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# ATM Surcharges

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*The recent spread of ATM surcharges has sparked significant debate among consumers, policymakers, and ATM owners. Much of this debate has focused on the direct costs that surcharges impose on consumers. The use of ATM surcharges, however, also raises broader questions about ATM deployment, customer convenience, and the nature of banking competition.*

In April 1996, the two largest national automated teller machine (ATM) networks, Plus and Cirrus, ended their prohibition on direct fees for using an ATM. Since that decision, many banks and nonbanks that own machines have chosen to impose these fees, known as surcharges, on users who are not depositors of the machine owner. Surveys show that these fees, which can reach as high as $5.00, average about $1.00.[1]

The relatively sudden appearance of ATM surcharges has led to a large increase in the cost of ATM transactions to some consumers. This cost burden has prompted significant public debate, which in turn has led many state legislatures and congressional subcommittees to consider bills to ban surcharges.

This edition of *Current Issues* provides a brief overview of the organization of ATM networks, the fees they charge member financial institutions (most of which are banks), and the fees banks and ATM owners charge consumers for ATM services. It then looks at the potential effects of surcharges on ATM deployment and bank competition. We find that surcharges appear to have led to a significant increase in the number of ATMs, but they inconvenience some consumers and may weaken price competition among banks in the long run. Finally, the article examines the surcharge policy options facing the United States today.

## ATM Networks and ATM Fees

Most ATM networks are organized as joint ventures owned by a central group of bank members.[2] A network provides an array of services that link together the ATMs of its members. The activities of the network are governed by a set of rules agreed to and implemented by the network's board of directors.

ATM network organizations engage in a host of activities that support the trademark, brand name, reliability, and operation of the ATM system controlled by the network. The basic operational activity of the network is to support ATM cash withdrawals by the deposit account holders of any member bank. This function requires the network to transfer electronically, or "switch," the transaction information from the ATM to the account holder's bank and back again. This communication and sorting activity is accomplished through the aid of leased or dial-up telephone lines and centralized computers. Many networks also provide ancillary services such as ATM servicing and clearing and settlement of payments to their members or other banks.

ATM services entail two types of fees: wholesale fees, which are paid by the banks to other banks or to the network, and retail fees, which are paid by the person conducting the transaction to his or her bank or to the ATM owner (see box).

Wholesale fees are set by ATM networks and comprise the switch fee and the interchange fee. (Most networks also charge a membership fee, which is not transaction-based.) Switch fees, which range from \$0.02 to \$0.15 per transaction, are paid by the cardholder bank to the network to cover the costs of routing transactions through the network's computer-switching system. The interchange fee is paid by the cardholder's bank to the ATM owner to compensate the owner for the costs of deploying and servicing the ATM; interchange fees typically range from \$0.30 to \$0.60 per transaction. In addition to compensating ATM owners, the networkwide interchange fee is designed to standardize the arrangements that enable member banks' cardholders to use an ATM owner's machines (Baxter 1983). By fixing a single price for all interchange transactions among its many members, a network avoids numerous interbank negotiations.

The retail fees of an ATM transaction are set by the cardholder's bank and by the ATM owner. When a cardholder uses an ATM that is not owned by his or her bank, the cardholder's bank may charge a user fee to cover the interchange fee that it must pay to the ATM owner. User fees, also called "foreign fees," range from \$0.25 to \$2.50, and average about \$1.00 per transaction.

Surcharges also fall under the category of retail fees. As noted, banks that own ATMs typically surcharge other banks' depositors rather than their own account holders.[3] Surcharges vary widely, ranging from as little as \$0.50 to as much as \$5.00, but they average about \$1.00 per transaction.

## ATM Surcharges: The Pros and Cons

Surcharges entail both benefits and costs for ATM owners, consumers, banks, and ATM networks. The primary benefit of surcharges is that they have the potential to lead to a better match between the supply of ATM locations and customer demand for remote access to their bank accounts (Salop 1990, 1991). ATM surcharges, however, also impose direct costs on consumers and may have long-term consequences for transaction volume and banking competition. We review these pros and cons in our analysis of the effects of ATM surcharges on deployment, customer convenience, ATM transaction fees, and banking competition.

*ATM Deployment*

The introduction of surcharges appears to have resulted in one important customer advantage: a better match between customer demand for ATMs and ATM deployment. In particular, surcharges encourage the deployment of ATMs to areas that are too expensive for interchange fees alone to support, such as airports, casinos, football stadiums, and ski resorts. By lowering the number of transactions needed to generate sufficient revenue for owners to recoup ATM costs, surcharges can encourage

### ATM Transaction Fees

Fees for ATM services fall into two broad categories: wholesale fees and retail fees.

| Fee | Category | Set by | Description | Fee per Transaction |
|---|---|---|---|---|
| Switch fee | Wholesale | ATM network | Fee paid by cardholder's bank to network organization for the costs of routing transaction information | \$0.02 to \$0.15 |
| Interchange fee | Wholesale | ATM network | Fee paid by cardholder's bank to ATM owner for costs of deploying and maintaining shared ATM | \$0.30 to \$0.60 |
| User fee (or foreign fee) | Retail | Cardholder's bank | Fee paid by cardholder to cardholder's bank for using an ATM not owned by the cardholder's bank | \$0.25 to \$2.50 |
| ATM surcharge | Retail | ATM owner | Fee paid by cardholder to ATM owner for the costs of deploying and maintaining the ATM | \$0.50 to \$5.00 |

deployers to maintain ATMs in high-cost, high-value locations.

If surcharges promote ATM deployment, we would expect to find that ATM installations have increased since surcharges were permitted in 1996. Indeed, from 1996 to 1997, the number of ATMs in the United States increased 18.5 percent, the fastest rate of growth in fifteen years (Chart 1). At the same time, the number of transactions per machine fell rapidly, indicating that the number of machines has grown faster than the total number of transactions. Thus, ATM deployers find it profitable to continue to deploy ATMs even though the number of transactions per ATM is lower than in previous years. This fact is consistent with the hypothesis that surcharges allow machines to be placed in higher cost, lower volume locations.

From 1996 to 1997, the number of machines located off bank premises also increased—further evidence that surcharges may have improved customer access to ATMs (Chart 2).[4] Much of the transaction volume at off-premise machines is provided by customers who have accounts at banks other than the bank that owns the ATM. The interchange and surcharge revenues collected from these transactions help owners to recover the higher costs of maintaining off-premise machines. Anecdotal evidence also supports the hypothesis that surcharges have influenced the growth in the number of ATMs: ATM deployers indicate that surcharges have been a leading factor in the business decisions that have led to the recent acceleration in the growth of ATMs.[5]

*Customer Convenience*

Although surcharges may enable individuals to access their accounts from an increased number of locations, they also have the potential to disrupt the convenience supplied by ATM networks. Networks provide this convenience by linking ATMs in a shared system owned by many different parties and by allowing cardholders from many banks to access accounts from any ATM in the network. Surcharges have reduced this convenience by "taxing" transactions in which a cardholder of one bank uses an ATM that is not owned by his or her bank. It follows that if a new tax is placed on a service, we would likely see a decline in the use of that service.

A review of ATM activity reveals that in 1997 the volume of interchange transactions (transactions in which a cardholder uses an ATM that is not owned by his or her bank) fell for the first time since ATMs became available. The sizable drop in interchange transactions of roughly 10 percent occurred even as the number of off-premise machines and the overall number of ATM transactions increased.

The decrease in interchange transactions suggests that consumers have changed their pattern of ATM usage. To avoid surcharges, many consumers are likely visiting ATMs that are less convenient than those they had used previously. Consumers may also be withdrawing and carrying larger amounts of cash each time they use an ATM to spread the costs of a surcharge over a larger dollar value. A decision by customers to reduce the number of visits to ATMs could erode the convenience that a network is designed to offer.

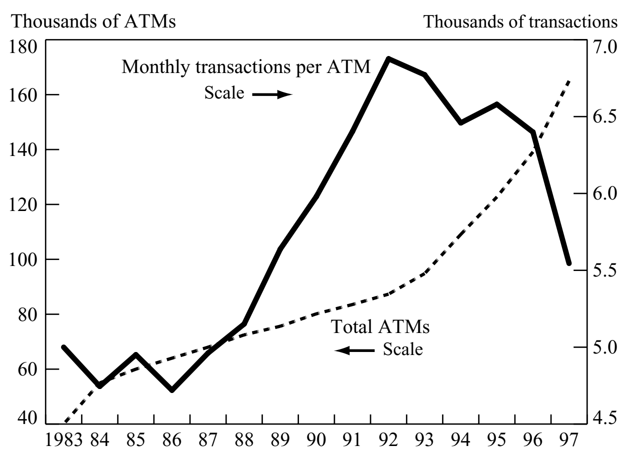
*Transaction Fees*

Some ATM owners stand to gain from an increase in revenues resulting from ATM transactions. Each time a customer who is not an account holder withdraws money, the ATM owner collects the surcharge—in addition to the interchange fee. Given that approximately 1,700 interchange transactions take place at an average ATM every month, these additional fees can amount to significant earnings. Although the number of interchange transactions has fallen, ATM owners are nonetheless motivated to surcharge, because in doing so they capture a larger share of the benefits of the network economy. Before such fees were introduced, the benefits of the increased availability of ATMs flowed more directly to the cardholder's bank.

Although surcharges boost the earnings of ATM owners, they may also impose costs—in the form of customer losses—on both ATM networks and network banks. An ATM transaction has two components: the information provided by the cardholder's bank, and the machine and cash supplied by the ATM owner. The two parts of this transaction are complements. When these

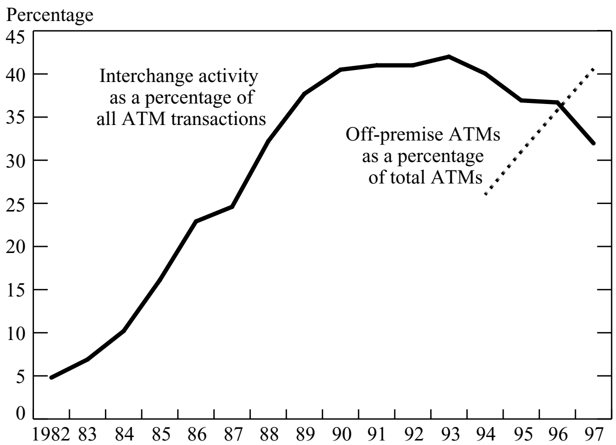
**Chart 1**

**Number of U.S. ATMs and Monthly Transactions per ATM**




Source: *Bank Network News*, annual *Data Book*.

**Chart 2**
**Volume of Interchange Activity and Percentage of Off-Premise ATMs**




Source: *Bank Network News*, annual *Data Book*.

two pieces are sold independently (by setting a user, or foreign, fee payable to the account-holding bank and a surcharge payable to the ATM owner), the sum of the prices may discourage customers from engaging in the transaction. Moreover, the existence of dual providers makes it less likely that either provider will consider how the fees will influence customer behavior.

This effect of "double marginalization" is well known in economics. A recent study of this issue shows that pricing ATM transactions using surcharges leads to higher prices on average than does pricing transactions using interchange fees alone (Economides and Salop 1992). Significantly, the double margin effect does not come into play when a single provider oversees the two sides of the transaction. Thus, a bank—as a single provider with its own chain of ATMs—has control over both sides of the transaction and can price its ATM services attractively. As a result, customers have an incentive to use their own banks' machines.

The likelihood that surcharges are prompting increasing numbers of ATM customers to use their own banks' machines in place of network machines has clear negative implications for the networks. This substitution has already led to fewer interchange transactions and reduced revenue from switch fees for the networks. As single banks expand their operations to other areas of their home states and to other parts of the country, the potential for substitution could increase.

*Long-Term Effects on Competition*
A broader risk of surcharges is their potential to alter long-term competition among banks.[6] By exempting the customers of ATM owners from surcharges, the current system reduces the role of the shared ATM network to which a bank belongs and expands the role of the bank's own chain of machines. This arrangement encourages customers who prize convenience to establish deposit accounts with banks that have ATMs located in the customers' preferred locations rather than with banks that offer the highest interest rates on deposit accounts. Hence, surcharges can change the nature of competition among banks for deposits by reducing customers' sensitivity to deposit interest rates. Indeed, banks may choose to increase the intensity of competition in ATM locations and to decrease the intensity of price competition in deposit interest rates.

Models of nonprice competition show that such competition can lead to some undesirable consequences, including two that are relevant to ATM surcharges.[7] First, banks could "overdeploy" ATMs. For example, to avoid becoming less competitive, two banks may deploy ATMs in the same location, a strategy that would result in lower transactions per machine but would not necessarily increase customer convenience. Moreover, because of the increased costs of servicing two machines in one location, the competition between the two machine-owners might not always lead to lower prices.

To the extent that customers become more responsive to the number and the location of a bank's ATMs and less responsive to deposit interest rates, weakened deposit interest rate competition among banks could result in lower interest rates on deposits in the long run. This consequence may be considered a reasonable trade-off by those customers who place a high value on convenience and have chosen the bank with the most convenient ATM network; however, customers who do not rely as heavily on ATM location would bear the costs of the added convenience.

## Public Policy Today

Consumers, banks, and legislators have been engaged in lively debate over surcharges ever since these fees were introduced in 1996. Consumers paying user fees and surcharges argue that they are being charged twice for the same transaction.[8] An open question is whether surcharges are location-specific. If surcharges are largely restricted to ATMs in high-value, high-cost locations, then consumers are paying an additional fee for an additional benefit. If surcharges are not location-specific, however, consumers' claim that they are paying a double fee for a single service may be valid. The empirical evidence is not yet sufficient to determine whether ATM deployers set their surcharges on a location-specific basis, although some evidence suggests that banks tend to set the same rate for all their machines (*Bank Network News* 1997b, 1997c).[9]

One response to consumers' dislike of surcharges—the formation of no-surcharge networks—has been hindered by existing network bylaws. Most ATM networks currently stipulate that all cardholders of network member banks must be treated in the same way at network ATMs. In practice, this means that a group of banks cannot ban surcharges for their customers if other banks in the network charge them. Nevertheless, a growing number of networks have revised their rules to accommodate no-surcharge subnetworks, and some states have also begun to make way for these groups. For example, in 1997 Georgia passed legislation invalidating the nondiscrimination policy of ATM networks doing business in that state (*Bank Network News* 1997c).

Also in response to consumer complaints, two congressional hearings have focused on the issue of surcharges. Various bills have been introduced in Congress to ban ATM surcharges and to mandate that a consumer be informed at the ATM of all transaction charges.[10] Complicating the legislative debate is the fact that state laws do not address the issue of surcharges in a uniform way. Recently, in Connecticut and Iowa, for example, banking regulators have gone so far as to rule that surcharges are illegal. In contrast, in the early 1990s, fifteen states passed into law legislation that made existing no-surcharge agreements illegal (*Bank Network News* 1997d). These laws were passed before most networks allowed surcharges and were likely intended to allow banks greater latitude in their price-setting decisions. Today, however, these laws may impede the competitive response to surcharges by restricting the freedom of groups of banks to form no-surcharge networks.[11]

Proponents of bills that ban ATM surcharges altogether argue that such legislation would end the practice of double charging consumers. Critics, however, claim that such bans would limit private businesses' right to recover the costs of their services. The critics of surcharge bans also argue that, in the long-run, regulation of ATM networks may set a precedent that weakens the joint venture form of business.[12] Conceivably, such legislation could discourage banks from developing goods for which the joint venture is a useful form of governance. Many other electronic banking products—such as credit cards, point-of-sale debit systems, and electronic payment systems—are provided through joint ventures. Finally, critics assert that state actions to regulate network bylaws or to ban no-surcharge networks have limited ATM networks' ability to set their own business policies.

Public policy toward surcharges today reflects widespread action at the state level to adjust the rules of ATM networks to promote an adequate competitive balance within and between ATM networks. Still, conflicts remain: two state banking regulators ban surcharges, while fifteen states prohibit the formation of no-surcharge networks. Moreover, at least one state has overturned a central rule of ATM networks requiring nondiscriminatory treatment of cardholders at network ATMs. The end result is that multistate networks are forced to adopt different policies for different states.

What can consumers expect for the ATM transactions that have become a routine part of daily life? The widespread adoption of surcharges by ATM owners suggests that surcharging will continue. Nevertheless, action at the state level is likely to affect the ease with which surcharges are implemented. If the states that prohibit no-surcharge agreements lift these restrictions, the number of no-surcharge networks could rise. Such a development might ultimately prompt the owners of competing ATMs to lower their fees.

## Notes

1. According to a survey reported in *Bank Network News* (1997a), roughly half of the ATMs in the nation assess surcharges. Similar numbers are reported in earlier surveys of the prevalence of surcharging (U.S. General Accounting Office 1997; U.S. Public Interest Research Group 1997). Some proprietors refer to surcharges as access fees, convenience fees, or noncustomer convenience fees.

2. In a small number of cases, the networks are owned by all member banks or by nonbank data-processing firms.

3. Nonbank ATM owners typically surcharge all customers.

4. Some of these machines are being deployed by nonbanks. Electronic Data Systems, for example, is the third leading deployer of ATMs (*Bank Network News* 1997b). However, banks still deploy the great majority of ATMs.

5. See U.S. House (1996). In addition to the relaxation of the surcharge bans, other events that may have contributed to the increased deployment of ATMs include the steady economic expansion in the last several years, new lower cost, no-frills ATMs, and an increasing number of interstate banking organizations.

6. See Horvitz (1996) for a discussion of the effects of surcharges on retail deposit market competition among banks.

7. See, for example, Gilbert (1989) for a discussion of competition under product differentiation.

8. One legislator has attempted to get around the issue of double fees by abolishing the interchange fee and allowing the ATM owner to collect all the revenue for the transaction through a surcharge. Ohio introduced a bill to this effect.

9. Two factors might lead a bank to set a uniform rate for all its machines. First, a bank may find it too difficult and costly to set fees on a location-specific basis. If this is the case, raising the interchange fee generally might suffice to eliminate surcharges. Second, a bank competing for deposits might wish to surcharge all non-depositors to encourage them to open an account at the bank.

10. In 1996, Senator Alfonse D'Amato of New York introduced the Fair ATM Fees for Consumers Act, S.1800, which would ban surcharges, and Representative Charles Schumer of New York introduced a bill requiring disclosure of all ATM fees at the time of the transaction.

11. Furthermore, as one network executive has indicated, the differing laws among the states were a factor in the networks' decision to overturn their prohibitions on surcharges. See U.S. House (1996).

12. For a discussion of the negative effects of state membership requirements for ATM networks (commonly called mandatory sharing laws) on ATM deployment and network growth, see Laderman (1990).

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