Observations

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Now, many countries actively try to encourage remittances from migrant workers and to channel some of the money through the domestic banking system. Some regulate the money transfer firms, in an attempt to lower costs and ensure the safety of transfers. Others, like Egypt, Turkey, and Poland, give preferential exchange rates. And Sri Lanka, Bangladesh, and India offer dollar-denominated accounts with higher interest rates.

Countries are also seeking to strengthen economic ties with citizens who have permanently settled abroad by adopting dual citizenship legislation. A study of 17 Latin American countries by the Tomas Rivera Policy Institute found that between 1996 and 2000 the number of countries that allowed dual citizenship grew from four to 14. Similar laws are now being considered by the Philippines, South Korea, and India, and 15 African nations had dual citizenship laws in 2000.

In addition to benefiting from the incentives to facilitate remittances, dual citizens are exempt from restrictions on foreign investors in their countries of origin. In Mexico, for instance, dual nationals can now invest in such "strategic" industries as telecommunications and petrochemicals, or can own property in coastal areas or near the national border, privileges not ordinarily open to foreigners. Mexican emigrants can also return home upon retirement and take advantage of domestic health care and retirement plans, should they choose to do so. Nonetheless, since 1998 only about 26,000 Mexican-Americans have reclaimed the Mexican nationality they gave up when they became U.S. citizens.

While countries may have turned from criticizing migrants to wooing them, some migrants are now beginning to criticize their governments' actions — feeling empowered by their growing economic importance. Though the governments may not always appreciate it, this meddling in domestic matters could end up benefiting their countries in the long run.

— Oksana Nagayets

perspective

WHILE MORE PEOPLE ARE PAYING ELECTRONICALLY, MANY OF US STILL CLING TO CHECKS

by Joanna Stavins § The modern consumer faces a vast array of choices, not only in what he or she purchases, but also in how to pay. The expanding availability of electronic methods such as debit cards and direct payment has made it possible to go for days without writing a check or touching paper currency. But recent estimates indicate that an average American still reaches for a checkbook about 20 times each month. The problem is that checks are one of the more costly types of payments to process. A 1996 study by the Federal Reserve suggested we might save close to half of the $225 billion we spend on our payments system each year if we switched all paper check payments to electronic forms. But the movement to abandon a check-based system has been relatively slow on the part of both consumers and banks. Why are we so reluctant to give up our checks?

One reason is that we are used to them. The check has been with us since the 1500s, when traders in Amsterdam's business centers introduced the idea of accepting cash deposits and paying depositors' debts. The printed check first appeared in England in the 1760s, and has been in use in the United States since the time of the early settlers. Many years of safe checking have made checks both familiar and trustworthy.

Checks are also easy to use and nearly universally accepted, making them especially convenient when the payee is far away, as is often the case when paying bills. And they offer "float," money accrued between the time the check is written and the time the money is debited from the check writer's account. Banks also have little incentive to replace checks. Checks are profitable, and the decentralized structure of the U.S. banking market makes coordination of a new payments system difficult. As a result, an estimated 50 billion checks are written each year in the United States, according to a recent Federal Reserve study.

In the last 20 years, though, banks have provided consumers with a variety of electronic alternatives. Automatic teller ma-

chines (ATMs), credit cards, smart cards, and debit cards have become widely available. The Automated Clearing House (ACH) handled 5.6 billion transactions in 2000, including direct deposit of paychecks and Social Security payments and direct withdrawal of recurring payments such as utility and insurance bills.

These electronic options offer many of the features of checks, along with some additional benefits. Both credit and debit cards are accepted at almost as many retail outlets as checks, and they are often faster in the checkout line. Credit cards offer float and consumers often use them as an easy way to borrow. Automated bill payments save time and money: Consumers don't have to write a separate check for each bill, and they don't have to pay postage. Direct deposit guarantees that funds will be deposited on time and avoids the hassle of going to the bank.

Consumers are starting to take notice. Between 1990 and 1997, the share of household bills (such as utilities) paid by check decreased from 86 percent to 79 percent, while the share paid electronically increased from 4 percent to 9 percent. My research shows that paying electronically is especially popular with professional and technical workers, married people, and homeowners. Each increase of $10,000 in household income raises the probability of using any electronic form of payment by almost 3 percentage points. Households where members have attended some college are more likely to use all forms of electronic payment except for smart cards, for which the effect was also positive but not statistically significant. Younger people are more likely to use ATMs, smart cards, and debit cards, but less likely to use credit cards, direct payment, or direct deposit. Nonetheless, checks still remain the noncash payment instrument of choice for many American households. About 60 percent of noncash payments in the United States are still paid by check.

The average American still reaches for a checkbook about 20 times a month

This fondness comes at a cost. Clearing checks is a time-consuming and complicated procedure, and one that cannot be fully automated. At a retail store, for example, after a consumer writes a check, the retailer deposits the check at its financial institution. If the retailer and the consumer use the same bank (about 30 percent of check transactions), processing is easy and the check need not leave the bank to be verified. But if the consumer uses a different bank, the retailer's bank must find a way to collect on the deposit. It may pay the Federal Reserve Bank or a private clearing house to process the check, or it may make an agreement with other banks to handle the deposit directly. The intermediary clears,

ILLUSTRATION BY SERGE BLOCH

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REALITY CHECK

	TRANSACTION VOLUME		DOLLAR VOLUME		AVERAGE PAYMENT
	IN BILLIONS	% OF NONCASH PAYMENTS	IN BILLIONS	% OF NONCASH PAYMENTS	
Check	50	63	$47,700	87	$961*
Credit card	15	19	$1,240	2	$82
Debit card	8	11	$350	1	$42
Automated Clearing House	6	7	$5,680	10	$1,009

*Includes business checks, which tend to have higher payment amounts than consumer checks. Businesses write 32 percent of checks, but account for 62 percent of the dollar value of checks written.
SOURCES: Check data from Depository Financial Institution Check Study, Federal Reserve Bank, 2000. All other data from Electronic Payment Instrument Study, Federal Reserve Bank, 2000.

sorts, and distributes all its checks. The check goes to the consumer's financial institution, which determines whether the consumer has money available to cover the payment and debits the account appropriately. If there are sufficient funds in the payee's account, the original check is then returned to the consumer in a monthly bank statement.

Banks have streamlined this process somewhat by using electronic check processing for a fraction of checks, a method whereby the information from a paper check is transmitted electronically as a digital data file or image. But because consumers and their banks want their original checks returned to them, the vast majority of checks processed electronically are still followed by the paper originals, reducing the cost savings. According to a 1996 study published in the Minneapolis Fed's *Quarterly Review*, the total social cost of clearing a check was nearly $3.00 apiece, as compared to roughly $1.25 for a transfer via ACH.

This differential would appear to give banks a big incentive to move away from paper checks. Yet they, too, still cling to the paper-based system. One major reason is consumer preferences. Bank customers feel uncomfortable with the idea of others having access to their accounts, especially for automated withdrawals. Many are reluctant to relinquish having their paper checks returned to them, since they are accustomed to using them for record keeping and account balancing. Banks fear losing customers if they push too hard for electronic substitutes.

There are also technical and coordination barriers. Once an electronic system is in place, an individual electronic payment costs less to process than a check-based payment. But making electronic payments available requires a significant investment in technology and staff training for banks and their corporate customers. Furthermore, no bank wants to invest only to find that none of its competitors has followed suit, or that they have adopted a different and incompatible system. This is especially problematic in the United States, where there are nearly 10,000 banks. Such decentralization, unusual in a developed country, makes it more difficult to coordinate a national move to electronic payments.

Finally, neither banks nor consumers now directly face the full cost of the checks they write. Consumers' check use is subsidized by monthly checking account surcharges, lower interest rates, and fees on electronic transactions, such as ATM fees. Consumers don't pay the full cost directly when they write a check and have little incentive to switch to another payment form. Likewise, banks have little incentive to discourage check writing by their customers since it is the depositing bank — not the bank on which the check is written — that pays the processing fee. Banks also have no inducement to coordinate their payments strategies without some assurance that others will go along. In the end, everybody loses. One study suggests that we could save up to 1.25 percent of GDP each year if we switched to a fully electronic system, an amount that would have paid our yearly residential gas and electric bill in 1997, or half what we spend annually on higher education. But that would mean changing the prices that consumers face when they use checks and electronic payments to reflect their true cost, something banks so far seem reluctant to do.

The federal government has helped by passing the Electronic Funds Transfer Act of 1999 which requires that all federal payments be made electronically. Today 96 percent of federal government employees and almost 80 percent of Social Security recipients use direct deposit as compared to only about half of private sector employees. And this may be one reason why increasing age seems to affect whether someone uses electronic payments.

The Federal Reserve Board has also proposed reducing the barriers by making it legal for banks to return digital images or image replacement documents to customers in place of original paper check returns. In the long term, the Fed should also align its pricing structure to encourage customers to choose what is best both for themselves and for society. ❊

Switching all paper check payments to an electronic form would require a big investment, but could save an estimated $112 billion each year

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