

Transcript
FedTalk: The Resilience of the US Banking System
Federal Reserve Bank of Cleveland
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Presentation

Welcome:

- Steve Jenkins, Senior Vice President, Federal Reserve Bank of Cleveland

Moderator:

- Joseph D'Agostino, Banking Supervisor, Federal Reserve Bank of Cleveland

Panelists:

- Thomas Fitzpatrick, Vice President, Credit Risk Management, Federal Reserve Bank of Cleveland
- Michael Metalonis, Supervisory Examiner, Federal Reserve Bank of Cleveland
- Anulekha Mohanty, Assistant Vice President, Supervision, Federal Reserve Bank of Cleveland

Stephen Jenkins:

Good afternoon. Thank you for joining us, and welcome to today's *FedTalk*. My name is Steve Jenkins. I'm a Senior Vice President responsible for the banking, supervision, and regulation function here at the Fed Reserve Bank of Cleveland. It is my pleasure to kickoff today's *FedTalk* session on the resiliency of the US banking system. *FedTalk* is a Cleveland Fed Speaker series in which we share research that is relevant to our community. Past events have covered such topics as the racial wealth gap, access to the labor markets, and financial literacy. All our events can be found on our website, it's clevelandfed.org, or on our [YouTube channel](#). We are excited to share with you this presentation highlighting the evolution of the banking system since the financial crisis in 2008. Promoting resiliency and financial stability within the banking sector is an important goal of the Fed Reserve's supervision and regulation function.

Under this session, we hope you'll gain a better understanding of the strengths of the banking sector and how the industry is prepared to respond to future shocks to the financial system. During today's presentation, we will first define the characteristics of a resilient bank, provide an overview of changes to regulations and supervisory approaches since 2008, highlight key metrics demonstrating the financial condition of the banking system, illustrate how the industry reacted to the Great Financial Crisis, and more recently, the COVID-19 pandemic and the recent banking sector turmoil that occurred earlier this year.

Following the prepared remarks will be a Q&A session with the group of panelists, but for now, I'm going to turn things over to our presenter and moderator today, Joe D'Agostino. Joe manages the surveillance function in the Supervision Regulation department at the Cleveland Fed and leads a team responsible for data-driven horizontal assessments of risk impacting the

four district institutions, the banking sector, and the financial stability more broadly. Joe started his career at the Cleveland Fed in 2011 as an Examiner in our Community Bank Supervision function before moving into our Surveillance function in 2016. With that introduction, I'll hand the program over to Joe. Joe?

Joe D'Agostino:

All right. Thank you so much for the introduction, Steve, and good afternoon to everyone on the call. Thank you for joining us for a discussion we're really excited to have with you on the topic of the resilience of the US banking system. As Steve said, my name is Joe D'Agostino. I'm the Banking Supervisor over our Surveillance function here at the Cleveland Fed. We have a presentation today that individuals from our team in surveillance have put together for you and we'll follow that up as Steve mentioned with what we hope to be an engaging conversation with a strong group of panelists from the Reserve Bank that will be able to answer questions and provide further context for the information that I'll be sharing here today. Just a few housekeeping notes before we begin. During the event today, your microphones and your cameras will be disabled, but if you have a question for our analysts, we encourage you to type and submit them within the chat box in the Zoom meeting.

For whatever reason, if the Zoom meeting drops for you, do feel free to use the dial-in information that was provided in the invitation for the call. Before I start here with prepared remarks, just to introduce the panelists that we have joining the call today, so first is Tom Fitzpatrick. Tom is the Vice President over our credit risk management function here at the Cleveland Fed, has responsibility over discount window operations, reserve management, as well as the various credit facilities that are available to financial institutions. Next we have Mike Metalonis, and Mike is a supervisory examiner and a central point of contact within supervision. He's held numerous roles in his time at the Fed and has a wealth of knowledge, both regarding credit risk related matters as well as general supervisory matters both from his time at the Fed and within industry. Then rounding things out, we have Anulekha Mohanty.

Anulekha has also served in various supervisory capacities from community bank supervision up through large bank supervision, and she currently serves as the Assistant Vice President over our Compliance Supervision function with responsibilities over both corporate and consumer compliance as well as Bank Secrecy Act and anti-money laundering functions. Again, thank you to the three of them for joining us today, and I hope you find the conversation with them a little bit later to be incredibly engaging. To start off here, I will pull up our information so we can get going. Just to motivate the conversation that we're having today, why we're having this discussion, so the idea for it really came out of another external engagement that I had with the group about a year ago now, just discussing the Federal Reserve, its purposes, its functions, and a little bit about the banking system.

During that conversation, I got a question that was essentially what is different now about the banking system as compared to that Great Financial Crisis period, that 2007 to 2009 period, that gives us more confidence in these institutions. The answer to that question really centered around the resilience of our banking institutions, both individually and as a collective system. And how that resilience has evolved over the past 15 years. Of course, the idea of bank resilience was further thrown into the spotlight this past spring with the sudden failures of three large banks, Silicon Valley Bank, Signature Bank, and then later First Republic Bank. But ultimately, the events that unfolded after those failures and the banking system's ability to weather contagion

effects of those failures really further demonstrated the resiliency that we'll speak to today. Before we get started, just a quick note that I'm sure there will be opinions shared both by myself as well as the panelists today, and these are not necessarily reflective of the views of the Federal Reserve System.

Okay, so at the top, we wanted to provide some main themes that we hope you take away from the conversation today. First here, when you tend to read news clips on the economy and see forecasts for economic activity, and there's a lot of talk right now about the potential for recession, will there be one, when will it happen, how long, how deep could it be? Of course, over the past few months, the banking industry has been in the headlines because of the failures that I just mentioned, that sowed some additional fear of rippling effects throughout the financial system. But our message through this presentation is really to show that while there are always of course risks to individual institutions, the banking system as a whole is currently well positioned to support the economy through a potential recession, through potential volatility. Whereas in prior downturns in the economy such as during the financial crisis, the banking system could have been viewed as a source or an amplifier of that stress, right?

Then, in addition to the strong financial position the banking system is in, over the past decade, there have been significant changes made to the way banking institutions are supervised that ultimately led to improvements in the way that we, as regulators, are able to identify, measure, and monitor risks within our firms to ensure that they're operating safely and in compliance with the various laws and regulations that exist. Now, as was indicated in the report published by the Fed back in April about the events leading up to the Silicon Valley Bank failure, there is of course room for improvement and continued evolution in how firms are supervised. But today we'll walk through some examples of the improvements that have been made in the past 10 to 15 years that have contributed to a stronger financial system.

Then, last we wanted to cite some examples of what I'm talking about here to provide further support for this resiliency that we're discussing. We can point towards two things. First, the strength of the banking system during the height of the COVID-19 pandemic, as well as in the aftermath of the recent bank failures as illustrations of how the banking system can support the economy during potential periods of stress.

Before we discuss some of the detail to illustrate the resiliency of the system, it's important to provide some key definitions here. First, I mentioned the role of supervision and regulation in strengthening the resiliency of the banking system. It's really important to note for a general audience such as this, the role that sup and reg plays. The various regulatory agencies, which of course include the Fed, are responsible for ensuring the safety and soundness of the institutions that we supervise. Simply put, our job is to make sure that institutions that you, the public, entrust your money are being protected or operating safely, and that you're being treated fairly in your interactions. Ultimately, our role as supervisors is to build a foundation of trust within the financial system that promotes economic stability.

Now I'll call attention to the last bullet point on the slide, and it's particularly noteworthy because it's important to understand that our role as supervisors is not to eliminate the possibility of banks failing, right? Just as with any industry, there are institutions that are going to thrive and there are institutions that are at risk of failure. Our job is to help prevent these failures when possible, but more importantly, to mitigate potential systemic risks and bank failures and minimize the overall impact on the broader banking and financial system when they do occur.

Okay, so to this point, I've mentioned the word resilience about half a dozen times. What exactly do we mean when we say resilience? What are we referring to when we talk about a resilient bank? While there's no standard definition, when we think of resiliency here, we're talking about a bank's ability to withstand economic volatility and general volatility within the financial industry and continue to offer its core services to clients, which of course includes providing credit to businesses and consumers. Now, there's no predetermined list of items that get checked off, and if a bank meets all of them, they're considered resilient. That's not how it works. But there are several factors that we've outlined here that help to characterize a resilient bank. The first that we'll talk about here really speaks to the financial resilience of a bank. We start with the statement that a resilient bank is one that maintains sufficient levels of both capital and liquidity, which are fundamental in strengthening a bank's financial condition.

Now, strong bank capital, which is essentially a measure of a bank's net worth, it supports operations and it serves as a cushion to absorb unanticipated losses. Strong capital positions really allow firms not only to manage potential deterioration of their performance, but also direct credit activities towards areas of the economy that might be in need of support. But what's important to note is that the measure of capital adequacy is not necessarily the same across all banks. Firms that are engaging in more complex or inherently risky activities should hold more capital to account for the volatility or potential volatility in those lines of business. Now additionally here, there's a common line of thinking within the banking industry that's deterioration in credit quality, the performance of a bank's loan portfolio that often is what leads a bank into trouble, but ultimately it's liquidity and the solvency of an institution that will lead them to fail.

A firm without adequate liquidity will be unable to fund loans and meet other financial obligations at reasonable costs and during periods of stress. To kind of take you back in time, those familiar with the movie *It's a Wonderful Life*, you'll recall the run on the Old Bailey Building and Loan when people of the town demand their money at the same time, but the bank didn't have the liquidity to repay them. Now, in today's day and age, a bank run looks very much different with the proliferation of online banking platforms, mobile applications, and just the acceleration of news. But the point still stands, all of this is to say that a resilient bank maintains levels of liquidity that are not only sufficient to meet the demands of business as usual, but also under periods of stress.

Now, next here is a topic that has garnered much more discussion given the recent bank failures. But a resilient bank is one that has sound management over its balance sheet, its mix of assets and liabilities, in order to adjust to changes in market conditions. We commonly refer to this as proper interest rate risk management. Positioning balance sheets so that movements and interest rates don't lead to large swings in the value of assets and liabilities or the bank's ability ultimately to generate revenue and build capital. Now, the next factor to consider in resiliency is how conservative a bank is in determining which loans to make and who to make them to. Resilient banks are those, they maintain sound underwriting practices that are reflective of the risk appetite of both senior management as well as the board of directors, but also consistent with the level of capital that the bank has on hand. There's typically been a direct correlation between underwriting standards and loan performance. Institutions that maintain stronger underwriting standards are typically better protected during periods of economic stress.

Then, the last component of resiliency that we speak to here, really speaks to the operational resilience of an institution, maintaining strong policies, procedures, controls to ensure the bank is

safeguarded from non-financial risks, so things like fraud, cybersecurity attacks, non-compliance with consumer protection laws. This leads us into the component of resilience underpinning all of these which are strong risk management practices that permeates the entire bank in order to properly measure, monitor, and control risk across the organization.

Okay, so before we kind of dive into some details and some analysis on how bank resilience has changed over the past 10 to 15 years, we first wanted to look at how the supervisory landscape has evolved in this time to help strengthen the industry, to build resilience in the system, and ultimately provide stronger confidence in bank's ability to support businesses and consumers. There are several key ways that our approach as supervisors has changed since the financial crisis. First and foremost, we talk about robustness. Supervisory strategies focus more on what we call macro-credentialed risks, so considering the interconnectedness of the banking system rather than risks solely at individual institutions. As a result, regulatory agencies are placing greater emphasis on horizontal reviews, especially involving the country's largest institutions.

The supervisory approach is also now placing more emphasis on modeling future outcomes to assess bank preparedness, most notably with stress testing as I'll discuss on the next slide, but we're also focusing more on the identification of emerging risks and utilizing more specialized supervisory teams for targeted review. A good example of this is an area such as financial technology or FinTech and our goal of setting up a novel supervision activity program. Then last year, regulators are making efforts in improving transparency, both in our communicating of expectations to our banks as well as the results of supervisory activities to the general public. This includes things like disclosure of stress testing results, the semi-annual supervision and regulation report that's published by the board. But then in addition to these, I mentioned the special report that was published by the Fed examining the events leading up to the failure of Silicon Valley Bank, including areas where our supervisory activities were lacking. This transparency is to build further trust in the supervisory process and holds regulators more accountable for ensuring the banking system is overseen in the highest quality manner possible.

But not only has our approach in conducting supervisory work changed to foster strong resilience in the system, but the regulatory framework itself, the rules by which we assess banks has also changed with that goal in mind. Now on this slide, we list a number of critical changes through the passage of domestic legislation out of congress, namely the Dodd-Frank Act, as well as international banking standards through the Basel Committee on Bank Supervision. Now, Dodd-Frank was sweeping legislation that was passed in the wake of the financial crisis that sought to promote stronger stability in the financial system by improving accountability and transparency within it, altering this idea of too big to fail, and ultimately protecting consumers from abusive practices. The DFA has led to what many consider some of the most valuable changes to the supervisory framework, including the implementation of resolution planning and stress testing for the nation's largest banks.

These two items have led to the creation of more rigorous internal controls to define how institutions would handle restructuring or resolution of the bank, but also how firms are modeling and adjusting their financial posture for potential stress scenarios that may occur. The goal of these processes is to avoid undue disruption to the financial system and cost to taxpayers like we saw during the financial crisis. Further, as I mentioned, the results of the stress tests are now made publicly available, so again, it speaks to the improvements in transparency of supervisory activities that help to strengthen confidence in the system. Dodd-Frank, as many know, also led to the creation of the Consumer Protection Financial Bureau, the CFPB, which is

focused on ensuring financial institutions treat consumers fairly. While this may not have a direct effect on resilience, it still helps to build confidence in the system and protect customers.

On the right side here, we have rule changes coming out of Basel, which is an international organization that sets global standards for credential regulation of banks. Since the 1980s, this group has implemented several different frameworks that have been adopted globally. The third such framework, Basel III, was in direct response to the financial crisis and has included elements such as changes to minimum capital ratio rules and standardization of liquidity requirements for the largest banks. These changes, again, have been made in order to help strengthen the regulation, the supervision, but most importantly, the risk management of banks themselves.

Okay, so now that we have a baseline on what we mean by resilience and how the supervisory landscape has changed to help bolster that resilience, let's now turn to how the financial condition of the banking industry has evolved over the past decade in light of these changes. To provide everyone with a baseline comparison of what the banking system looks like today versus before the financial crisis, we show some basic stats here. Generally, the industry has undergone significant consolidation, right? Firms are becoming fewer, but they're becoming larger. As you can see here, the average institution size has more than quadrupled since 2007. While this in and of itself is not necessarily a barometer of bank resilience, what's important to note is that while balance sheets have grown considerably, they're less complex than they were. We'll illustrate that on the next few slides here.

If you recall from the characteristics of bank resilience that we talked about, the first item that we noted was capital. The slide illustrates the evolution of bank capital positions on aggregate over the past 20 years. We use two measures here to kind of look at this. We use the ratio of book equity to total assets, which gives you a general picture of the loss absorbing cushion that a bank has compared to its size, while also adjusting for market losses within the securities' portfolio that have become an important subject given this rate environment. The second measure is bank equity relative to a risk adjusted measure of bank assets. This risk adjusted measure is important because firms of the same size may operate with varying complexity within their business lines. This ratio provides us with a clear picture of a bank's cushion relative to the nature of the activities that it's engaged in rather than just its size. What we see here from this chart is that both measures compare favorably to the period before the financial crisis, but the risk adjusted measure particularly is materially higher and remains well above the 20-year average.

When honing in on that risk adjusted asset measure in particular, the story becomes even more clear. As the ratio of risk adjusted assets to total assets is nearly 20 percentage points lower than it was before the financial crisis, meaning that the banking system balance sheets on aggregate are far less complex. Altogether, this de-risking means that institutions are engaged in activities that are generally less likely to lead to default and losses to the institution. Less risk, higher capital lends itself to stronger resilience.

Now, turning to the second component of resilience that we discussed, and a very important one given today's environment, which is liquidity. As I mentioned, liquidity is the ability of a bank to meet obligations at reasonable costs and within a reasonable amount of time. Generally, there are two types of liquidity that we think of. There's traditional liquidity or funding that's generated from deposit activity and from borrowings, and then there's asset liquidity that's typically derived from cash or from assets that banks hold and are able to sell into the market to generate funds. We look at measures of both of those on this slide here. When we talk about funding

coming from the liability side of the balance sheet, a sign of a resilient bank is one that relies primarily on core funding to fund its operations. Core funds are generally deposits from businesses and consumers that aren't heavily influenced by interest rates and can be relied upon by the bank consistently. We typically refer to these as sticky deposits.

On the other hand, non-core funding or sometimes what's referred to as wholesale funding, these are less stable sources of liquidity, either large uninsured deposits that are sensitive to interest rates or often borrowed lines of credit that either might not be available or might be discounted during periods of stress. Now, reliance on these wholesale funds is typically viewed as a riskier way to fund operations, but what we've seen over the past 20 years is that reliance on these sources of funds has fallen considerably, meaning institutions are reliant on more stable funding while having capacity to tap into those wholesale sources if needed. Now in terms of asset liquidity, it's a similar story. Liquid assets are important because they can be sold relatively quickly to fund other obligations and include things like cash and investment securities. Liquid asset levels improved markedly after the financial crisis as banks really bolstered their liquidity positions, and then they further spiked during the pandemic as an influx of deposits led banks to invest those funds either in cash or securities portfolios while loan demand was pretty muted.

Now, as pandemic stimulus has faded and consumers and businesses continue to spend, we've seen liquid asset levels normalize as some of those deposits leave the banking system and institutions utilize more liquid assets to fund operations, but you'll see ratios are still favorable compared to long-term averages. Again, going back to the idea of resilience, bank funding bases currently are more stable and their balance sheets are more liquid than at points that we saw prior to the financial crisis.

Now, in addition to the composition of liquidity on both the asset and the liability sides of the balance sheet, capacity is another key element of liquidity. What capacity does a bank have to fund obligations timely and under potential periods of stress? We show a few measures here to gauge that ability. The first is the loan-to-deposit ratio, which is a measure that indicates to what extent of bank's core business, its loan portfolio primarily is being funded by its core source of funds, namely its deposits. The lower the ratio, the greater capacity a bank has to make loans using stable funding. A ratio of one-to-one or 100% would indicate that a bank really doesn't have any more deposits available to make loans, it must then rely on wholesale and potentially costly sources to fund obligations and to fund its growth. Loan deposit ratios have also recently normalized after all-time lows about a year ago, but they remain favorable compared to historical levels and much lower than what we saw prior to the financial crisis.

The second measure on the right here is one that has become increasingly in focus lately, and that's a bank's ability to cover uninsured deposits with its on-hand liquidity. Uninsured deposits are those that generally exceed the FDIC's insurance limit of 250,000, and therefore they're not fully guaranteed in the event of the bank failing. These funds can be considered more volatile as depositors often seek favorable interest rates and are more likely to withdraw funds if there are signs of stress at the bank. But despite some volatility in this measure, current coverage of uninsured deposits is generally in line with historical figures and at current levels on aggregate, banks can cover about a 50% loss of uninsured deposits through cash-on-hand alone, not considering potential liquidity from the investment portfolio.

Okay, now our last two slides on the topic of financial resilience here deal with credit risk, the risk that banks cannot collect payments expected from the assets that they hold. As I mentioned earlier, how aggressive or conservative banks are in underwriting loans, what criteria is being

used in the decision to make a loan or not, has historically been a leading indicator of future loan losses. What we saw during the financial crisis was a period of increasingly looser or more relaxed underwriting behavior. For instance, lower requirements on how much collateral was needed to secure a loan. But when real estate values plummeted, banks had insufficient collateral held against both residential and commercial mortgages so when loans defaulted, they were forced to take on properties with depressed values and couldn't absorb those losses. Now, since the financial crisis, underwriting has generally been more conservative, so sentiment that we show here from a survey of senior loan officers that's conducted by the Fed each quarter shows that bankers have been much quicker to tighten their standards in the past year in anticipation of potential recession as compared to the period leading up to the financial crisis.

Now additionally, we've seen that over time lending to riskier customers, those with poor credit ratings, has fallen as well. The chart on the right here shows mortgage loans originated by FICO score with FICO scores less than 620 considered subprime borrowers. The proportion of these loans lent to subprime borrowers is roughly half of what it was pre-financial crisis. While this chart represents the entire mortgage market, not just banks that trend holds for banking institutions as well.

The result of more conservatism in how banks are underwriting and making loans is stronger loan performance with common measures of credit quality that we look at, such as the rate at which loans are past due on their contractual payments, as well as the rate at which loans are being charged off. They both remain near historically low levels. Further, we've seen concentrations in riskier loan categories decline. For instance, construction loan concentrations, which have been documented as leading contributors to bank failures during the financial crisis, they're roughly a third of what they were in 2007. Not only have more conserved underwriting practices helped support current loan performance, but more proactive tightening of loan standards should help to mitigate potential effects of an economic downturn in the future. This is especially important in periods such as this where there are certain segments of the market, especially the market for office commercial real estate that are expected to deteriorate.

Okay, so now to wrap up our conversation, we really want to illustrate practically how the banking system has become more resilient, is able to better support the economy. To do this, we turn to the examples that were set during the height of the COVID-19 pandemic as well as the aftermath of the recent bank that I mentioned. When speaking of the pandemic, as everyone knows, this was an unprecedented period of economic shutdowns that put stress on consumers and businesses and created a lot of uncertainty in the economic outlook of the country moving forward. Then, in terms of the recent bank failures, they really stressed the confidence that the public had in the banking system and whether banks were maintaining sufficient liquidity. But again, because the banking system had in fact positioned itself well to weather periods of stress, it was able to support consumers and businesses during the pandemic in conjunction with fiscal relief and measures taken by the Fed. It's been able to weather these possible contagion effects from the three large bank fails in the spring and continue to take deposits and lend to customers.

Okay, so our last slide here really illustrates the actions that were taken both by banks themselves during the pandemic as well as regulatory agencies during the pandemic and over the past few months to ensure that money and credit continue to flow through the economy and to provide backstops for businesses and consumers until volatility had evened out. Now on the banking side, institutions provided more flexibility to their borrowers, providing them loan accommodations to ensure loan terms are reasonable given the rapidly changing economic

landscape during the COVID-19 pandemic, and that borrowers had the capacity to repay even if it meant modifying the original terms of their loan. I am sure many, if not all of you, on this call had heard of the Paycheck Protection Program. This was a program that was designed by the federal government to support businesses during the economic shutdowns, and banks were largely responsible for utilizing their infrastructure to support distribution of these loans and help struggling businesses stay afloat.

Then on the consumer side, banks also provided a number of accommodations including waiving things like overdraft fees and increasing limits on ATM withdrawals and credit card lines so customers had additional capacity to borrow while cash flows were tighter. Then, complimenting the measures that banks took to help their customers, there were a number of actions taken by the Fed and other regulatory bodies to again ensure that credit and money continued to flow through the economy, and more recently to fortify that confidence in the banking system. First, during the pandemic, agencies adjusted regulatory capital requirements, the amount of capital that we as regulators require banks to hold before facing scrutiny. This really allowed firms stronger capacity to lend by freeing up their balance sheets to make loans. Regulators also provided greater flexibility for banks during the pandemic to work more proactively with customers on things like appraisal standards and loan modifications so they could work quickly to address the needs of those that were struggling.

We also promoted things like small dollar loans, things like deposit advances, single payment loans to bridge the gap for customers without steady paychecks. Then, finally here with banks having additional capacity and regulatory assurance to lend, programs were also set up during the pandemic to ensure that banks had the liquidity needed to fund these loans. The special lending facility that was set up is called the Paycheck Protection Program Liquidity Facility, PPPLF, which provided term financing to banks backed by the PPP loans that they were making. Then, separately and more recently, as a result of the bank failures that I mentioned, the fed also set up the bank term funding program. This liquidity facility was created to help institutions withstand deposit outflows within the banking system as markets and customers reacted to those failures. Now, since deposit activity stabilized and growth and borrowing from the BTFFP has subsequently accelerated.

Ultimately the story here is that the strength of the banking system before the onset of the pandemic and the recent bank failures really allowed for banking institutions and regulators to work in unison to ensure the sharp decline in economic activity or potential contagion concerns did not lead to deeper and longer lasting issues. While we can't say for certain, the actions that were taken to address these recent events could very well be a blueprint for how to address similar periods of economic stress moving forward. With that, that kind of brings us to the end of my prepared remarks this afternoon. Again, I'd like to thank everyone here for allowing us to share this topic with you. We have about 28 minutes here, so for the next half hour or so, as I mentioned, we're going to continue to engage in this discussion of bank resilience with the panel that we have assembled. We really hope you find that conversation engaging.

We have a number of questions that have come in through the registration that we'll walk through, but again, I encourage folks that are on the call to type in messages through the chat and we'll get to them if we have time. With that, I'm going to exit out here. I believe we have Anulekha, Tom, and Mike still on the line. All right, great. Like I said, we had a number of questions that came through registration that I'm going to walk through. The first one that we wanted to address I think kind of sets a good stage for the conversation here today. Mike, I'm

going to throw it to you first. I talked about the bank failures quite a bit in the spring. I talked about the special report that Vice Chair Barr issued on the events leading up to Silicon Valley. This question really was asking, given the events of the spring, how has that made you think differently about the supervisory process? Then, what are we doing differently as a result of these recent failures and the recent turmoil?

Mike Metalonis:

Yeah, I think that's an excellent question and a lot of things come to my mind, especially as we reflect back on the spring and the events that unfolded. A couple of things that I'll mention here specifically in terms of the supervisory process, things that we probably need to take a deeper look at. You kind of mentioned on the deposit side, deposit concentrations, deposit behaviors as an example, how do those behave, react differently in periods of stress or turmoil? Strong risk management, I know you talked about that in your prepared comments, especially around interest rate risk and liquidity, an area where we probably need to take a more deeper look into how banks are managing that risk just given the events that unfolded in the spring.

The other area I would call out is the role that social media plays and the impact that has on the bank's reputation. I think I, for one personally, just recall the speed in which these events unfolded leading up to their failures and the role that social media played as part of that is an area that we probably need to think about from a supervisory standpoint. There are a number of things, but those are some things that I would call out.

Joe D'Agostino:

Excellent. Thanks, Mike. Anulekha, Tom, anything to add on that?

Tom Fitzpatrick:

Joe, maybe one thing I'll add is just operational preparedness. We've heard a lot from banks that they're regulators, whether they're the Fed, the other national regulators, their state counterparts are really encouraging depository institutions to be operationally prepared to borrow from their contingent funding sources, whether that's the discount window, home loan banks, or some other provider. That's really been emphasized since early this year.

Joe D'Agostino:

Excellent. Sorry Anulekha, go ahead.

Anulekha Mohanty:

Joe, I was just going to add, I think all the topics so far are great and very, very relevant. A couple of other topics that comes to my mind is the importance of monitoring for the intersection of risks or layering of risks. That's going to be an important element as we sort of move forward. From a consumer compliance perspective, really as we move forward, understanding the potential impacts to financial inclusion and access. If there is structure underwriting criteria or changes in how institutions go about relative to their community development initiatives, those could all have consumer compliance implications that we continue to monitor for. Back to you, Joe.

Joe D'Agostino:

Thanks, Anulekha. Yeah, those are great points. I guess I'll also make a comment just from my perspective as being on the data side of this, there's also improvements in the way that we look at how we analyze and report on the data and analytics side of the house. It was noted in the report that Vice Chair Barr published, that the Fed published in April, the surveillance teams within the Fed, they're providing analysis of horizontal risks within the system. This institution is being reviewed by stakeholders, but there might not be as clear a connection on how that information is worked into the supervisory process that can make identifying these risks more proactive and kind of help along with the supervisory work that the examination staff are doing. I think that's an important thing from a surveillance perspective, is how can we better fit into the supervisory process as well as being cognizant that some of the measures that we need to review.

Mike mentioned some of the liquidity metrics, uninsured deposit activity, looking at different measures of the market value of bank balance sheets, whether it be securities portfolios or loan portfolios. That's a new thing, not a new thing, but something that we're looking at differently and how we can improve how we monitor those two elements. Okay. All right. Thank you for the comment there. Mike, you hit on reputation, that was kind the next question that had come up through the chat that I wanted to touch on. Anulekha, I might start with you, is I mentioned it quite a few times within the conversation about our role as supervisors obviously is to ensure safety and soundness, but ultimately it's to provide strong trust in the banking system, to provide confidence in the banking system. I was wondering if you could touch on the question that came in about how much does the US banking system, its performance, really rely on reputation and trust, and maybe more importantly, how and where is that trust measured and how is it assessed?

Anulekha Mohanty:

Sure. Thanks Joe. Absolutely, I think reputation and trust are a key element for a strong and stable banking system, and if not well managed, could certainly have adverse implications. From the Federal Reserve perspective and other regulatory agencies, we exist in part to provide that adequate oversight that allows the public to have confidence in the safety and soundness of their financial institutions. Reputational risk, as we define it, is the potential for negative publicity which will cause a decline in customer base, cost of litigation or revenue reduction, and is a key consideration in our supervisory processes and is assessed during the examination. As you can imagine, a reputational risk is often driven by a wide range of other business activities and risks, whether it be fraud or information security or engagement with third parties or delivery of new products and services. Those types of risks must be actively managed.

As a result, our examiners are often assessing the effectiveness of a bank's risk management program. This includes the appropriateness of board and senior management oversight, the adequacy of policies, procedures, and limits, the effectiveness of risk management, measurement and monitoring, and the comprehensive of internal controls to manage the risks at hand. One of the questions I think that came in was, "Well, how is trust measured?" Well, there isn't one definitive measure, there are a variety of key risk indicators that can help measure and monitor for reputational risk. Some examples include, but certainly are not limited to, the number and the type of customer complaints, the volume and severity of legal disputes and litigations, customer sentiments including adverse perceptions of products and services, declines in market share, employee executive misconduct, regulatory non-compliance, and public enforcement actions to name just a few.

Joe D'Agostino:

Excellent. Thanks Anulekha. Mike, Tom, anything you care to add to that?

Mike Metalonis:

No.

Joe D'Agostino:

All right, so the next question that we had come in here, Tom, this is up your wheelhouse here. You mentioned preparedness and how banks are set up to borrow from the discount window and other credit facilities. The question was really... We talked about evolution of the supervisory process since the Great Financial Crisis, but I think there have been a lot of changes made to the Federal Reserve's role in lending to institutions. I was curious if you could talk us through changes that have been made since the Great Financial Crisis with discount window lending and some of the other credit facilities that have been stood up over the last couple of years.

Tom Fitzpatrick:

Yeah, absolutely, Joe. You can think about this in two buckets. The first would be the emergency lending facilities that then Chairman Bernanke sort of pioneered during the Great Financial Crisis. Those are often referred to as 13(3) facilities because we're a little wonky in the Fed, it's also the section of the Federal Reserve Act that authorizes the Fed and the US Treasury to make them. Those are special lending facilities set up for specific segments of the market. For instance, the term asset backed securities lending facility, TALF, which was used in 2008 and then again in 2020 during COVID. You mentioned one, Joe, the one that's active today, actively making loans today, the bank term funding program. First, using that authority to make sure that liquidity is flowing to those sections of the market that need it is different than how it was used pre Great Financial Crisis, GFC.

The second is really on the discount window itself, the primary and secondary credit programs. If we look at... There are a number of changes made to primary credit. In April 2020, there was a joint press release from all the federal banking regulators encouraging firms to actively build their contingency funding plans, including considering the discount window, so that goes into some of the preparation that's really being encouraged. But the facilities themselves change, so we can now lend for up to 90 days under primary credit, it doesn't have to be just used as a backup facility, that is you use other funders as your primary funders and you come to us if there's a snafu in borrowing from them at the end of the day.

Then, the cost of primary credits also dropped to the top of the Fed funds range where it used to be a spread above that. All of those changes are still in effect since April of 2020. The result, and you can see this in the data that's public, is that some firms started using the discount window as a more regular provider, and certainly the bank term funding program has been a popular program as well.

Joe D'Agostino:

Excellent. Thank you, Tom. Let me scan through to see what other questions we have coming in. We do have one, and anyone can jump in on this. I think it's a really good one. Over time, our mandate as regulators, the mandate of the Federal Reserve as regulators has expanded simply beyond measuring and monitoring credit quality of bank assets, but in various areas such as consumer protection, fair lending, anti-money laundering, other operational risks. There are

some that think we should be picking up or we should be expanding supervisory activities in areas such as climate risks. The question here was how do we balance these various duties and kind of expanding responsibilities, but still prioritize and address the most pressing threats within each individual bank? I mean, there's a lot there. Mike, either you or Anulekha, given some of the consumer aspects, I wonder if you could speak to that.

Mike Metalonis:

Yeah, I think that's a great question. Part of what we do every year, at least every year, is go through a rigorous supervisory planning process where we do exactly that, where we look at the top and emerging risks that our firms are facing. We also step back and look at what are the risks more broadly facing, the financial system as a whole. Then, we sit down and discuss how do we prioritize those risks versus our schedule? Where do we see the most immediate needs, areas that maybe we haven't looked at in some time, perhaps where there might be some feedback from prior review work? All of that gets factored in to a planning process that we do at least once a year, sometimes more frequently.

I recall a time during COVID, during the pandemic where we were doing this every six months because we weren't sure really at that time where the economy was going. There was a lot of uncertainty with the shutdown and just the impact that this could have on businesses and consumers. We were doing this very frequently to balance all of those things. To the question, which I think is a good one, how do we think about some of these more emerging risks, whether it's climate risk, FinTech, cybersecurity, all of those things we look at and consider as part of our process to figure out where we want to take a deeper look versus some other areas. That's a good question.

Joe D'Agostino:

Thanks Mike. Anulekha or Tom, anything additional in that question? Okay. Here's just a broad question that's been asked, and I think this is really for any one of you, given your knowledge of the industry. At this point, what do you feel the most impactful risks to the banking system are? What's the approach that we're taking around those risks? Whoever would like to start with that, go ahead.

Mike Metalonis:

Well, maybe I'll go and just open it up to Anulekha or Tom if you want to weigh in with your thoughts. Certainly, liquidity is an area that comes to mind, I know you had some points on that in your presentation, just given what happened in the spring and certainly the rising interest rate environment is another factor in that. Interest rate risk management is really important, understanding how banks' balance sheets are impacted based on rising rates and falling rates, just risk management in general. Credit is also another area, you touched on this in your prepared remarks, how that might translate to losses in the bank's portfolio. How are they reserving for a potential downturn if we have a credit event?

Capital planning, you mentioned capital, that's another area in terms of bank resiliency. How are firms looking at their unique vulnerabilities, stress testing those in different ways to understand their sensitivities? All of those things combined is what we look at to get a glimpse into where the risks are in each one of these firms. It's a number of things. I don't think it's just one thing,

it's a number of things that... Anulekha touched on is the risk layering, the interconnectedness is really important as supervisors to understand and assess.

Joe D'Agostino:

Yeah, I think that's a good point. The institutions that have the combinations of these risks are the ones that could be most impacted. Anulekha or Tom, anything you'd like to add to that?

Anulekha Mohanty:

I think in addition to what Mike already mentioned, I think a couple other items that come to mind is obviously cybersecurity continues to be a threat to our financial system and getting complex by the day. That's another area of focus. I would call out also partnerships with emerging technology companies, whether those be Fin Techs and such. That's an area where, again, we continue to see intersection of a variety of risks, whether it be third party management, compliance, operational or credit risks, all kind of coming together and banks needing to understand much better how that interplay of risks is occurring and making sure they're appropriately managing their controls.

Tom Fitzpatrick:

Not to say that we should be afraid of everything, but basically every part of banking has been mentioned in some sense, so I'll say one thing that I think the Fed did a really good job responding to was the interest rate and liquidity risk that firms are facing. You saw early this year in the spring use of the discount window, if you look at the H41 shot up to I think over 116 billion at its peak and since then the bank term funding program and the discount window kind of switched places with the BTFPs up over 107 billion as of the last, and the primary credits back down to two. But you saw the same thing happen with home loan banks, right? We saw home loan bank liquidity lines get drawn down pretty significantly early in the year and paid back. I think that one of the lessons from this last stressor is that while we should still be focused on liquidity risk, on interest rate risk, the system did a really good job of managing that despite the really strong stresses in the market.

Joe D'Agostino:

No, it's a great point, Tom. Actually a question that just came in, to that point, is given the speed of the deposit outflows that we've seen recently, based on your expertise, do you believe the discount window will eventually be available 24/7?

Tom Fitzpatrick:

On a long enough timeline, all things are true, so eventually, yes, I am sure that it will be available 24/7. Whether that's a need in the short run, I think it's an open question. There are new 24/7 ways for banks to fund, especially if they're participating in Fed Now. There are two wholesale funding options, whether it's the clearinghouse as a real time payments product. Fed Now, there's also a liquidity management tool so firms can fund 24/7 there. There may be a need for the discount window in the future, we don't see it today.

Joe D'Agostino:

Thanks. All right, we've got time for a few more questions. I'm looking, we've got two more. The first was just, given the failures of Signature, First Republic, Silicon Valley, those failures may have triggered broader collapse were it not for the extraordinary measures that were taken by the Fed, by the FDIC, by the treasury. The question really is, how resilient is the banking system, in your opinion, in absence of those backstops? Then, how can the public have greater confidence that bank supervisors will intervene more quickly and firmly when they spot poor risk management at institutions like these? A loaded question there, but Anulekha, Mike, I'll start with either one of you to see if you have any thoughts.

Mike Metalonis:

Maybe, Anulekha, I'll go and then I'll turn it to you. I happen to think that the financial system is pretty resilient. One of the things that we look at and assess on a pretty regular basis, and I know Joe, you mentioned this in part of your remarks, is the stress testing, liquidity stress testing, capital stress testing. Those are very powerful supervisory tools that allow us to understand different vulnerabilities, behaviors, scenarios in which these banks can be impacted. We certainly leverage that and look at that to understand the resiliency of these firms. To Tom's point earlier, the banks use those tools along with other things to manage through turmoil. I think they did that really well by leveraging some of these processes that came out of the Dodd-Frank reform and the things that we've learned in the past as the way to manage in the moment when we have events like we did in March, but certainly a thing that we continue to evaluate as scenarios or conditions change. I don't know, Anulekha, if you wanted to add to that, but I think that's, from my viewpoint, one way we look at resiliency.

Anulekha Mohanty:

Yeah, to Mike's point, I would agree that I definitely see that we do have a resilient banking system. If you look through just over time, there have been several improvements made to capital and liquidity practices that our institutions, through these supervisory processes that Mike spoke about, that we've observed. Certainly there are gaps, but there's certainly improvements as well. Then, I think there was a second part to that question in terms of supervisors intervening quickly, as part of our normal supervisory process, we are expected to and continue to monitor for how a firm is addressing our supervisory gaps. That is something that we continue to focus on and an area that we're putting additional focus in terms of making sure that those supervisory issues are managed appropriately through our examinations.

Mike Metalonis:

Just one other thing I'll add on that, it's certainly case by case. It really depends on the circumstances and situations in which would necessitate a need to act quickly-er than others. It really is a case by case basis, it's something that we take a look at as part of our process.

Tom Fitzpatrick:

Just to dovetail on that, Mike, I think the question is about how stable the banking system is, and I think if we look earlier this year, we're talking about a couple of firms... Sorry, the lights in my office just went out. We're talking about a couple of firms out of an entire system that really, I would say, needed the extraordinary measures that were taken early on and others that certainly benefited from it that may or may not have needed it. Really, it's a question we can't answer

without the counterfactual, but I would just... The vast majority of the system never needed them and didn't use any.

Joe D'Agostino:

I'll just add quickly in terms of the intervention piece, I think that was a big part of what came out of Vice Chair Barr's report is that there is some additional work needed to improve the agility of supervision. There will be some changes made to that end that I think will ultimately give the public greater confidence that we have the tools and we have the encouragement to take action when needed. All right. We, I think, have time for one more. I think again, Anulekha and Mike, this might be for you guys, but are there additional metrics that are more useful for regulators to identify bank run risk in regional banks versus large banks? When we talk about regional versus larger here, I think we're talking about the [inaudible 00:57:44] firms versus more what we consider large banking organizations. I don't know, Anulekha and Mike, if there are specific measures that you all are using to differentiate run risk?

Mike Metalonis:

Well, I can certainly take that one, Anulekha, if you weren't going to jump in. I think it really depends. There's different rules and requirements based on the size and complexity. If I think about the very largest companies like the [inaudible 00:58:30], they have their own set of metrics and criteria that they have to follow versus maybe some of the smaller but still large, complex organization. It really depends on the firm, the category in which the firm operates, the complexity, and the risk posed by the institution. I don't think this is the one metric that we look at, it's a combination of things that really play into that.

Joe D'Agostino:

Okay. All right. Well, I'm looking at the clock here and we have one minute. Again, Tom, Mike, Anulekha, I just want to thank all three of you for being willing to jump on the panel today. It was a great conversation. I think folks got a lot out of it. In the last 30 seconds or so, I'll just kind of close things off. Again, just want to thank everyone on the call for joining us today. I hope you found the conversation valuable and insightful. I believe Erica has been sharing some material that we discussed throughout the presentation, and hopefully we'll be able to make the presentation available for you all after the fact. There will also be a recording of the event that will be posted to clevelandfed.org shortly, so keep a lookout for that if you're interested.

There will be a follow-up email that'll be sent, as I mentioned, with the information that Erica's been providing. I also wanted to remind folks to join us for our next *FedTalk*, so that's going to occur on Tuesday, October 17th, and it will revolve around the topic of wealth distribution. With that, I have four o'clock. Again, thank you all for joining us. Have a great rest of the afternoon. Thank you.