YPFS Lessons Learned Oral History Project: An Interview with Eric Rosengren

Eric Rosengren
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Introduction:

Eric Rosengren began working at the Federal Reserve Bank of Boston in 1985 and ultimately served as its president and CEO from 2007 to 2021, including during the Global Financial Crisis (GFC) and the COVID-19 crisis. He met with the Yale Program on Financial Stability (YPFS) to share insights related to the Fed’s crisis responses—particularly those during the pandemic. This Lessons Learned is based on an interview conducted with Rosengren on February 6, 2023.  

This transcript has been edited for accuracy and clarity.

Transcript

YPFS: Thanks again for joining us. Before we get started—we're going to focus on 2008 and 2020—but if you could first briefly give us the broad arc of your career at the Fed.

Rosengren: Sure. I came up through the research department at the Boston Fed, then became senior vice president in charge of bank supervision. Slightly unusual background in the Fed. Normally, people have not had experience both in senior roles in the research department as well as senior roles in the bank supervision department. That actually was quite useful. I think it should be done more often to be quite honest.

During the financial crisis, in particular, understanding what roles different banks played, how segmented the market was, and which players were key participants in which markets was something that, if you had a bank supervision background, was quite useful. Frequently, people that are trained

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1 The opinions expressed during this interview are those of Mr. Rosengren, and not those of any of the institutions with which he is or was affiliated.

2 A stylized summary of the key observations and insights gleaned from this interview with Mr. Rosengren is available here in the Yale Program on Financial Stability's Journal of Financial Crises.
in macroeconomics alone don't necessarily understand all the institutional details.

We'll probably get into it, but another example is money market funds, and the way that money market funds play a role in short-term credit markets, and how disruptive it can be if one of those key players all of a sudden is having financial difficulty.

After being head of supervision, I became president of the bank and started in 2007 as the financial spreads started to widen that summer, after a lot of the CDOs [collateralized debt obligations] started to get downgraded. I served at the FOMC [Federal Open Market Committee] for 14 years before retiring.

YPFS: I'm curious, when you were in supervision—that was effectively the financial stability function at the time, more or less?

Rosengren: Not really, it was very focused on the banking sector, not at broader financial markets. As a result, something like studying money market funds would not necessarily have been done in bank supervision. It was very focused on enforcing rules and supervising banks. At that time, there was a particular focus on the large, systemically important institutions. The Basel Accord had just started to be fully implemented internationally.

There was a lot of recognition of the importance of systemically important banks. For example, there was no work prior to the financial crisis on investment banks, because they were regulated by the Securities and Exchange Commission [SEC]. A number of the players that got into difficulty at the start of the financial crisis were actually entities that were supervised by the SEC.

Since they had a very different focus for their supervisory responsibilities, and really were not a safety and soundness focused regulator, the result was that nobody was really spending a lot of time in investment banks, money market funds, or understanding flows in and out of mutual funds. I would say one of the challenges going into the financial crisis was nobody was really focused on financial stability; efforts were much more focused on too big to fail.

YPFS: Sure. That was the thrust of my question. So, to the extent financial stability work was being done, it was being done through the bank supervision lens of too-big-to-fail. The Board [of Governors of the Federal Reserve] creates its own financial stability division after the GFC. What was that like at Boston? Did you pull that function out? Did you set up a unique financial stability function within Boston too, or was that more cross-system?

Rosengren: There was a Board of Governors focus. I would say Boston reallocated a significant amount of funds to focusing on financial stability more broadly, as
One of the many changes during the financial crisis was that I had actually approached Chair Bernanke about having a financial stability go-around, which hadn't previously been done, and that became a regular part of FOMC meetings. Frequently, many people didn't comment.

I commented on financial stability every single meeting after the speaking opportunity was incorporated into regular FOMC meetings. More presidents started commenting as time went on, but I'd say that initially, there were two or three people—usually the president of the New York Fed, myself, and Dan Tarullo. Then over time, it became more institutionalized.

But I actually thought it was an important aspect to bring to the FOMC table. When you're thinking about the economy, not spending some time thinking about how financial participants and financial markets could impact your outlook was probably one of the blind spots going into the financial crisis. There wasn't enough appreciation of how the real side and the financial side interacted.

YPFS: Sure. We'll get into the unique role that Boston has played in the crises. How much of your drive to further the financial stability efforts comes from the Boston region in particular? I mean, obviously, there are relatively nonfinancial Fed regions that have presidents that care deeply about this kind of thing, too. Was this just more your concern as an FOMC participant? Or was it partially driven by the nature of the Boston district?

Rosengren: I'd say it was both. The biggest bank in the First District is State Street, which serves as the back office for the mutual fund industry and money market funds. As part of the supervisory responsibilities of State Street, you had to understand the back office responsibility of State Street. That naturally led to getting a better understanding of how private equity, hedge funds, mutual funds all interacted, and they play an important role to the local Boston economy.

I spent a lot of time talking to people in hedge funds, private equity, mutual funds as part of my ongoing responsibilities as president of the bank, in part to understand how they were positioning themselves relative to potential concerns. Again, that was actually extremely useful during the financial crisis, where I would frequently hear about very large short positions well before they became publicly known. For example, shorting Ambac, the mortgage insurers—that was something being done early in the crisis, at least by many of the Boston hedge funds.

That gave me some significant warning signs that problems were developing and financial market participants in the Boston area were positioning themselves for things to get a lot worse. It helped that I was in Boston where
there were a lot of financial market participants. I was also personally interested in the topic. A lot of my research had been about the interaction of finance and macroeconomics. It was a natural extension of my interests as well.

YPFS: Sure. I guess that's a good segue into Boston's role in 2008. I'm interested in how Boston came to have its own 13(3) facility, the rest were out of New York, with I think one that had some sharing across the system. But otherwise, Boston was the only other regional bank to pick one up. How did that process come about?

Rosengren: It came out primarily around the Lehman failure. I got a call from the person who was the CEO of State Street at the time and was told that a very large money market fund was quite likely to not meet its obligations by the end of the weekend. They wanted to express their concern, and they wanted to make sure that the US government was prepared for a potential run on money market funds, which was likely to be very disruptive to the markets. I flew down on a Sunday and talked to [Federal Reserve Board Vice Chair] Don Kohn, who also had a focus on financial stability. He understood how financial markets interacted with payment systems in the real economy.

I expressed my concern about what was going to happen with money market funds. He suggested I get together with Board staff and see if there was a way to create a facility if the predictions that started at State Street actually came about. Unfortunately, they did. As soon as the Lehman failure was known, there was a run on money market funds. Primarily the prime money market funds. The government money market funds were basically fine, but the prime money market funds, where—particularly on the institutional side, but even on the retail side—there were a lot of transfers into safer assets.

It was a little complicated at that time. One, there wasn't Treasury backing. Two, there was a lot of back and forth about what kind of discount window lending could occur in a 13(3) facility. You may recall that that facility purchased only asset-backed commercial paper. That was because the Board legally determined that it had to be collateralized paper in order to be able to do the facility. Now, as it turned out, that was the riskiest paper that the money market funds held and was actually the riskiest paper that we could have possibly purchased.

The lawyers did not seem as concerned with the fact that it was the riskiest paper held by the money market funds and chose to focus on the fact that it was collateralized. The other thing that I don’t think the lawyers appreciated was that a lot of the asset-backed commercial paper was on collateral in Europe. And so, if we'd actually had to take possession, it was far from clear exactly how that actually was going to occur.
But anyway, we created a facility that enabled us to provide nonrecourse loans to money market funds via the banking system. We were able to set it up. Lehman failed over one weekend, and by the next weekend, we were up and running on that facility. That was done incredibly quickly given we were basically building the plane while we were launching it, but it ended up being quite effective. It brought the spreads back in very quickly.

As it turned out, asset-backed commercial paper was so widely held in the money market fund industry at that time that it was a pretty good asset class in terms of just delivering a lot of funds so that the money market funds did not break the NAV. In that respect, I think it worked out. Even with no Treasury backstop, there were no losses. The facility made a fair amount of money because it was relatively low-risk, high-quality paper. We only took A1/P1 paper; we didn’t take A2/P2 paper.

I think it proved the reasonableness of going in and providing liquidity in a very badly disrupted financial market. In the absence of doing it, I think the losses would have been far more extensive, and the credit market disruptions would have been far more extensive.

YPFS: Sure. Then this facility—it was the AMLF in 2008 for the asset-backed paper—becomes the MMLF in 2020, this time with $10 billion from Treasury. It was obviously pulled off the shelf very quickly, even quicker in 2020 than 2008. What was that process like of dusting it off, making the modifications with the Treasury? This time, you're buying unsecured paper, presumably because you have “collateral” in the form of that $10 billion from the Treasury.

Rosengren: Yeah, in the case of the MMLF, first of all, since we ran the facility during the financial crisis, we were probably the only people that were familiar with how it worked, and so we were the natural Reserve Bank to actually do the new facility. Because there was Treasury funding, it gave us more flexibility not to worry about it being asset-backed commercial paper. That was fortunate in that asset-backed commercial paper was not nearly as widely held by money markets by the time of the pandemic.

The asset-backed commercial paper market never came back to the same degree that it had prior to the financial crisis in terms of being a significant holding of money market funds. If the facility had been constrained to asset-backed commercial paper, it wouldn't have been nearly as successful. We spent a lot of time going back and forth about what assets made sense and what the pricing of the loans should be. It was basically CP [commercial paper] and CDs [certificates of deposits] that we were taking on board.

One of the complications was, as soon as we announced what paper that was going to be accepted by the facility, people wanted to hold that paper, but not
the other paper in their portfolio. So, we would keep getting calls to expand the size of the MMLF. It was somewhat cumbersome in that we kept switching which assets we were willing to take into the facility as people applied pressure—both at the Fed and at Treasury—to broaden out the number of instruments that would be accepted at that facility. It also became a somewhat complicated facility.

The type of organizations that are most prepared to do this kind of interaction with the Fed are actually the processing banks. State Street had been an integral partner in the financial crisis; they were once again an integral partner during the pandemic. Other institutions looked into doing it, but for the most part, it was organizations that had a processing activity: JPMorgan Chase, Citigroup, Bank of New York Mellon, and State Street were the natural primary counterparties. The broadening of the facility even got to the point of including things that I think initially we hadn’t thought about—including the tax-exempt sector—as people became worried that credit markets that didn’t have a Fed facility backstopping them would be significantly disadvantaged. And the spreads were quite large relative to anything that qualified at the facility.

Not surprising to me. Once again, the facility was one of the more utilized facilities because it really was in the midst of an emergency, and it was set up very quickly. We directly purchased the paper; it was not done through an SPV [special purpose vehicle] structure. The SPV structure is much more cumbersome to negotiate.

It takes about six weeks of legal work. If you really have a crisis where you need to immediately get funds into the market, an SPV structure pretty much eliminates the possibility of doing that. The advantage of the MMLF, like the previous facility, the AMLF, was that we had to get the processing and link it up into the Federal Reserve payment system. I mean, one of the challenges was that the system we were using for accounting was not designed to take the volume of financial assets that we were trying to flow through the system.

This happened both in the financial crisis and during the pandemic. There was a lot of restructuring of IT systems. Actually, for the financial crisis, we built a communication center. We actually got national defense wiring so that we could have high volumes of communication come into the Boston Fed. We had pretty much a similar structure for the pandemic. We actively used IT people to be able to set up a full communications network that was going to be capable of processing a high volume of financial paper.

But we also really used a lot of people both with IT and accounting backgrounds to try to find a way to, in effect, change our internal systems that were not designed for purchases of large numbers of financial assets over a very short period of time.
YPFS: Sure. How much of this was done at home versus having to be there? I mean, at this point, it's lockdown phase.

Rosengren: Yeah, and as you may recall, Boston was one of the worst-hit areas initially, in part because we had a couple of drug companies that decided to have conferences right at the end of February, beginning of March. At that time, there was no vaccine, there was a lot of uncertainty about how the virus was transmitted. We actually had 60 people at the Boston Fed working in the bank when everybody else was able to work from home.

That was a concern, because there was a safety concern for the employees, particularly given the lack of knowledge about how the virus was transmitted and the fact that there was nothing you could do to mitigate the risk with vaccines. But fortunately, nobody who participated in the facility, at least to my knowledge, got sick while they were in the building and dealing with the facility. But it was quite an effort by the employees who were being asked to put in very long hours and relatively narrow proximity at a time when being close to people was not well understood how dangerous that could be.

YPFS: Sure. You mostly preempted my questions on the SPV structure. I assume this is also answered, but the MMLF was uniquely structured as a credit guarantee from Treasury as opposed to an injection of funds. Is that simply because it was not an SPV? That they sent over part of the funds, but it was structured as a guarantee?

Rosengren: I think they understood that it had to be set up really quickly and that we couldn’t afford more than two or three days, or it wouldn’t have been useful to do the facility, the markets would have had serious problems. I think the different structure was in part because it truly was an emergency facility, which couldn’t have all the legal niceties if it was going to be effective. A couple more comments on that SPV structure: it’s partly transparency, it’s partly negotiating the waterfall with the Treasury about exactly how the payment streams get split, and what happens when things go wrong.

As I mentioned, it really slows down the process. If you could directly purchase assets so you didn’t use a SPV structure, you’re actually able to do it much more quickly. The New York Fed had a bunch of SPV structures, but they didn’t start purchasing assets for four or five weeks, sometimes longer. The good news is that the announcement that the Fed was willing to buy assets brought in the spreads. If it was a situation where it was important to actually purchase the assets rather than stating intent to purchase the assets, those SPV structures would have seriously hampered how we could have responded.

I think in part because financial markets have been trained through the financial crisis that when the Fed said it was going to purchase an asset, it brought the spreads in on the announcement, made that less of a serious
problem, but I do think it would make more sense to have the same level of transparency, but not the SPV structure so that you can make direct purchases in a crisis up to a prescribed amount.

It would be much more efficient, you would not have to spend a lot of time spending money on law firms and would be able to get the facility up and running much more quickly. But to my knowledge, there was no serious thought process that the Fed could do direct purchases rather than go through this more cumbersome structure.

YPFS: *Just speaking to the level of emergency, one example, and it's probably most closely analogous to the MMLF, would be the CPFF. Like you alluded to, it was about a month between announcement and first purchases. You think that would have been detrimental to the MMLF if that had been the case?*

Rosengren: Yeah. For the MMLF, you're trying to stop a run, which is different than trying to bring spreads in. Now, stopping the run was going to bring the spreads in as well. Money market funds were big purchasers of CDs, commercial paper, asset-backed commercial paper, a variety of short-term financial instruments. But with the money market funds, an announcement alone doesn't stop a run. It's a little bit different than promising to purchase assets to lower the cost of funding. The commercial paper facility was basically a facility to bring in spreads. The money market facility was really a facility to stop a run. The motivation is a little bit different. I'm not sure announcement effects alone are sufficient if you're already experiencing a run on the asset class.

YPFS: *Okay, great. The other thing that happens in 2020 is you get a second facility at Boston, which is the Main Street Lending Program (MSLP) facility. Before we get into the details of that facility, in particular the small and midsize enterprise (SME) lending, just what was that like versus the MMLF? It's a little bit different where the Treasury money came from—you have CARES Act funding in the MSLP. Obviously, it's a new facility you guys are running as opposed to a modified version of an old one. What was that experience like of standing that one up next to the old facility?*

Rosengren: The biggest challenge was that there was not complete agreement between the purpose of the facility between Congress, Treasury, and the Federal Reserve. The funding had come through the CARES Act, but it had not been particularly specific about exactly how to use the Treasury backstop. That facility, from the perspective of the Treasury, was not necessarily intended to take very much risk. The Treasury secretary and staff were very focused on trying to set up the facility very much like a loan participation market that would primarily have been a conduit for the largest banks that were used to loan participations.
The Federal Reserve was far more focused on having a broad-based facility that would have a macroeconomic impact with the focus being on the fact that a lot of people were employed through small businesses. As a result, only using a facility that would be helpful to the largest institutions probably would not have the same economic impact as making it much broader. The result was you needed both the Treasury and the Federal Reserve to agree to the facility. There was a call at 4:00 every day between the Treasury secretary, the chair of the Fed, [Governor] Lael Brainard—who did a lot of the work on the facilities—and, when it was about Main Street, myself, trying to negotiate the terms for the Main Street facility.

Since there was such a divergence of views, what we ended up with was, in effect, different facilities. Some of the facilities were basically facilities closer to what the Fed wanted, and some of the facilities were closer to what the Treasury wanted. But the Treasury was quite adamant that they wanted a structure that they thought would not have a moral hazard problem. In particular, they didn’t want to be bailing out people that already had exposure. They wanted primarily to be focused on new lending.

There was a lot of concern about subordinated interest and whether the facilities could be gamed by organizations that were using it as a backdoor bailout rather than a way to get new credit to the market. If you look through history, there were a lot of term sheets, and the term sheets kept changing. Each time there was a term sheet, first of all, there would be weeks of negotiation to get the term sheet. Then we would go out to the banks and ask them what was feasible and what was not. Sometimes, we would go out to the borrowers. If it was focused, for example, on the nonprofit sector, we spent a lot of time talking with hospitals and other nonprofits, about whether they would use the facility and what interest and fees were feasible.

Because this was such an experimental facility, between the different views of why the facility was set up and the different views of participants about whether they wanted to participate, I would say the large banks disproportionately impacted how things were structured, even though, for the most part, the large banks did not participate particularly actively. When the Treasury consulted with banks, they primarily consulted with the largest banks in the United States. We had a facility designed for large banks that was only used by small banks that were not used to loan participation agreements, that were not used to a lot of the legal structures that were being used.

As a result, it was very complicated to get smaller banking organizations to truly understand what the nature of the position was. As a result, it took quite a while to get banks and borrowers to start using the facility. The negotiations began in the spring, that facility didn’t go at least partially live until July. It didn’t really get extensively used until September. So, it was a really long lead time to get it set up.
Operationally, it was far more complicated as well. Our original vision was to try to automate the process. We had hired some vendors to focus on having an automated submission of these various loan documents. But one of the stipulations by the large banks was they wanted to use all their own documentation. Well, when you use your own documentation, every bank has its own loan agreement. These are not like a bond deal, where there’s a lot of structure and almost all the legal work is very similar across deals. Each loan agreement is a bespoke kind of agreement between borrower and lender, and different banks have very different ways of accepting collateral and different financing requirements.

As a result, it became almost impossible to automate, because we were getting very specific loan contracts, and we needed lawyers to evaluate whether or not the contracts that the banks were using were consistent with the program. The banks were less concerned about whether it was consistent with the program and more concerned about it being consistent with the loan structure that they were most used to. Some enterprising banks got quite creative about how they could alter some of the terms of their contract to make it particularly attractive for the bank and not necessarily for the borrower.

We ended up not only having to hire a substantial number of lawyers at the Boston Fed, but we outsourced to a variety of law firms that were tasked, once these loan documents came in, to read through all the legal work, many of which could be hundreds of pages long, and make sure it was consistent with the criteria for the program.

The way to think about the MMLF is it was much more of a standardized product. As a result, much easier to streamline. Because bank loans are created—in part because banks don’t want a streamlined process, they want a specific contractual arrangement between borrower and lender—the MSLP didn’t lend itself to the same kind of scaling.

It became a very complicated program to implement and was of a scale that was much more substantial than I think any of the other facilities. In addition, there were, in effect, a variety of different facilities within that one facility. Some of the facilities were designed in part depending on the level of subordination and whether borrowers were pari passu or not. As a result, we ended up not implementing one program, but having one for nonprofits, one for businesses, and the businesses had a variety of different permutations. A lot of that was created in part by the Treasury/Fed negotiations, which, in effect, took five to six months to negotiate.

YPFS: Yeah, there’s a lot there that’s very interesting. We’re thinking about SME assistance ourselves here at YPFS now, because it became center stage during COVID, because of the uniqueness of the crisis. You gave a speech when the MSLP closed, talking about how you would have changed the
facility. The Fed announced its intention to create a Main Street facility before the CARES Act.\textsuperscript{3} It didn't have a name or a term sheet or anything, but the Fed said, "Okay, this is coming." Then the CARES Act passes, and obviously that expands what the Fed can do, but how is the Fed thinking about this type of assistance going forward?

There's not really an announcement effect. You don't get the backstop effect. You have to look at the volume, and volume was pretty low, rising slightly at the end. Obviously, there are all these complications. How's the Fed thinking about it? Is it wargaming the structure? Is it going to try to avoid it in the future? How were those conversations after it was closed?

Rosengren: I don't think a loan participation program where the documentation is specific to the banks and borrowers would be the way that you would necessarily design a program in the future. Unfortunately, once the facilities are closed, nobody tends to look at what went well and what went poorly. After the financial crisis, when the pandemic started, many people with the New York Fed who had been involved previously, were no longer there. There were a lot of people at the New York Fed reading old New York [Economic Policy] Review articles, trying to remember how these things were structured. I think that, unfortunately, it will be true again next time in that I don’t think there is very much of an after-action review once the facilities are done and thinking about ways that these things could be implemented much more efficiently in the future.

If you insisted on, for example, an SPV structure, you got to have a standing SPV structure so that you didn't have to do all the legal work starting from scratch. Or you could think of other ways that you could do direct purchases that wouldn’t require the SPV structure at all. In terms of a lending facility, I think using the tax code and, in effect, giving rebates to previous years’ taxes might be a much more efficient way to get funds to businesses than the way we were doing it. In particular, we were asking a lot of small community banks to, in effect, try to get borrowers from large banks that didn’t want to participate and get familiar with a program that they didn’t understand.

Working through the banking system also had challenges. The [Paycheck Protection Program] PPP program worked because it was a grant program, and the banks were doing very little other than shuffling paper. But asking banks to be participants, even though it was a very small loss exposure—and, particularly given the revenue stream, they were doing quite well—it wasn’t until November, December that most of the banks figured that out.

\textsuperscript{3} Federal Reserve Board of Governors (FRB), "Federal Reserve Announces Extensive New Measures to Support the Economy" (2020). Documents. 574. https://elischolar.library.yale.edu/ypfs-documents2/574
As a result, volume was picking up quite a bit as they started to figure out that actually, these were going to be reasonably profitable programs for the banks. But by that time, the Treasury was trying to get the program to be reduced and to close. I don’t think you would want to structure it this way. I think having not much direction from Congress, and a very different viewpoint of the Fed and Treasury makes it very unlikely that you would do things quickly or efficiently.

YPFS: What about the prospect for asset-backed loans in the future? I mean, presumably, in theory, you can go without money from the Treasury at that point then too. How much thinking was done around asset-backed SME lending, and is that something that seems conceivable in the future, if it was needed?

Rosengren: The Treasury didn’t want to bail out people with existing assets. Given what the Treasury was willing to do, it was going to be very hard to structure an asset-backed facility that didn’t have, in effect, a refinancing aspect to it. As long as the Treasury was adamant that that was the criteria, it wasn’t feasible. We actually did spend a fair amount of time thinking about different asset-backed facilities. We did have proposals that were put together, but because of the disagreement with the Treasury about what the purpose of the CARES Act program was, we were not able to get agreement.

If you look at the facilities that did get accepted, they were not meant to be refinance facilities particularly. That was by construction; the Treasury didn’t want them to be structured as refinancing. The larger bond facilities and the facilities run by New York were very effective because they allowed every very large borrower to refinance at dramatically different rates. But because the Treasury was afraid of losing money and was afraid that the credit risk for these [loan refinancing] borrowers was much greater, they didn’t want to have it be a refinancing facility.

As a result, small businesses are disadvantaged relative to large organizations. If you regularly have the kind of crises we’ve had these last two times, the implication would be that there would be a cost of credit advantage to large institutions that small- and medium-sized institutions did not benefit from. But the Treasury did not seem to be worried about that discrepancy.

YPFS: Sure. What were the marching orders, if any, to your supervisors, and supervisors across the system, with respect to these loans? You mentioned, I’m quoting you here, you said "a little more leeway" when talking to the Congressional Oversight Commission. When it came to supervisory assessments, you analogized it to supervision in the wake of natural disasters. What were the marching orders, if any, to supervisors?
Rosengren: For the MMLF, there was an agreement among the regulators about how to treat the MMLF. For the Main Street Lending Program, [Federal Reserve Board Vice Chair for Supervision] Randy Quarles had not been as successful at getting the other regulators on the same page. There were different views about how these things should be classified among the various federal regulators that never got completely clarified.

YPFS: Okay, interesting. Was there then a distinction between regulators, or did they all go to the common denominator?

Rosengren: Banks seemed to think that there were differences across regulators.

YPFS: Okay. Sure. One other thing that is particularly unique with the MSLP was—and is—the prospect of borrower defaults. This is a different animal than A1 paper or something like that. It’s my understanding there was some coordination with the New York Fed, given they were thinking about managing assets with respect to one or two of their facilities. What was that thinking like? Were there vendors ready for workouts? Were you guys ready? Was the plan to outsource it all? In the event the MSLP got huge in particular, this could have been an issue.

Rosengren: Yeah, the default risk for this facility was different from the other facilities. If you’re mostly dealing with high-quality paper or high-quality borrowers, unless it’s truly a catastrophic event that doesn’t subside over time, more than likely, these will be the areas of the market least likely to sustain losses. But with the Main Street Lending Program, we were lending to people that banks didn’t want to lend to without a guarantee from the government that was quite substantial. Some banks didn’t want to deal with guarantees, because they were afraid that the terms would change over time.

Other banks, many of them smaller, didn’t understand that risk maybe. I think there was a high degree of uncertainty about how resolution was going to occur. In fact, there were lots of negotiations with Treasury about: Were they going to just take over the SPV? Whether the SPV would continue to be under the Boston Fed? Who was going to manage the SPV?... This was not an area that Treasury quickly came to an agreement on. There was a great deal of uncertainty. We, in effect, hired people to help us with the workout decision-making.

We don't have a credit shop normally; we're not doing commercial loans normally. Many of these loans are to small borrowers with very little collateral. In the event that they can’t pay, there’s not a whole lot to collect from many of them. While we spent a lot of time with that, I think right up until the end of the facility, there was a great deal of uncertainty about how to manage it after closure. It would have been much better if there had been more clarity about
how problem loans were going to be managed. There really wasn’t much clarity developed.

YPFS: Losses have been low thus far throughout the life of the facility. One thing that went under the radar was a huge adjustment in the accounting. I don’t know if you have any insight into that, but the loss allowance rate shot up 10 percentage points towards the end of 2020. To date, losses have been very low, but the expected loss rate has remained high. I don’t know if you have any insight into why that change occurred.

Rosengren: Another area of negotiation was how much information could we collect from the borrowers. The Treasury wanted to have very few bits of information collected. We wanted a fair amount of information so we could evaluate the quality of the loan and come up with a loan loss reserve. Like everything else, that was negotiated, so we didn’t end up having very many variables. Many of the borrowers and many of the banks were very, very slow at providing any details once they got their money.

The result was that we had very little information to establish a reserve until they had to start making payments, because the terms were such that there was a deferral at the beginning of the loan. So, we were both collecting virtually very little information about the borrower, and the borrower could be current without paying a cent. As a result, evaluating the true quality of the loan portfolio was very difficult to ascertain until they were contractually obligated to start making payments.

The other thing that was quite uncertain was what was going to happen to the economy. It wasn’t clear what the fiscal policy was going to be, and obviously, there was a lot of money expended by the federal government. But that was not certain at the beginning stages. In addition, at the outset of this program, it wasn’t clear we’d have a vaccine. The progression of what happened with the pandemic would have been quite different if it got more contagious and more deadly, rather than having a vaccine that provided substantial mitigation relative to what it might have otherwise been.

So, coming up with a loan loss reserve... Basically, as we started getting information from banks and borrowers, we started having a lot more information about whether or not they were likely to pay. But because we hadn’t required more information to be collected, it was still difficult to get an accurate estimate of losses. And, to be honest, for most relatively small business loans, banks only collect financial information annually. Annually doesn’t give you much information, particularly when you’re not paying anything in the first year.

So, there really was a dearth of information. I think the changes that you’re seeing in the loan loss reserve are reflecting how, as we started getting
information from the banks and borrowers, and as we started to get far enough into the loan that people actually had to make payments, we got a much better idea of what the likely payout would be.

**YPFS:** That's great. In the short time we have left, I wanted to get your thoughts on financial stability policy more broadly. Ahead of the pandemic, you were warning about commercial real estate. Obviously, that was a volatile area in the pandemic. If you have any thoughts to update in that space, I'd be interested in hearing them.

Then I also want to talk about bank dividends. I mean, I know that's ultimately a Board decision, not an FOMC decision. You gave an oft-cited speech post-2008 demonstrating the role that bank dividends maybe had in some of the under-capitalization issues of 2008.\(^4\) In 2020, there were some restrictions on capital payouts. But again, no dividend restriction, aside from a cap on total amount, which was effectively non-binding for most. If you could offer your thoughts on those two things or any other financial stability considerations today.

**Rosengren:** Let me start with the bank dividends. There was a strong push at the Conference of Presidents\(^5\) to stop payment of bank dividends. If the federal government has to get involved by creating various facilities, it struck almost all of the presidents that that was a situation where you were not confident that banks would provide loan supply to the degree necessary and that dividends should be stopped until the facilities were no longer needed.

**YPFS:** You say the Conference of Presidents, was this a specific meeting or are you talking generally among the presidents?

**Rosengren:** It was a discussion at several Conferences of Presidents meetings, but there was not support at the Board. So, it didn't go anywhere. But my personal view is still that we should have stopped dividends as soon as we set up facilities. If you have a 13(3) facility, you probably don't need to be having money go out the door of banks through dividends. I think it was a mistake not to cut off dividends when it was determined that 13(3) facilities were actually necessary. If you think there's plenty of loan supply, you don't need a Main Street lending facility.

The reason the Main Street lending facility was designed was that there was a real concern that banks were going to be unwilling to lend during the

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\(^5\) "The presidents of the Federal Reserve Banks are organized into the Conference of Presidents, which meets periodically to identify, define, and deliberate issues of strategic significance to the Federal Reserve System; to consider matters of common interest; and to consult with and advise the Board of Governors." https://www.federalreserve.gov/publications/2020-ar-frs-organization.htm
pandemic. If banks are going to be unwilling to lend, the first thing you want to do is for them to accumulate capital so that they have an incentive to lend. It was a very weird set of circumstances, exigent circumstances that require you to do the role that a bank normally does but say that the bank has more than enough capital; that did not make sense to me. It just seemed like a serious disconnect between policy tools. I still think that it was a serious disconnect. And there were a bunch of subtle changes made to the bank supervisory process to, in effect, make it easier for banks to lend.

But if you're changing your regulations to make it easier to lend, then again, you're worried about loan supply. I think during a time of crisis, it makes a lot more sense to suspend dividends. As long as the crisis ends up not being severe, they're able to issue dividends once things have normalized, and they can either have a higher dividend or do share buybacks.

There were a lot of changes made to the annual stress test during this period, almost all of them are in favor of the banks. I guess my own view was there probably should have been a different bank supervisory process and bank regulatory process during the pandemic.

YPFS: What stress test changes did you have in mind? I mean, just the lower unemployment shock and things like that that were incorporated? Or are you talking more about structural regulatory changes that exist to this day?

Rosengren: The countercyclical capital charge is currently at zero. We're at an elevated risk of having a recession; we'll see if we have a recession or not. Most other countries have a countercyclical capital charge much higher than zero. Most other countries lowered the countercyclical capital charge during the pandemic; because ours was set at zero, we didn't have the ability to lower it. There are not that many countercyclical macro policies that we actually can do. The easiest one is the countercyclical capital charge, but we've continued to keep it at zero.

We don't have the same process that the Bank of England has to really think through financial stability issues and think about whether this is a banking sector problem or non-banking sector problem—and how we can be sure that there are sufficient buffers, that we can moderate some of the shocks that are occurring. My own personal view is that the Bank of England has a much more integrated process, and too much of the United States's financial stability [policy] is really just too-big-to-fail rules.

I actually think the US is a laggard relative to most other countries in thinking through what financial stability really means in a macroeconomic context. Part of the problem is that the Treasury doesn't really have the responsibility. People think the Fed has the responsibility, but it doesn't have the legislative
authority to deal with financial stability issues. As a result, most of the financial stability actions are very different in the rest of the world that they are here.

**YPFS:** Well, we have just about a minute left. Any other broad takeaways for future crisis fighters, takeaways from your experience? Anything else you want to put on the record before we go?

I mentioned commercial real estate or real estate, if you want to mention that too.

**Rosengren:** Yeah, I will. When you look around the world at financial stability problems, one of the major asset classes that banks hold is real estate. If you’re worried about a real significant financial stability problem, it probably involves loss of collateral valuation. In most countries, that’s real estate. I do think there’s probably not enough time spent thinking about how the real estate, and collateral, and financing all fit together in a crisis. Many of the banking crises and nonbank crises have a significant real estate component to it. That is an area where, in the long term, there should be more research.

**YPFS:** All right, great. Anything else? Final thoughts?

**Rosengren:** I think we covered quite a variety of things.

**YPFS:** Well, that’s great. We appreciate your time. Thanks so much. This was a great discussion.

**Rosengren:** Okay, good talking with you.