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# FRBSF WEEKLY LETTER

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## Why Are ATM Fees Rising?

Over the past two decades, automated teller machines (ATMs) have revolutionized the way we perform a variety of banking transactions. Today, ATMs are used by 45 percent of American households to withdraw cash, make deposits and loan payments, and transfer funds. Recently, the press has reported increases in ATM user fees at numerous banks. The purpose of this *Letter* is to examine various aspects of ATM fees as well as possible reasons fees may be increasing.

### Growing popularity

An ATM is a machine that allows a customer to perform banking transactions such as cash withdrawals, deposits, balance inquiries, and interaccount transfers. In practice, ATMs mainly are used as cash dispensing machines. Approximately 75 percent of all transactions at ATMs are cash withdrawals.

ATMs often are more convenient than human tellers. They can be used 24 hours a day, and they have many more locations than do traditional bank branches. In addition to being located at bank branches, ATMs are located in shopping centers, gas stations, convenience stores, airports, hotels, hospitals, universities, and tourist areas.

The number of ATMs and the number of ATM transactions per month have grown over time. In 1988 there were over 72,000 ATMs in the United States, compared to 9,750 in 1978. Likewise, total transactions per month on ATMs have increased more than nine-fold, from 41 million in 1978 to 375 million ten years later.

### Shared networks

Part of the reason ATM use has increased so dramatically in recent years is that the growth of "shared" ATM networks has given bank customers access to banking services over a much wider geographic area than their banks' branch offices cover. A shared ATM network differs from a "proprietary" network in which all the ATMs are owned and controlled by one bank for the exclusive use of that bank's customers. In con-

trast, in a shared network, a group of banks and other financial institutions share some or all of their ATMs with one another's customers. Thus, customers of a bank that is a member of a shared ATM network may use any ATM on that network, even when the ATM does not belong to their own bank. According to one estimate, between one-fourth and one-third of the ATM transactions on a given bank's accounts now are made at other institutions' ATMs.

One indication of the growing importance of shared networks is the steady increase in the percentage of shared ATMs in total ATMs that has occurred in recent years. In 1980, under 20 percent of all machines were linked to shared networks. By 1988, 90 percent of the ATMs in the United States were shared with at least one other institution, and there were over 100 shared networks operating in this country.

Moreover, a number of banks now belong to more than one shared network. In 1987, 28 percent of the banks that belonged to shared networks belonged to two or more such networks. Nine percent belonged to three shared networks and three percent belonged to more than three shared networks.

### To use an ATM or not. . .

Whether bank customers decide to use ATMs or the alternative, human tellers, to handle their transactions depends on the costs of using each. The relative costs of ATMs and human tellers, in turn, depend on a variety of factors, including the level of explicit fees charged and the time and effort involved in using each alternative. For example, a bank may charge its customers a per-transaction fee for withdrawing cash from an ATM, but may not do so for cashing a check through a teller. On the other hand, ATMs' more numerous locations and 24-hour access may save time and effort relative to human tellers. In addition, customers' attitudes and tastes regarding, for example, computers versus human interaction play a role in the decision.

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With respect to the explicit costs of using ATMs, available evidence indicates that relatively few bank customers pay fees for using their own banks' ATMs. A 1988 survey of 475 users of ATM cards found that 77 percent of them paid no "home" ATM fees at all. When fees were charged, such fees tended to be highest for deposits. Another survey found that only 16 percent of banks charged their own customers for cash withdrawals from ATMs.

Although relatively few customers pay for transactions on ATMs operated by their own bank, many pay their bank for transactions carried out on ATMs operated by other banks on shared networks. Such transactions are referred to as "foreign" transactions. In 1988, foreign, or "us-on-others," fees were employed, or were about to be employed, by 75 percent of large banks and thrifts in shared networks. A 1987 report stated that about 40 percent of *all* banks charge foreign fees. In contrast to home ATM fees, foreign fees tend to be highest for withdrawals.

Besides being more common than home ATM fees, foreign fees also tend to be higher than home fees. For banks that charge such fees, the average foreign fee for withdrawals is 75 cents, although figures up to \$2.00 have been reported. The average fee for withdrawals at an ATM owned by the customer's bank, on the other hand, is 20 to 25 cents.

The higher foreign fees may be a reflection of the higher cost of foreign ATM transactions. One of the costs that a bank faces when its customer uses a foreign ATM is the "interchange fee" that must be paid to the ATM-owning bank. Interchange fees and other network member fees vary from network to network, and this may explain why some banks vary their foreign fees according to the network their customers use.

Studies suggest that ATM use is fairly insensitive to small changes in the level of ATM fees, at least in the vicinity of currently observed fee levels. Although studies of actual ATM use are not available, a recent survey found that 35 percent of customers who pay ATM fees said that they cut back on ATM use when the fees were imposed, while 43 percent said that they did not cut back. (Another 19 percent said they had always paid fees and three percent were unsure whether they

paid fees.) Another survey concluded that ATM use would be unaffected by the imposition of a charge of about 30 cents per transaction. Finally, a third survey indicated that fees could rise to 50 cents per transaction without significantly lowering ATM use.

## Convenience

It is not surprising that ATM use is relatively insensitive to small changes in transactions fees since other factors also are important in determining ATM use. As noted above, whether a particular customer will choose an ATM or a teller partially will depend on such factors as the value of the time and the effort that the customer needs to contribute in order to get to and use an ATM or a teller. These factors determine how "convenient" ATMs are.

The number of ATMs available to customers appears to be one useful measure of the convenience of ATMs. Preliminary work at this Bank indicates that an increase in the number of ATMs noticeably increases the number of ATM transactions, holding other factors, including the number of ATM cards, constant. An additional ATM at a new location is assumed to increase convenience and may thereby encourage a bank's customers to use the machines instead of visiting a teller at a bank branch. And even if the new ATM is installed near existing terminals, convenience may increase as a result of shorter lines or reduced risk of all terminals being down at once.

Given the tendency for ATM transactions to increase as the number of machines increases, it is reasonable to speculate that ATM use is qualitatively at least as affected by convenience as by changes in the level of fees, if not more so.

## Rising ATM fees

Many observers claim that in recent years, home ATM fees have become more widespread and that banks have been increasing customers' costs of ATM use in other ways, such as imposing a minimum balance in order to avoid or reduce ATM fees. Instances of increases in foreign fees also have been reported.

There are several explanations for this apparent rise in ATM fees. One argument is that because both fees and the non-pecuniary aspects of the cost of using ATMs are important in determining

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ATM use, banks deliberately may have set relatively low promotional fees initially as a way of encouraging people to try ATMs and become familiar with the convenience they offer. Now that bank customers are familiar with the advantages of ATMs, banks can raise their fees without much risk of discouraging ATM use, according to this hypothesis.

This is only part of a complete explanation for the rise in fees. Such a strategy assumes that banks are able to make up for any losses resulting from low initial fees by earning excess profits later on. However, for this to happen, there must be some sort of breakdown in the competitive process in banking. Without such a breakdown, competition would induce banks to keep ATM fees at the lowest possible level at all times; that is, the point at which they only "break even." Any bank that charged higher fees presumably would lose its depositors to banks with lower fees.

Economist Mark Flannery has pointed out that since bank customers incur setup costs when they establish a deposit relationship with a particular bank, these setup costs can be a source of imperfect competition in the bank deposit market. Setup costs include the costs of gathering information on types of accounts, fees, charges, interest rates, bank procedures, and hours of operation, as well as the time spent meeting with bank personnel and filling out forms.

Flannery's work can be extended to ATM fees. The idea is that as long as the savings from transferring to a bank with lower ATM fees are less than the costs of establishing a new account, banks can raise ATM fees above competitive levels without losing customers. Thus, the recent increase in fees, in this view, is the outcome of a strategic pricing policy.

An alternative, but not mutually exclusive, explanation for the apparent increase in ATM fees is that it is part of a general trend towards "unbundling" bank services. In recent years, technological improvements have enabled banks to determine the cost of and assess fees for providing individual banking services. As a result, many banks are attempting to price each of

their services on a stand-alone basis, rather than as part of a package of services. Thus, some banks are now pricing transactions services, including ATM access, that formerly were not priced explicitly.

### Looking ahead

There are two recent developments that may have implications for the level and structure of ATM fees. First, the outcome of a pending anti-trust lawsuit has the potential to change both the pricing of foreign transactions and the availability of ATMs at heavily-trafficked, off-bank-premise locations such as airports and hotels. At present, virtually all shared networks prohibit ATM owners from charging fees directly to customers of *other* banks, referred to as "surcharges." This prohibition keeps fees down by preventing the ATM-owning bank from charging fees commensurate with the value of the services rendered at high-demand locations. However, it also discourages banks from installing shared ATMs at these locations. If the court were to disallow such prohibitions, surcharges probably would become more widespread, thereby raising the explicit cost of using ATMs. At the same time, however, eliminating these prohibitions also might encourage banks to install more ATMs at heavily-trafficked locations, thereby increasing convenience for bank customers.

The second development that may affect ATM costs has to do with changes in the level of the interchange fee. The interchange fee is set by the shared network owners and has been declining for some networks. For example, last year, interchange fees for the ten largest regional shared networks were around 15 to 20 cents per transaction, but are now running around 5 to 10 cents.

If this decrease in interchange fees is indicative of future and more widespread trends, then we may see a decrease in foreign ATM fees. However, if ATM owners continue to be prohibited from charging foreign ATM users directly, this decrease in interchange fees can also be expected to decrease the number of new ATMs deployed.

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