Christine M Cumming: Enhancing payment system speed, efficiency and security

Keynote remarks by Ms Christine M Cumming, First Vice President of the Federal Reserve Bank of New York, at the TCH Annual Payments Symposium and Business Meeting, New York City, 5 July 2013.

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It is a great pleasure to be here today to speak to you about the evolution of the U.S. payments system and the Federal Reserve Banks' role in that evolution. The views I express will be mine and not those of the Federal Reserve System or the Federal Reserve Bank of New York, although I will draw on the considerable work being done in the Federal Reserve on the future payments direction.

Without question, we are living in an once-in-a-lifetime period of change in the U.S. payments system. Payments providers are seeking ways to bring mobile technology to payments, an integration widely seen as a game-changer by payments industry participants. Person-to-person payments mechanisms have grown rapidly, and the potential for those funds to be immediately credited to the receiver could be another game-changer. Commerce increasingly integrates with a payments mechanism, especially as information about spending patterns are a source of value to firms and loyalty discounts and points become an important part of the business value proposition to customers. Indeed, rather than talk about a payments industry, we find ourselves talking about a payments ecosystem, a web of banks, service companies, alternative payments providers and commercial firms.

Some have called these developments a second internet revolution. End-user demands and new industry participants (i.e., non-banks) are driving innovation, with technology enabling faster processing, more convenience to users, and the extraction and use of valuable information that accompanies payments. As the term "second internet revolution" implies, these developments represent another instance of high levels of innovation, fueled by disruptive technology, challenging traditional business models. But this time, they are not just any business models – they are our business models.

How are end-users driving innovation? Let me mention my personal hypothesis: that we may be seeing fundamental change in the way households, small businesses and some merchants manage their finances. We're seeing trends in financial data and bankers are seeing the trends in practice: less reliance on debt and closer attention to cash balances to manage spending. Some nonbank e-wallet providers are facilitating the management of the points, coupons and discounts that have become an important source of value to customers and of customer loyalty for business. And those behavioral changes, if durable, could prompt major evolution in the traditional deposit banking model, which was built to meet a wide range of customer demands, but perhaps not these newly emerging demands. Those behavioral changes suggest that great business opportunity lies in addressing those 21st century customer needs.

The payments industry has demonstrated strong ability to innovate, but innovation often creates pain points, and we're hearing about them. Virtually all of the mobile, person-to-person or commerce-related systems are closed-loop. If the loops don't communicate, we fall short of the network opportunities that checks, debit and credit cards, and ATM cards offer. The tremendous potential in mobile lies in the eventual speed and quality of the end-to-end experience and in the security of any information on the device or in transit, tough challenges simultaneously to engineer. And beyond mobile payments, achieving the speed and general availability of faster payments seen or planned for in the United Kingdom, Australia and other countries requires tremendous coordination across the payments industry.

So, how does the Federal Reserve fit into this period of extraordinary change and challenge?

The Federal Reserve has long championed access, including nationwide connection, coordination, as well as the security, efficiency and resiliency of the nation's principal payments mechanisms. In light of the tremendous increase in payments innovation, last fall the Federal Reserve Banks launched a new strategic plan for Federal Reserve Financial Services. We're asking how our services may need to change to facilitate the direction of the payments market and how we could enable existing and future innovation by the payments industry. The Federal Reserve Banks are actively engaged in adjusting our planning, our product development and our resources to address innovation in the marketplace.

To do that, however, we need to build consensus within the industry around a broad direction, around the benefits of access and connectivity across the nation, and about understanding and managing the risks of new technologies and new business models that emerge.

What can the Federal Reserve bring to the table? First and foremost, we can convene the industry and, as needed, drive toward consensus. We can bring strong research and analysis to the table. We can synthesize the large volume of payments research developed by industry, think tanks, consultants and academics, as we've already done for ourselves, as well as provide research by Federal Reserve economists. We can analyze use cases, as we've done over the last six months. And to help shape the consensus, we can draw on the basic principles that have guided Federal Reserve provision of payments services over the postwar period: access, efficiency, security and resiliency.

Historically, the Federal Reserve's focus has been on the interbank clearing and settlement of payments, operating efficiency, such as the conversion from paper to electronics, technologies that extend and improve accessibility, and infrastructures and services that are robust to security threats. Moving forward our strategy maintains emphasis on those key areas, but expands our focus to the flow of a payments transaction from end to end, end-user to end-user. The vision is to make sure the core services we provide enable and encourage innovation among payments providers who serve the end-users at the two ends of the payment. The end-to-end view means that payment initiation and delivery of good funds to end-users in the future state need to be timely, cost-effective, safe and easy.

When we talk about timeliness and a faster payments system, what exactly does that mean? Speed of payment clearing and settlement is defined as the time from payment initiation to payment completion in final funds. In a world where many other countries are moving to payment systems that support near real-time payments from any bank account sender to any bank account receiver, the U.S. payments system is slow. Countries such as the UK, Australia, Mexico, Switzerland and Singapore have built or are building near real-time retail payment systems.

Is the need for faster payments in the U.S. a key gap in the payment industry that should be addressed? As we've discussed this issue with industry leaders, we hear that although end users don't demand this today, they will expect it tomorrow. The sentiment seems to be that a proactive approach to preparing for a real-time future is wise. And near real-time seems likely to be transformative to the transactions of daily life and work.

Notification of payment to end-users is an element of speed in payment clearing. End users increasingly expect near real-time informational features, which are lacking in payment mechanisms such as ACH and even in much provision of wire, but typically available with cards and certain non-bank innovator products. For credit transactions, receivers expect to be informed that good funds have arrived or are on their way. Transaction confirmation is expected by both the sender and receiver. If settlement is deferred, the sender's financial institution may need to send a message to communicate that good funds are on their way. A key question for the future is this: do notification and memo-posting suffice, so that funds actually move at discrete times in the day, as they do in the UK, or do funds need to move in near real time as well?

In the near term, we in the Federal Reserve continue to work to reduce the time required to complete payments and deliver payments-related information in the channels in which the Fed operates. The debate to be had by the industry is whether our existing payments mechanisms can meet the needs of the future or we need to embark upon designing a next generation payment instrument. We welcome your voice in that debate.

Let's turn our focus to end-to-end efficiency in the payments system. Innovation is occurring in closer proximity to end-users, at points between payment providers and their customers, and between merchants and consumers. Enhancing efficiency will mean moving business-to-business (B2B) and person-to-person (P2P) payments from paper to electronics, and bringing down the end-to-end cost of initiating and receiving payments. Efforts will continue by Internet/Web vendors to create customer-facing technologies to help users initiate payments. Here's where mobile and handheld innovations may play a large role. In what form, and when, growth occurs will depend on when alternatives offer the speed, convenience, simplicity and other advantages that drive broad adoption.

End-to-end efficiency also means that innovation in payments origination and receipt integrates smoothly into demand account systems and traverses risk filters and the payments infrastructure with both speed and relatively low cost.

We have ample room to increase efficiency. End-users are still writing paper checks by the billions across many different use cases. Some recent payment innovations are designed to address these opportunities. For example, in the P2P space there are PayPal, PopMoney and Dwolla; in B2B, Paymode X and PayNetExchange; for bill payment, FIS and Fiserv, and among the proliferating mobile options, Square Wallet and LevelUp.

In many ways, however, checks continue to provide features that are not replicated by electronic alternatives and innovations. Checks offer a large measure of ubiquity. In other words, senders and receivers can reach nearly everyone without signing up for multiple services. They provide convenience because the payer doesn't have to know the payee's account information. Virtually all the innovative services I noted involve closed payment communities, which require both the sender and receiver to join. A more efficient mechanism would facilitate payments from any sender to any receiver. Achieved through directories, standards or some other solution, ubiquity will be key to achieving the efficiency of all-electronic payments in the end-to-end value chain.

Let me touch on one more possible form of efficiency; in my personal view, an efficient, faster, secure and ubiquitous payments mechanism (especially if it's mobile) could significantly change the risks in payments. Faster clearing, especially with a balance check at initiation and immediate posting or credit at the receiving end could reduce the amount of credit involved in managing commerce or a payments business, credit that arises today from returned checks, for example. Customers that are relying more on their balances and less on float or credit may borrow less but may need to be more liquid. The possibility that future payments might rely somewhat less on a firm's economic capital and its liquidity could also contribute to efficiency.

Along with enabling innovation, technology drives new risk. Reports of denial of service attacks and data breaches have raised data security concerns across the payments industry. Concern is growing about the potential to corporate and or other bank account takeovers. Any of these disruptions has the potential for undermining confidence in the payments system, particularly given that it is difficult for end-users to assess the security of payment services.

Security and resiliency have always been paramount concerns across the payments system. The impact of a significant outage or fraud on the public's confidence may adversely impact increasingly electronic or "digital" commerce. New ways of making payments and the entry of non-traditional payments system participants create change that presents new risks and challenges to assess. The sophistication of some recent frauds introduces the potential for material risk. The Federal Reserve Banks' strategic plan focuses on fostering safety and security not only in Federal Reserve interbank networks and applications, but also the safety and security of the payments process from end-to-end.

The challenges and opportunities related to speed, efficiency and security of payments are most apparent when we examine the mobile and international payment ecosystems. The mobile revolution is blurring the lines between commerce, both online and offline, and payments. In this new world, payments are but a small part of the value to be delivered in the commerce experience, with loyalty programs, location and behavior-based offers, and personal financial management tools becoming part of the broader customer experience. Financial institutions are working hard to figure out how they will participate. We must consider how the payments industry can design its future systems and services to address these new opportunities.

The business challenges for financial institutions are also great when considering international payments. Cross-border transactions are generally slow, inconvenient and inefficient, especially bank account-centric international payments sent or received on behalf of consumers or businesses. Some closed networks, such as Western Union and PayPal, have made advances in this space, but their networks are not as ubiquitous as open banking networks. Our leadership in the global economy calls for a more seamless international payment experience.

Each of these areas – speed, efficiency, security – are embodied in the Federal Reserve's vision for the future of payments. Success in achieving these goals will require collaboration and engagement with the industry. We need to understand industry views on the benefits and costs of addressing these gaps and opportunities, the technical and operational impacts of potential solutions, and the associated safety and settlement issues.

In the coming months, we intend to work with industry stakeholders to facilitate development of a shared vision for enhancing the future payments system. A recent Payments Strategy Roundtable in Chicago was a first step in this effort, we envision many forums to gather diverse industry perspectives. Our ongoing collaboration with The Clearing House leadership on strategic issues is critical to this planning process, given our key roles in common as payment system operators. In September, our Chicago Payments Symposium will offer a platform to report on the progress of our work.

All of us at Federal Reserve Financial Services are committed to working collaboratively with the leaders in this room and the entire payments industry to implement innovations that meet user needs today and into the future. We thank you for your ongoing partnership in these endeavors.