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Two cheers for the Monetary Control Act¹

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This article explains how the Monetary Control Act (MCA) of 1980 paved the way for the transition away from paper to electronic check clearing and processing, ultimately leading to the successful implementation of the Check Clearing for the 21st Century Act (Check 21) in 2003.

> **There** has been a great deal of discussion lately about the Federal Reserve System and its role in providing financial services. Since its founding in 1913 as the nation's central bank and monetary policy-

> > maker, the Fed has also played an important role as a payments intermediary, providing check clearing services to banks (figure 1). However, until the Depository Institutions Deregulation and Monetary Control Act (MCA) of 1980, the provision of financial services by the Federal Reserve was largely based on a club pricing arrangement: Member banks received all Fed payment services for free, whereas nonmembers could not obtain them from the Fed at any price.2 Before the MCA,

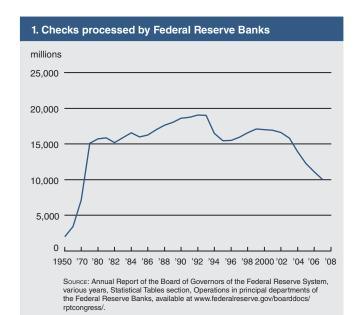
nonmembers had little access to Fed services and used correspondent banks to get access for a fee (or compensating balances). Such a pricing arrangement led to some inefficiencies, especially in the handling of checks.³ These inefficiencies were coupled with relatively expensive paper check processing systems that were beginning to seem

outdated compared with electronic payments processing.

In the long run, maintaining large-scale inefficient paper check processing would not be smart public policy. Yet disrupting a well-functioning means of payment, in the short run, is also undesirable. The Federal Reserve and the banking industry needed to devise a plan that would allow for a smooth transition away from paper to electronic check clearing and processing. We argue that the MCA paved the way for this transition, leading to the successful implementation of the Check Clearing for the 21st Century Act (Check 21) in 2003. It is worth stressing the quarter-century gap between these two laws. While that might seem like a long time, changes in technology and in the payments market as a whole had to occur before specific solutions such as Check 21 could be developed in response to the general imperative set forth by the MCA.

The MCA

The impetus of the MCA was twofold. The law provided that nonmember banks had to adhere to the rules of the Federal Reserve. It also gave banks more freedom to set interest rates and to merge. As a result of the MCA, beginning in 1981, the Fed began charging banks for services that had previously



been free to member banks. While the aim of the MCA was to address inequities between member and nonmember banks rather than to lower prices, the law nonetheless had the effect of pushing the Fed in the direction of cost efficiency. Under the MCA, the Fed would need to compete with the private sector when providing payment services. Thus, the Fed had to set prices to recover its full costs plus an upward adjustment to imitate the cost of capital faced by private sector competitors. In testimony preceding the MCA legislation, then-Federal Reserve Chairman Paul A. Volcker stated, "In principle, [pricing of payment services] is acceptable to the Federal Reserve. Intelligently implemented, we believe this approach can contribute to the efficiency, competition, and safety of the financial system."4

It was understood that if the MCA became law, the Fed could continue to act as an operator in the payments system, but it would be subject to a different set of constraints. In essence, the act made the Federal Reserve take explicit account of efficiency considerations in its payment operations. The enactment of the MCA compelled the Federal Reserve Banks to begin charging for check services to member and nonmember banks alike. But since the Fed and commercial banks would now compete directly with one another in various payments markets, the act sought to remove the inherent competitive advantages the Reserve Banks had as a result of their quasi-government status.

As the act was implemented, the Reserve Banks were obliged to include a private sector adjustment factor (PSAF) when calculating their costs.5 The PSAF had the effect of forcing the Reserve Banks to operate as if they were private sector competitors. Each would be obliged to take into account financial costs, return on equity capital, taxes, and certain other expenses, such as deposit insurance, that are not explicitly incurred by Reserve Banks but would be by their competitors—private correspondent banks and third-party processors. Under this new MCA pricing regime, the Fed either had to be sufficiently efficient as a payments operator or exit from a priced activity (such as check clearing) whenever full costs inclusive of the PSAF exceeded revenues on that activity over a period of years. Some observers initially felt the Fed would be unable to compete successfully with private check clearing operators and be forced to leave the payments business relatively quickly.⁶ The law pushed the Fed toward more efficient payments processing and led the Federal Reserve System to concentrate on its core competencies.

In 1980, the MCA was enacted and the Federal Reserve System cleared approximately 15.7 billion checks. Check clearing volume at the Reserve Banks faltered a little immediately after the passage of the act but then regained a foothold, with volumes finally peaking in 1992 as consumers' appetite for paper checks first began to wane (figure 1). On balance, the Fed continued to compete successfully in clearing checks even with the extra cost hurdle imposed by the necessity of meeting the PSAF requirement. Indeed, it appears that in the most recent decade, the Fed maintained approximately the same share of total checks it cleared in the 1970s before the MCA.⁷ The Fed created a more sophisticated pricing structure, moving from just three products in the pre-MCA era (with prices determined by the customer's location) to hundreds of different price points after the MCA's passage.

Check processing systems became more sophisticated as a result of the MCA as well. Because the Fed needed to be able to transport checks to more locations than before, including rural areas, the Reserve Banks needed to find a way to address availability issues. In the early 1980s, Reserve Banks instituted changes to help expedite checks drawn on outof-state institutions, and these efforts were reinforced with the passage of the Expedited Funds Availability Act in 1987. In the 1980s and 1990s, market forces (such as the advent of free checking, which led to increased check usage) and electronic check processing actually led to increases in check volume at some Reserve Banks.8

One could overstate the importance of the MCA for Check 21. On the one

hand, the Fed has always had a public policy interest in having an efficient payments system. On the other hand, while the drafters of the MCA could not have foreseen the technological advances that would eventually begin to transform the payments industry over the subsequent decades, it did pave the way in a sense. In particular, it caused the Fed to operate its financial services operations more efficiently than it had in the past. The Fed's new understanding of the changing real-world payments landscape enhanced its ability to influence the direction of a second important piece of payments legislation, Check 21.

Check 21

In terms of share of noncash transactions, paper checks have been declining since the 1970s, yet they are still the secondlargest noncash payment type, behind debit cards.9 To facilitate the transition from paper-based to electronic check processing in the 1990s, the Fed developed systems that would pave the way for Check 21, including the Electronic Presentment Image Check (EPIC) process that the Federal Reserve Bank of Minneapolis's Helena Branch deployed in 1999. EPIC was discontinued in 2002 when the Federal Reserve System embarked on a strategy to standardize and modernize check processing. 10 This strategy coalesced with various methods that had been introduced to remove paper from the clearing and settlement of checks. For example, accounts receivable conversion (ARC) was introduced in the early 2000s. ARC allowed consumer checks (bill payments) sent to lockbox operations to be electronically converted to ACH (automated clearinghouse) debit transactions, thereby truncating the paper path in midstream and substituting an electronic clearing path on the ACH.

A more thorough transformation of the U.S. check collection system would require a more fundamental innovation. The Fed took an active role in promoting Check 21 as a way to foster innovation and efficiency in the nation's payments and check collections systems. In 2002, the Vice Chairman of the Federal Reserve Board, Roger Ferguson, testified to Congress that legislation aimed at defining

a new paper negotiable instrument called the substitute check could dramatically reduce the amount of paper checks clogging the legacy clearing channels.¹¹ At the time, the check payments system, while relatively efficient, was nonetheless hampered by legacy legal and operational issues. Banks had to present the original paper check to the paying bank for payment unless they had agreed to accept presentation in some other form, i.e., electronically. The resources associated with this paper check clearing process were enormous. However, under Check 21, a bank could use electronic imaging technology for collection and create a substitute check from those images for delivery to banks that did not accept checks electronically. As a result, most of the massive amount of paper in the process could be eliminated in midstream and the payments system would become more efficient.

In addition to the cost associated with a physically delivered check collection process, after September 11, 2001, other vulnerabilities of the paper check processing system became apparent. One of the byproducts of shutting down air transportation after the terrorist attacks was a costly delay in paper check processing nationwide. Interestingly, when Check 21 was introduced, it attracted some criticism for not going far enough. The law did not create a federal legal structure for check image exchange without bilateral agreements between the collecting and paying banks. The Fed maintained that the legislation should not be too far-reaching, in order to allow the industry to gradually move toward an electronic process without mandatory standards that could disrupt the existing payments system. Against this backdrop, in 2003 the Check Clearing Act of the 21st Century passed the U.S. House of Representatives with 405 yeas and 0 nays and ultimately became law.

Since the passage of Check 21, the use of check imaging has exploded and the resources devoted to clearing paper checks have shrunk drastically. The change of paper-based to electronic-image-based checks has been touted by many as the fastest payments transition in our nation's history. Since 2005, the

number of check images received daily has jumped to almost 60 million. ¹² As a result of this transition, plus the growing use of other electronic payment types (e.g., credit and debit cards), paper check volumes are declining rapidly. The Fed cleared only 9.5 billion paper checks in 2008, compared with 19.1 billion in 1992.

How the MCA made the Fed a better competitor

Around the time when the MCA was enacted, many observers felt that a quasigovernment entity such as the Fed, operating in an industry experiencing such dramatic changes, would not be able to implement the necessary strategies to operate anywhere near an efficient level. But recall that by compelling the Fed to adhere to the PSAF requirements, the MCA imposes explicit efficiency considerations on the choice of payments activities. Given the somewhat surprising success of the Check 21 initiative, the Fed has been able to downsize its payment operations adroitly to move closer to an all-electronic payments environment.

In February 2003, the Fed began reducing its payments infrastructure in line with the waning use of checks and the requirements of the MCA. The objective was to secure a proportionate reduction in the numbers of locations at which checks were processed. The Fed reduced its paper check imprint from 45 processing operations in 2003 to just one today, with a commensurate decline in the staff devoted to processing paper checks. ¹³ The focus that the Fed has placed on efficiency since the passage of the MCA almost 30 years ago has provided efficiencies to the payments system as a whole.

Conclusion

It appears that former Chairman Volcker and Vice Chairman Ferguson were both correct: Explicit pricing for Fed services improved efficiency, and the substitute check spurred the removal of paper checks from the clearing process. This has led to a more socially efficient payments system in which fewer resources are used to propel a large volume of transactions. While not perfect, the incentive embedded in the MCA is certainly more conducive to producing efficient

long-run outcomes than many static bureaucratic models that are unable to cope with changing circumstances.

Mandatory (full cost) PSAF pricing appears to have produced significant public policy benefits. It emboldened the Fed to be more nimble and flexible, to seek to improve its operations or go out of business. While the continual evolution of the political environment and the economy often presents challenges, the Fed continues to focus on its responsibility of ensuring efficiency, safety, and accessibility of the nation's payments system. We believe the Depository **Institutions Deregulation and Monetary** Control Act of 1980 is the underlying mechanism that helps nudge the Fed to remain on an efficient payments path. So, two cheers are in order.

- We wish to thank Professor Charles Kahn, of the University of Illinois at Urbana– Champaign, for alerting us to E. M. Forster's similarly titled book of essays defending democracy during the 1930s. Also, we appreciated comments from Douglas Evanoff, Bruce J. Summers, and Robert Wiley.
- ² Member banks subscribe to required amounts of nontransferable stock in their regional Federal Reserve Banks. In 1917, the Federal Reserve Board mandated that all member banks exchange checks at par—prior to that, checks were often not exchanged at par. See Paul M. Connolly

Charles L. Evans, President; Daniel G. Sullivan, Senior Vice President and Director of Research; Douglas D. Evanoff, Vice President, financial studies; Jonas D. M. Fisher, Vice President, macroeconomic policy research; Daniel Aaronson, Vice President, microeconomic policy research; William A. Testa, Vice President, regional programs, and Economics Editor; Helen O'D. Koshy and Han Y. Choi, Editors; Rita Molloy and Julia Baker, Production Editors; Sheila A. Mangler, Editorial Assistant.

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- and Robert W. Eisenmenger, 2000, "The role of the Federal Reserve in the payments system," in *The Evolution of Monetary Policy and the Federal Reserve System Over the Past Thirty Years: A Conference in Honor of Frank E. Morris*, Richard W. Kopcke and Lynn Elaine Browne (eds.), Research Conference Series, Federal Reserve Bank of Boston, No. 45, October, pp. 131–161, available at www.bos.frb.org/economic/conf/conf45/conf45f.pdf. Moreover, before MCA, some nonmember institutions that did not have neighboring member banks were able to access Fed services for free.
- ³ By the end of the 1970s, providing free check services was expensive because of the high cost of holding sterile reserve balances.
- ⁴ See http://fraser.stlouisfed.org/ historicaldocs/787/download/27892/ Volcker_19790926.pdf.
- ⁵ The 1980 Principles for the Pricing of Federal Reserve Services (www.federalreserve.gov/ paymentsystems/pfs_principles.htm) laid out the ground rules. From the outset,

- the Fed avoided cross-subsidization across different payment silos. This restriction prevented the Fed from using the natural monopoly advantages it had in wire settlement of central bank money to subsidize other payment activities.
- ⁶ Since passage of the MCA, the Fed has exited two payments services entirely: definitive securities safekeeping and noncash collection.
- ⁷ At times it appeared that the private sector was overtaking the Fed in payment activities, in part because the Fed's unique advantage as a nationwide payments operator began to be eroded, e.g., by the passage of the Riegle–Neal Interstate Banking and Branching Efficiency Act of 1994. See Bruce J. Summers and R. Alton Gilbert, 1996, "Clearing and settlement of U.S. dollar payments," *Review*, Federal Reserve Bank of St. Louis, September/October, pp. 3–27. On balance, the data are much too sparse to make precise statements about the relative respective shares of the Fed and the private sector in check activity. We can say that the Fed's
- average share of total checks processed in the 2000s (39%) about matches its share for the 1970s (37%).
- ⁸ Federal Reserve Bank of Minneapolis, 2007, "The Helena Branch transitions into an era without check processing," special issue, *RiverBank Currents*.
- ⁹ Katy Jacob, Anna Lunn, Richard D. Porter, Wade Rousse, and David Walker, 2009, "Digital checks as electronic payment orders," Federal Reserve Bank of Chicago, Financial Markets Group, policy discussion paper, No. PDP 2009-5, note 26, available at www.chicagofed.org/webpages/ publications/policy_discussion_papers/ 2009/pdp_5.cfm.
- ¹⁰Federal Reserve Bank of Minneapolis (2007).
- ¹¹See www.federalreserve.gov/boarddocs/ testimony/2002/20020925/default.htm.
- ¹²See www.eccho.org for check imaging statistics.
- ¹³Jacob et al. (2009).