payments system research briefing

AUGUST 2006

FEDERAL RESERVE BANK of KANSAS CITY

The U.S. Retail Payments System in Transition: Federal Reserve Initiatives

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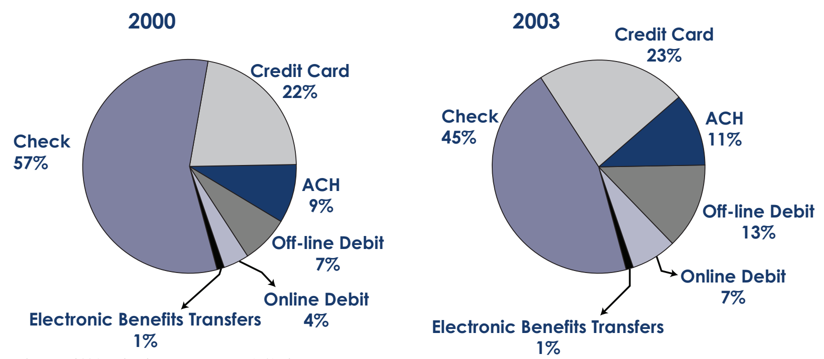
At its peak in the mid-1990s, the U.S. check clearing system handled hundreds of millions of pieces of paper each night, sorting them, handling exceptions, reconciling dollars deposited and shipped, and transporting them by airplane, truck, and car to the banks on which they were drawn all across the country. The system was efficient—in relative terms—with a time-tested legal framework and set of standards that buyers and sellers built into their payments systems and processes. However, check clearing was labor intensive, relying on decades old technology and equipment and vast transportation networks. Both bankers and corporate treasurers were heavily invested in the paper check clearing system. And although the technology existed for a fully electronic payments system and experts were unanimous in extolling its societal benefits, individual consumers and businesses were more than satisfied with writing and receiving checks as the primary vehicle for completing the payment process. Now, the creation of end-user demand, changes in payments law and rules, and new payments products and features have converged with technology to lead us into the electronic payments era.

The trends

Today, there are more than 80 billion noncash payments transactions completed every year in the United States. Based on research published by the Federal Reserve System in 2004, the share of those transactions completed by check declined from 57 percent to 45 percent between 2000 and 2003 (Chart 1). This decline resulted from the double digit annual growth rates of debit cards and Automated Clearinghouse (ACH) transactions and from the year-over-year *decline* in the number of payments completed by check—and that trend continues to accelerate. Since 2003, paper checks collected by the Federal

Chart 1

U.S. Noncash Retail Payments Share



Source: 2004 Federal Reserve Payments Study

This article is adapted from a presentation during the "Omaha Bankers Forum," sponsored by the Federal Reserve Bank of Kansas City on July 19 in Omaha, Neb.

Reserve Banks have declined by 11 to 12 percent per year, with a 15 percent decline so far this year.

Electronic payments, including those cleared through the ACH, credit card, and debit card networks, became the dominant payment type during this decade. Until 2000, the ACH network was used primarily for recurring payments, such as direct deposit of payroll. Since then, double digit growth in ACH transactions has been driven by two factors: 1) retailers and billers converting checks they receive into cheaper and faster ACH payments, and 2) consumers initiating one-time payments via the Web and the telephone. Chart 2 illustrates the trends in ACH and check volume processed by the Federal Reserve, should they continue, it is likely that the volume of ACH will surpass check volume in a year or two.

But the big story is the adoption of the debit card for everyday purchases, with transaction volume increasing 25 percent per year. Embraced by consumers who want the convenience of a card with the discipline of the tie to a checking account, the number of debit card transactions surpassed those made by credit card in 2003 (Chart 3).

Chart 2

Federal Reserve ACH and Check Volumes 1989-2005

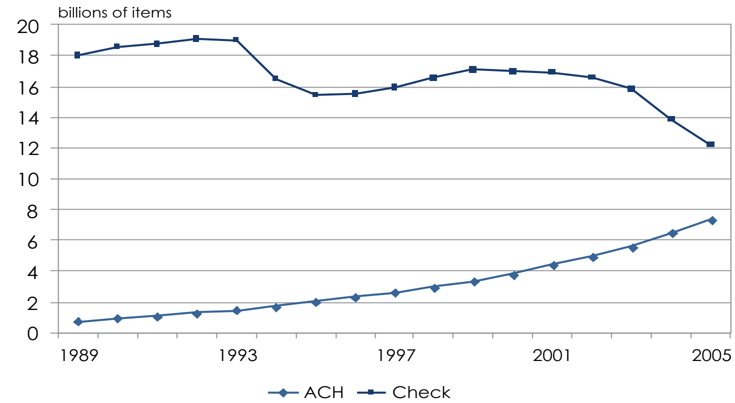
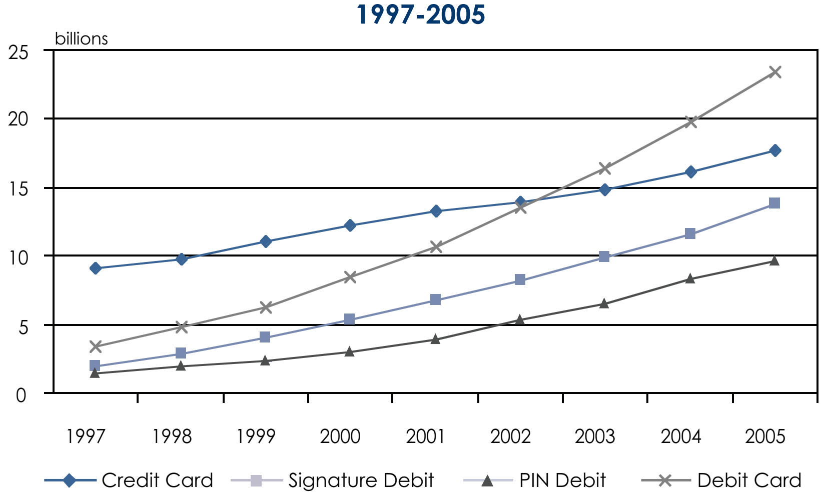


Chart 3

Card Purchase Transactions 1997-2005



Source: Data based on statistics from the *Nilson Report*

The Fed's role

Not too long following the disruption of the nation's air transportation system following the 9/11 disaster, the Federal Reserve System partnered with Congress on one hand and private-sector financial institutions and their technology and service providers on the other, to help the transition from paper checks to electronic payments take off.

The Federal Reserve System's role in this transition is motivated by a public policy mandate: to ensure the efficiency, safety, and accessibility of the payments system. In carrying out this mission, the Fed is virtually unique among central banks in that it is both a participant in the retail payments system as well as a policy and rule maker. Through the 12 Reserve Banks, the Fed is the leading provider of payments services to financial institutions nationwide. As required by the Monetary Control Act of 1980, the Federal Reserve competes with private-sector providers of payments services by charging fees necessary to recover the cost of production plus a "private-sector adjustment factor" that accounts for expenses like taxes and the cost of capital that the Federal Reserve does not actually incur. So while the Fed can use its participant role to support changes in the payments system that increase efficiency, safety, and accessibility, it must do so within the constraints of its cost-recovery objective, just like private sector companies must to meet profit objectives. To fund investment in the transition to electronic payments, the Fed has had to make substantial reductions in its paper check clearing infrastructure. Since early 2003, the number of Federal Reserve check processing locations will have declined from 45 to 18 offices by mid-2008.

Check 21: Hitting new peaks

Despite the trends in ACH and card-based transactions, people will continue to write tens of billions of checks each year. To provide additional incentives for the transition to electronics, the Federal Reserve System leveraged its dual role in the payments system. With its regulatory role, the Board of Governors staff worked with consumer groups, bankers, and other check clearing networks to draft the Check Clearing for the 21st Century Act (Check 21) which became effective in October 2004. The law did not mandate the exchange of check images. Instead, it created the substitute check, a new payments instrument with all the legal characteristics of the original check that could be reproduced from an electronic image if necessary to complete the payment process.

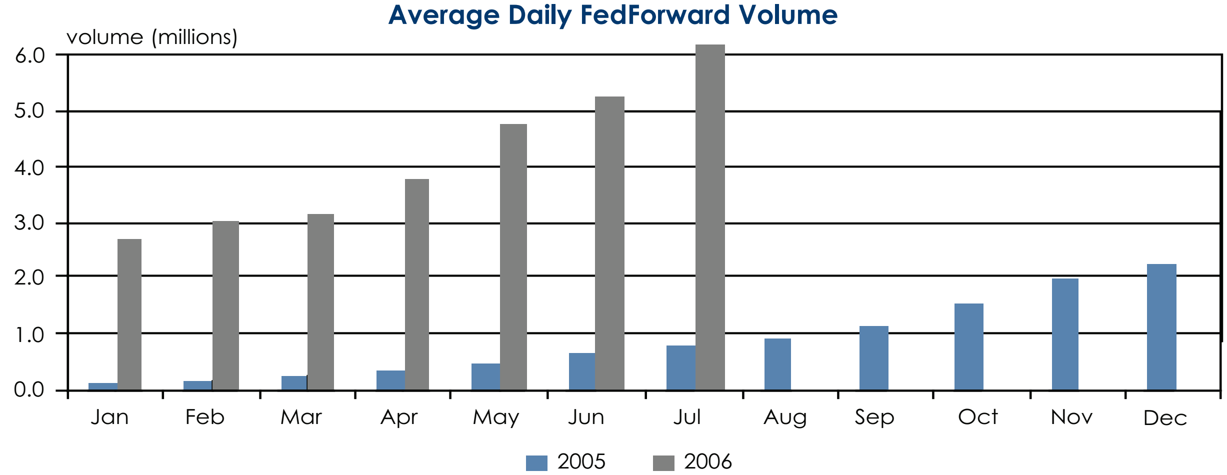
Since the day that the Check 21 law was enacted, Federal Reserve Banks have offered “FedForward” image check clearing services, enabling financial institutions to benefit from converting a paper check to an image during the collection process. And judging from the growth in this image clearing service (see Chart 4), the benefits have been substantial. On a single day in early August, the Fed received nearly 10 million check images in FedForward deposits from approximately 1,200 financial institutions. Most of these early adopters were community banks eager to accelerate collection and reduce the paper handling and transportation costs that disadvantage them relative to local branches of larger banks. In addition, all banks implementing image capture and clearing are benefiting from reduced exceptions, reduced local transportation costs for checks deposited in ATMs and branches, extended customer deposit windows, and the ability to offer customers new services such as remote capture and deposit for business customers to speed their deposits and provide increased convenience.

Substitute checks continue to grow

While this sounds like tremendous progress toward electronics, there is a dark side to image clearing under Check 21. More than 90 percent of checks that are image captured and deposited for clearing with the Federal Reserve still have to be converted back to paper at the Fed office closest to the receiving bank. As of July 2006, while less than 500 banks were receiving check images from the Fed, another 700 are committed and expected to go live in the next few months.

Chart 4

Average Daily FedForward Volume

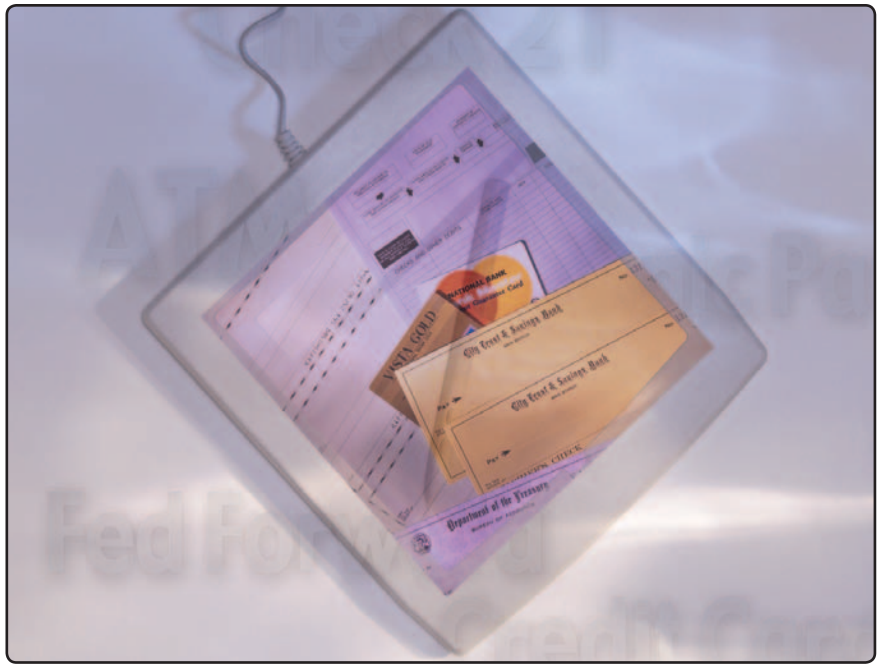


An electronic future

So, how do these realities position us for the future? The paper check collection infrastructure will continue to shrink along with declines in transaction volume and dollars cleared. Air transportation will be re-engineered resulting in a reduction in the dollar value of paper checks that can clear overnight. Deposit deadlines for paper will shift earlier and per item fees will rise.

At the same time, price incentives will encourage banks to receive check images versus paper are likely and fees for depositing check images will fall. Substitute checks will continue to increase in the short term until the base of financial institutions receiving images catches up with the volume deposited. However, questions remain as to whether image exchange can be fully implemented or whether another model will emerge.

The trends from paper to electronics will only accelerate over the next 12 to 24 months. In particular, retail businesses and other companies that receive a large volume of payments are becoming very sensitive to the cost of collection. They will demand multiple payments clearing options with better service for lower fees from their banks. Check conversion to ACH and remote capture for check images will become standard services to retain these customers. Financial institutions must consider how best to position their products and services as the payments system continues to evolve.



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Web site: *www.KansasCityFed.org/home/subwebs.cfm?subweb=9*

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