Federal Reserve Study Shows
That More Than Two-Thirds of Noncash Payments Are Now Electronic

Minneapolis, Minn., Dec. 10, 2007—The Federal Reserve’s 2007 study of noncash payments released today revealed that in 2006 more than two-thirds of all U.S noncash payments were made electronically. From 2003 to 2006, the period covered by the study, all types of electronic payments grew while check payments decreased. The Federal Reserve’s 2004 Payments Study found that the number of electronic payments and check payments were roughly equal in 2003.

About 19 billion more electronic payments were made in 2006 than in 2003. In contrast, the number of checks paid fell by about 7 billion over the same period. Of the 93 billion noncash payments in 2006, about 63 billion were electronic and around 30 billion were checks.

Among the three main types of electronic payments, the annual use of debit cards increased by about 10 billion payments over the survey period to 25.3 billion payments in 2006. Debit cards now surpass credit cards as the most frequently used electronic payment type. Over the same period, automated clearinghouse (ACH) payments grew to 14.6 billion, an increase of almost 6 billion payments. Credit cards grew by almost 3 billion payments to 21.7 billion in 2006.

The highest rate of growth from 2003 to 2006 was in ACH payments, which grew about 19 percent per year, followed closely by debit card payments at almost 18 percent. Meanwhile, checks declined by an average of 6.4 percent per year since 2003, indicating the pace at which check payments has been decreasing since the mid-1990s has picked up in recent years.

One of the most significant changes of the past three years has been the increasing proportion of checks processed electronically. Such changes have improved the efficiency of the check clearing system for interbank checks—those drawn on a different depository institution than the one at which they were deposited. At the time of the survey, about 40 percent of all interbank checks paid were replaced with electronic information at some point in the collection process.
In addition to the 30 billion checks paid, some payments that started out as checks became electronic payments. During 2006, almost 3 billion consumer checks—including checks sent to billers or used as source documents to initiate electronic payments at the point of sale—were converted and cleared as ACH payments rather than check payments, an eight-fold increase since 2003. A total of 33 billion checks were written in 2006.

“The results of our study underscore the ongoing importance of check electronification and other innovations that improve the efficiency of the U.S. payments system,” said Richard Oliver, executive vice president of the Federal Reserve Bank of Atlanta and the Federal Reserve Banks’ product manager for retail payments. “With around 33 billion checks written in 2006, we expect checks to be around for some time.”

The 2007 Federal Reserve Payments Study consists of three research efforts commissioned to estimate the annual number, dollar value, and composition of noncash retail payments in the United States. The Depository Institutions Payments Study included responses from approximately 1,400 financial institutions (commercial banks, savings institutions and credit unions). The Electronic Payments Study, included responses from 65 of the largest payment networks and card issuers. A third study, which will categorize the use of checks by payer, payee, and purpose, is expected to be published during the first quarter of 2008.

“The Fed’s 2007 Payments Study is part of an ongoing effort by the Federal Reserve System to measure trends in noncash payments in the United States,” Oliver said. “This year’s study repeats critical aspects of our previous studies, providing additional point-in-time estimates from which inferences can be drawn about the rate and nature of change of the U.S. payments system. We appreciate the efforts of all the institutions that provided the information needed to conduct these studies.”

Background

The 2007 Federal Reserve Payments Study includes three research efforts to estimate the annual number, dollar value, and composition of noncash payments in the United States. For this study, noncash payments included check, automated clearinghouse (ACH), credit card, debit card (both signature and PIN) and electronic benefits transfer (EBT) transactions. The study also estimated the number and value of ATM withdrawals.

The Depository Institutions Payments Study estimated the number and value of checks and other types of payments from deposit accounts based on responses from approximately 1,400 financial institutions in the United States. The Electronic Payments Study estimated the number and value of electronic payments based on responses from 65 of the largest payment networks and card issuers in the United States. The Check Sample Study, which looks at check usage, is expected to be published by the Federal Reserve Banks during the first quarter of 2008.

Assisting the Federal Reserve with the 2007 Payments Study were Global Concepts, a subsidiary of McKinsey & Company, and its subcontractor ICR (International Communications Research), and Dove Consulting, a division of Hitachi Consulting.

Findings (All are annual estimates based on survey data)

Check Payments
- Number of checks paid: 30.6 billion
- Value: $41.7 trillion
- Annual rate of decrease in transactions from 2003 to 2006: 6.4 percent

Electronic Payments
- Number of electronic payments: 62.7 billion
- Value: $34.1 trillion
- Annual growth rate of transactions from 2003 to 2006: 12.4 percent

Debit Cards
- Number of debit card payments: 25.3 billion
- Value: $1.0 trillion
- Annual growth rate of transactions from 2003 to 2006: 17.5 percent

ACH Transactions
- Number of ACH payments: 14.6 billion
- Value: $31.0 trillion
- Annual growth rate of transactions from 2003 to 2006: 18.6 percent

Credit Cards
- Number of credit card payments: 21.7 billion
- Value: $2.1 trillion
- Annual growth rate of transactions from 2003 to 2006: 4.6 percent
Electronic Benefits Transfer
  • Number of EBT transactions: 1.1 billion
  • Value: $29.6 billion
  • Annual growth rate of transactions from 2003 to 2006: 10.0 percent

ATM Withdrawals
  • Number of ATM cash withdrawals: 5.8 billion
  • Value: $0.6 trillion
  • Annual rate of decrease in transactions from 2003 to 2006: 0.4 percent