



James J. Angel, Ph.D., CFA
Associate Professor of Finance
Georgetown University¹
McDonough School of Business
Washington DC 20057
angelj@georgetown.edu
+1 (202) 687-3765
Twitter: @GuFinProf

Ann Misback, Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue NW
Washington, DC 20551

Re: Docket No. OP-1670, Federal Reserve Actions to Support Interbank Settlement of Faster Payments

VIA EMAIL to regs.comments@federalreserve.gov

Dear Board of Governors:

I commend the Fed for taking this long overdue action to support modernization of the U.S. payment system. I have served on the Federal Reserve's Faster Payments Task Force (FPTF) and the subsequent Interim Collaborative Work Group (ICWG) that led to the formation of the Faster Payments Council (FPC). I am also the academic director for a fintech certificate program that we offer at Georgetown.

Payments are network products. The utility of a network is directly proportional to the number of users of the network.² Larger networks have such a dominant advantage over smaller networks that network industries often result in oligopolies in which new entrants face insurmountable entry barriers. To make matters worse, a dominant network has strong incentives to deny interconnection to smaller networks, stifling innovation and competition.

¹ All opinions are strictly my own and do not necessarily represent those of Georgetown University or anyone else.

² To be precise, according to Metcalfe's law, it is proportional to the square of the number of nodes connected to the network.

The current state of faster payments in the US is one of extreme fragmentation. Users of one fast payment system often can't interconnect with users of another system. A Zelle user can't pay a small business that is on Venmo. A Square user can't easily pay someone with a traditional bank account.

We are in the midst of a technical revolution in payments that promises to provide better, faster, cheaper more secure, and more flexible payments. Numerous fintech companies are working on introducing better solutions in the payment space. In order for them to make their promising technologies come to fruition, they have to be able to interconnect with other payment systems.

In order to interconnect, payment systems need to be able to exchange payments themselves in a secure system that provides fast finality. The Fed's systems currently operate on 20th century East Coast hours. It is time to meet the demands of the modern economy and move into a 24/7/365 mode of operations.

The proposed FedNow service is a great step in the right direction. It will allow new and existing payment systems to interconnect more efficiently and more securely. This will allow our fragmented payment systems to interconnect into one large virtual payment network. By including everyone in the payment network, we maximize its value because we maximize the size of the network. This is the only realistic way to achieve ubiquity.

FedNow will also provide an important backup to existing private systems.

There are many issues involved in achieving interconnection. Different systems have different technologies. Each market participant naturally does not wish to expend resources to change its system. Some propose central directories that would allow routing of payments based on an alias. For example, anyone could send a payment to random_user@some_domain.com and the central directory would figure out which payment account that belongs to. This raises obvious concerns about the personally identifying information (PII) contained in the director and cybersecurity risks.

There is a simpler and better solution that does not require a PII repository. The package delivery business provides a model. We can ship a package to an address, and our freight carriers figure out how to get the package to the address while using several different modes of transportation. The key is that there is a clear address. Similarly, our web traffic is routed to the right IP address over numerous ISPs.

Different payment systems can route payments to other payment systems without having PII. All they need is the name of the payment system of the recipient and the alias used by the recipient's payment system. For example, one could send a payment to random_user@some_domain.com.PAYPAL or a payment to 1.212.555.1212.VENMO or 1.212.555.1212.ZELLE or 987654.123456789@RTP. Then it would be up to the receiving system to route the payment accordingly. All that is needed is a simple routing table based on the suffixes.

While the proposing release denies "plenary authority" over payments, I would like to point out that Dodd-Frank §805 does give the Fed broad powers to set risk management standards. This authority

applies not only for financial market utilities, but also for all financial institutions, which are broadly defined under Dodd-Frank.³ There are clearly risk management concerns in interconnection, and the Fed may have to step in to set standards. Failure to achieve a ubiquitous secure payment system clearly imposes the economic risk on the country of having an inefficient payment infrastructure. Such an inefficient payment infrastructure would impose a costly tax on every economic transaction.

However, the Fed should step lightly here and encourage the private sector to work out appropriate standards and step in only if private sector efforts fail. Such efforts could fail if certain large entities actively seek to block interconnection in order to protect their pre-existing network advantage.

Respectfully submitted,

James J. Angel, Ph.D., CFA
Georgetown University

³ SEC. 805. STANDARDS FOR SYSTEMICALLY IMPORTANT FINANCIAL
805. MARKET UTILITIES AND PAYMENT, CLEARING, OR SETTLEMENT ACTIVITIES.

(a) AUTHORITY TO PRESCRIBE STANDARDS.—

(1) BOARD OF GOVERNORS.—Except as provided in paragraph (2), the Board of Governors, by rule or order, and in consultation with the Council and the Supervisory Agencies, shall prescribe risk management standards, taking into consideration relevant international standards and existing prudential requirements, governing—

(A) the operations related to the payment, clearing, and settlement activities of designated financial market utilities; and
(B) the conduct of designated activities by financial institutions.