ASSESSING THE IMPACT OF FASB'S CURRENT EXPECTED CREDIT LOSS (CECL) ACCOUNTING STANDARD ON FINANCIAL INSTITUTIONS AND THE ECONOMY

HEARING

BEFORE THE

SUBCOMMITTEE ON FINANCIAL INSTITUTIONS AND CONSUMER CREDIT

OF THE

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ASSESSING THE IMPACT OF FASB'S CURRENT EXPECTED CREDIT LOSS (CECL) ACCOUNTING STANDARD ON FINANCIAL INSTITUTIONS AND THE ECONOMY

Tuesday, December 11, 2018

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FINANCIAL INSTITUTIONS
AND CONSUMER CREDIT,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 2:02 p.m., in room 2128, Rayburn House Office Building, Hon. Blaine Luetkemeyer [chairman of the subcommittee] presiding.

Present: Representatives Luetkemeyer, Rothfus, Lucas, Barr, Tipton, Loudermilk, Kustoff, Tenney, Clay, Maloney, Meeks, Scott, and Heck.

Also present: Representatives Budd, Hill, Zeldin, and Sherman.

Chairman LUETKEMEYER. The committee will come to order. Without objection, the Chair is authorized to declare a recess of the committee at any time. This hearing is entitled, "Assessing the Impact of FASB's Current Expected Credit Loss, or CECL, Accounting Standard on Financial Institutions and the Economy."

Before we begin today, I would like to thank the witnesses for appearing today. I appreciate your participation. And we anticipate votes around 4, so hopefully if we can get done before then, it will be great; if not, we will hope that you will be able to be held over until after we get back which probably wouldn't be too long. I don't think we have too long of a session today; maybe 45 minutes to an hour so, we will see how it works out. But again just to give everybody a heads up.

I now recognize myself for 4 minutes for the purposes of delivering an opening statement. There has been much conversation over how to best calculate expected credit losses for financial firms. That conversation has taken place at the Financial Accounting Standards Board, or FASB, and financial institutions of all sizes across the Nation.

It has also been discussed in the halls of Congress. Several months ago, I co-hosted a roundtable discussion with several members of the Financial Services Committee, regulators, and stakeholders to discuss FASB's current expected credit loss, or CECL, standard.

The FASB leadership later commented to the press that the meeting had been contentious. That was an accurate statement.

The meeting was contentious because this is an important issue, and one that could have serious implications for our economy. It deserves our full attention.

The final CECL standards set to be implemented in the coming years represents, in my judgment, the most significant accounting change to the banking industry in decades. With this new standard, institutions will recognize the expected lifetime losses at the time a loan or other financial product is recorded.

This rule has been done under the guise of investor protection. It applies to every single financial institution in the Nation regardless of whether they are publicly traded or privately held.

If the purpose of CECL is to protect shareholders, it is my opinion that private firms, particularly community banks, should be exempt from this rule altogether.

For publicly traded firms, FASB should amend the final rule so that it appropriately takes into consideration existing bank capital regimes which already require institutions to hold capital against expected losses.

Ultimately, we need a rule and enforcement mechanism that reflects the realities of banking. We also need processes in place that offer greater clarity and collaboration.

Since our roundtable, FASB has indicated a willingness to work with Congress and with stakeholders to make changes to the final standard. Some of the suggestions will be highlighted today by our panelists.

I hope FASB's willingness is sincere, and I encourage the board to take into account any and all alternative proposals discussed.

I also want to encourage the Federal financial regulators to consider the dramatic challenges that will result from implementation of this standard, and to have their examiners exercise pragmatism and sensibility as banks and credit unions work toward compliance.

We have a very distinguished panel of witnesses with us today and we thank them for appearing. The Chair now recognizes the gentleman from Missouri, Mr. Clay, for an opening statement for 5 minutes.

Mr. CLAY. Thank you, Mr. Chairman. And in the interest of brevity, knowing that we will face votes sometime during this hearing on the floor, I am going to defer my opening statement to my good friend from California, Mr. Sherman, I yield to him.

Mr. SHERMAN. I thank the Ranking Member both for the time to make an opening statement and for the opportunity to participate in this subcommittee. Wherever on Capitol Hill there is a discussion of accounting theory, I am certain to be there as chair or co-chair of the CPA caucus.

FASB is a government entity. If you violate its rules, you go to jail. It is the most powerful government entity double insulated from the public. That is to say, the SEC (U.S. Securities and Exchange Commission), we have delegated power to the SEC which then delegates power to FASB.

By comparison, the Fed is a populist organization. The Fed comes here to discuss their policies far more often than FASB. And the fact is that what FASB does is more important than well over half of the government entities that are subject to the Administrative Procedure Act.

We need to see FASB follow or provide quantitative impact studies and field testing before they turn the economy on its head, or any sector of the economy on its head.

Now, this is an area where this is an anomaly from an accounting perspective. They are going to turn to banks and say the day you make a loan that you think is a good loan, you have lost money. That is crazy. If it were true you wouldn't make the loan.

But the idea that you incur a loss when you make a loan, you are going to make a hundred loans, hopefully in my district. I guarantee on a couple of them, especially if you loan to some people I would otherwise tell you about, you are going to lose money on maybe two of them. You are going to make money on 98 of them. You don't recognize the profit on day one. You shouldn't recognize the loss on day one. It is a portfolio of loans with profit and loss built in it. But I am told by FASB that it is important that you have higher reserves. That in the years before the economic recession that banks were not booking adequate reserves.

Now, you would think it would be the bank regulators that would decide whether you need more reserves. And they can simply allocate, take a portion of your capital on the right side of your balance sheet and say keep that money available, because we could have an economic downturn. In fact, requiring you to have sufficient capital is their main job.

The other way to increase your reserves is to take one of your assets and subtract something from it in order to force you to have more reserves. If you need more reserves, that would be a good thing. But put aside the balance sheet, because we have to understand that what drives public companies is the income statement.

And for us to tell banks, if you loan $100 million to small businesses, you incur a loss when you do it right, when you have good underwriting standards. But if you invest in a $100 million dollar bond portfolio, of publicly traded bonds and you say we are not going to hold these bonds to maturity, most people don't, then you can invest $100 million without incurring a loss.

Every day, there is a struggle for capital between Main Street and Wall Street, between those who get money from banks by issuing a bond and those who have to come beseeching you for a loan. And we should not allow FASB to adopt this standard which biases you against Main Street and in favor of Wall Street.

That being said, I am sure that if FASB goes back to the drawing board on this, they will figure out a way to make sure that there are adequate reserves without imposing something on you that reduces your earnings per share, because that is what will drive your behavior.

And if you are told that—and I realize this all, and eventually, if you have been in business long enough, this can come out in the wash. What you did 2 years ago moves in one direction, what you are doing now. But anytime we turn to a bank and say make a good loan to a small business, that means you have lower earnings per share, that is a bad day. I yield back.

Chairman LUETKEMEYER. The gentleman's time has expired. Before I turn to him for opening remarks, I would like to recognize the distinguished gentleman from Pennsylvania, Mr. Rothfus, the Vice Chair of the subcommittee.

Mr. Rothfus has been a tireless advocate for economic freedom and growth. He has been a valued member of this committee, and he will be missed. With that, the Chair now recognizes the Vice Chairman of the subcommittee, the gentleman from Pennsylvania, Mr. Rothfus for 1 minute for an opening statement.

Mr. ROTHFUS. I want to thank the Chairman for calling today's hearing on potential impacts of CECL. This Congress, we have made significant progress, bipartisan progress right-sizing the regulations on our financial sector.

These reforms have strengthened our financial institutions and made them more responsive to consumer needs. An important principle supporting this effort is that we need to consider the cost and benefits of any major change, whether we are looking at new regulation or a change in GAAP (generally accepted accounting principles).

With implementation looming in the distance, CECL has come up in many of my discussions with bankers throughout western Pennsylvania. Both large and small institutions are concerned about implementation and the potential impacts that this new approach may have on the way they do business.

I look forward to hearing from today's witnesses, what effects they anticipate from the implementation of CECL and whether further study or adjustments may be necessary. With that, I yield back to the Chairman.

Chairman LUETKEMEYER. The gentleman yields back his time.

Today, we welcome the testimony of Mr. Joe Stieven, Chief Executive Officer of Stieven Capital Advisors; Mr. Bill Nelson, Executive Vice President and Chief Economist for the Bank Policy Institute; Mr. Scott Blackley, Chief Financial Officer of Capital One Financial Corporation; and Mark Zandi, Chief Economist of Moody's Analytics.

Each of you will be recognized for 5 minutes to give an oral presentation of your testimony. Without objection, each of your written statements will be made part of the record.

And before we begin, we need to have a little housekeeping here. We have a, because of the content of the discussion points of this committee, we have a number of members of the full Financial Services Committee who are not members of the subcommittee who would like to be here today. In order for them to participate, we need to recognize them.

Without objection, the gentleman from North Carolina, Mr. Budd; the gentleman from Arkansas, Mr. Hill; the gentleman from New York, Mr. Zeldin; and the gentleman from California, Mr. Sherman, are permitted to participate in today's subcommittee hearing. While not members of the subcommittee, they are members of the full Financial Services Committee and we appreciate their participation.

With that, we begin the testimony. Mr. Stieven, you are recognized for 5 minutes. Welcome.

OK. You need to hit the button on your microphone. And I would ask each of you to pull those little boxes toward you. They do come toward you.

This is not the best acoustics in the world here. If you just act like you are going to take a bite out of the microphone, it works

really well and we can actually hear you. I do appreciate that. The closer you get to the microphone, the better it is. OK. Mr. Stieven, you are recognized for 5 minutes.

STATEMENT OF JOSEPH STIEVEN

Mr. STIEVEN. Thank you. Good afternoon. My name is Joe Stieven, and I am honored and sincerely appreciate the opportunity to share my personal views and opinions on the scheduled topic.

I have analyzed the financial industry and financial institutions for 35 years. Early in my career, I was an analyst examiner in banking supervision and regulation at the Federal Reserve Bank, St. Louis.

From there, I went to Stifel Nicolaus for 20 years. I founded and was director of Financial Institutions Research. During my tenure, we completed over 250 transactions for financial institutions. Most recently, 13 years ago, I started my own company, an SEC-registered private investment advisory firm focusing on financial institutions.

In January 2012, in addition to my CEO responsibilities, I was appointed by then-FASB Chairman Seidman as a member of the Investors Technical Advisory Committee (IAC). It was a 4-year non-compensated appointment. The FASB expected us to thoroughly analyze and discuss current and proposed accounting rules, including CECL.

After a year, approximately, I was invited by the FASB chairman and the board to become the co-chair of the IAC. In April 2015, the IAC issued a comment letter on CECL. I would like to read to you a short excerpt from the summary paragraph on page two.

"Currently, IAC members have wide-ranging views on the proposed CECL model. However, a majority view the proposed model as needing improvements on topics listed in the body of this letter under points of general concern. These points addressed, one, process and implementation; two, lifetime losses accrued day one; and three, IFRS (International Financial Reporting Standard) convergence."

I have been asked to discuss the impact this new accounting standard will have on financial institutions, including the effect on the availability and affordability of credit for your constituents, U.S. consumers, and the burden on financial institutions.

Let me get started. The burden on financial institutions, primarily banks, is much more than readily apparent. Instead of me giving you my opinion, let me give you an actual example.

One of my seven references is David Kemper, Executive Chairman of Commerce Bank, a great regional bank with 150-year roots. Commerce never took a penny of TARP (Troubled Asset Relief Program). And they came through the 2007–2009 Great Recession in excellent shape.When the market froze up, Commerce was still lending to consumers.

I know this for a fact, because I have been a customer of that bank for over 25 years. They came through the toughest period in nearly a century, and they had to go out and hire a third party to do their CECL modeling. This shows you the complexity of this model.

I can give you other names of other great companies with similar experiences, like Texas-based Prosperity Bancshares. Again, no TARP. CEO David Zalman, if you add these implementation costs to the wide-ranging estimates from third-party experts for the reserve build, it could cost $20 billion, $50 billion, some say $1 hundred, but don't stop there.

What is the impact on customers and consumers, and the availability of credit? If a loan equals about 10 times each dollar of equity, the simple math amounts to about $500 billion, a half trillion of potentially less lending.

Let me ask you. Do you think that hurts availability? The answer is obvious. Will this lower long-term financing, if lenders have to look out lifetime, does this push people out of the banking industry into non-bank lenders?

Will the rates that these other lenders, subprime companies, payday lenders, will their rates be more than what banks charge? How many billions are going to be wasted on unproductive modeling, as none of this modeling, none of it, changes the actual result?

In my view, this model definitely will impact the availability of credit for consumers. Furthermore, there are other negative consequences that absolutely need to be discussed in the Q&A. Thank you. I have 4 seconds.

[The prepared statement of Mr. Stieven can be found on page 103 of the appendix.]

Chairman LUETKEMEYER. Well done, Mr. Stieven. We appreciate timeliness around here. I didn't explain the timing mechanism. There's a green means go; yellow means you have a minute left; and red means we need to call it quits.

Mr. Nelson, you are recognized for 5 minutes. Welcome.

STATEMENT OF BILL NELSON

Mr. NELSON. Thank you. Chairman, Ranking Member, and members of the subcommittee, thank you for the opportunity to testify today. I am Bill Nelson, Chief Economist of the Bank Policy Institute (BPI). Prior to my current role, I was Deputy Director of the Division of Monetary Affairs at the Federal Reserve Board where I worked for 23 years.

At the Federal Reserve, I was extensively engaged in developing our emergency liquidity programs during the crisis, and helping to strengthen the liquidity and other elements of our regulatory framework afterward.

I am here today to discuss BPI's research which demonstrates that the proposed new accounting methodology, current expected credit loss or CECL, is in fact pro-cyclical. That is, CECL will amplify swings both up and down in the economy.

During the financial crisis, banks were following accounting rules still currently in place called the incurred loss methodology for credit losses. Under this approach a bank takes a provision, that is it recognizes credit losses which are then subtracted from capital when a loss is both probable and estimable.

Through the crisis, domestic and international banking agencies were frustrated by how slowly banks were provisioning for losses on loans. In the aftermath of the financial crisis, and with a goal

of reducing pro-cyclicality in the financial system, FASB published a new methodology, CECL.

Under CECL, banks must provision for all losses expected over the entire life of the loan when they first book the loan. As an illustrative example, if a bank projects the loss rate on a 5-year home equity loan to be 2 percent per year, it will book an immediate loss equal to 10 percent of the loan amount when it makes such a loan.

For each subsequent period, the bank would take new provisions, positive or negative, as it changes its economic outlook and receives information about the performance of the loan.

It is undisputed that lending standards deteriorated in the years preceding the crisis. A requirement the banks take losses based on a more forward-looking perspective would seem likely to increase provisioning during the go-go years, thereby diminishing the enthusiasm for making bad loans. And leaving banks better prepared for the subsequent fallout.

Indeed, early studies of CECL concluded it would be counter-cyclical as intended. However, we have all learned a lot about projecting loan losses over the past decade, in part due to stress testing. In particular, loan losses depend importantly on the state of the economy in addition to lending standards. As a result, understanding the cyclical properties of CECL requires determining how the economic projections banks will utilize, evolve over the cycle. Unfortunately, early studies simply assumed that banks could predict with perfect foresight the state of the economy. This proved to be a critical mistake.

By contrast, my colleague Francisco Kovacs and I used real-time projections of the economy combined with models of loan losses developed by the New York Fed to estimate what level of loan loss allowances CECL would have called for in the years before, during, and after the financial crisis.

Because economic projections almost never anticipate turning points in the business cycle, economists tend to revise outlooks down as the economy slows and up when the economy picks up.

By our estimates, CECL-based loan and lease loss allowances as the percent of bank loans would have risen only about one half percentage point in 2005 and 2006 as lending standards deteriorated, but 3–1/2 percentage points in 2007 and 2008 as the economy collapsed.

Had CECL been in place during the financial crisis, we estimate that banks' capital ratios would have been 1–1/2 percentage points lower in the third quarter of 2008. Those lower capital ratios would have reduced bank credit supply in the crisis by an additional 9 percent, significantly worsening the recession. These results support our conclusion that CECL is indeed pro-cyclical.

CECL loan loss accounting will not only be pro-cyclical, it will also disproportionately affect home mortgages, student loans, small business loans, and loans to households with less than pristine credit histories.

For example, CECL would require a bank to book an immediate loss of $1,500 when originating a typical $250,000 mortgage in good times, and a $15,000 loss when originating the same loan in bad times, a tenfold increase. Such a requirement would reduce banks' willingness to make such loans in times of stress.

While FASB followed a rigorous process around the proposal, we believe that given our findings more economic analysis is required to understand better the downside risks of implementing this new standard and incorporating it into regulatory capital.

Thank you again for the opportunity to testify and to present our research. I look forward to your questions.

[The prepared statement of Mr. Nelson can be found on page 54 of the appendix.]

Chairman LUETKEMEYER. Thank you, Mr. Nelson.

Mr. Blackley, you are recognized for 5 minutes. Welcome.

STATEMENT OF SCOTT BLACKLEY

Mr. BLACKLEY. Thank you. Chairman Luetkemeyer, Ranking Member Clay, and members of the subcommittee, my name is Scott Blackley and I am the Chief Financial Officer of Capital One Financial Corporation.

Capital One is a diversified bank that offers a broad array of financial products and services to consumers, small businesses, and commercial clients. I want to thank you for inviting me to testify before the subcommittee about the FASB's new accounting standard, commonly referred to as CECL.

I applaud the FASB's desire to address the criticisms of the current accounting for loan losses. Unfortunately, I believe that CECL will create significant unintended consequences that will be harmful to the availability, accessibility, and affordability of credit for consumers and small businesses. During an economic downturn, this will be particularly felt by those in underserved segments of the market.

What is it about CECL that leads us to believe these outcomes are likely? Today, banks book credit losses on loans when those loans are probable and estimable based on conditions that exist at that moment, including where we are in the economic cycle.

We record revenue on good loans and we recognize losses on those that turn bad. Under CECL, companies will be required to recognize all future estimated losses on loans before recognizing any revenue.

Let me offer an example. If a bank originates a mortgage loan and the borrower makes payments for 10 years before encountering some unfortunate financial difficulty, the bank will generate revenue and capital during those years before the loan goes bad.

Under CECL, the bank would recognize all expected future loan losses when the loan is originated and before even the first dollar of revenue is recognized, reducing bank capital immediately.

This accounting distorts the economics of lending and it disadvantages lending to those with less than perfect credit. This is because the higher the perceived risk of a loan, the higher the upfront loss we must book.

It stands to reason that during a recession, banks will be less likely to lend when CECL requires that we reduce our capital for losses that could occur years into the future, and before we have generated even a dollar of revenue.

Another issue is that in practice CECL will be highly pro-cyclical. Having overseen the loan loss allowance at financial institutions

for over a decade, I believe I have a good perspective to offer about what the future under CECL will look like.

Prior to an economic downturn, allowances will be based on economic forecasts heavily influenced by the then-current environment. As an economic downturn evolves, forecasters will increasingly incorporate worsening economic assumptions which will drive up CECL allowances and reduce lending capacity.

Further, I believe there will be a strong bias from auditors and regulators to expect banks to build allowances assuming economic worsening until there is evidence of economic improvement. This process will likely result in the peak loss allowance occurring after the peak of the economic worsening.

As banks increase reserves, this naturally reduces the level of capital available to lend. Under CECL, banks will be further limited in their ability to lend during an economic downturn, which is damaging not only to consumers and small businesses but also to the economy more broadly.

As we saw during the global financial crisis, constrained credit significantly amplifies the impacts of an economic downturn.

In conclusion, we must ask, is it wise to go forward with an accounting rule that distorts the economics of lending and has the potential to constrain lending in an economic downturn?

Capital levels, not allowance increases, are the appropriate way to address credit loss uncertainty. And under the robust post-crisis regulatory regimes, particularly the stress testing mandated by the Dodd-Frank Act, the largest banks are already required to hold capital for extraordinary levels of economic and industry challenges.

We believe that either CECL or the capital regimes must be modified in order to avoid the adverse effects that CECL may drive on consumers, small businesses, and on our economy. Thank you, and I look forward to answering questions that you may have.

[The prepared statement of Mr. Blackley can be found on page 40 of the appendix.]

Chairman LUETKEMEYER. Thank you Mr. Blackley.

Mr. Zandi, you are recognized for 5 minutes. Welcome.

STATEMENT OF MARK ZANDI

Mr. ZANDI. Thank you. Chairman Luetkemeyer, Ranking Member Clay, members of the subcommittee, thanks for the opportunity to be here today. I am the Chief Economist of Moody's Analytics. These are my views, not those of Moody's.

I should also point out that I am on the board of directors of MGIC, a national mortgage lender insurer, and also the Lead Director of the Reinvestment Fund, one of the Nation's largest community development financial institutions. We invest in underserved communities across the country.

We do a lot of work with the banking industry here in the U.S. and overseas on CECL, stress testing, and have been very involved in the IFRS 9 process overseas which is the analog overseas to CECL implementation here. And that is already underway overseas.

I would like to make three points in my remarks. Point No. 1 is I think CECL adoption will lead to a stronger, safer financial system and economy. There are a number of benefits to CECL.

Most importantly, it will be less pro-cyclical than the current incurred loss accounting system. Under an incurred loss system, the loan loss provisioning is highly pro-cyclical. We could see that clearly evident in the last recession, the Great Recession, if you go back to the end of the housing bubble in late 2006 when unemployment was low and house prices were rising very rapidly, loan loss provisions were also very low, equal to about 1 percent of outstanding assets.

By the end of 2009, coming out of the Great Recession, the loan loss allowance was about a little over 3 percent of outstanding assets. A very substantive increase in loan loss provisioning during the period which exacerbated the decline in corporate bank earnings, profitability, obviously capital, and contributed to the severity of the economic downturn, and contributed to the credit crunch that soon followed.

Take CECL, if it were in place 10 years ago prior to the Great Recession, during the boom times, during the housing bubble when lending standards, unemployment was very low, house prices were very high, lending standards were very poor and egregious. CECL would have required the banking system to reserve at a much higher level than they actually did, which would have hurt earnings, profitability, capital, and incented the banking system to be less aggressive in extending credit during that bubble period.

Now, I don't think CECL would have prevented a bubble. There were a lot of other dynamics in that period, but it certainly would have mitigated the bubble and made the subsequent economic crash much less serious.

Not that CECL is counter-cyclical, it is not. But it is meaningfully less pro-cyclical than the current incurred loss accounting system. And you can read my written testimony to give a very transparent example of how this works for Freddie Mac's mortgage book based on their loan portfolio.

Point No. 2, having said all of that, I think there are things we can do to make this better. There are some reasonable concerns about CECL and its adoption. I will mention two very quickly.

First, I think there should be capital relief. The purpose of CECL is not to cause the banking system to be higher, more highly capitalized. It is an open question whether it will result in more capital.

But if it does then the prudential regulators should work to address that, particularly for long duration assets like a mortgage loan or for loans to borrowers of lower credit quality. We don't want the banking system to have to hold more capital against those types of loans in a troubled period. Capital relief is essential.

And two, I do think there is a good proposal on the table to allow banks to take the first year of the life of the loan loss as a charge in loan losses and put the rest of the loan losses, expected loan losses over the life of loan in other OCI, other income.

And I think that would go a long way to addressing some of the concerns that the banking system has. We can talk about some others. I have some other ideas, but I think those two proposals are

pretty good ones and would go a long way to addressing some of the concerns.

Finally, third point, I will point out that we are not leading the way on this accounting change. The rest of the world is, Europe, Canada, the Middle East, many parts of Asia have already implemented this.

And it has really been very graceful, not, much ado about nothing. There are differences obviously between IFRS 9 overseas and CECL here. But they are pretty minor and don't change the message that at the end of the day, despite all the hand wringing overseas about how this would hurt the system and lead to significant problems, it has not. It has been a very graceful implementation.

And I think the same will happen here in the United States when CECL is adopted under current regulations in 2020. Thank you. I appreciate the opportunity.

[The prepared statement of Mr. Zandi can be found on page 105 of the appendix.]

Chairman LUETKEMEYER. The gentleman's time has expired. One other housekeeping here, we want to enter into the record some information here. Without objection, I move to include in the record an April 16, 2015 letter from the FASB Investor Advisory Committee to FASB's technical director and the FASB rules of procedure dated through December 11, 2013. No objection.

I also move to include into the record statements from the American Bankers Association, National Association of Regional Insurance Companies, and the National Credit Union Association. Without objection.

With that, I will recognize myself for 5 minutes and will begin the questioning. Mr. Stieven, your business is to invest in banks. In my discussion, the roundtable with FASB, the gentleman there indicated that the reason for this proposal was because he wanted more transparency in the bank's balance sheets to make it easier for investors to be able to see problems or be able to better analyze the sheets to be able to do a better job of making sure they wanted to invest in these different banks or not.

So I have two questions for you. No. 1, will this work? Will this be helpful to you? And No. 2, when you are talking about banks, we have roughly over 5,200 banks and there are probably 5,000 privately owned. That doesn't apply, to me it wouldn't apply to those banks. Why would this accounting system be necessary for those who are privately held? Can you answer those two questions, please?

Mr. STIEVEN. On your first question, will it work? The truth of the matter is that with the health of our United States banking industry, we could even take a bad model getting thrown at us. We can.

And if I look at Congress right now, you are sitting next to Mr. Clay, a Democrat. Accounting should not be political. It should be neutral. And if you look at the rules of procedure in the FASB, it says that. So my point is, you guys in Congress did something very good 5, 6, 7, 8 years ago. If you look at Dodd-Frank, you did some very good things; stress testing, capital formation. Excellent. You did it. You made the tackle to use a football term.

But now 5 years later somebody is going to jump on the pile. Will it work? No, it won't. But then you start asking about the 5,200 banks. This is a huge burden. I gave you seven references. And these references are not to be nice to me. These are references for people who are experts.

And I will tell you when David Kemper at Commerce Bancshares has to go out and hire a third party because they can't do CECL alone, I think that should tell you about the complexity. How are these small community banks going to do it? They can't.

Chairman LUETKEMEYER. I have some follow up questions. Thank you, Mr. Stieven. Along the same line, you were a member of the advisory task force, Investors Advisory Committee. Is that correct?

Mr. STIEVEN. Four years, sir, non-compensated.

Chairman LUETKEMEYER. Four years, OK. And going through their principles which were made up of rules of procedure here, FASB's own rules, I have some concerns about this because, according to the other information, the dissenting opinion letter that was sent with that, there apparently was very little or no cost-benefit analysis done to this.

Is that correct? Which is supposed to be in the rules here, I have underlined that this is part of their rules process. Was that done?

Mr. STIEVEN. I have never seen a cost-benefit analysis. I would hope that you people in Congress have, but I have never seen it. And we have asked for it too.

Chairman LUETKEMEYER. So they didn't fulfill their—that is one point. They didn't fulfill with regards to their actual duty according to their own rules. Some of the other things here, it is very questionable in my mind that they have actually fulfilled these as well. But I guess my question is to you, because the rule was never done according their own rules, if I were sitting here and they were trying to ram these down my throat, would I have a legal recourse against these folks for rules that were improperly done?

Mr. STIEVEN. I am not an attorney.

Chairman LUETKEMEYER. OK.

Mr. STIEVEN. All I could tell you is I was at the IAC and you saw the comment letter we wrote. You have heard me read this paragraph. A lot of people have said to me, Joe, that is a pretty harsh statement when you are sort of part of the FASB.

Chairman LUETKEMEYER. I have one more quick question. Anybody on the committee can answer this question. If a bank, credit union, whatever, makes the loan on a home mortgage, they reserve the money and then they sell that to a secondary market. What happens?

No. 1, the reserves that they booked, do you unbook those? Does it go with the loan? Now, and then as the secondary market, if it goes to Fannie and Freddie, do they have to book a reserve on the loan? Because according to Mr. Schroeder who was at the FASB meeting, he said Fannie and Freddie also have to book these losses.

Anybody want to comment?

Mr. BLACKLEY. I will comment on that. As the loan is sold, it would come off your balance sheet and you would release the related reserve, the allowance associated with that loan. All that would come off and you would record that sale at the fair value

that you sold it at. The buyer would put that loan on their books and record their own estimate of allowance.

And one of the things that I think is interesting here is that the buyer and the seller could have completely different allowances when that loan comes on their books based on different views of the forward economy. But you do have it correct in terms of the way that would function.

Chairman LUETKEMEYER. OK. So with Fannie and Freddie, they are already broke. They are going to have to figure out how to reserve for those loans. Is that correct?

Mr. BLACKLEY. That is correct.

Chairman LUETKEMEYER. Holy smokes. OK.

Mr. ZANDI. So under the rules, this is a 3-year phase in. And if you do the arithmetic, they will have to reserve more. But it will not require them to go back.

Chairman LUETKEMEYER. So basically, in order to reserve for a Freddie and Fannie alone, those folks are going—so whoever has that loan with—that is sitting in their portfolio, they are going to have more charge. They are going to cost more for those loans because somebody is going to have to reserve for them. So they are just going to get passed on to the consumers of that.

Mr. ZANDI. If the asset is on your balance sheet, you have to reserve for it. Right? This is a question of how much—

Chairman LUETKEMEYER. Freddie and Fannie have to reserve for it. If HUD has to do this, they are going to charge more.

Mr. ZANDI. No, not necessarily. If you do the arithmetic on this, they should not have to charge more. No.

Chairman LUETKEMEYER. They don't have to reserve for loans? Home loans?

Mr. ZANDI. They have to reserve for loans. But if you do the—this is the difference. The difference is upfront reserving less the present value of the stream of future reserving, less the interest or return on the increased loan loss reserves you are holding—

Chairman LUETKEMEYER. End of the day, somebody is going to have to reserve more for that loan. That is the only way this is going to work.

Mr. ZANDI. It should not raise the cost in the system. It should not raise the cost for that loan. It should not.

Chairman LUETKEMEYER. My time is up. With that, we go to the gentleman from Missouri. Mr. Clay is recognized for 5 minutes.

Mr. CLAY. Thank you, Mr. Chairman. Let me also take this time and thank you for your leadership of the subcommittee. It has certainly been a pleasure for this term. Thanks.

Chairman LUETKEMEYER. Thank you.

Mr. CLAY. Let me put or pose a question to the entire panel. And it comes from a statement from Randal Quarles, Federal Reserve Vice Chair for Supervision who testified before this committee a few weeks ago in response to a question about CECL. He seemed to suggest that the regulators are providing banks with ample time to transition to the new accounting standards so that they can closely monitor it. And that its impact on stress testing will be neutral.

Vice Chairman Quarles said, and I quote, "I am always in favor of measures that make more transparent the position of any finan-

cial institution." But I do agree with you that the implications of CECL are not currently deeply understood, and we need to have time to understand them. So we have proposed a phased-in implementation of CECL and how that affects and how that works with our regulatory capital regime.

And we think that that will give us time to see how it's working in operation before it gets plugged into the regulatory capital regime. Allow us to see whether there are any changes. I don't know that there are. For firms that are affected by the stress tests, CECL could actually be a wash because to the extent that it means a larger reserve at the outset of the period of stress, then you will chew through that reserve before you chew through other things in the stress test. And it can be a one-to-one offset.

I will start with Dr. Zandi. Do you agree with Mr. Quarles' assessment including that CECL may end up being a wash in terms of the impact on bank stress test results?

Mr. ZANDI. I do. He is bringing up a good point that CECL will conflate with the stress testing process. And the question is how will the Federal Reserve implement the stress testing process under CECL? And that has not been determined yet. In fact that is why the Fed has allowed banks to not have to do this for another year or so as they figure this out.

But under reasonable assumptions about how the Fed is going to do this, I would be surprised if at the end of the day this is going to result in any significant change in the stress testing process, the results and ultimately what matters most, the amount of capital that the system has to hold.

Mr. CLAY. OK. How about Mr. Blackley? Do you have an opinion on it?

Mr. BLACKLEY. The first comment that I would make is that I believe that CECL actually creates a double count in the amount of capital you have to hold. Today I have capital that is based on an incurred loss model. In the future, if I have to increase my reserves under CECL and I don't get to reduce my capital, haven't I increased the total amount of capital that the bank has?

That is going to be a cost that is eventually going to get passed on to the consumer through higher interest rates.

Mr. CLAY. And has that issue been raised with FASB?

Mr. BLACKLEY. We have raised this issue. I believe that it is one of the issues that the industry has brought forward to the Fed and to others.

Mr. CLAY. OK.

Mr. BLACKLEY. The second thing I would say is that in stress testing, the way the stress test works, you are trying to look at a situation where you have an economic shock that happens very quickly. Most of the worsening in the economy in that hypothetical stress happens almost immediately in the test.

I have an accounting rule that says as soon as something goes—I have a loan that is going bad. I need to recognize the lifetime losses from a turn in the economy. I don't understand how you are not going to pull forward all the losses to the beginning of the stress test and cause the bank to ultimately have to hold more capital. So I am interested to hear how the Fed may solve that problem as well.

Mr. CLAY. Thank you. Mr. Nelson, any comment on the stress tests and whether it is a wash?

Mr. NELSON. Yes. Thank you, sir. I would point out that the Fed's proposal, while it does involve a delay and a gradual implementation, it doesn't suggest that over that course of time there is going to be any adjustment to the standard. As a consequence, the problems that we have discussed including the severe pro-cyclicality and negative implications for lending to less than pristine households and small businesses will all still be there when it comes to the fore.

With regard to the stress tests, as Mr. Blackley just noted, the stress tests involve projecting how banks would perform under a very severe economic recession. And of course, given the design of CECL, which depends, loan loss reserves depend upon economic projections, that is going to have a big impact. We estimate that the impact would in fact be an additional $500 billion in reserves going from a baseline to the worsening. And that is going to have an effect.

Mr. CLAY. Mr. Chairman, can I ask Mr. Stieven to weigh in?

Chairman LUETKEMEYER. Absolutely.

Mr. CLAY. Mr. Stieven?

Mr. STIEVEN. I don't want to intentionally disagree with one of my panelists, but I have to. But my experiences are totally different. I was a bank examiner. I was there. When stuff hits the fan, banks have to talk to their examiners. They have to talk to their auditors. And when stuff hits the fan, things go bad, there is a race to think the worst.

And I am going to give Mr. Clay an example, because you still look like you are in great shape. We had a great pitcher in St. Louis, Bob Gibson. We know what he could do at 60 feet. But CECL wants to go out a long way, lifetime.

Let's put Mr. Gibson in centerfield. How good will his baseball skill be then? This is a different model.

Mr. CLAY. What an analogy. Thank you.

Chairman LUETKEMEYER. We just got Goldschmidt over the weekend. We are going to be great next year. Mr. Clay and I, we talk baseball all the time here. Mr. Clay's time has expired. With that, we go to Mr. Rothfus, the gentleman from Pennsylvania, Vice Chairman of the committee. He is recognized for 5 minutes.

Mr. ROTHFUS. Thank you, Mr. Chairman. Mr. Nelson, some stakeholders have raised concerns that CECL's requirements will adversely impact the availability and price of credit and have a large impact on longer term products like mortgages, small business loans, and student loans. Do you share this concern?

Mr. NELSON. Yes, sir. Absolutely.

Mr. ROTHFUS. Do you believe that these impacts may be more pronounced for smaller institutions that are more heavily engaged in mortgage lending?

Mr. NELSON. Yes, sir.

Mr. ROTHFUS. Mr. Stieven, it appears that the changes required by CECL would require firms to conduct significantly more modeling and analysis than they do today. How costly would it be for banks to adjust to and operate under CECL? Can we quantify some of those costs?

Mr. STIEVEN. Again, the estimates that are out there, no one knows. I have quotes from Jamie Dimon at JPMorgan just talking about it. And the complexities of this model, no one even has the answers yet.

Mr. ROTHFUS. You have talked about—

Mr. STIEVEN. Talking about implementing this next year. Even for community banks, nobody has these estimates done.

Mr. ROTHFUS. Yes, you testified about Commerce Bank having to engage third parties to do this type of work. And you are looking at a local community bank. This just hasn't been quantified what the cost is going to be for them.

Mr. STIEVEN. If I had to give a guess, and this is just a guess, it's in the billions. I don't know the number. Nobody does. And that is one of the things. There is supposed to be some type of a cost-benefit analysis I have never seen, and we have asked for it.

Mr. ROTHFUS. Let's talk about the consumers. I think Mr. Blackley talked about—he believes the cost of this is going be passed along in the form of higher interest rates. Do you see that happening too, Mr. Stieven?

Mr. STIEVEN. Absolutely, as we all know, things roll downhill. If costs increase, in some way shape or form, they get passed along to the United States consumer. So it's absolute.

Mr. ROTHFUS. What about, Mr. Blackley? How is that going to impact how these community institutions are operating? What do you see coming down the pike in terms of product offerings, and what they are going to be able to do to meet the demands of the consumers that are out there?

Mr. BLACKLEY. I think that CECL is certainly going to put us in a situation where we won't be able to lend in all different economies, in good times and bad. We want to make sure that we can serve all markets. And our concern is that CECL, because of its front-loaded nature and its breaking of the economic earnings cycle, is going to put us in a situation in the middle of a downturn where we are not going to be able to lend to underserved communities and to folks that are non-prime credit.

It is just going to be harder when you are trying to husband your capital to then go forward and lend when you have to take that loss day one before you have recognized any revenue.

Mr. ROTHFUS. This sounds a little bit like déjà vu. As I recall, a report that Steve Strong did from Goldman Sachs talking about the two-speed economy that we saw going over the last 10 years where he looked at the financial regulation generally, that was coming out of this town having an impact greater on those smaller financial institutions.

The big folks were able to find those third parties that could help out. They could retain the lawyers. They could retain the consultants, the accountants to navigate the complexity that was coming down the pike, but not so for the smaller institutions. And we saw the concentration and loss of our community finance institutions one a day even.

Is this—are we looking—we made some great progress with S. 2155 providing meaningful relief to our community financial institutions. Do you see this taking one step back again? I would ask Mr. Stieven that.

Mr. STIEVEN. I think S. 2155 was absolutely a step in the correct direction. If you look at Dodd-Frank, even Barney Frank of Dodd-Frank has said, it's gone too far. We have to be reasonable. Paul Volcker of the Volcker Rule has said, wait a second, we have gone too far. We have to be reasonable.

So I want to again compliment Congressman Clay, Congressman Luetkemeyer, if you look at the changes in the banking industry over the last 10 years, the most important was tightening capital standards. And, the foundation of capital is tangible common equity. That is the foundation of all capital. If you look at the numbers in this industry, I could throw numbers out that would probably amaze 99 percent of the people in this room.

Citicorp's tangible common equity in 2008 was 1.56 percent. Does anybody have a clue what it is today? Eight percent. It's 5 times what it was 10 years ago. Bank of America has doubled. My point is you did a great job. CECL is too complex. It is going to hurt your community banks.

Chairman LUETKEMEYER. The gentleman's time has expired. Now we go with the gentleman from New York, Mr. Meeks. He is recognized for 5 minutes.

Mr. MEEKS. Thank you, Mr. Chairman. Mr. Stieven, my neighbor here said that Mr. Gibson, he knows someone that could hit him from 60 feet away. He said his brother-in-law could handle him a little bit well. His brother-in-law happens to be Hank Aaron.

Mr. STIEVEN. Another Hall-of-Famer.

Mr. MEEKS. Let me ask—I am listening. And it is really interesting to me. And I will start by probably asking everyone on the panel. I will start with Mr. Zandi. I understand the potential investor because I understand that this accounting scheme was for the investor. So they would understand the value of a financial institution.

So I get it from an investor side. However, considering the reforms that Mr. Stieven was talking about, whether it is capital standards or stress testing, etcetera, that we may do in Dodd-Frank. I am trying to understand why is CECL necessary from a safety and soundness perspective? Which is what I am doing, why is CECL necessary?

Mr. ZANDI. Remember back to the period prior to the financial crisis, Great Recession and during the financial crisis and Great Recession. Prior, we had a bubble. Very egregious mortgage lending, very poor lending in the commercial real estate sectors, commercial and industrial lending. There was lots of credit going everywhere under very low underwriting standards.

That was the bubble that set the stage for the financial crisis that caused the financial system to effectively collapse without support from the Federal Government. CECL—and one of the reasons for that dynamic—and there are many reasons. Capital was clearly one of them. But one of the reasons for that was the loan loss accounting system that we had in place, incurred loss.

Under incurred loss, the current system, you only book the loss when you take it. But in these boom times when things are great, there are no losses. You could go to San Diego in 2006. There wasn't a single default on a mortgage because things were rip-roaring. But it was all fake. It was all false. It was all a bubble.

But under CECL, because you were extending this credit to bad credits, people that were lying about income, lying about their—you would have to reserve a lot more. And if you reserve a lot more, you would make less loans.

Mr. MEEKS. That's just the—

Mr. ZANDI. So the problem is safety and soundness.

Mr. MEEKS. Didn't mean to cut you off. But that was the problem in my estimation. The problem was we had no-doc loans and some of the exotic mortgages.

Mr. ZANDI. But, why?

Mr. MEEKS. That was there so that they could package them. Maybe the folks knew that was the fraud there and that they would package them and they would sell them. But they knew in the beginning because they never checked the documentation that they may be bad loans.

Mr. ZANDI. Congressman, if I were a lender, I made that loan no-doc and I knew that that had a higher probability of default because it is no-doc, I would have to book a higher loan loss reserve under CECL. And if I have to do that, I am less likely to make that loan. That is—

Mr. MEEKS. But what my question is—and I just want to ask because I am concerned. I agree with Mr. Stieven that what we tried to do in Dodd-Frank was to fix that so that they wouldn't do that again, so that wouldn't happen. That was the sole purpose of Dodd-Frank to make sure that we got it right so this couldn't happen again.

And from what I understand with reference to CECL, it was or it is primarily for an investor to do some value, but here's what my concern is. My concern is it has a reversed effect. I think a couple of members have said it. I don't want people going out not having access because that is what happens. I don't want them to go out, not having access to capital, into loans or feeling that they have to go to payday lenders or anything else where they have to pay some more money.

And especially, I know that the former Fed Chair Ben Bernanke identified the concept he called financial accelerator. And it's with the idea that recessions tend to disrupt the flow of credit, which makes the downturns worse. People, they don't have access to it.

Folks in the community like mine have no alternative. They have no access to credit at all. They go to these payday lenders and they pay all this money.

Mr. ZANDI. Totally right. But what you want is, you want the lenders to provide credit through the business cycle in good times and bad, and if they don't lend to poor credits, very bad credits, no-doc, no down payment in the bad times it is much more likely that in good times they are much more likely to have the resources and the ability to lend more in the bad times.

That is the principle behind CECL.

Mr. MEEKS. But I am also asking particularly small-sized banks that have to pay more money for these regulations, why they are closing up in my district now. And then my folks don't have access to banks. And that means that I am actually causing another problem or a bigger problem for the folks that I represent.

And I don't want them to have to go to payday lenders. And if I am closing the opportunities for them to go to banks because I am making, especially small banks, I am making it more difficult for them and more costly for them because it is still a bank. I am a capitalist. I know they are not doing it to give away money. They want to make some money. But I want it to be reasonable. Whereas the payday lenders are not reasonable. I understand I am over time. I yield back.

Chairman LUETKEMEYER. I love your venting, gentleman. Thank you very much. With that we go to the gentleman from Oklahoma, Mr. Lucas. He is recognized for 5 minutes.

Mr. LUCAS. Thank you, Mr. Chairman. Mr. Nelson, I find the dissenting FASB votes to raise some very troubling prospects regarding CECL. For example, those members noted under the new method, a growing portfolio of loans will have a negative effect on profitability. And that seems to reinforce the old country adage: The people who can borrow money, don't need money.

And when you reduce the profitability, you take away the incentive to engage in the market. Now because of the requirement to record, of course, full lifetime expected losses, they also believe that the CECL method will have unintended implications for the willingness of lenders to lend under certain circumstances and to certain kinds of borrowers. I will acknowledge to you in my district, I represent a goodly number of both agricultural producers and energy producers.

And for the sake of discussion right now, I would like to focus on the ag side of the equation. Given those statements above, I am concerned that farmers in a rough farm economy—and we are into that right now, might have their credit dry up under CECL. Can you elaborate when and what some of the unintended consequences might be in this regard?

Mr. NELSON. Yes, I think you have very good reason to be concerned. What we found is that because of the disparate way that CECL reflect—accounts for expected losses versus expected income, it gives banks a strong disincentive to lend to and to make loans that have higher expected loss rates or loans with longer terms. And that would include agricultural loans and they would have to book a significant loss right up front when making those loans. And that amount would go up when times appeared to be worse.

Mr. LUCAS. Mr. Nelson, sticking with you, FASB recently signaled support for an amendment to CECL. That would require financial institutions to break charge offs and recoveries out by vintage year. I would imagine that any entity who buys debt, be it a bank, otherwise would probably need to radically change their current reporting practices if this amendment passes. Can you discuss how such an amendment would impact those entities?

Mr. NELSON. I am sorry, sir. Could you repeat what the entity—amendment was again?

Mr. LUCAS. FASB recently signaled support for an amendment to CECL that would require financial institutions to break charge offs and recoveries out by vintage year. I would imagine that any entity who buys debt, be it a bank or otherwise, would probably need to radically change their current reporting practices if this amendment passes. Could you touch on that?

Mr. NELSON. Yes. Certainly. So currently, charge offs and recoveries are recorded on the loan level basis. So being required to record those amounts at the loan vintage basis would require significantly more work on the part of the banks.

Mr. LUCAS. One last question, Mr. Chairman. Mr. Blackley, should there be a cost-benefit analysis done before agreeing to such an amendment?

Mr. BLACKLEY. I think that starting with the cost-benefit analysis is probably the first thing we need to do. I believe that we also need to then either eliminate CECL or, modify how it works. Capital One and 20 other banks have provided a proposal to the FASB that we believe would eliminate a number of the problems that we have discussed today, including the pro-cyclicality in the upfront cost of lending. If we are not able to change the accounting standard, then we are going to need to do something to modify the capital frameworks to allow for us to not have to hold more upfront capital.

I believe that a lot of the work that Congress has already done after the financial crisis with Dodd-Frank and the stress testing regime and other capital standards have broadly already dealt with all of the problems that CECL was initially intended to deal with. So at this point, my view would be that the best course of action would be to just eliminate CECL.

Mr. LUCAS. Well stated, Mr. Blackley, with that, I yield back, Mr. Chairman.

Chairman LUETKEMEYER. The gentleman yields back his time. Then we go to the gentleman from Georgia. Mr. Scott is recognized for 5 minutes.

Mr. SCOTT. Thank you. Thank you very much, Chairman and let me congratulate you on winning your re-election, good to have you back with us, my bipartisan partner. Good to have you. It is an honor.

Chairman LUETKEMEYER. Good to be with you, and I saw many of the battles between Mr. Aaron and Mr. Gibson, they were good ones.

Mr. SCOTT. Oh yes. The Cardinals and the Braves, can't do better than that. OK, what I would like to zero in on is this CECL and how it addresses comparability between different financial institutions. I think that is the core of the argument here we have today. And the reason I bring that up is because we worked hard on Dodd-Frank, I was a part of that, and we worked hard to reduce the complexity and increase the comparability between banks. We have an extraordinary banking system.

But it is extremely diverse, there are so many different institutions. Now, as I understand it, the CECL accounting method does not specify a single method for measuring credit loss, but allows any reasonable approach that meets GAAP accounting standards, is that correct, Mr. Zandi, you are shaking your head.

Mr. ZANDI. That is correct, yes.

Mr. SCOTT. All right, I want to make sure I am right. Now, let me go to you Mr. Blackley, in your written testimony you stated, and I quote, "as institutions may make different judgments about the future performances of their portfolios, readers of financial statements will be forced to reconcile the differences to fully under-

stand the comparability of financial results," is what you said, correct?

Now, I want you to elaborate on the impact that this has on the ability to compare the health of banks, the great diversity of them, small, large, regional, you name it, across the industry and whether these different models could impact the costs that consumers might see for different credit reports like mortgages and small business loans, that is the core of it. That particularly in areas that are already experiencing less bank competition, could you address that?

Mr. BLACKLEY. Certainly, thank you. The points on comparability, I believe, are very important. As the CFO for the company, I spend a lot of time with our investor base and one of the core concerns that they have brought forward to me is we don't know how we are going to compare two different banks.

There was recently an article in the Wall Street Journal that talked about, as Mr. Zandi spoke about in the international banking community, there has already been an accounting standard that I would call CECL-light that has gone into effect and the Wall Street Journal was commenting on how banks in the UK had already started recording allowances that varied from one bank to another, and no one could really explain why those differences were occurring.

So I do think there is a risk when you have to rely on that economic forecast, I have two great economists sitting here, they both have different views of where the economy is going to go. Just imagine they are different banks, they are going to have different allowances. So I do believe that it is going to create differences and opinion about—and comparability issues between banks.

Mr. SCOTT. Yes, let me—

Mr. ZANDI. Can I point out, Congressman?

Mr. SCOTT. Yes.

Mr. ZANDI. This I view as a feature not a bug. This goes to allowing smaller banks and institutions the flexibility they need to address the CECL standard without requiring all the big changes that a large institution like Capital One would want to implement.

Mr. SCOTT. And let me just say this right quick, I am also the chairman of the subcommittee that deals with swaps, derivatives, the whole cross border situation and Mr. Zandi, you bagin to allude to it in terms of the European models and all of that. Where do we stand now in terms of our own financial system, in terms of what we have here and then when you expand, all these companies that have direct and indirect impacts overseas?

So right now, we have these two dynamics with the largest sections of the European economy in Great Britain with their problem with Brexit and the exit from the European Union, and France which I am really worried about their situation. Could you tell us in your estimation, what impact what is happening now on the European continent will have on our financial banking system?

Mr. ZANDI. Let me say I think our banking system is rock solid. I think because of Dodd-Frank, because of many of the other changes that have been made since the Great Recession including, I would hope, the adoption of CECL at some point, means that the U.S. banking system can weather any storm. We have heard the

capitalization levels are measurably higher, liquidity levels are measurably better, risk management in place, measurably better.

We are in a much better place today. So I think we can weather many storms, Brexit storm, what is going on in France, but it doesn't mean we should stop and I do think CECL would put our system on even sounder ground if we went down the path.

Sure, there are changes we should make to make it work better and address the reasonable concerns that you are hearing expressed today, but at the end of the day, if we want comparability with the rest of the world, we should adopt something similar to CECL.

Mr. SCOTT. Right. Mr. Stieven?

Mr. STIEVEN. I was at the FASB on the ITAC when we discussed IFRS 9. IFRS 9 and CECL are not the same. In fact, in many of my discussions with people inside and outside of FASB, the IFRS 9 model is only sort of close to our current model.

The United States banking system has the toughest standards. You look at our U.S. banks compared to the other international banks, we are much stronger.

Mr. SCOTT. Yes. Thank you, Mr. Chairman.

Chairman LUETKEMEYER. The gentleman's time has expired. With that, we go to the gentleman from Colorado. Mr. Tipton is recognized for 5 minutes.

Mr. TIPTON. Thank you, Mr. Chairman. I appreciate the panel taking the time to be able to be here today. One of my primary concerns happens to be our local community banks. It is pretty interesting, economics simply don't work if you can't get a loan. You have to be able to get out into the community, be able to borrow the money. And we have had real concern expressed from our community banks in Colorado, the areas that I represent, about some of the new requirements that are coming in.

Mr. Stieven, would you maybe speak, is this going to actually—I think Mr. Zandi had mentioned, it is going to give the community banks more flexibility under these new regulations. Would you concur with that? Do you have a different opinion?

Mr. STIEVEN. Absolutely not, I don't believe so. This model is so complex. And my perfect example was Commerce, which is a regional bank. They can't figure it out, and they are one of the safest banks in the country. Explain to me how just a good community bank is going to figure it out? That is your answer.

It is not even me giving you my opinion. It is a fact.

Mr. TIPTON. Yes. Mr. Nelson, maybe you would like to weigh in on this as well?

Mr. NELSON. Yes, I would be happy to. As I mentioned, our research has concluded that CECL is going to be particularly difficult for banks that focus on small business lending, mortgage lending, lending to households with perhaps not perfect credit, student lending, precisely the kind of business models that smaller banks specialize in.

There are current industry estimates, not our estimates right now that say that if you are a bank that focuses on corporate lending, right now, you wouldn't see your capital reduced very much by the implementation of CECL, perhaps half a percentage point, but if you are a retail bank, a bank that focuses on retail customers

and small businesses, your capital could be reduced by as much as 2 percentage points.

Mr. TIPTON. Thank you. Mr. Chairman, one of the issues we have really had in Colorado, we have had a tale of two economies where a lot of our urban areas have done very well, a lot of our rural economies have continued to struggle and Mr. Blackley, would you see perhaps some of this over-regulation potentially on some of the small community banks, could this create a downward trend in economic activity? Or is this something that is going to stimulate economic activity?

Mr. BLACKLEY. Could you restate the question? I am sorry I missed the front-end of that.

Mr. TIPTON. You bet. It's a tale of two economies, rural areas versus urban areas. We have small community banks in the rural areas. If we are going to increase the compliance burdens on a bank that has $100 million in assets sitting, is this going to stimulate economic activity or is it going to deter it?

Mr. BLACKLEY. I really have a tough time seeing how it would be possible to stimulate economic activity. We are a very large complex bank. We have sophisticated tools which are allowing us to prepare for CECL. It is going to take us a year running in parallel to ensure that our systems are prepared when this thing goes effective in 2020.

I think that it would be considerably harder for a small institution that does not have the same scale and sophistication to be able to do that. I also think that CECL has the propensity, as Mr. Nelson was saying, to really punish consumer and small business lending, because those loans typically have, people that are new to credit have, higher losses.

The upfront burden of lending to those types of borrowers is going to make it less likely you are going to be able to do that. And that's right in the bailiwick of many community banks or small banks. I do think that it would be a headwind for the folks that you are talking about.

Mr. TIPTON. And just overall—and if you would like to speak to, just in terms of reducing some of the regulatory requirements, we had S. 2155 that my colleague had mentioned. We tried to be able to make sure that we have, not have regulations, but smart regulations to be able to have good outcomes.

Is this going to run counter to actually having smart regulations to be able to help the economy move?

Mr. BLACKLEY. I think many of the decisions around tailoring that have been made, S. 2155 or some of the comments that we have seen from the Federal Reserve on tailoring are absolutely going in the right direction to try to tailor regulation to the size and the risk of an institution. CECL I think applies to everyone equally. It's hard for us all.

I do believe that it is a bit of a step backward in terms of simplifying and making sure that the regulations that we all have to follow are appropriate for the size and the risk of the institution.

Mr. TIPTON. Mr. Nelson, do you care to comment on that?

Mr. NELSON. I agree. I don't have much to add.

Mr. TIPTON. OK. Mr. Stieven?

Mr. STIEVEN. I have nothing to add. But I agree.

Mr. TIPTON. OK. Mr. Chairman, I think that we have an opportunity to be able to address something that is going to be regulatory overreach. And I hope that this hearing is going to be able to highlight the real impact that it is going to have on the financial institutions. But ultimately, on the moms and dads that are trying to be able to provide for their families at home and to be able to build those small businesses.

Thank you, and I yield back.

Chairman LUETKEMEYER. The gentleman yields back. With that we go to the gentleman from Washington. Mr. Heck is recognized for 5 minutes.

Mr. HECK. Thank you, Mr. Chairman. It is always a good day when you have the opportunity to ask one's favorite economist in the country a couple of questions, Mr. Zandi. I want to take a slightly different tack—

Mr. ZANDI. By the way, my forecasts are always right, so.

Mr. HECK. We have obviously seen a significant shift in some lending markets. Some might even say dramatic shift in some lending markets from banks to non-banks over the last decade. I am frankly not entirely sure what is causing that. But I hope it is not bad policy.

This rule obviously applies to all lenders. I am wondering if you could talk about how you think it might be implemented; if so, differently with respect to regulated banks and credit unions versus non-banks. And whether or not you think this brings us closer to a level playing field or the opposite. Or does it not have any effect in your opinion?

Mr. ZANDI. I think because it does apply across the board to all financial institutions, whether they are in the regulated part of the system, the banking system or in the non-regulated part of the system, I don't think it should change the playing field to any significant degree. I am sympathetic to your point though, that we have seen risk move from the regulated part of the system, the banking system to the unregulated part of the system, the shadow system.

In part because some of the regulations, some of the capitalization requirements, liquidity requirements on the banking system have changed the economics and pushed risk out. And that is one of the limits to requiring the banks to be even more highly capitalized. And we have to be very careful and sensitive not to overdo that, because the risk will just go somewhere where it is less transparent and do more damage.

In fact, you can—a quick tangent. You can see this happening in the leveraged loan market. This is lending to highly levered nonfinancial corporations. And a lot of that is being done by nonbanks. And this is where the real financial vulnerabilities are in the current system.

But in terms of CECL and the adoption of CECL, I don't see that—I have not seen anything that would suggest that it is going to change the dynamics between the regulated part of the system and the unregulated.

Mr. HECK. I guess I am prompted and I do not mean to cast aspersions or impugn motives in any way. But on the one hand, you will have the banks and the credit unions overseen by Federal regulators with respect to how it is that they construct their models

and their assumptions, and the non-banks you don't and where are the incentives there.

But I have another question I want to get to. Since GSE's (government-sponsored enterprise) have been referred to a couple of times here, I can't help but ask. It's been mentioned in press reports that the President is considering nominating somebody to head the FHFA who is an open advocate for winding down if not eliminating the GSEs. And is opposed to the 30-year fixed mortgage. I am wondering if you would care to comment about what you think the implication to the economy would be if that were to be realized. And if you have time and you do not have a lot, compare it to the effect on the economy, for example, of CECL and any contraction that may occur there.

Mr. ZANDI. Yes. Good point. Clearly, there is a momentum toward scaling back the GSE's footprint, Fannie and Freddie and the potential changes at the FHFA seem to signal that we are moving in that direction. My hope is, my sense is that once the person running the show is there, that they will have second thoughts about eliminating the 30-year fixed-rate loan or significantly scaling back loan limits or raising G-fees, things that would do a lot of damage to the housing market which is already struggling in the current rising rate environment.

So I think better angels will prevail when you are actually having to sit down and make a decision. But clearly, it's something we need to watch very carefully. And it is a matter of—

Mr. HECK. Would you be very concerned if that stated preference were to be pursued?

Mr. ZANDI. Clearly, that would be a huge error. And it would do a lot of damage to the housing mortgage markets, to homeownership, and ultimately to the broader economy. Pretty bad idea. And that would—CECL would pale in comparison to what we are talking about here, and potentially with the GSEs.

Mr. HECK. Might I just add parenthetically and to conclude that I think we have seen the movie before where we finished the sentence. Once they are there, better angels might.

With that I yield back, Mr. Chairman.

Mr. ZANDI. Good point. I hear you.

Chairman LUETKEMEYER. The gentleman yields back. Now we go to the gentleman from Georgia. Mr. Loudermilk is recognized for 5 minutes.

Mr. LOUDERMILK. Thank you, Mr. Chairman. I appreciate the panel being here, incredibly important issue that we are talking about here. And as I was listening to all the panelists and my colleagues up here, my mind went back to when I worked intelligence in the Air Force.

One of our contractors that worked with us developing IT systems was tasked, was developing a hack-proof computer to handle all of the analysis of our intelligence because security was a concern. And they did it. They actually produced a system that could not be hacked. The problem was it was not useful. No one could use it. It was too slow. So we backed off and we said, OK, the importance is managing the risk, which is really what we are talking about here.

And I fear that from a small business standpoint, that what bean counters in ivory towers sometimes miss is what the underlying strength of our economy is, it is an entrepreneurial-based economy. And that is why what works in Europe does not necessarily work here in the United States because we are an entrepreneurial-based economy, which really breaks down to those who have money managing the risk to allow those who don't have the money or need the money at the time they need it to borrow that money.

It's always about managing the risk. And I think what we try to do is regulate away all the risk, which basically results in the people who have money only being able to loan it to the people who do not need the money at the times they don't need it. We have seen that happen over and over and over again.

And I have heard us talk about, that CECL itself will not raise the cost of lending or it itself won't reduce the number of loans. But the real result is when it comes down to it, in the bad times, which I don't see how you can say this isn't cyclical, it is definitely procyclical because during the lean times when small businesses like mine needed to borrow the money the most and could not borrow it, the banks are going to look at, if the projection is this business is going to be a little bit more risk, I am just not going to make that loan because I don't want to hold on to that additional capital that I could be using to make more loans.

And then when you talk about the complexity of it, the biggest complaint I am getting from our small banks and credit unions right now is the number of compliance specialists that they already have to have. And if you are going to increase the number of compliant specialists, it is going to be additional cost to the consumer, to the small business, which the end result is less money to loan.

And I think there is some empirical analysis that would back this up. Mr. Nelson, if I am not mistaken, your organization, the Bank Policy Institute, did do an analysis of the previous economic crisis. And if I am not mistaken, did not your analysis show that had CECL been in effect in 2009, it would have actually—the 10 percent reduction in loans would actually have been increased to 19 percent. Is that true? Would you like to elaborate?

Mr. NELSON. That's correct. So we estimated that had CECL been in effect, banks' CET, common equity, capital ratios would have been more than 1–1/2 percentage points lower at the worst point in the crisis. And using estimates from another paper that was just recently published in the Journal of Finance, that additional net reduction in capital requirements, we estimate would have lowered bank lending by an additional 9 percent, exactly as you said.

Mr. LOUDERMILK. Now, I experienced some of this in my own business back in 1995 to 2000. I was best friends with my local banker because we were starting a business. We didn't have a lot of capital. We needed capital. They came in and said, "Look, you probably are not the person just on your books that we would loan to, but you have contracts and POs in hand that we know we can pretty much rely on."

And they loaned us money. We kept loans and lines of credit open up until 2001, 2002. We were doing so well I didn't need the money. I paid off all the loans, all the lines of credit. But then

came 2008 and 2009 when our reserves were depleted. But I had the opportunity to do some very large projects.

But I just didn't have the capital to buy the equipment. I go back to the same bank and they said, "Can't do it anymore. The government's telling me I can't." And what that result was, is I had to do a massive layoff in my own business, which I would have probably been another one of those additional 9 percent.

Mr. Blackley, have the banking regulators conclusively stated whether there will be a corresponding offset in regulatory capital requirement for the additional capital required by CECL?

Mr. BLACKLEY. At this point, the only tangible rulemaking that has come out from the banking regulators is to give us relief and a phase-in period over 3 years for the initial adoption impact of CECL. What we have not yet seen is any adjustments that will need to be made for what I conceive as a double count of the consequences of CECL on capital. And they have also not clarified how they might need to adjust the stress test under Dodd-Frank in order to address the changes that are under CECL. So we are still waiting to see how they may address those items.

Mr. LOUDERMILK. Thank you. Mr. Chairman, I yield back.

Chairman LUETKEMEYER. Gentleman's time has expired. With that, we go the gentlelady from New York, Mrs. Maloney. She is recognized for 5 minutes.

Mrs. MALONEY. Thank you, member, for calling this hearing. Dr. Zandi, I understand CECL requires banks to immediately recognize expected losses on a loan but not any expected income on the loan. And what is the reason for this? Is it just to make banks err on the side of caution?

And I might add that on stress tests, they also require banks to assume losses on the Federal stress tests but not income on those loans. So could you comment on that and your understanding of it?

Mr. ZANDI. Sure. You are right. As currently envisioned, CECL does not allow the institutions to recognize interest income. And there has been a proposal to in fact allow that to occur, which is not unreasonable. Although if they are going to recognize interest income, they should also recognize the interest expense.

Now, this all sounds very easy to say and for an economist to say it pretty straightforward. But there are all kinds of—this would really complicate the implementation of CECL. And there may be many other accounting issues involved and I am not even aware of, that are deep into the accounting standard.

So in theory, it is probably not a bad idea. But in practice, I am not sure it is going to change the result here to any significant degree. But it will certainly raise the complexity of what is being proposed here.

Mrs. MALONEY. Also, Dr. Zandi, there seems to be a general agreement that the accounting standard for loan losses should not be pro-cyclical and should ideally be counter cyclical. And you acknowledged in your testimony that if CECL had been in place during the financial crisis and the Great Recession, it still would have been pro-cyclical but much less pro-cyclical than the old accounting standard.

Is there any accounting standard that would have been counter cyclical during the Great Recession?

Mr. ZANDI. It is a great point. And just to reinforce the point, CECL will not be counter-cyclical. It will simply be less pro-cyclical than the current incurred loss accounting system, which is highly pro-cyclical. Meaning, it opens the floodgates during the boom times and it really restricts the available credit in the bad times. That is what CECL is trying to correct.

Now, there are some things that in theory could be done to try to make CECL even less pro-cyclical or even counter cyclical around setting the economic scenarios and how they are determined in the future. That would be one way of going about doing it. Or even around the amount of loan loss provisioning that would occur for different types of lending at different points in the cycle.

But as you could tell, this is getting to be very, very complex. And I am not sure we get significant lift. In my view, let us just take this step. This is a very good step. It is not as complex as people think. There is a lot of flexibility here so that small banking institutions and credit unions can adopt this very painlessly. And this will make the system less pro-cyclical.

Meaning, we are not going to have these bubbles. Or at least to the same degree, we are not going to have these busts to the same degree. We are going to still have bubbles and busts, but just not to the same degree.

Mrs. MALONEY. I would like to, Mr. Nelson, if you would follow up and comment on this. Is there another accounting standard that would have been counter cyclical during the Great Recession? And if you want to comment on how CECL could be tweaked so it could have been counter cyclical in any way in addition to what Dr. Zandi has said?

And I would also after Mr. Nelson invite other members of the panel if they would like to comment on it. Mr. Nelson?

Mr. NELSON. Thank you. But first, let me comment on Moody's conclusion that CECL would in fact be less pro-cyclical than the current accounting standard. And that result was released in a paper that was released at the end of last week. Unfortunately, there are some analytical flaws and mistakes in the paper that make that paper an unreliable guide for the cyclical properties of CECL. And I will name just two of them.

First of all, the analysis is based on only a single type of loan, 30-year mortgages, 30-year fixed-rate mortgages and only on the highest-quality types of those loans. Consequently, it is not surprising that those loans do not exhibit a lot of cyclicality in their performance over the business cycle.

But second, and perhaps more critically, when they do their analysis and as they have to estimate what the allowance would be under CECL and what the allowance would be under incurred loss. When they estimated the loss under CECL, they assumed that when a mortgage goes bad, banks would be able to recover 65 percent of that loan. But when they did the analysis for the incurred loss methodology, they assumed that if the loan went bad, they would recover nothing on the loan. Correcting for that mistake by itself overturns their finding that the CECL allowance would be less pro-cyclical than the incurred loss allowance.

To answer your question, there are a number—I think the very fact that what we are asking for today, is that based on the serious

concerns that have been raised and the complexity and magnitude of this issue that there be time to wait, to not implement it, and to take time to study further and develop alternatives.

There have been suggestions raised. The regional banks led by Capital One have put forward a proposal that deserves serious consideration.

Mr. STIEVEN. Thank you for your question. No. 1, I don't believe there is a way to remove business cycles. Period. So I think the best thing that you can do to help the safety of the banking industry is what you did in Dodd-Frank. The foundation of bank capital is tangible common equity.

If you look at the improvements that you, along with your regulations, along with the regulators have done, you have done an excellent job. I am not trying to pat you on the back, but you actually did a good job. The concept of using reserves to quote/unquote be counter—no. Your eye has to remain on the ball, which is tangible common equity.

Chairman LUETKEMEYER. The gentlelady's time has expired. With that, we will go to gentleman from Kentucky, Mr. Barr. He is recognized for 5 minutes.

Mr. BARR. Thank you. I would like to continue that discussion a little bit because I definitely share concerns that CECL if implemented could in fact have some pretty—maybe unintended consequences in a downturn from a standpoint of access to lending and access to capital for those businesses and firms and households that could lead a recovery.

But I wanted to ask the other panelists to comment on Mr. Zandi's argument that in fact the CECL proposal is less pro-cyclical than the incurred loss standard. If you disagree with that, can you elaborate—and I will start with Mr. Blackley.

Mr. BLACKLEY. Yes, thank you for the question. Look, from a practitioner's perspective, building allowances, what I know for certain is that it is very difficult for a bank to project a future that is different from what we are seeing today. I think that CECL is going to be pro-cyclical by that very fact, because as we move through the cycle, we will be picking up increasingly big forecasts of losses. Those will be coming in to our allowances as we move.

Mr. BARR. Can I interject a question?

Mr. BLACKLEY. Certainly.

Mr. BARR. What Mr. Zandi, what I think I heard him say is that if you reserve more, that will strengthen the financial condition of the institution during a downturn. What about that do you disagree with?

Mr. BLACKLEY. Certainly having a strong capital basis is critical to all of banks. And what is going to happen is we are building our reserves, that actually will be reducing our capital levels. At the point of an economic downturn where things are really starting to decay, we are going to be very cautious with deploying that capital.

And that means that under CECL where you have to front-load the penalty for making a loan, that is just going to put pressure on us to make loans to small businesses to any of the types of credits that tend to have a higher loss rate to them. I do believe that it is going to be pro-cyclical and bad on the economy.

Mr. BARR. Mr. Zandi, you have heard what Mr. Stieven has said on multiple occasions I think very persuasively. And that is that we have strengthened the capital position of these institutions significantly both in terms of Basel III and in terms of CCAR stress testing capital regimes that are now in place.

My question to you is, given that, what problem are we trying to solve here?

Mr. ZANDI. We are trying to reduce the cyclicality of the provision of credit in the impact on the business cycle. We are now in a boom time. These are good times and credit is flowing. Underwriting standards are declining. You can particularly see this in the lending to not large, non-financial corporate businesses. Janet Yellen gave a speech last night talking about this as an existential threat to the economic expansion.

Under current laws, the provisioning is very low for those loans because there are no defaults.

Mr. BARR. But if the cap—what he is saying though is if the capital levels are extremely healthy—

Mr. ZANDI. They are. But we want a safer and less cyclical system. So right now, under CECL, the banking and non-bank institutions, the private equity firms, hedge funds, anyone who is extending this credit would have to be reserving more today. Their earnings would be lower. Their capital would be lower and they therefore would extend less credit.

Therefore, when we get into the recession, this will be less of a risk.

Mr. BARR. I would love to hear your response to that. Mr. Stieven.

Mr. STIEVEN. The word "incurred" is past tense. My third grade English teacher would tell me that it is past tense. But if you look at bank industry data for the last 25 years, do you know how far out in advance the average bank has been reserved for the last 25 years?

On average, two years in advance. So the concept that banks aren't looking forward currently, that is a joke. It is a mistake. It is not the truth. Banks are looking out.

Mr. BARR. When you book a loss on day one, but you do not recognize the potential for loan revenue, does that mirror reality?

Mr. STIEVEN. I started as a bank regulator 35 years ago. I grew up with that. I would say I am biased to keep it because I want a strong banking system, and we have it. But now too as Jamie Dimon once said, "We have gold plated standards." And now you want to keep going higher? Where do we stop? Is 100 percent capital the right number for banks? That means they do not make loans.

Mr. ZANDI. Congressman, to answer your question, from the portfolio of the loans, absolutely yes. You entered loans to them we know are going to default and there is going to be a loss given default. So why don't we recognize that when it happens? Because we know it.

Mr. BARR. My time is expired. But this is a very interesting conversation. Thank you very much. I yield back.

Chairman LUETKEMEYER. The gentleman's time has expired. Then we go to the gentleman from California. Mr. Sherman is recognized for 5 minutes.

Mr. SHERMAN. Thank you. I am a little concerned about talking about being counter cyclical. From an economic standpoint, I can understand we want our banks to be lending in the bad times. But the fact is that the financial services industry is a very volatile business. You make money in the good times. You lose money in the bad times.

And in other industries, at least, people try to smooth earnings, make investors think that things are all smooth when in fact life is jagged and people have gone to jail for smoothing earnings, which sounds to me like something very close to designing an accounting system that is designed to hide the cyclicality.

One way to deal with this, if this were to go into effect, would be to elect fair value accounting. Mr. Blackley, as I understand it you can get out of all these rules and just go to another system of rules? What is the matter with that?

Mr. BLACKLEY. Wow, there are so many—

Mr. SHERMAN. You could elect that now. You could elect that later. And I know your institution is pretty big and sophisticated. Could a small bank implement fair value accounting and just mark everything to market all the time?

Mr. BLACKLEY. In the best of times, a bank's ability to know the current fair value of an asset that doesn't trade is limited. You are using financial projections. In the worst of times when you have a variety of different opinions, you see spreads, or the difference between buyers and sellers and their view on what an asset is worth, widen out considerably.

Mr. SHERMAN. And then if you have to make a bunch of estimates, you can smooth earnings, hide bad results from your shareholders. Or be honest, but be accused of trying to smooth earnings or hide losses from shareholders. The more projections and estimates you make, the better it is for the trial bar. They need to sue somebody.

But I want to go to Mr. Zandi. I can see a reason for reserves on the balance sheet. Have you looked at what this means for the income statement? Should we—you put forward really that perhaps the right answers for the income statement might be too difficult to implement. And that is if you make a hundred loans and two of them are going to go bad, and 98 of them are going to be good, and on those loans, you are lending the money at seven and your cost of capital is three. So you are making pretty good money on the 98. You are losing money on two. If you recognize the loss on the two and you don't recognize the profit on the others, haven't you made things worse than not recognizing either?

Mr. ZANDI. I am very sympathetic to fair value accounting, very sympathetic to recognizing interest income and expense. I do not think though the banking industry and the rest of the financial system is to the point where they would go—you can hear it and they do not want to go down that path. That is a very long road. Maybe someday. But a baby step is—

Mr. SHERMAN. Basically, fair value is you go up and down. And what you are proposing is, do the down, but do not do the up. That would tend to give a worse number.

Mr. ZANDI. All I am saying, all I am proposing is, we know when we book loans and we have a portfolio of loans, we know with a high probability because of historical experience that this percent is going to default and we know the loss given default.

Mr. SHERMAN. But you also know, with the same kind of experience, that the ones that don't default are going to be profitable.

Mr. ZANDI. Yes.

Mr. SHERMAN. The very fact that banks exist and have not all gone bankrupt means that every time they—usually, when they make a hundred loans, only two or three of them go bad and the others are actually profitable. The profit on 97 loans just as much as you know the loss on the three loans.

Mr. ZANDI. The only thing I would say, I am sympathetic to what you are saying. The only thing I would say is we are trying to, in my view, solve for the following problem. We know the current accounting system is highly pro-cyclical. It messes things up in recessions. We saw it plain as day in the Great Recession. Let us just make this better. This is—

Mr. SHERMAN. Yes. I just want to comment on Mr. Nelson's answers to Carolyn Maloney and that is, I think you will inform the committee that whether this is less pro-cyclical or not, it deserves additional study that for us to come in and say, this is going to be less pro-cyclical because somebody did an analysis of its effect on fixed-rate 30-year prime mortgages, frankly the financial system does a good job of making mortgages.

I need money lent to businesses, and has a study been done on whether this is pro-cyclical or anti-cyclical or less pro-cyclical with regard to the business loans that we are relying on banks to make?

Mr. NELSON. Certainly, our study estimated loan losses for all the different types of loans on the banks' portfolio and then we use that information on the banks' portfolio of loans, the aggregate banks' portfolio of loans to come up with CECL analysis, so—

Mr. SHERMAN. And did you see some analysis show that it made the thing more pro-cyclical or less pro-cyclical?

Mr. NELSON. It was much more pro-cyclical. Significantly more pro-cyclical because thanks—it is—

Mr. SHERMAN. This thing needs more study. I yield back.

Chairman LUETKEMEYER. The gentleman's time has expired.

With that, we will go to the gentleman from North Carolina. Mr. Budd is recognized for 5 minutes.

Mr. BUDD. Thank you, Mr. Chairman. I appreciate you having me here as your guest over from Capital Markets and it is good to be able to shine a spotlight on this. I remember when the North Carolina Banking Association came in over a year ago and raised this issue with me. And it is good to have it in such a forum today, so thank you again, Chairman.

Mr. Nelson, I would like to start with you and ask you a couple of questions and some of this today from both sides of the aisle, it's been—it will be a bit of a summary, so if you could help pull this together toward the end of the afternoon here.

Your research over at BPI, it found that CECL would have a negative impact on lending during a recession, the cyclicality issue we have been talking about with various members today.

So in that vein, could you describe the impact and more specifically what would happen to borrowers who are dependent on bank lending in a recession?

Mr. NELSON. In a recession, particularly borrowers that are dependent on bank lending or particularly households that can't issue—get loans that are securitized and packaged away. It is small businesses as well.

And those borrowers are the ones for which banks are going to have to particularly take significantly larger allowances as they mark down their outlook for the economy.

Banks will therefore reduce lending to those individuals and those types of borrowers. And that will raise costs on those loans.

Mr. BUDD. So let's just continue, so the Fed's Vice Chairman for Supervision Randal Quarles said recently that a 3-year phase-in of CECL would help the Fed understand any unintended consequences of adoption of CECL.

Mr. NELSON. Right.

Mr. BUDD. Sounds like a great idea. But does that commitment really address your concerns that CECL would have negative impacts on bank lending during a recession?

Mr. NELSON. No, it wouldn't, and so it's a good point. The 3-year phase-in is really only to let the banks have time to adopt CECL. It is not to let everyone observe what happened, to then make changes to CECL.

The concerns that we have raised, the pro-cyclicality, the negative impacts for small business lending, student lending, lending to households that don't have absolutely perfect credit scores will all still be there.

Mr. BUDD. Mr. Stieven, I have enjoyed your thoughts so far today, would you have anything you care to add to that regarding the 3-year phase-in?

Mr. STIEVEN. When the Federal Reserve says they still don't have all of this fully implemented in their models, I think that reflects upon the complexity, that is number one. I would very much like to address Congressman Sherman's question, which was an excellent question.

If the CECL model is so great, why is it you could choose not to do it and just go to fair value? That is what you said, which you are correct, sir, but let me bring this back home for you right now in your State.

I have a lot of great bankers I know in California. You have been devastated by these wildfires. If you believe in fair value, what would you tell me is the fair value of a lot of the properties near and around those wildfires? They have obviously gone down. I am telling you, FV says mark them down. But, the good bankers are trying to run there and help their communities. CECL is a very pro-cyclical model.

Mr. BUDD. Thank you. Mr. Chairman, dare I say reclaiming my time. I love that. Mr. Nelson, just continuing on with a couple of other questions. Historically the FASB, which the SCC overseas has been considered the world's pre-eminent accounting standard

setter because of the rigorous process for developing the rules of the road for American companies.

With that said, I am concerned that recent accounting standards like the CECL, the forthcoming long-term duration standard for insurance companies. They have not been subjected to the rigorous field testing and other due diligence that was applied prior to the financial crisis. So CECL, like the long-term duration standard, does not appear to have been sufficiently vetted prior to becoming effective.

That is one of the things we have talked about today. So in your view, would processes like comprehensive field testing or independent investor surveys and cost-benefit analyses, would they give the SEC and the FASB the opportunity to identify and address problems with CECL that we are hearing about today?

Mr. NELSON. Yes, absolutely and the Bank Policy Institute wrote to the FSOC to encourage them to study further this problem. We recognize that this is a complex problem and for the—we have asked the Fed to look into it.

Further study is needed in order to understand the implications for the economy. Everyone agrees this is a major change. But we don't yet understand what the implications for the economy are going to be. It seems very likely that it is going to make business cycles worse.

It is going to make the financial system even more of an amplifier of business cycles and that should be understood before taking such a big change.

Mr. BUDD. Thank you to the whole panel and with no time to reclaim, I yield back. Thank you.

Chairman LUETKEMEYER. If the gentleman would like a little bit more time we certainly would lean in toward that if you have a very short question.

Mr. BUDD. No, this is perfect. Thank you.

Chairman LUETKEMEYER. Thank you.

With that, we will go to the gentleman from Arkansas. Mr. Hill is recognized for 5 minutes.

Mr. HILL. Thanks, Mr. Chairman. Thank you for doing this hearing. It is good to have the panel before us, of experts. We are grateful for your time. Following up on my friend from North Carolina.

So that means that FASB doesn't follow the best practices that Chairman Luetkemeyer laid out, so are we saying that in this CECL proposal they did not do pre-issue field testing, yes or no? To the best of your knowledge Mr. Nelson?

Mr. NELSON. Not to the best of my knowledge and—

Mr. HILL. And they didn't do independent investor surveys to see how the market would react to this to the best of your knowledge?

Mr. NELSON. I shouldn't say. I don't know the answer to that.

Mr. HILL. OK. And then cost-benefit analysis Mr. Stieven addressed and do you have anything you want to add on that?

Mr. STIEVEN. The FASB did talk to investors. I don't remember the exact number. Because this is a bank-specific model, I participated on several calls. There was not one bank-specific investor that we called that supported this model.

Mr. HILL. Thank you. So I have been in Congress 4 years. Before that I was in the financial industry for 35 years or so including in

the commercial banking industry, and in the 4 years I have served in the House only two things have prompted a slew of phone calls into my office from community bankers. One was Treasury's beneficial ownership rule that was put out last May and the other was CECL.

Everybody else has their list of things they would like to see improved along the way on Dodd-Frank, but these two have really struck a chord with community banks. And in looking at the definitions, it says CECL requires consideration not only of past events and current conditions, of course, that is what we have now, but also supportable forecasts that affected expected collectability.

The standard does not mandate a specific technique for estimating credit losses, allows companies to exercise judgment to determine the methods appropriate for their own circumstances, and institutions are permitted to use loss estimation techniques already employed. So what is the point of this exercise, would be a question I have.

How are we that much better off? And if we could put up a slide, you are asking community banks to make a forecast. And we have always used historic loss in setting loan loss reserves, rolling 8 quarters, rolling 12 quarters looking at shocks in recession periods, shock in individual sector analysis.

We do all this and we have done it for decades. We have done it since double entry bookkeeping. But here is the Fed, they have 700 economists. That is their starting point and their revision of their forecast for GDP. It is never right.

And they have all the economists in the world, not as good as Mr. Zandi but good. Let us go to the next one. Here is the Fed's forecast on inflation over here but the actual is, they have never been right, not once.

This is about a decade's worth of data, so how do we expect community bankers to forecast unknown events in the future when I don't see the measurable difference in transparency for loss analysis for the bulk of assets on a commercial bank's books by taking this standard, particularly when you read the standard and it says, institutions are permitted to use loss estimation techniques already employed including loss rate methods, probability of default, discount cash-flow methods and aging schedules, meaning what we do right now.

So if that is permitted right now then I am going to raise my hand at the board meeting when the senior vice president for credit administration comes in with this big gobbledygook proposal and says, "Hey, I like it. That is fascinating but since you can't really tell me it's better, we will just stick with what we are doing now."

Is that permitted Mr. Stieven? Can I just stick with what I am doing now?

Mr. STIEVEN. From my understanding, that is not going to be permitted.

Mr. HILL. Even if I am a community bank and I don't have the Fed's wonderful ability to forecast, I still can't stick with what I am doing now, even if it demonstrates decade after decade that it is acceptable, that it actually is predictive of my actual losses.

Mr. STIEVEN. Again, on my understanding, including my time working with the FASB, I don't know if that would be permitted.

Mr. HILL. So maybe that is why Jamie Dimon suddenly after 3 years or 4 years of talking about this finds it concerning even for the largest most sophisticated bank in the country.

Thank you, Mr. Chairman. I yield back.

Chairman LUETKEMEYER. The gentleman yields back.

With that we have concluded our questions today. And we certainly appreciate the witnesses' testimony. I just have a few concluding thoughts here. We have actually a minute or two here and what I usually try and do is give the witnesses all 1 minute to just sum up some of your—if you had a question that you want an answer to, didn't get a chance or if you have a comment you want to make to somebody else.

If you can hold it to 1 minute because we are looking at probably going to the floor here and voting very shortly, so if we—Mr. Stieven, we will start with you at 1 minute. You have anything you want to say, concluding remarks, summary?

Mr. STIEVEN. I would say that you and Congress have actually done a nice job, along with the regulators, to improve the most important form of capital, which is tangible common equity. The United States banking regulatory system, and the banking industry, are in excellent shape. Thank you.

Chairman LUETKEMEYER. Thank you very much.

Mr. Nelson?

Mr. NELSON. Thank you and I would want to add that we strongly support the objective of making the financial system less pro-cyclical, unfortunately, Congressman Hill put his finger precisely on the problem.

Economic forecasts including the forecast of the Fed, forecasts of all of the professional forecasters, they don't ever predict changes in the outlook that go from a downturn to an upturn or an upturn to a downturn, so even though despite the best intentions, what CECL will do is it will cause loan losses to rise sharply when you go into a recession and fall when you are going into a recovery.

Chairman LUETKEMEYER. Very good.

Mr. Blackley?

Mr. BLACKLEY. Yes, just a couple of quick comments, first, I believe that Dodd-Frank and the post-crisis regimes are doing the job that they were built to do. We have a very well-capitalized banking system.

CECL is redundant to that. It is harmful. I believe that there is significant evidence that suggests that it's going to exacerbate an economic downturn. And given that, I believe that we need to change or eliminate CECL or adjust the capital regimes to reflect that fact.

Chairman LUETKEMEYER. Mr. Zandi?

Mr. ZANDI. Thank you to the committee for the opportunity to speak here and participate. It was a very productive session I thought. Just one quick point. You don't need to take anybody's forecast.

You can look at your historical experience and that would be your forecast in the future. So it doesn't rely on my forecast. I—and believe me, I think I am great at what I do, but I don't predict any turning points very well, either, but you don't need to rely on me and CECL is not designed to rely on those kinds of forecasts.

Chairman LUETKEMEYER. Very good. Thank you gentlemen. I have a few thoughts and a few concerns that I want a voice here very quickly. Mr. Stieven, you gave us some information here and I entered it into the record with regards to your serving on the committee that oversaw this, the proposal, this rule and in this discussion of some of the papers that you presented there it was shown that the rule as Mr. Hill indicated as well was not done according to FASB's own rules, which really begs the question why? Why was it not? What is the concern? Who is trying to promote this? Who is behind this? What is really going on? It raises a lot of questions in my own mind.

Another thought, all of you made the point that there are additional costs here to be borne by somebody whether it is the banks or the consumers. If that happens, the point I made when we were discussing with FASB was, hey, look if the costs are to be borne by the consumers, one of two things happen, either they are going to pay a whole lot more for this or they are going to do without services.

If the banks have to do without presenting them with additional services, which has happened with smaller lending, which has happened with mortgage lending, there is more—I have banks from my district that no longer do mortgage lending.

So suddenly now the banks have a CRA problem. They are not servicing the community. This is an unintended consequence of this proposed rule in my mind. So the other thing is where does FASB think that money comes from that we are going to segregate out?

The banks already have a loan loss reserve, so we are segregating out existing income of the existing year's income. Is that where it is coming from? It is coming from loan loss reserves, take out those reserves and set them to the side out of capital on the conservative side? Whatever it is, it is already money. It's already in the system that we are segregating out.

That is already. To me, this is a shell game of what they are trying to do with the money that serves for the capital reserves and income for the year. And it is nonsense in my mind. I am hopeful that we can, and also one other comment with regard to Mr. Hill in the comment he made with regards to the Fed economists.

I have argued that point for a long time, but obviously FASB believes that the community bankers especially are better at estimating the local economy than the Fed and everybody else is, so that is very heartening to know that.

With that, I would like to thank the witnesses again for the testimony today.The Chair notes that some members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

And, with that, this hearing is adjourned.

[Whereupon, at 10:34 a.m., the subcommittee was adjourned.]

A P P E N D I X

December 11, 2018

Testimony of

R. Scott Blackley

On behalf of

Capital One Financial Corporation

before the

Financial Institutions and Consumer Credit Subcommittee

of the

Committee on Financial Services

United States House of Representatives

Assessing the Impact of FASB's Current Expected Credit Loss Accounting Standard on Financial Institutions and the Economy

Tuesday December 11, 2018

2:00pm

Rayburn House Office Building

Room 2128

Abstract

CECL is a byproduct of the 2007-2009 financial crisis era and was developed by the FASB in response to the view that banks increased their "allowances" to absorb loan losses too late in the cycle, thereby intensifying the effects of the financial crisis. However, since that time, Congress enacted sweeping reforms under the Dodd-Frank Act, and financial regulators have instituted significant new regulations and tools to help ensure that future crises would be either averted or their impact diminished.

While the FASB's efforts in developing CECL were laudable, it is likely to create significant unintended consequences that could be harmful to the availability, accessibility and affordability of credit for consumers and small businesses, especially those in already underserved segments of the market – particularly during an economic downturn.

Today, banks book credit losses on loans when those losses are probable and estimable based on conditions that exist at that moment, including where we are in the economic cycle. Under CECL, companies will be required to recognize all future estimated losses on loans before recognizing any revenue. This accounting distorts the earnings cycle of prudently underwritten loans and the economics of lending to consumers and small businesses, most significantly to those with less than perfect credit. During a recession, banks will be less likely to lend when CECL requires taking all of the estimated lifetime credit losses – reducing capital – before generating any revenue.

Another aspect of CECL is that it requires banks to predict losses based upon their views of the economy in the future. Many believe that this will exacerbate the procyclicality of loss allowances. Even the best economists and other forecasters have difficulty predicting the timing

and depth of turns in the economy. Misestimations in economic forecasts will drive uncertainty and volatility in Allowance for Loan Losses that will result in increased procyclicality.

When a downturn occurs, the rapid changes in economic forecasts will impact projections for credit losses multiple years in the future, and CECL requires banks to immediately reserve for the changes driven by this forecast volatility. As banks increase reserves, this naturally reduces the level of capital available to lend. In a downturn, bank capital positions are reduced while the capital needed to originate new loans under CECL would be materially higher than under the current framework. This would mean that banks would be further limited in their ability to lend during a crisis, which is damaging not only to consumers and small businesses but also to the economy more broadly. As demonstrated by the financial crisis, driving more lending out of regulated banks and into unregulated financial institutions will harm both consumers and the financial system. Furthermore, it is reasonable to conclude that these increases could be passed onto consumers in the form of higher pricing particularly in longer lived and other non-prime lending products.

In conclusion, the robust post-crisis regulatory regime, especially the stress tests mandated by the Dodd-Frank Act, raise serious questions as to whether CECL is even needed. At a minimum, the adoption of CECL should be delayed so that a quantitative impact study may be conducted to conclusively understand the magnitude of the potential negative impacts to consumers, businesses and the overall economy.

Chairman Luetkemeyer, Ranking Member Clay, members of the subcommittee, I want to thank you for allowing me to testify this afternoon. I am pleased to be here to represent Capital One and express our concerns regarding the Current Expected Credit Loss ("CECL") accounting standard that has been issued by the Financial Accounting Standards Board ("FASB"). I am

also here to provide you with some possible solutions to mitigate the concerns we and other financial institutions have with this standard.

Capital One is one of the nation's 10 largest banks based on deposits and offers a broad array of financial products and services to consumers, small businesses and commercial clients. A Fortune 500 company, Capital One has one of the most recognized brands in America.

I have been with Capital One for more than seven years and Chief Financial Officer since May 2016. I previously served as Capital One's Principal Accounting Officer and Controller. Prior to my time at Capital One, I held various executive finance roles at Fannie Mae, I was a Partner with KPMG and a Professional Accounting Fellow in the Office of the Chief Accountant at the Securities and Exchange Commission.

CECL History

The global financial crisis of 2007-2009 highlighted what some called a weakness in the traditional "incurred loss model," under which companies recognize credit losses on their loans once those losses are "probable." During the crisis, balance sheet loss allowances grew at a rate considered "too little, too late" by critics who believed that lenders should be able to use more forward-looking information to establish reserves for loan losses rather than waiting to reserve until after the loss is probable. The delayed recognition of credit losses was cited by the Financial Crisis Advisory Group ("FCAG") as a weakness in generally accepted accounting principles ("GAAP"). In an attempt to address these perceived deficiencies, the FASB initiated a project in 2008, issuing forward-looking reserve proposals that culminated in the issuance of CECL in June 2016, replacing the existing "incurred loss" framework with a new model requiring immediate recognition of credit losses expected over the contractual life of the underlying financial instrument.

CECL was developed to reduce the procyclicality of credit loss recognition. The standard removes the "probable" threshold and the concept of "incurred" that financial institutions have used for over 40 years. In its place, CECL requires financial institutions to consider forward-looking information in order to estimate expected lifetime credit losses. CECL was intended to ensure that loss reserves accurately reflect not just the present but the future as well. Reserves are considered "procyclical" when they are overstated at the trough of an economic cycle (the downturn) and understated at the peak of an economic cycle. Procyclical reserves threaten to overinflate economic peaks and make economic downtowns worse. As noted by the Financial Stability Forum[1], "addressing procyclicality is an integral part of strengthening the macroprudential or systemic orientation of regulatory and supervisory frameworks. A macroprudential orientation focuses policy on avoiding damage to the financial system as a whole with an eye to the impact on the real economy."[2]

CECL distorts the accounting and economic relationship

CECL requires banks to estimate losses for the entire life of a loan including the prediction of future economic conditions which necessitates anticipating exactly whether - and precisely when - a downturn will occur. Because such perfect foresight is impossible, banks will be forced inevitably to adjust their expectation of lifetime credit losses once a downturn occurs, increasing projected loan losses at that point. Thus, loss reserves (and without regulatory capital relief, required capital) will rise as the economy worsens. The effect on capital would reduce lending, and could be harmful to consumers and small businesses through higher pricing, reduced loan tenors, and less access to credit for already underserved borrowers.

[1] The Financial Stability Forum was an institution of major national financial authorities and international financial bodies that promoted international financial stability.
[2] Financial Stability Forum publication: "Report of the Financial Stability Forum on Addressing Procyclicality in the Financial System," April 2, 2009

CECL will also discourage normal bank lending, even during healthy economic periods, by front-loading the capital costs of originating loans. Under CECL, when a bank increases its lending, all of the estimated losses over the life of those loans reduce capital on the day of origination. In the depths of a recession, when banks must look more carefully for revenue opportunities, banks are less likely to lend when lifetime losses must be recorded before the first dollar of revenue.

This divergence, combined with the procyclicality of CECL and the conservative bias expected of banks as it relates to loan loss reserves, will result in increased costs to extending credit. At a minimum, if these concerns are realized, it will discourage lending during a weak economy, limiting constituents' access to credit when it is needed the most. Consumer and small business lending products will generally become less attractive to lenders once CECL is adopted, with the potential to either become less available in the market, or possibly repriced to reflect the additional costs incurred to provide them. Notably, this effect will be felt most acutely by underserved borrowers, where higher historical loss rates will exacerbate CECL's negative effects, further raising costs and reducing the availability of credit.

CECL is more procyclical

Research has cast doubt upon CECL's central claim that it would reduce procyclicality of credit loss recognition. Federal Reserve Board ("FRB") Staff analyzed the procyclicality of CECL and concluded that provisions are generally less procyclical compared to the incurred loss model, but only "to the extent that risk managers have a capacity, even somewhat limited, to predict near-future macroeconomic trends."[3] This assumption is highly problematic. Both empirical data and academic research show that macroeconomic forecasters' ability to predict even short-

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

term trends, especially the ability to predict the timing and/or magnitude of the onset of an economic downturn (or an upturn), is critically limited, and is especially limited at the turns of economic cycles.

Research by The Bank Policy Institute ("BPI," formerly The Clearing House) concludes that had CECL been implemented prior to the global financial crisis, loss provisioning would have been "highly procyclical" and likely would have "exacerbated the impact of the 2007-2009 financial crisis." BPI noted that macroeconomic models and forecasters are "generally unable to predict turning points. Most of the time, the models predict that economic conditions in the future will be similar to the present while gradually reverting to the mean."[4] In other words, BPI concluded that forecasters err by believing the future will be too much like the present. This is particularly relevant because, due to intentions to minimize management bias, companies will likely rely on such forecasters for assumptions of how the economy will look in the future when estimating lifetime loan losses under CECL. Therefore, they will likely be slow to pick up the worsening and then slow to pick up the recovery.

BPI also noted that forecast errors are generally small prior to a recession but rise significantly when a recession begins. For example, utilizing macroeconomic models, the forecast error for the unemployment rate was determined to be -0.1 percentage points for forecasts ending in Q4 2007, but that error rate exceeds 3.75 percentage points ending in Q4 2009.[5] This is critical, as CECL credit loss expectations will be highly sensitive to forecasts of economic indicators, and changes to those forecasts, particularly at cycle turns, will greatly amplify the level of procyclicality under the new lifetime CECL model. BPI's research concluded that at this critical point when the economic cycle changes, forecasts are the most inaccurate.

[4] The Clearing House Staff Workpaper 2018-3: "Current Expected Credit Loss: A Top Down Approach"
[5] The Clearing House Staff Workpaper 2018-3: "Current Expected Credit Loss: A Top Down Approach"

Similarly, an FRB Staff working paper identified many challenges associated with forecasting, including changes in the structure of the macroeconomic environment, forecaster bias and measurement of input data. The FRB Staff paper indicated that "the December 2008 forecasts of the December 2009 unemployment rate ranged from under 5 percent to almost 10 percent."[6] As noted by the American Bankers Association ("ABA"), unemployment forecasts by the Federal Reserve Bank of St. Louis ("FRBSL") did not sufficiently recognize the extent of the eventual increase in unemployment in its forecasts until late in 2009.[7] However, subsequent FRBSL forecasts then overshot both the severity and the length of the economic decline.

Having overseen the loan loss allowance at financial institutions for over a decade, I believe I have a good perspective to judge the future under CECL. I believe that the inability of forecasters to predict economic changes will inevitably cause CECL to be more procyclical than the incurred loss model. Prior to an economic downturn, allowances will be based on an economic forecasts heavily driven by the then current environment. As the economic downturn evolves, forecasters will increasingly incorporate worsening economic assumptions, driving up CECL allowances.

The process of setting the allowance of loan loss is intended to be prudently conservative. As we work through an economic cycle, there is a strong bias from auditors and regulators to continue to forecast economic worsening until there is evidence of economic improvement. This process most often results in the peak allowance occurring after the peak of the economic worsening. There have been no innovations in forecasting since the creation of CECL that will mitigate this effect. These factors will result in CECL's impact on reserves being significantly

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

[7] American Bankers Association response to "Regulatory Capital Rules: Implementation and Transition of the Current Expected Credit Losses Methodology for Allowances and Related Adjustments to the Regulatory Capital Rules and Conforming Amendments to Other Regulations" (Docket OCC-2018-0009; FRB Docket No. R-1605/RIN 7100-AF04; FDIC RIN 3064-AE74)

more procyclical than the current accounting model and thus functioning contrary to its intended purpose by exacerbating, rather than limiting, the effect of an economic downturn.

As one analysis summarizes, "if banks fail to anticipate turning points well in advance or to adopt additional precautions during good times, the more forward-looking provisioning methods may paradoxically mean that banks experience more sudden falls in regulatory capital right at the beginning of contractionary phases of the business cycle,"[8] which would amplify the procyclicality currently observed in the incurred loss model. Essentially, CECL estimates relying on such forecasts would have resulted in inappropriately higher reserves during the financial crisis than those recognized with incurred loss accounting and would have maintained those high reserves longer, even as the economy was stabilizing, potentially creating a drag on the recovery.

CECL is bad for investors and lacks comparability

Based on our active and extensive dialogue with investors, it is clear to us that institutional investors are generally opposed to CECL. As previously noted, accounting under CECL is inconsistent with the economic flows of lending. As this occurs, investors will likely turn to non-GAAP measures to understand the difference between financial and economic performance. They believe that the necessity but inability of banks to predict the timing and magnitude of economic cycles will increase the procyclical volatility of bank financial statements. Higher volatility will increase both the required amount of capital and the cost of that capital, resulting in lower and less predictable returns, even as the real underlying economics of lending will not change. Additionally, investors believe financial statements will be less reliable and less comparable after CECL is implemented. Accuracy and reliability will decrease as assumptions about economic and credit cycles, which are empirically unreliable, cause and amplify changes

[8] Abad, Jorge, and Javier Suarez (2018), "The Procyclicality of Expected Credit Loss Provisions"

in financial results as those forecasts and assumptions are adjusted in reaction to real cyclical movements. This impact is at its worst during periods of economic stress.

As institutions with similar asset classes may make different judgments about the future performance of their portfolios, readers of financial statements will be forced to reconcile the differences in management judgment to fully understand the comparability of financial results. This problem will be particularly acute for portfolios of long dated assets where the estimated loss recognized at origination will change over time with changes in economic assumptions and may never align the provision expense with the economics of the long-term loan. The economics would require the institution to realize the earnings as the borrower performs against the obligation over a period of time.

The net effect of all these factors is that investors, who should be the intended beneficiaries of changes in financial reporting requirements, do not see CECL as a positive. To the contrary, they will be less willing and able to allocate their investment dollars to the banking sector, thus making it more challenging for banks to access capital, particularly during periods of stress when banks, their customers, and the economy need it most.

CECL is duplicative of more effective post-crisis reforms

Banks use capital as a buffer against credit losses. The Federal Reserve notes that "[c]apital provides a buffer to absorb losses that may result from unexpected operational, credit, or market events."[9] Given substantial advances in prudential regulation in response to the financial crisis, CECL is duplicative of other, far more effective tools, specifically Basel III and the capital stress testing regimes of the Dodd-Frank Act. Basel III has increased both the quality and quantity of capital, and stress testing ensures that banking institutions have the capital

[9] Federal Reserve Board, Supervision and Regulation Report, November 9, 2018,

resilience to withstand severe and sustained economic downturns and related impacts to revenues and loan losses.

The Federal Reserve has concluded that "[s]ince the financial crisis, the Federal Reserve has implemented new rules that have significantly raised the requirements for the quantity and quality of bank capital, particularly at the largest firms."[10] The Federal Reserve's Comprehensive Capital Analysis and Review ("CCAR") (including the federal banking agencies' recent Stress Capital Buffer ("SCB") proposal) in particular is far more effective at achieving CECL's goal, and unlike CECL, it does not have the procyclical impacts since it is scenario-based and monitored in advance of a crisis. The SCB proposal makes CECL's redundancy especially apparent. The SCB framework would ensure that bank capital levels adjust concurrently with the economic cycle and changes in a bank's risk profile, all in advance of a downturn. Put another way, SCB implementation would force banking organizations to recognize and capitalize for potential economic downturn losses sooner, just as CECL is intended to do.

Abandon CECL; or other options

We support the efforts of FASB to improve financial reporting, as reliable and useful financial statements are a bedrock of our financial markets. Nonetheless, we believe CECL should be abandoned because it is duplicative of other, more effective post-crisis capital reforms, and poses potential economic threats to consumers and small businesses, especially those in underserved segments of the market.

If not abandoned, then delayed and studied

As the adoption date nears, banks, banking regulators, consultant firms and trade groups have published studies attempting to estimate the impacts of CECL. In our view, this research shows

[10] Federal Reserve Board, Supervision and Regulation Report, November 9, 2018,

that CECL will be procyclical, duplicative, and detrimental to our economy. We recognize that other good faith efforts have come to conflicting conclusions on these points. In some cases, the studies rely on expectations of perfect, or near-perfect foresight of future economic conditions, are limited in the dataset availability to support their respective analysis, or involve simplifying assumptions that could greatly impact the outcomes of the studies. Clearly, more research is needed. That is why we and many other banks, trade groups, and members of Congress have requested a delay in the adoption of CECL so that a quantitative impact study can be conducted to determine conclusively whether CECL will have any potentially negative impacts, and if so, provide an opportunity to address those impacts prior to its required adoption.

Though FASB has done much good-faith work in designing CECL, its focus does not extend to CECL's broader economic impact. As part of its standard-setting process, the FASB conducts a significant level of outreach to financial statement preparers, audit firms, banking regulators, and users of financial statements to develop standards that improve upon financial reporting. Prior to issuing a standard, the FASB conducts a cost-benefit analysis on the impact of the standard. In this case, however, the cost aspect of these analyses focused solely on the operational implementation and execution costs to provide the benefits of improved reporting, rather than potential broader costs to economic activity. This analytic is both significant and critical. Typically, the economic impacts of new reporting standards measured in this manner are de minimis, and thus their exclusion does not materially impact the outcome of the analysis.

Evidence strongly suggests, however, that the potential for CECL to impact economic activity is both unique and profound. Therefore, the FASB's cost-benefit analysis for this standard should be expanded to incorporate potential costs to the economy more broadly. There is still time to delay the implementation of CECL to perform a quantitative impact study to understand and resolve its impacts on lending and regulatory capital.

Alternative proposal submitted to FASB

In the absence of any such rescission or delay, twenty-one financial institutions (including Capital One) submitted a proposal (the "Proposal") to the FASB to initiate a dialogue regarding how the CECL standard could be amended in order to avoid or limit the unintended consequences to the economy. The Proposal retains the FASB's intent of establishing an allowance for the lifetime of an asset on the balance sheet, but recognize the provision for credit losses in three parts: (1) for non-impaired financial assets, loss expectations within the first year would be recorded in earnings as a provision for losses with (2) loss expectations beyond the first year recorded to Accumulated Other Comprehensive Income ("AOCI") and (3) for impaired financial assets, lifetime expected credit losses would be recognized entirely in earnings.

We believe this Proposal better aligns the accounting under CECL with the economics of lending, while still providing financial statement users with decision-useful information on an institutions lifetime expectation of losses. Additionally, the Proposal retains the flexibility of the CECL standard and is not prescriptive of modeling methodologies enabling institutions to apply an approach that is commensurate with their size, complexity, and risk management systems.

The Proposal could be leveraged by the banking regulators to reduce the impact of CECL on regulatory capital by allowing banks to opt-out of the portion of losses in AOCI, thereby avoiding the unintended consequences of additional capital cost passed on to consumers and small businesses through higher pricing, reduced loan tenures, and reduced access to credit for already underserved borrowers. Additionally, the opt-out of CECL losses recorded in AOCI aligns with the recent banking regulatory proposal to change applicability thresholds for regulatory capital and liquidity requirements, as the Proposal provides a framework to quantify the AOCI amount through well governed and controlled processes.

A primary objective of CECL, to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments at each reporting date, would not change with the adoption of the Proposal. Instead, the Proposal attempts to leverage the primary features of CECL (e.g., incorporating forward-looking information, estimates of expected credit losses over the contractual term of the underlying financial assets), while reflecting a more accurate depiction of the economics of lending transactions in the income statement (credit losses are typically experienced well after origination, clustered in economic downturns, and are offset by interest income from performing loans). The Proposal would provide financial statement users with enhanced visibility into an entity's expected lifetime credit losses and more appropriately align the income statement recognition of credit losses with the FASB's concept statement related to recognition and measurement in an entity's financial statements.

We would like to thank you and the members of the Subcommittee for holding this important hearing and look forward to continuing to work with you to ensure we achieve an appropriate balance between the objectives of FASB, the prudential regulatory expectations of the banking agencies, the safety and soundness of the banking industry, and the availability and affordability of credit to consumers and small businesses.

Testimony of William Nelson, Chief Economist, Bank Policy Institute

before the Financial Institutions and Consumer Credit Subcommittee of the

Committee on House Financial Services, U.S. House of Representatives

December 11, 2018

Chairman Luetkemeyer, Ranking Member Clay and Members of the Committee, thank you for the opportunity to testify today. I am Bill Nelson, Chief Economist of the Bank Policy Institute (BPI), a bank trade group representing 48 of America's leading commercial banks. BPI is the successor organization to the advocacy and research work of The Clearing House Association, where I was also chief economist. Before joining The Clearing House three years ago, I was Deputy Director of the Division of Monetary Affairs at the Federal Reserve Board, where I worked for 23 years. At the Federal Reserve, I was extensively engaged in developing our emergency liquidity programs during the crisis and helping to strengthen the liquidity and other elements of our regulatory framework afterward. At BPI, I continue to concentrate on providing research and analysis of bank regulatory policy with the goal of ensuring that US bank regulation is well designed and rigorous.

Today I will discuss BPI's recent research that addresses upcoming changes to how banks will be required to account for loan losses. Our research demonstrates that these changes are procyclical; that is, they will amplify swings in the economy, leading to longer and deeper recessions as well as credit excesses during periods of economic growth. It will be helpful to start by describing how we got here.

During the financial crisis, banks were following accounting rules, which are still currently in place, that used the so-called "incurred loss" methodology for credit losses. Under this approach, a bank takes a provision –that is, recognizes credit losses which are subtracted from capital—when a loss is both

probable and estimable. Through the crisis, domestic and international banking agencies were frustrated by how slowly banks were provisioning for losses on loans.

So, in the immediate aftermath of the financial crisis, in April 2009, the G-20 and the Financial Stability Board (FSB) recommended that the international accounting standard setters, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), reconsider how banks account for losses. Their goal was to reduce procyclicality in the financial system. To achieve that reduction, in June 2016, FASB published a new standard that revised how banks in the United States will be required to provision for a loan loss, and this is scheduled to take effect in January 2020 for many institutions.

Under this new approach -- the "current expected credit loss" or "CECL" methodology -- banks must provision for **all** losses expected over the entire life of the loan when they first book the loan. As an illustrative example, if a bank projects the loss rate on five-year home equity loans to be 2 percent per year, it will book an immediate loss equal to 10 percent of the loan amount when it makes such a loan. For each subsequent period, the bank would take new provisions, positive or negative, as it updates its projections of remaining lifetime loan losses based on incoming information about the performance of the loan and changes in economic expectations. Importantly, under CECL, banks must mark only expected losses over the life of the loan to market, not the expected income earned over the life of the loan; as a result, loans that make economic sense, but not accounting sense, are disincentivized.

It is undisputed that lending standards deteriorated in the years preceding the crisis, and that loans made in those years subsequently performed poorly. Consequently, a requirement that banks take losses based on a more forward-looking perspective would appear to offer the prospect of increasing

provisions during the go-go years as financial imbalances are building, thereby diminishing the enthusiasm for making bad loans and making banks better prepared for the subsequent fallout. Indeed, early studies of CECL concluded it **would** be countercyclical, as intended.

However, we have all learned a lot about projecting loan losses over the last decade, due in large part to annual stress testing. Among other things, we have learned that loan losses depend, importantly, on the state of the economy **in addition** to lending standards. As a result, understanding the cyclical properties of CECL requires determining how the economic projections banks will utilize evolve over the cycle. Unfortunately, early studies of the cyclical properties of CECL simply assumed that banks had perfect foresight – that is, that they knew the future with certainty. This proved to be a critical mistake.

By contrast, my colleague Francisco Covas and I used real-time projections of the economy to estimate what level of loan (and lease) loss allowances CECL would have called for in the years before, during, and after the financial crisis. We combined those projections with models of loan losses developed by the New York Fed to determine what allowances would have been called for under CECL.

Because economic projections almost never anticipate turning points in the business cycle, economists tend to revise their outlook down as the economy slows and up when the economy picks up. By our estimates, CECL-based loan and lease loss allowances as a percent of bank assets would have risen about ½ percentage point in 2005 and 2006 as lending standards deteriorated but 3½ percentage points in 2007 and 2008 as the economy collapsed.

Had CECL been in place during the 2007-2009 crisis, we estimate that banks' capital ratios would have been 1½ percentage points lower in the third quarter of 2008. Using estimates from a paper recently

published in the Journal of Finance, those lower capital ratios would have reduced bank credit supply in the crisis by an additional 9 percent, as banks worked to preserve capital, significantly worsening the recession. These results support our conclusion that CECL is indeed procyclical.

CECL loan loss accounting will not only be procyclical, it will also disproportionately affect longer-term borrowing, such as home mortgages and student lending, as well as lending to higher risk borrowers, such as small businesses and households with less-than-perfect credit histories. For example, for a $250 thousand mortgage loan, our results indicate a bank would be required to immediately book a loss of $1.5 thousand in good times for originating that loan, and nearly a $15 thousand loss in bad times for making the same loan, almost a tenfold increase. Such a requirement would undoubtedly reduce banks' willingness to make such loans in times of stress.

While FASB followed a rigorous process around the proposal, we believe that, given our findings, more economic analysis is required to understand better the downside risks of implementing this new standard and its incorporation into regulatory capital.

Thank you again for the opportunity to testify, and to present our research. This hearing to examine the impacts of this significant change in accounting is precisely what is needed, as well as more time to assess and address the concerns that we have raised. Thank you, and I look forward to answering your questions.

BANK POLICY INSTITUTE

Staff Working Paper 2018-1

Current Expected Credit Loss: Lessons from 2007-2009

Francisco Covas and William Nelson

July 2018

Current Expected Credit Loss: Lessons from 2007-2009

Francisco Covas and William Nelson[1]

July 12, 2018

Abstract

We use a top-down approach to estimate the amount of credit loss allowances under the current expected credit loss (CECL) methodology during the 2007-2009 financial crisis. The new standard will replace the incurred loss methodology that is used nowadays by banks. We find that CECL would have been highly procyclical had it been in place during the past crisis, amplifying the contraction in bank lending and the severity of the crisis. This procyclicality would have occurred because macroeconomic models (and macroeconomic forecasters) are generally unable to predict turning points in the business cycle. As a result, CECL allowances generated using real-time forecasts of the economy would not have increased significantly until the beginning of 2007. As the problems in the housing sector gained steam in early 2007, credit loss allowances under CECL would have started to rise rapidly and would have caused a sharp decline in banks' regulatory capital ratios. In addition, the trough in banks' regulatory capital ratios would have occurred around the time of the failure of Lehman Brothers. Lastly, we estimate bank lending would have fallen by an additional 9 percentage points during 2009 as it would have been very difficult for banks to raise capital.

Key words: Current expected credit loss approach, loan loss provisions, capital requirements, bank lending, procyclicality.

JEL classifications: G18, G21, G28.

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1. Introduction

In the immediate aftermath of the financial crisis, in April 2009, the Financial Stability Forum (later renamed the Financial Stability Board, henceforth "FSB") recommended that the international accounting standard setters, FASB (Financial Accounting Standards Board) and IASB (International Accounting Standards Board) reconsider how banks account for losses as a way to reduce procyclicality in the financial system. Under the standard in effect at the time—the "incurred loss model"—banks provisioned for losses only when the bank concluded that it was probable that a loss had occurred and the amount of that loss was estimable. The FSB stated that "Identification of the loss event is a difficult and subjective process that results in a range of practices and, potentially, a failure to fully recognize existing credit losses earlier in the credit cycle."[2] The FSB recommended that the FASB and IASB consider alternatives including "...a fair value model, an expected loss model and dynamic provisioning...", the last being the technique used in Spain during the crisis that is similar to the expected loss model.[3]

The FSB's recommendation reflected bank supervisors' sense that it was difficult to get banks to recognize losses quickly during the crisis. Earlier loss recognition was felt to have the potential dual benefits of both reducing income when lending standards eased, and thereby restraining originations of riskier loans as the credit cycle heated up, as well as speeding the recovery of banks following an economic downturn when loans default, because the expense had largely already been taken. Moreover, the natural tendency for banks to tighten standards during a recession would translate into a boost to capital as loan loss reserves were released.

In June 2016, the FASB adopted the "current expected credit loss" (CECL) methodology for accounting for losses. In describing the benefits and costs of the new standard, the FASB cited the benefits as being "[m]ore timely reporting of credit losses, [and] [m]easurement using forward-looking information."[4] The only costs the FASB recognized were one-time implementation costs. In March 2017, the Bank for International Settlements (BIS) published an

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[2] Financial Stability Forum (2009), Report of the Financial Stability Forum on Addressing Procyclicality in the Financial System, 2 April 2009, p.21. Available at http://www.fsb.org/wp-content/uploads/r_0904a.pdf

[3] Dynamic provisioning uses a much simpler approach than CECL (see Jimenez et al 2017 for details) and does not suffer from the procyclicality problem we describe in our paper.

[4] FASB (2016), Understanding Costs and Benefits, ASU: Credit Losses (Topic 326), June 16, 2016. https://www.fasb.org/cs/ContentServer?d=Touch&c=Document_C&pagename=FASB%2FDocument_C%2FDocumentPage&cid=1176168233403

analysis of the new CECL standard in its Quarterly Review. The review was authored by Gerald Edwards, a former advisor to the FSB and Basel Committee on Bank Supervision, chief accountant at the Federal Reserve Board and the Head of the FSB and BCBS accounting task force, and by Benjamin Cohen, the Head of the Financial Markets section at the BIS. Cohen and Edwards conclude that "If [CECL] is performed appropriately and with the full range of future risks in mind, [it] should reduce the procyclicality of the financial system."[5]

Importantly, however, Cohen and Edwards did not reach this conclusion by estimating real-time expected credit losses and the associated level of provisioning under CECL. Instead, they conducted two "exercises." In the first, they adjusted provisions up when they were low and down when they were high, preserving the average level of provisions. In the second, they "simply assume[d]" that banks took provisions two years earlier than they actually did.[6] Similarly, a more recent analysis authored by Chae, Sarama, Vojtech, and Wang (2017) showed that CECL allowances for first-lien residential real estate loans would have been countercyclical during the 2007-2009 financial crisis *if* the future path of macroeconomic variables was assumed to be known (also known as perfect foresight).

In this paper we replace the assumption of perfect foresight with a more realistic approach of using macroeconomic forecasts available at the time and reach a strikingly different conclusion. We find that CECL would have been highly procyclical had it been in place during the 2007-2009 financial crisis. That is, CECL would have raised capital requirements exactly at a time when banks' capital base was already under some pressure because of an increase in losses during the crisis. Intuitively, the rise of CECL-based allowances during a recession works similarly to a multiplier effect: under the incurred loss standard, allowances only rise when losses tip to probable; under CECL, in contrast, allowances increase for every loan, taking into account its entire expected life. Therefore, the impact on loan allowances due to a change in the macroeconomic forecasts is much higher under CECL.

To analyze the performance of CECL during the 2007-2009 financial crisis, we estimate expected credit losses on banks' loan portfolios using a macroeconomic model of the economy, the historical relationship between loan losses and economic conditions by loan type, and bank-

[5] Cohen, Benjamin and Gerald Edwards (2017), The new era of expected credit loss provisioning, BIS Quarterly Review, March 2017, p. 53

[6] Cohen and Edwards (2017), pp. 50-52.

level information on the composition of loan portfolios and remaining loan tenor. To relax the assumption of perfect foresight we develop a macroeconomic model to generate the projections of all macroeconomic series required to forecast CECL allowances. However, macroeconomic models (and macroeconomic forecasters) are generally unable to accurately predict turning points in the business cycle. Most of the time, models predict that economic conditions in the future will be similar to the present while gradually reverting to the mean. Thus, when times are good, these models generally project economic conditions to remain buoyant. Similarly, when times are bad, models generally expect economic conditions to remain depressed, at least for a while.

According to the average survey responses from the Survey of Professional Forecasters (SPF), the Wall Street Journal (WSJ) economic projections, and the projections of our own model, the inaccuracy of the forecasts for the unemployment rate and the house price index were highly significant at the start of the recession and in the early part of the subsequent recovery. For instance, our own projections and those available at the time significantly underestimated the rise of the unemployment rate at the start of the recession. In particular, the two-year-ahead forecast error reached approximately 4 percentage points for the forecast ending in 2009:Q4 based on the average survey responses from the SPF and our own models. Moreover, during the early part of the subsequent recovery, forecasts were slow to project the decline in the unemployment rate. Meanwhile, macroeconomic projections also overstated the path of the house price index at the start of the recession. For example, the two-year ahead house price index projection ending in 2008:Q4, was overstated by more than 30 percent according to our macroeconomic model. Of note, because forecasts published by the SPF and WSJ are not available for all the macroeconomic variables and periods required to forecast CECL-based allowances, we developed our own macroeconomic models to generate such forecasts.

The key contribution of this paper is to measure the impact of the inability of forecasters to predict turning points in the business cycle on the likely level of CECL allowances. In particular, CECL allowances conditional on the macroeconomic variables projected by our own models would not have increased significantly relative to allowances determined using the incurred loss methodology until the beginning of 2007. Thereafter, over the period between the first quarter of 2007 and third quarter of 2008, CECL allowances would have risen from 1½

percent of loans to approximately 4¾ percent. The rapid increase in allowances under the new accounting standard will be especially impactful for portfolios with longer loan lives, such as first-lien residential mortgage loans. For example, for a $500 thousand mortgage loan our results indicate a bank would be booking a loss of $3 thousand in good times for originating that loan and nearly a $30 thousand loss in bad times for the same loan, almost a tenfold increase.

As a result of the rapid increase in CECL allowances during the crisis, we estimate that banks' regulatory capital ratios would have declined an additional 1.6 percentage points in the third quarter of 2008 relative to the reported regulatory capital ratios under the incurred loss methodology. Our estimate likely understates the impact on regulatory capital ratios because although we take into account the impact of losses on tax payments, we do not apply the Tier 1 common capital limits on deferred tax assets. Based on estimates provided in the academic literature, a 1.6 percentage point increase in capital requirements during the recession would have led to a contraction in lending by an additional 9 percentage points and would have doubled the decline in loans on banks' books over the course of 2009. This decline would have translated to an additional $600 billion decrease in aggregate holdings of loans on banks' books during that year.

Importantly, we only consider the cyclical implications of CECL on bank lending through its impact on regulatory capital. However, as noted, CECL will also have a material effect on a bank's net income. Under the incurred loss methodology, theoretically, when a bank originates a loan, it should have no immediate effect on net income.[7] Over time, net income is reduced through higher provisions as some loans in the portfolio default, but net income is also being boosted by interest earned on such loans. In general, those two effects will cancel out because interest rates are higher for riskier loans. Under CECL, however, banks are required to establish a credit loss allowance based on the expected lifetime losses on the loan *when they originate the loan*. Banks do not book a corresponding gain that would reflect their expected higher future interest earnings. As a result, banks will book an immediate loss, with no

[7] In practice, a provision may be recorded under the incurred loss method at origination, depending on a bank's loss emergence period. The loss emergence period is the period that it takes, on average, for a bank to identify the specific borrower and amount of loss incurred by the bank in a pool of loans for a particular loan that has suffered from a loss-causing event. However, because this provision relates to those losses that are incurred but not reported, it will be, by definition, lower than the provision under CECL, which relates to losses that are expected to be incurred over the full lifetime of the loan.

compensating gain, for each loan they make, and that loss will be highest for bank dependent borrowers that are most vulnerable in an economic downturn. Banks struggling to maintain profitability in a downturn will have a strong incentive to stop lending to such borrowers. The procyclicality of CECL caused by its impact on net income is a critical item for future research.

In summary, provisioning for losses under the current expected credit loss standard is highly procyclical, not countercyclical as was intended. The procyclicality is similar to that arising when capital risk-weights are calculated using contemporaneous rather than through-the-cycle estimates of risk as in Behn, Haselmann, and Watchel (2016). Thus, as discussed below, banks will reduce lending to riskier, generally bank-dependent borrowers, in downturns. That reduced credit supply will lead to further declines in economic activity, amplifying the downturn.

The rest of the paper is organized as follows. Section 2 reviews some of the main assumptions around the incurred loss and CECL standards. Section 3 outlines our econometric framework used to generate the macroeconomic scenarios. Section 4 describes the data and methodology. In Section 5, we estimate the level of CECL allowances in real time during the 2007-2009 financial crisis. Section 6 discusses the implications to capital requirements and lending. Section 7 concludes.

2. Overview of CECL

The accounting for losses on loans works as follows. When a bank estimates a loss, it "provisions" for the loss. The provision is an expense that is deducted from income and added to the bank's "allowance for loan and lease loss" ("ALLL"). The ALLL is presented on the balance sheet as a contra asset and so reduces a bank's capital. When the bank recognizes the loss on the individual loan, it charges off all or part of the loan, reducing both the loan amount and the ALLL by the same amount. Therefore, the charge-off has no effect on bank capital. If the bank later makes a recovery on the loan, the recovery is then credited to the loan amount. "Net charge offs" are charge offs minus recoveries.

The most complicated element to loan loss accounting is determining when, exactly, a bank should estimate a loss. Under the "incurred loss" standard, banks provision for a loss when they determine that it is probable that a loss has been incurred. While outside of the U.S., where

objective evidence of impairment on individual loans was required prior to recording a credit loss, practice within the U.S. also includes pool-based estimates that were based on historical annual charge-off rates, adjusted for other credit risk factors present at the balance sheet date. Concerns related to earnings management and increasingly stringent auditing standards, however, largely limited such estimates to those supported by historical annual charge-off rates. Consideration of most forward-looking information has been specifically disallowed from such allowances.

In June 2016, the FASB published "Accounting Standards Update No. 2016-13," which revised how accountants were required to account for credit losses on financial instruments.[8] The standard changes the accounting from a "probable incurred loss" approach for determining that a loss should be anticipated to a "current expected credit loss" or "CECL" approach. Under this new standard, the use of forecasted information is critical as banks take a credit loss provision when making a new loan equal to the expected losses over the entire life of the loan. For example, if the net charge off rate on a portfolio of construction and land development loans averaged about 10 percent over the full life of the loans, the bank would take a provision when issuing the loan of about 10 percent of the amount of a new construction loan, adjusted for individual loan characteristics and the forecasted state of the economy.[9] Each period, the bank takes new provisions, positive or negative, to update its projection of lifetime loan losses.

In practice, forecasts of lifetime expected credit losses will span three time periods. Over the period under which the bank can make a "reasonable and supportable" forecast, the bank projects the lifetime probability of default of a loan using its own models conditional on a forecast of the economy and loan characteristics. The "reasonable and supportable" period will likely be between one to three years, though it could extend beyond that. Beyond the "reasonable and supportable" period, the lifetime probabilities of default are assumed to revert to their historical performance (unadjusted for current conditions and forecasts of the future) for that loan category for the remaining life of the loan. The length of the period over which the reasonable and supportable forecast reverts to historical performance may also vary by bank and

[8] Financial Accounting Standards Board, Accounting Standards Update No. 2016-13, Financial Instruments—Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments, June 2016. https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176168232528&acceptedDisclaimer=true

[9] In practice, net charge-off rates are typically computed on an annualized or quarterly basis; this is a simplified example that assumes the net charge-off rate is then converted into a lifetime loss rate.

product. The lifetime expected credit loss of a loan is simply equal to its lifetime probability of default times its loss given default. In the analysis below, we use banks' reported net charge-offs to estimate the lifetime expected credit loss on a portfolio of loans.

While current practice of incurred loss accounting and specific forecasts of economic factors under CECL are significant factors in assessing the expected impact of CECL, the loan and lease loss allowance is expected to normally be higher under CECL than under the incurred loss methodology, however some types of loans with shorter tenors may show lower allowances under CECL during economic expansions. Other things equal, because the allowance is a negative asset, the higher allowance implies lower levels of capital.

Moreover, as we show in this paper, the CECL methodology is more procyclical than the incurred loss methodology. Provisions rise by more in bad times than under the incurred loss methodology, and the increase is especially acute for loans with longer maturities, such as residential mortgage loans, and riskier loans including small business loans.

3. Macroeconomic Scenarios

In this section we develop a macroeconometric model to generate the forecasts of the macroeconomic variables needed to project net charge-offs and CECL allowances. In order to minimize perception of unreasonable bias within credit loss forecasts, banks will normally refer to economic forecasts performed by professionals or professional organizations. Consensus forecasts, such as the ones published by the Survey of Professional Forecasters (SPF), are not available for all the macroeconomic variables required to forecast net charge-offs and CECL allowances back in time. Therefore, this section uses a vector autoregression model to generate the projections of all macroeconomic series required to forecast CECL allowances during the 2007-2009 financial crisis. We then look at the size of the forecast errors at various horizons and compare those with the forecast errors obtained using consensus forecasts to the extent those are available.

3.1 Vector Autoregression Model

We use a vector autoregression (VAR) model to generate predictions for the macroeconomic series. These projections are key inputs needed to forecast net charge-offs and CECL allowances for each major loan portfolio. The main advantage of VAR models is that they are very flexible and are widely used to forecast macroeconomic series by central banks and practitioners. In particular, because of VAR models' reduced form nature, they often produce superior forecasts than more elaborate theory-based simultaneous equations models.

Let

$$y_t = (y_{1,t}, y_{2,t}, \cdots, y_{n,t})'$$

denote a vector $(n \times 1)$ of macroeconomic series and $t = 1, \ldots, T$ index the time-series dimension of the VAR model. Also, let p denote the number of lags of the VAR model. We consider the following VAR (p) model to generate the projections of the macroeconomic variables:

$$y_t = c + A_1 y_{t-1} + \cdots + A_p y_{t-p} + \epsilon_t \quad (1)$$

where c is an $(n \times 1)$ vector of intercept terms, A_i are $(n \times n)$ coefficient matrices and ϵ_t is an $(n \times 1)$ unobservable zero mean white noise vector process with time invariant covariance matrix Ω. Since there are n equations in the VAR, each one is estimated individually using ordinary least squares. We include four macroeconomic variables in the VAR model: (1) civilian unemployment rate (UR); (2) real gross domestic product (GDP); (3) the house price index (HPI); and (4) the commercial real estate price index (CRE). The data are quarterly and over the sample period between 1977:Q2 and 2017:Q4.[10] The sample period is the same as for the macroeconomic variables available in the scenarios provided by the Federal Reserve to the bank holding companies that participate in the U.S. stress tests conducted under the Dodd-Frank Wall Street Reform and Consumer Protection Act.[11]

[10] Note that we always use the entire sample period available to estimate our models. We did this to show that the procyclicality of CECL is driven by the inaccuracy of forecasts around turning points of the business cycle and not driven by parameter uncertainty or by not including enough recessions in the estimation of loan loss models. Extending our analysis to also use real-time model estimation would have likely exacerbated the issues around using CECL projections in real time.

[11] The historical data provided to banks is available in the following link: https://www.federalreserve.gov/supervisionreg/ccar-2018.htm.

The VAR model includes all macroeconomic series in first differences. The number of lags of the macroeconomic variables is set equal to two, which was selected according to the Bayesian information criterion. We use the entire sample to estimate all the parameters of the VAR. This is a conservative assumption, as using only the information available at the time of the forecasts would have reduced even further the accuracy of the projections.

3.2 Baseline Forecast and Forecast Errors

This section describes how the forecasts of each macroeconomic variable are generated and computes the size of the forecast errors for each variable over time. We calculate dynamic forecasts by using the values of the previous forecasted values of the macroeconomic variables in place of the actual values to evaluate the next forecast. For example, the one-quarter -ahead forecast uses only historical data to project the value of the macroeconomic variables, while the two-quarter-ahead forecast uses the values of the one-quarter-ahead forecast as an input in place of the actual values of the lagged macroeconomic variables. Similarly, the three-quarter-ahead forecast uses the one- and the two-quarter-ahead forecasts as the value of the lagged macroeconomic variables. We repeat this procedure to construct any number of quarter-ahead forecasts. In this section we go up to three years (12 quarters), but the length of forecast period depends on the assumption governing the "reasonable and supportable horizon" utilized under CECL.

Figure 1 displays the baseline dynamic forecasts for the unemployment rate and the natural logarithm of the house price index over the following 8 quarters. In particular, the figure shows five different sets of forecasts, starting in the first quarters of 2006 through 2010, to illustrate the variation in the baseline projections as the start of the forecast period changes. In general terms, there are some periods where the forecasts appear to be fairly accurate, while there are other periods that are very difficult to predict. In particular, the charts show periods in which the projections understate the rise in the unemployment rate (e.g., 2008:Q1 vintage) or overstate the increase in house prices (e.g., 2007:Q1 vintage), particularly at the onset of the 2007-2009 financial crisis, while there are other periods in which the projections overshoot the rise in the unemployment rate (e.g., 2010:Q1 vintage) and the decline in house prices right around the trough of the recession in mid-2009.

Next, we evaluate the accuracy of the forecasts starting in each period before, during and after the 2007-2009 financial crisis. Figure 2 shows the errors of the four-quarter-ahead, eight-quarter-ahead, and twelve-quarter-ahead forecasts for the unemployment rate between 2004:Q4 and 2012:Q4. Positive values in the y-axis correspond to the VAR model underestimating the rise in the unemployment values and, conversely, negative values indicate the model is overestimating the increase in the unemployment rate. Before the start of the recession in 2007:Q4, the forecast errors are generally small. For example, the forecast error was -0.1 percentage points using the 8-quarter-ahead forecast ending in 2007:Q4. In contrast, when the recession starts, the model significantly underestimates the rise of the unemployment rate, with the four-quarter-ahead forecast error reaching 2½ percentage points for the forecast ending in 2009:Q2, and the eight-quarter-ahead and the twelve-quarter-ahead forecast errors exceeding 3¾ percentage points and 5¾ percentage points for the forecast ending in 2009:Q4, respectively. During the subsequent recovery, the model tends to understate the decline in the unemployment rate. For example, the eight-quarter ahead forecast error was -2½ percentage points for the forecast ending in the 2012:Q3 period. In summary, these results indicate that the size and the direction of the forecast errors for the unemployment rate series are closely tied to the business cycle turning points.

Figure 3 displays the corresponding information for the house price index. The negative values in the y-axis indicate instances where the forecasts produced by the VAR model underestimate the decline in the house price index. The largest forecast errors occur in the forecast period ending in the fourth quarter of 2008, approximately one year before the peak in the forecast errors for the unemployment rate. For example, the eight-quarter-ahead forecast error for the period ending in 2008:Q4 was about -32¼ percent.

To demonstrate that the size of forecast errors reflects the difficulty of predicting turning points in the business cycle and is not driven by the lack of sophistication of our model, Figure 4 compares the 8-quarter-ahead forecast errors for the unemployment rate obtained using our model with those obtained using the average responses from the SPF. As shown in the chart, the eight-quarter-ahead forecast errors are generally higher using the average responses from the SPF for the forecast period ending during the 2007-2009 recession. In addition, the root mean-squared error of the forecast of the unemployment rate using the average responses from the SPF

is 19 percent higher than those obtained via the VAR model. The VAR model may have a better forecast performance because it uses the entire sample period to estimate the parameters of the model and therefore understates the forecast errors that would be made in real time. Note that we are only able to evaluate the forecast performance of the unemployment rate since the SPF did not have projections for the house price index during that period of time.

Relatedly, the analysis presented here uses the final estimates of the macroeconomic variables to generate the projections for key macroeconomic variables during the crisis period. In reality, banks would have to generate projections in real-time using the first preliminary estimates of the macroeconomic series before any revisions. It is probably worth exploring this issue in more detail, but because most of the series we use are measured precisely and thus are not subject to large revisions in real time, this might be a secondary consideration.

3.3 Density Forecasts

In practice, banks will use more than one macroeconomic scenario to estimate their loan allowances under CECL. In particular, banks will likely generate projections for CECL allowances under a baseline scenario as well as an optimistic and a pessimistic scenario. In reality models used by banks are nonlinear, with CECL-based allowances rising significantly more under a pessimistic scenario, than being reduced under an optimistic scenario. Thus, averaging the two results may be more prudent from a risk management perspective than simply relying on the baseline projection.

We construct an optimistic scenario and a pessimistic scenario by generating density forecasts for each of our macroeconomic series. We then can label the optimistic scenario as the one corresponding to the path of the macroeconomic series in the more favorable tail of the density forecast, and in contrast choose the pessimistic forecast in the opposite percentile of the density forecast.

To generate the density forecasts for each of our macroeconomic series, we use a simulation-based approach designed to preserve the time-series dependence across the various macroeconomic series in our sample. Let

$$\{\hat{\epsilon}_{1,t}, \hat{\epsilon}_{2,t}, \cdots, \hat{\epsilon}_{n,t}\}_{t=1}^{T}$$

denote the full set of residuals from the estimated VAR model. Using this set of residuals, we construct 200 bootstrap samples by resampling from the vector of residuals. The size of each bootstrap sample is determined by the length of the forecast horizon. Next, having bootstrap sample j the one-quarter-ahead forecast is given by:

$$\hat{y}^{j}_{T+1|T} = \hat{c} + \hat{A}_1 y_T + \cdots + \hat{A}_p y_{T-p} + \hat{\epsilon}^{j}_{T+1} \tag{2}$$

where $\hat{c}$ and $(\hat{A}_1, \ldots, \hat{A}_p)$are the OLS estimates of the model coefficients, and the residual $\hat{\epsilon}^{j}_{T+1}$ is the jth draw from the first bootstrap sample. We then apply equation (2) recursively to generate the two-quarter-ahead forecast:

$$\hat{y}^{j}_{T+2|T} = \hat{c} + \hat{A}_1 \hat{y}^{j}_{T+1|T} + \cdots + \hat{A}_p y_{T-p+1} + \hat{\epsilon}^{j}_{T+2} \tag{3}$$

We can apply this procedure recursively to generate the H-quarter ahead forecasts for the j^{th} bootstrap sample

$$\left\{\hat{y}^{j}_{T+1|T}, \hat{y}^{j}_{T+2|T}, \ldots, \hat{y}^{j}_{T+H|T}\right\}.$$

As noted earlier, we construct 200 different forecasts for each series, namely let $j = 1, \ldots, 200$.

Figure 5 shows the density forecasts for UR and HPI. The shaded areas in the charts represent the 5th and 95th percentiles of the paths of the macroeconomic variables and the dashed line represents the median. Going back to the original goal of generating density forecasts, a bank could select the optimistic path for the unemployment rate as the one corresponding to the 5th percentile of the density forecast, and the pessimistic path as the one corresponding to the 95th percentile.

4. Estimation of CECL allowances

This section describes the methodology used to estimate CECL allowances for the loan portfolios available on the regulatory reports. We estimate CECL allowances using predictions for net charge-off rates of loan portfolios over a particular horizon. These projections are generated using top-down models proposed by Hirtle et al (2015), which rely on the path of

macroeconomic variables and past values of net charge-offs to generate projections for industry-wide loan losses.

4.1 Methodology

The definition of CECL allowances follows closely the approach developed in Fadil (2018). The main difference is that we use top-down models to project net charge-off rates instead of using the realized values of net charge-off rates. In addition, to project net charge-off rates we also use forecasts for the path of macroeconomic variables instead of actual realizations for these series. Lastly, we also expand our analysis to include all the 15 loan categories available on the bank regulatory reports.[12]

The size of loan reserves under CECL for each loan portfolio in a given quarter depends on the loan balance at that time, the expected life of the loan portfolio, the projections for net charge-off rates over the reasonable and supportable period, and a set of assumptions governing the evolution of loan balances over time until those balances are reduced to zero and how quickly loss rates revert to long-run values. Figure 6 displays the forecasting horizon of a particular loan portfolio assumed to have an expected life of 28 quarters (7 years). The charts displays three important sub-periods. We define the reasonable and supportable period in red, which represents the forecast horizon of net charge-off rates. In the baseline case, we assume the reasonable and supportable period is equal to 12 quarters (3 years). We have also generated results using shorter forecast horizons. The second sub-period is the reversion period, under which the net charge-off rate is assumed to revert to its long-run value. In our analysis, the reversion period is portfolio specific and corresponds to the number of quarters it took for net charge-offs rates to reach their long-run average value after the 2007-2009 financial crisis. Finally, the third sub-period denoted in blue sets the net charge-off rates at their long-run values. This last period is only relevant for loan portfolios with longer expected lives, such as various types of residential real estate loans.

For each loan portfolio in the analysis, we assume a straight-line balance reduction to zero over the expected life of the loan portfolio. This is a simple way of capturing the amortization and pre-payment of loans included in each loan portfolio. We acknowledge that not all loan portfolios behave in this manner. In particular, some loan portfolios with relatively short

[12] Net charge-offs are reported in schedule HI-B in the FR Y-9C regulatory report. See, https://www.federalreserve.gov/apps/reportforms/reportdetail.aspx?sOoYJ+5BzDal8cbqnRxZRg==.

expected loan lives (e.g., construction and land development loans) are more likely to have a more constant balance over their life as customer draws for construction may be roughly offset with maturities and paydowns. Although we assume in this paper a straight-line balance reduction for all loan portfolios, we believe this is an important issue that deserves further consideration as it may lead to an underestimation of CECL allowances for some portfolios.

Having described the forecast horizon and the evolution of loan balances over the expected life of the loan, the estimate of CECL allowances in quarter t, for loan portfolio j is defined as:

$$CECL_t^j = \sum_{i=0}^{T+N_j+R_j-1} \left(\widehat{NCO}_{t+i}^j \times Loan\ balance_{t+i}^j\right) \quad (4)$$

where $\widehat{NCO}_{t+i}^j$ represents the forecast of the net charge-off rate for loan portfolio j in quarter $t + i$. As noted earlier, we use top-down models to generate the predictions of the net charge-off rate for the first T periods. After that, the net charge-off rate is assumed to revert linearly to its long-run value over the next N_j quarters and stays at that level for the remaining $R_j$quarters until portfolio j's loan balance reaches zero.

4.2 Forecasting Net Charge-Off Rates

A key element of our analysis is the forecasting of net charge-off rates conditional on the path of the macroeconomic variables. Since we are interested in studying the impact of variations in the accuracy of macroeconomic forecasts over time, we use exactly the same top-down models as proposed by Hirtle et al (2015). The advantage of using that suite of models is that those have already been shown to having some power in explaining changes in banks' regulatory capital ratios under a stressful macroeconomic environment. Hirtle et al (2015) estimated model specifications for fifteen different loan portfolios as a function of an autoregressive term and a set of macroeconomic variables. Specifically, each of the top-down model specifications is of the form:

$$\widehat{NCO}_t^j = \alpha + \rho\widehat{NCO}_{t-1}^j + \beta\widehat{Macro}_t + \varepsilon_t \quad (5)$$

where α is the constant term, $\rho$is the first-order autoregressive coefficient and $\beta$is a vector of coefficients associated with the macro variables (some models have more than one macroeconomic variable as the driver of net charge-offs). Table 1 contains a list of all loan portfolios included in the analysis and the corresponding macroeconomic variables used to generate the projections of net charge-offs for each portfolio.

In terms of the path of the macroeconomic variables, we consider two cases. First, the baseline case which generates projections for net charge-off rates using the baseline forecast obtained using the VAR model described in the previous section. Specifically, the VAR model generates projections for each of the macroeconomic series needed to project net charge off rates, namely the unemployment rate, the house price index and the commercial price index. The second case uses a Monte Carlo approach that generates many possible paths for the macroeconomic variables and reports the range for CECL allowances across all possible realizations of such scenarios. In particular, we focus on the results for the median scenario as well as the results under the 5^{th} percentile (optimistic) and the 95^{th} percentile (pessimistic) cases.

4.3 Data

To implement the methodology described above, we use the Consolidated Financial Statements for Bank Holding Companies (the FR Y-9C) and the Consolidated Reports of Condition and Income (the FFIEC 031/041) for commercial banks published by the Federal Reserve to construct a dataset that includes all bank holding companies and all commercial banks that do not have a parent that file a FR Y-9C. As noted earlier, all models are estimated with aggregated time-series for the entire U.S. banking system.

In terms of target variables for bank losses, we model quarterly net charge-off rates for fifteen loan categories. For each category, the net charge-off rate is defined as charge-offs net of recoveries, scaled by average loans during the corresponding quarter and is annualized. The fifteen loan categories are as follows: (1) C&I = commercial and industrial; (2) CLD = construction commercial real estate; (3) MF = multifamily real estate; (4) NFNR = non-farm non-residential commercial real estate; (5) FL = first lien residential real estate; (6) JL = junior lien residential real estate; (7) HLC = home equity lines of credit; (8) CC = credit card; (9) CON = other consumer; (10) LEA = leases; (11) OTHRE = other real estate; (12) FG = loans to

foreign governments; (13) AG = agriculture loans; (14) DI = loans to depository institutions; (15) OTHL = other loans.

Table 2 contains the selected summary statistics for the net charge off rates used in the empirical analysis. Although loan net charge-offs are, on average, higher for credit card and a bit higher for other consumer loans, junior-lien mortgages and construction commercial real estate loans, net charge-off rates for all major loan categories exhibit significant variability, as shown by the difference between the maximum and minimum values of the series. This mainly reflects the cyclical nature of bank losses. For instance, net charge-offs for first-lien residential real estate loans ranged between 0.05 percent and 0.36 percent during 1991:Q1 and 2007:Q4. During the crisis period, net charge-offs for first-lien residential real estate loans reached 2.8 percent in the fourth quarter of 2009.

The expected life of each loan portfolio has a first-order impact on the level of CECL allowances, and so is an important input in our model.[13] We were able to receive confidential data on the expected life of loans from nine large banks for most of the fifteen loan portfolios. Banks provided data on the life of loans as of the fourth quarter of 2008; in a few instances, however, the data was only available for the current portfolio and we used those estimates to supplement the calibration of CECL allowances. Since we use aggregate industry models, we calculate an aggregate value for the expected life of loan using the corresponding loan balances of each bank for that particular portfolio as the weight. The left column in Table 3 shows the weighted-average expected life for each of the 15 loan portfolios included in our analysis. As shown in the table, residential real estate loans have an expected life of loans that varies between 34 quarters (FL) and 30 quarters (HLC). On the commercial side, commercial and industrial loans have an expected life of 15 quarters, while commercial and real estate loans have expected lives between 11 quarters (CLD) and 30 quarters (MF). On the consumer side, credit card loans have an expected life of 7 quarters and other consumer have loan lives of 16 quarters.[14]

[13] The use of expected portfolio lives within the top-down models is different from the bottom-up approaches used by banks to estimate current CECL allowances. This study, uses lagged net charge-offs and projections for the future path of macroeconomic variables to estimate CECL allowances for each major loan portfolio. In their own modelling, banks will also be taking into account portfolio specific variables, such as loan to value ratios, among other loan specific variables to estimate CECL allowances using their own bottom-up models.

[14] A recent study by S&P industry analysts used the following expected life of loans: 7 years for mortgages, 6 years for multifamily loans, 1.6 years for commercial and industrial loans, 3.8 years for commercial real estate loans, and

Lastly, another parameter of the model that is needed to estimate the level of CECL allowances is the length of the reversion period. We used historical data on net charge-off rates to calibrate the duration of the reversion period. Namely, for each of the fifteen loan portfolios we calculated the number of quarters it took for loss rates to revert back to their long-run values after the 2007-2009 crisis. In particular, the last column of Table 3 reports the number of quarters it took net charge-off rates to recover from their peak level to their long-run average during the past crisis. Since the depth of the past recession was much more severe for residential mortgage loans, we find that the reversion period is higher for such loans. Namely, the first-lien mortgage portfolio has a reversion period of 15 quarters while the junior-lien mortgage portfolio and the HLC portfolio have a reversion period of 18 quarters.

5. Results

This section estimates CECL allowances in real-time. It starts by presenting the results of the net charge-off rate regressions and discusses the estimation of CECL allowances using those projections and several other auxiliary assumptions described in the previous section. We finish the section by providing a confidence interval around our estimation of CECL allowances using Monte Carlo methods.

5.1 Net Charge-Off Rates

Before delving into our main results, we present the estimated coefficients of the models for net charge-offs. As noted earlier, we used the same model specifications as those presented by Hirtle et al (2015). All specifications use the net charge-off rate, defined as net charge-offs scaled by the corresponding loan balance during that quarter, as the dependent variable. The only difference is that we updated the sample and re-estimated the coefficients of each model by using data through the fourth quarter of 2017.[15]

According to the entries in Table 4, the coefficients on the macroeconomic variables have economically intuitive signs and almost all are statistically significant at conventional levels. In particular, net charge-off rates change positively with the year-over-year change in the unemployment rate and the charge off rates for real estate loan categories vary inversely with the

two years for consumer loans. Thus, our calibration of loan lives is well within the estimates of other industry studies.

[15] See footnote 10 on page 10.

change in the house price index and the CRE price index. Following Hirtle et al (2015), the model specifications for the real estate loan categories (CLD, MF, NFNR, FL, JL and HLC) depend nonlinearly on the changes in the price indexes for commercial real estate properties (CRE loans) and house prices (RRE loans). This is implemented by assuming that it is only when real estate prices decline that such variables have an impact on loss rates, as measured by net charge-offs. As shown by the coefficient on the lagged net charge-off rate, the degree of persistence is noticeably higher for the major loan portfolios, such as first-lien closed-end mortgage loans (0.89), home equity lines of credit (0.91), and credit card loans (0.86). In practice, this implies that periods of acute macroeconomic stress generate loan loss rates that are highly persistent and will account for most of the change in CECL allowances. In contrast, the degree of persistence is significantly lower for loss rates to depository institutions (0.36) and other loans (0.57) which implies a quick reversion to long-run loss rates after experiencing a period of macroeconomic stress. As evidenced by the relatively high R^2, all specifications fit the data quite well, however the high degree of statistical fit of the models relies importantly on the presence of lagged dependent variables.

5.2 CECL Allowances under the Baseline Scenario

This section estimates CECL allowances during the 2007-2009 financial crisis. As discussed below, the estimation of CECL allowances is done using equation (4)[16] and relies heavily on the projections of net charge-off rates over the following 12 quarters (under the baseline scenario). We start the estimation of CECL allowances in the first quarter of 2005, two years before economic conditions started to show a noticeable deterioration. We end our analysis in the fourth quarter of 2012, well after the end of the recession, to also study the dynamics of CECL allowances post-recession in which forecast errors tend to be significantly smaller.

Figure 7 plots the results for CECL allowances under the baseline macroeconomic scenario. The level of CECL allowances is scaled by the sum of loans across all 15 loan categories used in our net charge-off rate projections. For comparison purposes, the chart also depicts reserves that were actually taken under the incurred loss methodology scaled by total loans (allowance for loan and lease losses, or ALLL). The chart shows two main results: (1)

[16] Reported on page 15 above.

CECL allowances are not significantly different from ALLL when the economy is not in a recession (in fact, CECL allowances may sometimes be lower than the ALLL); (2) when the macroeconomic forecasts start to pick-up the deterioration in economic conditions CECL becomes very procyclical, with allowances rising sharply and overshooting levels that would have been applied had perfect foresight been possible. This increase would have most likely exacerbated the impact on credit availability of the 2007-2009 financial crisis.

As shown in Figure 7, between the first quarter of 2005 (the first quarter in which we estimate CECL allowances) and the first quarter of 2007, the ratio of CECL allowances to loans trends slightly upwards, reflecting the increasing share of loans in banks' loan books with very long lives, such as mortgage loans. In particular, in the first quarter of 2007 reserves under CECL were just 50 basis points above reserves under the incurred-loss methodology. This modest rise casts doubt on the premise that CECL allowances would have been countercyclical by forcing an early recognition of loan losses, incentivizing banks to tighten lending standards, and leading to a more moderate growth of loans. As we show next, the main reason why the path of CECL allowances is not so different from the incurred loss methodology is because until the end of 2006 almost all forecasts were projecting the house price index to continue to rise over the next 2 to 3 years.

In early 2007, however, the HPI forecasts are reversed and between the first quarter of 2007 and the third quarter of 2008, CECL allowances ramp up rapidly from 1½ percent to 4¾ percent. The rapid change in reserves under CECL in this period is also supported by revisions to the unemployment rate projections, especially at the end of 2007 and early 2008. In contrast, actual reserves that were taken under the incurred loss methodology rise approximately 1 percentage point between the first quarter of 2007 and the third quarter of 2008.

Thus, the new accounting framework could force banks to hold significantly more reserves over the life of the loan in a relatively short amount of time at the same time as a bank's capital starts to be eroded by loan losses. The requirement to increase reserves is akin to an increase in capital requirements in a downturn. As a result, had CECL been in place during the 2007-2009 financial crisis, some banks would have had to cut lending very aggressively in an attempt to partly offset the increase in capital requirements as it likely would have been extremely difficult and costly for banks to raise new equity during that period. The converse is

also true: when economic conditions recover, reserves under CECL decline at a much more rapid pace relative to the incurred loss methodology. As a result, by the third quarter of 2011, reserves under CECL would be projected to be lower than those under the incurred loss methodology.

Next, we explain why CECL is more procyclical than the incurred loss methodology. The first main reason is the inaccuracy of the forecasts for the house price index in the years prior to the crisis. In particular, up until the end of 2006, HPI forecasts over the next 12 quarters (the reasonable and supportable period under the baseline specification) were projecting continued appreciation in housing prices, while in reality the HPI declined. In particular, the HPI declined approximately 25 percent between 2007:Q1 and 2009:Q2. The results of our model are similar to consensus forecasts available at the time. According to the average forecasts from the WSJ Economic Forecasting Survey, at the end of 2006 the average projection for the HPI was to be about unchanged over 2007, similar to our baseline projection. In reality, the HPI declined 10 percent over that year.[17]

Figure 8 presents the projections for CECL allowances assuming perfect foresight for the house price index. That is, the projections for net charge-off rates are generated assuming the actual future path of the HPI is known to the forecasters, while forecasters still need to project the remaining macroeconomic series, namely the UR and the CRE. Under this set of assumptions, the ratio of CECL allowances-to-loans would have been projected to be 0.3 percentage points higher in 2005:Q1 and 1.9 percentage points higher at the start of 2007 relative to the incurred loss methodology. That is, an assumption of perfect foresight for the HPI under CECL would have generated a much higher level of reserves at the onset of the crisis. Therefore, a more aggressive rise in reserves before the start of the recession may have incentivized banks to start tightening lending standards for residential real estate loans earlier and made the recession considerably less severe. However, as shown by the inaccuracy of HPI forecasts, perfect foresight is an unreasonable scenario from a practical perspective.

There is a second instance, namely between the end of 2007 and the third quarter of 2008, where models used to project CECL allowances call for a rapid increase in loan reserves under the baseline scenario. This second occurrence of the rapid build-up of reserves is driven by

[17] The WSJ economic projections for house prices are available at: http://projects.wsj.com/econforecast/?standalone=1#ind=homeprices&r=10.

revisions to the projections of the unemployment rate. At the end of 2007, many such projections were still predicting a mild recession and only a modest increase in the unemployment rate; but those projections were increased beginning with the exacerbation of the financial crisis in the first half of 2008 through the default of Lehman Brothers in the fall of 2008. As economic conditions deteriorated and the UR continued to rise sharply, revisions to future projections of the UR drove the acceleration in loan reserves under CECL observed in the first-half of 2008.

Figure 9 depicts CECL allowances for two loan portfolios with longer loan lives: – first-lien residential real estate and home equity lines of credit. Each plot shows CECL allowances assuming perfect foresight for the macroeconomic variables (dashed line) and using real time forecasts (solid line). Data on allowances under the incurred-loss methodology is not available for these two portfolios on the regulatory reports so we cannot show ALLL in the chart. For these two portfolios, the difference between CECL under perfect foresight and real time is clear. Between 2005 and 2007, CECL allowances under perfect foresight would have started to increase at a steady pace, while real-time CECL allowances would have remained about unchanged. During 2007 and 2008, CECL allowances in real-time would have risen very rapidly to catch-up CECL allowances under perfect foresight. For instance, CECL based allowances in real time would have been 0.6 percent in 2005:Q4 and 5.7 percent in 2008:Q4. For a $500 thousand first-lien mortgage loan, a bank would be booking a loss of $3 thousand in good times and $28.5 thousand in bad times. Lastly, the charts in Figure 9 show that the procyclicality of the CECL methodology is in large part driven by loan portfolios with longer loan lives.

Ultimately, we are most interested in the implications of CECL on the level of capital and lending. Figure 10 plots provisions under the CECL standard and as reported by banks under the incurred loss methodology. Because provisions under CECL were so volatile and lumpy, the chart depicts provisions using a four-quarter moving average just to be able to compare the behavior of provisions under the two accounting regimes. As shown in the chart, provisions under CECL start to ramp up about two quarters before the increase in provisions under the incurred loss methodology. Although, provisions under the two standards look remarkably close, CECL-based provisions are higher than those under the incurred loss methodology between the first quarter of 2006 and the fourth quarter of 2008. The level of allowances shown

in Figure 7, depicts the cumulative difference in the level of provisions over time. That chart also shows that CECL allowances are not smooth and exhibit some excess volatility as a result of updates to the macroeconomic projections. Without the four-quarter moving average, CECL-based provisions would have been much more volatile.

In summary, our results show that CECL would have been very procyclical had it been in place during the 2007-2009 financial crisis. In particular, the new standard will reduce bank capital when it is difficult or more costly for banks to raise outside equity, therefore banks could be forced to cut back on lending, which in turn could amplify the decline in economic activity. The main reason underlying the procyclicality of CECL is that it is very difficult to predict turning points in the business cycle, and those forecast errors will be especially impactful on the determination of CECL allowances for portfolios with longer loan lives.

5.3 CECL Allowances using Monte Carlo

This section shows the sensitivity of CECL allowances to different macroeconomic scenarios. The estimation of CECL allowances is very sensitive to the macroeconomic scenario considered. In reality, banks will project their CECL allowances under more than one scenario. Figure 11 plots the results for CECL allowances under the baseline macroeconomic scenario, an optimistic scenario (equivalent to the 5th percentile of the path of the macroeconomic projections) and a pessimistic scenario (equivalent to the 95th percentile). Using a more pessimistic scenario during 2005 through 2007 would have raised CECL allowances from 1.6 percent to 2.6 percent. However, that would not have prevented the procyclicality of CECL because models would have required banks to still raise reserves aggressively during the 2007-2009 financial crisis. Moreover, under the current specifications of our top-down models we didn't find a significant difference between CECL-based allowances obtained under the baseline macroeconomic scenario and those obtained by averaging the results across all possible scenarios. Although our top-down models are nonlinear, it only impacts some portfolios. This in area we intend to explore further, perhaps using quantile regressions as in Covas, Rump and Zakrajsek (2014).

6. Procyclicality of CECL

This section assesses the impact of CECL on banks' regulatory capital ratios. It also presents an estimate of the increase in capital requirements on the lending capacity of the banking sector and GDP during the 2007-2009 financial crisis.

6.1 Impact on Regulatory Capital Ratios

We first study the impact of CECL on the behavior of the Tier 1 common capital ratio during the 2007-2009 financial crisis for the entire U.S. banking industry. We chose the Tier 1 common capital ratio (Tier 1 common capital as a percent of risk-weighted assets) because it was the same regulatory capital ratio used in the Supervisory Capital Assessment Program (2009) to assess the capital adequacy of banks, and provides the greatest loss absorption capacity. The changes in equity and capital are determined by the evolution of provisions under CECL. Specifically, provisions under CECL in quarter t are determined by

$$Prov_t^{CECL} = CECL_t - CECL_{t-1} + NCO_t \tag{6}$$

where $NCO_t$are the dollar amount of net charge-offs in quarter t. Next, the estimated impact of CECL on the Tier 1 common capital ratio for the U.S. banking industry is defined as:

$$T1CR_t^{CECL} = T1CR_t^{ALLL} - (1-\tau)\frac{\sum_{i=0}^{t}\left(Prov_i^{CECL} - Prov_i^{ALLL}\right)}{RWA_t} \tag{7}$$

where $\tau$is the tax rate, which is assumed to be equal to 21 percent and RWA_t is risk-weighted assets. Our estimate likely understates the impact of the CECL-based allowance on regulatory capital ratios because although the calculation includes the impact of taxes, it does not take into consideration the Tier 1 common capital limits on deferred tax assets.

The adjusted Tier 1 common ratio is first calculated in the second quarter of 2005 (i.e., the quarter in which $i = 0$) since the first estimate of CECL allowances is only available in the first quarter of 2005 and to calculate the provision expense the previous quarter of CECL-based allowances is required. Also, for simplicity, the analysis on the impact of capital assumes that there is no "day one" impact of the adoption of CECL on banks' regulatory capital ratios. That is, we are implicitly assuming the level of reserves under CECL is approximately the same as the

level of reserves under the incurred loss methodology when CECL is implemented. As shown in Figure 7, this is not a very strong assumption since we estimate CECL allowances to be only slightly lower relative to ALLL in the first quarter of 2005.

Figure 12 plots the observed Tier 1 common ratio for the entire U.S. banking industry and the Tier 1 common ratio under CECL baseline forecasts. The shaded area represents the range for the Tier 1 common ratio under more pessimistic and optimistic scenarios, respectively. The difference in the Tier 1 common ratios under the incurred loss methodology and CECL is approximately 25 basis points in the first quarter of 2007. Therefore, the implementation of CECL in 2005 would not have induced banks to significantly increase loan loss allowances up to the period in which the economic outlook starts to deteriorate.

The gap between the Tier 1 common ratio under the incurred loss methodology and CECL starts to widen in early 2007. In particular, the Tier 1 common ratio under CECL falls from 7.9 percent to 5.3 percent between the first quarter of 2007 and the third quarter of 2008. Moreover, the difference between the Tier 1 common ratio under the incurred loss methodology and CECL is 1.6 percentage points in the third quarter of 2008. Note that the Federal Reserve considered a 5 percent Tier 1 common ratio as the level of capital necessary for a bank to remain "a going concern throughout stressful conditions and on a post-stress basis" in the 2011 Comprehensive Capital Assessment Program. Because the aggregate regulatory capital ratio reached 5.3 percent in the third quarter of 2008, many banks would have crossed the 5 percent threshold under the CECL regime. It is also possible that more banks would have failed during the financial crisis as a result of an inability to satisfy minimum capital requirements.

Had CECL been in place in the 2007-2009 financial crisis, the decline in Tier 1 common ratios would probably not have been so dramatic because banks would have done all they could to prevent such declines and continued to be viewed as viable and solvent by investors and creditors, including the providers of short-term funding. To avoid such large declines in their regulatory capital ratios during the crisis, banks would have had no other viable alternative than slashing their equity payouts and reducing lending very aggressively, thereby amplifying the recession. In the next section we try to provide an estimate of the impact of CECL on lending during the last crisis.

6.2. Macroeconomic Implications of CECL

The previous results showed that CECL will reduce banks capital during a recession, likely encouraging banks to reduce lending, which could exacerbate a downturn. The consequences for bank lending would be similar to those from increasing capital requirements. In this section we try to quantify the impact of CECL on the availability of credit during a downturn and on GDP using the estimated impact on banks' regulatory capital ratios obtained in the previous section. In the case of CECL, it is crucial to evaluate the effective increase in capital requirements at the onset of a recession because that is when capital is the most valuable to absorb losses and at a time when banks are likely unable to raise new equity.

Generally, it is difficult to estimate the impact of an increase in capital requirements on credit supply during an economic downturn because a recession affects both banks' capital ratios via write-downs and depresses loan demand. Thus, we need to be able to separate changes in loan supply from changes in loan demand in driving the overall change in bank lending during a recession. A recent paper by Behn, Haselmann and Wachtel (2016) looked at changes in credit supply by comparing changes in lending to the same borrowers by banks using model-based capital requirements versus banks using capital requirements that are invariant to changes in economic conditions, namely the standardized approach. In particular, the risk-weighted assets of banks using model-based capital requirements increase as a result of a worsening in economic conditions driven by a rise in the likelihood of a borrower defaulting on its loan. This methodology works as an identification strategy because the paper controls for the impact of changes in loan demand on lending by focusing on loans to the same borrower provided by different banks subject to different types of capital requirements. Thus, this mechanism is very similar to CECL because banks using a model-based approach to determine their risk-weights experienced a decline in their capital ratios during the 2007-2009 financial crisis as credit risk rose. In particular, the paper finds that a 0.5 percentage point increase in capital requirements causes a reduction in the supply of such loans by an additional 3 percentage points relative to loans subject to invariant capital requirements. Since we have estimated a 1.6 percentage point increase in capital requirements, or 3x higher than the findings in Behn et al (2016), the adoption of CECL in the past financial crisis would have led to a decline in lending by an additional 9 percentage points relative to what occurred during the crisis. This decline would have translated

to an additional $600 billion decrease in aggregate holdings of loans on banks' books during that year. According to the Fed's H.8 release, total loans declined 10.2 percent in 2009.

Lastly, we tried to translate the 9 additional percentage point decline in loan growth to GDP. According to the Federal Reserve's October 2008 Greenbook Forecast, tighter bank lending standards observed over 2008 were projected to reduce the level of real GDP between 3 and 4 percent by the end of 2009. Our results indicate that the impact of CECL would lead to an additional 9 percentage point decline in lending, approximately twice the reduction in bank lending registered over 2009. Thus, the additional reduction in bank lending would have translated into a very sizable decline in real GDP during the crisis period according to the Fed's own forecasts at the time.

7. Conclusions

In this paper, we used a top-down model to assess the impact of CECL on banks' regulatory capital ratios during the 2007-2009 financial crisis. Specifically, we were able to generate forecasts for net charge-offs for various loan portfolios, using real-time projections for the macroeconomic variables that drive the behavior of net charge-offs. Other existing literature on this topic refers to "perfect foresight" in assessing the earlier recognition capabilities of CECL. This is not realistic, however, as professional forecasters were unable to effectively foresee the timing and the extent of turning points in the business cycle. We, therefore, apply macroeconomic forecasts available at the time in order to generate the loss rate forecasts for all major loan portfolios. We show that this more realistic scenario causes the level of CECL allowances to be just slightly higher than the level of allowances actually recorded under the incurred loss methodology until the start of the crisis in 2007. After that, CECL allowances would have experienced a rapid rise over the following six quarters causing banks' regulatory capital ratios to fall abruptly at the worst possible time during the past crisis. Moreover, our results also indicate that CECL-based allowances would have overshot and prolonged the recession as forecasts were slow to recognize the start of the recovery. Lastly, our results also suggest that in real time loan loss provisions under CECL would be highly volatile. Thus, our results indicate that CECL will increase procyclicality and will amplify the decline in credit availability during the recession due to inherent difficulties of macroeconomic models (and forecasters) being able to accurately predict turning points in the business cycle.

In addition, as we noted in the introduction, under CECL banks are required to establish a credit loss allowance based on the expected lifetime losses on the loan when they originate the loan. As a result, banks will book an immediate loss, with no compensating gain, for each loan they make. Therefore, banks struggling to maintain profitability in a downturn will have a strong incentive to stop lending to riskier borrowers. The procyclicality of CECL caused by its impact on net income is an important topic for future research.

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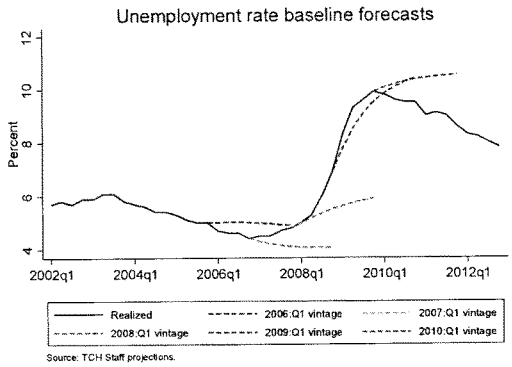
Figure 1



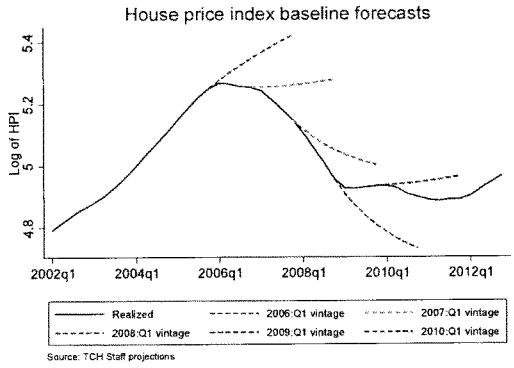


Figure 2

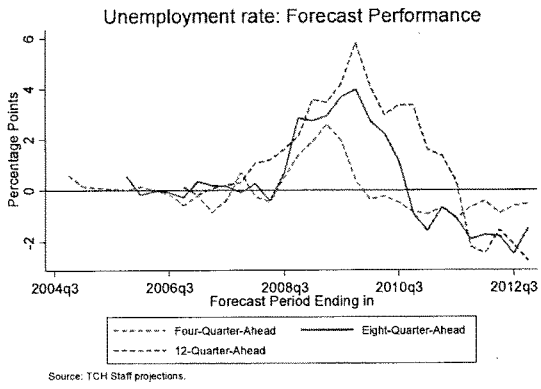


Figure 3

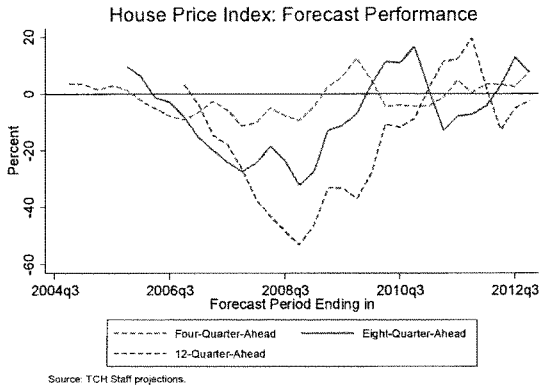


Figure 4

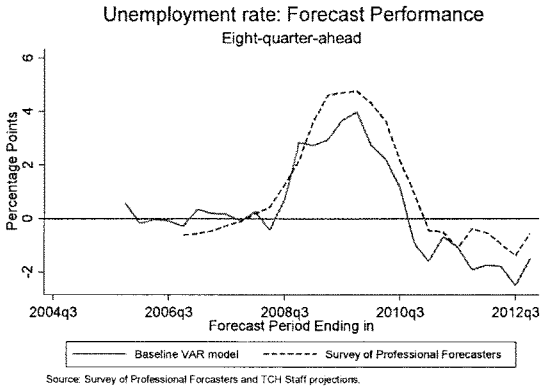
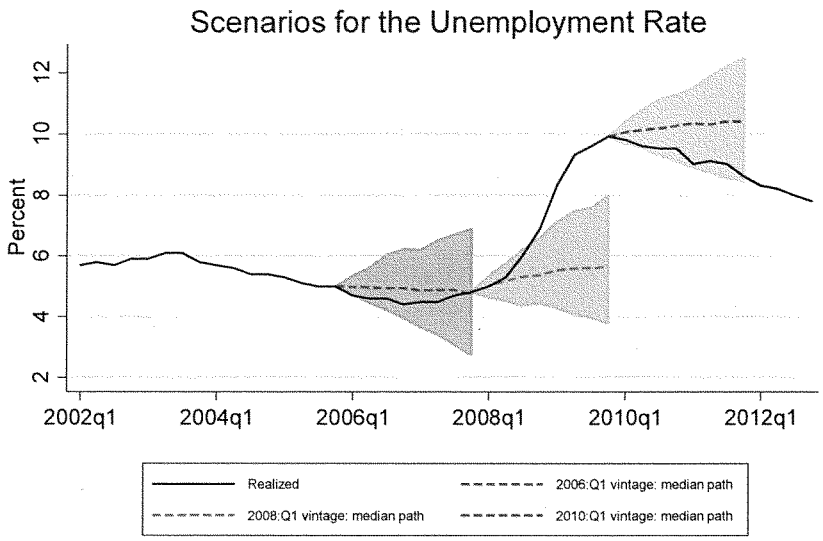
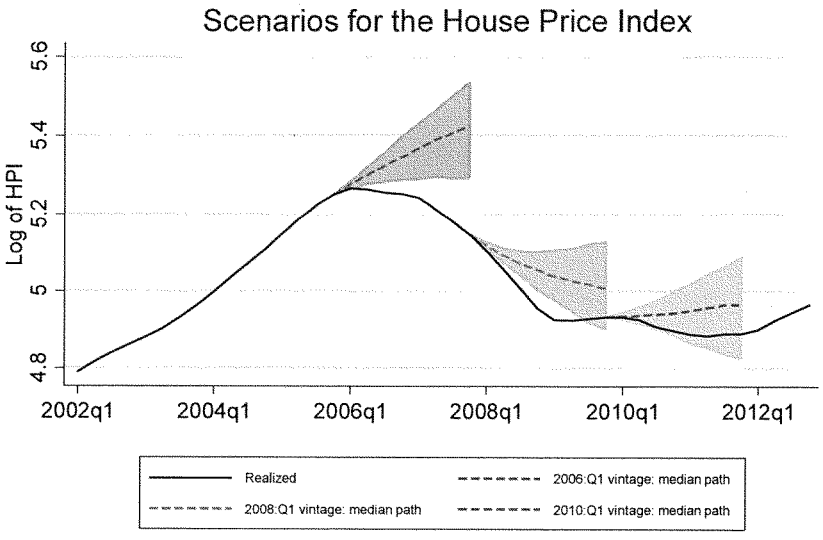


Figure 5



Source: TCH Staff projections.

Note: Scenarios generated using a VAR in first-differences. The shaded area represents the 10th lowest and the 190th highest values of the series across all 200 macroeconomic scenarios



Source: TCH Staff projections.

Note: Scenarios generated using a VAR in first-differences. The shaded area represents the 10th lowest and the 190th highest values of the series across all 200 macroeconomic scenarios

Figure 6: Illustration of the Forecasting Horizon for a Loan Portfolio

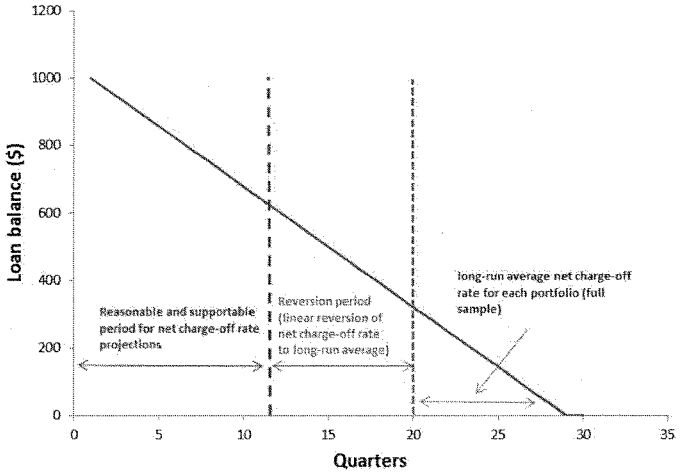
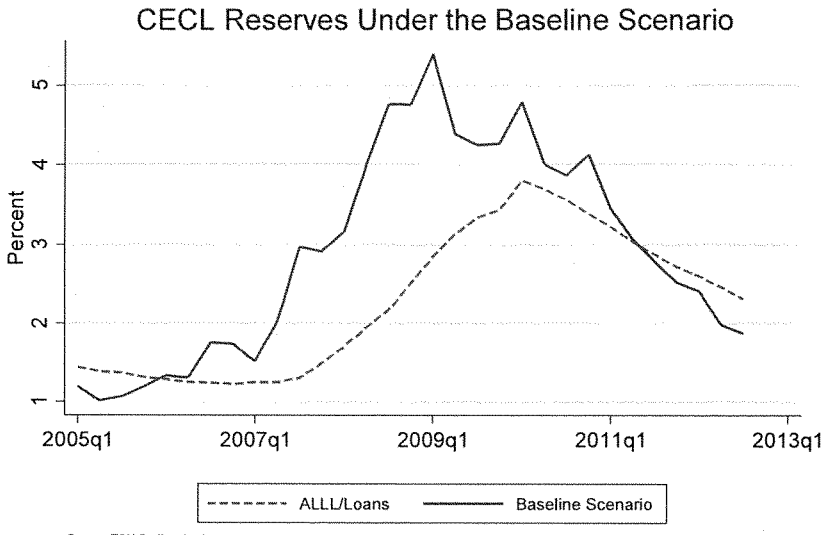


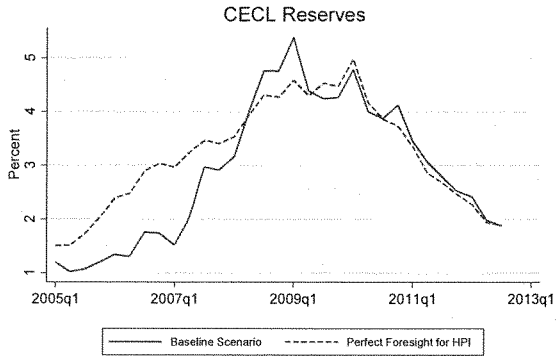
Figure 7



Source: TCH Staff projections.

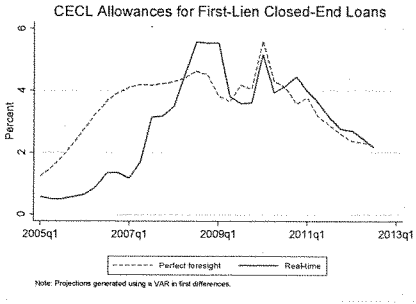
Note: Projections generated using a VAR in first differences.

Figure 8: CECL Allowances under Perfect Foresight for the House Price Index

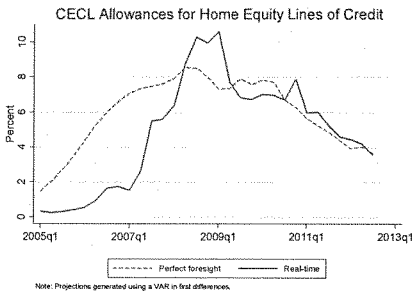


Source: TCH Staff projections.
Note: Projections generated using a VAR in first differences.

Figure 9

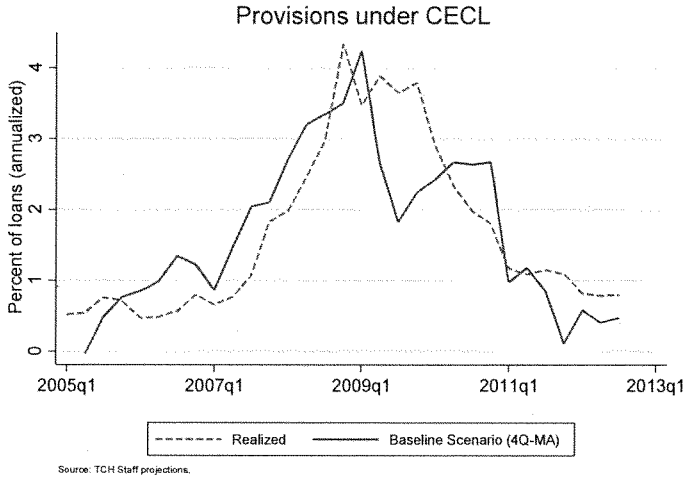


Note: Projections generated using a VAR in first differences.



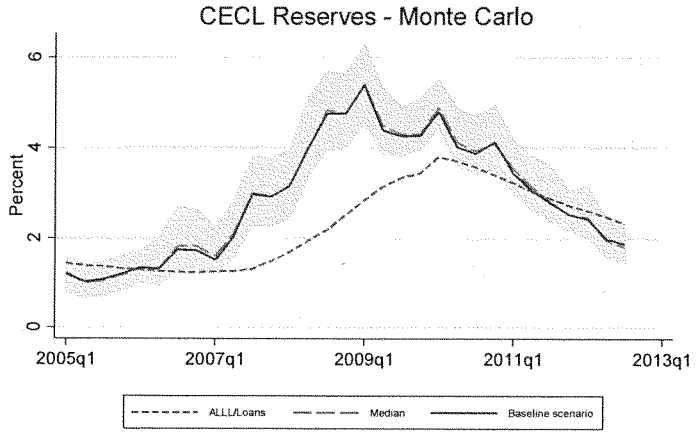
Note: Projections generated using a VAR in first differences.

Figure 10



Source: TCH Staff projections.

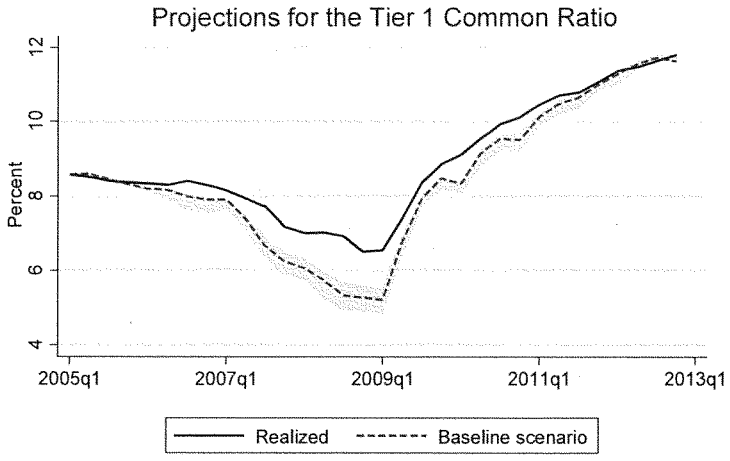
Figure 11



Source: TCH Staff projections.

Note: The shaded area represents the 10th lowest and the 190th highest values of CECL reserves across all 200 macroeconomic scenarios utilized. Projections generated using a VAR in first differences.

Figure 12



Source: TCH Staff projections.

Note: The shaded area represents the 10th lowest and the 190th highest values of CECL reserves and the Tier 1 common capital ratio across all 200 macroeconomic scenarios utilized.

Table 1: Loan portfolios and Macroeconomic Series

Loan Portfolio	Macro series
Commercial and industrial	Unemployment rate
Construction	CRE prices
Nonfarm nonresidential	CRE prices
Multifamily	CRE prices
First-lien mortgages	House prices
Junior-lien mortgages	House prices
HELOCs	House prices
Other real estate	CRE prices
Credit cards	Unemployment rate
Other consumer loans	Unemployment rate, Time Trend
Leases	Unemployment rate
Foreign governments	Unemployment rate
Agriculture	Unemployment rate
Depository institutions	Unemployment rate
Other loans	Unemployment rate

Table 2: Summary Statistics for Net Charge-off Rates

	Mean	SD	Min	Median	Max
Commercial and Industrial	0.8	0.7	0.1	0.5	2.8
Construction CRE	1.2	1.9	-0.2	0.1	8.5
Multifamily CRE	0.4	0.5	0.0	0.1	2.4
Nonfarm-nonresidential CRE	0.4	0.5	-0.1	0.1	2.1
First-lien mortgages	0.4	0.5	0.0	0.1	2.8
Junior-lien mortgages	1.6	2.1	-0.1	0.5	9.4
HELOCs	0.7	0.9	0.1	0.2	3.5
Other real estate	0.4	0.5	0.0	0.2	2.8
Credit cards	4.9	1.7	2.8	4.4	11.0
Other Consumer loans	1.7	0.8	0.5	1.6	4.6
Leases	0.4	0.4	0.0	0.3	1.8
Foreign Governments	0.5	3.4	-7.4	0.0	25.0
Agriculture	0.2	0.2	0.0	0.1	1.0
Depository Institutions	0.2	0.4	-0.5	0.0	2.3
Other Loans	0.3	0.4	-0.1	0.2	1.9

Table 3: Expected Loan Life and Length of Reversion Period

Loan Portfolio	Life of loan (in quarters)*	Reversion period (in quarters)
Commercial and industrial	15	8
Construction	11	13
Nonfarm nonresidential	14	7
Multifamily	30	10
First-lien mortgages	34	15
Junior-lien mortgages	30	18
HELOCs	30	18
Other real estate	19	7
Credit cards	7	9
Other consumer loans	16	6
Leases	28	6
Foreign governments	10	1
Agriculture	8	3
Depository institutions	8	1
Other loans	10	8

Note: The life of loan is the expected number of quarters it takes for the loan balance to reach zero.

Table 4: Model Estimates of Net Charge-off Rates

	Dependent Variables: Net Charge-off Rates														
Explanatory Variable	C&I	CLD	MF	NFNR	FL	JL	HLC	OTHRE	CC	CON	LEA	FG	AG	DI	OTHL
Lagged NCO rate	0.8006***	0.7929***	0.7723***	0.8159***	0.8904***	0.8506***	0.9099***	0.5732***	0.8574***	0.6262***	0.6454***	0.5746***	0.6005***	0.3618***	0.5679***
	(0.0659)	(0.0888)	(0.1065)	(0.0957)	(0.0793)	(0.0829)	(0.0492)	(0.1547)	(0.0453)	(0.0918)	(0.075)	(0.1670)	(0.1301)	(0.1361)	(0.1296)
Change in UR (annualized)	0.1256***								0.3365***	0.1800***	0.0999***	0.0887	0.0252**	0.0567	0.1084***
	(0.0313)								(0.0776)	(0.0339)	(0.0201)	(0.1359)	(0.0114)	(0.0383)	(0.0383)
Change in CRE Index								-0.0086*							
								(0.0049)							
Change in CRE Index x (X < 0 Dummy)		-0.0590**	-0.0143**	-0.0121**				-0.0069							
		(0.0297)	(0.0065)	(0.0048)				(0.0171)							
Change in HPI					-0.0031	-0.0204	-0.0045								
					(0.0024)	(0.0132)	(0.0040)								
Change in HPI x (X<0 Dummy)					-0.0129*	-0.0523**	-0.0247***								
					(0.0076)	(0.0220)	(0.0077)								
time trend										0.0054***					
										(0.0016)					
Constant	0.1618***	0.0789	0.0354**	0.0302	0.0337*	0.2265*	0.0407	0.1644***	0.7194***	0.3507***	0.1621***	0.1332	0.0872***	0.1172***	0.1482***
	(0.0436)	(0.0511)	(0.0170)	(0.0189)	(0.0185)	(0.1256)	(0.0327)	(0.0562)	(0.2046)	(0.1062)	(0.0319)	(0.2015)	(0.0203)	(0.0383)	(0.0438)
Observations	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
Adjusted R2	0.83	0.89	0.78	0.81	0.89	0.85	0.95	0.56	0.91	0.76	0.65	0.36	0.43	0.18	0.61

Note: Sample period is between 1991:Q1 and 2017:Q4. Net charge-off rates (annualized percent); C&I = commercial and industrial; CLD = construction commercial real estate; MF = multifamily real estate; NFNR = non-farm non-residential commercial real estate; FL = first lien residential real estate; JL = junior lien residential real estate; HLC = home equity lines of credit; CC = credit card; CON = other consumer; LEA = leases; OTHRE = other real estate; FG = loans to foreign governments; AG = agriculture loans; DI = loans to depository institutions; OTHL = other loans. The table reports the estimated coefficients of each model and robust standard errors are reported in parenthesis. * p-value < 0.10; ** p-value < 0.05; and *** p-value < 0.01.

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Responding to Criticism, BPI Stands By Its Finding that CECL is Procyclical

By Bill Nelson, Francisco Covas

November 14, 2018

On January 1, 2020, U.S. banks will be required to change how they account for loan losses. Under a new FASB standard – Current Expected Credit Loss (CECL) – banks will be required to maintain an allowance that equals, for each loan, total losses expected over the life of the loan. Currently, a bank is required to establish an allowance only when it concludes a loss is probable and estimable.

CECL was adopted in large part because it was meant to be countercyclical – the goal being for banks to build their allowances in boom years when lending standards weaken and then draw them down in a recession when lending standard tighten. In a recent working paper, however, we demonstrated that CECL will, in fact, be procyclical in practice: Allowances will go up in bad times when banks mark down their forecast for the economy – which heavily influence the outlook for loan losses – and down in good times when the forecast improves. In particular, we show that, if CECL had been in place during the financial crisis, allowances would have peaked in the fourth quarter of 2008.

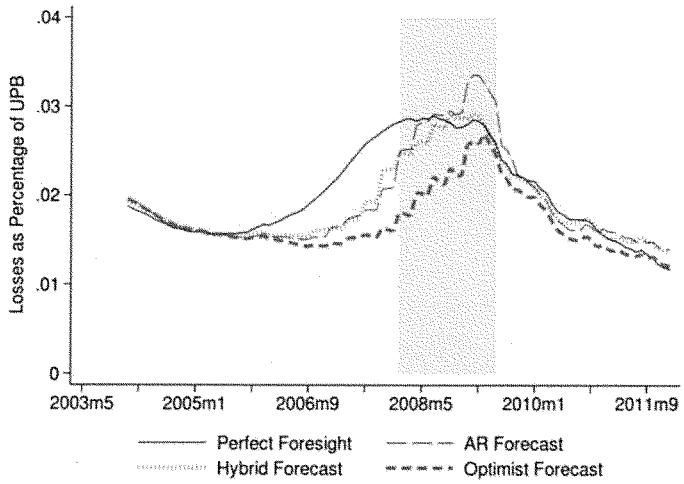
In a recent UBS Analyst Conference Call, a FASB Board member stated that our working paper was wrong and that CECL would, as intended, be countercyclical. As evidence, he cited three other studies. In this blogpost we analyze each of the three studies. Two of the three studies show that CECL is countercyclical only when the models incorporate the assumption of "perfect foresight" (that is, when the future course of the economy can be perfectly predicted) and is procyclical when the perfect foresight assumption is relaxed – fully consistent with the findings of our working paper. Moreover, the papers show that CECL would have been procyclical even after taking into consideration the deterioration in loan quality that occurred in the years prior to the crisis.

The third study simply provides no evidence on whether CECL is pro- or countercyclical.

The three studies cited during the call were, Chae, Sarama, Vojtech, and Wang (2018), Breeden (2018) and deRitis (2018). We discuss each of the results of the three studies in the remainder of this post.

1. Chae, Sarama, Vojtech, and Wang (2018). This paper calculates CECL-based reserves for 30-year fixed-rate first-lien mortgages that were originated in California during the period between 2002 and 2015. The paper uses a loan-level data to estimate a stylized mortgage default model. Importantly, the model controls for lending standards used by banks at the time the loan was originated.

Figure 9: Comparison of Alternative Forecasts Updated Every 3 Months



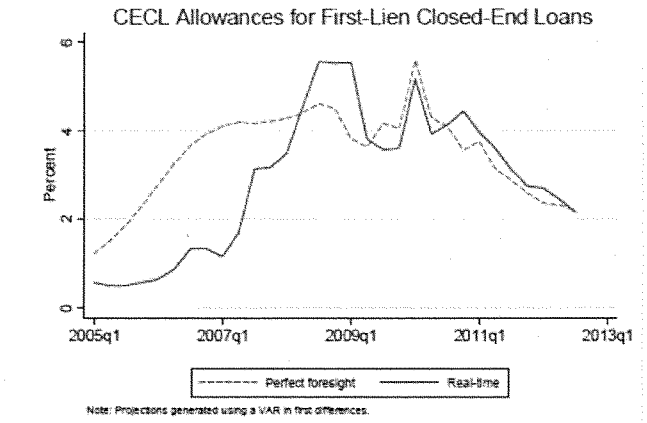
Source: Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Bank Holding Companies; Black Knight Financial Services, LPS McDash Data; and author calculations

Note: CECL with perfect foresight of macroeconomic conditions shows ALLL under the expected loss model and conditions on the actual path of home prices in the following two years, afterwards reverting back to the long run experience. The optimist forecast assumes a constant .6 percent monthly increase in the HPI index. The autoregressive forecast continues the recent price movements of the last 4 quarters. The hybrid forecast tracks the actual macroeconomic conditions for 2 quarters and then reverts back to a flat forecast for the remaining 6 quarters.

Source Chae et al (2018)

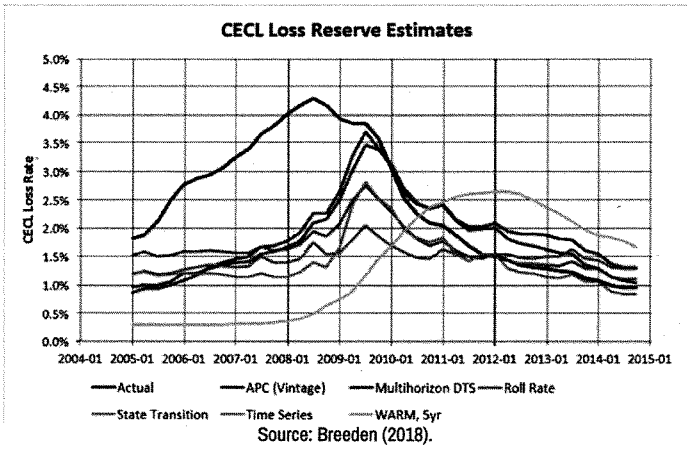
As shown by the blue line in the chart above (copied from the paper), the paper finds CECL allowances for first-lien residential real estate loans would have been countercyclical during the 2007-2009 financial crisis if the future path of California house price index was assumed to be known (a/k/a perfect foresight). CECL-based allowances are countercyclical because reserves start to rise in mid-2005, well before the start of the recession at the end 2007. However, when the paper relaxes the assumption of perfect foresight and uses an autoregressive (AR) model to project the future path of statewide home prices in California, it finds that CECL-based reserves are well below reserves under perfect foresight between 2005 and 2007 and rise at a fast pace in 2008 and 2009 as the crisis reaches its worst point. Moreover, the chart shows an overshooting of CECL-based reserves using the autoregressive forecast relative to the perfect foresight case. The authors of the paper recognize the tendency for CECL to be procyclical when the assumption of perfect foresight is dropped by stating "Compared to the perfect foresight case, ALLL under an AR forecast is thus more pro-cyclical and less forward-looking."

The chart below shows CECL-based allowances taken from Covas and Nelson (2018). Our evidence is very similar to Chae et al (2018), in that in real-time CECL-based allowances rise abruptly at the onset of the crisis as forecasts are being updated and exhibits some overshooting relative to the perfect foresight case. As a result, the paper by Chae et al (2018) cannot be used as evidence to counter the results provided in BPI's research as they are very similar, despite the use of very different models.



Source: Covas and Nelson (2018)

2. Breeden (2018). This paper also computes CECL-based reserves for 30-year conforming fixed rate mortgages using loan-level data between 2001 through 2017. An interesting feature of this analysis is that it used consensus forecasts available at the time and did not generate macroeconomic scenarios like Chae et al (2018) and Covas and Nelson (2018). The chart below (copied from the paper) depicts projections of CECL-based reserves between 2005 and 2014 using a variety of models. The black line shows CECL-based allowances under perfect foresight, which once again shows loan allowances rising well before the start of financial crisis. The remaining lines show CECL-based allowances under various models using consensus forecasts available at the time. The results show that without perfect foresight CECL-based reserves would have risen abruptly at the onset of the recession and would have accentuated the contraction in credit availability. The degree of procyclicality varies across models used to project expected loan losses, but almost all models project sizable increases in CECL-based reserves during 2008 and 2009.



Source: Breeden (2018).

3. DeRitis (2018). This paper also uses single-family loan level data made available by the GSEs to compute CECL-based reserves. Similar to the BPI study, the paper generates macroeconomic scenarios to construct projections of CECL reserves. However, the paper only estimates CECL-based reserves for the first quarter of 2005 under several macroeconomic scenarios. Thus, it is not possible to discern the cyclical properties of CECL as the paper does not estimate CECL reserves through the cycle. To do so, the paper would have needed to estimate CECL-based reserves for all time periods before and during the crisis. Importantly, the analysis would also have to address how the macroeconomic scenarios are being updated over time. In BPI's own work, the procyclicality of CECL is driven by the large forecast errors that arise around business cycle turning points.

Although not cited on the aforementioned call, a paper by Abad and Suarez (2017) also finds CECL to be procyclical for a portfolio of European corporate loans. Lastly, Ryan (2018) also notes that CECL will be procyclical for banks in bad times.

Another limitation of all these papers is the focus on a particular portfolio during the past financial crisis (in most cases, conforming 30-year fixed rate mortgage loans). BPI's analysis studied the behavior of CECL-based reserves across all loan portfolios, not just mortgage loans. As a result, we were able to derive the impact of "real-time" CECL-based allowances on regulatory capital ratios and provide a more comprehensive assessment of the procyclicality of CECL.

Disclaimer: The views expressed in this post are those of the author(s) and do not necessarily reflect the position of the Bank Policy Institute or its membership, and are not intended to be, and should not be construed as, legal advice of any kind.

Good morning, my name is Joe Stieven, and I sincerely appreciate the opportunity to share my personal views and opinions on the scheduled topic. I have analyzed the financial industry and financial institutions for 35 years.

Early in my career, I was an Analyst/Examiner in Banking Supervision and Regulation at the Federal Reserve Bank of St. Louis.

From there, I went to Stifel, Nicolaus for 20 years. (For your information, Stifel is a St. Louis based multinational investment bank and financial services company.) I founded and was Director of Financial Institutions Research. During my tenure, the firm completed over 250 transactions for financial institutions.

Most recently, 13 years ago I started my own company, an SEC registered private investment advisory firm focusing on financial institutions.

In January 2012, in addition to my CEO responsibilities, I was appointed by then FASB Chairman, Leslie F. Seidman, as a member of the Investors Technical Advisory Committee (ITAC). It was a 4-year non-compensated appointment and the FASB expected us to thoroughly analyze and discuss current and proposed accounting rules, including CECL.

After a year, I was invited by the FASB Chairman and the Board to become Co-Chair of the IAC (renamed from ITAC). In April, 2015, the IAC issued a comment letter on CECL. I would like to read to you a short excerpt from the summary paragraph on page 2 of the report:

"Currently, IAC members have wide ranging views on the proposed CECL model. However a majority view the proposed model as needing improvements on topics listed in the body of this letter under "Points of General Concern." These points address process/implementation, lifetime losses accrued on Day 1, and IFRS convergence.

I have been asked to discuss the impact this new accounting standard will have on financial institutions, including the effect on the availability and affordability of credit (for your constituents, the U.S. consumer) and the burden on financial

So let's start. The burden on financial institutions (primarily banks) is much more than readily apparent. Instead of me giving you my opinion, let me give you an actual example. One of my references is David Kemper, Executive Chairman of Commerce Bancshares, a great regional banking company with 150 year roots. Commerce never took one penny of TARP and came through the 2007-2009 Great Recession in excellent shape. When the market froze up, Commerce was still lending to consumers. I know this for a fact, as I have been a customer for well over 25 years. They came through the toughest period in nearly a century, and they had to go out and hire a 3rd party to model CECL. This shows you the enormous complexity of this model.

I can give you names of other great companies with similar experiences, like Texas-based Prosperity Bancshares, and CEO David Zalman. If you add these implementation costs to the wide-ranging estimates from third party experts for the reserve build, it could cost $20B, $50B, some say $100B. But don't stop there, what is the impact on consumers and the availability and affordability of credit? If loans can equal about 10 times each dollar of equity, that simple math amounts to $500 billion ($1/2 trillion) of potential less lending. Let me ask you, do you think that hurts availability? Will this lower the availability of long-term financing if you have to look lifetime? Does this push people out of the banking industry into non-bank lenders? What rates will these other lenders charge consumers versus a bank? How many billions will be wasted on unproductive modeling, as none of this modeling changes the actual results.

In my view, this model definitely will impact the availability of credit for consumers. Furthermore, there are other negative consequences that absolutely need to be discussed.

Thank you.

Written Testimony of

Mark Zandi
Chief Economist, Moody's Analytics

Before the House Financial Services Committee

"Assessing the Impact of FASB's Current Expected Credit Loss Accounting Standard

on Financial Institutions and the Economy"

December 11, 2018

The Federal Reserve and other banking regulators have worked diligently since the financial crisis to reform the financial system and put it on much sounder financial ground. They have required financial institutions to increase their capital and liquidity, improve their risk management functions and oversight, and have taken macroprudential steps to cool overheated lending activity.

The next big reform is a sea change in the way financial institutions account for their loan losses. Under existing incurred loss accounting rules, loan losses are not recognized in financial statements until it is probable (based on available information) that a loan is impaired and the amount of loss can be reasonably estimated. A loan's delinquency status is one example of a factor impacting the probability that a loss has been incurred. The new accounting standard, known as Current Expected Credit Loss, or CECL, requires banks to add to reserves when loans are originated, based on historical information, current conditions, and "reasonable and supportable" forecasts.

The American Bankers Association has called CECL the "most sweeping change to bank accounting ever." That is not hyperbole. This arcane change to the accounting rules has big implications for the way institutions operate and the amount of credit they provide. Since the availability and cost of credit are critical to the economy's performance, CECL will likely also have a meaningful impact on the business cycle.

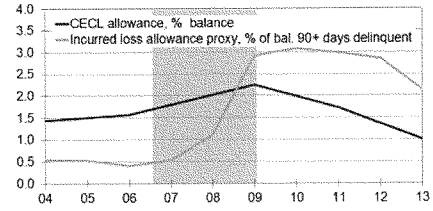
Because SEC registrants must adopt CECL by 2020, it is garnering significant attention. Bankers are just now grappling with how to implement the standard and what it means for their loan losses, profitability and lending. Many in the banking community worry that CECL will fail to achieve its principal intended purpose of reducing the procyclicality of the existing incurred loss accounting standard.

The empirical evidence presented in this testimony supports the conclusion that the CECL standard will be less procyclical than the incurred loss standard and should allay these concerns.[i] The analysis is based on the Freddie Mac portfolio of single-family residential mortgage loans. The results depend on modeling choices and assumptions, but based on our knowledge of how lenders will implement CECL, we find that the new accounting standard will result in substantially less procyclicality in loss reserving. That is, during the housing boom in the mid-2000s, CECL would have boosted reserves compared with the incurred loss standard, and in the subsequent housing bust, reserves would have been lower (see Chart 1)[ii]

Chart 1

CECL Is Less Procyclical

Credit loss rate, % balance



Source: Moody's Analytics

CECL would not have been countercyclical, because the unanticipated deterioration in the economy during the Great Recession would have caused CECL loss reserves to increase, but the increase would have been much smaller than the incurred loss allowance. And this analysis likely understates the benefit of CECL, as it does not consider likely changes in lenders' behavior to the new standard. Faced with an increasing loss allowance on loan originations in the housing boom, lenders would have been strongly incented to curb their subprime lending at that time, likely making CECL even less procyclical.

CECL will achieve its goal of encouraging lenders to reserve for eventual losses earlier in the lifecycle of their loans than they do today. As a result, CECL will result in easier underwriting and more lending in recessions, and tighter underwriting and less lending in boom times than under the incurred loss accounting standard. CECL will be less procyclical than the existing incurred loss standard. Therefore, CECL will lower the odds that the financial system and economy will suffer a fate similar to the financial crisis and economic downturn suffered a decade ago.

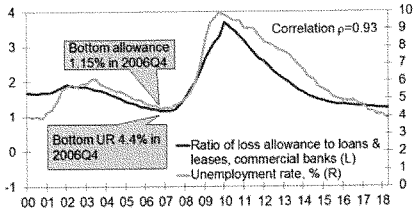
Incurred Loss Procyclicality

There is little debate that the existing incurred loss accounting standard is highly procyclical. That is clearly evident in the housing boom and bust of a decade ago. During the boom when unemployment was at its nadir and house prices at their peak, loss reserves were low and falling. Conversely, during the housing bust when unemployment soared and house prices collapsed, reserves surged (see Chart 2). Reserves peaked in the first quarter of 2010, soon after unemployment topped out at 10% and just prior to when house prices hit their nadir.

Chart 2

Incurred Loss Method Highly Procyclical

Comparison of loss allowance ratio to unemployment rate



Sources: FDIC, BLS, Moody's Analytics

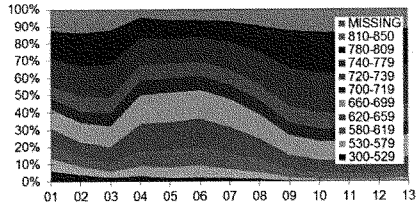
The high correlation between the unemployment rate and loss reserves was the key motivation for the Financial Accounting Standards Board to develop CECL. During the crisis, investors complained that financial statements did not reflect the inherent risk of losses in loan portfolios despite the fact that credit spreads were widening at an alarming rate. And auditors were uncomfortable with lenders rapidly revising their loss reserves every quarter throughout the crisis. A 2009 speech by then U.S. Comptroller of the Currency John Dugan laid out the dissatisfaction with the incurred loss model from the regulators' perspective and advocated for a less procyclical system. Even many bankers were dissatisfied with the incurred loss system. Despite having discretion to increase their loss reserves based on non-quantitative factors, the subjective nature of these adjustments exposed them to difficult questions from their auditors and investors.

Economists are also no fans of the procyclicality of incurred loss accounting, because it exacerbates the credit and business cycles. Historically, we observe periods when loan defaults are low, lending standards are loose, and credit is amply available, followed by times of higher defaults, tighter lending standards, and reduced credit availability (see Chart 3). Generally, this credit cycle is closely related to the business cycle, as easy credit turns economic good times into unsustainable booms, and tight credit exacerbates the economic tough times.[iii]

Chart 3

Lending Quality Loosened During Boom

Mortgage loan volume by borrower's credit score, % orig. volume



Sources: CreditForecast.com, Moody's Analytics

There is thus a clear rationale to end incurred loss accounting. The question is whether CECL will be meaningfully less procyclical. It will be if it incents financial institutions to reserve more in the boom times when underwriting standards are low and credit overflowing, and to reserve less in the tough times when standards are high and credit is constrained. Our analysis shows that it does.

Other Views

There are vocal critics of CECL in the banking community, including the American Bankers Association and the Bank Policy Institute, a trade organization for generally larger banks.[iv] Chief among critics' concerns is that CECL will not be less procyclical than the existing incurred loss system.

However, the critics' analysis is severely limited. It is based on Federal Deposit Insurance Corp. bank call report data for loss reserves and charge-offs available at a portfolio level. The FDIC data are insufficient for an analysis of CECL in two important ways. First, call reports do not provide information on either the lending profile or the seasoning of the underlying loan portfolio. We do not know if observed losses are high because a bank has engaged in lending to lower-quality borrowers or because the economy has deteriorated.

An understanding of seasoning or aging is also crucial for analyzing CECL. We do not know if the losses reported in call reports are associated with young loans, older loans, or something in between. Under CECL, banks will be required to update the loss estimates for each of the loans in their portfolios on a quarterly basis starting from origination. They will know the age of all loans on their books and will adjust their forecasts given the knowledge that the likelihood of default typically goes down as loans age. Not explicitly accounting for loan quality, seasoning and the economy is a significant shortcoming, given the differences between lending portfolios today and a decade ago.

Another serious limitation of the FDIC bank call report data is that the information was collected under the incurred loss accounting regime. The data thus encapsulate the accounting rules and behavioral responses that were in place at the time. Correlating economic data with this history can shed light on how procyclical the existing accounting standard has been. It clearly has been highly procyclical—hence, the motivation for change. However, the aggregate historical data cannot provide insight into how the new CECL accounting would have changed reserve estimates in the past. To borrow an analogy, unless we know all the ingredients, it is impossible for us to understand how a new recipe will change the taste of a cake.

To account for these limitations, our analysis of CECL's impact on loss reserves utilizes a detailed, publicly available loan-level dataset of single-family residential mortgages guaranteed by Freddie Mac. To be sure, it is just one of the asset classes that lenders will need to model under CECL, and results will vary across assets. But given the outsize role that residential mortgages played in the Great Recession, it is particularly relevant for our understanding of CECL.

Explaining loan loss cyclicality

The cyclicality of loan losses and by extension loan loss reserves is driven by three key factors: the credit quality of originated loans, origination loan volume, and the economy's performance. While CECL estimates will be impacted by forward-looking economic assumptions, it is a mistake to ignore the impact that credit quality and origination volume will have on individual banks' loss estimates. If CECL effectively increases the cost of riskier loan originations during boom times, lenders will respond by tightening standards or increasing interest rates for these loans.

To illustrate the impact of these factors, consider the hypothetical case of Prudent Credit Union. PCU has historically had a very strong credit culture, maintaining the same lending standards in good and bad economic times. It only provides mortgages to borrowers with high credit scores and with down payments of more than 25%. PCU lost market share to aggressive subprime lenders during the housing boom because of their resolute standards—at the height of the bubble in 2006 the lender booked only $10 million in loans. However, in the wake of the housing market collapse and the failure of its aggressive competitors, its loan volume expanded quickly, tripling to $30 million at the height of the

Great Recession in 2009.

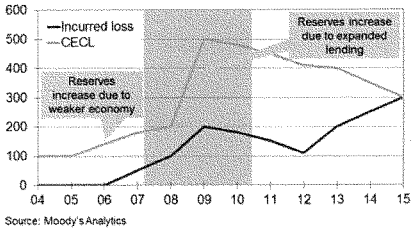
Not unexpectedly, PCU experienced a sharp increase in delinquency on its 2006 originations when the recession began in 2008. By 2010, losses on these loans rose to 2%. In contrast, the 2009 book would go on to experience a 1% loss rate, which is close to the historical norm.

Chart 4 illustrates what PCU's loss reserves would have been under incurred loss accounting and CECL. At first blush one might conclude that the loss reserves are more procyclical under CECL, but our analysis needs to account for origination effects. Reserves rose in 2009 not because of the lender's failure to predict a recession, but because of expanded lending. The increased credit availability during the downturn is precisely the outcome that regulators would hope for to counteract the contractionary forces in the economy.

Chart 4

Behind the Increase in Reserves

Hypothetical credit losses for Prudent Credit Union, $ ths



Source: Moody's Analytics

The overall loss reserve in 2009 would have been higher under CECL, but PCU's experience is precisely what we would hope for. For one, reserving on the 2006 book occurred earlier than under the incurred loss model with a smaller jump in reserves in 2008. Second, the higher initial CECL reserves prevented PCU from bowing to market competition and expanding lending earlier. By preserving its capital, it was able to expand its lending in 2009 when the rest of the market pulled back.

A portfolio-level analysis would be unable to capture these effects. Without more granular data, we would be unable to attribute changes in loss reserves to changes in credit quality, origination volume and economic forecasts. Without controlling for these factors, Prudent Credit Union's behavior could be considered procyclical, when it was anything but.

Mortgages Under CECL

To empirically test how CECL will work, we modeled and projected expected lifetime losses for Freddie Mac's guaranteed single family residential mortgages as of December 2004, 2006, 2009, 2011 and 2013. By so doing, we are able to determine what would have happened to reserves if CECL had been in place before, during and after the financial crisis and Great Recession.

Any assessment of expected credit losses requires two components: (1) a model of credit loss performance that is sensitive to economic conditions; and (2) a set of economic forecasts to use in this model.

The CECL guidelines do not dictate a methodology for estimating credit losses, leaving it to each institution to deter-

mine what is appropriate given the size and complexity of its loan portfolio. Larger institutions will opt to use more robust statistical and econometric models in order to properly incorporate correlations and sensitivities to economic factors. Smaller institutions may choose to account for these sensitivities through more qualitative judgments given resource constraints and the materiality of their portfolios. However, even the smallest institutions must estimate CECL reserves at loan origination, suggesting they will adjust their forecasts based on the credit characteristics of newly originated loans.

A vintage-cohort based approach is used in this assessment of Freddie Mac's loans. This method allows for the capture of key differences in credit quality, origination volume, and economic performance by origination month while minimizing the complexity and computational requirements of a loan-level model. That said, a loan-level modeling approach for implementing CECL is certainly conceivable.

Freddie Mac provides origination data on mortgages beginning in 1999, including borrowers' credit scores and loan-to-value ratios among other credit characteristics. The current payment status for each loan is also provided on a monthly basis from the time of origination onward. The entire database consists of about 24 million loans that translate into 1.13 billion loan-month observations.

The loan-level data is combined into cohorts defined by credit score, LTV and origination month. Typical industry practices for defining the ranges of credit score and LTV ratio in each of our cohorts are followed.[v] For the combination of each of these three factors, we computed the number of loans that were outstanding or delinquent and the number of loans that either defaulted or paid off in each subsequent month after origination.

To this vintage-cohort level dataset, three key economic factors by reporting month are added, including: the unemployment rate, the Federal Housing Finance Agency house price index, and the interest rate on the 10-year Treasury bond. Several transformations for each of these variables are used, including the 12-month difference in the unemployment rate and the 10-year Treasury rate, as well as the year-over-year percentage difference in the FHFA house price index. Changes in these variables from their origination values are also computed. This final set of variables proved to be particularly predictive in modeling default and prepayment performance, because borrowers typically choose to default on their loans based on the amount of equity they have in their property. A drop in interest rates relative to loan origination is a significant predictor of whether a borrower will refinance an existing mortgage.

A fractional logit model specification is used to estimate each of the default and prepayment outcome variables. A variety of categorical variable interactions and piecewise linear splines are utilized to capture nonlinearities in the response of borrower default and prepayment to credit quality, seasoning and economic variables.

For the most part, the model fit the cohort-level data well with significant performance differences across each of the credit score and LTV categories (see Table 1). Sensitivity to economic indicators was both significant and sensible. This model, which is relatively easy to operate, is used to create the forward-looking economic scenarios.

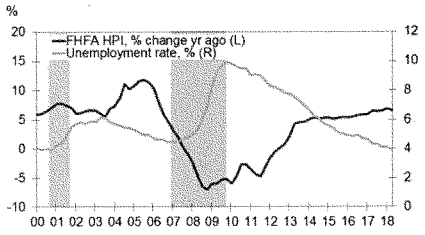
Retrospective Economic Scenarios

To assess how loan loss estimates would have changed before, during and after the Great Recession, we need to generate economic forecasts for the key drivers in the credit models, including the FHFA house price index, the unemployment rate, and the 10-year Treasury yield. Although Moody's Analytics has been producing economic forecasts for nearly 30 years, it did not start producing alternative economic scenarios until 2010. Moreover, the Moody's macroeconomic model has been overhauled significantly since the financial crisis to more formally integrate the banking and financial sectors into the model. The Moody's model is a fully endogenous global economic model that links the economies of 73 countries via trade flows, foreign investment, currency movements, and equity and bond markets. The model allows users to determine the impact of a range of shocks, including to trade, monetary and fiscal policies, asset prices, and oil and other commodity prices.

Using the current version of the Moody's global macroeconomic model, we generated baseline and alternative scenarios for five start dates, including December 2004, December 2006, December 2009, December 2011 and December 2013. These start dates were selected in order to reflect forecasts that would have been made prior to, during and after the onset of the Great Recession, and to also capture differences in the cycles for unemployment, house prices and interest rates (see Chart 5).

Chart 5

Before, During, After the Great Recession



Sources: FHFA, BLS, Moody's Analytics

Documentation describing the Moody's global macroeconomic model and the methodology used to produce forecasts are available.[vi] For the purposes of this analysis, we produced a baseline scenario that is centered at the midpoint of potential economic outcomes by construction. The baseline is consistent with a 50% probability that the economy would perform like this scenario or better/worse. We also produced four alternative scenarios, two upside and two downside, consistent with the baseline at each forecast start date. In constructing these scenarios, we utilized all historical economic data up to the forecast start date. More specifically, the alternative scenarios are:

Scenario 0 - A very strong upside scenario consistent with a 4% probability that the economy would perform like this scenario or better;

Scenario 1 - A strong upside scenario consistent with a 10% probability that the economy would perform like this scenario or better;

Scenario 3 - A strong downside scenario consistent with a 10% probability that the economy would perform like this scenario or worse; and

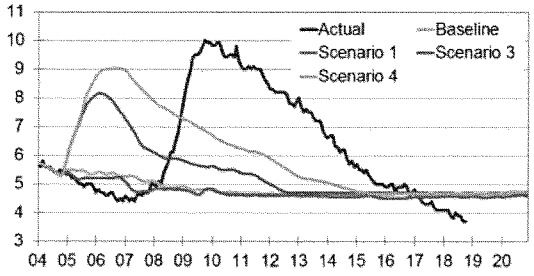
Scenario 4 - A very strong downside scenario consistent with a 4% probability that the economy would perform like this scenario or worse.

The alternative scenarios for each of the forecast start dates are illustrated in Charts 6 to 10. Several features of the forecasts are notable. Starting with the December 2004 forecasts, the baseline scenario was more pessimistic than the realized path of unemployment from January 2005 to January 2008, although it did not anticipate the sharp increase in unemployment after this time. The more pessimistic scenarios, Scenarios 3 and 4, also undershot the magnitude of the increase in unemployment, suggesting that the Great Recession was closer to a 98th or 99th percentile event rather than the 96th percentile consistent with Scenario 4.

Chart 6

Dec-04 Unemployment Forecast

Unemployment rate, %

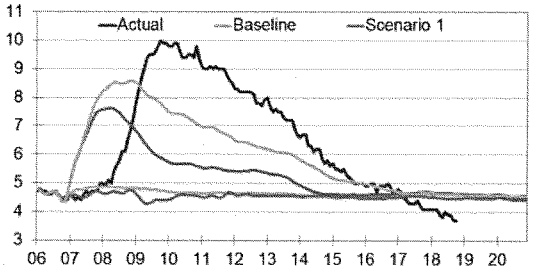


Sources: BLS, Moody's Analytics

Chart 7

Dec-06 Unemployment Forecast

Unemployment rate, %

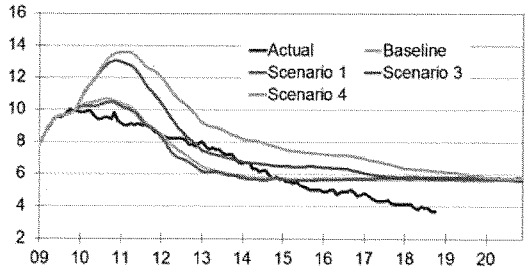


Sources: BLS, Moody's Analytics

Chart 8

Dec-09 Unemployment Forecast

Unemployment rate, %

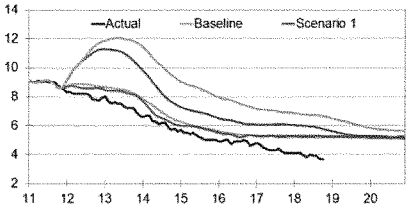


Sources: BLS, Moody's Analytics

Chart 9

Dec-11 Unemployment Forecast

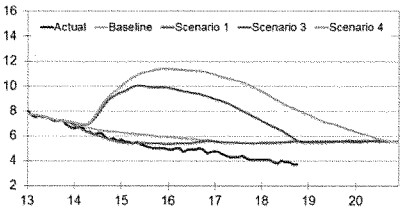
Unemployment rate, %



Sources: BLS, Moody's Analytics

Dec-13 Unemployment Forecast

Unemployment rate, %



Sources: BLS, Moody's Analytics

While one may jump to the conclusion that underpredicting the severity of the downturn would necessarily lead to an underprediction of loan losses, it is important to note differences in the timing of the scenarios. In estimating credit losses, an increase in unemployment may not translate into higher defaults due to the competing effect of seasoning. To emphasize the point, imagine that the unemployment rate rose to 15% in 2020. The impact on the December 2004 portfolio would have been minor given that most mortgages would have paid off or defaulted well before that time.

The December 2006 scenarios follow a similar pattern, although unemployment in the baseline was more optimistic than realized all the way until 2017. The more pessimistic scenarios did not catch the actual peak, but they preceded the actual increase in unemployment.

The December 2009 baseline scenario was close to what was realized, although it was initially more pessimistic with a somewhat higher peak unemployment rate. The baseline then turned more optimistic, with unemployment falling faster than actual during the economic recovery. The pessimistic scenarios show significant signs of overshooting with peak unemployment rising as high as 13%.

A loss estimate based on either of these two scenarios would have significantly overshot actuals, which may lead

some to conclude that CECL procyclicality would follow. But two important considerations are needed. First, CECL is not a stress-testing exercise. The loss estimates are intended to be management's best judgment of future expected losses. Some consideration of the pessimistic scenarios would be prudent given the uncertainty inherent in any single economic forecast as we discuss in the sections that follow, but complete dependence on these scenarios would not be appropriate. The risk compression inherent in the scenarios should also be noted. Whereas the unemployment rate rose from approximately 5% to 10% during the Great Recession, the severe recession in Scenario 4 has unemployment rising by only 3 percentage points. Given the business cycle, the deeper the economy gets into a downturn, the lower the downside risks and the greater the upside risks.

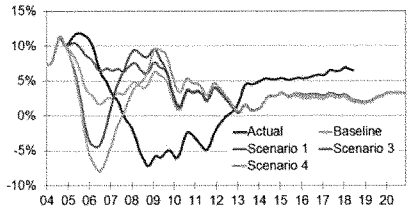
The December 2011 scenarios were similar to the December 2009 scenarios, although unemployment in the baseline scenario was somewhat higher throughout the recovery period. The equilibrium level of unemployment was forecast to be higher than the actual experience.

Charts 11 to 15 compare the house price forecast scenarios for each forecast start date. We observe similar patterns of over- and undershooting as with the unemployment rate forecasts. Again, we note that the timing of declines in the alternative scenarios may have an impact on forecasted losses at different points in time.

Chart 11

Dec-04 House Price Forecasts

FHFA All-Transactions Home Price Index, % change yr ago

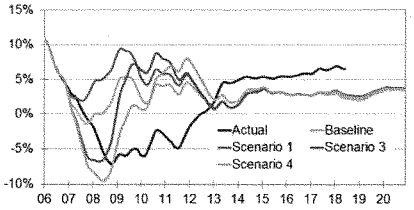


Sources: BLS, Moody's Analytics

Chart 12

Dec-06 House Price Forecasts

FHFA All-Transactions Home Price Index, % change yr ago

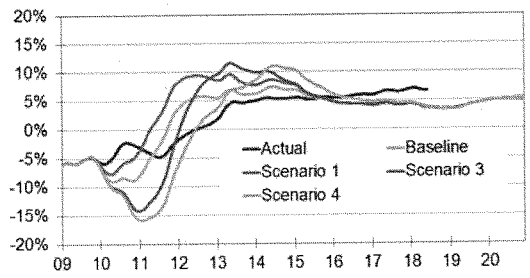


Sources: BLS, Moody's Analytics

Chart 13

Dec-09 House Price Forecasts

FHFA All-Transactions Home Price Index, % change yr ago

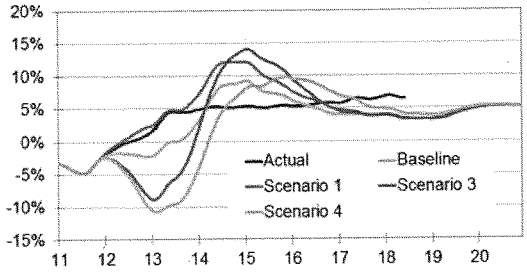


Sources: BLS, Moody's Analytics

Chart 14

Dec-11 House Price Forecasts

FHFA All-Transactions Home Price Index, % change yr ago

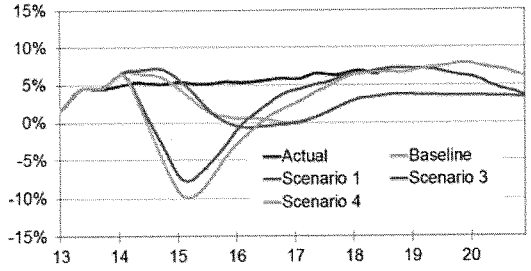


Sources: BLS, Moody's Analytics

Chart 15

Dec-13 House Price Forecasts

FHFA All-Transactions Home Price Index, % change yr ago



Sources: BLS, Moody's Analytics

Loss simulation results

Given the economic scenarios, we then created a dataset with the active set of Freddie Mac mortgages outstanding at each forecast start date. That is, we create a snapshot of mortgages as of the reporting date removing any previous loan defaults and payoffs as well as any future originations. We grouped the loans into the same origination vintage by credit score and LTV cohort that we used to develop our mortgage default and prepayment models. We then use the economic forecasts to forecast monthly default and prepayment rates over the remaining lifetime of each cohort in the portfolio.

Using these forecasts, we project the number of outstanding mortgages, prepayment and defaults based on the following recursive formulas:

$$\#\ \text{Active}_t = \#\ \text{Active}_{t-1} - \#\ \text{Default}_t - \#\ \text{Prepay}_t$$

$$\#\ \text{Prepay}_t = \#\ \text{Active}_{t-1} * \text{Probability of Prepayment}_t$$

$$\#\ \text{Default}_t = \#\ \text{Active}_{t-1} * (1 - \text{Probability of Prepayment}_t) * \text{Probability of Default}_t$$

Finally, we summed up the forecast number of defaults in each future time period to compute the projected lifetime number of defaults for each cohort and for the aggregate portfolio. Dividing this number by the number of loans observed at the start of the forecast gives us the cumulative probability of default or PD rate.

To compute the expected credit loss for each portfolio, we multiply this probability of default by the exposure at default, or EAD, and loss given default, or LGD, rate based on the formula:

$$\text{ECL} = \text{EAD} * \text{PD} * \text{LGD}$$

To simplify our analysis for expositional purposes, we assumed the EAD to be equal to the outstanding unpaid balance at the start of the forecast period. To the extent loans may have amortized before defaulting, this assumption may slightly overstate the true EAD. Given that most loans default at an early age when the amount of loan balance amortization is small, this assumption likely has a minor impact.

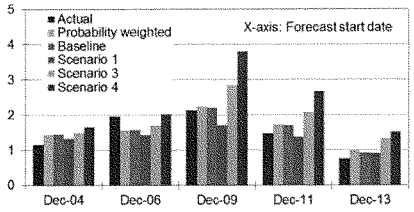
We reduced the complexity of the analysis by assuming a constant 35% loss given default rate. In reality, the LGD fluctuates with changes in house prices as well as lender policies regarding foreclosures, short sales, and other loss mitigation efforts. Relaxing this assumption does not change our qualitative findings.

The results of our analysis are provided in Chart 16 for each of the forecast start dates. We compare the 10-year expected credit loss projections across our four scenarios with the actual realized loss rate through December 2017.[vii]

Chart 16

Projected Losses by Scenario

Probability-weighted credit loss rate forecast, % balance



Source: Moody's Analytics

Our key findings are:

Consistent with our inability to completely foresee economic turning points, our loan loss forecasts over- and undershoot at different points in the cycle. In 2004, our baseline scenario was too pessimistic pushing predicted losses higher than actually realized. Conversely, in 2006 our baseline was too optimistic leading to underprediction of lifetime defaults. Consistent with our intuition, we observed the ordering of losses across the upside and downside scenarios that we would expect. Given nonlinearities in the response of defaults to economic weakness, we observe large increases in default projections for our most pessimistic economic scenarios.

We include a probability weighted scenario for each forecast period by assigning the baseline a 60% weight, Scenario 1 a 20% weight, and Scenario 3 a 20% weight.[viii] This is consistent with how we believe most banks will implement CECL.

Using the 90+ day delinquency rate as a proxy for loss reserves under the incurred loss standards, we observe the fluctuations in our CECL forecasts due to under- and overshooting are less pronounced than the runup in delinquencies during the Great Recession (see Chart 1). This supports our conclusion that CECL will not be countercyclical, but will be meaningfully less procyclical than the current incurred loss standard.

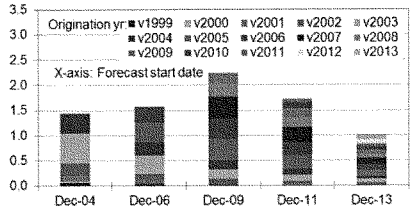
Another key finding is that procyclicality should be considered within the context of origination vintages. Under CECL, the overall loss reserve in a given period could vary because of lending decisions during the period as well as changes in the economic forecast. If CECL reserves increase simply because a lender did a lot of lending, that is not evidence of loss reserve cyclicality. Optimally, CECL will act as a countercyclical buffer that leads to less lending in a boom and more lending in a downturn.

Chart 17 decomposes our probability weighted CECL forecast of lifetime losses by origination vintage starting at each of our five reporting periods. Examination of the estimates provides additional evidence of the reduced procyclicality within each origination vintage. For example, the lifetime projection for 2004 originations was highest in 2004, but fell in subsequent periods. The loans were already mature when house prices fell in 2006, muting the impact. Forecasted losses for the 2006 vintage rose sharply from 2006 to 2009 given the surprisingly severe recession. While a sizable increase, it was much smaller than what we observed for the 90+ day delinquency rate for the same cohort.

Chart 17

Projected Losses by Origination Vintage

Probability-weighted credit loss rate forecast, % balance



Source: Moody's Analytics

Focusing on the forecasts for the 2009 book, nearly one-third of the loss estimate is attributable to loans originated in 2007, 2008 and 2009. Without these vintages, the estimated CECL reserves would have fallen as the rise in losses for 2006 originations was offset by the decrease in losses from older loans. While this additional lending would not have been eliminated under CECL, the rise in loss reserves from 2004-2006 would have hit the bottom line and presumably curbed at least some of the lending in these vintages before the economy went into recession. This shift in lending behavior during the boom would further reduce CECL's procyclicality.

Big Step Forward

CECL represents a sea change in financial accounting, and its implementation will be a challenge. Lenders rightly worry about the imprecision of economic forecasts and the impact they might have on their CECL estimates. As shown in our analysis, economic forecasts can have a material impact on loss estimates. Forecast uncertainty can lead to under- or overprediction at different points in the cycle.

However, the CECL guidelines provide lenders the discretion needed to address this issue. Forecasting losses under multiple scenarios reduces the volatility that could result from using a single forecast that is subject to large revisions. While CECL requires a lifetime loss estimate, it permits lenders to calculate this estimate based on a forecast of performance over a "reasonable and supportable" horizon plus an agnostic "reversion" period. An institution that feels uncomfortable with its ability to forecast far off into the future can choose a short "reasonable and supportable" period. Although this assumption may bring CECL estimates closer to incurred losses, the origination lifetime loss concept under CECL will still frontload more of the loss estimate relative to the incurred loss method.

The treatment of capital is another thorny issue—if loss reserves increase under CECL, then it stands to reason that bank regulators should adjust banks' capital requirements. However, the Federal Reserve has already agreed to provide banks with a transition period to minimize financial system disruptions when CECL is adopted starting in 2020. The Fed has also requested additional public comment, suggesting that additional regulatory changes may be forthcoming to address this criticism.

CECL is not a panacea. It will not prevent speculation and bad loans from being made. But CECL is a big step in the right direction. It will provide additional insight into the lending decisions and risks taken by financial institutions. Since CECL more closely aligns underwriting decisions with loss reserving, it will reduce the odds of another financial crisis and Great Recession.

Table 1: Mortgage Prepayment and Default Model

		Prepayment		Default	
Explanatory variable	**Category definition**	**Coef.**	**StdErr**	**Coef.**	**StdErr**
Age	(0-6)	0.2275	0.0057	0.1893	0.0992
(piecewise linear)	(6-12)	0.0729	0.0032	0.0573	0.0525
	(12-24)	0.0103	0.0011	0.0634	0.0129
	(24-36)	-0.0140	0.0011	0.0265	0.0061
	(36-48)	-0.0095	0.0011	0.0144	0.0045
	(48-60)	-0.0012	0.0009	0.0140	0.0034
	(60-360)	-0.0118	0.0001	0.0050	0.0003
FICO by LTV					
FICO group	**LTV group**				
Missing	(0-80)	-0.1466	0.0362	0.8389	0.2286
Missing	(80-90)	-0.0609	0.0420	1.2158	0.2373
Missing	(90-100)	-0.2149	0.0412	1.6709	0.2245
(300-620)	(0-60)	-0.2986	0.0304	0.5564	0.2175
(300-620)	(60-80)	-0.3831	0.0296	1.3045	0.2155
(300-620)	(80-90)	-0.3722	0.0344	1.5808	0.2173
(300-620)	(90-100)	-0.3787	0.0334	1.7017	0.2183
(620-660)	(0-60)	-0.2092	0.0296	0.2419	0.2170
(620-660)	(60-80)	-0.2746	0.0294	1.1488	0.2153
(620-660)	(80-90)	-0.2881	0.0296	1.4439	0.2154
(620-660)	(90-100)	-0.2823	0.0304	1.5045	0.2156
(660-700)	(0-60)	-0.0885	0.0294	-0.1440	0.2168
(660-700)	(60-80)	-0.1239	0.0294	0.9297	0.2153
(660-700)	(80-90)	-0.1461	0.0293	1.2725	0.2167
(660-700)	(90-100)	-0.1366	0.0293	1.3135	0.2153
(700-740)	(0-60)	0.0184	0.0295	-0.4725	0.2181
(700-740)	(60-80)	0.0020	0.0294	0.6555	0.2153
(700-740)	(80-90)	-0.0220	0.0293	0.9694	0.2155
(700-740)	(90-100)	-0.0186	0.0293	1.0823	0.2156
(740-900)	(0-60)	0.1174	0.0293	-1.1756	0.2181
(740-900)	(60-80)	0.1357	0.0294	0.1528	0.2155
(740-900)	(80-90)	0.0932	0.0293	0.6003	0.2158
(740-900)	(90-100)	0.0703	0.0294	0.7393	0.2157
Unemployment rate	(0%-5%)	0.0534	0.0206		
(piecewise linear)	(5%-6%)	0.6895	0.0116		
	(6%-7%)	-0.4400	0.0144		
	(7%-9%)	0.2456	0.0111		
	(9%-high)	0.0656	0.0160		

% change year ago in FHFA HPI	(low to -10%)				
(piecewise linear)	(-10% to -5%)	8.9491	1.2186		
	(-5% to 0%)	10.9583	0.3622		
	(0% to 5%)	7.5274	0.2363		
	(5% to high)	4.3971	0.1811		
% change in FHFA HPI from origination		0.5572	0.0185		
Change in 10-yr Treasury rate from origination		-0.2625	0.0035		
% change in FHFA HPI from origination	(low to -10%]			-4.8353	0.6051
(piecewise linear)	(-10% to -5%]			-7.9061	0.7941
	(-5% to 0%]			-1.5449	1.1858
	(0% to 5%]			-7.7625	1.1039
	(5% to high)			-0.5246	0.0716
Intercept		-7.6771	0.1063	-10.2707	0.6384

Source: Moody's Analytics

[i] This testimony is largely taken from "Gauging CECL Cyclicality," Cristian DeRitis and Mark Zandi, Moody's Analytics white paper, December, 2018. Also see "CECLnomics and the Promise of Countercyclical Loss Accounting," Cristian DeRitis, Moody's Analytics white paper, September 2018.

[ii] We note that setting allowances for loan and lease losses under the incurred loss standard involves a mixture of historical data analysis and management judgment, including consideration of current conditions. As such, historical incurred loss estimates for the specific mortgage portfolio we examined—a subset of Freddie Mac's total book of business—are not available. We use the 90+ day delinquency rate on this portfolio as a reasonable approximation of the pattern of incurred losses given its high correlation with the loss allowance rates shown in Chart 2.

For context, Freddie Mac's reported loan loss reserves for its entire single-family mortgage portfolio rose from $520 million to $33 billion from 2005 to 2009 as shown in the table below. Correlation between the loss reserve and the 90+ day delinquency rate is in excess of 99% (see Appendix).

[iii] The relationship between the credit and economic cycle varies based on the performance measures and the asset classes being considered. For example, residential mortgage defaults are highly correlated with house prices, while credit card defaults are more correlated with unemployment or personal income growth.

[iv] See "Current Expected Credit Loss: Lessons from 2007-2009," Francisco Covas and William Nelson, Bank Policy Institute, July 2018. Also see "CECL Procyclicality: It Depends on the Model," Joseph Breeden, August 2018.

[v] The FICO credit score was binned into these ranges: (300-620), (620-660), (660-700), (700-740), (740-900). Origination combined LTV ratios were binned into these ranges: (0-60), (60-80), (80-90), (90-95), (95-100).

[vi] For an overview of the Moody's macroeconomic model methodology please see https://www.economy.com/home/products/samples/macromodel.pdf

[vii] Note that this does lead to a potential inconsistency given that the 2009 and 2011 forecasts have a shorter window for realized defaults. Given expectations for continued growth in house prices and the seasoning of loan portfolios, the actual default rates are unlikely to rise materially above their levels through 2017.

[viii] For additional information on weighting scenarios for CECL and how the use of multiple scenarios may provide a more accurate and less volatile forecast over time, please see the white paper "Beyond Theory: A Practical Guide to Using Economic Forecasts for CECL Estimates".

October 25, 2018

The Hon. Steven T. Mnuchin
Chairman, Financial Stability Oversight Council
U.S. Department of the Treasury
1500 Pennsylvania Avenue, N.W.
Washington, D.C. 20220

Re: Request for a Quantitative Impact Study and a Delay in the Implementation of CECL

Dear Chairman Mnuchin:

The undersigned organizations are writing to express our concerns regarding the Accounting Standards Update 2016-13 (also known as the "Current Expected Credit Loss" accounting standard for the measurement of credit losses, or "CECL") issued by Financial Accounting Standards Board (FASB). Effective in 2020 for SEC registrants, 2021 for all other companies, CECL fundamentally changes how banks will recognize credit losses in their loan and held-to-maturity debt security portfolios by requiring upfront recognition of credit losses using economic forecasts over the contractual life of the asset while not providing a similar upfront recognition of associated revenues. Further, CECL requires banks to forecast future economic conditions to develop their future expected losses. Due to the inherent unreliability of the long-term economic forecasting, implementation of CECL will increase the volatility of regulatory capital, necessitating increased capital at all times. In accordance with 2009 recommendations made by the Financial Stability Forum, it was FASB's intent to develop an impairment model that would record credit loss reserves earlier and, thus, reduce procyclicality[1] in the industry.

Preliminary testing by various banks, however, indicates not only that CECL will fail to result in significantly earlier loss recognition, but it will also increase procyclicality.[2] As procyclicality generally causes allowances to spike during times of stress, the resulting impacts on bank capital will adversely affect the cost and availability of credit, especially related to longer duration loans and to borrowers with lower credit quality. Therefore, the impact will be greatest on 30 year residential mortgages, small business loans, and loans to non-prime consumers, especially during downturns in the economy. Said plainly, during a recession, the capital impact related to these products will dissuade most banks from lending. We do not believe the banking agencies would have supported issuance of CECL if this were foreseen.

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[1] Procyclicality is understood that, during times of economic stress, banks increase credit loss allowances, which reduces capital and the accompanying ability to lend to borrowers who need liquidity, thereby exacerbating the economic stress. Spurred on by the additional economic stress, credit loss allowances will further increase, prolonging the cycle. Earlier loss recognition is desired because it theoretically would decrease capital (and lending) before the economy heats up too much, thereby becoming a counter-cyclical force.

[2] See American Bankers Association letter to U.S. Banking Agencies at https://www.aba.com/Advocacy/commentletters/Documents/CECL-capital-transition-071318.pdf

Additionally, many community banks have heavy concentrations of residential mortgages in their loan portfolios. Over 800 banks in the U.S. with under $1 billion in assets maintain greater than 50% of their loan portfolios in residential mortgage products, with another 1,250 of similarly-sized institutions holding mortgages that make up between 30-50% of their portfolios. A recent study indicated that several hundred community banks will need to raise capital merely to comply with CECL at the effective date.[3] With all this in mind, and considering that the heavy costs of implementation naturally hit smaller organizations the most, the impact of CECL could change the face of the community banking industry.

As these issues have both macroeconomic and public policy implications, it is, therefore, imperative that these issues be analyzed and practical solutions provided prior to CECL's effective date. We are not aware of any study that has been completed to assess the potential impact of the CECL accounting standard, as recommended by the U.S. Department of the Treasury in 2017.[4] Therefore, we recommend the FSOC to seek a delay in implementation until such a study can be completed. A transparent, two-pronged quantitative impact study (QIS) should be performed and shared with the industry. The QIS must first evaluate the standard's effect on the overall stability of the banking sector and on the availability, accessibility, and affordability of credit throughout an economic cycle. Additionally, the QIS should then assess how CECL will affect smaller banks, including how the capital impacts and the operational costs of CECL will affect their ability to compete and serve their communities. Any negative impacts identified in connection with the QIS must be evaluated holistically, considering possible solutions within supervisory stress testing processes, accounting standard-setting, regulatory capital weighting for both standardized and non-standardized approaches, and other regulatory guidance.

The CECL standard is a critical and challenging issue to the banking industry, as the expected credit loss provisioning that is required under CECL is fundamentally different than current accounting standards. There is significant uncertainty regarding the impact of the standard on the banking industry through an economic cycle. Therefore, we recommend the FSOC delay implementation until such a study can be completed.

Thank you for your attention to this important matter.

Sincerely,

American Bankers Association
Alabama Bankers Association
Alaska Bankers Association
Arizona Bankers Association
Arkansas Bankers Association
Colorado Bankers Association

[3] See https://stonecastle.com/wp-content/uploads/2018/01/2017-12-18-CECL-and-Tier-2-Final.pdf

[4] Included in Appendix B: Table of Recommendations (page 125) of the June 2017 U.S. Department of the Treasury report, "A Financial System That Creates Economic Opportunities – Banks and Credit Unions"

Connecticut Bankers Association
Delaware Bankers Association
Florida Bankers Association
Georgia Bankers Association
Hawaii Bankers Association
Idaho Bankers Association
Illinois Bankers Association
Illinois League of Financial Institutions
Indiana Bankers Association
Iowa Bankers Association
Kansas Bankers Association
Kentucky Bankers Association
Louisiana Bankers Association
Maine Bankers Association
Maryland Bankers Association
Massachusetts Bankers Association
Michigan Bankers Association
Minnesota Bankers Association
Mississippi Bankers Association
Missouri Bankers Association
Montana Bankers Association
Nebraska Bankers Association
Nevada Bankers Association
New Hampshire Bankers Association
New Jersey Bankers Association
New Mexico Bankers Association
New York Bankers Association
North Carolina Bankers Association
North Dakota Bankers Association
Ohio Bankers League
Oklahoma Bankers Association
Oregon Bankers Association
Pennsylvania Bankers Association
Puerto Rico Bankers Association
Rhode Island Bankers Association
South Carolina Bankers Association
South Dakota Bankers Association
Tennessee Bankers Association
Texas Bankers Association
Utah Bankers Association
Vermont Bankers Association
Virginia Bankers Association
Washington Bankers Association
Western Bankers Association
West Virginia Bankers Association
Wisconsin Bankers Association
Wyoming Bankers Association

cc: Russell G. Golden
Financial Accounting Standards Board

Jerome H. Powell
Board of Governors of the Federal Reserve System

Joseph M. Otting
Office of the Comptroller of the Currency

Jelena McWilliams
Federal deposit Insurance Company

Jay Clayton
U.S. Securities and Exchange Commission

December 11, 2018

Statement for the Record

On Behalf of the

AMERICAN **BANKERS** ASSOCIATION

Before the

Financial Institutions and Consumer Credit Subcommittee

of the

Committee on Financial Services

United States House of Representatives

Statement for the Record
On Behalf of the
American Bankers Association
Before the
Financial Institutions and Consumer Credit Subcommittee
Of the
Committee on Financial Services
United States House of Representatives
December 11, 2018

Chairman Luetkemeyer, Ranking Member Clay and members of the Subcommittee, the American Bankers Association (ABA) appreciates the opportunity to submit a statement for the record on the issues surrounding pending changes to credit loss provisions. ABA is the voice of the nation's $17 trillion banking industry, which is composed of small, regional and large banks that together employ more than 2 million people, safeguard $13 trillion in deposits, and extend nearly $10 trillion in loans.

The upcoming implementation by banks of the Current Expected Credit Loss (CECL) accounting standard[1] for the measurement of credit losses represents a sea change to the banking industry. CECL requires, upon origination, recognition of credit losses using economic forecasts over the contractual lives of loans and held-to-maturity debt securities. Due to the inherent unreliability of long-term economic forecasting, implementation of CECL will increase the ***volatility*** of regulatory capital, necessitating ***increased capital*** at all times. While the forward-

[1] The CECL accounting standard is Accounting Standards Update 2016-13, issued by the Financial Accounting Standards Board. It is effective in 2020 for SEC registrants, and 2021/2022 for all other companies.

looking reserving requirement under CECL was intended to reduce procyclicality in the banking system by building and adjusting loss provisions earlier in the process, analyses by ABA members on their own portfolios indicate that in practice CECL will, in fact, cause ***more*** procyclicality (and capital volatility) during economic downturns than the current accounting.

Due to its effect on income and regulatory capital, CECL will change how banks are managed, may reduce the lending products provided and raise the cost of credit. Importantly, CECL will reduce the availability of credit when it is needed the most – during an economic downturn. Furthermore, as many banks will need to raise capital and incur significant costs to ensure CECL compliance at every stage of economic cycles, it will likely change the face of the banking industry, particularly smaller banks.

The banking agencies have proposed a three-year phase-in of the initial regulatory capital impact of CECL. While perhaps well-intentioned, this proposal ignores the fact that any deterioration in economic conditions soon after the effective date would make such a plan ineffective, if not futile, as capital volatility will be significantly increased under CECL.

More importantly, however, the proposal ignores practical concerns and does not take into account public policy implications that this change will likely have on longer-term lending products (such as 30-year residential mortgages and student loans), offerings to non-prime borrowers and the impact of higher operational costs and increased capital volatility on community banks.

Given these important and uninvestigated concerns, ABA strongly recommends that the effective date of the CECL accounting standard be delayed and a quantitative impact study be performed.

In the remainder of this statement, we will focus on our key concerns:

- CECL will increase procyclicality and exacerbate economic downturns.
- CECL will increase the cost and availability of credit to consumers, particularly on loans with longer terms.
- CECL will change the face of the community banking industry.

I. CECL will Increase Procyclicality and Exacerbate Economic Downturns

Regulatory capital levels directly affect the level of lending that a bank can offer: the more capital available, the more potential lending. Credit loss provisions reduce regulatory capital – therefore, the higher the provisions, the lower the capital and accompanying lending. Good public policy works to reduce capital volatility and procyclicality as an increase in either directly reduces the ability of banks to lend, particularly at critical periods.

As mentioned above, while CECL was intended to be forward-looking, the fact is that in practice, it would create more procyclicality and higher capital volatility. Provisions for loss under CECL will meld forward looking analysis of the robustness of credit quality with a qualitative overlay of cyclic economic forecasts. Long-term economic forecasting have often been inherently unreliable. Layering on an unreliable forecast to banks already extensive knowledge of the loans they make will add uncertainty and force higher levels of capital (relative to risk).

Relying on a theoretical "perfect foresight"—as a recent agency paper noted—can be problematic. Increased procyclicality appears to be caused by the general inability of forecasters to identify the timing and extent of turns in an economic cycle. During the last economic cycle, forecasters were not only late in

identifying both the economic peaks and troughs, but they also forecasted the downturn to be significantly longer than actually occurred. In fact, in 2008-10 the forecasts of loss experiences continually exceeded actual losses. If these macro forecasts drive allowances up in a downturn, income and capital will take a direct hit, and result in a negative (and pro-cyclical) impact on lending. Therefore, had CECL-based credit loss provisions been in place in 2008, it would have compounded the worse economic downturn since the Great Depression by increasing provisions for losses far beyond those that were otherwise established.

To try to minimize the volatility and to ensure that regulatory capital thresholds are not broken, banks will need to always keep more capital on hand, i.e., a capital cushion. Since credit loss provisions directly affect capital, increased potential volatility of credit loss provisions will reduce the amount of lending available.

As noted, ABA members have tested the impact of CECL using models designed for the new standard and have concluded that in practice volatility will increase. These results have also been supported by other studies over the past several months.

Given these results, ABA recommends that a study be performed to better gauge this expected procyclicality and to assess whether it goes against the agencies' objectives of safe and sound lending and an adequately liquid credit market throughout an economic cycle. This should also include assessing how regulatory guidance, changes to stress testing protocols, or changes to the CECL standard itself can reduce the risk of increased procyclicality.

II. CECL will Increase the Cost and Availability of Credit

Besides the concern of increased procyclicality, there is little disagreement that significant increases to credit loss provisions are in store for loan products

with long tenors, such as residential mortgages and student loans, as well as to borrowers with non-prime credit quality.

Higher credit loss provisions during benign times are understood, and this cost to capital is generally expected to result in higher interest rates charged to borrowers. However, during an economic downturn, such provisions can be up to *several times the levels recorded under the current accounting*. Due to CECL's requirement to record credit loss provisions at the time of origination without recognizing the expected interest income to be earned, it is easy to see how CECL could cause significant reductions in lending during a recession. With each loan made in a down economy, a bank digs a bigger hole in its capital position as a loss provision is immediately recorded, though the anticipated interest income is deferred.[2]

It is also likely that the impact of CECL will not be uniform. Many ABA members are estimating that, for commercial lending products and for loan portfolios with shorter terms, while the period-to-period volatility in provisioning will be higher under CECL, credit loss provisions could actually decrease compared to the current accounting.[3] The differences in credit loss provisioning between consumer loans and commercial loans, as well as between long-term loan and loans with shorter terms, will naturally change the pricing of each of these products.

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[2] This phenomenon especially can be seen under current stress testing protocols, as assumed losses occurring up to nine quarters in the future are recognized immediately, though the interest income to be earned in the meantime may not be likewise included.

[3] This is largely due to current practices which assess the likelihood of renewals that commonly occur within commercial loan arrangements. Under CECL, unless a renewal is considered a "troubled debt restructuring", consideration of renewal is not allowed.

A quantitative impact study will help regulators assess the impacts of the shifts in pricing and availability of credit to both consumers and commercial borrowers.

III. CECL will Change the Face of the Community Banking Industry

The CECL accounting standard will affect the business of lending for banks of all sizes. However, the impact of CECL will be heavier on community banks. Compared to larger banks, community banks' lending is a larger part of their businesses and their portfolios are typically more concentrated in 30-year residential mortgages.

For example, 757 banks in the U.S. (with under $1 billion in assets) maintain greater than 50% of their loan portfolios in residential mortgage products. Another 1,192 of similarly-sized institutions hold residential mortgages that make up between 30-50% of their portfolios. Clearly, the impact of CECL will have a significant effect on the lending by these institutions and the capital they must hold. A study by StoneCastle Partners estimates that approximately 650 community banks should consider raising capital merely to maintain compliance with regulatory capital requirements at the CECL effective date.[4]

Preliminary research being conducted by ABA suggests a similar conclusion. This is why the quantitative impact study must address not only the banking industry as a whole, but also how smaller institutions will be able to compete and serve their individual communities. Due to the challenges in raising capital for many community banks, the study will allow regulators to assess

[4] See https://stonecastle.com/wp-content/uploads/2018/01/2017-12-18-CECL-and-Tier-2-Final.pdf

whether the requirements could accelerate unintended consolidation in the industry.

Therefore, an impact study must also address the significant implementation costs of CECL, particularly for community banks. The banking agencies are now beginning to understand that a reasonable implementation of CECL will require significant changes to technology and processes for all but the tiniest of banks. While implementation efforts among smaller banks are in very early stages, most are considering hiring 3rd party companies to manage the significant increases in data and analysis that will be necessary. These costs—and those related to auditing—will be significant to the many smaller banks that already have been stretched by one-sized-fits-all regulatory costs.

Conclusion

Implementation of the CECL accounting standard will have a significant impact on how banks manage regulatory capital and, thus, on the credit products, availability and terms offered. ABA believes that CECL will raise the cost and reduce the availability of credit in most cases, shift the emphasis from consumer lending to commercial lending, and favor shorter term loans over longer term ones like residential mortgages and student loans. Given the inherent procyclicality built into CECL, the next economic downturn is likely to be made more severe with banks less able to make the loans so critical to restarting a stalled economy.

Community banks will face significant challenges with CECL implementation, not only due to the significant 3rd party costs they will have to bear, but more importantly the implications for the types of loans they make to

support their communities. Added costs, higher capital, and greater volatility can be the tipping point that drives further consolidation in the industry.

Bankers need to understand how to conduct business going forward. For each of the concerns raised, there may be solutions—for example through adjustments to regulatory capital requirements, changes to stress testing protocols, industry guidance, or changes to the CECL standard itself—that may help mitigate the negative impacts. This is why a quantitative impact study—conducted by the banking agencies with close assistance and engagement of the banking industry—is needed to better understand these issues and to appropriately respond. Due to the impact this could have on company efforts in designing their CECL systems and in their overall long-term strategies, ABA recommends that the effective date of the CECL standard be delayed until the study, including recommendations, is complete.

Credit Union National Association
CUNA

Jim Nussle
President & CEO

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99 M Street SE
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December 11, 2018

The Honorable Blaine Luetkemeyer
Chairman
Subcommittee on Financial Institutions and
Consumer Credit
Committee on Financial Services
House of Representatives
Washington, DC 20515

The Honorable William Lacy Clay
Ranking Member
Subcommittee on Financial Institutions and
Consumer Credit
Committee on Financial Services
House of Representatives
Washington, DC 20515

Dear Chairman Luetkemeyer and Ranking Member Clay:

On behalf of America's credit unions, I am writing to express our views ahead of the hearing entitled "Assessing the Impact of FASB's Current Expected Credit Loss (CECL) Accounting Standard on Financial Institutions and the Economy." The Credit Union National Association (CUNA) represents America's credit unions and their 110 million members.

CUNA's longstanding position has been and continues to be that application of CECL to credit unions is inappropriate. CECL is intended to address delayed recognition of credit losses resulting in insufficient funding of the allowance accounts of certain covered entities. However, underfunding of allowance accounts has not generally been an issue for credit unions. Further, the typical user of a credit union's financial statements is not a public investor—such as with large, public banks—but instead is the credit union's prudential regulator, the National Credit Union Administration (NCUA).

In addition to the direct effect the upcoming changes will have on credit unions' financial positions, credit unions are very concerned with the compliance burden of the changes, which require extensive resources to analyze the loan portfolio on a granular level to calculate and project life of loan losses. This comes at a time when many credit unions are struggling to comply with a near historic level of new and amended regulations. Even those credit unions able to allocate the resources necessary to comply are encountering major challenges since the level of data analytics required is less common among credit unions, unlike much larger, complex banks.

While CECL has been adopted and is scheduled to take effect over the next few years, we share these ongoing concerns in hope that FASB will take advantage of future opportunities to adjust the standard with an eye toward reducing the compliance burden on credit unions. Though the standard has been finalized, we are encouraged by FASB's apparent willingness to revise the standard as issues present themselves, such as FASB's recent delay of the CECL effective date for credit unions and other non-public business entities. However, we believe more can and should be done to ensure entities are able to comply with the standard. We ask this committee to convey the industry's concerns to FASB in hopes it will review the standard for opportunities to reduce unnecessary compliance challenges as well as develop compliance resources in coordination with prudential banking regulators, including the NCUA.

On behalf of America's credit unions, thank you for the opportunity to share our views.

Sincerely,

Jim Nussle
President & CEO

Investor Advisory Committee
401 Merritt 7, P.O. Box 5116, Norwalk, Connecticut 06856-5116 | Phone: 203 956-5207 Fax: 203 849-9714

Via Email

April 16, 2015

Technical Director
Financial Accounting Standards Board
File Reference No. 2012-260
401 Merritt 7
PO Box 5116
Norwalk, CT 06856-5116

Re: Financial Instruments – Credit Losses

Dear Technical Director:

The Investor Advisory Committee (IAC) [1] issued a comment letter on the FASB's Financial Instruments-Credit Losses exposure draft ("CECL") on June 10, 2013. IAC members and the FASB have held numerous meetings and conference calls since the initial letter.

This comment letter updates conclusions provided in the previous letter based upon the following:

1. Membership of IAC has changed primarily due to the four year term of an appointment.

2. The FASB has provided additional information since the June 10, 2013 letter which has resulted in some IAC members having continued or increased concerns about the determination of the credit loss accrual and related aspects of CECL.

[1] This letter represents the views of the Investor Advisory Committee ("IAC" or "Committee," previously called ITAC) and does not necessarily represent the views of its individual members or the organizations by which they are employed. IAC views are developed by the members of the Committee independent of the views of the Financial Accounting Standards Board and its staff. For more information about the IAC, including a listing of the current members and the organizations in which they are employed, see http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1175801857636.

3. Significant events related to commodity, currency and interest rate risk have occurred which raise questions about management teams' ability to accurately forecast lifetime expected losses on Day 1 for loans. Market risks ultimately help inform management teams' forecasts of expected credit losses and can have a significant impact on loss accruals.

4. The IASB has finalized a new loss reserve model which incorporates both a bright line current loss provision and a lifetime loss provision under specific circumstances. This standard is effective for IFRS filers starting January 1, 2018.

Currently, IAC members have wide ranging views on the proposed CECL model. However, a majority view the proposed model as needing improvements on topics listed in the body of this letter under "Points of General Concern." These points address process/implementation, lifetime losses accrued on Day 1, and IFRS convergence. The IAC welcomes further discussion with the Board and staff, if so requested.

Points of General Concern of IAC

Process for Assessing the Impact of Implementation of New Standards –

IAC members collectively support a dialogue with the FASB prior to official drafting that result in more effective information being provided to the Committee as it relates to CECL. The IAC would like to have a better understanding of how the FASB intends for the model to work upon implementation regardless of IAC members' opinions on the CECL concept itself. Specifically, meetings with FASB related to purchase accounting over several months raised significant concerns (discussed further below) which require further discussion over how the model may be implemented. It is the IAC's expectation that continued constructive dialogue on implementation matters can alleviate concerns and could lead to a result that would be in the best interest of investors and users of financial statements.

Lifetime Losses Accrued on Day 1 –

IAC members encourage the FASB to provide additional information as to how CECL establishes reasonable and supportable assumptions used to model out lifetime losses on Day 1 for loans and debt instruments. Opinions and support for CECL as a principle vary significantly among members. Increased disclosure and discussion may help to bridge differing opinions among IAC members.

Dissenting Opinions Related to CECL and Lifetime Day 1 Losses for Loans and Debt Instruments

Among some IAC members, the accuracy and rationale of accruing lifetime losses on Day 1 is of significant concern. In addition, if the lifetime loss is recorded "upfront," a mismatch is created between revenue and expense recognition. The key assumption with CECL is largely dependent on management's assessment of the collectability of loans (and other in-scope financial assets) looking out over their expected lifetime. Market participants, management teams, regulators, third-party valuation firms and auditors will need to raise questions about the appropriate assumptions used to determine the amount of the loan provision. Greater potential for error exist the longer the loan duration. The accrual will also be based in part on the direction of the economic cycle. In addition to credit risk, loans may also be subject to market risks such as interest rate, commodity or currency risk which can ultimately impact credit risk. Considering these risks, investors have, consequently, raised concerns about management's latitude for determining reasonable and supportable assumptions used to model out these loans.

Certain members of IAC also raise concern CECL will result in large loss reserves with inadequate consideration of the true risk involving specific loans or debt instruments. In addition, volatility and events not captured in companies' internal risk models will not be accrued for properly. Implementation within companies as it relates to internal data compiled by management may be at odds with what investors see, read and analyze as part of their own research. Thus, loss provisions and reserve balances disclosed under CECL would not be considered any more reliable than current accrual and reserves balances under current GAAP, which we encourage to be modified.

Management's assumptions are the most important factor for determining reserves and for investors to assess. No accrual under any methodology will capture losses with exact precision. However, attempting to project losses beyond a reasonable time period and immediately recognizing the full expense may not properly reflect the economics of lending while using financial assumptions which could contain biases. Comparability across companies within an industry will be made more difficult due to varying assumptions.

Subsequent to the June 10, 2013 letter, there have been several significant events that caught many forecasters by surprise. The Swiss central bank decided to no longer support its peg to the Euro, the Russian ruble declined in value relative to other currencies, and oil prices declined by 50%. Exposure to interest rate and commodity risks should result in a reassessment of losses on those loans subject to these risks once the unexpected event occurs. Loans, issued in Euros, to Russian companies and loans issued to high production cost U.S. oil shale companies may now be faced with significantly higher risks of default. Due to these unexpected events that have occurred since our June 2013

letter, it appears managements' ability to precisely or accurately forecast loan losses in a two year period is limited, let alone over the full lifetime of a loan. In other words, market risks can ultimately impact credit risk and the ability for management teams to accurately forecast loss accruals raises concern.

Favorable Opinions Related to CECL and Lifetime Day 1 Losses for Loans and Debt Instruments

Some members in IAC are in favor of accruing lifetime losses on Day 1, recognizing there may be significant hurdles to other alternatives. Under CECL, the balance sheet would reflect the current estimate of lifetime expected credit losses at the reporting date, and the income statement would reflect the effects of credit trends (improvement or deterioration) during the reporting period. Credit losses are an expected part of lending and fixed-income investing, and management teams incorporate expected future losses when they price loans. These members believe CECL will lead to more timely recognition of credit losses and that estimation reliability concerns should not stand in the way of the above benefit. Consistent with the view articulated by the IAC in its June 10, 2013 letter, certain IAC members believe that the CECL model better captures credit losses in lending portfolios and is more forward-looking and could prove less pro-cyclical than either current GAAP or the IASB's 3-stage model. The FASB has also stated in its proposal that a long-term average loss rates can be used for more distant time periods beyond the period for which specific events can be projected.

Members supporting CECL believe a forward-looking single measurement approach, coupled with comprehensive quantitative and qualitative disclosures, will better help analysts evaluate the adequacy of a company's credit loss reserves and provide greater insight into management's credit loss expectations that reside within its existing financial asset portfolio.
Some IAC members prefer the CECL model to the proposed IASB 3-stage model because it results in a more accurate valuation of loans and fixed income securities on the balance sheet. Further, it is less complex and is not reliant on a trigger event for recognition of all expected losses.

Certain members believe estimation reliability concerns should not stand in the way of improved accounting and financial reporting. Companies should reflect expected credit losses in a timely manner. To the extent management has concerns over the reliability and predictability of forecasted information, those members supporting CECL prefer that companies derive their most informed estimate and disclose the amounts and basis for those estimates (this may include reverting to plausible historical trends for longer-term horizons).

While understanding that market fluctuations (such as those pertaining to sudden currency and oil prices mentioned earlier in this letter) will occur and may not always be predicable, CECL requires re-estimation each reporting period resulting in the inclusion of credit risk and market-related data in loss estimates on a more timely basis than under current GAAP or the IASB 3-stage model. Some IAC members further believe the macroeconomic factors that influence the underwriting and credit analysis on potential new financing should be reflected in current loan loss reserving or impairment of outstanding debt or loans, rather than waiting for a triggering event such as a default to occur. These members believe that incorporating reasonable and supportable market-driven forecasts in estimated credit losses under CECL will be more meaningful to investors than under current GAAP.

Convergence with IFRS -

IAC members are in favor of convergence with IFRS standards if those standards are reasonable. Subsequent to June 10, 2013, the IASB in July of 2014 published a final version of IFRS 9, Financial Instruments. Expected credit losses, under IFRS 9, are to be measured at an amount equal to (1) the 12-month expected credit losses resulting from default events on the financial instruments possible with 12 months of the reporting date, or (2) full lifetime expected credit losses resulting from default events over the life of the financial instrument. A full lifetime loss is expected if the credit risk of an instrument has increased significantly since initial recognition.

Some members of IAC do not agree with a 12 month time horizon as finalized by IFRS and feel CECL can be amended to allow for low risk credit instruments to have loss accruals for a period deemed reasonable which in many circumstances could be in excess of 12 months but not subject to lifetime Day 1 losses. Many financial institutions have historically maintained loss reserves at re-measurement periods exceeding the following year's net charge-offs by an additional 12 months. A reserve in excess of 12 months of charge-offs may be considered more conservative than what current GAAP or recent IFRS rules have intended as a result of regulatory influence.

As a result, some IAC members inquire whether lifetime Day 1 losses need not be recognized on "low risk" loans. This would be similar to the IFRS standard recently issued. "High risk" loans could be subject to CECL and accrue lifetime Day 1 losses. Determining a trigger event for what constitutes a high risk is subjective. However, specific business conditions which can constitute high risk lending and debt instrument possession is often thoroughly understood by investors and users of financial statements even if the ultimate trigger event generating significant losses is not yet apparent.

Regardless of differing opinions related to applying CECL, the IAC acknowledges that estimates of lifetime Day 1 losses are currently applied in GAAP for other industries. For example, the

accrual for warranties is an estimate of the lifetime cost expected over the duration of the warranty recognized at the time of sale. Companies are required to make adjustments to their warranty accruals which on occasion may be material to financial results. Current and prior period adjustments will often be disclosed separately in the roll forward of the warranty reserve provided in the notes of the financial statements. The matching principle is applied in this case as the expected warranty cost is booked at the time of sale. However, some IAC members comment that CECL and the application of lifetime loan losses accrued on Day 1 moves away from the matching principle as revenue related to lending activity is accrued over the duration of the loan. For example, under FAS 91, loan origination revenues and specifically identified related expenses are both deferred and recognized over the life of the loan.

The implementation of CECL, independent of support or lack thereof, may result in both direct and related costs. The largest accrual impact to banking institutions would be the expected increase in loan loss reserves. Direct costs would include expenses incurred by management to establish new internal controls and procedures to appropriately account for these accruals.

Concerns are likely to be raised about consistent implementation across firms which impact analyses by investors and financial statement users. A significant related cost to equity holders of financial institutions may result when regulators see reductions in capital and restrict a company's ability to allocate capital between organic growth, acquisitions, or returning excess cash to shareholders.

Points of General Support of IAC

Acquisition Accounting -

Acquisition accounting issues raised in the June 10, 2013 letter strongly advised the FASB to address concerns with the FAS 141(R) business combination accounting treatment of loans and reserves. Under current GAAP, accounting reserves of an acquired bank cannot be recognized in the balance sheet of the acquiring institution. Because reserves of the acquired institution are eliminated in acquisition accounting, comparability among institutions has been materially distorted. Loans of the acquired business are instead brought on the acquired company's balance sheet at fair value without an option to retain the loan at book value on the acquirer's balance sheet. Nor can the acquirer accurately reflect what management thinks is the true value of the loss reserve.

Subsequent to the June 10, 2013 letter, the FASB has proposed differing accounting treatment for acquired loans with low risk of impairment compared to those with high risk of impairment. IAC members raised concerns that the guidelines provided would result in acquired loans with low risk being subject to loan provisions being taken twice. Loans acquired with high risk of impairment, however, would be reported at fair value with no additional loss provisions taken.

Some IAC members propose under business combinations that an acquirer be permitted to bring loans on its balance sheet at a fair value which could be current book value, in addition to allowing reserves to be brought on at fair value which could equal the acquired company's book value. The book value option would eliminate the possibility of the acquiring company having to report bad debt provisions on losses a second time after the acquisition is completed. In addition, the elimination of additional non-cash yield accretion created by fair value treatment would lead to less distortion of net interest margin.

Other IAC members support, as noted in our comment letter of June 10, 2013, proposed changes to purchased credit impaired accounting because the changes will provide greater transparency and consistency with the accounting for originated loans. However, the demarcation line between what is "credit impaired" and not "credit impaired" is very important as purchased debt instruments that are not credit impaired may also require an allowance in addition to any credit losses already incorporated into the fair value. Therefore, those IAC members would encourage the FASB to consider changing the current definition of credit impaired to include any purchased debt instrument for which a credit loss is measurable in the fair value on the purchase date.

Disclosures –

IAC unanimously supports having additional disclosure to accompany changes to credit impairment accounting. Regardless of the shape of the financial standard, the quality and quantity of disclosures is paramount to investors' ability to evaluate management's decision making and develop informed opinions. Poor disclosure was one cause of the financial crisis.

Subsequent to June 10, 2013, IAC members were presented by the FASB with proposals for vintage disclosures. IAC members as a group are in support of vintage disclosures which provide credit quality by both years of origination and risk rating for each asset class level. This disclosure should include reserve data by vintage and class which reconciles to the total allowance for loan losses. Companies should also be required to provide information within the financial statement footnotes explaining changes to the allowance by vintage and class, detailing the specific type of lending impacted and the potential for future changes to current reserve levels. IAC members also learned that a financial institution can eliminate vintage disclosure if they use Fair Value. The majority of the Committee feels vintage disclosure should be required for all institutions, even if using Fair Value.

In addition, FASB presented IAC with proposed disclosure related to loan roll-forwards for loans at amortized costs. Disclosure for allowance for loan losses is not part of the current proposal. IAC members are in favor of disclosure breaking out the provision of credit losses into its components to better assess the composition between estimate revisions, originations and purchases despite pushback from other constituents about the difficulty in providing that information with each SEC filing of financial results.

Clear and understandable insight into how management derives its loss estimate is key to investors. IAC acknowledges that comparisons across companies may be difficult as institutions may not be consistent in the classification of assets. The ability of investors to access credit quality across asset classes, however, will be enhanced.

This comment letter represents the views of IAC members and information available at this time. Changes in membership of the Committee may also cause the opinions of the Committee to change. Changes to the proposed standard or occurrence of other significant events may cause the opinion of the Committee to change. The IAC stands ready to work with and assist the FASB staff regarding this topic.

Sincerely,

Investor Advisory Committee

Investor Advisory Committee

Rules of Procedure

Amended and Restated through December 11, 2013

401 Merritt 7, PO Box 5116, Norwalk CT 06856-5116

FINANCIAL ACCOUNTING STANDARDS BOARD

RULES OF PROCEDURE

Amended and restated through April 15, 2013

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FINANCIAL ACCOUNTING STANDARDS BOARD

RULES OF PROCEDURE

I. INTRODUCTION

These Rules of Procedure, which the Financial Accounting Standards Board (FASB) has adopted[1] pursuant to the authority granted in the Restated Certificate of Incorporation and By-Laws of the Financial Accounting Foundation (Foundation), set forth procedures followed by the FASB in establishing and improving standards of financial accounting and reporting for nongovernmental entities, including procedures related to the issuance of such standards and other communications. These Rules also describe briefly the relationship of the FASB to the Foundation and its two advisory councils, the Financial Accounting Standards Advisory Council (FASAC) and the Private Company Council (PCC).

The FASB is an independent, private-sector body created to serve an important public interest. Since 1973, it has been the designated organization in the private sector for establishing and improving standards of financial accounting and reporting that govern the preparation of financial reports by nongovernmental entities.

[1]The Financial Accounting Standards Board's Rules of Procedure were initially adopted, effective March 29, 1973, by the Board of Trustees of the Financial Accounting Foundation pursuant to the By-Laws of the Financial Accounting Foundation then in effect. Section 11 of the current By-Laws provides that the Financial Accounting Standards Board has exclusive authority to alter, amend, supplement, or repeal its Rules of Procedure, or to adopt new Rules of Procedure, and it is pursuant to that authority that the FASB adopted these amended and restated Rules of Procedure.

II. THE MISSION OF THE FINANCIAL ACCOUNTING STANDARDS BOARD

A. Mission Statement

The mission of the FASB is to establish and improve standards of financial accounting and reporting that foster financial reporting by nongovernmental entities that provides decision-useful information to investors and other users of financial reports. The mission is accomplished through a comprehensive and independent process that encourages broad participation, objectively considers all stakeholder views, and is subject to oversight by the Foundation's Board of Trustees.

B. Uses and Users of Nongovernmental Accounting and Financial Reporting

Accounting standards are essential to the efficient functioning of the economy because:

- Decisions about the allocation of resources rely heavily on credible, concise, and understandable financial information.
- Financial information about the operations and financial position of individual entities also may be used by the public in making various other kinds of decisions.

Many of those who make those decisions cannot require reporting entities to provide the information they need directly to them and must rely on general purpose financial reports. Consequently, the primary users of general purpose financial reports are:

- Existing and potential equity investors, lenders, and donors.
- Other creditors, including those who provide resources as a consequence of their relationship with the entity such as employees and suppliers.

Because the goal is financial information useful in making decisions about providing resources to an entity, the needs of those users are a primary

consideration in developing accounting standards. The FASB recognizes, however, that financial reporting information is the product of a financial reporting system that also includes the entities that prepare financial statements, auditors, regulators, and other stakeholders. Therefore, the FASB gives careful consideration to those other stakeholders' views about the benefits and costs of accounting standards as it develops them.

C. How the Mission Is Accomplished

To accomplish its mission, the FASB acts to:

1. Improve the usefulness of financial reporting by focusing on the relevance and faithful representation of financial information, as well as other enhancing characteristics of useful information including comparability, verifiability, timeliness, and understandability.
2. Guide and educate the public, including users, the individuals that prepare financial statements, auditors, and others. Through its open due process, outreach to constituents, the form of the standards themselves, and related implementation activities, the FASB improves the common understanding of the nature and purposes of information contained in financial reports.
3. Keep standards current to reflect changes in methods of doing business and changes in the economic environment.
4. Consider promptly any significant areas of deficiency in financial reporting that might be improved through the standards-setting process.
5. Promote the convergence of accounting standards internationally concurrent with improving the quality of financial reporting.

Faithful Representation

Convergence

The FASB develops standards for financial accounting and reporting and related implementation guidance. The FASB also develops accounting concepts. Concepts are useful in guiding the FASB in establishing standards and in providing a frame of reference, or conceptual framework, for resolving accounting issues.

The FASB's work on both standards and concepts is based on research and analysis conducted by the FASB's technical staff and others (including national and international accounting standards-setting bodies). The FASB actively

solicits the views of various stakeholders in the financial reporting system on all accounting and reporting issues. These Rules of Procedure describe the FASB's operating procedures, including due process activities that are to be open to public participation or observation to provide transparency into the standards-setting process.

D. Guiding Principles

The FASB establishes and improves standards and concepts through a comprehensive and independent process that encourages broad participation, objectively considers all stakeholder views, and is subject to oversight by the Foundation's Board of Trustees. FASB members exercise their judgment after research, due process, and careful deliberation. They are guided by these principles:

1. *To be objective in its decision making* and to ensure, insofar as possible, the neutrality of information resulting from its standards. To be neutral, information must report economic activity as faithfully as possible without coloring the image it communicates for the purpose of influencing behavior in any particular direction.
2. *To actively solicit and carefully weigh the views of stakeholders* in developing standards and concepts. The ultimate determinant of standards and concepts, however, must be the FASB's judgment, based on research, public input, and careful deliberation, about the usefulness of the resulting information.
3. *To issue standards only when the expected benefits justify the perceived costs.* The FASB strives to determine that proposed standards fill a significant need and that the perceived costs they impose, compared with possible alternatives, are justified in relation to the overall expected benefits.
4. *To issue high-quality standards,* which are grounded in a consistently applied conceptual framework, set forth objectives and principles stated in clear and unambiguous language, and foster consistent application by providing structure and necessary detail derived from the principles.

5. *To manage the process of improving standards* in ways that balance the desire to minimize disruption of accounting and financial reporting processes with the need to improve the decision-usefulness of information in financial reports. The FASB establishes reasonable effective dates and transition provisions when new standards are introduced. The FASB must also balance the desire for comprehensive improvements in standards with the need for incremental changes that produce timely reporting improvements in areas important to users.
6. *To provide clear and timely communications,* endeavoring at all times to keep the public informed of important developments about the FASB's operations and activities.
7. *To review the effects of past decisions* and interpret, amend, or replace standards in a timely fashion if such action is indicated.

The Board is accountable to the Foundation's Board of Trustees, the Securities and Exchange Commission (SEC), and, broadly, its stakeholders for establishing standards and concepts following those principles and the comprehensive due process described in theses Rules.

E. Due Process

The FASB is committed to following an open, orderly process for setting standards. The FASB designed its comprehensive due process procedures, as more fully discussed below, to permit timely, thorough, and open study of financial accounting and reporting issues and to encourage broad public participation in the standards-setting process by creating channels for the communication of all points of view and expressions of opinion at all stages of the process. The cooperation of all concerned with or affected by financial accounting and reporting is fundamental to the operation of the FASB. Of particular importance to the FASB is the receipt of thoughtful, reasoned, and timely input during the FASB's research, discussion, and deliberative processes. The FASB recognizes that acceptance of its conclusions is enhanced by demonstrating that the comments received in due process are considered carefully.

Statement

of the

National Association of Mutual Insurance Companies

to the

United States House of Representatives

Committee on Financial Services Subcommittee on
Financial Institutions and Consumer Credit

Hearing on

Assessing the Impact of FASB's Current Expected Credit
Loss (CECL) Accounting Standard on Financial
Institutions and the Economy

2128 Rayburn House Office Building
December 11, 2018

Introduction

The following statement is submitted on behalf of the members of the National Association of Mutual Insurance Companies[1] regarding the Accounting Standard Update, (ASU) 2016-13, Financial Instruments – Credit Losses, issued by the Financial Accounting Standards Board in June 2016. The new standard presents some major challenges to property and casualty insurance companies for many reasons, but particularly as it applies to reinsurance receivables, an asset class unique to the insurance industry. The ASU replaces the existing incurred loss methodology for estimating allowances with a current expected credit loss methodology (CECL). The new standard will be effective beginning in the first quarter of 2020 for institutions that are required to file U.S. Generally Accepted Accounting Principles (GAAP) financial statements with the U.S. Securities and Exchange Commission. All other entities have an additional year to implement.

For insurance companies that do not file GAAP financial statements, the National Association of Insurance Commissioners (NAIC) – who promulgates statutory accounting rules for insurance companies – proposed in March 2018 that certain aspects of the FASB's ASU be incorporated into Statutory Accounting Principles (SAP); however, action has been deferred until existing implementation issues associated with applying CECL have been resolved.

The FASB's new CECL standard changes the accounting for credit losses for certain instruments, including reinsurance receivables. The introduction of CECL in U.S. GAAP reporting, and potentially SAP reporting, substantially increases the amount of management judgment involved in estimating credit losses and could potentially lead to volatile swings in estimates from quarter to quarter. Under GAAP and SAP reporting, there are various types of programs classified as reinsurance receivables/recoverables. For example, there are: industry pools and facilities (voluntary and involuntary), regulator-approved reinsurance arrangements, shared markets, catastrophe pools, and excess of loss facilities. The insurance industry is concerned because applying the CECL standard – a one-size-fits-all model – would be unsuitable for certain types of programs classified as reinsurance receivables. The appropriateness of applying a blanket model to reinsurance receivables was not field-tested by FASB nor was there a comprehensive cost-benefit analysis done prior to issuing the standard.

The Unique Nature of Reinsurance Receivables

Reinsurance receivables are unique to the insurance industry; therefore, insurers are in the best position to evaluate the collectability of reinsurance receivables, including disputed, litigated and defaulted claims. A lifetime loss model for reinsurance receivables is not likely to produce a reliable output. A ceding company does not incur an economic loss on the day a reinsurance contract is executed. Under the existing incurred loss model, an event must occur prior to recognizing a credit loss. That event must be subject to independent substantiation to support a

[1] NAMIC is the largest property/casualty insurance trade association in the country, with more than 1,400-member companies representing 39 percent of the total market. NAMIC supports regional and local mutual insurance companies on main streets across America and many of the country's largest national insurers. NAMIC member companies serve more than 170 million policyholders and write more than $230 billion in annual premiums. Our members account for 54 percent of homeowners, 43 percent of automobile, and 32 percent of the business insurance markets. Through our advocacy programs we promote public policy solutions that benefit NAMIC member companies and the policyholders they serve and foster greater understanding and recognition of the unique alignment of interests between management and policyholders of mutual companies.

reliable estimate of loss. Contrast that to the CECL model which requires no specific event or the breaching of any threshold before an allowance is recognized.

Insurers typically manage their reinsurance counterparties individually and rely on historical experience to develop a reliable estimate of credit losses. The industry has adequate credit specific financial information from which to develop a reliable estimate. Moving away from an incurred loss model introduces a significant amount of management judgement in measuring credit impairment and forces insurers to disregard decades of loss experience data from their reinsurance counterparties. This would not improve the reliability of estimates of credit loss exposure attributable to reinsurance receivables. From a small company perspective this means more resources must be dedicated to calculating these estimates and explaining them to management and external parties.

CECL is a critical and challenging issue to the insurance industry that should have been field tested before it was issued, and it still should be field-tested today. On many occasions prior to the standard being issued, the insurance industry made attempts to engage FASB regarding the characteristics of reinsurance receivables and the issues with applying CECL concepts to reinsurance programs. The complications and drawbacks of including reinsurance receivables in the scope of the standard should have been considered prior to standard issuance.

Conclusion

The FASB needs to work with the insurance industry to get an understanding of the implications related to the application of the standard to reinsurance receivables. The insurance industry has not been given the opportunity to provide information to FASB about a significant asset class reported as reinsurance receivables, and which exist only in the insurance industry. In closing, consideration should be given to enhancing the SEC oversight process to reinstitute field-testing for all FASB standards before they are issued and require FASB to conduct a comprehensive cost/benefit analysis prior to issuing a new standard.

○