Farewell Christine Cumming

Among payments bankers, the reputation of Christine Cumming rests on her leadership of the modernization of Fedwire. But in a 35-year career at the Federal Reserve that ended in June this year, she also played a leading role in fashioning the response of the bank to financial deregulation and innovation, risk management and operational resilience. As Alexandra DeLuca discovered, when she interviewed her shortly before her retirement, Christine Cumming has not lost her zest for continuous improvement.

Christine Cumming did not sound like a central banker on the eve of retirement. The then still second-highest ranking officer, COO and first vice president of the Federal Reserve Bank of New York spoke with the energy and thoughtful, measured conviction of an economist still entrenched in the day-to-day life of the capital markets.

When *MI Forum* magazine caught up with her at 33 Liberty Street, she was no more than weeks away from concluding a career at the American central bank that stretches back more than 35 years. Yet she insisted there was still much work to be done on improving the financial system—and, characteristically, that the time to start it was never more propitious.

The excitement of real-time retail payments

Nowhere is that sense of urgency more evident than in her views on the American payments system. Fedwire—the real-time gross payments system operated by the U.S. central bank—fell within the purview of Cumming, in her capacity as chief operating officer. She believes the Federal Reserve has an important leadership role to play in

guiding the development of the entire payments system. *Strategies for Improving the U.S. Payment System,* a paper published by the Federal Reserve in January of this year, pointed to real-time retail payments (RT-RPS) as the priority. "I am very excited about that paper," says Cumming. "It was a wonderful effort within the Federal Reserve to ask where we need to get to in the United States. The idea that quickly rose to the top was something faster for retail payments than what we have today." The Fed had hired a consultant to examine alternative routes to a faster, more secure and more international payment system. The central bank is clear it wants an industry-led process of modernization. "It is exciting, and I hear people are eager to get on with this," says Cumming. "Hopefully there is going to be engagement and even some heat, a necessary by-product of producing light. Roll up your sleeves; figure out the pros and cons; and really talk seriously about which of these solutions seems to make the most sense. If there is a service the paper has performed, it is to get people to realize that the time is now, and that is very valuable. We are not alone in this." On a recent trip to Asia, Cumming joined a panel that

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discussed similar efforts in Australia, Japan, Singapore and Europe.

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Changing reality by putting ideas into practice

Where theory meets practice is natural territory for Christine Cumming. A fascination with the practical application of ideas was what drew her to study economics in the first place. She read the subject as an undergraduate at the University of Minnesota. “Economics sounded intriguing, partly because I did not know anything about it, but secondly because economists were described as applying mathematical models to the world,” she says. “I was really interested in how the world worked and how business worked. I was hooked right away.”

The university was a practical choice. As a native of Minnesota, in-state tuition totaled a whopping $125 a quarter. But, luckily if unbeknownst to her, the university also happened to be one of the leading schools for economics in general and econometrics - the use of mathematics to describe economic systems - in particular. “I was very lucky at the time,” she recalls. “The department had these forward-thinkers in economics such as Tom Sargent, Neil Wallace and Chris Sims, two of whom are Nobel laureates now.”

After earning her B.S., Cumming travelled to West Berlin on a scholarship. “My first big lesson as a student in Germany was watching the impact that U.S. news has overseas,” she recalls. “I wish it was possible for everyone in the U.S. to see how important what we do here is, and how necessary it is to lead by example.”

After returning to Minnesota for a year – a condition of the scholarship – Cumming identified an ideal place to lead by example, and in her chosen specialties of econometrics and monetary policy too. “The New York Fed was quite seriously at the top of my list,” she says. “Its mission, and the fact it was international-facing, was a huge attraction.”

She arrived in New York in 1979, as the reputation of the city had just begun to rise from its nadir, but nevertheless welcomed the challenge of starting a career there. “Minneapolis is a nice place to grow up,” she explains. “It is low crime, very clean and very homogenous. I was really interested in going to a big city that was diverse and more challenging—where everyone is not necessarily nice.”

Her first role was in the International Research Department. She covered Italy, which had a bank run late that year. At the time, monetary policy in countries such as Italy was conducted not by open market operations, but by direct quantitative controls on credit.

The Italian banking system was heavily cartelized, and an increase in official rates in 1979 did not translate into increases in deposit rates, leading to a flood of money from bank deposits into government paper. “The inevitable happened,” she says. “The Bank of Italy had to do a large intervention to fill the gap.”

By the end of 1979, the Federal Reserve was led by Paul Volcker, who squeezed inflation out of the system by raising interest rates as high as 20 percent in 1981, providing a stable foundation for nearly 30 years of expansion and innovation in financial markets. Cumming spent the first seven years of that remarkable period in International Research, a brief detour to J.P. Morgan apart, so she knows how ideas can change reality. "For a long time, that strong market tradition was beneficial to the U.S.," says Cumming. "One of our biggest exports was financial services, because we had open markets and sophisticated practitioners. Of course, the other side of our success is that we have a lot of legacy in the U.S. The early advantage meant we could rest on our laurels a little more than is desirable."

Combat the complacency of the pioneer

It is to combat complacency that Cumming urges innovation now. "At this point, it is important for us to have a vision of where we want to be in five or ten years' time," she says. "That is hard to do when our financial institutions have to meet the business and regulatory expectations of a post-crisis world. But, at the same time, the crisis is a tremendous opportunity for financial services firms to re-think how they serve their customers in the 21st century."

Her own experience of financial innovation stretches back to 1988, when she joined the International Capital Markets Group at the Federal Reserve. A new department, it focused on product and market innovation in financial services. In the retrospective light of the financial crisis, the work of the group on the use of cross-margining to help repo-dependent securities firms fund new financial products, and the unbundling and re-packaging of risks in the securitization and derivatives markets, reads oddly.

Of course, innovation sparked multiple mini-crises in the 1980s and 1990s. Cumming had direct experience of one when, after rising to vice president in 1992, she joined the domestic arm of the Bank Supervision department. She arrived at the tail-end of a commercial real estate-related banking contraction. "Up until then, it was me and the computer," she recalls. "It was concept and facts - nothing that led to immediate action. All of a sudden, I was in a job where you had to make decisions, and the institutions had to make decisions, which means you had to put something forward and it mattered. You could not dither. It was a great experience in decision-making - how you never know everything you need to know."

The crisis of 2007-08 put decision-making based on partial knowledge to the ultimate test. "My whole education had me thinking that we will never have another Great Depression," recalls Cumming. "We thought we knew how to prevent it. Of course that was completely and totally wrong. We had a Great Recession. The lesson is that we need to ask ourselves hard questions about our assumptions."

The questionable value of financial innovation

One of the hard questions prompted by the financial crisis was the value of financial innovation. "By the time we got to the financial crisis, we realized it was not all for the good," says Cumming. "Some of the things that people were worried about in the 1990s came to fruition. I wish we had understood more deeply what we needed to guard against. We saw the glimmers, but we under-estimated the cleverness of human beings adrift from their moral compass. We never contemplated people playing the type of games they played in the run-up to the financial crisis."

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Inevitably, the crisis has made it harder for the central bank to collaborate with the banks in the ways that it did in the 1980s and 1990s. “It has been more difficult to do collaborative work with the industry to understand how rapid change is reshaping risk profiles,” says Cumming. “Good collaborative work was done in the 1990s. The greater distance between supervisor and supervised entity that was necessary after the crisis makes that collaboration much harder. My own personal hope is that we can get back closer to the relationship in which there is learning on both sides of the table to manage risk in the financial system better. But I think we still have quite a way to go before we get back to those days.”

The value of modern risk management techniques

But Cumming reasons that something valuable did survive the rupture of 2007-08. This was modern risk management techniques, which she encountered for the first time in her role in Bank Supervision. “Risk management at that time was a new discipline,” she explains. “There were old risk management techniques, but no one saw how they fit together in a common framework. A lot of the approaches to measuring market risk and credit risk were being developed in the late `80s and `90s, when I was in bank supervision. It was very exciting to learn from the banks, the academics and consultants about how they were thinking of measuring those risks.”

Traditional measures of risk had a limited understanding of correlation. In fact, it was the sectoral measurement of risk that undermined the effectiveness of Basel I. Cumming helped to spur the decision to reshape the Basel regime in the late 1990s. “That second effort was successful, though it ran into problems created by the overlap between market risk and credit risk,” says Cumming. “We ended up in this grey zone, and it was not clear how you were accounting for risk in some of the credit instruments. That was where a huge amount of risk built up in the system.”

She learned about yet another aspect of risk when in 1999 she succeeded Stephen Cecchetti as director of research. It was an important job – she started to attend meetings of the Federal Open Market Committee - but Cumming says the thoroughness of the work of her two predecessors made it “the least hard job I ever had.”

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Unusually for a research director, operational risk became a major focus. The introduction came in the form of a research paper submitted to her on the effect of 9/11 on the payments system and financial markets. "Previously, we worried about hurricanes and snowstorms," she says. "We had not contemplated physical attacks. Today, we have to contemplate cyber-attacks and the sad thing is, of course, the nature of the threats is much more destructive than the weather."

Building a more resilient market infrastructure

One result of both the 9/11 experience and the research was a step-change in resiliency planning at the Federal Reserve. Its goal was to insulate the payments system and markets from disruption, not only through back-up sites and geographical diversification, but by measures designed to protect the health and lives of the employees of the Bank.

It was Cumming who extended the thinking of the Federal Reserve on operational risk still further, by introducing an operational risk programme. "Operational risk does not lend itself much to precise measurement, so making it more visible turned out to be very valuable," she says. "Risk events get characterized as mistakes, and there is a natural tendency to want to put mistakes in the shadows. But there is always a tremendous lesson to be learned from any risk event about how to improve."

That programme was singled out by the Federal Reserve as a signal success of the career of Christine Cumming, when the central bank announced her retirement in October last year. But she does not see it, or indeed any other single achievement, as her greatest personal success.

"When you are a central banker—unless you are Paul Volcker, Ben Bernanke or Mario Draghi—the large accomplishments are made up of many small accomplishments and it takes a lot of people to make those things happen," she says. "When you look over the sweep of time, there has been a tremendous amount of advance, and it was rewarding to be a part of that."