Speech by President Austan Goolsbee at the Chicago Payments Symposium

Austan D. Goolsbee

Federal Reserve Bank of Chicago
Chicago, IL
October 4, 2023

FEDERAL RESERVE BANK *of* CHICAGO

Speech by President Austan Goolsbee at the Chicago Payments Symposium

Austan D. Goolsbee

President and Chief Executive Officer
Federal Reserve Bank of Chicago

Welcome. I'm Austan Goolsbee, President of the Federal Reserve Bank of Chicago, and it's my privilege to kick off the Chicago Payments Symposium. Now in its 23rd year, the Symposium is a testament to the Chicago Fed's long-standing commitment to collaboration with the industry on payments. It's great to see all of you here in Chicago and online.

Before I start, I would like to personally thank Ellen Bromagen for her leadership both here at the Chicago Fed and in payments across the Federal Reserve System and for her work with Shonda Clay in putting this conference together. I would also like to thank colleagues from across the Fed System here with us today: Loretta Mester, Mark Gould, Kathy Paese, and Ken Montgomery. Thank you for your leadership and partnership.

I want to also acknowledge the many leaders from the payments industry who are here today. We are grateful for your collective work managing the payments system and for your longstanding collaboration with the Fed. Some of you have traveled a long way, and we appreciate you making the effort to be here.

It's my first time so let me give a brief line about why I am here. I am an economist. In the Great Financial Crisis, I was the Chairman of the Council of Economic Advisers and chief economist for the Economic Recovery Advisory Board and its head Paul Volcker. I have said ever since that everyone that lived through that time has a lifetime interest in the plumbing behind the financial system.

But before the financial crisis and then after—for 28 years—I was a professor at the University of Chicago's Booth School of Business, where one of my main areas of research was the economics of innovation and of the Internet. For many years I taught the class on platform strategy.

So combining a love of payments with an interest in networks and platforms brought me right here: to the Payments Symposium. And looking through the themes of this year's speakers, I'm struck by how several of the key themes facing payments today overlap with things from platform economics, whether online business in the twenty-first century, telecom in the twentieth, or even railroads in the nineteenth.

The starting point for platform business is that the size of the network has value to everyone because people connect to each other. The value of the network rises for each participant the more people add to it. And it makes it extra important that people work together to unlock the potential of the network as a whole.

You can probably already see where I'm going here with payments. But let me make two and a half points in the spirit of what-to-expect-when-platform-economics-meets-the-payments-symposium that come from the need for us to work together.

I. Ubiquity is critical to unlock the full value of an instant payments network but is mostly impossible without strong coordination and will involve tradeoffs.

Bigger networks are useful. But building a big network is expensive. Users have connection costs and network infrastructure is generally a huge investment. Because uncoordinated investment is risky in this way, it's usually easier to build smaller networks that are faster and cheaper and reach fewer participants.

But fragmented investments where different users end up with different standards can prevent the system from ever reaching its full potential value.

Wide accessibility of payments networks is one of the Fed's explicit policy goals, as recognized by the Monetary Control Act, which requires that the Fed take into account the provision of an adequate level of service nationwide. The propensity for individual actors to start with the highest margin, lowest cost, easiest-to-service customers makes it especially important for there to be a broader push for ubiquity. The Fed has often played a key role as a force for expansion while collaborating with the financial and technology private sectors to make something ubiquitous and better than it would be segmented.

For example, some of you may remember working together 20 years ago to implement widespread use of check imaging technology after the passage of the Check 21 Act. Or the efforts for ACH payments to take off in the 1970s, 1980s, and 1990s.

Or even farther back, the introduction of magnetic ink technology for checks.

In the 1950s, the Fed and the banking industry considered other options to automate check processing, like bar codes or punch cards, but magnetic ink had some clear advantages. It was still readable by the human eye and also still readable by a machine, even if someone wrote over it or spilled a cup of coffee on it. To make it work, everyone had to agree on a standard way to place magnetic characters on checks for machines to read. The Fed and the American Bankers Association jointly campaigned for adopting the technology, emphasizing the benefits for the banking system as a whole, and the responsibilities of individual banks over and above their own cost-benefit calculations.[1]

---

[1] Federal Reserve Bank of New York, 1960, "Electronic check handling," Economic Policy Review, Vol. 42, No. 8, pp. 7–10, available online, https://fraser.stlouisfed.org/title/economic-policy-review-federal-reserve-bank-new-york-1170/august-1960-2530/electronic-check-handling-259448.

Bottom line, without extensive cooperation and collaboration, this history might have unfolded very differently. Our predecessors knew that building out a large network was key. They couldn't just rely on individual companies to do it themselves.

But history also shows us that it's hard work getting a network all the way to ubiquity, even with a lot of collaboration. The rollout of ACH in the 1970s took a lot of time. We had to overcome inertia but also improve technology. ACH initially relied primarily on magnetic tapes. Each tape could hold information equivalent to 1.5 million checks, but they still needed to be physically couriered to and from banks. Even as some banks moved to electronic communication of ACH payments, others continued to rely on tapes or the next new thing, floppy disks. Because ACH processing schedules needed to accommodate the slowest endpoints, even small numbers of nonelectronic users slowed the network. ACH operators began to mandate all-electronic communications in the late 1980s and early 1990s and worked together with financial institutions extensively to get them ready.

If there had not been cooperation, many of these now ubiquitous systems would probably never have caught on. Or, at the least, would not have reached the levels of convenience and quality that they enjoy today.

Developing a vibrant instant payments regime in the U.S. will require heavy investments in the ubiquity of the network done by all of us working together.

II. The international payments system is a fragmented network all its own

We would be remiss at an international symposium like this not to highlight the similar set of challenges and opportunities facing the international payments system.

The global payments sector is also highly fragmented and with multiple overlapping layers, including links between correspondent banks; messaging systems such as Swift; money transfer businesses and credit card networks; as well as foreign exchange markets, and arrangements between central banks.[2] Each of these entities answers to its own authority, and the reputations and security practices of network participants vary widely. There is also the well-established challenge of aligning the standards of various sovereign payments systems—a task made all the harder if conflicts like the one in Ukraine lead to what the IMF has called "economic blocs" that restrict cross-border flows.

And the global payments system is expensive. According to the World Bank, the average cross-border payment carries a 6.3% fee. We know that smaller volume senders tend to pay higher fees—which means the 6.3% data point probably *under*states the actual fees paid by many households and small businesses when they send money across borders.

The same idea of how expanding the network will raise the value of the system for everyone suggests there is an important role for collaboration across countries, too. It will be more challenging in many of the participating countries because there is no mandating authority. The lessons we are learning about encouraging voluntary adoption in the United States may be helpful in the global context, too.

III. Security in instant payments will be crucial for adoption but will also be a challenge because of the fragmented environment

One of the biggest potential barriers to the ubiquitous adoption of any network is security. For instant payments, it is absolutely critical for all of us—the Fed, industry, everyone with a seat at the table—to get security right from the start or lapses will otherwise undermine the network's growth and reach. That's the thing about network externality businesses—getting users begets more users, but *losing* users snowballs on itself, too. Early negative experiences can set back adoption for a long time.

[2] Kristalina Georgieva, 2022, Confronting Fragmentation: How to Modernize the International Payment System, concluding remarks at the IMF-Swiss National Bank High-Level Conference, Zurich, May 10, available online, https://www.imf.org/en/News/Articles/2022/05/10/sp051022-md-concluding-remarks-at-the-snb-high-level-conference.

A key lesson from network economics is the ever-present conflict of incentives between an individual participant—who is understandably focused on their own wellbeing, and in fact isn't powerful enough to protect the network on their own—and the needs of the broader group, which inherently relies on collective action to solve for security. In effect, networks must always be considering the same two questions:

- Are current incentives going to get us the systemwide developments that we need and that everybody can benefit from?
- Or, is everybody going to have an incentive just to look at their own business and well-being, which leads to haphazard evolution, as well as innovations that cause rather than solve problems?

A timely example that illustrates this issue is fraud, a hot topic across the entire payments ecosystem, not just instant payments. Like with ubiquity, the best answers we have to fraud come from cross-industry collaboration. The trick is aligning incentives so that participants can work together as network participants, even as they compete against one another in the economy every day. For the wellbeing of the network, both of these postures—collaborator and competitor—can and must exist simultaneously.

In the case of fraud, some of these learnings are baked into the design of FedNow. For example, network participants—banks, credit unions, and payments companies—are obligated through network rules to report fraud that takes place on FedNow. The mandatory reporting not only helps remove stigma associated with self-reporting problems, but also helps the Fed and the industry better monitor and address warning signs.

We also know that some of the most valuable collective work is collegial and cultural, such as work groups of network participants that share candid information and fraud mitigation strategies.

In a sense, fraud and security are always individual events, because they have specific victims and costs. But the broader reality is that fraud—just like any other network security risk—is a *collective* issue that relies on collective efforts and collaboration to maintain safety and security.

I know collaboration has been a key theme of this conference for more than two decades, and will no doubt be a key ingredient of this gathering for years to come.

It is an exciting moment in the history of the financial system, and we don't know how things will end up.

It feels like the long history of other platforms in the economy has taught us that balancing cooperation and innovation to help the entire system achieve its full potential will remain front and center, and I can't wait to see what you all come up with.

Thanks for being here. Now let's get to work.