Yale SCHOOL OF MANAGEMENT
Program on Financial Stability

Lessons Learned Oral History Project Interview

Interviewee Name and Crisis Position	Kevin Stiroh[1] Head of Financial Sector Analysis Supervision Group, Federal Reserve Bank of New York
Interviewer Name	Mercedes Cardona (Contractor) Yale Program on Financial Stability
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Introduction:

The Yale Program on Financial Stability (YPFS) contacted Kevin Stiroh by email to request an interview regarding his time as head of the Financial Sector Analysis Supervision Group at the Federal Reserve Bank of New York (FRBNY) during the Global Financial Crisis (GFC) of 2007–09.[2]

Stiroh is a leader in the realm of macroprudential policy frameworks, which look at the health of the financial system as a whole, rather than on a firm-by-firm basis. He was a leader in the design of the Supervisory Capital Assessment Program (SCAP), the "stress test" for the banking system, which aimed to determine banks' ability to weather the losses during the GFC by assessing the strength of their capital levels. In the aftermath of the GFC, members of the FRBNY, including Stiroh, drafted a report on systemic risk and bank supervision,[3] in which they lay out the lessons learned from the crisis and their recommendations.

In February 2021, Stiroh transitioned from the FRBNY to a leadership position with the Federal Reserve Board where he leads the system's supervisory work related to the financial risks of climate change and chairs the Supervision Climate Committee, a newly formed System-wide group that will build the system's capacity regarding the potential impacts of climate on financial institutions, infrastructure, and markets.

[*This transcript of a telephone interview has been edited for accuracy and clarity.*]

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[1] The opinions expressed during this interview are those of Mr. Stiroh, and not those any of the institutions for which the interview subject is affiliated.
[2] A stylized summary of the key observations and insights gleamed from this interview with Mr. Stiroh is available in the Yale Program on Financial Stability's *Journal of Financial Crises*.
[3] "Federal Reserve Bank of New York: Report on Systemic Risk and Bank Supervision." August 5,2009. Available at: 2009-08-05 FRBNY Report on Systemic Risk and Supervision Draft.pdf (windows.net)

Transcript:

YPFS: **If you have any disclaimers or any caveats that you want to share about whether these opinions are your own, or anything along those lines, this will be a good time.**

Stiroh: Well, everything I say will be my own opinion, and not necessarily that of the Federal Reserve Bank of New York or the Federal Reserve System.

YPFS: **Since this is an oral history, let's start with a little narrative. Can you tell me a little bit about what you were working on as the Global Financial Crisis developed? What were the priorities in your area, in late 2007 and 2008 as the Global Financial Crisis was brewing?**

Stiroh: I'm an economist by training, and, at the time, I was in the research group at the New York Fed, working on topics related to banking and finance and to economic growth. Then I left the Fed in the fall of 2007 to work on Wall Street. That was an interesting time to leave the New York Fed, ahead of what turned out to be a great financial crisis.

I went to be an equity analyst, and during the rest of 2007 and 2008, several of the firms that I was covering as an equity analyst failed, and my portfolio effectively went away. I returned to the Fed in the fall of 2008, so I missed a big chunk of the financial crisis through the first three quarters of 2008 and returned, in part, to try to help contribute to the next round of work to support the Fed's mission.

YPFS: **From your vantage point, when were you seeing the first signs of the housing bubble? When Bear Stearns collapsed in early 2008, were the signs already clear that there was a coming crisis?**

Stiroh: At that point, I think, yes. Prior to my departure from the New York Fed, there had been work understanding what was going on with securitizations and credit derivatives and the originate-to-distribute model—and what that was doing. There was quite a bit of internal discussion about what was happening in housing markets around the United States.

Then I went, as I mentioned, to work as an equity analyst, and part of my portfolio included the government-sponsored enterprises and some mortgage-related banking firms. So, we did a lot of analytical work, trying to understand what was happening in the housing sector, what was happening with housing prices, the ability of consumers to repay. It became increasingly clear during that time—that would have been through early 2008—that things were much worse than we would have forecast or predicted a year earlier. Then by the fall, with the GSEs and Lehman Brothers and AIG, it was pretty clear that things had reached some sort of a head at that point.

YPFS: **Were you back at the Fed when Lehman collapsed and the stock market crashed in September (2008)?**

Stiroh: No, I was still working on Wall Street at that point. I don't remember exactly, but I returned to the Fed sometime around October, after the Lehman events.

YPFS: **And what was the situation back then? This was also the final days of a presidential campaign. Just how complicated was the situation, as you were also looking to a potential transition?**

Stiroh: So, for me, it was very different because I had been at the Fed pre-crisis and now I was stepping back in right in the middle of things. The entire operating environment, the working environment, was different. The cadence of meetings, the subject matters, the urgency, the questions.

One example I remember: Within the first week or so, maybe the first two weeks of when I returned to the Fed, I got a phone call from a colleague who said, "Can you help on a project?" So, of course I can help on the project. What was different though, is the phone call occurred Friday night, and the colleague said, "Okay, I need you to be in the bank tomorrow morning at eight o'clock to begin the project." And that just didn't happen prior to the crisis. So that was an example of the way the work environment was just completely different.

YPFS: **You said you have been through multiple crises. So, when was it clear that this was not just an economic cycle, that this was going to require some significant measures?**

Stiroh: At that point in the fall of 2008, there had already been a series of emergency interventions, both firm-specific and in terms of development of liquidity facilities. That was all in the public domain. I wasn't involved in the development of any of those liquidity facilities, but I did step in and work on some of the firm-specific issues. That had never happened, where there was that level of intervention with global financial firms of that scale. So that was completely new to me.

YPFS: **Speaking of interventions, you had a leading role in sort of the effort on building the first bank stress test. One of your colleagues said he walked into his office and found a stack of bank examiner credentials on his desk, and that's how he found out he was going to examine banks. How did you become involved?**

Stiroh: At that point, I was working as an economist, helping out on a number of different projects. And some of my colleagues in research had already started work, trying to scale what the potential losses to the banking sector would be. I joined that effort that was already underway.

I had some modeling experience, banking and finance experience, partly informed by my time as an equity analyst, to be able to build firm-specific models. So, I collaborated with my colleagues in research and began thinking about, well, in certain scenarios, how bad might the losses be? How did that compare with the available funds that the US Treasury had provided? What does that mean about the health of the banking system?

That was really the prototype, the initial version of the scenario analysis that eventually became the Supervisory Capital and Assessment Program, the SCAP. That was the first formal stress test that we did and completed in the spring of 2009. So, for the better part of the fall of 2008, winter, and spring of 2009, we were working full-time on trying to gauge what the cumulative impact on the banking sector might be.

I'll also mention that during that time, I spent a few weeks during the transition in Washington, working with colleagues at the US Treasury. So, that was a fascinating experience in part of the full-government response.

YPFS: **How much of that sort of inter-agency collaboration had you seen before? Was this a new development, the closer communication channels between agencies?**

Stiroh: I don't know if it was a new development; it was new to me. I had been in different roles—largely in research before that—so I can't really speak to whether that kind of collaboration happened at that scale in other situations or in other financial events. But I remember working very closely with colleagues at the Treasury, at the FDIC, at the OCC, at the Fed jointly, thinking about, "What are the potential range of adverse outcomes for the banking system, and how might policy respond to them?" There were a number of meetings in Washington with colleagues from all the different agencies, thinking of ideas, brainstorming, developing pros and cons for policymakers to evaluate.

YPFS: **How important was that sort of cross communication, cross-pollination to formulating the responses?**

Stiroh: I think it was very helpful. The different agencies had different skillsets; to some extent, they might've had slightly different perspectives, or even agency objectives, but putting people together who brought the different experience I think was enormously valuable. Thinking just about the stress-testing work that we developed primarily through 2008 and the first half of 2009—we would have bank examiners, financial analysts, economists, accountants, lawyers, and communications people, all working together to think through these really complex problems. And for me, that was one of the big lessons—

that you need that kind of multiple, diverse perspective to really be able to address complex problems.

YPFS: **Some of the other people that were involved in the bank stress test said one of the problems in the beginning was getting information. And as an analyst, you probably know this better than most. Was that a problem, the fact that a lot of the data on banks was supplied by the banks themselves?**

Stiroh: We had lots of data; I think the challenge was to make sure that we had the right data and consistent data, because one of the core insights from the stress testing regime was the ability to do consistent horizontal assessments, looking at a range of firms, using the same metrics, using the same data, using the same methodologies.

A first step of the stress test was to gather that data in a consistent way. So, there were templates that were built, and "we need X, Y, and Z data"—you never get that right the first time. There'd be questions and clarifications, and you'd go back. Building that core set of common data was, I think, critical to being able to do the credible cross-sectional analysis that we ended up doing. And, of course, that then became a central part of the subsequent stress-testing regimes, where there's now formal regulatory reports that capture data in a consistent way and inform the stress testing that's mandated by the Dodd-Frank Act.

YPFS: **You were in the team that prepared the 2009 report on systemic risks. It was pretty critical of what happened before the crisis in terms of the regulatory framework, how it relied too much on the banks to self-correct, that the information didn't flow quickly. What improvements or policies came out of this report or analysis that may have informed the future developments? Have developments been successful, or do we still have some policies and some supervisory functions that need improvement?**

Stiroh: I'll take a bigger, broader perspective on some of the lessons learned about supervision, and how we interact with firms. I think one of the things we learned is that a horizontal perspective is incredibly valuable, and that got built into the subsequent supervisory regime for the largest banks.

The second thing we learned was that we needed to take a broader financial stability perspective to think about how firms interact with each other and with financial markets, for certain financial assets, and how the cumulative systemic effects might be different from what is observed for any individual firm. And that was incorporated into the Board of Governors' approach to financial stability assessment and analysis.

And the third thing we learned was the value of multiple perspectives: that it really does help to have people who think about problems in different ways working together. And that particularly for complex problems, when there's uncertainty, it makes solutions to those problems more robust than they would be in isolation. All of that has gotten built into the infrastructure of how the Federal Reserve does supervision, both for financial stability purposes and for microprudential purposes.

YPFS: **In your symposium speech from 2018, you talked about how the financial firms were becoming a herd, and how it could disrupt the system if they suddenly felt a shock. Is there a warning there that we still need to adjust the financial system's view of risks before the next crisis, which we are experiencing right now with the COVID recession?**

Stiroh: So, I think the current experience with COVID has been very interesting from a policy perspective. You think about how the banking sector fared, what role it played in the economic impact of what has been a massive shock to the economy, a massive shock to public health first and foremost. What we've seen is that the banking sector has been able to dampen shocks—at least the COVID shock—rather than amplify them. And that reflects, in part, the greater resilience that banks built up over the last 10 years since the financial crisis. The banking industry entered the COVID period with strong balance sheets in terms of capital and liquidity, stronger earnings potential and business models, and that positioned them well to be sources of strength for the economy, rather than sources of distress.

I'm sure the economic and financial outcome would have been much worse if we had had a banking crisis in 2020, the same way we did in 2008. One of the reasons we didn't was because of strong steps from the official sector, both in the US and globally, to support the financial markets and to support financial institutions during this period. Those two pieces together [the strength of the banks and the official response] led to a financial system that did not amplify the initial adverse shock that came from COVID.

YPFS: **Many features of this COVID pandemic, like the uncertainty and the job losses are mirroring what we saw in the Global Financial Crisis. Are there any specific lessons—beyond banking—in the greater economic, macroeconomic arena that were learned in the Global Financial Crisis that are sort of germane to the current economic response?**

Stiroh: Focusing on some of the steps that the central bank took, I think there were clear lessons that were learned from the financial crisis in 2008 and 2009 about the way to structure and roll out, communicate and execute the different programs to provide credit and liquidity support for the economy. There was also recognition that this shock was different in the sense that it didn't emanate from a financial system that had a deep weakness due to the assets that it held and the credit that it was exposed to. So, credit goes to those folks who worked on the facilities during the COVID period to know to learn the lessons from the earlier crisis, not just to try to do exactly the same thing, because it was a different crisis. I think when we look back, history will say that the intervention from the Fed, those who worked on the facilities, had a meaningful, positive impact.

YPFS: **Some argue that the GFC showed that there was a lack of regulation with respect to shadow banking, and now we've seen gaps in the tools to support individuals in the economy, like the Paycheck Protection Program. What actions can policymakers take to become more aware of such gaps in the policy framework?**

Stiroh: Some of the issues you raise are fundamentally important questions about supporting businesses and individuals in the real economy. Those types of transfer programs are not typically within the remit of the central bank. They are more of a question of fiscal authority; I haven't really worked on those issues, so I don't think I'm best positioned to comment on them.

YPFS: **That wouldn't be somewhere where the Fed could have exercised a little more control or have created tools to help homeowners? Or is that, as you say, outside of their remit?**

Stiroh: So, I think that's the question—where do you draw the line between the roles of the central bank in monetary policy and financial stability, versus the role of the fiscal authority? And that's really a decision that's made by Congress and policymakers.

YPFS: **The issue of the political priorities, the economic priorities, and the policy priorities becomes a much more complicated issue.**

Stiroh: Absolutely.

YPFS: **If you were to write a memo to your younger self, what would be the key points on your PowerPoint to keep in mind for future crises?**

Stiroh: From my experience during the financial crisis, one really important lesson is that sometimes it's helpful to not debate whether something will happen, but to think through what if it does happen. What might the implications be, and are there steps that could be taken now that would be no-regret steps that might be able to mitigate the impact of that bad outcome?

We spent a lot of time prior to the financial crisis talking about housing prices, and whether there was a bubble, or whether housing prices nationwide could fall a dramatic amount. You could have that debate at length, and we did. One lesson would be to not necessarily try to come to the definitive answer to a question like that, but ask yourself what would be the impact if your assumption is right, and if your assumption is wrong, and try to find steps to take that would be robust and effective across a range of possible outcomes.

A second lesson, which I mentioned earlier, is with respect to complex problems with uncertainty—which are almost all the big problems that you would face in that scenario—it is really helpful to have a range of views, to have multiple and diverse perspectives, different approaches, different tools, different experiences. That helps you think through intended and unintended consequences and come up with better, more robust policy advice that you can give to policymakers.

YPFS: **And how do you operationalize those things? How do you make them work in the real world? Are we thinking about tabletop exercises, symposiums, publishing papers? Is any of that effective in terms of getting the knowledge where it needs to be?**

Stiroh: I think all of that is effective. I don't think there would be any single silver bullet, but you can do a number of things to try to build your capacity. That would include tabletop exercises, different analytical tools that you can use to challenge yourself, whether it's different cognitive diversity exercises—pre-mortem exercises is one that we've used, where you imagine a bad outcome, and ask yourself: Now, what are the assumptions? What are the actions? What are the steps that might have led to that bad outcome? And what can we do about it now to prevent it?

I think you try to institutionalize this by bringing in people with different perspectives, you push outside your comfort zone, and bring people in with backgrounds and training, and experience that is complementary to, and not duplicative to, what you already have. And I've seen that happening in many places across the Federal Reserve, and I think it's a very positive development.

YPFS: **It sounds like challenging conventional wisdom would be one good place to start.**

Stiroh: Absolutely.

YPFS: **Is there anything else that I might have skipped that you'd like to add?**

Stiroh: Maybe just one other comment about my experience during the financial crisis. As I said, I was not on the official sector side through all of it, but for the portion where I was, probably the most remarkable feature was how committed the staff was across the system. There were people who were asked to do things they were never trained to do. They were asked to work nights and weekends under enormous pressure—both a time pressure, but also the pressure of knowing about the importance and the consequence of what individuals were working on. Never once did I see somebody complain or be unwilling to do what was asked. I'm sure we didn't get everything right, but the amount of effort and commitment to trying to achieve the public good was absolutely remarkable, and I think that's what I'll remember most about that period.

YPFS: **It sounds like a lot of people were asked to sort of go above and beyond what was the original remit and what they were hired to do. And it's important then when you hire people to these kinds of positions that they have the flexibility and the knowledge base to be able to do that.**

Stiroh: Exactly. You gave the example of the person who came in and found the examiner credentials on the desk, and I think that happened in numerous occasions. People were told to report to duty on this team, or for that project, or to work on this topic, and in some cases you had the background and the experience, and in other cases you learn from your colleagues. You ask questions. You supported one another, and people developed what was needed to answer the question of the day.

The stress-testing regime that we talked about, as I mentioned, built up from work by research economists in New York and at the Board and then morphed into a supervisory assessment that ended up to be pretty consequential as part of the official sector response. But none of us had learned in graduate school how to do a stress test. We thought hard, and worked hard, and worked with many of our colleagues, and jointly came up with the best approach that we could.

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