assigned score. Here, so you have a bank's financial strength is really depending on solvency and liquidity. Solvency has a higher weight in the whole financial profile and solvency is itself determined by asset risk, relative to loss absorbers or risk mitigates, how we call them, which is basically capital and profitability. The asset risk is also impacted by reserve, which is also considered the loss observer under our methodology, so both reserves and capital are absorbing losses. Therefore, because of CECL you have an increase in reserves that is funded by a decrease in equity, technically you have a neutral impact because the overall loss absorption capacity of a bank hasn't changed. This is high level, the methodology and the impact.

Moving on to questions, we get a lot these days from both investors and banks, "Are you going to change your rating methodology as a result of CECL adoption?" And the answer is no. We do not expect a change in our rating methodology. Historically, accounting changes have not resulted in changes in methodology because we do not generally expect accounting to drive business decisions, and maybe CECL will be an exception. I think people are still talking about that.

We did a survey of our rated banks at the beginning of the year and 86% of respondents at that time did not expect a change in their business model or asset mix, solely as a result of CECL adoption. More of them, about half of them really expected that they could have a change in pricing. Of course, it was early time yet, so we'll have to monitor that closely, subsequent to implementation and see if it brings any change in business model.

We expect the capital scoring ratios to change because those are based on accounting equity and we don't actually consider the regulatory phasing in adjustment, so the ratio itself and the initial score will be significantly impacted on day one. However, we do not really expect the change in the score card, which is the mapping of the historical ratio to the initial score. But again, those are global metrics and we shouldn't really change them as a result of a change in accounting in just one region or country. We had IFRS 9, a similar change, recently in 2018 and we didn't change the scorecards and we didn't really

have significant impact on metrics. The reason being that the accounting is really just the beginning of the analysis and there is a lot of adjustments that the analysts will make to include risks that are not included in the historical accounting ratios and they're trying to get as close as possible to economic substance.

Following up on that idea, because the underlying economics do not really change, we think, as a result of CECL adoption, we do not generally expect rating to change. Ratings themselves are a relative measure and all banks will be impacted by this change, so all equity will go down. Of course there will probably be outliers that we will have to analyze and understand why their impact is larger than for others in their peers, and determine whether that difference is changing our view of their long term capital position.

We will also try to understand if they have any action plans regarding raising capital in the future and generally we'll need to understand why they're an outlier. There are probably two possibilities. One is that CECL is really bringing in the reserves risks that we consider analytically outsided, like we always consider the forecasts and we always trust their historical losses based on what we expected to happen to the economy in the future. Also, a high growth portfolio or a higher risk portfolio always had some adjustment on top of the historical ratio because we can see there those risk and basically downgraded it, the score.

Those would now be reflected directly in the historical ratios and you will no longer need to do those analytical adjustments. So because of that it will just move from one bucket to another and shouldn't really impact the ratings. In rare cases it is not excluded that sometimes CECL might give us information that about risks that we were not aware of, about specific companies. In which case we will have to determine if it has a significant impact potentially on the credit analysis, there will be a rating committee convene where all the analysts will discuss to figure out if there is any impact on the rating. This is about it.

Nate Royal:

So, a guy you've heard of, guy you've heard of, guy you heard of, organization you've heard of. This guy, guy you've heard of. I'll be your interlude into the organization you've never heard of with the suspiciously young looking guy who looks like he grew a beard to be old enough to be up here, sort of situation. That is me.

I am Nate Royal. I work for a Global Credit Data. I have to stump a moment so you actually know who I am. So we are a not for profit, originally started in another lens about 15, 16 years ago and are now making headway into the United States. Speaking to our modesty are looking at the entirety of the North American branch of Global Credit Data, all function through myself.

We don't do any marketing. We have a website if you can find it. I've left my card conveniently on the table if you're actually curious enough to look. What we do is we collect data from banks, anonymize it and let the banks who gave us the data look at. We do loss given default and we do probability default.

This has proven to be quite useful to banks over the years and sort of through word of mouth and

through the occasional conference we have, we have ones in New York City. We had one last month at JP Morgan Chase. We have one in Toronto, Vienna, South Africa, Australia and we will start having one in China and the Nordic countries if they can decide who's going to host. So we're growing quite rapidly. We have this vast reservoir of default data and probability of default data. We function as anonymizers and ears for the banking community, a safe space for bankers to come and discuss the problems and look for solutions in our dataset.

Why am I here? Well, occasionally beyond the reach of this warehousing of a valuable source of data, we are asked by our banks who, they have a subscription service to be with us and that is how we create our modest operating costs. They ask us to do stuff or organize things on account of some fears they're having. CECL happens to be one of those fears. This happened about three or four months ago. We ran a CECL benchmarking study with a number of our member banks in the United States. We also do an IFRS 9 as well in Europe.

Essentially what it was is we said we created a synthetic portfolio based off the data that we have. So it was rather close to what reality should represent and we asked for banks who are willing to contribute to this [inaudible 00:56:13], those who were worried and there was about 11 in the first run, there'll be five in the second, which is going on right now. We're going to do one post CECL returns as well to have banks allow them to compare results.

They took a synthetic portfolio, they ran their models on the synthetic portfolio and then we did a blind comparison of everyone's results. All the major banks in United States in New York and some of the regional ones submitted, ran their model methodology for CECL on this synthetic portfolio and they came back with returns for each different segment. There was a lot of discussion, things worth talking about. Just, sorry, just to be more specific. This wasn't just merely a, hey look at this. We don't almost ever partner with consultants, but in this case we had a consultant from Accenture who we knew quite well and had worked with us before who was able to put together the fancy graphics and well-meaning charts that the banks needed to see to understand what they were seeing in return. This is just sort of an example of what you see.

We got the returns back, we cut up the data in all the different various ways that banks were interested in. Senior unsecured, unsecured by different profiles, business banking, and middle market. We even looked at credit cards and all the different ways that CECL could affect each bank. Then we gave them box plot charts and the box plot chart showed the orange is what the example bank in this case actually how they fared in comparison to the other banks that participated in this study.

If you were the orange bank in this case and you had Senior Unsecured A's, you'll see that after the average lifetime expected credit loss, by the fifth year, you're at the bottom of the bracket. Are you doing something strangely different from the rest of your peers? Are you way out of line with your predictions or do you feel very comfortable that you've come in with such low average lifetime ECL that you think you're doing it better than everyone else? That's all we did. We didn't say, "You did a good job, bank A and you did good job, bank B." We just said, "Here's who participated and here's how you fared in comparison with each other."



I suppose this is useful to hear from outside the banks and so I was asked here to speak on behalf of GCD and GCD member banks to what the general thoughts were. Now there are lot of words behind this, a lot of discussion behind closed doors. Of course, I represent what banks are saying. Of course, I'm not going to say anything about any particular bank. I'm not going to say anything that banks don't want me to share with you. However, there is a general consensus of views about how this goes. There was a lot of variability in these results in many different ways. The variance of the outputs of each model were large. We spoke actually at an IF meeting and displayed this in a little more detail and if you have any questions about this detail, you can get in contact with me, I'll see what I can share and we can talk further.

But the general reactions were so what and oh no. I mean, what did you expect? Some banks, they said these are our models. They're darn good models. We're going to nail CECL. We've done a great job and we're bank. We're going to continue to do a great job. And that was not without, I mean we are a neutral party. We are. There's no reason for them to come on strong to me and say that. We are a remora on the back of a shark. We have no function other than to observe.

Some banks think they really have the handle on it. In general, I would say they're the larger banks. Then there are some banks that said, "Oh no, we are way off. We don't look like anybody else. There's a disaster, and we need to worry more about this." I won't say, there's no general consensus about what those banks are, but you have to understand a lot of this has to do with the bank's internal bandwidth. The ones that said, "Oh no," to me were no surprise. CECL has stressed bank's capabilities to deal with it in some manners, right? Modeling departments are so big, there's only so much people to actually handle this stuff. And I'm blind when I talk about my job, but you have to understand there's a lot of people working long nights, overtime to to manage the expectations of their managers, their banks, the predictions of the US economy and the regulatory bodies. And you can see who are stressed and you can see who are not and you have to sympathize with them. It's a heroic work in some instances for banks to be able to run this stuff and do it in a timely and accurate fashion.

And the overall effect that CECL will have on bottom lines. There is not a big consensus about this. There's a lot of grumbling, there's a lot of grumbling, there's also a lot of confidence. But in terms of how this is actually going to affect everybody, when we sit down and talk with these guys post study, very quickly the conversation turns to, okay, what's the future here? Okay, we've done this now, we're done. January is coming up. We're going to submit these things.

But what is the result going to be when we get the returns back? How is this actually going to affect us? Everyone has now accepted the variability. They trust what they've given to us and they trust the results. But now the question is now what's to worry about. It's there, it's going to happen, but what's going to happen after this? What's going to happen once this is realized by the greater world and the regulatory bodies and such and such and so on and so forth?

And the modelers are the people I deal with most. I'm former modeler and lot of these people that did this were people that did CCAR. CCAR was more prescriptive than CECL. Modelers feel that they've put their necks out more. Right. CECL was multiple choice... Or sorry, CCAR was multiple choice, CECL's long answer. Right? You have to use your experience more. You have to use your judgment more. Managers

have to be more thoughtful about their feedback in some ways to these modelers who are trying to accomplish this. And then provide the, the models to their management.

And a lot of questions from the model is around the parameters they're using in their own models. If you tell banks to model this, this, this and this, they'll model this, this, this and this and submit something to you. But if you give them some choice, we're going to include re gionality and our CECL estimates. We're going to include some variables that we know other banks aren't putting in their estimations. You know, they get nervous. This is something that the bank management has decided on its own to do and they think it's the right thing to do, but the modelers may not be accustomed to doing this sort of user judge, best judgment sort of practice.

And as I said, the outlook post CECL return future, examining its banks methodology is probably going to be what I'm going to hear about next in the following months. Okay. Who did it "better"? Better in quotes because of course, what's that? How do you compare? I mean the one thing our study showed is how do you really compare each other to each other? The variability is huge. There has to be some explanation. But when you think about it and think about it and think about it and you can't really nail down why bank A and bank B and bank C seem to go one way and bank D, E and F one another.

So it's confusing. You knew that. This is confirmation that banks are a little bit confused but they know there's variability. They get it, they know it. It's just how they're going to respond to what the regulatory bodies say about their models and how they plan on managing their expectations in the future. So that's what I hear. That's where I am. That's who we are. Thank you for listening.

Speaker 6:

I would say good afternoon, but I think we're now in evening. So good evening everyone. I'm going to do something a little bit different. I have no slides so you can rest your eyes. You can close your eyes, you can fall asleep. I'll try to talk above the snoring. Okay. As Joshua mentioned, I am the Associate Director of Capital Markets at the FDIC. I'm also the Chair of the Basel committee's task force on expected credit loss provisioning. So I have had the opportunity to be in from the ground floor from day one on the implementation of both IFRS nine in Europe and CECL here in the US. So what I want to talk about today is my own point of view. I am not speaking on behalf of the government, the FDIC, the Basel committee, my wife or anyone else. These are just my points of view, my thoughts.

I've had an opportunity to have a lot of long, drawn out, sometimes quite in depth discussions with banks around the world and a lot of the US banks. And I want to share some of the reflections, some of what I've found that I've heard in these conversations. You know, when we talk about CECL, there are really three elements that we have to consider as part of the application at CECL. Okay.

There were structural constraints. Hal's done a good job of creating nice structural constraints and in the FASB Standards implementing CECL. By the way, Hal, thank you for letting my small banks off for a while. I do want to thank you for that.

So, banks have structural constraints that they have to worry about on the application of CECL. There's also behavioral aspects. I think a lot of what we are talking about today and a lot of the concerns that

we're looking at are actually behavioral in nature more so than structural. For example, a lot of the conversation that we hear is, will my economist actually allow me to say things are getting better? Will my stakeholders, will they allow me to say things are getting better?

And by the way, if I say things are getting better, they're in the peak of the crisis and I'm wrong, will I be out of a job? Will the regulators allow a bank to say things are getting better? These are behavioral issues that we have to address sooner rather than later. These are expectations that need to be tamed early in the process. Not during the height of any crisis. Hopefully there'll never be another crisis, but there will be economic downturn. Cycles are important for the economy. We will go through cycles, so we need to be sure that we tame these behavioral aspects now. And as Nate pointed out and Michael pointed out, the third consideration that we have to think about are the exposure factors. Each bank has a different portfolio, a different set of exposures.

One thing that we have seen is that CECL, IFRS nine, any of the expected credit loss provisions will have a different impact depending upon the type of exposure that you have. Short dated exposures tend to fare better, mainly because they're off the books before it hits the fan. Long dated exposures you have more of a time constraint to look at before anything that actually implements.

So these are, these are the three things that, that we've taken a look at that we've kind of placed in the international regime. We've had a lot of studies, a lot of discussions with institutions and I would say that when we started out the conversations, the fervor with the institutions were here, it's kind of mitigated. It's come down, it's ratcheted down.

Today most of the comments that concerns that I hear about are really from the "Oh no banks" that Nate was talking about. Those institutions that realize, hey, we still have a lot of modeling. And also from smaller institutions who really... this is a new step for them. They've never been this far into this type of economic predictions. What type of expectations will be required at smaller institutions? One of the things that the regulators across the board, domestically and internationally, said is "look, we realize there's going to be a tiered approach. We want to see the application of the CECL model, we want to see the application of the IFRS9 model.

Going into the last financial crisis. I can tell you that as a positive statement, there were not enough provisions to absorb the losses that the institutions had born. In fact, it rose to a level of unprecedented government support across the board. When we sit back and we look at exactly how much loss had built up into the system, it's just staggering. It's taken a long time for us to get out of this. Some folks might argue we're still not out of the woods yet. So my personal point of view, I look forward to the application of CECL, but I look forward to the application of CECL in the understanding that we need to realize that there were these three areas of consideration that that needs to be taken fully aboard by everyone. And when I mean every one I'm talking about not just, not just the FASB, not just the regulators.

We had a discussion a little bit earlier today about variability. We just had another presentation on variability. While bank A, B and C they came off looking at losses this way, banks D and F looked at losses

this way. We got this variability. Well thank goodness, because if banks looked at losses this way, I wouldn't have got my loan from the banks that looked at it this way. Okay. So we have to realize that we will have this healthy amount of variability is going to be shown.

A lot of the credit distinction that we currently see when we go into examine institutions, when we go and dig deeper into the financial reporting of institutions will be more transparently shown in CECL. That might be scary. Okay. That might be scary to some. But it is, I think, a positive thing.

So when we look at that and we say, well what can we do? What can we do from the regulatory perspective? I think one of the things that we are looking at, it's not really the level of provisioning on day one. The information that we've got, what we hear from earnings reports. Yeah. We're seeing institutions with 30, 40, 50, 60, 70 percent increase in provisions, but remember 60, 70, 80 percent increase of a very low number still winds up with a very low number. Okay. So we're not panicked with those numbers yet.

But we are looking and we need to focus as a regulatory body on the rest of the wrapper. So much of what we do from a regulatory point of view is based on the accounting numbers that get presented. That is the one thing that we've looked at internationally and that we recognize as a potential friction point in the application of these provisions. For example, stress testing. We also have to have to look CCAR, the stress testing provisions that we have. Even things such as the limits that we place on concentrations, other types of limits. What we are looking at different losses. We have to understand that we now will have a different measure of loss that is embedded or expected into the accounting numbers and we have to make sure that we take that change fully on board and consideration across the entire regulatory frame. We cannot allow or permit a double counting. We do not want to hit an institution twice, once on the accounting side and then again by a regulatory wrapper, many of which replace. Because we did not trust the incurred loss model. Incurred losses gone.

So I will quote Shakespeare. What was it? I'm doing this for you Hal, this was the life of Julius Caesar's friends. Roman countrymen, lend me your ears. I came here to bury incurred loss, not too praise it. Okay, that's for you Hal.

But nonetheless, we have to realize that we're moving into a different broad, into a brave new world and as regulators, the one thing that we are committed both domestically and abroad is to watch the implementation. We are doing a significant amount of ongoing analysis, ongoing looking into particular institutions, looking into particular portfolios, trying to understand as CECL unfolds, what implications it will have. Okay.

We hear concerns about changes in business models, about changes in the way that exposures may be maybe underwritten. We know that one thing that we hear about concern, and I hear about this more so than other exposures, is concerns about mortgages. What will the implication of CECL be on 30 year mortgages? So these are a lot of things that we are in the process of analyzing. We don't have answers on it, but we are watching.

And then finally I think I would be remiss as a capital markets person, not to go back around and to say

that the impact on regulatory capital is also something that is front and center. Okay. We've looked at, we've looked across holistically through our framework, we apply an international framework that's based upon the Basel standards. We apply that for large institution and at the Basel level we've had several discussion papers that we've had outstanding trying to determine whether or not there are areas in which the new CECL and IFRS 9 provisions wind up double counting against our regulatory frame. Right now, we don't believe that there really is a significant amount of double counting in the capital frame. We're not that concerned about the capital framework. As it stands today.

We are more concerned about the way that the behavioral aspects CECL will be implemented during a downturn. That concerns us more than anything that we have looking at today. And so I want to end to say we need to be vigilant. I sound to some extent a little bit cavalier, but I don't mean to be, we have to be vigilant. We have to monitor the application of CECL as it moves forwards. We need to look at the effects that it have on the safety and soundness of individual institutions as well as the financial system. We have to look at the way CECL changes, product offerings in institutions. We have to look at the way CECL changes pricing of different products. And we also need to look to see what the impact of CECL will be long term for business models. So thank you very much. Thanks for listening. And now we'll get back to the PowerPoints.

Cindy Vojtech:

Good evening. I'm Cindy Vojtech and I'm at the... There we go. Nope. There we go. Federal Reserve Board. I am within the division of financial stability so I'm not within the regulatory arm of the board. And this paper that I'm going to really focus my comments on is coauthored by actually all board people. And so to underline the disclaimer, what I'm going to be talking about is not staff policy and nothing to do with the board and their views but are the author's views alone. So when we looked at CECL originally, we want to think through what we thought would be a wonderful benchmark portfolio to look at. And so we focused entirely on mortgages for this paper. Why mortgages? Well, since CECL was about the contractual life, we thought this would be very interesting because this is going to be the long lived asset.

And the other nice thing about mortgages is that there's well understood lost behavior. And we wanted to understand how AB procyclicality. We also want to... So the timing is how we're looking at that. Of losses. And we were also interested in how just small changes in your belief system or your modeling assumptions would really change how things flow through your books. And so that's what we were talking about, the compatibility. So we're just going to look at one small change, specifically how you're going to be modeling the house price index. Because that's obviously an important input in your modeling of losses for mortgages. And so that's how we implemented our paper.

So it's kind of been discussed, but what was one of the motivations of the FASB change was this losses came too little too late. And so, still from a regulatory point of view, we of course care about capital within the banks. And so we had a lot of depletion of capital right at the heart of the crisis coming from provisioning for loan losses. So to the extent that that could happen earlier from a regulatory point of view, that would be great. And so that was one of the motivations for the change. And so this picture just showing this, the depletions of capital with provisioning's in the dashed black line happening right during the recession, really.

Okay. So, what are we going to do? We are going to again look specifically at mortgages and we're going to look at the timing. And so as we change our forecast assumptions, how is that going to change our loss assumption or modeling or forecast? So we're going to have four basic premises. We have an ideal. So this is assuming you had perfect forecast of the house price index, which is of course pretty ludicrous, but we wanted some kind of benchmark. So that's one forecast method. Another one would be an optimistic forecast. So, I guess people believe that house prices never declined. And so if you use that to forecast house prices, that would be our second one. We also had an auto regressive forecast. So of course an AR process, auto regressive process, is horrible at predicting inflections. And so that we thought was an important forecasting method to look at. And then we had a hybrid. So if you just had at least some decent forecasting ability, so six months as a backup, I think it's probably my next slide, we're going to use the reasonable supportable forecast horizon of two years primarily for our study. So we're going to do that for two years and then you're going to revert to a three to cycle kind of projection.

So in this hybrid model we're going to say, let's just assume that you have six months of really good forecasting ability and then after that you're just going to assume a flat growth. And then of course for CECL and for companies that have to do this thing quarterly for the financial statements, they're going to be updating their models more than what we look at here for that. We also kind of look at a different frequency of two years, a year or six months or three months. We did this primarily to allow us to see if your forecast method is really off the mark, you know how bad things get. That's another way to kind of frame it. Not that we believe the banks are supposed to be updating these more than every two years. But how a things... you'll see the biggest volatility, the biggest jumps when your forecast is really off. Right.

Okay. So the data we're using, again we're going to be looking at just simple 30 year loans. We're going to look historically, so we're going to look at the California market. That's our primary focus. We did a couple of other states but just as a nice situation where there was obviously a big change in house prices. And again, so you already kind of covered, our reasonable supportable forecast would be two years and then we're going to revert to long run house price index. And we use this a pretty simple implementation model. And so the key thing is that we're going to use this exact same model across these predictions. And so the only thing that we're changing is house price index input. And so there's no model risk per se. We're just going to be able to compare about how does this change in your forecast method, change your results. And so that's going to be the driver of the results.

So the first thing, as I said, we'll do is this kind of perfect foresight. And so, is it the case that you'll at least get recognition of losses earlier. One would assume that or hope that this was the case and that this is exactly what we see. And so the green hump shape is the actual house price index. And so it obviously peaked and declined going into the crisis. The blue is a CECL with perfect foresight. And then the dashed line is what we have under the occurred losses. So as one would hope, if you had perfect foresight, again, not quite reasonable in the practice, but you at least do get... You're accounting for loan losses earlier.

And so when we're thinking about timing, we were particularly focused on kind of the peak of the, the reserve account. And so obviously the peak of the blue line is before what we haven't occurred. Okay?

But of course, forecasts aren't perfect. So what happens if we vary this assumption, this might be a little small for this room, but now we're going to use this optimistic forecast and these four charts again show this different frequency of updating two years, one year, six months, or three, three months.

And so the three month chart in the bottom right there. And so now you want to really compare the blue. This is again the perfect forecast. And the optimistic forecast now in red, not too surprisingly, you're going to get a much delayed reaction to provisions if you have an optimistic forecast because you're going to continually underestimate your ultimate losses. I'll kind of go through these fast so we can go to the kind of the punchline.

Then we could do the auto aggressive forecast, which again an auto aggressive process will, by creation, not be good at projecting inflection points. And so this would be perhaps a nice model to look at. Again, the peak of the red line is going to be to the right of the perfect foresight but a little earlier than the optimistic forecast that we had in the last slide, but we'll see a direct comparison in a few slides.

And then finally the limited forecast. And so now with the limited for foresight of six months, we actually get a prediction. Again, focus more on the bottom right chart. You have a peak of the red line that's happening reasonably closer to the perfect foresight. And obviously to the left of some of the earlier charts. And so as a comparison now on the one slide, since maybe your picture memory was not spot on, you can kind of compare these. So obviously the perfect foresight is going to be before everything else, but you have the incurred loss, now in black dashed, generally happening to the right of all these other forecasts. Again, looking more at the peak of these losses.

So what were some of the goals of our paper, we were curious about the timing. So we do see with at least a reasonable accurate forecast even under a short period of six months you do get a recognition of loss much earlier and they peak much earlier than they did on the occurred loss. So that was one of the findings. But the other thing you see is, and we've talked about variability several times today, you see what just a small change in your model assumption, you were using to change your forecast on house price index, which is only one input of a whole host of inputs, as some of the other speakers have focused on, you get very different results. And so this can call to question some of the comparability issues that we might have as these banks are announcing their results.

I guess as another final tweak to the robustness that we looked at, is recall that the main focus of our paper was using this two year forecast window. And obviously if you change that forecast window, you can get very different results. So here it's kind of small, but we have three years in the top left, two years, one year, bottom left, and then six months. Again to the point of, if your forecast is bad, you're going to carry that for even a longer period of time, that's when you're going to get some of these big swings or variability in your projections. And that's been touched on by several speakers this evening. And our data and our analysis essentially is another kind of demonstration of how that can happen.

So some of the big pictures, again reiterating some of the points this evening, the risk managers and modelers have a whole host of things that they're trying to think about when they're trying to make these projections, build their models and update that. And so if you have an accurate forecast of course inputting that forecast and your results will not help the situation, will muddy the waters if you will. So



that's something that needs to be obviously clear and perhaps reinforced. I think some banks are even thinking about doing like five year forecasts. And that just, to my mind, seems really, really peculiar. If for one hand, you that your forecasts aren't that good and the other hand you're still willing to do a five year forecast. And I've seen some of these discussions, and to me as an economist, that just is kind of mind blowing. But I guess one of the good news that we had from our research is if you do have a fairly reasonable and accurate forecast, even on a shorter term, it does help with some of this procyclicality. It does allow you to recognize these losses earlier. And of course as a fed economist, they have a lot of caveats. Again, we only focused on mortgages.

When we started this, we thought that was going to be very interesting because these are long-lived assets. But from what I've heard from other discussions is including tonight, perhaps C&I lending is a little more interesting on some of the variability and the issues that we're talking about.

The other thing that I point out about the mortgage model that we use for these projections, the model was built through the financial crisis. So in one sense, the model understood and knew about the financial crisis, which is again challenging. And so I definitely want to highlight that and I think that I'll end there. Thank you very much.

Jason:

So, thank you very much for having me here today. Again, my name is Jason Jacobs. I'm the head of Accounting Policy at AIG. You may sit here and say, "Well what is an insurance guy doing here speaking at a banking conference?"

So by way of context, I actually spent 20 years in public accounting, part of that time auditing banks. I was on the audit side up until May of this year, and then moved to AIG. I'll just give you the disclaimer that any views that I give you today are my own personal views and not necessarily those views of AIG. So I will give you a perspective from not only an insurance company perspective, but also a bank perspective. I'd like to take a quick poll. How many folks in here, when they came here today, really thought about insurance companies and the impact CECL may have on them?

I see some hands. Okay, good, good. Largely from an industry perspective, many have viewed CECL as a banking specific standard. And the reality is for an insurance company that just is not true. It is obviously impacting any mortgage lending activity or any other vending activity that an insurer may have to support its losses in its portfolio.

So for example, a life insurer may have investments in RML and CML type portfolios as a result of having some long duration liabilities related to those life contracts. So that's one place where you'll see insurance companies doing origination and lending activity. So many don't think about that. But second to that, insurers are also exposed to credit loss, not only from our insureds but from our reinsurance counterparties as well. So we go out to the market and buy credit protection or buy protection for ourselves, and we are exposed to credit loss there as well.

So that is some of the areas that many, when you talk about CECL, you don't hear a lot of dialogue in

industry. And we as an insurance industry are continuing to have discussions about how we actually apply the CECL standard to the insurance industry.

To give you some perspective... so from my perspective, one of the benefits of CECL, I think all else being equal, some of the earlier commentary made today... really over a lifetime perspective, the loan loss is not going to be any different. That being said, timing of recognition clearly is different and in many instances may be accelerated. And what does that do? Whether an insurer or bank, clearly that has ramifications, whether it be from a capital perspective or whether that be from the perspective of what products you're going to be underwriting, your current underwriting standards, and your pricing standards obviously.

So clearly it has an impact on overall lending in the market. Again, if I look at it from an insurance perspective, many insurers are in it for the long haul. So the exposure is a little bit different than a bank that may be investing in a credit card, loans, auto loans and other personal type products, because they do behave very differently.

But again there is clearly that acceleration. Again, you'd expect in times of economic turmoil, you would most clearly expect that you see earlier recognition of downward economic trends impacting the allowance for loan loss. So clearly, and again, an acceleration there.

And also from an overall disclosure perspective, I think earlier how may [inaudible 01:34:45] to have disclosure that's going to go into the financial statements, including looking holistically at the expanded disclosure, as clearly the users of financial statements will have much more information, much more insight, both qualitative and quantitative around the allowance for loan loss or other CECL provisions, so you'll see far more disclosure there as well.

Again, from a comparability perspective, we talked a lot about comparability this evening. There's a number of models, a number of pieces of information that can be used to derive the allowance for loan loss and a CECL provision, but at the end of the day there will be far more disclosure, while you've historically seen, when a company is putting forth a CECL allowance.

In terms of the impact on origination, again, loan loss provision will be accelerated, so it clearly will accelerate that timing of origination. I think clearly from a high level perspective, it's important to emphasize that the allowance for loan loss for the CECL provision is really a best estimate at a point in time, and it is continuously evolving. It is continuously refined, it is continuously updated. So you do see continued evolution and change in that particular allowance. And again, from a financial accounting and reporting perspective, you'll see additional disclosure around significant changes as well.

So clearly, there is more judgment, there is more estimate, but there is also that requirement of expanded disclosure. Again, historical loss data is clearly critical overall to establishing the allowance. We talked again about some historical data, some stress testing that many banks and insurance companies have done around their loan portfolios and other credit portfolios.

Clearly there is additional refinement that's done to that historical loss data. So again, it comes down to

how much forecasting are we doing? When are we reverting back to forecast, historical forecast, et cetera? I will give you the disclaimer. I am an accountant. I am not a modeling individual. I do see many of the outputs from the models that my former clients had put together as well as what we put together at AIG. But that being said, there is a significant amount of judgment estimate that's involved.

And that's where we as accountants come in from the perspective of, "Is it consistent with the standard?" So again, many things to consider as we're establishing the allowance. The forecast of data's got to be reasonable and supportable. So clearly, it's coming up with documentation. I am a former auditor. I spent 20 years auditing, so I think very heavily in a space of documentation.

So it's clear when you're in an area and see someone, you're a bank or you're an insurance company or any other company that's putting up a CECL allowance, you're clearly considering the documentation that you're putting together to support your allowance. Because there is now a significant amount of judgment involved and clearly documentation becomes a core part of what you share, not only with your audit firm, but also as you're preparing to go out to the investor market, your regulators, your rating agencies, et cetera. Having that documentation together is really key.

I'm just moving on. I don't want to be redundant with some of the other comments that we've heard here today.

Yeah. I think there's been, again, a lot of discussion in industry about, "Well, what are our next steps?" I know there's been reference to the house bill and discussion about, "Well should there be changes to the standard?" There is a delayed implementation date for smaller reporting companies. Again, if you sit back and think about it, whether you're a large accelerated filer, we at AIG and many others who are in our same position are 1-1, 2020 we'll be adopting the standards.

There's really not a lot of time and I wouldn't expect from an overall legal perspective that we'd anticipate any further delay. I know there's been much hope in terms of my former smaller clients that are operating in the small and medium size lending space where they were hoping for, and expecting a further delay. And it's also interesting to note that we've talked a little bit about the regulatory impact and the credit impact will have on capital ratios.

Clearly for a bank, that is the case. I will say for insurance companies, there's one thing to keep in mind here in the United States. If you are a regulated insurance company, you are subject to any IC statutory reporting. I will say that does use a risk based capital model, and it is based on current NEIC accounting standards. Well, what does that mean? The punchline there is that CECL has not yet been implemented by, or been adopted by, the NEIC from a regulated insurance company perspective here in the United States.

So there could be long term ramifications to the statutory capital of insurance companies as well, because in the long term there may be a requirement to apply CECL further, but again, more discussion to come on that. It is something the NEIC has been continuing to consider and been very heavily discussed in a significant amount of pushback from the insurance regulated industry, because the insurance regulated industry largely believes that our models that we currently use for our risk based

capital perspective are already reflective and account for those risks inherent in portfolios. So with that, I will close and move on to Robert.

Robert:

Thank you, and I guess I'll bring a practical experience to this conversation. First of all, thank you for having me here today. I will try to keep my remarks short and to the point. I know you guys have been listening to this for a long time, and they've been great presentations. It's been an eye opener for me, having been a practitioner of lending for the last... over 25 years now.

But just a quick background on myself, I worked for a Caisse de depot de placement, which is a, for those who don't know us, we are an asset manager based in Quebec. We manage the pension money for all the employees of the promise of Quebec. So total assets of over \$235 billion US dollars, and about 40 of that is credit. So we are a very active investor in credit, specifically in the corporate credit team, where my job is to arrange opportunities for us to invest in corporate loans.

So I will give you a takeaway on what I've heard today. To me, CECL is absolutely great, and it's going to be great opportunities for people like us who are not regulated. I'll come to that in a second.

So I've been in the lending business for over 25 years. I spent 20 years at Credit Suisse and went from accrual to market accounting for our book of loans, which was mostly revolvers. And it was quite a change culturally at Credit Suisse when we did that over 15 years ago now. But what it led to was significantly increased return targets for all the loans that we were making. And that's since been adopted by all the large banks and even the smaller banks. But the fact that we had to market every loan and had to create a return target and increase the pricing that we had to charge the loan to generate the same return.

So in terms of background and experience with being in the trenches making loans, I do see CFO, particularly for smaller companies as having an absolute immediate impact on loan availability for small companies in costs. No question in my mind. What it also will do is create even more opportunities for non-regulated banks.

You recall, 10 years ago, the implementation of the leverage lending guidelines, which have been an absolute bane in the existence of banks we leveraged buyouts in this country. They were absolutely horrible guidelines and I actually speak from my personal experience. I think they created an explosion of private credit, which I'm not a part of and I'd probably enjoy being part of it. Sophisticated investors have poured billions and billions and billions of dollars in private credit. As of mid-2019, there's been over \$900 billion US dollars raised in private credit for investors to invest in that.

And I think that's been largely as a function of, I think the leverage lending guidelines and also low interest rates for fixed income investors like ourselves who have sought obviously higher yielding opportunities. And credit has been one, particularly loans have been one that's viewed as being very attractive asset class for investors like ourselves to deploy capital in relatively secure type of fixed income instruments.

So loan losses have been particularly low over the last 10 years and they will, we think, continue to do so. But I personally think that CECL's going to give even more opportunities for private credit to play a more active role in the economy in the next five to 10 years. And particularly at the lower end of the credit spectrum. So all the big banks, Credit Suisse, JP Morgan, Bank of America, who do leverage buyouts, they've already lived with a version of CECL.

So the expected losses might be a bit higher, they'll have to charge a little bit more potentially, but it's really not going to, in my view, have a particular impact on credit for large companies. So when talking about large companies, we're talking about, in my view, companies with EBITDA of 60, 75 million up.

The private debt market where we as an institution are focused on investing more and more is, even though our companies have 30 to 75 million, and banks have become almost irrelevant in that space, private debt funds firms that have raised hundreds of billions of dollars of capital are lending money in very competitive terms to small companies. So for companies that are less than 35 million, there's even more opportunities. I think CECL, particularly for small banks, will make capital for small companies a lot more expensive and a lot more scarce. Creating a tremendous amount of opportunities for people like ourselves to invest in. What I consider the lower middle markets, the companies that have five to 35 million of EBITDA are currently underserved by the banking industry. And I think we'll be even more underserved with the adoption of CECL for the small banks. So, as an investor looking at that segment of the corporate market in the US, we think it's going to be a tremendous opportunity for us to invest capital with players that are dedicated to that space. And there are a number of firms that are focused on that space in the US, and we think that those are going to be experiencing significant growth.

So I think in a nutshell, for people that, like myself, are practicing in the world of making loans... I heard a lot about more transparency, creating more availability of credit in the time of a recession. We're comparing the last recession, which was the worst in a generation, as a guide to judge what credit and how credit can be available in the future. I think it's a little bit misguided to be honest with you, for a practitioner. So I think that the adoption of CECL for smaller banks will create an enormous amount of opportunity. I personally look forward to it in the next three, four or five years as a way for us to invest a lot more money and make for our depositors. People will give their pension money to us, making a return that will be significantly better than it is today. So that's the most that I have to say. Thank you.

Joshua Ronen:

Thank you very much, Robert.

We'd like to open up for questions? Please, identify yourself.

Arthur:

Arthur Fliegelman. It seems like a lot of the differences lies from the differences in the, I guess I would call economic expectations, rather than the model. So are we really blaming the wrong thing?

And quite frankly, the fact that different people come out with different results isn't necessarily in my mind, bad. Different banks and institutions have different lending models, and it might be perfectly reasonable that one bank will have a lot higher or lower losses than another bank going to particular

markets because of the way they operate.

Michael:

Well, I think it's... comparability is a big thing in regards to what investors do, between what regulators do, what even banks do. I think it's not inherently bad, but I think that from my... what I tell our bankers is that you have to expect that comparability, but you have to also get your ducks in a row to understand why you're different. I think everyone, which is a challenge that they probably are, didn't think of at first. So I mean inherently it's not a bad thing, but everybody does use comparability for their investment. A lot of their decisions, whether it's investor or regulator bank.

Maria:

And I also think that it's not only the economics, but there's a lot of optionality still in the model, which is good for banks because I read there are different business models and assets.

But if it does not help with comparability, some examples are you may decide to discount or not, or there's really no economic substance behind the decision. You have a difference between two bags. One is discounted, one doesn't, Why? then you may decide in the case of the credit card, the very significant assumption is how do you apply the payments to the outstanding balances.

One bank may go first inverse out, another bank may actually go closer to the reality, and which is the actually applying payments have to follow the credit card act. The two would result in significantly different lives and reserves that have no economic substance behind the difference.

So those are the types of differences that concern us more than the economic scenarios. The economic scenarios, it's fine to have different assumptions. What we would like them to do is to disclose those assumptions, because then you can compare who is more aggressive with who is more conservative. How are those changes? If they don't disclose those assumptions, you have an issue, because you don't know why reserves are different. You see they're different, but you don't know why.

Michael:

Yeah. I think that... Hal and I have talked about disclosure and as you brought up, Maria, the thing that I see is that the required disclosure of vintage in my opinion changes a lot of things of how banks need to respond. But quite honestly, there's a lot of things, you're talking about assumptions and stuff.

I think what will occur is in your management's discussion and analysis, there's going to be a lot of further disclosure, these are not part of the CECL standard, but probably are needed because of the CECL standard in order to tell your story. That's where we're going to get into varying different assumptions and things like that.

What the level of those assumptions, those will be regards to what's your economic forecast and such, probably will evolve over time. But I think the banks are going to be hotly looking at those things to try to, I don't know if they're going to be the, "Oh no"s, but they're going to be the ones that are really wanting to start understanding, to help investors to understand what their... when all of said and done, they know what they're talking about.

Hal:

Just keep in mind what we're talking about is building up reserves that are going to be relieved when you charge off a loan. Whether Mike makes a loan or I make the loan, we're all involved in the same loan. You're going to end up charging the same amount out.

There can be some variances [inaudible 01:52:13] accrual before I do. But by and large we're going to collect or not collect the same amount of money and all of this is building up a reserve to be relieved or taken back down when you don't collect that money. It has to all live in exactly the same place. Just to question, do I build a reserve up earlier or later? That's it. It doesn't change the laws. Just the timing of how big the pile is and how quickly I build it.

That's it. James?

James Finch:

I want to follow up with that. Then I also have another question.

Joshua:

Can you take the mic?

James:

So... if a loan portfolio is flat, then in fact I could see where that could have a detrimental effect. Let's just compare or bear to a regulated bank. So you've got all this money flowing in the private sector. It's not the non-regulated entities. And you still have loans, you still have to comply with CECL. But if I'm a bank, now it flows through all my models and impacts my regular capital up front. In fact, I'm going to have to go out and raise capital, which is incredibly expensive. While we're bear won't have to do that because he's not regulated. So does that-

Hal:

It's evil, obviously.

James:

I know, capital's an amazing thing. It always finds its way to wherever it needs to go. And so the question is, does that then further disintermediate the banks from an area and create an unregulated, in other words, a bigger unregulated pool of capital that the FED or FDIC and others aren't going to be able to deal with, especially in these lower credit profile companies that have a higher risk of to fall.

Hal:

What you have raised is a fabulously interesting and fascinating public policy issue. The board, the financial accounting standards board, has nothing to do with public policy. What it does is provides decision useful information to investors. It's not my charter to set public policy, to guide public policy, other than to provide decision useful information. It's been made very clear to us by those who set public policy in this country.



Leave that to them. So things like regulatory capital are public policy intended to drive certain behaviors or drive non-certain behaviors. Taxes, public policy, legislation, regulation, taxation, or public policy. That's not what we do. I agree with you, and I think that there are some incredibly strong arguments to adjust regulatory capital because of accounting changes, but it's not within our area of authority. We can't do anything about that.

Joshua:

I'm sorry. In that case, the FASB's objective is transparency?

Hal:

Correctors provides the mission statement to provide decision useful information to investors and other users of the financials.

Joshua:

Right. Now, if the-

Hal:

I think I got all those words-

Joshua:

Exactly right. If the FSB standards affect factors in the economy that other governmental agencies often serve about, such as the Federal Reserve and others. What you're saying is, you do your job by providing this decision information from your investors, talking about transparent, even if that transparency causes changes in decisions in the marketplace that other governmental agencies find it militates against the accomplishment of their own objective.

So, the question is, should there be a coordination such that from the standpoint of cost benefit analysis of accounting standards, that the analysis of costs should include externalities that affect the economy at large that the FASB as an institution by itself is not concerned with.

So, do we have a complete cost benefit analysis that included externalities that affect the marketplace?

Hal:

Again, our mission is to provide decision useful information. If that changes behavior, we get this quite often. We're going to get it in the insurance area, because we are doing other things other than the CECL for insurance, which you guys love.

We got the same thing on the leases. There was a headline from the US Chamber of Commerce because we were going to capitalize leases on the balance sheet, right? Because you signed an agreement, an obligation. We're 190,000 jobs. We're going to be cut \$10 billion of GDP or 10 trillion, I don't remember the number. It was a really big number.

These horrible things were going to happen. Professors like yourself came back and said, "Gosh, if this is really true, FASB board members should be tarred and feathered and run out of town." And then they

went on to say, "Fortunately, that's not what happens." Providing transparency, you provide more efficiency in the market that may result in lower costs for some and higher costs for others. But greater transparency I've never heard is a bad thing. And if you want to reverse that and say, "Well gosh, if we hide the losses in bags, those bags could actually lend more money because their capital would never be impacted."

That's where I somewhat sarcastically put up at nine different ways you can account for. We can ignore the losses. If we ignore losses, and that's by having less transparency, is good for the economy because Mike's banks [inaudible 01:58:21] then for, "Hell, I'll do that right now if that's how it works."

James:

Hal, I don't think anyone's saying that. What they're saying is the results because of different regulatory regimes. If, for example, Jason and the NEIC, the results have fundamentally different impacts. And-

Hal:

Absolutely. Absolutely. And that is something for the, and we've been told this very clearly, that is for the regulators to deal with the public policy consequences. We do not require them to follow GAAP standards. We had been charged with the OCC to set accounting standards since in 1938-ish. Okay. There was a three to two vote. Some people wanted the government to set accounting standards. Imagine where that would have headed, but we've been doing this and others have been doing this. Then it is up to each of the regulators to decide how they use, how they adjust, how they change and modify... use that as an input to their process.

Part of that is mandated by Congress. Congress mandated that the bank regulators, Bobby Bean and others, use GAAP financial statements as a starting point and then they can make adjustments to that.

The FDIC wants to make a different judgment than Federal Reserve. They tend not to want to do that, but if they do, they can do that. The insurance companies could do something different than that, as it relates to regulatory capital. But again, we are outside of that realm, and I completely understand the argument of between a regulated entities making a loan in a non-regulated or a lesser regulated. I completely get the argument, but our line stops at fighting decision use in committee.

Michael:

Yeah, from the bank's perspective, Hal is absolutely right, but the FASB is not, that's not part of their charter. However, this whole thing started with the regulators trying to get something that reduced procyclicality, and so if we were to tell the regulators that before the standard was approved, this could increase procyclicality and will also drive more money-lending out of your regulated system. It is very doubtful to me that they would have gone to FASB and said, "Yes, we want this. We want this." Also, it would be very difficult for me to think that FASB would have approved of that, if they did not support that.

Speaker 11:

Well, it's interesting because you have unregulated, privately-regulated and publicly-regulated, all on that side of the table-

Michael:  
But, it isn't.

James:  
And they're all having different issues. [crosstalk 02:01:20]

Michael:  
But, it is something that I think this is the kind of discussion that there needs to be. I mean, in regards to how much or what does the impact to the so-called shadow banking, with the non-bank regulated entities be.

Fannie Mae has already said because of CECL, we're going to look into laying off more risk, by their risk-sharing program that they have. So, we'll go out in that respect, which is I think outside of, Bobby and Cindy, your realm, but those are things that certainly need to be addressed. The banking industry is all about confidence and if you don't have confidence in what you're going to do, then it screws up everything.

Hal:  
Did you want to jump in? [crosstalk 02:02:18]

Nick Satriano:  
All right. Nick Satriano from the FHFA. I don't think Fannie Mae or Freddie Mac are incented to lay off risk pursuant to accounting standard setting. They are doing it because of the capital framework that was imposed upon them by the regulatory. So, they are incented through the capital framework to lay off risk through credit risk transfer transactions and-

Michael:  
At least that's how it came to their earnings called after the first quarter of this year.

Nick Satriano:  
So under the capital framework-

Michael:  
Yeah.

Nick Satriano:  
That the regulator set, they are incented to lay off credit risks through a very structured transactions, but not because of accounting rules.

Michael:  
Totally understand, but I think from a practical perspective, at least that's what they're telling people. That's what you're telling us three.

Hal:

If I could just jump in? Mike and I actually agree on something. If I were still an investor, I'd hate CECL. Absolutely hate it, because the thing that I made a lot of money on was the opacity of accounting in this area. Made a lot of money, and I got to retire early. You'd be taking my livelihood away by putting CECL in. In some ways, one of the reasons why I did support CECL in the accounting structure is because it did open up, and I knew what investors were not seeing and what they didn't want to see.

I've had many investors tell me the same thing, "the last thing I want is you to provide greater clarity because that's how I make money today, is a lack of clarity." And so I know this sounds a little strange, but we need to think about what if we didn't do this. We already know investors are ignoring the accounting today. We know that, and we're already into the next cycle, and I've had investors starting to tell me. Again, we're starting to again ignore the accounting numbers.

So we have two choices; we can either allow the investors to ignore the accounting, and that way we haven't achieved our mission, or we can say, "What can we do to improve the entity to provide greater transparency?" As you know, we spent eight years debating this, weighing benefits and costs associated with this, but as an investor, if I wanted to keep my old hat on, I'd be fine. Let's knock CECL down today and I'll go back and do my old job. That'd be great.

Michael:

[crosstalk 02:04:47] Hal, so unless you've been talking a lot with the investors lately, I mean they came up to me, probably about nine months ago, saying this is much more opaque. I will not be able to understand how to reflect the forecasting risk. I think that's what they called it. I mean, they came up in my meetings, and naively thought that I was going to show them, "okay well, in purchases or whatever, you have to think about this," and they came across as ticked off, and so I think that there is still a lot of their concern in regards to that.

We talked about we're here about additional disclosures and such about ways to get them comfortable, but at least what investors are saying, and I think that the investors didn't understand the impact that forecasting would have, or inaccurate forecasting. I think that's the problem, and so I guess you're talking to different investors than I am.

Hal:

Mike, I'm actually asked to talk to those people that you say you've talked to and I believe you've talk to people, but every meeting that... I have continued over the last year with your comments like that. I've said, "Please find those investors that think CECL is the most ludicrous, idiotic thing in the world." I'm still asking for that. I was at meetings in the last four hours with investors.

One of them came back and said, "thank you for doing this. This is going to help me a tremendous amount." I don't agree with that. If I were in his shoes, I'd want to keep it as dark and cloudy as possible, but in his view he thought this would make a lot of sense. I have yet to find this massive number of people. I do occasionally find people who say, "I don't like CECL," but it's usually people who think more like I would have thought. That, please keep this a dark secret because I'm making money this way.

[crosstalk 00:07:13].

Joshua:

I guess that investor didn't talk to mine-

Nick Satriano:

Apparently not. [Crosstalk 02:07:20] Just as a comment, all the investors in Robert's funds, all the investors in Guggenheim and Blackstone, they're thrilled with CECL because it's going to basically allow them to disintermediate banks and allow them to grow their portfolios.

Hal:

From a regulatory capital perspective, I get that argument. I absolutely get that.

Nick Satriano:

I'm not saying it's your fault. I'm just letting you know there are a lot of investors out there that love this regulation.

Hal:

I think there's some really interesting public policy issues. I would also add taxation into that. If I were really looking at this issue, and I've mentioned this to Mike before, I would try to get the deductibility of Lomas Reserves back to where it was pre 1969. Right now, there's a disincentive to have an adequate reserve because of the difficulty of getting a textbook until it's very light.

Joshua:

Let me get some questions from the floor.

Frank:

I have two questions and they're both for Hal, and they're not there to be rude. [crosstalk 00:02:08:23]. So you made the statement that you did not think that there was going to be increased costs and therefore a reduction of lending based on CECL.

Hal:

No, I did not say that. I actually said just the opposite. That there would be cause to clean up data, improve internal controls and improve estimation processes. What I said was that the banks that were there was a fairly good range of the largest to the smallest. So yeah, there's a clear cause, but if we take a business approach to implementing this standard, and the same is true over in insurance and actually the insurance in many respects is actually seen a bigger benefit from adopting some of the changes over there. They could actually see this recycling of this virtuous cycle of information flow internally actually helping improve pricing, capital allocation.

Frank:

Yeah, I disagree because if you have them-

Hal:

I'm just telling you what the banks have told me.

Frabj:

I'm a banker, so I can tell you if I have to fund a larger amount of reserves on day one, I have to charge more for it and that has to be passed on to the borrower. There's no negotiation on that.

Hal:

Okay, well that's fine, but when, and I've talked to the folks at RMA and these are the manager's association Robert Morris, if I recall correctly, these are the people who are actually represented. These are the credit lending folks that we've talked to over the years and I know that there was a survey done on, I think they included 492 lending officers and they were asked two open ended questions.

First, what are the things you think about in lending, excuse me, extending credit? One question. The second question was, what do you think about in terms of setting the terms? In the study, they had 10-ish, 11 items listed, none of them that had anything to do with bank accounting or regulatory capital. Let's put regulatory capital aside for a second. Nothing had to do with bank accounting. So I called those people up and said, "Huh, I'm hearing that people like yourself think that accounting would drive cash flows ability to repay." They said, "no, of course not. It has no impact on your decision."

So I said, go look at all the other things. There were 72 different responses from this 492. None of them had anything to do with the accounting of the bank itself, and so I'm not disagreeing that you think that way, but I'm just going to, at least one relatively detailed survey done with the coordination of the RMA, which represents the industry, at least in that area. I would say I would have to disagree with you. What's your second question?

Frank:

My second question is how do you figure out the contractual life of a credit card loan where there is no contractual life?

Hal:

Interesting. Initially some people, investors came back and said, we heard that you can't do this, can't figure out the credit card life. I went, "gosh, that's interesting because the credit card companies have come to us and said it's not a question of if they can figure it out." There are ways to think about the cash flows that would have an impact of either stretching out the expected life or shortening the expected life. You'd have to follow the CARD Act in terms of how you apply cashflows and there are certain assumptions that you can make and that can lengthen out or shorten it.

The question isn't can they figure out the expected life. It's within the variabilities of future cash flows and how you have to apply it under the CARD Act that can affect your life. So it's not that they can't. It's what makes most sense and what can they do from an operational standpoint. We allow some flexibility there as well. So I disagree. It's not a question of being able to do it, it's just what assumption, what approach do they want to take, again, within the CARD Act requirements and how cash flows are applied and then that will dictate where they come out in terms of their expected life.

So is it more complicated than you just signed a 30 year mortgage? A little bit more, but or a five-year auto loan or eight-year auto loan, whatever they are today. Yeah, it's a little bit more complicated, but it's something that from a risk management standpoint and a cashflows standpoint they're already dealing with.

Michael:

There is a study out there, not by GCD but by another company that is looking specifically at cards and they're going to expect a pretty wide variety of a big range of what those lives are.

Hal:

And there's a reason for that because there's a wide range of the type. There's a wide range of the types of products and customers out there and having worked with some of those credit card companies in the past, I can understand.

Michael:

One thing that's interesting that we see, again, I'll go back to the disclosures, I don't think we're going to argue on this is that it brings up the issue when you're dealing with things of vintage, it brings up the issue of front book and back book by the investors because it's right there, and so you're going to see what volume of loans is there. The first question I would have is how are you pricing that versus the rest of your book, and so I think they will over time. That'll be something. I mean, and I think this is, again, you probably have that, whether it was CECL or not. As long as you had that kind of disclosure.

Hal:

This is a great example of in the original proposal, we addressed that exact problem. What we wanted to do was have a roll forward schedule, beginning balance, ending loan balance, what was originated, what was paid down, what was purchased, what was sold by vintage. Actually not initially by them, but we wanted to have this roll forward.

The banking industry came back and said basically we can't tell you what we originated this period. That seems to be a little odd. They can't tell us and you tell us what got repaid, anything. So we tried to do exactly what you're describing, but the banking industry said it's really too complicated to be able to tell our investors how much we lent, how much got paid down, how much got bought, how much got sold. I find that a little strange and I find it even stranger that we're making the argument today that that would have been the better solution, which I agree with, but the industry said we can't go down that path because we can't tell you what we originated.

Michael:

Yeah. I mean, I think that's one of the data challenges that I think banks of all sizes are still doing, and yet, I mean I'm not arguing with you.

Hal:

All I'm trying to impress upon people is that we can poke holes at various aspects of this, but there's a constant continuous balancing between cost and benefits and how to get to a particular solution. I'm just pointing out one case where it would have been far better for investors to have a roll forward of





loan balances to know what was originated, but the industry convinced a majority of the board that it couldn't figure out what they originated in a particular period. I just find this strange, but again, it's not a perfect standard. It's a standard that advances, improves, better timing in recognition of losses. It's not perfect.

Joshua:

Is it better timing recognition? So I'm struggling to understand how accelerating losses have recorded. I'm recording losses where there is no loss is transparency as opposed to opacity.

Hal:

I know that because you've written in your research, in which you and I have talked about and I've read. I just disagree. You have a clear sentence. I'm sorry I've got it buried in my bag somewhere, but you basically said this standard requires you to recognize losses that will never exist. Well, I would say if you're recognizing losses that never exist, then you're not applying the standard correctly because the standard says in effect, what did I lend? What do I expect to collect back, both the difference? That's what the standard says. In the first paragraph of the standard, it says.

So it doesn't say book losses that will never happen. It says, what did you lend? I think the banks know that number. The banks know what they lend. It's on their balance sheet. Auditors have signed off on it. The loan statements come to me. They seem to know how much I borrowed. Now, the question, the trick in all this is do they know how much they're going to collect back?

Now, Mike will go back and tell me no, no, no. That's really hard because they have to forecast out 30 years on a loan.

Michael:

I never said that. Don't try to paint me as someone who-

Hal:

I would never say that, but I-

Joshua:

Continue fighting. It's more interesting. We don't have much time left.

Hal:

But putting that aside for a moment. That's the argument that has been made is that you're making me figure out how much I'm going to collect back. Investors, obviously, those that didn't talk to Mike came back and said, "Huh, if a bank doesn't know what it's going to collect back, how did you price a loan in the first place?" I want to know if a bank can't do CECL because that's going to give me tremendous insight into whether or not I want to invest.

Joshua:

But how? I admit it.

Hal:

This is fun.

Joshua:

You're not going to have fun much longer.

Hal:

Mike and I have known each other a really long time.

Joshua:

So the bank knows. Let's say the bank, your bank, your rational bank knows what expected loss. It's covered itself and I just showed you following the standard and that was you're telling me that doesn't follow the standard. Hold on. I discussed it with two of your experts that were involved in the standard formulation as well as another board member. I discuss it with them over the phone and they agreed that one of the results would be that in fact you'd be recording these losses and what I'm showing you is that if you cover yourself, you're still going to record a loss. So I don't see how that is transparency.

Hal:

I just disagree with your analysis, but we're going to have that just conversation. I feel Paul, we're going to have another panel next spring.

James:

He loves doing it. Can I just make a comment, professor, before you enter? I think just to answer it, to listen to this dialogue, to me all that it's going to do is it's going to provide a much lower impact when a recession happens and that the losses are going to be realized by that bank are going to be less than they would otherwise have been. That's the data that he's shown, really. That the losses that are recognized, but the actual losses are reported in the downturn in a recession will be less than they would have been otherwise. So that's the only benefit. The charges.

Hal:

The charge will also be exactly the same. [crosstalk 00:20:43]. The provisions up to the reserve would be lower.

James:

So the actual losses in the recession when the economy goes down or when the banks loan book is declining and because there's more, either less activity or two factors, less activity or increase actual losses, that's when it's going to benefit from the buffer at that time. That's the only benefit that it will do. The impact of that regulation is going to create for people like ourselves and the enormous amount of private debt out there that's going to continue to grow even more opportunities for us to land, and as Jim said before, this intermediate the banks.

So it's going to be a massive unintended consequence that the regulars will see in terms of availability of credit for small companies from banks is going to go down, costs are going to go up, and opportunities for people like ourselves are going to go up.

Hal:

And how can you account for the loans that you make?

James

We have market to market.

Hal:

If you go back to the nine different ways you'd count it. If your argument is true and I think there's some regulatory capital arguments that support that, then you can always go to fair value and you can have exactly the same accounting that you have. That is an option under this standard. Some particularly higher risk lenders have actually come and ask us if we could expand that and for some technical reasons, we agreed with them. So those who feel like they're at a competitive disadvantage because of CECL can always go to exactly your accounting guy and therefore following your argument, were to eliminate the competitive disadvantage.

I don't think it would because I think there are regulatory capital implications as well, but the accounting can be eliminated by selecting the fair value option.

Michael:

I do have just one question, and it's not to Hal. It would be actually to Bobby and Cindy. When we talk about money going, and maybe Nick, about money going to non-bank, where is that sit in the discussions of regulator calls and who would deal with that?

Cindy:

So I am in the division of financial stability. So I mean we definitely are monitoring the whole economy and we're monitoring leverage throughout the economy and where that ends up. So that's definitely a part of our purview or what we're analyzing, and so that would affect how we are giving guidance to the board of governors because there would be the board of governors that implement things like CCYB and macroprudential policies. So that would be one avenue which is being analyzed.

Michael:

So is this on the radar? I know that there was some discussions over the last year on the leverage lending issue, that there's concern about that lot of it is not held out by banks and that, so there's a lack of real good data that regulators have in order to assess that. So is that the same? Are we going to be running into the same thing as Roberto's was saying?

Speaker 13:

I think there's a couple of things that we have to think about. First of all, we are a marketing economy. So to the extent that there is a cheaper and lower cost way, competitive. We are not here to say look, only the bank is the only player in the town. So the issue that we need to look at, I think, comes from the point of view of stability. It's the money, it's the lending going to a group that can maintain that level of stability throughout the cycles either all the time or is this a way to arbitrage the system? So we're always concerned about that.

So rates have been as low as they've been forever. For a long period of time, there's probably, for the foreseeable future, rates are going to be low. That has caused a significant amount of refinancing. There was a significant amount of data. So we've seen a lot of debt go straight out immediately to buy and hold investors. The funds out there are clamoring for that debt. They're not clamoring for debt because they're not holding capital. By and large, maybe you are. A lot of them are clamoring for debt because it is an investment choice that they want. There's a lot of demand out there for the debt. Banks are in that space.

So that's something that we look at, but when we think about regulatory capital, CECL's one component in regulatory capital. If you think about all of the competing factors that go into the calculation of capital. For example, CCAR. For a lot of cities, for a lot of institutions, CCAR is a binding constraint. If CCAR is a binding constraint, unless CECL drives you significantly higher than CCAR, CCAR is going to remain a binding constraint.

Another constraint that institutions, particularly those that are not overly bound by CCAR, another constraint is investor expectations. Every time your folks from the ABA, they always got me and they say if you asked for eight, the market demands at least 9.5. There is always this excess demand from the market. So the question is will CECL calm some of that excess market demand? Probably not. Why? Because we can't get the behavior.

We're having behavior problems today. We're having behavioral problems in the broader economy to understand what CECL really means at the end of the day, and I think from a regulatory point of view, from where we stand, we're going to sit and we're going to watch. If it turns out that CECL winds up in a way that creates implications on regulatory capital that we haven't anticipated. Regulatory capital, by the way, is intended to capture unexpected losses. CECL was intended to capture expected losses.

Hal:

Your regulatory capital within your regulated universe. What I'm saying though, is that Jason's not in that regulator universe and Robert and all his various investors aren't in that regulated universe. So is that really addressing the systemic risk that's being represented by those investors bulking up because they're regulated? Institutions can't lend because of issues associated-

Speaker 13:

But one has to be careful because one does not want to say, okay, let's bring all of the risks back into the banks, back onto the taxpayer, back onto the public.

Hal:

I'm saying it's all systemic.

Speaker 13:

It is systemic, but the cost of the allocations.

Joshua:

I'm afraid that, I'm sorry.

Paul:

He said we're going to have a third conference.

Joshua:

All right. I want to thank the panelists. I want to thank the audience very much. It's been, the best thing is the fighting.

Hal:

Everyone believes whole-heartedly in their positions.

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