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Merchant Steering of Consumer Payment Choice

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Abstract:
This paper investigates the degree to which merchants influence consumers' choice of how they pay for transactions. Using data from the Survey and Diary of Consumer Payments Choice, we examine consumers' adherence to their preferred payment method when making in-person transactions. We also investigate whether merchants are able to steer consumers away from their preferred payment method. We characterize preferences for paying with cash or cards according to consumers' income, level of education, and employment status. We find that consumers make most payments with their preferred method. When consumers pay with a non-preferred method, it is due only in small part to merchants' refusal to accept that payment method. If a merchant accepts card payments, consumers who prefer paying with cards are not likely to pay with cash for large-value transactions or for gas or groceries. Discounts on cash purchases do not affect the probability of consumers deviating from using cards and paying with cash. Finally, the paper identifies "inertia" effects, which lead consumers to use the same payment method for consecutive purchases.

JEL Classifications: D03, D14, G02
Keywords: Consumer payments, consumer payment preferences, merchant steering, discounts, surcharges

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1. Introduction

Consumers' payment-method preferences and their payment choices—that is, the methods they actually use—both have evolved over time, but their choices are not always consistent with their preferences. We analyze the demand-side (consumer) and supply-side (merchant) factors that affect consumer payment choice to assess why consumers deviate from their stated preferences. On the supply side, merchants might try to steer their customers toward payment methods that are less costly for the merchants. The recently announced settlement between credit card networks and merchants refocused attention on merchants' ability to influence their customers' choice of a payment method.[1] Although future consequences of the settlement are uncertain, one possibility is that merchants will become more likely to impose surcharges on purchases in exchange for accepting premium credit cards whose issuers charge merchants high fees. Anecdotal evidence from before the settlement suggests that merchants were increasingly using discounts on cash purchases and surcharges on credit card purchases to try to influence consumers' payment choice.[2] Our data from a survey of consumers align with that evidence (see Figure 1).

The goal of this paper is to analyze trends and changes in merchants' ability to influence consumers' payment choice by offering discounts or imposing surcharges at the point of sale (POS). We use the term "steering" or "steering consumer payment choice" to refer to such actions by merchants or other sellers to induce consumers to use a less preferred (by consumers) payment method.

The consumer survey that yields our data records respondents' stated preferred payment method and their actual choices at the point of sale, allowing us to examine why consumers sometimes deviate from their preferred option. Overall, consumers, particularly those who prefer credit cards, typically use their preferred method. However, preferences vary systematically across demographics. Lower-income, less educated, male, and unemployed consumers tend to

[1] See Annamaria Andriotis, "The Credit-card Rule That Powers Rewards Cards Just Got Broke," *Wall Street Journal*, November 10, 2025.
[2] See Adriana Ocañas, "Restaurant Surcharges Could Make Your Credit Card Rewards Pointless," *US News & World Report*, December 12, 2025; and Ted Benzing "That New and Annoying 3% Credit Card Surcharge: Finding Answers with Pricing Research," *The TRC Blog*, September 15, 2025. For information on state regulations in the United States, see Dale Erling, "Surcharging vs. Dual Pricing: What Business Owners Need to Know (2025)," IntelliPay blog, December 2, 2024.

favor cash, whereas higher-income, more educated, Asian, and retired consumers are more likely to prefer credit cards. Although supply-side frictions, such as merchants' nonacceptance of a payment method, affect consumers' payment choice, they explain only a portion of the deviations from payment-method preferences. For example, some consumers who prefer credit cards resort to cash when cards are not accepted, whereas cash users rarely encounter the absence of cash acceptance. Price incentives also play a role. Surcharges on credit card purchases are concentrated in gasoline stations and establishments that serve food, and cash discounts are more common with high-value purchases, but consumers who prefer paying with credit or debit cards do not appear to be more likely to shift to cash when discounts are offered. Consistent with these demand-side dynamics, deviations from card use are less common for larger transactions, when transactions involve certain merchant categories, and due to "inertia" effects, whereby consumers are more likely to repeat their payment method for consecutive transactions and which are particularly pronounced for debit and credit card purchases.

The rest of the paper is organized as follows. Section 2 summarizes the relevant literature. Section 3 describes the data used in this study. Section 4 analyzes consumers' stated payment-method preferences. Section 5 focuses on merchants' steering of consumers' payment choice by refusing to accept a payment method and through pricing incentives, specifically discounts on cash purchases and surcharges on credit card purchases. Section 6 examines why consumers deviate from their preferred payment methods, analyzing both demand and supply factors. Section 7 discusses consumers' inertia, that is, their use of the same payment method for consecutive transactions. Section 8 summarizes our findings.

2. Literature Review

Merchants can steer consumer payment choice via outright refusal to accept a payment method, by offering discounts, or by charging extra. Arango, Huynh, and Sabetti (2015) find that merchants' refusal to accept payment by credit or debit card plays a large role in the use of cash in Canada, especially for low-value transactions. Using data from Canada and Austria, Huynh, Schmidt-Dengler, and Stix (2014) find that increased acceptance of payment by card reduces consumer demand for payment by cash. Wakamori and Welte (2013) find that the use of cash for

small-value transactions is driven mainly by consumers' preferences, not by merchants' refusal to accept card payments for such transactions.

Before continuing our review of the literature on the use of discounts and surcharges to influence consumer payment choice, we should note that we employ the terms "steering," "surcharges," and "discounts" to describe efforts made *by the merchant/seller* at the in-person point of sale. Steering efforts at the POS are substantially different from efforts made by commercial banks (including reducing or eliminating fees and offering rewards) to entice consumers to adopt and pay with credit cards or debit cards. We do not review the literature on such bank efforts.[3]

It is also worth emphasizing that although card surcharges and cash discounts both can steer consumers toward using cash, Carlton and Frankel (1995) and Frankel (1998) show that these are two very different strategies. The fees paid by merchants vary across card brands and card types (that is, reward cards versus non-reward cards). Therefore, merchants may be better off surcharging card payments according to the card-specific fee that they bear instead of providing a uniform price discount to all consumers who pay cash. However, at the time a transaction takes place, merchants generally do not know the fee they will be charged for accepting payment with the particular credit card that is used.[4]

Barron, Staten, and Umbeck (1992) describe the evolution of offering discounts for cash payments at gas stations, showing how this practice emerged during the 1978–1982 period and was driven by a rise in the cost of financing accounts receivable per gallon. Humphrey, Kim, and Vale (2001) focus on Norway and estimate the potential savings in the social cost of substituting electronic payments for paper-based payments and determine the responsiveness of payment users when relative prices are used to speed up that process. Borzekowski, Kiser, and Ahmed (2008) find a 12 percent decline in overall use of debit cards when an average (mean) fee of 1.8 percent is charged on certain debit card transactions. Using US consumer diary data from 2012, Stavins and Shy (2015) find minimal evidence that merchants either surcharge card payments or provide discounts for cash payments, except for cash discounts given by gas stations and small

[3] The literature on the efforts made by commercial banks and card networks to steer consumers to pay with credit cards via rewards includes Ching and Hayashi (2010); Simon, Smith, and West (2010); Agarwal, Chakravorti, and Lunn (2010); and Arango, Huynh, and Sabetti (2015).
[4] For more information on this topic, see Schuh et al. (2012).

service providers. Using US consumer diary data from 2015, Stavins (2018) finds that merchants rarely offer price incentives, but when discounts on cash payments are available, the probability that a consumer who prefers other payment methods will conduct a cash transaction increases by 19.2 percent.

Ingene and Levy (1982) characterize the conditions under which cash discounts are advantageous to retailers and their consumers, showing that cash discounts are feasible under some circumstances. Grant (1985) finds that retailers generally will not find it profitable to offer cash discounts. Similarly, using US consumer diary data from 2012, Briglevics and Shy (2014) find that steering consumers to pay with cash or with debit cards via price discounts yields very small benefits to merchants because most of the discounts go to customers who already prefer to use cash or debit cards.

Outside the United States, Welte (2016), using Bank of Canada survey data from 2009, also finds that cash discounts intended to steer consumers to pay cash are not profitable for merchants. Bolt, Jonker, and van Renselaar (2010) use 2006 survey data from the Netherlands to show that surcharges imposed on debit card payments steer consumers away from debit cards toward cash. (Note, however, that regulations of card surcharges in the European Union have changed over the years.) Finally, on the theoretical side, Mariotto and Verdier (2017) construct a model in which, in the absence of a card surcharge, merchants may pass through the costs of card payments to cash users.

Our paper adds to this literature by focusing on the deviations between consumers' preferred payment method and their actual payment choice at the POS. More precisely, using data on consumers' preferences for payment methods and their actual choice of a payment method at the in-person POS, we analyze factors that induce deviations, including merchants' efforts to steer consumers to pay with merchants' preferred methods.

3. Data

For most of our analysis, we use data from the 2024 Survey and Diary of Consumer Payment Choice (SDCPC), which is conducted annually in October by the Federal Reserve Banks of Atlanta and Boston and Federal Reserve Financial Services. Each year since 2015, SDCPC respondents have reported their checking and savings bank account holdings, the payment

instruments they possess or have adopted, and how they use those payment instruments. Payment instruments include cash, paper checks, credit cards, debit cards, prepaid cards, and electronic payments out of bank accounts (that is, bank account number payment and online banking bill payment).[5] Survey participants record their transactions over three consecutive days. Transactions include purchases (in-person or online), bill payments, person-to-person payments, and ATM withdrawals and deposits. Participants' three-day response periods are evenly distributed throughout October so that on each day of the month, an equal number of overlapping respondents record their first-, second-, and third-day payment information. The data used in this study are described in greater detail in Foster et al. (2024), while Foster (2025) provides technical background on the survey methodology used to collect the data.

Our analysis focuses on in-person purchases only, and we therefore exclude bill payments and online transactions.[6] Table 10 in the 2024 SDCPC Tables provides statistics on the number and dollar value of in-person purchases per consumer and per transaction by payment instrument.[7] By both number and value, the most-used payment methods for in-person purchases are credit cards, debit cards, and cash (in that order). Payment-method use varies with demographics, especially with age, education, and income (Greene, Perry, and Stavins 2025).

4. Consumers' Stated Preferences for In-person Purchases

As part of the SDCPC questionnaire, consumers are asked to declare which payment instrument they prefer to use for each of the following transactions: in-person purchases, remote purchases, and bill payments.[8] As can be expected, and as has been the case for several years, the most preferred payment instruments for in-person purchases are credit cards, debit cards, and cash. However, those preferences have evolved over the past decade. The share of consumers who

[5] Bank account number payment (BANP) is described in the survey questionnaire as "You pay by giving your bank's number (sometimes called a 'routing number') and your account number." Online banking bill payment (OBBP) is defined in the survey questionnaire as "A payment made from your bank's online banking website or mobile app."
[6] We also exclude responses from the California oversample. For more details on the Understanding America Study (UAS) California oversample of respondents, see Foster (2025).
[7] See: https://www.atlantafed.org/-/media/documents/banking/consumer-payments/survey-diary-consumer-payment-choice/2024/dcpc2024_tables_for_web.pdf
[8] The survey question is phrased as follows: "Please tell us the payment method you most prefer to use for making (bill payments/in-person payments/online purchases)."

prefer to use cash has declined, while the share who prefer to use credit cards has increased (Figure 2). In 2024, 16 percent of consumers stated a preference for cash, 40 percent for debit cards, and 40 percent for credit cards.

Consumers typically make most of their in-person purchases with their preferred payment method (see Table 1). While those who prefer to use cash are relatively less likely to follow their preference, consumers who prefer to use credit cards tend to be more consistent in adhering to their preference: 52.5 percent of transactions conducted by consumers who prefer cash were paid in cash; 64.1 percent of transactions conducted by those who prefer debit cards were paid with debit cards; and 72.8 percent of transactions conducted by those who prefer credit cards were paid with credit cards. This suggests that credit card use is stickier than cash use.

To identify factors that influence preferences for specific payment methods, we estimate regressions of payment-method preferences on consumers' demographic characteristics (that is, age, education level, race, ethnicity, gender, and employment status) and income. These regressions generate, for each of these factors, the probability of selecting a given payment instrument as the preferred payment method. We limit our analysis to cash, debit cards, and credit cards. The sample is limited to all in-person, non-bill transactions recorded at any time during the diary period.

We estimate the probability of consumer *i* selecting payment instrument *j* as the preferred method:

$$\Pr\left(PREF_{ij}\right) = f(Age_i, Edu_i, Race_i, Ethn_i, Gen_i, Inc_i, Emp_i), \quad (1)$$

where:

$$PREF_{ij} = \begin{cases} 1 \text{ if consumer } i \text{ prefers payment instrument } j \text{ for in-person purchases} \\ 0 \text{ if consumer } i \text{ does not prefer payment instrument } j \text{ for in-person purchases} \end{cases}$$

$Age_i, Edu_i, Race_i, Ethn_i, Gen_i, Inc_i, Emp_i$ = a vector of exogenous attributes of consumer *i*: age, education, race, ethnicity, gender, income, and employment status.

Table 2 presents the marginal effects based on the estimated probit regressions. Payment method preferences are correlated with demographics and income. Lower-income and less educated

consumers are more likely to prefer cash, as are men and individuals who are unemployed. Higher-income and more educated consumers prefer credit cards, as do Asian and retired consumers, even after we control for age. Despite the statistical significance of many of the explanatory variables, the pseudo R^2 is relatively low, indicating that demographics or income do not explain a large portion of the variation in preferences among consumers.

5. Steering

Though consumers have their preferred payment methods for in-person purchases, merchants have their own preferences for customers' payment methods. Previous studies show that due to interchange fees charged by card issuers, credit card payments are more expensive for merchants to accept than debit card payments, and debit card payments are more expensive than cash payments (Felt et al. 2023). While most merchants in the United States accept all three payment methods and typically do not alter their pricing based on the payment method used, some merchants provide incentives to encourage consumers to use cash or to discourage them from using credit cards. Stavins and Shy (2015) and Stavins (2018) show that merchant steering was rare in the United States at the time of the studies, but there was evidence that discounts for cash payments did induce consumers to use cash.

a. Payment-method Acceptance

Merchants' refusal to accept a payment method is an extreme form of steering. If a merchant does not accept a consumer's preferred payment method, the consumer's choice is limited to using a non-preferred method or foregoing the transaction. Although we are interested mainly in the effect of price incentives—that is, cash discounts and credit card surcharges—on payment choice, our analysis must also consider which payment methods merchants accept or do not accept.

Most merchants accept both cash and cards (credit and debit) for in-person purchases, but cash acceptance has decreased over time, while card acceptance has increased (Figure 3). Cash and card acceptance varies across merchant types. Figure 4 shows, by merchant type, the percentage of transactions for which cash is accepted. As the figure illustrates, cash acceptance is nearly universal at grocery and convenience stores and for purchases of food other than groceries

(including restaurant meals), categories that together represent 57.6 percent of consumers' in-person purchases. As Figure 5 shows, those categories have a similar acceptance rate for card transactions.

Table 3a highlights the relationship between consumers' deviations from their preferred payment method and payment-method acceptance by merchants who prefer cards. Consumers who prefer debit cards or credit cards but instead used cash for a transaction were asked if the merchant accepted cards. In most cases—more than 70 percent—the answer was "Yes," suggesting that lack of merchant acceptance was not the major reason why consumers deviated from their preferences. However, lack of payment acceptance was also a significant factor in consumers' payment choice. Cards were not accepted in nearly one-quarter of the cases in which consumers who prefer to pay with a credit card instead used cash (22.4 percent). Among consumers who prefer to pay with a debit card, the fraction of transactions paid with cash because cards were not accepted was lower, at 16.6 percent. Among consumers who prefer paying with cash, the fraction of transactions in which they deviated from their payment preference because cash was not accepted was substantially lower, at only 6.8 percent (Table 3b). In 90.3 percent of the deviations, cash was accepted, indicating that consumers typically deviated from cash for other reasons.

b. Discounts and Surcharges

SDCPC participants were asked the following questions about merchant steering.

For transactions in which they used cash:

Question 1: Did you receive a discount from the merchant specifically for using cash? [Yes/No]

For transactions in which they used a credit card:[9]

Question 2: Did you pay an extra charge, surcharge, or convenience fee to the merchant specifically for using this credit card? [Yes/No]

[9] Although the questions refer to the specific debit card or credit card used in the transaction, Shy (2021) shows that consumers tend to use only one card.

As noted earlier, the incidence of cash discounts and credit card surcharges has increased in recent years, though both remain relatively rare (Figure 1). We do not observe merchants' steering in the form of *potential* discounts and surcharges—that is, those that were offered but not realized. We observe only the transactions that occurred. Therefore, we observe only a subset of the transactions affected by merchants' (potentially successful) pricing strategies.

Table 4 shows the relationship between receiving a cash discount or paying a credit card surcharge and consumer preferences. Consumers who prefer to pay with cash are just as likely to receive a cash discount as those who prefer other payment methods (4.9 percent and 4.8 percent, respectively). However, those who prefer non-credit payment methods are more likely to pay a credit card surcharge than those who prefer to pay with a credit card (4.6 percent versus 2.6 percent). This result is surprising, since we would expect that consumers who prefer not to pay with a credit card would be more likely to use another payment instrument when facing a credit card surcharge.

Which type of transactions and which type of consumers are more likely to be affected by merchant steering? Does the type of merchant or the dollar amount of the purchase affect the likelihood of a consumer paying a surcharge or receiving a discount, or are certain types of consumers more likely to be steered (for example, those who are either more savvy or less attentive)? We examine the effect of consumer and transaction characteristics on the probability of paying a credit card surcharge and the probability of receiving a cash discount.

$$\Pr\left(SURCHARGE_{ij}\right) = f\left(AMOUNT_j,\ MERCHANT_j,\ PREFERRED_i, X_i\right)$$

$$\Pr\left(DISCOUNT_{ij}\right) = f\left(AMOUNT_j,\ MERCHANT_j,\ PREFERRED_i, X_i\right),$$

where:

$SURCHARGE_{ij}$ = 1 if consumer i paid a surcharge for using a credit card for transaction j (for credit card transactions only);

$DISCOUNT_{ij}$ = 1 if consumer i received a discount for using cash for transaction j (for cash transactions only);

$$PREFERRED_i = \begin{cases} 1 \text{ if consumer } i \text{ prefers credit cards, 0 otherwise (surcharge regression)} \\ 1 \text{ if consumer } i \text{ prefers cash, and 0 otherwise (discount regression)} \end{cases}$$

The largest number of payments by SDCPC participants was made at grocery and convenience stores; restaurants, bars, and fast-food businesses (food/beverage establishments); and gas stations (totaling 69.5 percent of in-person transactions in 2024). We group the rest of the merchant types in the "other" category. The results (Table 5) show that gas stations and food and beverage establishments are significantly more likely to impose credit card surcharges compared with grocery and convenience stores, but neither consumer characteristics nor the dollar amount of a purchase have a significant effect on whether a consumer will be charged extra for using a credit card. The results also show that regardless of their attributes or the merchant type, consumers are more likely to receive a discount for paying with cash when a transaction has a very large value.

6. Why Might Consumers Deviate from Their Preferred Payment Method?

SDCPC respondents state their preferred payment method for in-person purchases, and in many cases, they stick with that preference. However, for various reasons, they may deviate from their preferred method. In general, payment decisions can be viewed as a two-sided market. On the demand side, consumers may deviate due to the dollar value of the transaction (for example, using cash for low-value transactions) or the merchant type (for example, using credit cards to buy gas) or because they cannot access their preferred method at the time of the purchase (for example, they do not have enough cash on hand). On the supply side, merchants may limit consumers' choice by refusing card payments for purchases of less than a certain value or by refusing card payments for purchases of any value. Merchants may also encourage consumers to deviate from their preference by, for example, providing discounts on cash purchases or imposing surcharges on credit card purchases. In addition to merchant steering, the dollar amount of a transaction and the merchant type influence a consumer's decision to deviate from their preferred payment method.

We analyze in-person purchases for which consumers prefer to pay with cash or a debit or credit card but instead use one of their non-preferred methods (see Table 1). Consumers who prefer to pay with cash used cash for about half of their in-person transactions (52.5 percent). If they did not use cash, they were more likely to shift to a debit card rather than a credit card, although shifting to either card type was relatively common (23.7 percent to debit and 15 percent to credit for all transactions conducted by consumers who prefer to use cash). Consumers who prefer to pay with either a debit or credit card were more likely than cash-preferring consumers to stay with their preferred payment method. If they deviated from using debit or credit, they most likely used cash; more than half of all deviations from cards were shifts to cash.

We focus on transactions in which consumers deviated from using credit cards or switched to using cash. In the former case, consumers could have used a credit card but instead used another method, possibly because the merchant would have imposed a surcharge for using a credit card. (We do not observe credit card surcharges unless the consumer used a credit card.) In the latter case, consumers used cash, possibly because they were offered a discount, even though they prefer a different payment method. We estimate the probability of deviating from credit cards and the probability of switching to cash with the following regression models:

$$\Pr\left(TO\_CASH_{ij}\right) = f\left(AMOUNT_j, MERCHANT_j, X_i\right) \quad (2a)$$

$$\Pr\left(TO\_CASH_{ij}\right) = f\left(CARDACCEPT_j, DISCOUNT_j, AMOUNT_j, MERCHANT_j, X_i\right) \quad (2b)$$

To estimate the probability of switching to cash, we apply two specifications, each to a different sample. In the first specification (equation 2a), the sample includes all the consumers who prefer to pay with non-cash instruments. If they used cash (that is, they switched to cash), the dependent variable equals 1, and if they used a non-cash method, the dependent variable equals 0:

$$TO\_CASH_{ij} = \begin{cases} 1 \text{ if consumer } i \text{ uses cash for transaction } j, \text{ and they prefer not cash} \\ 0 \text{ if consumer } i \text{ uses non-cash for transaction } j, \text{ and they prefer non-cash} \end{cases}$$

In the second specification (equation 2b), the sample includes all the cash transactions. If a cash transaction was conducted by a consumer who prefers to pay with a non-cash instrument (that is, they switched to cash), the dependent variable equals 1. If a cash transaction was conducted by a consumer who prefers to pay with cash, the dependent variable equals 0:

$$TO\_CASH_{ij} = \begin{cases} 1 \text{ if consumer } i \text{ uses cash for transaction } j, \text{ and they prefer non-cash} \\ 0 \text{ if consumer } i \text{ uses cash for transaction } j, \text{ and they prefer cash} \end{cases}$$

We estimate the two specifications for two different samples because we want to assess the extent to which merchants' refusal to accept cards affects consumers' likelihood of switching to cash. If a consumer used cash but prefers to pay with a card, they may have done so because the merchant did not accept cards. The SDCPC asked whether a merchant accepted cards only if a consumer indicated they had used cash for a purchase. The variation in card acceptance in the data is insufficient for estimating the effect of non-acceptance of cards on decisions to switch to cash. The second specification allows us to test whether cash discounts affect the probability that consumers will deviate from using cards and pay with cash.

Regression results are presented in Table 6. The first specification (column (1)) shows that consumers are significantly less likely to switch to cash for large-value transactions. A $1,000 increase in a transaction's value reduces the probability that a non-cash-preferring consumer will use cash by 68 percent. Consumers who prefer using non-cash payment instruments are significantly less likely to shift to using cash for grocery store, food, and gas station transactions than for purchases from other merchant types. Older, lower-income, and Black consumers are much more likely to shift to using cash compared with other consumers.

For the estimates shown in column (2), we use a much smaller sample that comprises only cash transactions. This enables us to assess the effect of card acceptance and cash discounts on the probability of non-cash-preferring consumers switching to cash. We find that if a merchant accepts cards, consumers who prefer using non-cash instruments are 13 percent less likely to use cash. Therefore, the refusal to accept cards accounts for some cases in which consumers shift to cash. Offers of discounts on cash payments do not affect the probability of non-cash-preferring consumers switching to cash. Note, however, that our estimate of that

specification involves only a small sample of cash transactions with relatively little variation in whether merchants offered cash discounts.

Although we cannot observe transactions in which consumers avoided using credit cards due to surcharges that would have been levied on their purchases, we can estimate the probability of credit-card-preferring consumers deviating from using credit cards. We estimate the following specification:

$$\Pr\left(FROM\_CREDIT_{ij}\right) = f\left(AMOUNT_j,\ MERCHANT_j, X_i\right) \quad (3)$$

$$FROM\_CREDIT_{ij} = \begin{cases} 1 \text{ if consumer } i \text{ prefers credit and does not use credit for transaction } j \\ 0 \text{ if consumer } i \text{ prefers credit and uses credit for transaction } j \end{cases}$$

$AMOUNT_j$ = dollar value of the transaction j

$MERCHANT_j$ = merchant category for transaction j

X_i = a vector of exogenous attributes of consumer i: age, education, race, ethnicity, gender, income, and employment status.

To separate the effect of card acceptance (a supply-side restriction) from a consumer's choice not to use a card (a demand-side factor), we estimate equation (3) first by using a full sample of consumers who prefer using credit cards (column (1)) and then by using a subsample of transactions in which cards were accepted (column (2)).

Table 7 presents the results. Consumers are significantly less likely to deviate from using credit cards for large-value transactions. After controlling for merchant type and consumer attributes, we find that the dollar value of a transaction significantly affects the probability of a consumer deviating from their preferred payment method. The magnitude of the effect is small: In a full sample of credit-card-preferring consumers, a $1,000 increase in the transaction amount is associated with a 13 percent lower probability of deviating from using a credit card (column (1)). However, the effect of the transaction value on the probability of deviating from using a credit card is much greater after we restrict the sample to transactions in which merchants

accepted cards (column (2)). This restriction enables us to estimate the effect of consumers' choice of payment method. The effect of the dollar value remains small: A $1,000 increase in the value of a transaction increases the probability of a consumer deviating from using a credit card by 89 percent, but few transactions exceed $1,000.

After controlling for transaction amount and consumer attributes, we find that consumers are less likely to deviate from their preferred payment method for purchases from the three major merchant types (grocery and convenience stores; restaurants, bars, and fast-food businesses; and gas stations) compared with purchases from the reference (omitted) category of "other" merchant types. Older, less educated, and Black consumers are significantly more likely to shift from credit cards to other payment methods.

7. Inertia: Using the Same Payment Method over Time

Previous research finds that a large fraction of consumers prefers to use the same payment methods for all or most of their transactions (Shy 2021). There are several reasons for this observed behavior. First, using a single payment method facilitates the decision-making process at the POS. Second, it requires less preparation. For example, cash users can make a single withdrawal from an ATM to cover multiple payments during a certain period. Third, sticking to a single, non-cash payment method facilitates record keeping because all payments are recorded on a single statement.

We use the terms "sticky" and "inertia" to describe the payment behavior of consumers who tend to use the same method over time, even if they have access to multiple methods and when merchants accept multiple methods. Table 8 displays—for cash, debit, and credit transactions—the percentage of transactions that consumers conduct using the same payment method as their previous transaction. If a consumer used debit or credit for a transaction at time t, they will use the same method for the following transaction at time $t+1$ in about three-quarters of cases. Table 8 shows that consumers tend to use the same payment method for most of their transactions. Only about 12 percent of the second of two consecutive purchases made with a debit card and about 9 percent of the second of two consecutive credit card transactions are made by consumers who prefer another payment method. That is not the case for cash: Consumers are less likely to follow their cash transactions with another cash transaction (occurring less than half

the time). In most of those cases, the consumer prefers a payment method other than cash; about 26 percent of the second of two consecutive cash transactions are made by consumers who prefer a payment method other than cash.

To assess the effects of various factors on the probability of inertia—that is, of a consumer using the same payment method for consecutive transactions—we estimate the probability of using payment instrument *j* for a transaction at time *t*, conditional on using payment instrument *j* for a transaction at time *t–1*.

$$PI_{ijt} = f(PI_{ij,t-1}, PREFERRED_{ij}, AMOUNT_{jt}, MERCHANT_{jt}, X_i)$$

Where:

$$PI_{ijt} = \begin{cases} 1 \text{ if consumer } i \text{ used payment instrument } j \text{ for transaction at time } t \\ 0 \text{ if consumer } i \text{ used another payment instrument for transaction at time } t \end{cases}$$

$$PI_{ij,t-1} = \begin{cases} 1 \text{ if consumer } i \text{ used payment instrument } j \text{ for transaction at time } t-1 \\ 0 \text{ if consumer } i \text{ used another payment instrument for transaction at time } t-1 \end{cases}$$

$$PREFERRED_{ij} = \begin{cases} 1 \text{ if payment instrument } j \text{ is preferred by consumer } i \\ 0 \text{ if payment instrument } j \text{ is not preferred by consumer } i \end{cases}$$

$AMOUNT_{jt}$ = dollar amount of transaction at time *t* using payment instrument *j*

$MERCHANT_{jt}$ = merchant type for transaction at time *t* using payment instrument *j*

X_i = a vector of exogenous attributes of consumer *i*: age, education, race, ethnicity, gender, income, and employment status.

The results are presented in Table 9. Consumers are significantly likely to use their preferred payment method, whether it is cash, debit, or credit. Credit card preference is a strong predictor of repeated use of credit cards. After controlling for the dollar amount of the purchase, merchant type, and consumer attributes, we find that consumers who prefer to pay with a credit card are nearly 40 percent more likely to pay repeatedly with a credit card. Yet, even when controlling for consumers' preferred method, we find that using a given payment method significantly increases the likelihood of using the same method for the next transaction. This

inertia is much stronger for debit and credit cards than for cash, but it is significant for all three payment methods. When a consumer uses a debit card or a credit card for a given transaction, the probability they will use the same method for their next transaction is 32 percent greater than the probability they will use a different method, regardless of the merchant type or dollar amount involved. If a consumer uses cash, the probability that they will use cash for their next transaction is about 19 percent greater than the probability they will use a different method.

Intuition may suggest that preference for a particular payment method leads to inertia. That is, if a consumer prefers payment method X, then it seems reasonable they will use X repeatedly. However, the findings displayed in Table 9 reveal that the inertia effect does not necessarily depend on a consumer using their preferred method. In a specification that omits the *PREFERRED* variable, the probability of a consumer using the same payment method for consecutive transactions is much higher (the results are available from the authors). Yet, even after we control for consumers' preferences, the inertia effect remains relatively strong. Larger-value transactions are less likely to be paid for with cash and more likely to be paid for with a credit card, so the inertia effect is dampened when consecutive transactions are of different dollar values. Merchant type also affects the probability that a consumer will use the same payment method for consecutive purchases, as transactions at grocery and convenience stores, restaurants, and gas stations are more likely to be paid for with a card and less likely to be paid for with cash.

8. Summary of Findings and Conclusions

We analyze data from a consumer payment survey and diary that documents both consumers' general payment-method preferences and their actual payment choices at the point of sale. We test the effects of demand-side and supply-side factors on payment choices to identify reasons why consumers often deviate from paying with their preferred method. This section describes our main findings.

1. Most of the time, consumers use their preferred payment method for in-person purchases: 52.5 percent of in-person purchases for consumers who prefer using cash, 64.1 percent for debit-card-preferring consumers, and 72.8 percent for credit-card-preferring consumers (see Section 4 and Table 1)

2. Low-income, less educated, male, and unemployed consumers tend to prefer using cash. Higher-income, more educated, Asian, and retired consumers prefer credit cards (Section 4 and Table 2).
3. Merchants' refusal to accept payment methods is not the major reason consumers deviate from their preferences. However, lack of acceptance does play a role. For example, 22.4 percent of consumers who prefer using credit cards paid cash and reported that the merchant did not accept cards (Section 5a and Table 3a). By contrast, consumers who prefer to use cash made only 6.8 percent of their purchases with cards when cash was not accepted (Section 5a and Table 3b).
4. Gas stations and food/beverage establishments are more likely than other merchants to impose surcharges on credit card purchases. Large-value purchases are more likely than smaller-value purchases to include discounts when they are paid for with cash (Section 5b and Table 5).
5. Consumers are less likely to shift from using cards to using cash for large-value transactions and for purchases at gas stations, grocery and convenience stores, and other food establishments. Older consumers, low-income consumers, and Black consumers are more likely to shift from using cash (Section 6 and Table 6).
6. Consumers who prefer using cards are 13 percent less likely to shift to cash if the merchant accepts cards. Lack of card acceptance accounts for some cases in which consumers shift to cash. Offers of discounts for cash payments do not affect the probability of consumers who prefer cards switching to cash (Section 6 and Table 6).
7. Consumers are less likely to deviate from using cards for large-value transactions (Section 6 and Table 7).
8. Inertia effects: Consumers are more likely to use the same payment method for consecutive purchases. Inertia effects are stronger for debit and credit card purchases than for cash purchases (Section 7 and Tables 8 and 9).

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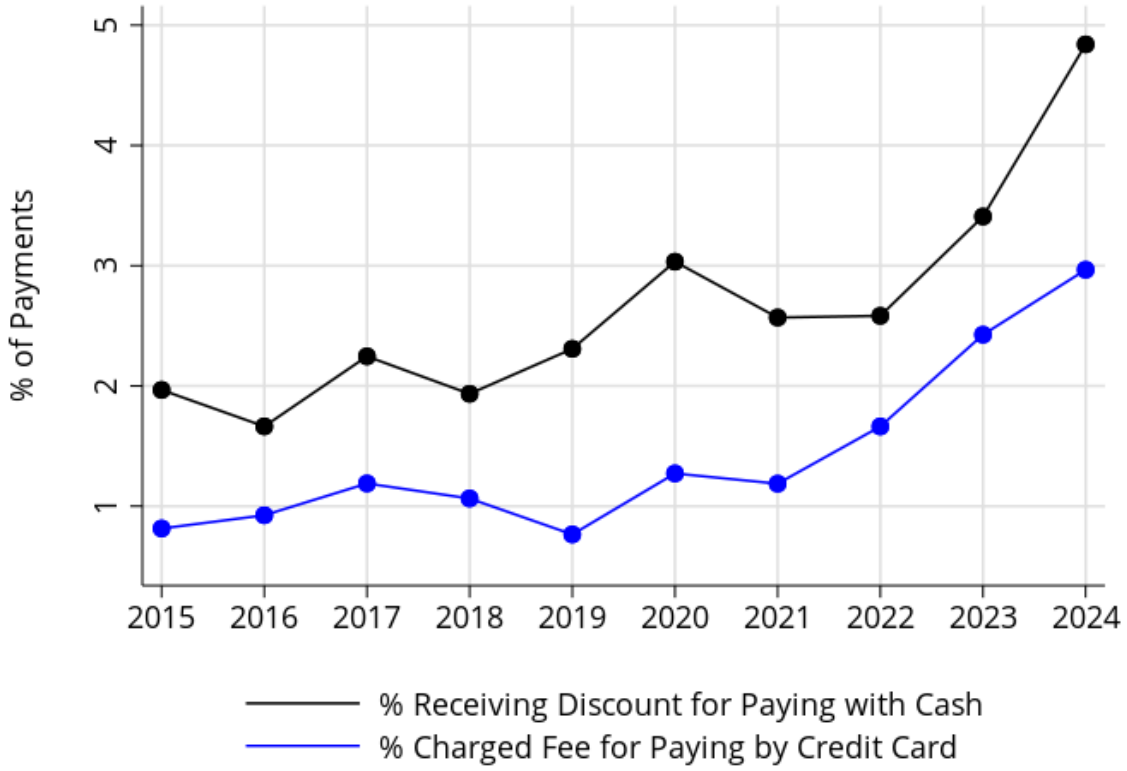
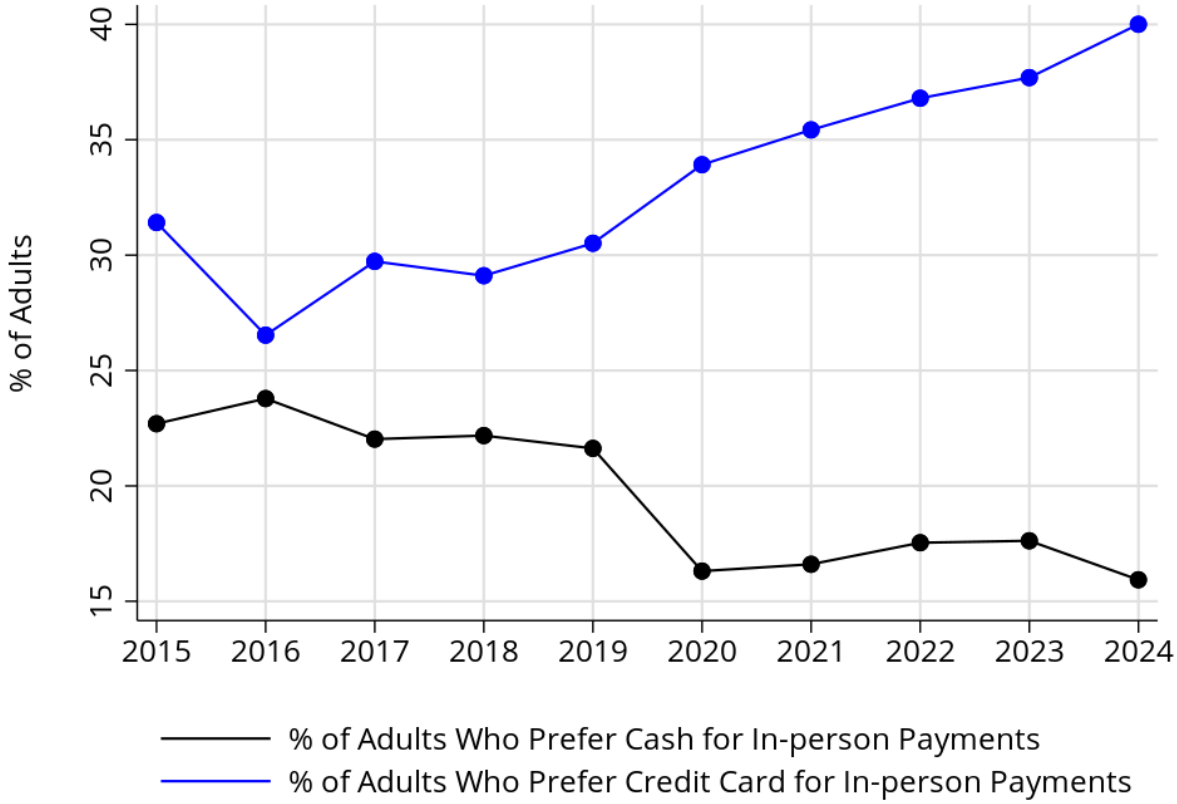
Figure 1: Percentage of in-person credit card payments for which the consumer was charged a fee for paying by credit card and percentage of in-person cash payments for which the consumer was given a discount for using cash



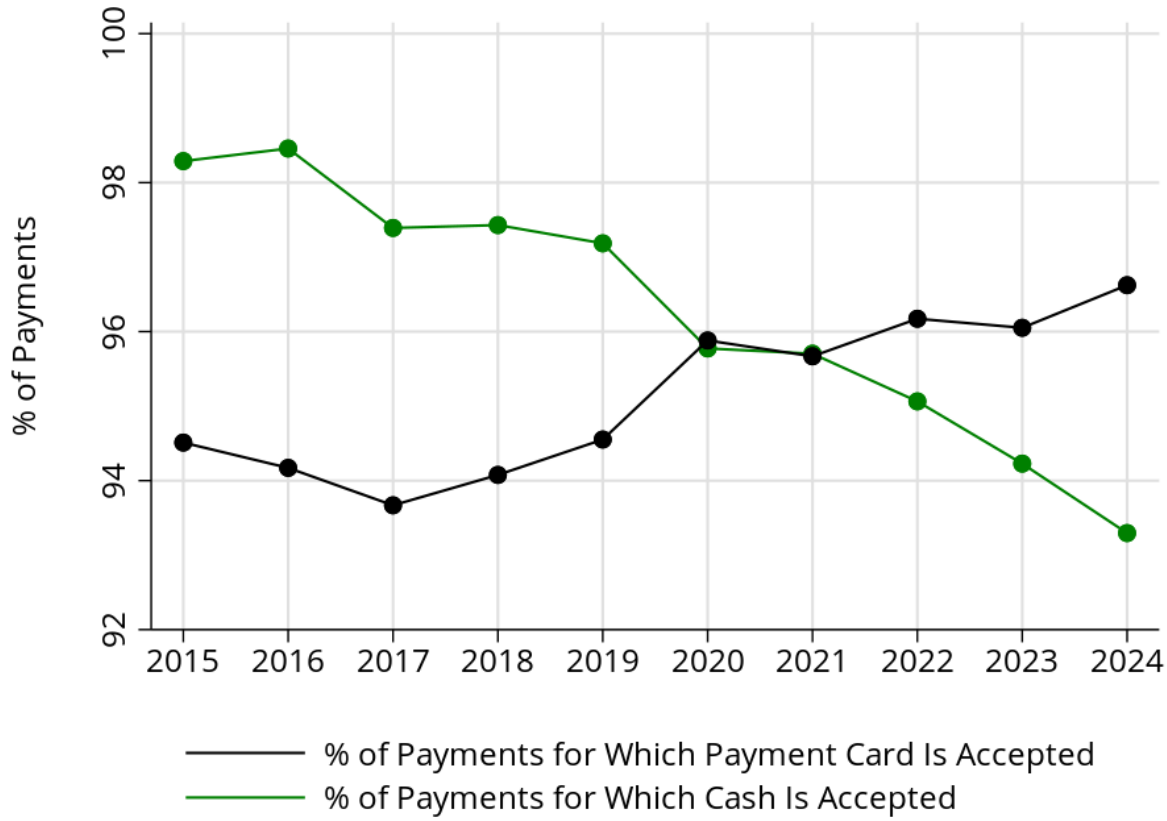
Note: The sample is limited to in-person, non-bill payments, unweighted.
Source: 2015–2024 Survey and Diary of Consumer Payment Choice.

Figure 2: Percentage of consumers whose preferred payment method for in-person payments is cash or credit card



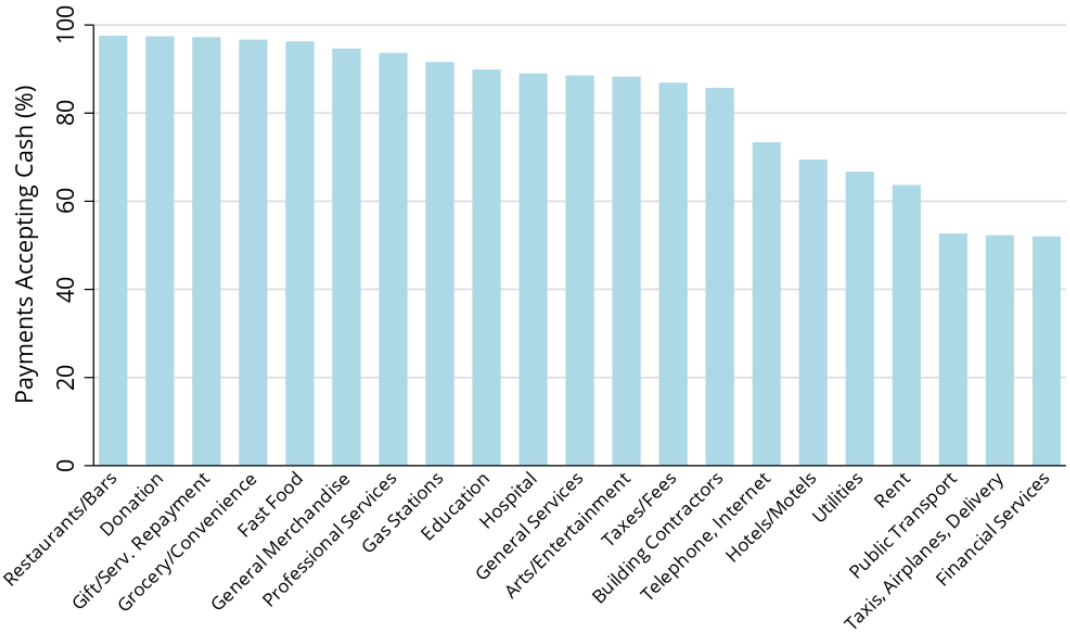
Note: The sample is limited to in-person, non-bill payments, unweighted.
Source: 2015–2024 Survey and Diary of Consumer Payment Choice.

Figure 3: Cash acceptance and card acceptance over time, in-person purchases, 2015–2024



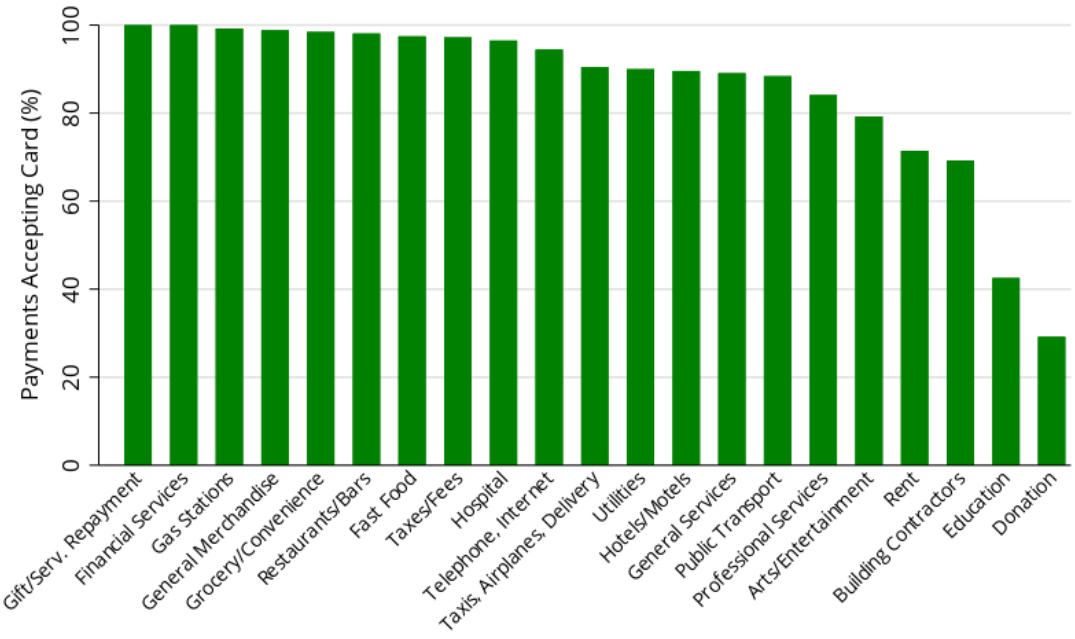
Note: The sample is limited to in-person, non-bill payments, unweighted.
Source: 2015–2024 Survey and Diary of Consumer Payment Choice.

Figure 4: Percentage of in-person payments for which cash is an accepted payment method, by merchant category



Notes: The sample is limited to in-person, non-bill payments, unweighted. Respondents using any non-cash payment method to complete their payment were asked a follow-up question concerning the acceptance of cash at the given merchant. Values represent a share of payments within each merchant category for which either cash was used, or cash was not used, but the respondent indicated that cash would have been accepted.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Figure 5: Percentage of in-person payments for which a credit or debit card is an accepted payment method, by merchant category



Notes: The sample is limited to in-person, non-bill payments, unweighted. Respondents using cash to complete their payment were asked a follow-up question concerning the acceptance of cards by the given merchant. In addition to such responses, card acceptance was imputed whenever debit or credit was used to complete a payment. Values represent a share of payments within each merchant category for which either a card was used, or a card would have been accepted if used.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Table 1: Using and deviating from preferred payment methods for in-person purchases

Consumer's stated preference...	**Cash**		**Debit**		**Credit**	
	Number	Share	Number	Share	Number	Share
Consumers preferring	832	15.9%	2,038	39.0%	2,089	40.0%
In-person purchases	2,010	12.7%	6,040	38.1%	7,101	44.8%
Used preferred	1,056	52.5%	3,869	64.1%	5,172	72.8%
Shifted to cash	-	-	1,168	19.3%	1,057	14.9%
Shifted to debit	477	23.7%	-	-	382	5.4%
Shifted to credit	301	15.0%	571	9.5%	-	-
Shifted to other	176	8.8%	432	7.2%	490	6.9%

Notes: The sample is limited to in-person, non-bill payments, unweighted. The share using their preferred payment method is calculated by summing the total number of payments made using the preferred method and dividing by the number of all payments made by respondents sharing this preference. Similarly, shares of deviations from preferred method are calculated by dividing the total number of payments made using a non-preferred payment method by consumers with a given payment preference. For example, there were 2,010 transactions by those with a stated cash preference, 6,040 transactions by those with a stated debit preference, and 7,101 by those with a stated credit preference. Those who prefer cash used cash for 1,056 transactions, or 52.5 percent of their transactions.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Table 2: Probability of selecting cash, debit, or credit as the preferred payment method for in-person purchases

Variable	Category	(1) Cash	(2) Debit	(3) Credit
Age	Under 25	-0.053**	0.040	0.074
(Ages 35–44 omitted)	25–34	-0.027*	-0.046*	0.089***
	35–44	–	–	–
	45–54	0.033*	0.036	-0.050**
	55–64	0.017	0.032	-0.029
	Over 65	-0.012	-0.001	0.052*
Income	< $25,000	0.117***	-0.054**	-0.125***
($50,000–$74,999 omitted)	$25,000–$49,999	0.075***	-0.019	-0.053**
	$50,000–$74,999	–	–	–
	$75,000–$99,999	-0.018	-0.082***	0.114***
	> = $100,000	-0.052***	-0.165***	0.219***
Education	Less Than High School	0.132***	-0.128***	-0.158***
(Some College omitted)	High School	0.048***	-0.037	-0.059***
	Some College	–	–	–
	College	-0.049***	-0.114***	0.173***
	Graduate Degree	-0.064***	-0.185***	0.259***
Gender	Women	–	–	–
	Men	0.035***	-0.080***	0.060***
Ethnicity	Not Hispanic	–	–	–
	Hispanic	0.011	0.069***	-0.109***
Race	White	–	–	–
(White omitted)	Black	0.040**	0.070***	-0.193***
	Asian	-0.021	-0.323***	0.322***
	Other	0.041*	-0.008	-0.056*
Employment Status	Employed	-0.013	0.061***	-0.030
(Other omitted)	Unemployed	0.076***	-0.085***	-0.014
	Retired	-0.020	-0.116***	0.176***
	Other	–	–	–
	Observations	5,190	5,190	5,190
	Pseudo R^2	0.112	0.081	0.209

Notes: The sample is limited to in-person, non-bill payments. Numbers in the table represent unweighted probit marginal effects. Reference (omitted) categories denoted as "–." The "Other" group in the Employment Status category includes those who are disabled, on sick leave, or selected a combination of the potential labor status responses.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.
* p < 0.10, ** p < 0.05, *** p < 0.01

Table 3a: Card acceptance by merchants among shifts from card to cash

Among deviations from...	Debit Preference		Credit Preference	
	Number	Share	Number	Share
Would the merchant accept card?				
Yes	799	77.8%	639	70.5%
No	170	16.6%	203	22.4%
I don't know	58	5.6%	65	7.2%
Total	1,027	100%	907	100%

Notes: Respondents using cash to complete their transaction were asked a follow-up question about the acceptance of a card by the given merchant. Values represent transactions made by debit- or credit-preferring respondents who used cash for the given transaction. In addition, there were 141 missing responses for transactions made by debit-preferring consumers and 150 missing responses for transactions made by credit-preferring consumers. When taken into account, the "Total" row across both instruments sums to 1,168 and 1,057 for debit and credit, respectively; total recorded instances of shifting from debit/credit to cash (also summarized in row (3) of Table 1). The sample is limited to cash and credit card transactions for in-person, non-bill payments, unweighted.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Table 3b: Cash acceptance by merchants among shifts from cash to any non-cash payment method

Among deviations from...	Cash	
	Number	Share
Would the merchant accept cash?		
Yes	861	90.3%
No	65	6.8%
I don't know	28	2.9%
Total	954	100%

Notes: Respondents using any non-cash payment method to complete their transaction were asked a follow-up question concerning the acceptance of cash at the given merchant. Values represent transactions made by cash-preferring respondents who used non-cash for the given transaction. The sample is limited to cash and credit card transactions for in-person, non-bill payments, unweighted.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Table 4: Cash discounts and credit card surcharges by consumer payment preferences

Cash	**R Prefers Cash**	**R Prefers Non-cash**
Number of Transactions	1,056	2,393
Discount	52	114
No Discount	1,004	2,279
Share Discount	4.9%	4.8%
Credit	**R Prefers Credit**	**R Prefers Non-credit**
Number of Transactions	5,171	1,063
Surcharge	136	49
No Surcharge	5,035	1,014
Share Surcharge	2.6%	4.6%

Notes: The sample is limited to cash and credit card transactions for in-person, non-bill payments, unweighted. In the sample, two respondents who used a credit card to complete their transaction did not record a response regarding whether a credit card surcharge was applied, leading the total to fall just short of the sum of credit card transactions within the diary period (6,234 versus 6,326, as referenced in prior descriptive statistics).
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Table 5: Probability of paying a surcharge (among credit card transactions) or receiving a discount (among cash transactions)

Variable	Category	(1) Credit Card Surcharge	(2) Cash Discount
Transaction Amount	Amount ($1,000s)	0.004	0.100***
Merchant	Grocery/Convenience	-0.011**	-0.012
(Other omitted)	Food/Beverage	0.017***	0.008
	Gas Station	0.024***	0.025*
	Other	–	–
PI Preference	Prefers Credit Card	-0.017***	
	Prefers Non-credit	–	
	Prefers Cash		0.005
	Prefers Non-cash		–
Age	Under 25	0.010	-0.033
(Ages 35–44 omitted)	25–34	0.016*	0.005
	35–44	–	–
	45–54	-0.006	0.002
	55–64	0.000	-0.030**
	Over 65	0.000	-0.026*
Income	< $25,000	0.015*	0.001
($50,000–$74,999 omitted)	$25,000–$49,999	0.006	-0.009
	$50,000–$74,999	–	–
	$75,000–$99,999	0.011	0.001
	> = $100,000	0.011**	0.014
Education	Less Than High School	-0.008	-0.031**
(Some College omitted)	High School	0.004	-0.004
	Some College	–	–
	College	0.000	-0.014
	Graduate Degree	0.001	-0.004
Gender	Women	–	–
	Men	0.006	-0.003
Ethnicity	Not Hispanic	–	–
	Hispanic	0.009	0.030*
Race	White	–	–
(White omitted)	Black	0.012	0.020*
	Asian	-0.002	0.016
	Other	-0.003	0.001
Employment Status	Employed	-0.015*	0.010
(Other omitted)	Unemployed	-0.006	0.010
	Retired	-0.004	0.003
	Other	–	–
	Number of Transactions	6,211	3,426
	Pseudo R^2	0.0456	0.0475

Note: The sample is limited to in-person, non-bill payments. Numbers within the table represent unweighted probit marginal effects. Reference (omitted) categories denoted as "–." The "Other" group within the Employment Status category includes those who are disabled, on sick leave, or selected a combination of the potential labor status responses.

Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Probability of shifting to cash among consumers who prefer non-cash (column (1)) and among cash transactions by all consumers (column (2))

		Shifted to Cash	
		(1)	(2)
Variable	Category	Among non-cash preferers	Among cash users
Accepts Card	No		–
	Yes		-0.130***
	I don't know		-0.176***
Discount Received	Cash Discount		-0.005
Transaction Amount	Amount ($1,000s)	-0.681***	-0.150
Merchant	Grocery/Convenience	-0.133***	-0.083***
(Other omitted)	Food/Beverage	-0.066***	-0.020
	Gas Station	-0.128***	-0.097***
	Other	–	–
Age	Under 25	-0.044***	0.036
(Ages 35–44 omitted)	25–34	-0.031***	0.013
	35–44	–	–
	45–54	0.007	-0.087***
	55–64	0.060***	-0.048*
	Over 65	0.077***	0.005
Income	< $25,000	0.055***	-0.099***
($50,000–$74,999 omitted)	$25,000–$49,999	0.023*	-0.119***
	$50,000–$74,999	–	–
	$75,000–$99,999	0.001	0.040
	> = $100,000	-0.006	0.101***
Education	Less Than High School	0.051*	-0.122**
(Some College omitted)	High School	0.029**	-0.048*
	Some College	–	–
	College	-0.018*	0.098***
	Graduate Degree	-0.035***	0.079***
Gender	Women	–	–
	Men	-0.017***	-0.099***
Ethnicity	Not Hispanic	–	–
	Hispanic	0.020	0.048
Race	White	–	–
(White omitted)	Black	0.088***	0.035
	Asian	-0.021	-0.010
	Other	0.003	-0.088**
Employment Status	Employed	-0.014	-0.067***
(Other omitted)	Unemployed	0.004	-0.136***
	Retired	0.002	-0.008
	Other	–	–
	Number of Transactions	13,766	3,066
	Pseudo R^2	0.0730	0.0911

Notes: The sample is limited to in-person, non-bill payments. Column (1): only transactions by consumers who prefer non-cash; dependent variable = 1 if a non-cash-preferring consumer used cash for the given transaction, 0 if they did not use cash. Column (2): cash transactions only; dependent variable = 1 if a consumer prefers non-cash, 0 if they prefer cash. The numbers within the table represent unweighted probit marginal effects. Reference (omitted) categories denoted as "–." The "Other" group within the Employment Status category includes those who are disabled, on sick leave, or selected a combination of the potential labor status responses.

Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Probability of deviating from credit cards among all consumers who prefer credit cards (column (1)) and among transactions in which credit cards were accepted (column (2)).

		Deviated from Credit	
		(1) Among Credit Preferers	(2) Among Credit Preferers: Credit Cards Accepted
Variable	Category		
Transaction Amount	Amount ($1,000s)	-0.130***	-0.893***
Merchant	Grocery/Convenience	-0.224***	-0.031***
(Other omitted)	Food/Beverage	-0.147***	0.005
	Gas Station	-0.261***	-0.057***
	Other	–	–
Age	Under 25	-0.074**	-0.054**
(Ages 35–44 omitted)	25–34	-0.054***	-0.045***
	35–44	–	–
	45–54	-0.014	-0.004
	55–64	0.049***	0.050***
	Over 65	0.097***	0.083***
Income	< $25,000	0.066***	0.034
($50,000–$74,999 omitted)	$25,000–$49,999	0.013	0.018
	$50,000–$74,999	–	–
	$75,000–$99,999	0.037*	0.022
	> = $100,000	-0.001	-0.011
Education	Less Than High School	0.334***	0.319***
(Some College omitted)	High School	0.037	0.020
	Some College	–	–
	College	-0.029	-0.041***
	Graduate Degree	-0.050***	-0.066***
Gender	Women	–	–
	Men	-0.034***	-0.025***
Ethnicity	Not Hispanic	–	–
	Hispanic	0.035	0.024
Race	White	–	–
(White omitted)	Black	0.238***	0.243***
	Asian	0.018	-0.010
	Other	0.032	0.083***
Employment Status	Employed	-0.008	0.003
(Other omitted)	Unemployed	-0.019	-0.014
	Retired	-0.046**	-0.046***
	Other	–	–
	Number of Transactions	7,073	6,168
	Pseudo R^2	0.0670	0.0682

Note: The sample is limited to in-person, non-bill payments. Dependent variable = 1 if a consumer prefers credit cards but used non-credit, 0 if a consumer prefers credit cards and used credit. Column (1): all transactions by consumers who prefer credit. Column (2): only transactions in which credit cards were accepted. Numbers in the table represent unweighted probit marginal effects. Reference (omitted) categories denoted as "–." The "Other" group within the Employment Status category includes those who are disabled, on sick leave, or selected a combination of the potential labor status responses.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.
*p < 0.10, **p < 0.05, ***p < 0.01

Table 8: Percentage of transactions in which the consumer used the same payment instrument as their preceding transaction

Transaction *t* and *t–1* used...	The Same PI (%)	The Same PI and PI is Preferred (%)	The Same PI and PI Is *Not* Preferred (%)
Cash	45.7%	19.9%	25.9%
Debit	72.5%	60.6%	11.9%
Credit	75.5%	66.6%	8.9%

Notes: The sample is limited to in-person, non-bill payments, unweighted. The payment method used in period *t–1* is assessed at the individual level. It is the method used to complete the purchase immediately preceding the given payment.
Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

Table 9: Transaction-level probit regressions estimating the marginal probability of repeated use of a given payment method while controlling for preferences

Category	Variable	(1) Cash	(2) Debit	(3) Credit
Prefers PI	Preferred	0.219***	0.297***	0.392***
Previous PI	Previous: Cash	0.185***	-0.013	0.007
	Previous: Debit	-0.045***	0.318***	-0.183***
	Previous: Credit	-0.039***	-0.178***	0.316***
Transaction Amount	Amount ($1,000s)	-0.819***	-0.094*	0.233***
Merchant	Grocery/Convenience	-0.123***	0.103***	0.140***
(Other omitted)	Food/Beverage	-0.050***	0.026**	0.114***
	Gas Station	-0.120***	0.066***	0.223***
	Other	–	–	–
Age	Under 25	-0.054***	-0.002	0.085*
(Ages 35–44 omitted)	25–34	-0.028**	-0.006	0.036*
	35–44	–	–	–
	45–54	0.000	-0.005	0.001
	55–64	0.053***	-0.016	-0.040**
	Over 65	0.066***	-0.008	-0.056***
Income	< $25,000	0.060***	-0.079***	-0.042**
($50,000–$74,999 omitted)	$25,000–$49,999	0.009	-0.024	-0.004
	$50,000–$74,999	–	–	–
	$75,000–$99,999	0.005	-0.039**	-0.006
	> = $100,000	-0.002	-0.052***	0.036**
Education	Less Than High School	0.037	0.019	-0.053
(Some College omitted)	High School	0.028**	-0.008	0.010
	Some College	–	–	–
	College	-0.012	-0.041***	0.063***
	Graduate Degree	-0.017	-0.055***	0.077***
Gender	Women	–	–	–
	Men	-0.012	-0.016*	0.033***
Ethnicity	Not Hispanic	–	–	–
	Hispanic	0.004	0.009	0.020
Race	White	–	–	–
(White omitted)	Black	0.055***	-0.003	-0.146***
	Asian	-0.024	-0.103***	0.062***
	Other	-0.010	0.033*	0.026
Employment Status	Employed	-0.001	0.042***	-0.004
(Other omitted)	Unemployed	-0.001	-0.081***	0.015
	Retired	0.009	-0.043***	0.025
	Other	–	–	–
	Number of Transactions*	11,533	11,533	11,533
	Pseudo R^2	0.1630	0.3974	0.4039

Note: The sample is limited to in-person, non-bill payments and to transactions made by respondents with two or more in-person, non-bill transactions recorded throughout the diary period. Numbers in the table represent unweighted probit marginal effects. Reference (omitted) categories denoted as "–." The "Other" group within the Employment Status category includes those who are disabled, on sick leave, or selected a combination of the potential labor status responses.

Source: Authors' calculations based on the 2024 Survey and Diary of Consumer Payment Choice.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$