

April 2013

AUTOMATED TELLER MACHINES

Some Consumer Fees Have Increased



G A O

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Why GAO Did This Study

Since the 1960s, consumers have increasingly used ATMs to easily access their accounts and conduct transactions such as cash withdrawals. Consumers may incur fees to use ATMs, such as a “surcharge” fee, which is paid to the ATM operator for transactions conducted at ATMs outside their financial institution’s network. In 2008, GAO reported that ATM surcharge fees had increased since 2000. GAO was asked to review issues related to continued increases in these fees.

This report discusses (1) the business models for ATM operators and how they set ATM fees, (2) the amounts of fees that consumers incur to conduct ATM transactions and how these fees have changed over time, and (3) the reported costs of ATM operations for ATM operators and how the costs and revenues are expected to change.

For this work, GAO surveyed a nongeneralizable sample of 30 financial institutions and 4 independent ATM operators to collect information on their ATM operations and costs in calendar year 2011. In addition, GAO analyzed two types of ATM fees data obtained from firms specializing in the financial services industry: (1) data on fees charged by financial institutions from 2007 to 2012 that are generalizable to all financial institutions in the United States, and (2) nongeneralizable data on fees charged by independent ATM operators that were procured by “mystery shoppers” at 100 judgmentally selected independent ATMs in 2012. GAO also interviewed industry representatives and federal regulators to understand ATM operations and requirements.

View [GAO-13-266](#). For more information, contact Alicia Puente Cackley at (202) 512-8678 or CackleyA@gao.gov.

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What GAO Found

Automated teller machine (ATM) operators include financial institutions—banks and credit unions—as well as independent firms. Industry representatives GAO spoke with estimate there are approximately 420,000 ATMs in the United States. They estimate that financial institutions operate and set the fees for about half of the market, and independent operators work together with merchants to operate the remainder and to determine the fees incurred by consumers. ATM operators have differing business models that affect the way they set ATM fees for consumers. Financial institutions operate ATMs as a convenience to their own account holders, who generally do not pay fees to use these ATMs, while non-account-holding customers do. At independent ATMs, most consumers incur a surcharge fee, although there are some exceptions, such as when the ATM is part of a surcharge-free ATM network.

GAO estimates that the prevalence and amount of ATM surcharge fees charged by financial institutions have increased since 2007, and that the estimated average surcharge fee for financial institutions that charged a fee increased from \$1.75 in 2007 to \$2.10 in 2012, in 2012 dollars. In 2012, surcharge fees charged by financial institutions ranged from \$0.45 to \$5.00. GAO’s analysis of a nongeneralizable sample of 100 ATMs run by independent operators found that the average surcharge fee was \$2.24 and ranged from \$1.50 to \$3.00 in 2012. However, some independent ATMs may have surcharge fees that are higher or lower than those in GAO’s sample. In contrast, GAO estimates that the foreign fee—the fee assessed by financial institutions for using an ATM outside the institution’s network—generally stayed constant in dollar amount over this period. Consumers have many ways to obtain cash without incurring fees, such as using ATMs within their financial institution’s network. Additionally, some financial institutions participate in surcharge-free networks that allow their customers free access to ATMs outside their institution’s ATM network. These networks can greatly expand the number and location of ATMs available to consumers free of charge.

GAO’s analysis of the ATM cost data reported by a nongeneralizable sample of financial institutions it surveyed revealed some differences in the biggest cost drivers for ATM operations. For example, large banks’ reported costs for hardware and software investments were higher as a percentage of their reported total ATM costs than for the midsize banks and credit unions. Key cost drivers reported by the nongeneralizable sample of independent ATM operators varied, but commonly reported costs were rent, infrastructure, and transaction processing. In addition, most of the surveyed ATM operators reported that overall per-ATM costs have increased over the past 5 years, while per-ATM revenues have declined. Many of the operators GAO contacted believe that ATM operation costs will continue to rise in the future and that revenues will be flat or decline.

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Abbreviations

ABA	American Bankers Association
ADA	Americans with Disabilities Act
ATM	automated teller machine
ATMIA	ATM Industry Association
CFPB	Bureau of Consumer Financial Protection
EFT	electronic funds transfer
FDIC	Federal Deposit Insurance Corporation
ICBA	Independent Community Bankers of America
NCUA	National Credit Union Administration
OCC	Office of the Comptroller of the Currency

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Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

April 11, 2013

The Honorable Charles E. Schumer
The Honorable Tom Harkin
The Honorable Bernard Sanders
The Honorable Tom Udall
The Honorable Sheldon Whitehouse
United States Senate

Since the 1960s, consumers have increasingly used automated teller machines (ATM) to conveniently and quickly access their bank accounts and conduct transactions, including withdrawing cash, making balance inquiries, and depositing cash or checks. Consumers sometimes pay fees for conducting ATM transactions, which can include both a fee paid to the ATM operator (“surcharge” fee) and a fee paid to their own financial institution (“foreign” fee) when they use an ATM outside that institution’s ATM network. According to industry estimates, the ATM business has grown substantially since the mid-1990s—from an estimated 165,000 ATMs in 1997 to 420,000 in 2012. In 2009, the most recent year for which data on ATM transactions are available, U.S. consumers made an estimated 6 billion withdrawals from ATMs, totaling \$646.7 billion.¹ We have reported in the past that ATM surcharge fees increased between 2000 and 2006.²

You asked us to review issues related to surcharge fees and what might be driving any increases. This report discusses: (1) the business models for ATM operators—financial institutions and independent firms—and how they set ATM fees; (2) the amounts of fees that consumers incur to conduct ATM transactions and how these fees have changed over time; and (3) the reported costs of ATM operations for financial institutions and independent ATM operators and how the costs and revenues are expected to change.

¹Federal Reserve System, *The 2010 Federal Reserve Payments Study: Noncash Payment Trends in the United States: 2006 – 2009* (Washington, D.C.: April 2011).

²See GAO, *Bank Fees: Federal Banking Regulators Could Better Ensure that Consumers Have Required Disclosure Documents Prior to Opening Checking or Savings Accounts*, [GAO-08-281](#) (Washington, D.C.: Jan. 31, 2008).

To address these objectives, we reviewed prior GAO, regulatory, and industry reports on ATM fees and operations, and we interviewed relevant officials from the Board of Governors of the Federal Reserve System (the Federal Reserve), the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), the National Credit Union Administration (NCUA), and the Bureau of Consumer Financial Protection, commonly known as CFPB. We also interviewed representatives from several banks, a credit union, and three independent ATM firms; industry associations; three electronic funds transfer (EFT) networks; a financial institution that sponsors independent ATM operators; and a consumer protection group.

For the first objective and third objective, we interviewed and surveyed financial institution and independent ATM operators to collect information on their business operations and models, transaction levels for calendar year 2011, and what factors they take into account when setting fees. The survey also collected information on costs—for calendar year 2011—across 12 categories that we developed in consultation with industry representatives and staff from the Federal Reserve and CFPB. The survey was deployed to the 10 largest banks and credit unions (by asset size) and 10 randomly selected midsize banks (with assets between \$10 billion and \$50 billion). We received responses from 9 out of 10 large banks, 8 out of 10 midsize banks, and 9 out of 10 credit unions. We designed and deployed a separate survey to four independent ATM operators that operate 10,000 or more ATMs and received responses from two.³ We were not able to independently verify the cost information submitted by survey respondents. However, we asked the respondents to tell us what sources they used in calculating the costs they reported. They relied on sources such as internal accounting reports and third-party bills. Based on the source information provided and follow-up calls with survey respondents, we determined the data they reported were sufficiently reliable for our purposes. In addition to the survey, we interviewed one large and two smaller independent ATM firms and held two group interviews with representatives from nine community banks, in order to

³We originally intended to deploy the survey to 10 independent ATM operator firms. However, our pretests revealed that the survey would have been overly burdensome for smaller firms, so we limited our outreach to the 4 firms that, according to our research, had more than 10,000 ATMs.

obtain general information on their ATM costs and operations.⁴ None of the costs or operations data we collected are generalizable to ATM operators at-large. Due to the sensitive and possibly proprietary nature of the information we collected with the survey, we aggregate the cost data at a high level and present it in a way that prevents individual organizations from being identified.

For the second objective, we analyzed data we purchased from two market research firms that specialize in the financial services industry. We obtained data on fees charged by banks and credit unions from 2007 through 2012 from Moebs Services, Inc. (Moebs). Moebs collected the data through telephone surveys with financial institutions selected using a stratified random probability sample, and therefore, when weighted, the data are generalizable to all financial institutions in the United States. We computed weighted estimates and 95 percent confidence intervals of the percentage of institutions charging surcharge and foreign fees and weighted averages and medians of these fees. We also examined the differences between the estimated prevalence, or percentage of institutions that charged each fee, and average fees for type and size of financial institution, as well as geographic region and type of location of the financial institution separately. We did not conduct a multivariate analysis using all of these factors, control for all factors at once, or control for additional factors in our analysis. We adjusted the dollar amounts of fees for inflation to remove the effect of changes in prices. The inflation-adjusted estimates used a base year of 2012 and Consumer Price Index calendar year values as the deflator. We relied on past interviews, analysis of the Moebs data, and the methodology report provided by Moebs, as well as reasonableness checks we conducted on the data we received to identify any missing, erroneous, or outlying data. We concluded that the data were sufficiently reliable for our purposes. Data on ATM fees charged by independent operators are not available, so we engaged the services of another research firm—Informa Research Services—to conduct “mystery shops” at 100 judgmentally selected independent ATMs in the top 10 metropolitan statistical areas.⁵ The

⁴Community banks can be defined based on a number of criteria, but for the purpose of this report, we use size (less than \$10 billion in assets) as the sole criterion to distinguish community banks from their larger counterparts.

⁵A metropolitan statistical area is a geographic entity defined by the Office of Management and Budget for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics. A metropolitan area contains a core urban area population of 50,000 or more.

mystery shop process involved having a shopper go to each selected ATM and use his or her own debit card to conduct a transaction and document several aspects of the transaction, including the fee that he or she incurred. Our sample of independent ATM operators focused on ATMs in grocery stores, drug stores, gas stations, and liquor stores. These data indicate what independent ATM fees were on a particular day in 2012 at those 100 ATMs and are not generalizable to the population of independent ATMs in the United States.

We conducted this performance audit from November 2011 to April 2013, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. See appendix I for a more detailed description of our scope and methodology.

Background

ATM transactions involve several different participants, including the customer at the terminal (the “consumer”); financial institutions such as banks, thrifts, and credit unions; and other entities involved in electronically processing transactions. Financial institutions typically issue debit cards to account holders that can be used for purchases at the point of sale or to conduct ATM transactions. ATM owners can be depository institutions, such as banks and credit unions, or public or private companies, such as merchants or independent operators that specialize in offering ATMs and related processing and support services.⁶ Independent operators may own their ATMs as well as provide ATMs under contract to merchants (for which the independent operators provide processing and other support services). Some independently owned ATMs are “branded” ATMs, where an independent firm owns and operates the machine but a financial institution pays for the right to display its logo on the terminal and to allow its customers to access the machine free of charge. Independent ATM operators must have a depository institution that sponsors their membership in the EFT networks

⁶There are several types of independent ATM operators that are not affiliated with a financial institution. These can include independent sales organizations, independent ATM deployers, and independent ATM operators or processors. In this report we use the term “independent ATM operator” to refer to all types.

that process ATM transactions. Financial institutions have a relationship with account holders outside of ATM transactions, while independent ATM operators' sole relationship with the consumer is through use of the ATM.

The EFT networks provide the infrastructure that allows funds to be transferred electronically and provide a means for an ATM card from one financial institution to be used at another financial institution's or independent operator's ATM. EFT networks route transactions between the ATMs and the card-issuing financial institutions and act as a clearinghouse to settle those transactions. They establish the rules and requirements for any financial institution that chooses to participate in the EFT network. These networks perform millions of transactions monthly.

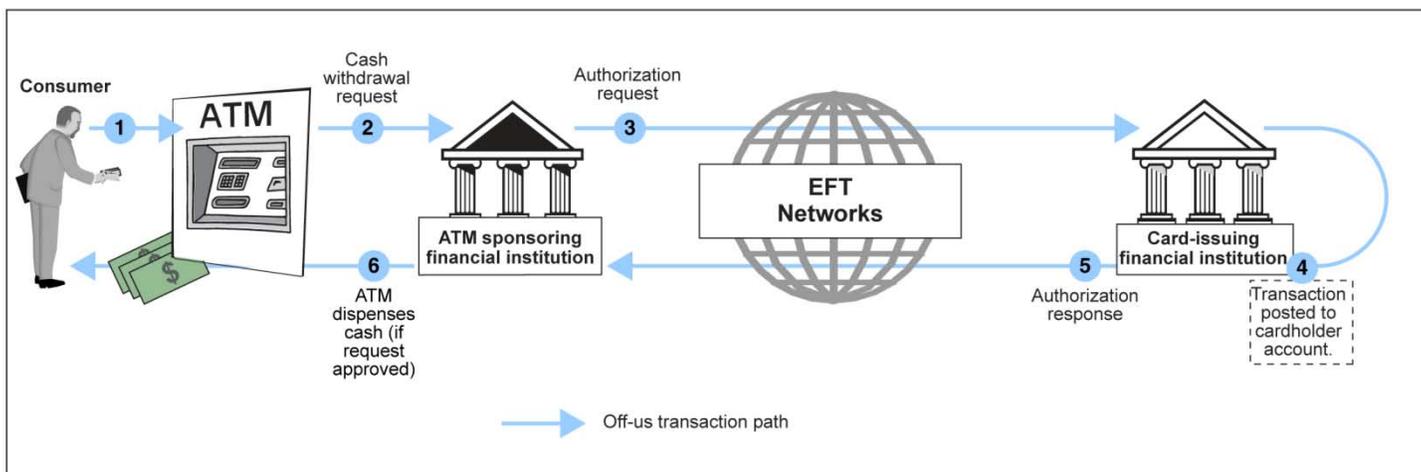
The steps involved in an ATM transaction depend on whether or not a consumer uses an ATM owned by his or her financial institution (typically referred to as an "on-us" transaction) or an ATM owned by another financial institution or firm (typically referred to as an "off-us" transaction). On-us transactions are not routed through the EFT networks but instead are processed internally by the consumer's financial institution.⁷ In both cases, the ATM transaction begins when the consumer inserts the ATM or debit card into an ATM, enters the personal identification number, selects the transaction to be performed—such as a cash withdrawal from the consumer's checking account—and enters the amount of the transaction.⁸ For off-us transactions, the terminal sends this information to the sponsoring financial institution to identify the card-issuing financial institution, which determines the EFT network used to route the

⁷Industry representatives told us some smaller financial institutions use a third-party firm to process "on-us" ATM transactions.

⁸In addition to cash withdrawals, consumers can conduct other transactions at an ATM such as checking account balances or making deposits; however, cash withdrawals are the most common transactions conducted at ATMs, as shown by our survey results in appendix II. Credit cards can also be used at ATMs to withdraw cash. However, ATM operators are not always able to track whether or not a transaction was initiated with a debit card or a credit card. For example, in our survey, out of the 26 financial institutions that responded to the question, only 11 said they could track the frequency of credit card-based transactions at their ATMs, and reported between 0.3 and 5 percent of the transactions at their ATMs used a credit card in calendar year 2011. The other fifteen operators responded "unable to determine."

transaction.⁹ The EFT network passes the request for authorization to the consumer’s financial institution, which approves or denies the transaction based on the terms and conditions of the consumer’s account and the availability of funds. The approval or denial message is sent back to the ATM terminal, first through the EFT network and then through the sponsoring bank. If the transaction is authorized, the consumer receives the requested cash, and the transaction is posted to the consumer’s account, deducting the amount of money the consumer received at the ATM plus any fees assessed. Using the EFT network, the consumer’s financial institution pays the ATM owner the withdrawal amount plus any assessed surcharges. Figure 1 depicts the transaction flow among the parties involved in an off-us ATM transaction.

Figure 1: ATM Transaction Flow for “Off-Us” Cash Withdrawals



Sources: GAO; Art Explosion (clip art).

Several fees can be paid by the consumer and the other participants in order to process an ATM transaction.¹⁰ Consumers may be charged two types of fees. First, the ATM owner may assess a surcharge fee on the consumer for conducting a transaction at the ATM. Federal regulations

⁹The ATM sponsoring financial institution is the entity that sponsors access to the EFT network. Therefore banks and credit unions are their own sponsoring financial institutions. Sometimes the sponsoring financial institution is referred to as the “acquirer.”

¹⁰This report focuses exclusively on the fees paid to conduct transactions at ATMs in the United States.

require ATM operators to provide notice that the surcharge fee will be imposed and disclose the amount of the fee on the ATM screen before the consumer commits to paying the fee.¹¹ Surcharge fees also appear on the transaction receipt and again on the consumer's account statement—sometimes combined with the cash withdrawal amount. Second, a foreign ATM fee is a fee that may be assessed by the consumer's financial institution when the consumer uses an ATM owned by another ATM operator. The foreign ATM fee is not disclosed at the ATM. Rather it is provided to consumers in information they receive when they open their account, in fee disclosures, and on their periodic statements when they incur the fee.¹²

¹¹Regulation E implements the Electronic Fund Transfer Act, the primary federal statute that governs the disclosure of ATM fees. 15 U.S.C. §§ 1601, 1693-1693r. Regulation E requires ATM operators that charge a fee to provide notice that a fee will be imposed and disclose the amount of the fee. 12 C.F.R. §1005.16. On December 20, 2012, the President signed into law a bill that eliminated the statutory requirement that the fee be posted on the outside of the ATM, so now only the on-screen notice is required. 15 U.S.C. §1693b(d)(3)(B), (2013) *amended by* Pub. L. No. 112-216, 126 Stat. 1590 (2012).

¹²Regulation E requires financial institutions to provide consumers with initial disclosures of the terms and conditions of EFT services. 12 C.F.R. §1005.7. In addition, Regulation DD, which implements the Truth in Savings Act, requires depository institutions to disclose, among other things, the amount of any fee that may be imposed in connection with an account and the conditions under which such fees are imposed. 12 C.F.R. § 1030.4. Banks, thrifts, and credit unions are subject to supervisory oversight, which includes on-site examinations and other steps, to enforce compliance with the relevant laws and regulations that pertain to ATM transactions. The Bank Service Company Act, 12 U.S.C. §§ 1861-1867(c), permits examination and regulation of bank service companies or independent servicers performing under a contract or otherwise any service for a federally regulated depository institution by the appropriate federal banking agency of the depository institution acquiring the service, which includes OCC, the Federal Reserve, and FDIC. See 12 U.S.C. § 1867(c). The Federal Reserve has supervisory responsibility for state-chartered banks that are members of the Federal Reserve System, as well as bank holding companies and their nonbank subsidiaries, other than savings institutions and credit unions. 12 U.S.C. § 1844(c)(2)(A)(i)-(ii). FDIC oversees state-chartered banks and savings associations with federally insured deposits that are not members of the Federal Reserve System. 12 U.S.C. §§ 1813(q)(2), 1819(a). OCC oversees national banks and federal savings associations. 12 U.S.C. §§ 481, 1813(q)(1). NCUA oversees federally chartered and state-chartered credit unions whose member accounts are federally insured. 12 U.S.C. § 1784. State-chartered banks, thrifts, and credit unions are also subject to supervision by the state in which they are chartered. CFPB examines insured depository institutions and credit unions with more than \$10 billion in assets as well as entities with which they have third-party contracts, such as independent ATM operators and network providers, to assess compliance with federal consumer financial laws. Pub. L. No. 111-203, §§ 1002(26),1025(d).

The consumer's financial institution and the ATM operator also pay certain fees to process an ATM transaction. Specifically, the interchange fee is set by the EFT networks and paid by the consumer's financial institution to the ATM owner for the costs of placing and maintaining ATMs. The switch fee is assessed by the EFT networks on the consumer's financial institution to pay for processing each of its network transactions. Finally, the acquiring fee is paid by the ATM owner to the EFT networks for use of the networks to conduct the ATM transaction. Table 1 provides a summary of the fees paid by consumers, financial institutions, and ATM operators during an ATM transaction.

Table 1: Fees Paid by Consumers, Financial Institutions, and ATM Owners to Process ATM Transactions

Fee	Who pays	Who receives	Description
Surcharge fee	Consumer	ATM owner	Paid to the ATM owner by the consumer when using an ATM not owned by his or her financial institution.
Foreign fee	Consumer	Consumer's financial institution	Paid to the consumer's financial institution by the consumer when using an ATM not owned by the card-issuing financial institution.
Interchange fee	Consumer's financial institution	ATM owner	Paid to the ATM owner for the costs of operating and maintaining the ATM.
Switch fee	Consumer's financial institution	EFT networks	Paid to the EFT networks for routing transaction information over the network.
Acquiring fee	ATM owner	EFT networks	Paid to the EFT networks for the use of the network by the ATM owner.

Source: GAO analysis of Federal Reserve and industry documents.

Business Models for Financial Institutions and Independent ATM Operators Impact How Fees Are Set

Financial institutions and independent ATM operators have different business models and, as a result, set ATM surcharge fees differently. Financial institutions operate ATMs as a convenience to their own account holders, who generally do not pay fees to use these ATMs. However, financial institutions do assess a surcharge fee when a transaction is conducted by nonaccount-holding consumers. Independent ATM operators charge surcharge fees to most customers, and in many cases operators work with merchants to determine those fees.

Financial Institutions Operate ATMs Primarily for Their Own Account Holders, Often with No Fees

According to industry estimates, there are approximately 420,000 ATMs currently operating in the United States, and financial institutions operate just under half of those machines, either in their own facilities or at off-site locations, such as shopping centers, drug stores, and grocery stores. Those financial institutions that responded to our survey—representing 81,833 ATMs—reported they placed 57 percent of their total ATM fleet at bank facilities, while 43 percent were located off site.¹³ Financial institutions typically own or operate their ATMs. In some cases, financial institutions partner with independent firms to operate branded ATMs that carry the financial institution's logo and look and function as if they belong to the institution but are owned by an independent ATM operator. As previously discussed, under these arrangements, the account holders for that financial institution are allowed to use the branded ATMs without paying a fee.

Financial institution representatives told us they view access to ATMs as a key service they provide to account holders. A representative from a large national bank said that its personal banking business is driven by customer convenience. Therefore they view access to ATMs as an important service to their account holders and have invested in a large fleet of ATMs for customer use. Likewise, a community banker we interviewed said that they view their ATMs as a way of extending the bank's hours for customers to receive cash and make deposits. Representatives from two large national banks said that they consider where their customer base is located when determining where to place an ATM. One large bank representative noted that the bulk of the bank's ATM business is its own customers, so it invests in ATMs and places them in locations near the greatest numbers of account holders. Financial institutions that have smaller fleets of ATMs, such as some credit unions and community banks, may offer their account holders access to ATMs by participating in a surcharge-free network. When a financial institution enrolls in a surcharge-free network, all ATMs in that network are available to their account holders surcharge free.

¹³As previously discussed, we surveyed a total of 30 financial institutions—the 10 largest banks and 10 largest credit unions (by asset size) and 10 randomly selected midsize banks (with assets between \$10 billion and \$50 billion). Response rates for this question were: 9 large banks, 9 credit unions, and 8 midsize banks. For these and all other survey data, the period covered is calendar year 2011. For more survey results, see appendix II.

Financial institutions generally do not charge their own account holders for transactions conducted within their own ATM network. When establishing surcharge fees charged to nonaccount-holding customers, the financial institutions we surveyed most frequently cited three factors that they consider, the first being competition—the fees being charged by nearby ATMs.¹⁴ Likewise, one bank representative we interviewed said that they do not want the fee to be so high that they turn away potential customers; instead, they want account holders from other financial institutions to use their ATMs and based on that experience, open accounts at their bank. Similarly, one of the community bankers we spoke to said that they try to set their fee just below those of other ATMs in the area so that they can increase their own transaction volume. In contrast, a few industry representatives told us that generally fees are set higher at areas where there is more limited ATM competition, such as airports and amusement parks.

The second most cited factor by survey respondents that they consider when setting surcharge fees was cost of operating the ATM.¹⁵ However, several of the financial institution officials we interviewed noted that the surcharge fees do not cover the costs of operating their ATMs, and the institution takes a loss on the ATM to provide the service to its account holders. The third most frequently cited factor the surveyed financial institutions take into account when setting surcharge fees was anticipated usage, or transaction levels.¹⁶ For example, representatives from two large banks noted that surcharge fees help ensure ATM availability for their account holders while also making the service available as a convenience for nonaccount-holding customers. Furthermore, the surcharge revenues at some locations can subsidize expensive or unprofitable ATM locations such as airports, colleges, and business districts.

¹⁴Our survey included a question asking what factors are taken into account when setting fees. Eight large banks, eight midsize banks, and nine credit unions responded to this question. We analyzed those responses and grouped them into like categories. Competition was the most frequently cited factor the financial institutions take into account when setting fees, mentioned by 16 survey respondents.

¹⁵Cost was cited by 13 respondents as a factor they take into account when setting surcharge fees.

¹⁶ATM usage levels were cited by six respondents as a factor they take into account when setting surcharge fees.

Independent ATM Operators Work with Merchants to Operate Terminals and Set Fees

Independent ATM firms—those not part of a financial institution—own, operate, or service just over half of the nation’s ATMs in a variety of locations, such as gas stations and convenience stores, bars, restaurants, and small businesses, according to industry sources.¹⁷ The independent ATM industry is very diverse, with firms ranging in size from fewer than five ATMs to tens of thousands. According to information we have gathered, the two largest independent firms operate an estimated 47 percent of the independent ATM market. In addition to owning and operating their own ATMs, these independent firms offer a wide range of ATM-related services to merchants and other entities that own ATMs, such as monitoring and maintaining appropriate cash levels in terminals and processing transactions. There are four primary business models for independent ATM operators, shown in table 2.

Table 2: Description of Primary Independent ATM Operator Business Models

Name of business model	Independent operator responsibilities	Merchant responsibilities
Turnkey	Owens the ATM and is responsible for most aspects of its operations, including ATM monitoring, managing and loading cash, replacing supplies, and providing maintenance, customer-service support, and transaction processing.	Provides a place to locate the ATM and an electric outlet to power it.
Merchant-Assisted	Owens the ATM, provides all transaction processing, performs ATM monitoring and related customer-service support, and, in some cases, performs maintenance for more complicated problems.	Provides and loads cash as well as performs basic maintenance.
Merchant-Owned & Loaded	Provides transaction-processing services, ATM monitoring, and other services, such as customer-service support and arranging for advanced maintenance.	Owens the ATM, responsible for the majority of the operations, including basic maintenance and managing and loading cash.
Merchant Cash-Assisted	Provides and loads cash, and provides transaction-processing services, ATM monitoring, and other services, such as customer service support and arranging for advanced maintenance.	Owens the ATM, responsible for operations, including basic maintenance, but not managing and loading cash.

Source: GAO analysis of industry reports.

According to the ATM Industry Association, approximately 20 percent of the independent ATMs in the United States are owned by an independent ATM firm. The other 80 percent of independent ATMs are owned by

¹⁷We obtained this information from the ATM Industry Association. In addition, two major EFT networks—based on their industry knowledge—also told us they estimated that independent ATM operators run half or just over half of the ATMs in the United States.

merchants and retailers. In these situations, independent ATM firms provide varying levels of nonownership services and support to merchants, depending on the business model established. We found that the independent ATM firms included in our study had similarly diversified portfolios, where they both owned and operated ATMs while also providing services to merchants who owned the ATMs in their stores. We also found that, among the firms in our study, there was great variability as to the percentage of ATMs owned by the firm versus the merchant. For example, one smaller independent firm we spoke with owned 79 percent of the approximately 500 ATMs in its fleet, while the remaining 21 percent were merchant owned. In contrast, the two independent firms that participated in our survey—representing approximately 66,000 ATMs—owned 2 percent of their ATMs, while merchants owned the other 98 percent.

Independent ATM operators generally levy a surcharge on consumers, although there are exceptions. Unlike financial institutions, which have a relationship with consumers who are also account holders through which they can gain revenue from other account fees, independent ATM operators' only relationship with the consumer is through their use of the ATM. Most independent ATM operators charge a surcharge fee to consumers for the convenience of accessing their account from a machine outside their bank's ATM network. In addition, as previously discussed, those consumers may be charged a foreign fee by their own bank for using these independent ATMs (or ATMs run by financial institutions other than their own). However, some transactions at independent ATMs are surcharge free because the ATMs may be bank-branded or may be part of one or more surcharge-free networks.

When placing, operating, and servicing ATMs in retail space, independent ATM firms establish contracts with the merchants that specify which party will set the surcharge fee and how, if at all, those and other fee revenues will be shared. For turnkey and merchant-assisted ATMs, the surcharge fees are generally set by the independent ATM firms because they own the machines.¹⁸ For ATMs that are owned by merchants or retailers in the United States, the fees are set by either the merchant or a combination of the merchant and the independent ATM firm. A representative from one

¹⁸According to one independent ATM firm, in some cases the contract for an ATM placement may stipulate that both the merchant and independent ATM operator mutually consent to the amount of the surcharge fee.

independent firm said that if the ATM is owned by the merchant, the firm is not involved in setting the surcharge fee, except to make suggestions to the merchant or to refuse to process the transaction if it determines the fee is exorbitant.

Like financial institutions, when setting surcharge fees, independent operators typically consider fees at the nearby ATMs, the location, and operating costs. A representative from one independent ATM firm said that the market dictates the surcharge fee and he can only charge what his competitors are charging. The location of the ATM is also considered when setting the surcharge fee. Another independent operator said he considers the type of location where the ATM will be placed and the resulting demographic that will frequent that area. He evaluates what fee is competitive for the region or neighborhood and the type of location. For example, some ATMs have lower fees because they are placed in lower income areas. Another firm representative said that the surcharge fee in bars, nightclubs, and casinos is typically higher than the surcharge fee in a grocery store. The third factor is the cost of running the ATM terminal. An independent ATM operator we spoke with said that the firm establishes fees that, when combined with other revenues such as interchange fees, will provide sufficient revenue to cover the variable cost of processing transactions and the fixed cost of installing the ATM.

Some ATM Fees Have Increased, but Often Consumers Can Avoid Incurring Fees

Our review found that since 2007, surcharge fees assessed by financial institutions have generally increased. We also found that the percentage of financial institutions charging foreign fees and the amount ATM users pay in foreign fees has remained constant. However, consumers can obtain cash without paying ATM fees in a number of ways, such as using their own banks' ATMs or requesting cash back at the point of sale.

ATM Surcharge Fees Assessed by Financial Institutions Have Increased, While Foreign Fees Remained Constant

Our analysis shows that the prevalence and amount of ATM surcharge fees levied by financial institutions have generally increased since 2007, while foreign fees have generally remained constant in prevalence and amount, as seen in figure 2.¹⁹ We analyzed data obtained from a private vendor—based on annual surveys of hundreds of banks, thrifts, and credit unions on selected banking fees—and found that the percentage of financial institutions charging surcharge fees rose from an estimated 87 percent to 96 percent from 2007 through 2012.²⁰ Of those institutions that charged a surcharge fee, the estimated average ATM surcharge fee increased from \$1.75 in 2007 to \$2.10 in 2012.²¹ The estimated median ATM surcharge fee rose from \$1.56 in 2007 to \$2.00 in 2012. Surcharge fees charged by financial institutions in our sample ranged from \$0.28 to \$5.52 in 2007, and the range was \$0.45 to \$5.00 in 2012. Meanwhile, foreign fees did not significantly change in prevalence and amount from 2007 to 2012. Our analysis of the data shows that the estimated percentage of financial institutions charging their customers a foreign fee between 2007 and 2012 has remained fairly constant at about 55 percent. In addition, our analysis shows that for institutions that charge a foreign

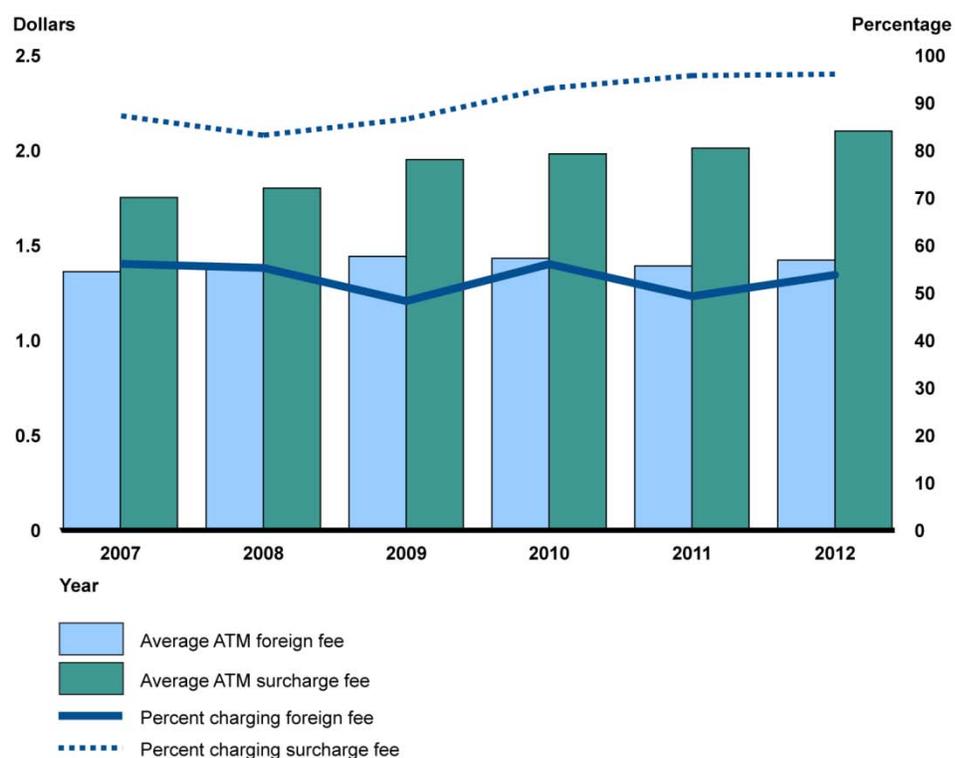
¹⁹As previously discussed, we analyzed data from a private vendor, Moebs Services, Inc. (Moebs), to assess ATM fees charged by financial institution ATM operators. Moebs provided data gathered through telephone surveys for each of the years 2007 through 2012, based on statistically representative samples of financial institutions. We computed weighted estimates and 95 percent confidence intervals of the percentage of institutions charging surcharge and foreign fees and weighted averages and medians of these fees. All percentage estimates presented in this report have a margin of error of +/- 5 percentage points or fewer, and all average and median estimates have a relative margin of error of +/- 5 percent or less, unless otherwise noted. All differences between estimated values in this report are statistically significant at the 95 percent confidence level (p-value <= 0.05), unless otherwise noted. For more detailed information on the characteristics of the data, see appendix I.

²⁰Our analysis focused on surcharge and foreign fees for cash withdrawals. However, a small percentage of other transactions that occur at the ATM incur fees. See appendix II for survey results on these other fees.

²¹Unless noted otherwise, dollar amounts for ATM surcharge and foreign fees in this report are in 2012 dollars, calculated using the Consumer Price Index calendar year values. We analyzed the prevalence of charging a surcharge and foreign fee, and then we excluded financial institutions that did not charge a fee from our calculation of the average fees. In our previous work on ATM fees, we calculated the average ATM surcharge and foreign fee by averaging the fee charged by all institutions, including those that did not charge a fee, and reported those numbers in 2006 dollars. See GAO, *Bank Fees: Federal Banking Regulators Could Better Ensure that Consumers Have Required Disclosure Documents Prior to Opening Checking or Savings Accounts*, [GAO-08-281](#) (Washington, D.C.: Jan. 31, 2008).

fee, the estimated average fee did not significantly change between 2007 (\$1.36) and 2012 (\$1.42). The estimated median foreign fee was \$1.09 in 2007 and \$1.00 in 2012.²² Foreign fees charged by financial institutions in the sample ranged from \$0.28 to \$5.52 in 2007, and the range was \$0.25 to \$5.00 in 2012.

Figure 2: Estimated ATM Fees Charged by Banks and Credit Unions, 2007-2012



Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values. We computed weighted estimates and 95 percent confidence intervals of the percentage of institutions charging surcharge and foreign fees and weighted averages and medians of these fees. All percentage estimates presented in this report have a margin of error of +/- 5 percentage points or fewer and all average and median estimates have a relative margin of error of +/- 5 percent or less, unless otherwise noted.

²²The median estimates for 2007 and 2012 are not significantly different; the median estimate for 2012 has a margin of error of ±\$0.15 and a relative margin of error of ±15 percent.

We estimate that there were no statistically significant differences in 2012 in the prevalence of the surcharge fee based on the type and size of institution, or on geographic region or location—such as rural, urban, or suburban—in which the financial institution was located.²³ The estimated average surcharge fee amount, for institutions that charged a fee, differed slightly by size and type of financial institution.²⁴ In 2012, the estimated average surcharge fee for larger financial institutions was approximately \$0.24 higher than the estimated average surcharge fee for smaller financial institutions, and banks' estimated average surcharge fees were also \$0.17 higher than the estimated average surcharge fees charged by credit unions.²⁵ For example, in 2012, the estimated average surcharge fee for using a large financial institution's ATM was \$2.25, while the estimated average surcharge fee at a small financial institution's ATM was \$2.01. In contrast, there were no statistically significant differences in estimated average ATM fees in 2012 based on the type of location and geographic region in which the financial institution was located.²⁶ See figure 3 for information on the estimated average surcharge fee amount based on several factors for 2012.

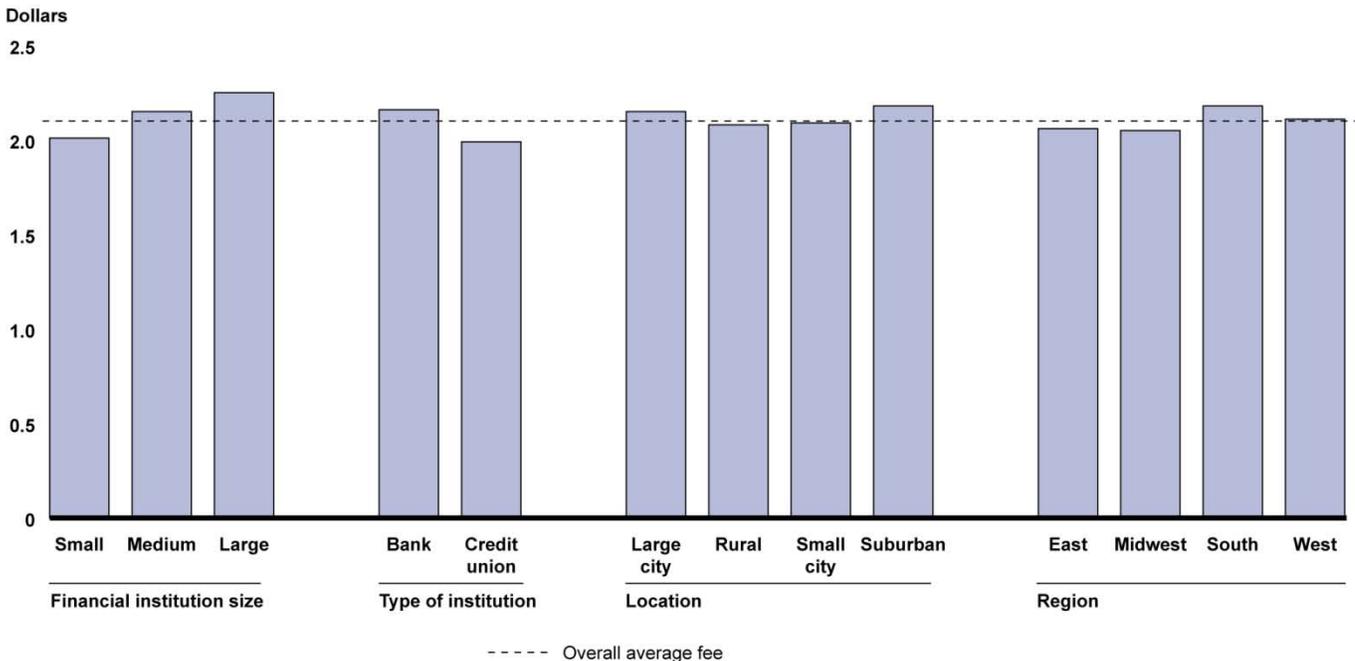
²³We examined the differences between the estimated prevalence and average fees for type and size of financial institution, as well as geographic region and type of location of the financial institution separately. We did not conduct a multivariate analysis using all of these factors or control for any additional factors in our analysis.

²⁴We analyzed the estimated average, median, and range of ATM fees for all financial institutions from 2007 through 2012, but due to a large sample size, we chose to present the estimated averages in discussing differences in the amount of the surcharge fees for various types and sizes of institutions, or in geographic regions or types of areas, such as rural, urban, or suburban, in which the financial institution was located.

²⁵The Moebs data set defined small financial institutions as those with less than \$10 million in assets, medium financial institutions as those with \$10 million to \$999 million in assets, and large financial institutions as those with \$1 billion or more in assets, so we used those definitions in our analysis of fees.

²⁶We also analyzed the variation in amount and prevalence of surcharge fees from 2007 through 2011 based on the institution size and type, and type of location and geographic region in which the financial institution is located. Within each year, we examined the differences between the estimated average fees for these factors separately. We did not conduct a multivariate analysis using all of these factors or control for any additional factors in our analysis. See appendix III for more analysis of surcharge fees based on these factors for 2007 through 2012.

Figure 3: Estimated Average Surcharge Fee, by Size, Type, Location, and Region of Financial Institution, 2012



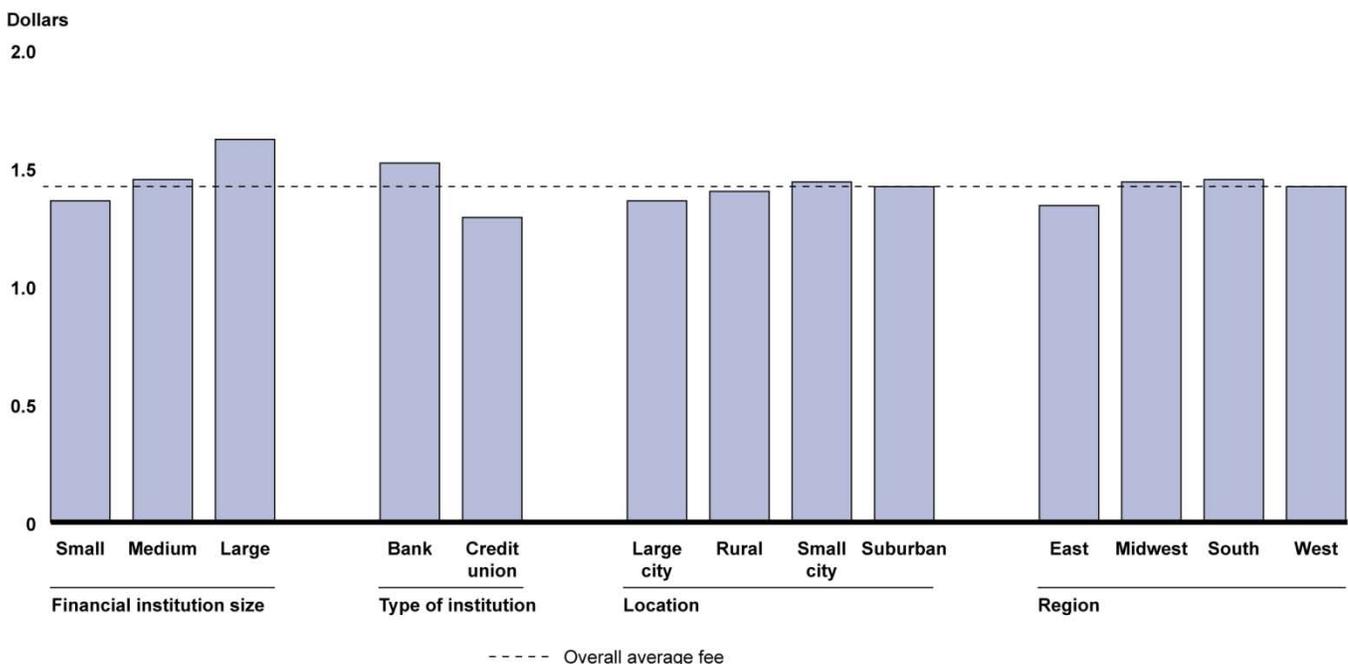
Source: GAO analysis of Moeb's Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values. We analyzed the estimated average, median, and range of ATM fees for all financial institutions from 2007 through 2012, but due to the large sample size, we chose to conduct our analysis of variation in fees using the estimated averages. We examined the differences between the estimated average fees for type, size, location, and geographic region separately. We did not conduct a multivariate analysis using all of these factors or control for any additional factors in our analysis. Our estimates have relative margins of error at the 95 percent confidence level of +/- 5 percent or less, with these exceptions: financial institutions in large cities (+/- 7.9 percent).

We estimate that a higher percentage of large financial institutions charged a foreign fee in 2012 than small financial institutions. Specifically, an estimated 73 percent of large financial institutions charged a foreign fee in 2012 compared to an estimated 50 percent of small financial institutions. For those institutions charging the foreign fee, the estimated average fee amount was greater for large institutions and for banks. In 2012, large financial institutions had an estimated average foreign fee of \$1.62, which is \$0.26 more than the estimated average foreign fee charged by small financial institutions, which had an estimated average foreign fee of \$1.36. Additionally, the average foreign fee was an

estimated \$0.23 higher at banks than credit unions in 2012.²⁷ See figure 4 for more information on the estimated average amount of foreign ATM fees based on various factors for 2012.

Figure 4: Estimated Average Foreign Fee, by Size, Type, Location, and Region of Financial Institution, 2012



Source: GAO analysis of Moeb's Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values. We analyzed the estimated average, median, and range of ATM fees for all financial institutions from 2007 through 2012, but due to the large sample size, we chose to conduct our analysis of variation in fees using the mean. We examined the differences between the estimated average fees for these factors separately. We did not conduct a multivariate analysis using all of these factors or control for any additional factors in our analysis. Our estimates have relative margins of error at the 95 percent confidence level of +/- 5 percent or less, with these exceptions: financial institutions in large cities (+/- 11.8 percent), suburban financial institutions (+/- 6.7 percent), financial institutions in the East (+/- 5.6), financial institutions in the South (+/- 5.7), and financial institutions in the West (+/- 6.7).

²⁷We also analyzed the differences in the estimated average amount and prevalence of foreign fees from 2007 through 2011 based on the institution size and type, and type of location and geographic region in which the financial institution is located. Within each year, we examined the differences between the estimated average fees for these factors separately. We did not conduct a multivariate analysis using all of these factors or control for any additional factors in our analysis. See appendix III for more analysis of foreign fees based on these factors for 2007 through 2012.

Historical or trend data for independent ATM operators' fees are not available. However, we analyzed data from Informa Research Services on the fees charged by a judgmentally selected sample of 100 ATMs run by independent ATM operators in 2012.²⁸ These data are not generalizable to the independent ATM population at-large.²⁹ Our analysis of the Informa data shows that the average surcharge fee for the 100 independent ATMs surveyed was \$2.24 in 2012.³⁰ The median surcharge fee for independent ATMs included in the sample was \$2.00. The surcharge fee ranged from \$1.50 to \$3.00. However, some independent ATMs may have surcharge fees that are higher or lower than those in our sample. While we do not have historical data on independent ATM surcharges, representatives from a large independent ATM firm told us that their average surcharge fees rose from \$1.77 in 2002 to \$2.46 in 2011.³¹

Aggregate data are also not available on the prevalence of surcharge fees among independent ATM operators. However, data obtained by mystery shoppers from a sample of 100 judgmentally selected independent ATMs in the top 10 metropolitan statistical areas, show that most of these ATMs charged a surcharge fee to the mystery shopper, but some transactions were conducted surcharge free. Specifically, in our sample of 100 independent ATMs, six mystery shoppers conducted a transaction for free using the selected ATM. In four of the six cases, the shoppers were able to conduct a transaction surcharge free since both

²⁸As previously discussed, we analyzed data from a private vendor, Informa Research Services, Inc. (Informa), to assess ATM fees charged by independent ATM operators in 2012. The Informa data are from a nonrepresentative sample of independent ATM operators and were gathered by sending shoppers to selected ATMs to conduct a transaction and report their results. For more detailed information on the characteristics of data sets and the data reported by each vendor, see appendix I.

²⁹Due to the judgmental and nongeneralizable sample of data we obtained from Informa, we are also unable to analyze differences in surcharge fees for independent ATMs based on the type or size of ATM operator or geographic region or type of area in which the independent ATM is located.

³⁰As previously stated, our sample of independent ATM operators focused on ATMs in grocery stores, drug stores, gas stations, and liquor stores, and our sample is not generalizable to all independent ATMs in the United States.

³¹As previously discussed, dollar amounts for ATM surcharge fees in this report are in 2012 dollars, calculated using the Consumer Price Index calendar year values. The nominal values for the average ATM surcharge fees reported by this independent operator were \$1.39 in 2002 and \$2.42 in 2011.

the ATM and the shopper's debit card displayed the logo of a surcharge-free network. In the other two cases where no surcharge was incurred, we sent a second mystery shopper to use the terminal, and the second shopper was charged a fee. We were unable to determine why the first mystery shoppers were not charged surcharge fees, but we did note that the ATMs had surcharge-free network logos on them.

The independent ATM firms we surveyed reported similar results to the mystery shopping data. The two independent firms reported in our survey that out of 140,634,638 cash withdrawals at their ATMs in calendar year 2011, customers incurred a surcharge fee 97 percent of the time.³² However, the percentage of transactions that are surcharge free may vary depending on the extent to which the ATM operator is involved in surcharge-free networks or branding agreements. For example, one large independent ATM operator estimates that more than half of the transactions that occur on its ATMs do not generate a surcharge fee due to either a surcharge-free network or branding agreements.³³

Consumers Have Many Ways to Obtain Cash without Incurring Fees

To obtain cash without incurring fees, consumers can generally withdraw cash at a bank branch during banking hours or use ATMs in their bank's network. Our analysis indicates that a majority of transactions at financial institution ATMs may occur in this way. Specifically, according to our survey data, approximately 92 percent of the 3.3 billion reported transactions in calendar year 2011 at the financial institutions that responded did not incur a surcharge fee.³⁴ At midsize and large banks we surveyed, ATM cash withdrawals did not incur a surcharge fee about 85 percent of the time. Additionally, our survey results showed that cash withdrawals at credit unions were surcharge free 95 percent of the time. Further, some industry representatives told us that financial institutions' ATMs typically have a higher volume of transactions than independent

³²The firms also reported on transactions other than cash withdrawals—balance inquiries, fund transfers, and denials—none of which incurred a surcharge. For more information, see appendix II.

³³Although we interviewed officials from this firm and they submitted cost and revenue information to us, they did not complete the survey. While we were not able to independently verify these estimates, we do know there are independent ATM firms that have substantial branding and surcharge-free network programs.

³⁴As previously discussed, all survey results are for calendar year 2011.

ATMs. While our survey results are not generalizable to the total population of ATM operators, they did reveal that per-ATM transaction levels were much higher at financial institution ATMs than at independent ATMs for operators responding to the survey. As previously discussed, bank representatives we spoke to said that transactions at their ATMs are primarily from their own account holders, who do not incur fees for the transaction, and a large EFT network estimated that 80 percent of ATM transactions are on-us transactions and do not incur a fee. Consumers also avoid paying foreign fees in on-us transactions, because they are using machines within their financial institution's ATM network.³⁵ However, all consumers may not have convenient access to their own financial institution's ATMs to obtain cash. Some account holders may live in areas with limited access to a financial institution facility, or need cash at a time when they are unable to go to their own financial institution—for example when attending a sporting event or while travelling.

Additionally, some financial institutions participate in surcharge-free networks that allow their customers free access to ATMs outside their bank's network of ATMs. In this way, a financial institution can expand the number and location of ATMs available to its customers. Three of the largest surcharge-free networks in the United States each offered more than 20,000 ATMs, and some customers whose financial institutions have enrolled in those networks can use those ATMs without incurring a surcharge fee.³⁶ Four banks and eight credit unions in our survey reported that they participated in at least one surcharge-free network, expanding the number of surcharge-free ATMs available to their customers. For example, one credit union in the survey owned and operated 251 ATMs and enrolled in a surcharge-free network that gave its customers access to an additional 30,000 ATMs free of charge. However, ATMs in surcharge-free networks may not be available to all customers. One of the largest surcharge-free networks in the country states that 80 percent of the ATMs in its network are in metropolitan areas.

³⁵As previously discussed, this report focuses exclusively on fees paid to conduct transactions at ATMs in the United States.

³⁶As of February 2013, these three firms reported having 38,000, 30,000, and 23,000 ATMs in their surcharge-free networks. However, since an ATM could be part of more than one surcharge free network, it is not possible to determine the number of distinct ATMs that participate in these three surcharge-free networks.

Also, many financial institutions use branding agreements to expand their network of ATMs, which allows their consumers to withdraw funds from these ATMs without incurring fees. For example, the number of branded ATMs with financial institution logos increased from 11,900 in 2010 to 15,400 in 2011 for one large independent ATM operator, according to the operator's annual reports. Among our surveyed financial institutions, branded ATMs accounted for approximately 16 percent of the total number of reported ATMs.³⁷ One small independent ATM operator estimated that 55 percent of customers who use its ATMs pay a fee, and that percentage has decreased over the past 5 years due to an increase in financial institution branding and access to surcharge-free networks.

Some financial institutions offer to refund ATM fees to account holders when they use an ATM. One community banker we spoke to said the bank gives consumers rebates on ATM fees up to \$20 each month and that this approach is more cost effective than owning and maintaining a fleet of ATMs. Finally, industry participants we spoke with said that consumers are increasingly obtaining cash when making debit card purchases, which also allows them to avoid fees. One community banker we spoke to said that the bank educates customers and encourages them to obtain cash at the point of sale so that they do not incur ATM fees and the bank can have a smaller ATM fleet. However, as previously discussed, these options may not be available to all consumers, and we do not know the extent to which consumers obtain cash at the point of sale or receive ATM fee refunds.

ATM Operators Have Varying Costs, and Many Operators Anticipate Costs Will Rise

ATM operators incur a variety of costs—including rent to place the machines in retail locations and security costs to keep the machines safe, among others—and the amount of these costs varies widely among operators. ATM operators report taking a number of steps to respond to changing operating costs, such as increasing surcharge fees and investing less money in ATMs. However, operators also anticipate that many of these costs will rise in the future.

³⁷Twenty-six financial institutions—9 large banks, 9 credit unions, and 8 midsize banks—responded to this question and reported a total of 12,701 branded ATMs.

Financial Institution and Independent ATM Operators Have a Variety of Disparate Costs

ATM operators incur a wide variety of costs in providing ATM services. Our survey of a judgmental sample of the 10 largest banks and credit unions, 10 randomly selected midsize banks (“financial institution” operators), and 4 large independent ATM firms (“independent” operators) collected information on the following cost categories, all of which—except bank sponsorship—are typically borne by both financial institution and independent ATM operators.³⁸

- *Rent.* Financial institution operators pay rent for ATM facilities at locations not in an institution facility, and independent operators pay rent for retail or other locations, such as grocery stores or gas stations.³⁹
- *Hardware and software investments.* Operators purchase, install, and upgrade ATM software and equipment, including the ATM terminals and physical security equipment, such as bolting devices which secure the machines to walls or the floor.
- *Cash services.* Operators must take steps to ensure that ATMs are adequately stocked with cash and, therefore, spend time and resources monitoring transaction levels in order to accurately forecast future cash needs. Cash is delivered to the ATM via armored carrier. Independent operators also need to pay to access a supply of cash from a bank vault.
- *Maintenance and repairs.* Maintenance includes cleaning the machinery, making routine repairs, and restocking of supplies (such as receipt paper), as well as more significant repairs, which can incur higher costs for tools, parts, and labor.

³⁸As previously discussed, independent ATMs may be owned by merchants, not the independent operators, and in those cases, the merchant-owners bear some of the ATM operational costs. We developed the cost categories and their content by reviewing various reports and studies on ATM operations, as well as a Federal Reserve survey recently deployed on debit card processing costs. We then received input on the categories from knowledgeable industry representatives and staff from the Federal Reserve and CFPB. For a detailed discussion of the costs survey methodology, see appendix I.

³⁹In some cases, in lieu of rent, the ATM operator shares a portion of fee revenues with the merchant as part of a revenue-sharing arrangement.

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- *Physical security and insurance.* Physical security costs are those incurred to keep the ATM and the surrounding lobby or area safe and include items such as lighting and cameras. Insurance costs include those policies that cover the cash in the machines.
 - *Infrastructure and processing.* Operators need to install and maintain the telecommunications infrastructure necessary for ATM operations and transaction processing. Processing costs include fees associated with transaction processing (switch fees) and costs associated with interbank settlement and account posting.
 - *Network fees.* ATM operators pay membership or license fees to the EFT networks in order to route transactions on the networks.⁴⁰ Network fees also include any fees the ATM operator pays for membership in one or more surcharge-free networks.
 - *Taxes and licenses.* In addition to property and sales taxes, ATM operators are sometimes required to pay for state and local licenses, on either a one-time or recurring basis.
 - *Regulatory and compliance costs.* Regulatory and compliance costs include paying for the required ATM signage alerting customers to any fees, as well as the costs of regulatory inspections and reviews.⁴¹
 - *Fraud prevention and fraud losses.* Fraud prevention costs are those related to activities aimed at detecting and preventing ATM fraud. Fraud losses are those incurred by the ATM operator when fraud occurs, including cash theft and ATM robberies.⁴²
 - *Bank sponsorship.* Bank sponsorship is a cost borne only by independent ATM operators, which, as previously discussed, must

⁴⁰Independent ATM operators typically pay these network fees to their sponsoring bank, which is the entity with the membership in the EFT network.

⁴¹As previously discussed, until December 2012, the Electronic Fund Transfer Act required ATM operators that charge a fee to post physical notice of that fee on the ATM terminal; the revised statute requires only the on-screen notification. 15 U.S.C. § 1693b(d)(3)(B) (2013), amended by Pub. L. No. 112-216, 126 Stat. 1590 (2012).

⁴²In the survey we asked the ATM operators to report their “net” fraud losses, which are total fraud losses, minus any offsets from insurance payments or other sources.

have a financial institution that sponsors their membership in the EFT networks.

Key Operating Costs Varied across Different ATM Operators

ATM operators we surveyed and spoke with indicated that key drivers of operating costs varied. For example, in our survey, large banks reported much higher costs for some categories, as a percentage of total costs, than did midsize banks and credit unions. Likewise, in some cost categories there was a wide range of reported per-ATM costs, while in other categories, the per-ATM costs were fairly consistent. None of the data we collected on costs are generalizable to either the financial institution or independent ATM operator populations at-large, although some costs, such as hardware and software investments, were mentioned as key drivers by many of the operators included in our work.

Financial Institution ATM Operators

Our analysis of the data collected from a sample of 30 institutions from three financial institution types—large bank, medium bank, and credit union—revealed some key differences in the biggest cost drivers for these ATM operators.⁴³ The large banks' costs for hardware and software investments were much higher as a percentage of their total costs than for midsize banks and credit unions in our survey. As shown in figure 5, the majority (63 percent) of the larger banks' costs were for hardware and software investments and upgrades. The second most prominent cost for the large banks was rent (15 percent of overall costs), followed by maintenance and repair (9 percent of overall costs) and cash services (6 percent of overall costs). In contrast, the hardware and software investments were a much smaller percentage of reported total costs for the midsize banks (18 percent) and credit unions (23 percent) in our survey.⁴⁴ In addition, midsize banks and credit unions that participated in our survey had much more even proportions of spending across the various cost categories. Midsize banks and credit unions also reported that a greater percentage of total costs were dedicated to infrastructure

⁴³As previously discussed, we received responses from 9 out of 10 large banks, 8 out of 10 midsize banks, and 9 out of 10 credit unions, but response rates varied by question.

⁴⁴There may be several reasons why the large banks' percentage of costs dedicated to hardware and software is higher than the other two financial institution types included in our survey. Industry sources and representatives we interviewed indicate that several of the largest banks are updating their ATM fleets with new, more expensive terminals, and these major investments may be one reason for greater hardware and software costs.

and processing (17 and 23 percent respectively), compared to the large banks (2 percent).⁴⁵

Figure 5: Top Five Costs Borne by Financial Institution ATM Operators in GAO Survey, as a Percentage of Reported Total Costs

ATM cost category	Percentage of total costs by type of institution		
	Large banks	Midsized banks	Credit unions
ATM hardware and software ^a	62.80%	18.17%	23.27%
Rent	15.32	10.41	8.02
Maintenance and repair	9.18	17.64	18.27
Cash services	5.89	18.79	21.47
Net fraud loss	2.63	2.42	0.56
Infrastructure and processing	1.71	16.60	23.01
Taxes and licenses	0.63	2.26	1.62
Fraud prevention	0.53	0.97	0.46
Network fees	0.50	1.17	0.38
Physical security and insurance	0.41	4.28	2.64
Regulation and compliance	0.41	7.29	0.30

Source: GAO analysis.

^aThis category includes capitalized and noncapitalized costs.

In some cost categories institutions reported a wide range of per-ATM costs across the three financial institution types, while in other categories, the per-ATM costs were fairly consistent. For example, the financial institutions we surveyed reported that per-ATM costs in calendar year 2011 for rent and hardware and software were much higher for the large banks than for the credit unions and midsized banks. The average rent cost, on a per-ATM basis, was \$27,173 for large banks, \$4,935 for

⁴⁵According to knowledgeable financial regulatory staff we spoke with, one possible reason the large banks in our survey reported incurring less in infrastructure and processing costs, as a percentage of total costs, might be because they often do processing services in-house. Processors that perform similar services for other financial institutions on an outsourced basis may bundle those costs with other services or charge more.

midsize banks, and \$4,032 for credit unions.⁴⁶ We saw similar results for hardware and software investments, with large banks reporting, on average, \$28,607 in costs per ATM, while midsize banks' and credit unions' average costs were, respectively, \$3,642 and \$7,422.⁴⁷ These hardware and software costs include both capitalized and noncapitalized items, although not all institutions reported noncapitalized costs.⁴⁸ In contrast, the costs for maintenance and repairs were much closer in range for the three financial institution types. The average maintenance and repair cost, on a per-ATM basis, was \$5,444 for large banks, \$3,485 for midsize banks, and \$5,827 for credit unions.⁴⁹

In some cost categories credit unions reported higher costs than their bank counterparts—cash services, and infrastructure and processing. The average cost for cash services, on a per-ATM basis, was \$6,847 for credit unions, \$3,765 for midsize banks, and \$3,495 for large banks.⁵⁰ Similarly, the average cost for infrastructure and processing, on a per-ATM basis, was \$7,958 for credit unions, \$3,494 for midsize banks, and \$1,191 for large banks.⁵¹ In contrast, credit unions' costs for network fees were significantly lower than those of the banks, with an average cost, on a per-ATM basis, of \$150 for credit unions, \$331 for large banks, and

⁴⁶Response rates for this question were: 6 out of 10 large banks, 6 out of 10 midsize banks, and 8 out of 10 credit unions. In the survey we defined rent costs as: the amount paid for ATM facilities at off-premise locations (not in a bank or credit union facility); and the amount of any revenues shared (partially or entirely) with a merchant or other party for ATM facilities at that location or locations. Some revenue-sharing arrangements are based, partially or entirely, on transaction levels, so as the number of transactions increases, so do rent costs. For a full description of each cost category, as well as average per-ATM costs, see table 11 in appendix II.

⁴⁷Response rates for this question were: 6 out of 10 large banks, 7 out of 10 midsize banks, and 8 out of 10 credit unions.

⁴⁸For a break-out of capitalized and noncapitalized hardware and software costs, see table 11 in appendix II.

⁴⁹Response rates for this question were: 5 out of 10 large banks, 8 out of 10 midsize banks, and 8 out of 10 credit unions.

⁵⁰Response rates for this question were: 5 out of 10 large banks, 7 out of 10 midsize banks, and 8 out of 10 credit unions.

⁵¹Response rates for this question were: 4 out of 10 large banks, 6 out of 10 midsize banks, and 7 out of 10 credit unions.

\$340 for midsize banks.⁵² For more information on average per-ATM costs across the three types of operators in all cost categories, see appendix II.

Community bankers we interviewed reported that their leading costs were investments in hardware and software, largely to upgrade older machines for compliance with Americans with Disabilities Act (ADA) requirements, or to purchase new machines all together.⁵³ Specifically, one representative told us his bank spent more than \$52,000 to upgrade the software in the bank's 26 ATMs, a cost of approximately \$2,000 per machine. The community bankers noted that while the newer machines are more expensive, they offer the customer more functionality and value due to their enhanced capabilities, such as being able to scan and deposit checks. The other prevalent costs for the community bankers were fraud (prevention efforts and losses), repairs, processing, and network fees.

Independent ATM Operators

Cost data are more limited for independent ATM operators, making identifying key costs difficult. One large independent ATM firm that we surveyed reported that its top five calendar year 2011 per-ATM costs (as a percentage of all costs) were (1) rent, (2) infrastructure and processing, (3) cash services, (4) hardware and software investments, and (5) bank sponsorship costs. Meanwhile the smaller firm that we surveyed reported that its top five calendar year 2011 costs (as a percentage of total costs) were (1) hardware and software investments, (2) maintenance and repairs, (3) cash services, (4) infrastructure and processing, and (5)

⁵²Response rates for this question were: 4 out of 10 large banks, 6 out of 10 midsize banks, and 6 out of 10 credit unions.

⁵³The new ADA requirements for ATMs required operators to add certain audio and touch-based technologies that assist vision-impaired consumers. These new requirements were announced in 2010, when the Department of Justice issued revised rules for Title III of the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disability and requires commercial facilities to be designed, constructed, and altered in compliance with certain accessibility standards. Pub. L. No. 101-336, 104 Stat. 327 (1990), (codified at 42 U.S.C. §§ 12101-12213). Building on the 1991 ADA standards that required ATMs to be accessible to individuals using wheelchairs, the Department of Justice's 2010 standards added specific technical requirements to ATMs for speech output, privacy and tactilely-discernible input controls, among other things. 28 C.F.R. § 36, Appendix B. ATM operators were required to have completed required upgrades by March 15, 2012. 75 Fed. Reg. 56, 236, 56,254 (Sept. 15, 2010).

rent.⁵⁴ In addition to the cost information gathered through the survey, we interviewed two small independent ATM firms, and—like the two firms that participated in the survey—they told us their key costs included cash services and processing, among others. In addition, we interviewed officials from another large independent firm who provided us with cost data that indicated that the firm’s top costs for calendar year 2011 were rent, cash services, and maintenance and repair.⁵⁵

Increasing Costs and Declining Revenues Are Prompting Some Changes in ATM Operations

Most operators included in our study—financial institutions and independent firms—reported that overall ATM costs have increased over the past 5 years and they expect that they will continue to do so. Ten financial institutions we surveyed reported that per-ATM costs had significantly increased in the past 5 years, ten reported costs had slightly increased, and five reported costs remained about the same.⁵⁶ The cost drivers most frequently cited by survey respondents were upgrading to more versatile ATMs—with functions such as check-imaging—complying with ADA requirements, and upgrading software.⁵⁷ Other cost drivers the financial institution representatives reported were increasing fraud prevention efforts, adding ATMs to their fleets, and paying more in network fees.⁵⁸ As previously discussed, the community bankers we interviewed also indicated that ATM upgrades to comply with ADA

⁵⁴Given the small number of independent operators that participated in our survey—two out of four firms—what we can report without revealing the identity of a given firm is limited, and therefore we are not able to provide specific dollar amounts for the cost categories. In addition, these data are not representative of independent ATM operators in general.

⁵⁵Although we interviewed officials from this firm and they submitted cost and revenue information to us, they did not complete the survey. Therefore we cannot compare this firm’s reported costs with those of the survey respondents directly because we are not assured that the categories are similar enough.

⁵⁶Four financial institutions did not respond to the question, and one reported “no opinion.”

⁵⁷In addition to asking the respondents to classify the level of cost increases or decreases, we asked an optional follow-up question—to describe the changes in operating costs and the reasons why. We then analyzed those responses and grouped them into like categories. Thirteen operators cited upgrading to more versatile ATMs as a major cost driver, eight cited compliance with ADA requirements, and six cited software upgrades. For more information about our content analysis of narrative responses, see appendix I.

⁵⁸Four operators cited fraud prevention efforts as a reason why costs increased, three operators cited adding ATMs to their fleets, and two cited increases in network fees.

requirements were a leading cost driver in calendar year 2011, and some said network costs had increased as well over the past 5 years. The two independent operators in our survey reported their costs had increased slightly over the past 5 years. One operator noted higher manufacturing costs as a driver and the other reported an increase in fuel prices (which increases the costs to transport cash to the terminals via armored carrier). The two independent operators we interviewed also said their overall costs have risen in the past 5 years, for armored carrier services and network fees. They also reported increased rent costs, among others. Some of the operators noted that the costs associated with certain actions could yield future savings. For example, while the cost of purchasing the newer machines has increased, those ATMs have improved technology, so service costs have declined. Similarly, one operator reported that with the expanded function of deposit-imaging, the newer ATMs have reduced paper costs.

Many of the operators told us that during that same 5-year period, where costs have increased, ATM revenues have decreased. As previously discussed, ATM operators collect revenues from fees charged during some ATM transactions. In our survey, 14 financial institution operators reported that their per-ATM revenues had decreased—6 said they had done so significantly, and 8 said slightly. In contrast, 6 operators reported that revenues remained about the same, and 4 reported a slight increase during that same period.⁵⁹ The most frequently cited reason the operators gave for the decreased revenues was declining transaction volumes—both overall and among non-account holders, who typically would generate income for the ATM operator through surcharge fees. Some financial institution operators stated that transaction levels are down due to the greater availability of surcharge-free networks and consumers obtaining cash at point-of-sale transactions, among other things. Several of the community bankers we spoke with expressed similar views that ATM revenues, along with transaction levels, have decreased generally over the past 5 years. The two independent operators in our survey reported their revenues had significantly decreased over the past 5 years, but cited reductions in their interchange fee revenues as a primary factor. The two smaller independent firms we interviewed reported similar issues with reduced interchange revenues.

⁵⁹Twenty-six financial institution operators responded to the question, including two operators that answered “no opinion.”

Looking forward, many of the operators indicated they expect that costs would continue to rise and that revenues would remain flat or decline in the future. For example, our survey results showed that 18 out of 25 financial institution operators anticipate ATM costs will increase in the future. The main drivers cited for these future increases are further investments in new and enhanced ATM terminals or upgrades that will be needed in order to comply with new or enhanced industry wide data security standards.⁶⁰ The community bankers and one independent firm we interviewed expressed similar views that ATM costs will continue to rise. Similarly, of the ten financial operators that addressed future revenue trends in our survey, seven indicated they anticipate a decline, due primarily to fewer transactions. Likewise, one of the two independent firms that participated in our survey also said it anticipates future revenues will be flat.

ATM operators reported taking various steps to adapt to the rise in costs and decline in revenues. For example, two credit unions reported in our survey that they recently raised their surcharge fee amounts in response to rising costs. Another credit union reported it was being more prudent in placing ATMs in new locations by first performing extensive evaluation of traffic flows, surrounding competition, and associated costs before committing to a new location. One of the large banks noted that because average revenues per ATM will likely continue to decline as consumers continue to avoid incurring surcharges, the bank would focus more on serving its own customers with ATM placements. Finally, some of the community bankers we interviewed said that as ATM transaction levels decline, so will their investments in ATMs. The owner of one independent ATM firm we interviewed told us that independent operators need to seek opportunities to diversify their portfolio of ATM services, such as establishing or expanding branding partnerships in order to increase revenues. He also noted that maximizing the number of

⁶⁰All participants in the EFT networks, including ATM operators, are required to meet certain industry-wide data security standards established by the Payment Card Industry Security Standards Council. These requirements include installing and maintaining systems to protect cardholder data and that ATMs include the use of approved encrypted personal identification number pads. Also, the U.S. ATM and debit point-of-sale markets are moving in the direction of new cards (“chip cards”) that use an embedded chip microprocessor for payment transactions, as opposed to the current magnetic stripe technology. As publicly announced, by 2017, MasterCard and VISA will shift liability for fraudulent transactions to whichever party has not adopted the chip card technology, so many ATM operators told us they will be updating their ATMs to accept the new cards.

transactions on a per-ATM basis will be important. One large independent firm reported in the survey that as interchange fees and resulting revenues decrease, merchants—in those cases where they set fees—will increase the surcharge amounts to make up the difference. However, as we previously discussed, there are many factors taken into account when setting fees, and several of the operators told us that setting fees too high, above neighboring competitors, could discourage consumers from using their ATMs.

Agency Comments

We provided a draft of this report to CFPB, FDIC, the Federal Reserve, NCUA, and OCC for their review and comment. CFPB, the Federal Reserve, NCUA, and OCC submitted technical comments which were incorporated where appropriate.

We are sending copies of this report to CFPB, FDIC, the Federal Reserve, NCUA, and OCC, interested congressional committees, members, and others. In addition, this report will be available at no charge on our website at <http://www.gao.gov>.

Should you or your staff have questions concerning this report, please contact me at (202) 512-8678 or cackleya@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.



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Director
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Appendix I: Objectives, Scope, and Methodology

This report reviews the fees paid by consumers when conducting automated teller machine (ATM) transactions, as well as the costs borne by ATM operators in providing those services. Specifically, the objectives of this report are to discuss (1) the business models for ATM operators—financial institution and independent firms—and how they set ATM fees, (2) the amounts of fees that consumers incur to conduct ATM transactions and how these fees changed over time, and (3) the reported costs of ATM operations for financial institution and independent ATM operators and how costs and revenues are expected to change.

To understand the history of ATMs, how ATM transactions are processed, and requirements for ATM operators, we reviewed prior GAO, regulatory, and industry reports on ATM fees and operations, and we interviewed relevant officials from the Board of Governors of the Federal Reserve System (the Federal Reserve), the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), the National Credit Union Administration (NCUA), and the Bureau of Consumer Financial Protection, commonly known as CFPB. In addition, we interviewed officials from five associations: American Bankers Association (ABA) and the Independent Community Bankers of America (ICBA), which represent various sectors of the banking industry; the National ATM Council and the ATM Industry Association (ATMIA), which represent independent ATM operators; and U.S. PIRG, a federation of independent, state-based, citizen-funded organizations that advocate for consumer interests. We also interviewed representatives from two national banks, a credit union, one large independent ATM firm, three electronic funds transfer (EFT) networks, and a financial institution that sponsors independent ATM operators.

In order to gather information on ATM costs and operations for smaller financial institutions and independent ATM firms, we conducted two group interviews with representatives from nine community banks and two interviews with smaller independent ATM firms. We identified these firms with assistance from ABA, ICBA, and ATMIA. In addition, we relied on information provided to us by ATMIA that described the composition of the independent operator market—specifically, the percentage of ATMs owned by operators versus those operated by merchants. This information could not be corroborated because no comparable data were available, either publicly or from the financial regulators and other industry sources we asked. However, we determined that our use of the information from ATMIA was appropriate because it is used to describe the independent ATM market and provide context.

To discuss the operations and costs for ATM operators, in addition to the interviews discussed above, we surveyed a nonprobability sample of financial institutions and independent firms that operate ATMs to collect information on

- ATM operations and business models,
- ATM transaction levels for calendar year 2011,
- ATM costs for calendar year 2011 in 12 specific cost categories,
- overall ATM cost and revenue trends for the past 5 years and in the future, and
- factors ATM operators consider when setting ATM fees.

In order to gain cost and operational information from ATM operators of various sizes, we deployed a survey to the 10 largest banks and 10 largest credit unions (by asset size), 10 randomly selected midsize banks (with assets between \$10 billion and \$50 billion), and 4 large independent ATM firms (with 10,000 or more ATMs in their portfolios). To select the banks, we used data from SNL Financial—a private financial database that contains publicly filed regulatory and financial reports.¹ We eliminated those that did not offer personal checking account services, as well as any online banks, since they generally do not maintain substantial numbers of ATMs. To select the credit unions, we obtained a list of the largest credit unions, by asset size, from NCUA. Because none of the regulators and business associations we spoke with were able to provide data on the total population of independent ATM operators, and no data are publicly available, we relied on estimates provided to us by one of the largest independent operators as to the size and geographic locations of the independent firms in the industry. We used that list to select the firms and were able to verify the information provided only in the cases where the firm responded to the survey.

For the survey questionnaire, we developed 12 categories (11 applied to all operators, and 1 was a cost incurred only by independent ATM operators) in order to capture information on a broad range of ATM operational costs. After we drafted our initial cost categories, we asked for comments from knowledgeable officials at the Federal Reserve, CFPB, ABA, and a consulting firm that works extensively with the independent ATM industry. We conducted six pretests to verify that (1) the questions

¹We ran our data reports from SNL on May 7, 2012, so the asset rankings were as of that date.

were clear and unambiguous, (2) terminology was used correctly, (3) the questionnaire did not place an undue burden on respondents, (4) the information could feasibly be obtained, and (5) the survey was comprehensive and unbiased. We chose the six pretest institutions to include various sizes of ATM operators: two large banks, one large credit union, one midsize bank, and one large and one small independent ATM firm. We conducted the pretests over the telephone. We made changes to the content and format of the questionnaire after each of the six pretests, based on the feedback we received. For additional quality control, an independent evaluator within GAO also reviewed a draft of the questionnaire prior to its administration. Furthermore, we determined—based on the pretest with the smaller independent ATM firm—that the questionnaire would be overly burdensome for smaller firms to complete, potentially leading to minimal participation. For this reason, we limited our independent ATM firm sample population to firms with 10,000 or more ATMs.

We sent the questionnaire by e-mail in an attached PDF form that respondents could return electronically after marking check-boxes or entering responses into open answer boxes. Alternatively, respondents could return the questionnaire by mail after printing the completed form. Through e-mails and phone calls in advance of the questionnaire, we determined the best contact at each financial institution or independent firm. We e-mailed the questionnaire with a cover letter to financial institutions between July 31 and August 1, 2012, and independent ATM firms between September 5 and September 11, 2012. Three weeks later, we sent a reminder e-mail to everyone who had not responded. We telephoned all respondents who had not returned the questionnaire after 4 weeks and asked them to participate. Completed questionnaires were accepted until September 28, 2012, for financial institutions and October 31, 2012, for the independent ATM firms.²

Questionnaires were completed by 9 out of 10 large banks, 9 out of 10 credit unions, 8 out of 10 midsize banks, and 2 out of 4 independent ATM firms. However, the number of respondents varied by question. Specifically, three large banks and one credit union completed sections of the questionnaire on ATM transaction levels and overall cost and revenue

²We accepted one additional survey questionnaire submitted by a financial institution on October 15, 2012, after the formal deadline.

trends, but did not submit dollar amounts for the cost categories. As previously discussed, we made multiple contacts by telephone and e-mail to nonresponding institutions, but one large bank, one credit union, two midsize banks, and two of the independent ATM firms declined to participate.

The practical difficulties of conducting any survey may introduce errors, commonly referred to as nonsampling errors. For example, difficulties in interpreting a particular question, sources of information available to respondents, or data analysis can introduce unwanted variability into the survey results. We took steps in developing the questionnaire, and in collecting and analyzing the data, to minimize such nonsampling error. Almost all responses from the PDF forms were directly read into a data file, and two analysts independently verified that all information provided in the forms was read in correctly. For the two forms that could not be read into the file, one analyst keypunched the responses and another verified the entries. All data analysis programs were independently verified for accuracy.

We were not able to independently verify the cost information submitted by survey respondents. However, during the pretests and in the survey questionnaires we asked the respondents to tell us what sources they would or did use in calculating the costs they reported. Commonly cited data sources for the costs included internal accounting reports and billing statements from external third-parties, such as processors. Based on the information provided on the cost data sources and follow-up calls with survey respondents, we determined the data they reported were sufficiently reliable for our purposes.

Using the data provided by the survey respondents, we calculated the number and type of ATM transactions in calendar year 2011, the percentage of total costs represented by each cost category, and the average per-ATM costs for each category. Due to the sensitive and possibly proprietary nature of the information we collected with the survey, we aggregated the cost data at a high level and presented it in a way that prevents individual organizations from being identified. For the four questions that asked about past and future cost and revenue trends, as well as the factors the operators take into account when setting fees, we performed a content analysis. Specifically, we analyzed the responses for each question and then grouped them into like categories. A second evaluator reviewed the categories to ensure that we were consistent in our coding. In any instance where the second reviewer disagreed with a categorization, team members met to discuss the categories and reached

consensus on the final category assignment for each response. The numbers of responses in each content category were then summarized and tallied. For more detailed information on the survey results, see appendix II.

To report on the amounts of fees that consumers pay to conduct transactions at financial institution ATMs, and how these fees changed over time, we purchased and analyzed data on surcharge and foreign ATM fees charged by banks and credit unions from 2007 through 2012 from Moebs Services, Inc. (Moebs), a market research firm that specializes in the financial services industry. Moebs collected its data through telephone surveys with financial service personnel at each sampled institution. In the surveys, callers used a “mystery shopping” approach and requested rates and fees while posing as potential customers. The statistical design of the survey for each year consisted of a stratified random sample by (1) institution type, (2) institution size, and (3) regions of the country defined by metropolitan statistical area and state.³

The surveys were completed in June for each of the years we requested, except for 2010, when the survey was completed in July. Table 3 shows the number of financial institutions for which we obtained data.

Table 3: Number of Financial Institutions Surveyed by Moebs Services, 2007-2012

	2007	2008	2009	2010	2011	2012
Number of institutions surveyed ^a	2,030	2,041	2,041	2,243	2,532	2,776

Source: GAO analysis of Moebs Services data.

^aThe number of institutions sampled each year varied because of changes to the number of cities and states surveyed, changes in the overall number of financial institutions, and refining the accuracy and precision of the sample selection.

Using the Moebs data, we computed weighted estimates and 95 percent confidence intervals of the percentage of institutions charging surcharge

³A metropolitan statistical area (metro area) is a geographic entity defined by the Office of Management and Budget for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics. A metro area contains a core urban area population of 50,000 or more. Each metro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high number of residents who commute to work within the urban core.

and foreign fees and weighted averages and medians of these fees. All percentage estimates presented in this report have a margin of error of +/- 5 percentage points or fewer, and all average and median estimates have a relative margin of error of +/-5 percent or less, unless otherwise noted. All differences between estimated values identified in this report are statistically significant at the 95 percent confidence level (p-value \leq 0.05), unless otherwise noted. We also examined the differences between the estimated prevalence and average fees for type and size of financial institution, as well as geographic region and type of location of the financial institution separately. We did not conduct a multivariate analysis using all of these factors, control for all factors at once, or control for additional factors in our analysis. To evaluate trends in ATM fees, we adjusted the numbers for inflation to remove the effect of changes in prices. The inflation-adjusted estimates used a base year of 2012 and Consumer Price Index calendar year values as the deflator. We reviewed interviews and analysis from our previous work on bank fees to understand Moeb's methodology for collecting the data and ensuring its integrity. In addition, we conducted reasonableness checks on the data we received and identified any missing, erroneous, or outlying data. We also worked with Moeb's representatives to ensure our analysis of their data was correct. We determined that the Moeb's data were reliable for the purposes of this report.

Since data on ATM fees charged by independent operators were not available, we engaged the services of another market research firm—Informa Research Services (Informa)—to conduct “mystery shops” at 100 judgmentally selected independent ATMs. We selected 10 ATMs in each of the top 10 metropolitan statistical areas. In order to ensure we captured fee information from a wide variety of locations frequented by consumers on a regular basis, we directed Informa to choose ATM locations that covered the following types of stores: drug stores, grocery stores, gas stations/convenience stores, and liquor stores. We excluded ATMs at airports or casinos—locations where most consumers would not go on a regular basis and for which, according to market research, there is typically a higher fee. We also excluded ATMs at supermarket chains that were likely to have a bank branch or an ATM operated by a bank or credit union on the premises because the focus of this part of our study was ATM fees charged by independent operators. Prior to making the final selections, Informa contacted the locations and verified that the ATMs were nonbank operated and that they were in working order. Locations having bank-operated or branded ATMs or machines that were not working were replaced with locations having independent and functioning ATMs in the same neighborhood, or as close as possible.

The mystery shop process involved having the shoppers go to each selected ATM and use their own debit card to conduct a transaction. The shopper documented (1) the surcharge fee amount that was posted on the ATM, (2) the surcharge fee amount that appeared on the screen after the transaction was begun, and (3) the surcharge fee amount printed on his or her receipt. The mystery shoppers entered this information into an online database. In addition, the shoppers took pictures of the ATM, screen, and their receipt, which Informa staff used to verify that shoppers correctly recorded the fee information and that the correct images were attached to the correct responses. Finally, the receipts were double checked against the location addresses to ensure that the shoppers visited the correct ATM. We then analyzed the data we obtained from Informa and computed the average surcharge fees charged to mystery shoppers for ATMs included in the sample. These data indicate what independent ATM fees were on a particular day in 2012 at those 100 ATMs and are not generalizable to the population of independent ATMs in the United States.

We reviewed documentation submitted by Informa to understand their methodology for collecting the data and ensuring their integrity. We conducted reasonableness checks on the data we received and identified 10 mystery shoppers who did not report a fee printed on their ATM receipt. We instructed Informa to conduct follow up on these cases, which included checking to see if the mystery shopper used a card that was part of a surcharge-free network, and in certain cases, to send an additional mystery shopper to the ATM. We also worked with Informa representatives to ensure our analysis of their data was correct. We determined that Informa's data were reliable for the purposes of this report.

We conducted this performance audit from November 2011 to April 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Selected Results from GAO's Survey on ATM Operator Costs and Operations

This appendix presents selected results from GAO's survey on ATM operator costs and operations. We surveyed financial institution and independent ATM operators to collect information on their business operations and models, costs, and transaction levels for calendar year 2011, and what factors they take into account when setting fees. The survey was deployed to the 10 largest banks and credit unions (by asset size) and 10 randomly selected midsize banks (with assets between \$10 billion and \$50 billion).¹ We designed and deployed a separate survey to four independent ATM operators that operate 10,000 or more ATMs, and we received responses from two.² We were not able to independently verify the cost information submitted by survey respondents. However, we asked the respondents to tell us what sources they used in calculating the costs they reported. They relied on sources such as internal accounting reports and third-party bills. Based on the source information provided and follow-up call with survey respondents, we determined the data they reported were sufficiently reliable for our purposes. None of the costs or operations data we collected are generalizable to ATM operators at-large.

Table 4 summarizes the number and size of financial institution ATM operators that participated in our survey, as well as the number of ATMs they were operating as of December 31, 2011.

Table 4: Financial Institution ATM Operators in GAO Survey

Type of financial institution ^a	Number	Number of ATMs			Total
		On-site	Off-site	Branded	
Large banks	9	44,669	19,866	11,895	76,430
Midsize banks	8	1,203	863	6	2,072
Large credit unions	9	924	1,607	800	3,331
Total	26	46,796	22,336	12,701	81,833

Source: GAO analysis.

^aWe deployed the survey to the 10 largest banks (by asset size), 10 randomly selected midsize banks (with assets between \$10 billion and \$50 billion), and the 10 largest credit unions (by asset size).

¹We received survey responses from 9 out of 10 large banks, 8 out of 10 midsize banks, and 9 out of 10 credit unions, although response rates varied by question.

²For more information on the survey methodology, see appendix I.

We collected similar information from independent ATM operators. In addition to owning and operating their own ATMs, independent ATM firms offer a wide range of ATM-related services to merchants and other entities that own ATMs, such as monitoring and maintaining appropriate cash levels in terminals and processing transactions. There are four primary business models for independent ATM operators; therefore our survey asked for information on the number of ATMs for each model. In both the “turnkey” and “merchant-assisted” business models, the independent operator owns the ATM. In the turnkey model, the operator is responsible for most aspects of the ATM’s operations, while the merchant is responsible only for providing a place to locate the ATM and the electricity to operate it. The merchant-assisted model is similar to turnkey, but the merchant provides and loads cash into the machines, as well as provides basic maintenance. In the “merchant-owned and loaded” and “merchant cash-assisted” models, the merchant owns the ATM and is responsible for many of the operations. However, in the merchant owned-and loaded model, the merchant manages and loads cash into the ATM, while in the merchant cash-assisted model, the independent operator handles those tasks. Table 5 summarizes the number of independent ATM operators that participated in our survey, as well as the number of ATMs they were operating under each business model as December 31, 2011.

Table 5: Independent ATM Operators in GAO Survey

	Number	Number of ATMs (as of December 31, 2011)			Total	
		Turnkey	Merchant-assisted	Merchant-owned and loaded		Merchant cash-assisted
Independent ATM Operators	2	858	346	64,032	534	65,770

Source: GAO analysis.

Tables 6 through 10 summarize the reported number and types of calendar year 2011 ATM transactions for the financial institutions and independent ATM operators that participated in our survey.

**Appendix II: Selected Results from GAO's
Survey on ATM Operator Costs and Operations**

Table 6: Number and Types of ATM Transactions Reported by All Financial Institutions in GAO Survey, Calendar Year 2011

Transaction type	Number incurring a surcharge	Percentage incurring a surcharge	Number not incurring a surcharge	Percentage not incurring a surcharge	Total
Cash withdrawals	274,490,626	14.11%	1,670,724,011	85.89%	1,945,214,637
Balance inquiries	333,064	0.05	613,376,064	99.95	613,709,128
Deposits	2,891	0.00	586,040,519	100.00	586,043,410
Fund transfers	13,827	0.03	49,035,169	99.97	49,048,996
Denials	37,696	0.06	63,904,257	99.94	63,941,953
All other transactions	48	0.00	26,667,071	100.00	26,667,119
Total transactions	274,878,152	8.37%	3,009,747,091	91.63%	3,284,625,243

Source: GAO analysis.

Table 7: Number and Types of ATM Transactions Reported by Large Banks in GAO Survey, Calendar Year 2011

Transaction type	Number incurring a surcharge	Percentage incurring a surcharge	Number not incurring a surcharge	Percentage not incurring a surcharge	Total
Cash withdrawals	258,196,539	14.56%	1,515,068,411	85.44%	1,773,264,950
Balance inquiries	0	0	549,647,784	100	549,647,784
Deposits	0	0	566,479,168	100	566,479,168
Fund transfers	0	0	46,078,992	100	46,078,992
Denials	0	0	51,118,549	100	51,118,549
All other transactions	0	0	26,092,976	100	26,092,976
Total transactions	258,196,539	8.57%	2,754,485,880	91.43%	3,012,682,419

Source: GAO analysis.

**Appendix II: Selected Results from GAO's
Survey on ATM Operator Costs and Operations**

Table 8: Number and Types of ATM Transactions Reported by Midsize Banks in GAO Survey, Calendar Year 2011

Transaction type	Number incurring a surcharge	Percentage incurring a surcharge	Number not incurring a surcharge	Percentage not incurring a surcharge	Total
Cash withdrawals	11,843,819	16.06%	61,923,945	83.94%	73,767,764
Balance inquiries	333,064	0.88	37,523,364	99.12	37,856,428
Deposits	0	0.00	1,954,749	100.00	1,954,749
Fund transfers	13,827	2.63	511,290	97.37	525,117
Denials	37,696	1.54	2,404,319	98.46	2,442,015
All other transactions	48	0.04	113,050	99.96	113,098
Total transactions	12,228,454	10.48%	104,430,717	89.52%	116,659,171

Source: GAO analysis.

Table 9: Number and Types of ATM Transactions Reported by Credit Unions in GAO Survey, Calendar Year 2011

Transaction type	Number incurring a surcharge	Percentage incurring a surcharge	Number not incurring a surcharge	Percentage not incurring a surcharge	Total
Cash withdrawals	4,450,268	4.53%	93,731,655	95.47%	98,181,923
Balance inquiries	0	0.00	26,204,916	100.00	26,204,916
Deposits	2,891	0.02	17,606,602	99.98	17,609,493
Fund transfers	0	0.00	2,444,887	100.00	2,444,887
Denials	0	0.00	10,381,389	100.00	10,381,389
All other transactions	0	0.00	461,045	100.00	461,045
Total transactions	4,453,159	2.87%	150,830,494	97.13%	155,283,653

Source: GAO analysis.

Table 10: Number and Types of ATM Transactions Reported by Independent ATM Operators in GAO Survey, Calendar Year 2011

Transaction type	Number incurring a surcharge	Percentage incurring a surcharge	Number not incurring a surcharge	Percentage not incurring a surcharge	Total
Cash withdrawals	136,536,331	97.09%	4,098,307	2.91%	140,634,638
Balance inquiries	0	0.00	3,017,497	100.00	3,017,497
Deposits	0	0.00	0	0.00	0
Fund transfers	0	0.00	67,987	100.00	67,987
Denials	0	0.00	2,684,683	100.00	2,684,683
All other transactions	0	0.00	0	0.00	0
Total transactions	136,536,331	93.26%	9,868,474	6.74%	146,404,805

Source: GAO analysis.

Table 11 shows the average reported per-ATM cost for financial institutions for each of the cost categories in our survey questionnaire.³ We are not able to present similar results from the independent operator survey since only two out of four firms responded to our questionnaire.⁴ As shown below, among the data reported by the financial institutions, there was a high level of variability across the financial institution types. For example, there are several instances in which the per-ATM average cost for one financial institution type is much higher or lower in a given category than the average of the other financial institution types.⁵ There was also variability in the number of responses for each cost category, also shown in table 11.⁶ Finally, due to the small size and nature of the sample, these results are not generalizable to the larger population of U.S. financial institutions. The descriptions of the cost categories listed below are reproduced verbatim from the survey questionnaire, and all data reported are for calendar year 2011.

³We calculated the per-ATM average by summing the costs in a category for all institutions of that type (large banks, midsize banks, or credit unions) and then dividing by the total number of ATMs represented by those institutions that provided cost data.

⁴As previously discussed, due to the sensitivity and the possibly proprietary nature of the information that we collected with the survey, we have aggregated cost information at a high level, and we present it in a way that prevents individual organizations from being identified.

⁵In instances where we identified a reported cost that appeared to be an outlier, we examined the sources reported by the financial institution, and in some cases we followed up with representatives from the financial institution to ensure they had reported the information correctly and according to the category description in the questionnaire. For more on our survey methodology, including quality review of the data, see appendix I.

⁶There were two types of nonresponses. First, an institution may not have answered the question—providing no cost data for that category. A second type of nonresponse was when an institution responded “unable to determine” if they were unable to identify a data source for a particular category or were unable to isolate ATM operational costs from other related business costs, such as those pertaining to debit cards.

**Appendix II: Selected Results from GAO's
Survey on ATM Operator Costs and Operations**

Table 11: Per-ATM Costs for Financial Institution ATM Operators in GAO Survey, Calendar Year 2011

Cost category and what it includes	Financial institution type^a	Number of respondents^b	Number of ATMs represented^c	Average cost per ATM
Rent	Large banks	6 out of 10	6,850	\$27,173
<ul style="list-style-type: none"> the amount paid for ATM facilities at off-premise locations (not in a bank or branch) 	Midsized banks	6 out of 10	861	4,935
<ul style="list-style-type: none"> the amount of any revenues shared (partially or entirely) with a merchant or other party for ATM facilities at that location or locations^d 	Credit unions	8 out of 10	1,561	4,032
Capitalized ATM hardware and software costs	Large banks	6 out of 10	26,667	28,093
<ul style="list-style-type: none"> costs of the ATM hardware and equipment, both purchase and installation, including ATM physical security equipment such as boots or bolting devices and fraud-prevention software 	Midsized banks	7 out of 10	2,037	3,059
<ul style="list-style-type: none"> costs to upgrade ATM hardware, equipment and software (e.g. Americans with Disabilities Act (ADA) upgrades, retrofits, etc.) 	Credit unions	8 out of 10	2,460	4,564
Noncapitalized ATM hardware and software costs	Large banks	6 out of 10	26,667	515
<ul style="list-style-type: none"> costs of the ATM hardware and equipment, both purchase and installation, including ATM physical security equipment such as boots or bolting devices and fraud-prevention software 	Midsized banks	7 out of 10	2,037	583
<ul style="list-style-type: none"> costs to upgrade ATM hardware, equipment and software (e.g. ADA upgrades, retrofits, etc.) 	Credit unions	8 out of 10	2,460	2,859
Cash-related costs ^e	Large banks	5 out of 10	20,478	3,495
<ul style="list-style-type: none"> costs related to cash provisioning and management for the ATMs, getting the cash to the ATM via armored carrier, monitoring the cash inventory, and balancing and reconciling cash 	Midsized banks	7 out of 10	2,037	3,765
	Credit unions	8 out of 10	2,460	6,847
Maintenance and repair costs ^e	Large banks	5 out of 10	20,478	5,444
<ul style="list-style-type: none"> costs of first-line maintenance—cleaning, routine repairs such as basic troubleshooting, and restocking of consumables such as receipt paper 	Midsized banks	8 out of 10	2,066	3,485
<ul style="list-style-type: none"> costs of second-line maintenance—more significant repairs that require tools and/or parts and labor 	Credit unions	8 out of 10	2,460	5,827
Physical security and insurance costs	Large banks	4 out of 10	18,211	272
<ul style="list-style-type: none"> insurance policies for cash (not included in courier contracts) 	Midsized banks	5 out of 10	1,868	935
<ul style="list-style-type: none"> all other insurance costs 	Credit unions	6 out of 10	1,935	1,069
<ul style="list-style-type: none"> physical security costs, such as contracted security, inspections, false alarms, and security components and materials (e.g. lighting, cameras) 				

**Appendix II: Selected Results from GAO's
Survey on ATM Operator Costs and Operations**

Cost category and what it includes	Financial institution type^a	Number of respondents^b	Number of ATMs represented^c	Average cost per ATM
Infrastructure and processing costs ^e	Large banks	4 out of 10	17,467	1,191
<ul style="list-style-type: none"> telecommunications—costs to install and maintain connections to the processor (e.g. local area network (LAN), wireless, frame relay, or satellite) 	Midsize banks	6 out of 10	1,939	3,494
	Credit unions	7 out of 10	2,268	7,958
<ul style="list-style-type: none"> data security—costs incurred in securing the data processing and communications infrastructure of operations processing: <ul style="list-style-type: none"> all fixed and variable cost components of equipment/hardware and software associated with authorization, clearance, and settlement of ATM transactions fees associated with transaction processing (e.g., switch fees) transaction monitoring costs that are a part of authorization costs associated with interbank settlement and account posting 				
Network fees	Large banks	4 out of 10	18,211	331
<ul style="list-style-type: none"> fees charged by card networks that are not associated with transaction processing, such as membership or license fees 	Midsize banks	6 out of 10	1,409	340
	Credit unions	6 out of 10	1,994	150
<ul style="list-style-type: none"> fees paid for membership in surcharge-free networks 				
Taxes and licenses	Large banks	4 out of 10	18,597	409
<ul style="list-style-type: none"> property and sales taxes and state and local licenses, both one-time and recurring 	Midsize banks	4 out of 10	777	1,188
	Credit unions	4 out of 10	1,868	681
Regulatory and compliance costs ^e	Large banks	4 out of 10	17,467	282
<ul style="list-style-type: none"> costs of regulatory signage for compliance with Electronic Funds Transfer Act and any state requirements 	Midsize banks	7 out of 10	1,438	2,070
	Credit unions	6 out of 10	2,185	109
<ul style="list-style-type: none"> costs of regulatory inspections and examinations costs of industry compliance and network audits costs of any ADA compliance work not reported as part of ATM hardware and software costs 				
Fraud prevention ^e	Large banks	3 out of 10	17,789	359
<ul style="list-style-type: none"> costs related to activities aimed at detecting and preventing ATM fraud 	Midsize banks	4 out of 10	1,232	322
	Credit unions	3 out of 10	1,407	256
<ul style="list-style-type: none"> costs related to responding to suspected and realized ATM fraud in order to prevent or limit losses research and development costs incurred in the in-house development or improvement of fraud prevention techniques 				

**Appendix II: Selected Results from GAO's
Survey on ATM Operator Costs and Operations**

Cost category and what it includes	Financial institution type^a	Number of respondents^b	Number of ATMs represented^c	Average cost per ATM
Fraud losses (net)	Large banks	3 out of 10	16,330	1,956
<ul style="list-style-type: none"> gross losses incurred, including cash theft and ATM robberies, less offsets, such as insurance payments, and losses absorbed by other parties, such as cardholders 	Midsized banks	6 out of 10	1,958	505
	Credit unions	4 out of 10	378	1,159

Source: GAO analysis.

^aWe surveyed a total of 30 financial institutions—the 10 largest banks and 10 largest credit unions (by asset size) and 10 randomly selected midsized banks (with assets between \$10 million and \$50 million). We are not able to present similar results from the nonbank survey since only two out of four firms responded to our questionnaire.

^bThere were two types of non-responses. First, an institution may not have answered the question—providing no cost data for that category. Second, an institution may have responded “unable to determine” when they were unable to identify a data source for a particular category, or were unable to isolate ATM operational costs from other costs, such as those pertaining to debit cards.

^cFor the “Rent” cost category, we only counted off-site ATMs in “number of ATMs represented” since we defined rent as the amount paid for ATMs located somewhere other than a financial institution facility.

^dBecause some revenue sharing arrangements can be based, partially or entirely, on ATM transaction levels, rent costs rise as the number of transactions increases.

^eIn these categories, respondents were allowed to include the total amount of wages or salaries of in-house personnel who spent more than half of their time performing tasks related to this cost activity.

Appendix III: Analysis of the Estimated Prevalence and Average Amount of ATM fees from 2007 to 2012

In addition to the analysis of estimated average ATM fees and their prevalence for 2012 that we presented in the report, we also conducted this analysis for 2007 through 2011. This appendix shows the estimated prevalence and average amounts of ATM fees based on four factors discussed in the report: type, size, location, and geographic region of the financial institution. We analyzed data from Moebs Services, Inc. (Moebs), a market research firm specializing in financial services data, to assess ATM fees charged by financial institution ATM operators. Moebs provided data gathered through telephone surveys for each of the years 2007 through 2012, based on statistically representative samples of financial institutions. See appendix I for more detailed information on the characteristics of the data. We examined the differences between the estimated prevalence and average fees for type and size of financial institution, as well as geographic region and type of location of the financial institution, separately. We did not conduct a multivariate analysis using all of these factors or control for any additional factors in our analysis. Dollar amounts for ATM surcharge and foreign fees in this appendix are in 2012 dollars, calculated using the Consumer Price Index calendar year values. We analyzed the prevalence of charging a surcharge and foreign fee, and then we excluded financial institutions that did not charge a fee from our calculation of the average fees. We computed weighted estimates and 95 percent confidence intervals of the percentage of institutions charging surcharge and foreign fees and weighted averages of these fees.

Estimated Prevalence and Amounts of Surcharge and Foreign Fees by Type of Financial Institution

We evaluated two types of financial institutions: banks and credit unions. Tables 12 through 15 show the variation in estimated prevalence of surcharge and foreign fees and estimated average surcharge and foreign fees for banks and credit unions from 2007 through 2012.

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Table 12: Estimated Percentage of Financial Institutions Charging a Surcharge Fee, by Type of Financial Institution and Year (2007-2012)

	Bank		Credit union	
	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)
2007	92	(88, 95)	81	(75, 86)
2008	88	(81, 93)	76	(67, 83)
2009	93	(87, 96)	77	(68, 84)
2010	96	(93, 98)	88	(84, 92)
2011	95	(90, 98)	96	(94, 98)
2012	97	(95, 98)	95	(93, 96)

Source: GAO analysis of Moebs Services data.

Table 13: Estimated Percentage of Financial Institutions Charging a Foreign Fee, by Type of Financial Institution and Year (2007-2012)

	Bank		Credit union	
	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)
2007	56	(48, 64)	56	(48, 63)
2008	55	(46, 63)	56	(49, 62)
2009	55	(47, 63)	40	(34, 46)
2010	59	(51, 66)	52	(46, 59)
2011	52	(46, 57)	46	(41, 51)
2012	54	(51, 58)	52	(48, 56)

Source: GAO analysis of Moebs Services data.

Appendix III: Analysis of the Estimated Prevalence and Average Amount of ATM fees from 2007 to 2012

Table 14: Estimated Average Surcharge Fee, by Type of Financial Institution and Year (2007-2012)

	Bank		Credit union	
	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)
2007	\$1.81	(1.73, 1.89)	\$1.66	(1.57, 1.76)
2008	\$1.83	(1.71, 1.94)	\$1.75	(1.63, 1.87)
2009	\$2.01	(1.90, 2.13)	\$1.84	(1.72, 1.95)
2010	\$2.01	(1.93, 2.09)	\$1.93	(1.84, 2.03)
2011	\$2.09	(2.01, 2.16)	\$1.89	(1.81, 1.98)
2012	\$2.16	(2.12, 2.21)	\$1.99	(1.93, 2.05)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Table 15: Estimated Average Foreign Fee, by Type of Financial Institution and Year (2007-2012)

	Bank		Credit union	
	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)
2007	\$1.45	(1.35, 1.55)	\$1.27	(1.18, 1.37)
2008	\$1.48	(1.34, 1.62)	\$1.24	(1.17, 1.32)
2009	\$1.55	(1.41, 1.70)	\$1.24	(1.16, 1.32)
2010	\$1.49	(1.38, 1.60)	\$1.34	(1.20, 1.48)
2011	\$1.49	(1.42, 1.56)	\$1.25	(1.19, 1.32)
2012	\$1.52	(1.46, 1.59)	\$1.29	(1.23, 1.36)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Estimated Prevalence and Amounts of Surcharge and Foreign Fees by Size of Financial Institution

We evaluated three sizes of financial institutions: small financial institutions with assets less than \$10 million, medium financial institutions with assets between \$10 million and \$999 million, and large financial institutions with assets of \$1 billion and more. Tables 16 through 19 show the estimated prevalence of surcharge and foreign fees and estimated average surcharge and foreign fees for small, medium, and large financial institutions from 2007 through 2012.

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Table 16: Estimated Percentage of Financial Institutions Charging a Surcharge Fee, by Size of Financial Institution and Year (2007-2012)

	Small		Medium		Large	
	Estimated percentage	95 percent confidence interval—(lower bound, upper bound)	Estimated percentage	95 percent confidence interval—(lower bound, upper bound)	Estimated percentage	95 percent confidence interval—(lower bound, upper bound)
2007	84	(77, 88)	92	(90, 94)	87	(80, 92)
2008	76	(67, 83)	91	(85, 95)	87	(80, 92)
2009	80	(71, 86)	93	(91, 95)	98	(94, 99)
2010	92	(87, 95)	94	(92, 96)	92	(86, 96)
2011	96	(92, 98)	95	(89, 98)	98	(95, 99)
2012	95	(93, 97)	97	(95, 98)	97	(95, 99)

Source: GAO analysis of Moeb's Services data.

Table 17: Estimated Percentage of Financial Institutions Charging a Foreign Fee, by Size of Financial Institution and Year (2007-2012)

	Small		Medium		Large	
	Estimated percentage	95 percent confidence interval—(lower bound, upper bound)	Estimated percentage	95 percent confidence interval—(lower bound, upper bound)	Estimated percentage	95 percent confidence interval—(lower bound, upper bound)
2007	52	(45, 59)	61	(52, 70)	70	(60, 78)
2008	52	(45, 60)	58	(48, 68)	69	(59, 77)
2009	39	(32, 46)	59	(49, 68)	73	(63, 81)
2010	53	(47, 60)	57	(48, 66)	72	(63, 79)
2011	45	(40, 51)	51	(45, 56)	75	(69, 80)
2012	50	(46, 54)	56	(52, 59)	73	(69, 77)

Source: GAO analysis of Moeb's Services data.

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Table 18: Estimated Average Surcharge Fee, by Size of Financial Institution and Year (2007-2012)

	Small		Medium		Large	
	Estimated fee	95 percent confidence interval—(lower bound, upper bound)	Estimated fee	95 percent confidence interval—(lower bound, upper bound)	Estimated fee	95 percent confidence interval—(lower bound, upper bound)
2007	\$1.72	(1.63, 1.81)	\$1.76	(1.67, 1.86)	\$1.98	(1.88, 2.07)
2008	\$1.81	(1.68, 1.93)	\$1.76	(1.63, 1.89)	\$2.01	(1.88, 2.14)
2009	\$1.93	(1.83, 2.04)	\$1.94	(1.80, 2.09)	\$2.19	(2.04, 2.35)
2010	\$1.97	(1.87, 2.07)	\$1.97	(1.89, 2.05)	\$2.17	(2.04, 2.30)
2011	\$1.94	(1.85, 2.02)	\$2.06	(1.98, 2.14)	\$2.21	(2.11, 2.31)
2012	\$2.01	(1.95, 2.07)	\$2.15	(2.11, 2.20)	\$2.25	(2.19, 2.31)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Table 19: Estimated Average Foreign Fee, by Size of Financial Institution and Year (2007-2012)

	Small		Medium		Large	
	Estimated fee	95 percent confidence interval—(lower bound, upper bound)	Estimated fee	95 percent confidence interval—(lower bound, upper bound)	Estimated fee	95 percent confidence interval—(lower bound, upper bound)
2007	\$1.32	(1.23, 1.42)	\$1.37	(1.26, 1.48)	\$1.73	(1.62, 1.84)
2008	\$1.35	(1.25, 1.46)	\$1.38	(1.22, 1.53)	\$1.56	(1.46, 1.67)
2009	\$1.37	(1.22, 1.52)	\$1.49	(1.34, 1.65)	\$1.50	(1.40, 1.59)
2010	\$1.34	(1.21, 1.47)	\$1.52	(1.39, 1.64)	\$1.57	(1.46, 1.68)
2011	\$1.31	(1.24, 1.39)	\$1.43	(1.36, 1.49)	\$1.67	(1.55, 1.78)
2012	\$1.36	(1.29, 1.43)	\$1.45	(1.39, 1.51)	\$1.62	(1.56, 1.68)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Estimated Prevalence and Amounts of Surcharge and Foreign Fees by Location of Financial Institution

We evaluated four locations of financial institutions: large city, rural, small city, and suburban. Tables 20 through 23 show the estimated prevalence of surcharge and foreign fees and estimated average surcharge and foreign fees for financial institutions located in large city, rural, small city, and suburban locations from 2007 through 2012.

**Appendix III: Analysis of the Estimated
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Table 20: Estimated Percentage of Financial Institutions Charging a Surcharge Fee, by Location of Financial Institution and Year (2007-2012)

	Large city		Rural		Small city		Suburban	
	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)
2007	75	(66, 82)	89	(80, 95)	88	(84, 91)	82	(77, 85)
2008	88	(80, 93)	90	(79, 96)	78	(70, 85)	85	(80, 88)
2009	89	(81, 94)	86	(76, 93)	85	(78, 91)	91	(87, 94)
2010	88	(78, 94)	97	(95, 98)	91	(86, 94)	92	(89, 95)
2011	93	(83, 97)	94	(86, 98)	97	(93, 99)	95	(92, 97)
2012	98	(94, 100)	97	(94, 98)	96	(94, 97)	94	(89, 97)

Source: GAO analysis of Moebs Services data.

Table 21: Estimated Percentage of Financial Institutions Charging a Foreign Fee, by Location of Financial Institution and Year (2007-2012)

	Large city		Rural		Small city		Suburban	
	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)
2007	55	(46, 63)	63	(52, 73)	52	(44, 60)	55	(50, 60)
2008	60	(51, 69)	49	(37, 61)	59	(51, 66)	56	(51, 61)
2009	50	(41, 59)	41	(30, 52)	53	(45, 60)	49	(44, 54)
2010	55	(45, 64)	62	(51, 72)	53	(46, 60)	53	(48, 58)
2011	51	(41, 61)	44	(48, 63)	51	(46, 57)	52	(47, 58)
2012	59	(47, 70)	51	(47, 56)	55	(52, 59)	53	(46, 59)

Source: GAO analysis of Moebs Services data.

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Table 22: Estimated Average Surcharge Fee, by Location of Financial Institution and Year (2007-2012)

	Large city		Rural		Small city		Suburban	
	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)
2007	\$1.85	(1.75, 1.96)	\$1.70	(1.59, 1.81)	\$1.78	(1.69, 1.88)	\$1.75	(1.69, 1.80)
2008	\$1.71	(1.59, 1.84)	\$1.73	(1.57, 1.90)	\$1.85	(1.73, 1.97)	\$1.81	(1.73, 1.88)
2009	\$2.01	(1.88, 2.13)	\$2.00	(1.84, 2.15)	\$1.92	(1.79, 2.04)	\$1.94	(1.87, 2.01)
2010	\$2.10	(1.97, 2.23)	\$1.97	(1.87, 2.08)	\$1.97	(1.88, 2.06)	\$2.03	(1.95, 2.11)
2011	\$2.07	(1.91, 2.24)	\$2.02	(1.90, 2.14)	\$1.99	(1.92, 2.06)	\$2.08	(1.99, 2.16)
2012	\$2.15	(1.98, 2.32)	\$2.08	(2.01, 2.14)	\$2.09	(2.04, 2.14)	\$2.18	(2.06, 2.29)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Table 23: Estimated Average Foreign Fee, by Location of Financial Institution and Year (2007-2012)

	Large city		Rural		Small city		Suburban	
	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)	Estimated Fee	95 percent confidence interval— (lower bound, upper bound)
2007	\$1.39	(1.27, 1.52)	\$1.33	(1.21, 1.45)	\$1.37	(1.26, 1.47)	\$1.45	(1.35, 1.54)
2008	\$1.32	(1.21, 1.42)	\$1.27	(1.13, 1.40)	\$1.45	(1.32, 1.58)	\$1.32	(1.26, 1.38)
2009	\$1.45	(1.29, 1.61)	\$1.46	(1.24, 1.68)	\$1.44	(1.31, 1.58)	\$1.36	(1.29, 1.43)
2010	\$1.45	(1.29, 1.60)	\$1.56	(1.40, 1.72)	\$1.33	(1.21, 1.45)	\$1.44	(1.35, 1.53)
2011	\$1.51	(1.33, 1.69)	\$1.39	(1.29, 1.48)	\$1.40	(1.33, 1.46)	\$1.36	(1.27, 1.45)
2012	\$1.36	(1.20, 1.53)	\$1.40	(1.32, 1.47)	\$1.44	(1.37, 1.50)	\$1.42	(1.33, 1.52)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Estimated Prevalence and Amounts of Surcharge and Foreign Fees by Geographic Region of Financial Institution

We evaluated four geographic regions of financial institutions: East, Midwest, South, and West. Tables 24 through 27 show the estimated prevalence of surcharge and foreign fees and estimated average surcharge and foreign fees for financial institutions located in the East, Midwest, South, and West from 2007 through 2012.

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Table 24: Estimated Percentage of Financial Institutions Charging a Surcharge Fee, by Region of Financial Institution and Year (2007-2012)

	East		Midwest		South		West	
	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)
2007	87	(82, 90)	82	(74, 89)	94	(88, 97)	80	(74, 85)
2008	83	(76, 88)	81	(71, 88)	89	(79, 95)	73	(57, 85)
2009	84	(72, 92)	83	(73, 90)	94	(87, 97)	81	(64, 91)
2010	86	(80, 91)	94	(88, 97)	95	(90, 98)	94	(90, 96)
2011	96	(93, 98)	96	(90, 98)	97	(90, 99)	90	(70, 97)
2012	97	(94, 99)	95	(92, 96)	98	(96, 99)	94	(89, 96)

Source: GAO analysis of Moebs Services data.

Table 25: Estimated Percentage of Financial Institutions Charging a Foreign Fee, by Region of Financial Institution and Year (2007-2012)

	East		Midwest		South		West	
	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)	Estimated percentage	95 percent confidence interval— (lower bound, upper bound)
2007	54	(44, 63)	57	(48, 66)	62	(50, 72)	40	(32, 48)
2008	59	(51, 67)	56	(46, 66)	57	(45, 67)	45	(34, 57)
2009	46	(37, 55)	46	(36, 55)	55	(43, 65)	43	(32, 54)
2010	60	(52, 68)	62	(53, 71)	52	(42, 61)	47	(35, 59)
2011	47	(40, 55)	53	(47, 60)	51	(44, 58)	33	(26, 41)
2012	54	(49, 60)	55	(51, 59)	53	(48, 58)	51	(44, 57)

Source: GAO analysis of Moebs Services data.

**Appendix III: Analysis of the Estimated
Prevalence and Average Amount of ATM fees
from 2007 to 2012**

Table 26: Estimated Average Surcharge Fee, by Region of Financial Institution and Year (2007-2012)

	East		Midwest		South		West	
	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)
2007	\$1.71	(1.58, 1.83)	\$1.69	(1.58, 1.80)	\$1.80	(1.68, 1.92)	\$1.86	(1.78, 1.93)
2008	\$1.73	(1.58, 1.87)	\$1.86	(1.75, 1.96)	\$1.78	(1.60, 1.96)	\$1.77	(1.62, 1.92)
2009	\$1.94	(1.77, 2.11)	\$1.86	(1.73, 1.98)	\$2.05	(1.88, 2.22)	\$1.98	(1.83, 2.12)
2010	\$1.90	(1.74, 2.06)	\$1.86	(1.77, 1.96)	\$2.08	(1.99, 2.18)	\$2.14	(1.99, 2.29)
2011	\$1.94	(1.80, 2.08)	\$2.00	(1.92, 2.07)	\$2.00	(1.90, 2.10)	\$2.22	(2.08, 2.37)
2012	\$2.06	(1.98, 2.13)	\$2.05	(1.99, 2.11)	\$2.18	(2.12, 2.25)	\$2.11	(2.01, 2.20)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Table 27: Estimated Average Foreign Fee, by Region of Financial Institution and Year (2007-2012)

	East		Midwest		South		West	
	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)	Estimated fee	95 percent confidence interval— (lower bound, upper bound)
2007	\$1.27	(1.18, 1.37)	\$1.40	(1.28, 1.53)	\$1.37	(1.23, 1.50)	\$1.41	(1.29, 1.53)
2008	\$1.24	(1.16, 1.32)	\$1.39	(1.25, 1.52)	\$1.41	(1.23, 1.59)	\$1.39	(1.20, 1.58)
2009	\$1.21	(1.13, 1.28)	\$1.39	(1.26, 1.52)	\$1.60	(1.39, 1.82)	\$1.34	(1.25, 1.43)
2010	\$1.39	(1.17, 1.60)	\$1.32	(1.22, 1.43)	\$1.58	(1.41, 1.76)	\$1.44	(1.21, 1.67)
2011	\$1.23	(1.15, 1.31)	\$1.40	(1.31, 1.48)	\$1.42	(1.34, 1.50)	\$1.54	(1.43, 1.64)
2012	\$1.34	(1.27, 1.42)	\$1.44	(1.36, 1.52)	\$1.45	(1.37, 1.53)	\$1.42	(1.33, 1.52)

Source: GAO analysis of Moebs Services data.

Note: Dollar amounts are in 2012 dollars, calculated using the Consumer Price Index calendar year values.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

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