

Christopher J Waller: Modernising Federal Reserve operations in the 21st century

Speech by Mr Christopher J Waller, Member of the Board of Governors of the Federal Reserve System, at the Brookings Institution, Washington DC, 21 April 2026.

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Thank you, David and thank you to Brookings for having me speak today.¹ Whenever anyone hears the words "Federal Reserve" they immediately think about monetary policy and the Federal Open Market Committee (FOMC) setting the federal funds rate. There is obviously tremendous media attention on those policy decisions, as there should be because they affect U.S. households and businesses and financial markets around the world. But the FOMC only meets 16 days a year to set monetary policy, so what are we doing at the Fed the rest of the time?

The answer to that question is that we run a large and complex organization across 12 Federal Reserve Districts, with a heavy operations focus. So today I want to talk about how we meet these operational responsibilities to give you a better understanding of the structure of the Fed and what we do each day. As I will explain, there were and remain good reasons for the Fed's decentralized structure, which is mandated under the 1913 Federal Reserve Act. It is an important enabler in carrying out our many vital responsibilities, which affect virtually everyone in every corner of America.

But that doesn't mean the Fed's operations should not change to reflect a changing world. As the Board member responsible for leading the oversight of Federal Reserve operations on behalf of my colleagues, I believe the Federal Reserve needs to be continuously oriented toward modernizing how it operates-reducing costs, more effectively managing risk, and delivering the best possible value to the American taxpayer. And that has been my objective since I became the member of the Board of Governors responsible for Reserve Bank oversight. To explain why that matters and what it has meant in practice, I will start with a brief overview of the structure of the Fed and describe how its operations have evolved over time, including over the last few years under my direction. I will then address two questions that I believe are critical for thinking about how the Federal Reserve should organize its work in the 21st century. First, which Fed activities are intrinsically local, and conducted for the benefit of an individual Federal Reserve District? Second, which activities are conducted on behalf of the Federal Reserve System as a whole, with attendant opportunities to exploit specialization, economies of scope, and economies of scale? In short, what needs to be done at a Reserve Bank and what can be done more efficiently elsewhere in the System?

A Short History of Operations in the FRS

To begin with a quick orientation, the Federal Reserve System is composed of the Board of Governors in Washington, D.C., the 12 regional Reserve Banks located across the country and the Federal Open Market Committee. In this speech, I will focus solely on the Reserve Banks and not the Board or the FOMC. All told, there are approximately 20,000 employees across the 12 Banks, with the vast majority focused on operations-

implementing market operations, performing fiscal agent activities for the U.S. Treasury, and running the Fed's payment systems, along with all the support and overhead functions like information technology (IT), human resources (HR), finance, and procurement that go along with operating 12 Reserve Banks.

The Federal Reserve was created as a compromise between those who recognized the need for a U.S. central bank and those who were suspicious of concentrating such power in Washington or New York. The result was a decentralized system of 12 regional Reserve Banks with boards of directors drawn from the local business community. Although ultimate oversight in many respects resides with federally appointed officials in Washington, from the beginning each Reserve Bank was a self-contained organization. Each provided services, including check processing, wire transactions, and cash distribution, to the commercial banks in the District that had elected to be members. With membership in the Federal Reserve System, a bank received certain benefits and incurred certain obligations, notably to submit to regular examinations by the Reserve Bank in their District. Due to branching restrictions at the time, a member bank was in that District and that District only. In addition to these services and oversight, each Reserve Bank also collected local economic information and data and did analysis of the local economy. Initially, the discount rate at each Bank was set locally to reflect local economic and credit conditions. At the beginning, everything a Reserve Bank did was "local"-no national functions were performed.

This decentralized approach made more sense when the economy and the banking system were much more regional in nature, but as finance and the economy became more national in scope, changes were needed. Statutory changes were made by Congress to the Federal Reserve Act in 1935 under which the presidents of the Reserve Banks took on a national role in setting monetary policy via the FOMC. The discount rate was also "nationalized" so that all Banks charged the same rate for lending to local banks. But after these changes, most Reserve Bank operations remained local. While monetary policy was conducted at the national level, bank supervision, payment system activities, and most other functions at Reserve Banks remained focused on serving its District.

Also characteristic of the early years were Reserve Banks that had large numbers of workers engaged in what were at that time highly manual and labor-intensive processes. Such work included processing paper checks, managing distribution of coins and currency, "discounting" or providing commercial banks liquidity against a variety of instruments-often taking physical custody of this collateral to assure a security interest-and managing U.S. Treasury securities.

In this era, Reserve Banks operated under a clear "Bank first, System second" mindset. In rare instances that required more of a "System" approach-for example, managing transactions between banks in different Federal Reserve Districts-this coordination occurred through occasional meetings of the Conference of Presidents, an ad hoc group composed of the 12 Reserve Bank presidents. A deeply embedded and long-standing common understanding of the decisionmaking process for the Conference of Presidents was that the group could not force a Bank to do anything-everything had to be resolved by consensus. This decisionmaking process was consistent with the view

that the Reserve Banks were essentially independent, private-sector, and governed by the local boards of directors rooted in the District and thus had the freedom to operate as they saw fit within the broad confines of the Federal Reserve Act.

Drivers of Transformation

Over the decades, as technology changed and U.S. financial sector regulation evolved, the external environment began to shift in important ways. As financial transactions became increasingly digital in the 1960s, the Fed developed new, nationwide electronic payment capabilities. Congress ended bank branching restrictions in the 1980s. Regulatory changes allowed national banking organizations to emerge, a phenomenon which broke the one-to-one connection between a Reserve Bank and its member commercial banks. Commercial banks with operations across multiple Districts were not enthralled with needing to maintain relationships with multiple Reserve Banks, each of which offered slightly different mixes of services and slightly different pricing. In 1981, Congress directed the Fed to recover the costs associated with its payment services through fees levied on both member and nonmember banks, a requirement intended to level the playing field between the Reserve Banks and private-sector providers of payment services.

By the mid-1990s, the Reserve Banks had begun consolidating their payment services in response to those developments. Some key services were starting to be centralized in specific Districts with the establishment of "product offices" to provide uniform services to banks nationally. Over this same period, check volumes began to drop precipitously as digital payments gained steam and the private sector took market share from the Fed in check processing. The terrorist attacks on September 11, 2001, underscored the vulnerability of a payment system that still relied on leased airplanes to fly paper checks around the nation. The digitization of paper checks followed the Check 21 Act in the early 2000s and led to a further reduction in the processing of physical checks. The result was that the Reserve Banks saw a significant reduction in operations and employment at their Branches, to the point of closing and selling some buildings. Even at head offices, the automation of check processing and other labor-intensive payments work reduced manpower needs and employment. The era when most head offices and many Branches ran three shifts of check processing each business day ended.

On another front, as information technology advanced rapidly in the 1980s and 1990s, the Reserve Banks realized there were economies of scale to be achieved by centralizing information technology infrastructure into one location that would operate on behalf of the entire system. It made no sense for each Reserve Bank to construct, operate, and maintain its own mainframe or, later, server farm. Thus, in the early '90s the Reserve Banks created Federal Reserve Automation Services (FRAS, now referred to as National IT), to build and maintain a single common IT infrastructure. A FRAS director was named to manage this consolidated infrastructure but most decision authority remained at the individual Reserve Banks.

More recently, in 2021, Fed financial services were consolidated into a single national payment service line, with its own chief payments executive (CPE) who would oversee payment operations across 12 Reserve Banks. With the appointment of a CPE, and the increased authority of the chief information officer, the Fed had moved into a world

where its arguably most critical operational responsibilities were managed at the System rather than the individual Bank level.

Another example of the Fed's gradual move toward centralization is in its role as fiscal agent for the Treasury, handling payments and securities issuance, auctions and redemptions, as well as providing other banking services. Most of this work as fiscal agent was spread around the Reserve Banks. In 2014, Treasury's Bureau of the Fiscal Service began to largely consolidate fiscal agency work in St. Louis, Kansas City, and Cleveland while the Federal Reserve Bank of New York continued to manage U.S. Treasury auctions and certain other activities that required direct market interactions.

Despite this gradual movement toward more centralization in payments, IT, and fiscal agency, many support functions, including HR, procurement, and finance are still run more or less separately at each of the 12 Reserve Banks. In my view, we have reached a point where we need to better exploit the efficiency and risk reduction benefits of standardizing and probably centrally leading all of these functions. I believe there is significant opportunity for more improvement.

Two Categories: What Must Be Local and What No Longer Needs to Be

At this point I want to return to the two questions I posed at the beginning. What Reserve Bank functions must be done locally, because they serve and must be tailored to the needs of a specific District, and which can be done anywhere to the benefit of the entire System? Let's start with what activities are inherently District-oriented, consistent with the original intent of the Federal Reserve Act, namely that the U.S. should have a central bank that reflects the needs of different regions and not be solely connected to Wall Street or Washington. These are the activities where geography still matters.

Clearly, some of the work that has always been carried out by different Districts in different ways remains appropriately local in approach and substance today. I see no reason to reduce the number of Reserve Banks or alter their geographic boundaries. Each Bank president still has an independent voice at the FOMC on the appropriate course of monetary policy and that should continue. Each president's views are shaped by the research of the Bank's economists, its regional experts, the input from the Bank's board of directors, and the president's interactions with business leaders in the District. Each Bank president contributes that perspective to the discussion in Washington with his or her colleagues, which generates a view of the economy as a whole at the national level and thus what direction policy should take. In addition to contributing to the development of monetary policy, each president engages with the business, financial, and nonprofit communities to understand local economic issues, and to position the Bank to serve as a convener of various interest groups to address local economic issues, such as labor force development, financial inclusion, and issues related to rural areas. These activities are enormously valuable to carrying out the Fed's mission, and they should continue. Each Reserve Bank also still conducts supervision of state member banks and bank holding companies, relying on the regional knowledge and expertise of supervisors based in the District and on regional industries and economic trends. Local presence will continue to be important. This local expertise is also important when the Reserve Bank serves as a lender to depository institutions.

Market operations are concentrated in New York, in proximity to the securities dealers who facilitate the implementation of monetary policy through open market operations.

Now let's turn to a very different class of activities that are important to the System's overall operations and for which geography does not matter.

These functions are increasingly platform-based, technology-driven, and scale-sensitive. The list includes HR systems, payroll and benefits administration, finance and accounting, procurement, and vendor management, as well as the payments, IT, and fiscal agency work.

These functions are not delivered better or more efficiently with geographic dispersion. Nor are they unique to a district. They improve with integration, scale, and standardization. With that comes lower operating costs, risk reduction, and greater savings for the American taxpayer. With these functions our philosophy must be "System first, Bank second." This is the message I have been delivering to the Reserve banks the last three years in terms of how our operations need to be organized and managed.

The Inflection Point: Why This Moment Is Different

You may be asking, why am I bringing this up now? Haven't the Reserve Banks consistently evolved to changes in the environment around them as I described earlier? Why can't this evolution continue organically? The answer is that I do not believe that this traditional approach will meet the moment, and the needs of the U.S. economy, for several reasons:

First, the external environment has changed. Technology cycles are faster and more disruptive. Artificial intelligence (AI) is a coming storm that threatens to alter and, I believe, improve all organizations. The pace of technological change today means that the Fed does not have the time to sit back and ruminate about changes. If we are going to ride this wave, and not be drowned by it, we need greater agility to capture efficiencies and manage risks, such as cybersecurity and incorporating AI into our system processes.

Second, consolidating functions makes sense for competing in talent markets that are increasingly national and sometimes global. We will achieve greater efficiency through consolidation and also attract the best talent in finance, HR, and procurement by offering people the opportunity to work for a national organization, with greater responsibility and impact.

Finally, benchmarking against the private sector is unavoidable. We are significantly "off-market" on IT costs, largely because of localized development of applications and procurement of software, and because of the complexity of our offerings across the Banks. We are not exploiting the available economies of scale or risk reduction benefit across a wider range of areas. Other large organizations have long faced financial pressure to standardize, centralize, and, in some cases, outsource. One critical benefit from Reserve Bank boards of directors having private-sector CEOs among their members is the ability of these directors to point out where our costs are out of line and how we might improve both efficiency and performance.

A Path Forward: Two Models for Operational Modernization

As we consider the future framework for Reserve Bank operations, one thing is clear—we are not going to return to a world where everything is done locally. So, looking forward, I believe that two models for the further evolution of the Fed's operational footprint are worth considering.

The first is standardization with centralized System leadership. Under this model, the current physical footprint of the Reserve Banks remains largely intact, but each major support function—IT, HR, finance, procurement, vendor management, and facilities—is placed under a single senior leader who runs that function on behalf of the entire System. That leader sets standards, makes enterprise-wide decisions, manages vendors, and is accountable for performance across all 12 Districts. Local staff remain in place but operate within a unified framework rather than 12 separate ones. System function leaders would operate within the existing Federal Reserve governance structure, reporting through Reserve Bank presidents and local boards, with the Board of Governors providing oversight. This is not a reorganization that centralizes authority in Washington. It is one that empowers the System to act as one enterprise while preserving the governance architecture the Federal Reserve Act established. This model captures much of standardization—lower cost, reduced risk, and greater consistency—without requiring the more difficult work of physical consolidation.

The second model goes further. If an outside consultant were asked to design the Fed's operating system from scratch, I believe it would be a lot closer to this second model. It takes everything in the first model and adds physical consolidation across key functions. Functions that do not need to be local—HR administration, payroll, finance and accounting, procurement, and certain IT operations—are concentrated in a small number of operations centers located in lower-cost cities or those that have a comparative labor skills advantage. Outsourcing certain activities should occur if the opportunity for cost savings warrants it. The specialized work that genuinely requires District presence remains in the Districts. Everything else follows the economics. The System gains not only the benefits of unified leadership and standardized processes, but also the full economies of consolidated facilities and labor markets. As with the first model, the formal legal structure of the Federal Reserve remains unchanged. System function leaders report through Reserve Bank presidents and local boards, with the Board of Governors providing oversight consistent with its statutory role. What must change for this approach to succeed is not the Fed's structure but its long-held expectation that every significant operational decision requires consensus across 12 institutions. This second model is the one that large, well-run organizations—both public and private sector—have largely converged on, and it represents the more complete realization of what operational modernization can achieve.

Either model represents a meaningful step forward. But it should be said plainly: the first is a waypoint, not a destination. The full benefits—in cost, in resilience, in cybersecurity, and in talent—are probably realized only under the second approach. An obvious implication of this second model is that some Reserve Banks may face lower levels of employment in the future. As happened with the closing of Branches when check clearing went away, I believe we will need to rethink the physical footprint of the Reserve Banks going forward.

Both models also require a shift in how operational decisions are made. A System in which senior leaders run enterprise-wide functions requires genuine delegation of authority-more authority than most Reserve Bank first vice presidents exercise today. Decisions about HR administration, IT architecture, procurement strategy, and facilities standards need to be made at the System level and not decided district by district. That requires not just delegation of authority but a genuine shift away from consensus-based operational decisionmaking. The decisionmaking model, based on debate and consensus, that serves us well in the Board Room when developing monetary policy is not ideal when it comes to running our operations. A leader of a System function who must secure agreement from 12 quasi-independent institutions before acting cannot be an effective leader. I believe we need a key shift in our approach to governance-we need to distinguish between decisions that need consensus for effective change and those where consensus becomes a hindrance to effective change.

Closing: Preserving the Federal Design by Modernizing the Machinery

The punchline of this speech is that we need to do more to centralize our operations into national lines of business and move away from having individual Reserve Banks managing operational infrastructure from a Bank mindset instead of a System mindset.

We need to have strong leadership and governance of these national business lines, and this does not mean it can always be accomplished through a consensus of 12 Reserve Bank presidents. Inefficient governance and overlapping lines of authority lead to cost inefficiencies and unnecessary risk. On the other hand, I believe we have an opportunity to leverage scale and our talent across the System to produce better outcomes for U.S. households and businesses.

Decentralization is a strength of the design of the Federal Reserve-but only when it reflects the genuine strengths of regional differentiation, not fragmentation for its own sake. Autonomy is a virtue-but not when it produces costly duplication that serves no one. We owe this to the American people we serve. Tradition deserves respect-but not when it stands in the way of necessary change.

To leave you with a final takeaway, operational excellence at the Federal Reserve depends on our willingness to standardize what should be standardized and centralize what should be centralized, so that we can strengthen what must remain distinctly regional to meet the needs of a large and heterogenous country. This is an important conversation and I appreciate the constructive engagement of all.

¹ The views expressed here are my own and are not necessarily those of my colleagues on the Federal Reserve Board or the Federal Open Market Committee.