EXCESSIVE SWIPE FEES AND BARRIERS TO COMPETITION IN THE CREDIT AND DEBIT CARD SYSTEMS

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Good morning Chairman Durbin, Ranking Member Grassley, and Members of the Committee. My name is Linda Kirkpatrick and I am the President, North America of Mastercard. I am here to discuss the Mastercard network and the competitive environment in which we operate. Through its structure, including interchange, Mastercard has helped deliver continuity to the American and global economy, especially as people and businesses navigated the pandemic. As a core element enabling global commerce, our technology has also helped to transform global commerce by providing enormous benefits to consumers, merchants, and the economy.

Background on Mastercard

Mastercard is a technology company in the global payments industry that connects consumers, financial institutions, merchants, governments, digital partners, businesses, and other organizations worldwide, enabling them to use electronic payments instead of cash and checks. We make payments easier and more efficient by providing a range of payment services using our family of well-known brands, including Mastercard®, Maestro®, and Cirrus®. We are a multi-rail network (debit, credit, prepaid, and real-time payments) that offers customers one partner for their domestic and international payment needs.

Through our global payments network built over decades, which we refer to as our core, we "switch" (*i.e.*, authorize, clear, and settle) payment transactions and deliver products and services. We also supply payment capabilities that include automated clearing house ("ACH") transactions (both batch and real-time account-based payments). Moreover, we provide integrated value-added offerings such as cyber and intelligence products, information and analytics services, consulting, loyalty, and reward programs. Our payment solutions offer customers choice and flexibility to ensure security for the global payments system.

Mastercard seamlessly processes more than 110 billion payments annually. With more than 2.9 billion cards issued through our family of brands globally, Mastercard serves consumers and businesses in more than 200 countries and territories.

Summary of Key Points

I will discuss each of these more below, but we believe that it is important to view Mastercard's current position in the marketplace with the proper context:

First, Mastercard brings extraordinary value to the marketplace because it works seamlessly for its participants. It works because it is available to consumers—of all economic means—at millions of merchants and from thousands of banks, both large and small. It works because it is frictionless, fast, and convenient. It works because consumers derive satisfaction from knowing that they can make a transaction wherever they see the Mastercard brand, whether they have cash or a checkbook, or whether they are in a store, in their car, or at home. It works because it guarantees merchants payment and is often cheaper than accepting cash. It works because it provides banks with a platform to compete fiercely to win customers by offering an endless variety of cards with features that deliver more than $60 billion annually to consumers.

Second, we manage our network to consider all ecosystem players and balance their needs. Interchange is the foundation of the Mastercard network and delivers the appropriate incentives for merchants to accept our products and for banks to issue credit to consumers. Moreover, Mastercard ensures that banks will act as a card issuer (with the credit risk) and provide merchants with guaranteed payment on Mastercard transactions. Mastercard's recent decision to adjust certain credit default interchange rates, the first changes since 2006, reflects the need to respond to the changing dynamics in the marketplace, including by helping small merchants by drastically cutting interchange on transactions under $5. Our recent changes have virtually no impact on issuers' revenues.

Third, Mastercard is an independent, publicly owned company that acts in the interests of its shareholders to promote its business. As of 2022, just 0.8% of Mastercard stock is held by issuing banks. The rest—99.2%—is held by public investors [88.4%] and the Mastercard Foundation [10.8%]. All decision-making authority over Mastercard's actions (including setting interchange rates and network rules) is held by its management, under the authority of an independent board of directors; banks have no control over any Mastercard action. Rather, banks (including community banks and credit unions) are Mastercard's customers—just as merchants (of different sizes), tech firms, governments, and transit authorities are valued Mastercard customers. Mastercard meets the demands of all customers, as well as cardholders, to bring value to their businesses and finances, all while competing with other systems of payment.

Fourth, Mastercard and Visa are each other's most fundamental competitors within an extremely competitive and dynamic payments market. Mastercard and Visa each pursue business initiatives to compete and take market share from each other (and from other forms of payment). Mastercard also aggressively competes with American Express, Discover, and debit networks like Pulse. Mastercard competes against these networks for issuers' business; it competes for merchant acceptance; and it competes for major co-brand deals (*e.g.*, the Delta co-brand deal, which Amex controls).

Mastercard is in no position to exercise market power in this industry. A business has "market power" when it has the unilateral ability to raise prices by restricting output. There can be no argument that Mastercard or this industry suffers from restricted output; to the contrary, Mastercard has grown steadily for decades because it has produced innovative products and systems for consumers, financial institutions, and merchants.

Moreover, Mastercard does not have the unilateral market power to restrict output or raise prices even if it desired to do so. Visa is twice as large as Mastercard in volume; if Mastercard sought to raise prices or restrict output to anticompetitive levels, it would promptly lose share to Visa. During the past 20 years, Mastercard has always been comparable in size to American Express, with each having a credit share of around 20%. In 2021, our market share in debit and credit was only 25% (down 10 bps); and our credit-only market share was only 23%. For comparison, Amex's credit-only market share in 2021 was 19.6%.

Fifth, and finally, this Committee must focus on the nature of competition in the payments marketplace today. The payments industry is more dynamic and competitive than ever, and its players are constantly innovating to respond to consumer needs. The rapid expansion of Buy Now Pay Later (BNPL), account-to-account transfers, and digital currencies has increased payments competition; the demand for contactless and digital payments will only increase as the pandemic continues to drive innovation. In many cases, merchants pay *twice as much* to offer BNPL than they do for Mastercard acceptance. BNPL exists not because it is the cheapest form of payment. It exists because millions of merchants recognize the benefits of BNPL drastically exceed its costs. Concurrently, FinTechs are supporting new account-to-account payment options that bypass Mastercard. Growth in "open banking" and fast ACH options enable consumers, merchants, and financial institutions to work outside of the card environment.

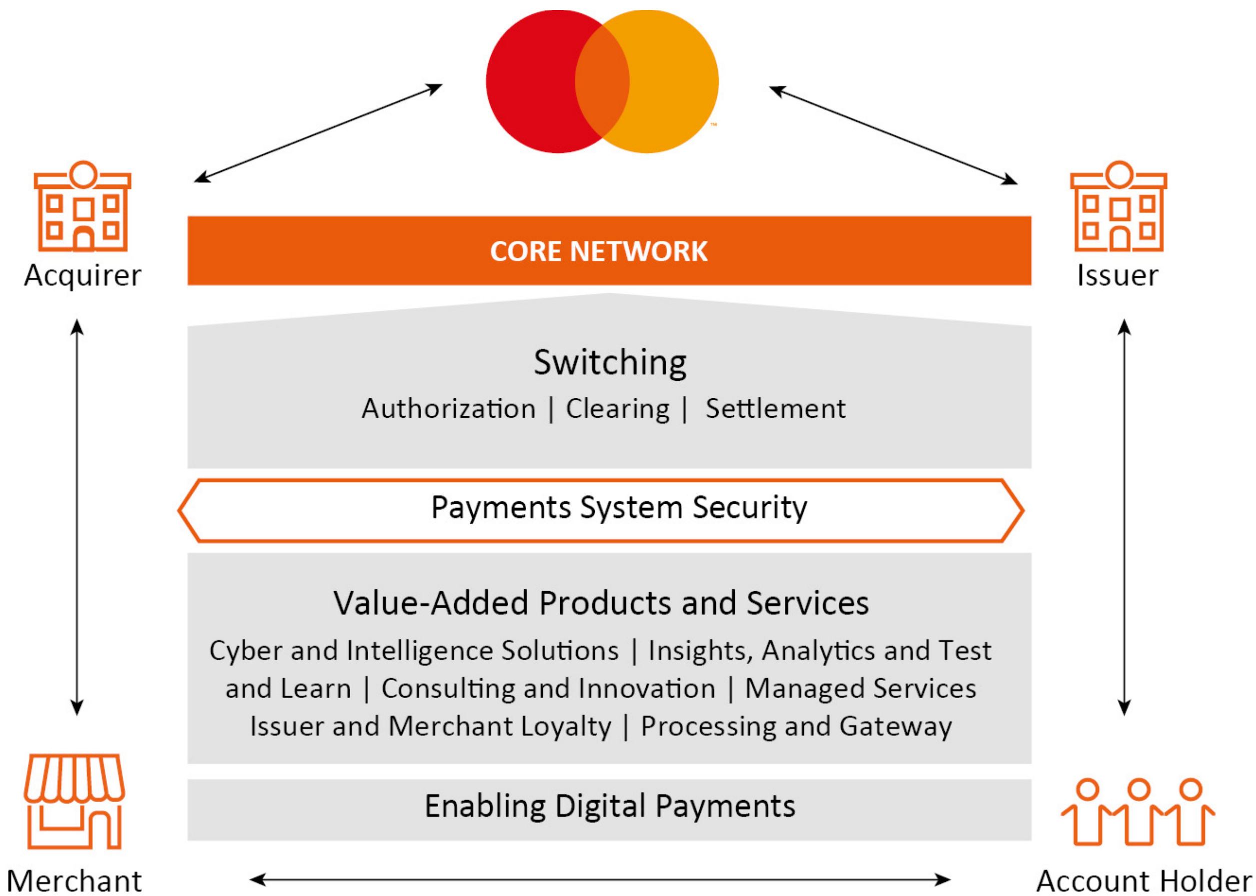
Against this competitive backdrop, Mastercard is attempting to maintain a competitive presence by continuously innovating. To stay competitive, Mastercard has been investing in a new multi-rail strategy that moves beyond payment cards, affording customers new payment solutions.

Now, let me return to the fundamentals of our network.

A Mastercard Transaction

A typical transaction on our network involves four participants in addition to Mastercard: an account holder (a person or entity who holds a card or uses another device for payment), a bank or credit union issuer (the account holder's financial institution), a merchant, and an acquirer (the merchant's bank or credit union). Mastercard does not issue cards, extend credit, determine or receive revenue from interest rates or other fees charged to account holders by issuers, earn money from interchange, or establish the rates charged by acquirers in connection with merchants' acceptance of our products. Consumer relationships belong to, and are managed by, our customers.

The following graphic depicts a typical transaction on our network, and our role in that transaction:



In a typical transaction, a consumer purchases goods or services from a merchant using one of our products. The merchant is connected to Mastercard via a contract with its acquirer, which in turn connects with Mastercard as the network. On the other side of our platform, the issuing bank for the cardholder also connects with Mastercard. Using the electronic network, the consumer's transaction is authorized by the issuer. Upon authorization, the issuer uses the network to pay the acquirer an amount equal to the value of the transaction, minus the interchange owed to the issuer by the acquirer. Then, it posts the transaction to the consumer's account. The acquirer pays the amount of the purchase, net of a discount (referred to as the "merchant discount" rate), to the merchant.

Interchange serves as a system-wide foundation providing value to all the participants in the Mastercard network, including merchants and cardholders. By establishing "default" interchange that applies to transactions when the issuer and acquirer do not agree on compensation, Mastercard can incentivize both card issuance and card acceptance through rates that grow the network and help to provide more than $60 billion in annual rewards to consumers. Generally, interchange is paid by acquirers to issuers. By directing the flow of funds this way, the system has recognized that the issuer's services are critical to the operation of an efficient network. The issuer takes on all the risk that a consumer does not pay his or her monthly bill. In contrast, normally a merchant will receive guaranteed payment by an issuer (less a merchant discount) regardless of whether the cardholder pays his or her bill. Interchange drives card issuance by thousands of banks and credit unions and incentivizes millions of merchants to accept cards because of the benefits that they derive.

Moreover, interchange fosters participation from both large and small merchants and issuing banks. By establishing default interchange, Mastercard enables all participants, regardless of size, to understand the financial structure of a transaction before it occurs. In the absence of default rates, millions of merchants would have to negotiate with thousands of banks to settle on the terms of Mastercard acceptance—a ridiculous proposition. Issuers and acquirers also remain free to reach their own agreements on interchange, and some large banks can sidestep the interchange system where they contract with both cardholders and merchants.

Mastercard does not generate revenue from interchange. We administer the collection and remittance of interchange through settlement. Mastercard must set interchange to benefit merchants, issuing banks, and consumers. We generate revenue from what we charge to our customers based on the gross dollar volume on their products that carry our brands, from what we charge to our customers for switching, and from other payment-related products and services.

The merchant discount rate is established by the acquirer in its contract with the merchant (to which Mastercard is not privy) to cover its costs of both participating in the four-party system and providing services to merchants. The rate considers the amount of interchange, which the acquirer generally pays to the issuer. Additionally, acquirers may charge merchants processing and related levies.

Competition

Competition in payments today is extraordinarily dynamic and innovative. Consumers are constantly discovering new ways to pay that fit their changing lifestyles, particularly in the face of health and technological challenges. Mastercard has not only provided great value to its system participants, but also is trying to react quickly in the marketplace to adjust to innovations that are moving beyond cards.

Mastercard competes against all forms of payment, including cash and checks; electronic transactions, such as wire transfers, ACH payments, and real-time account-based payments; contactless, mobile, and e-commerce payments; and other electronic forms of payment, including card-based payment systems that process credit, charge, debit, and prepaid transactions. We compete vigorously worldwide with brands such as Visa (including Plus, Electron, and Interlink networks), American Express, Discover, China UnionPay, and JCB, among others.

Mastercard's share of the credit or debit card transaction market is not dominant. For example, according to the Nilson Report, our share of the credit card transaction market in the United States in 2021 was 23.8%, around the same size as American Express at 19.6%, and well below Visa's share of 52.7%. (Discover is at about 4%). We also compete with ATM and point-of-sale debit networks globally, such as Star, NYCE, and PULSE in the United States, Interac in Canada, and EFTPOS in Australia. Finally, we compete against businesses that issue their own private label cards.

Increasingly, we must compete against companies that offer alternative payment systems, such as PayPal, digital wallet providers, Buy Now Pay Later providers, mobile operator services, mobile phone-based money transfer and microfinancing services, handset manufacturers, and cryptocurrencies.

Thus, Mastercard must meet this advanced competition by pursuing a multi-rail strategy that offers customers and consumers new and secure ways to pay that go beyond the traditional card transaction. Mastercard must continue to compete intensely for the loyalty of our financial institution customers, for our merchant customers, and for consumers. The graphic below provides a sense of the new payments environment within which Mastercard must compete:

Benefits to Consumers

As discussed, consumers have a variety of payment choices. Consumers can pay with cash, check, debit card, charge card, credit card, gift card, prepaid card, alternative payment system, or store-issued cards. Even among payment cards, consumers have thousands of options regarding the provider of those cards and the benefits associated with their use.

Mastercard offers a broad value proposition to consumers:

- Consistent, seamless, and secure checkout experiences
- Increased purchasing power and access to credit to finance purchases

- Consumer protections, such as zero fraud liability protections and dispute resolution processes
- Avoiding cash spoilage (lost or damaged currency)
- Value-added features and benefits, such as rewards, lounge accesses, and concierge service

Because of this, Mastercard is popular with cardholders. A consumer with a Mastercard knows that they can go almost anywhere in the world and make a purchase using their card, whether that card was issued by a large New York City bank or an Iowa, Utah, Missouri, or South Carolina credit union or small bank. Mastercard cardholders can transact in more than 150 currencies without the need to exchange cash.

Mastercard plays a critical role in expanding financial inclusion for consumers of all socio-economic means. Mastercard provides all cardholders with enhanced purchasing power, potential access to unsecured credit, access to merchants through remote and mobile mechanisms, easy ways to pay for medical and other benefits, and an orderly and convenient way to manage personal finances. The Mastercard brand promises fast, safe, and secure transactions for all Mastercard cardholders, regardless of income level.

Further, Mastercard continually innovates to improve its performance. A cardholder need not even leave his or her own home to shop around the globe. The Internet has become a powerful, ubiquitous tool for consumers to find the lowest prices. The rapid development of e-commerce and its important role for our consumer economy, including during the COVID-19 pandemic, is due largely to a cardholder's ability to pay for a product online with a card. Furthermore, Mastercard is developing, and intends to continue to develop, new and innovative payment options.

In addition to the convenience and security of our network, Mastercard enables banks to offer consumers significant tangible benefits across the socio-economic spectrum. Whether by issuing prepaid or student cards, or cards with airline miles, rewards points, and cash back, Mastercard issuers innovate to produce an endless variety of cards. The proliferation of these benefits is the direct result of intense competition in payments. Mastercard competes with other forms of payment, and Mastercard issuers compete vigorously against each other and against other payment card issuers. Because consumers can pick from thousands of different cards, issuers strive to make their card products more innovative and appealing. This intense competition has resulted in the elimination of annual fees for many cards. The increase in rewards and loyalty cards is also a direct result of competition in the marketplace. Contrary to some narratives, more than 80% of all cards are "rewards" cards, and data from the Consumer Financial Protection Bureau demonstrate that consumers of all incomes enjoy the benefits of rewards and points. For many card products, credit risk is more important than income alone.

During the pandemic, there is a preference for contactless payment transactions and the benefits of e-commerce. These trends are further accelerating the shift to digital payment. For example, in 2020, we expanded "click to pay," the activation of the EMV Secure Remote Commerce industry standard that enables a faster, more secure checkout experience across e-commerce. This checkout experience is designed to eliminate the need to retype credit card information during every checkout online. We also have continued our focus on contactless technology to help deliver a simple way for consumers to pay.

Benefits to Merchants

Merchants were the first to recognize the benefits of payment cards when, in the 1920s, they began to issue credit cards. These card programs, known now as two-party systems, grew because they were attractive to consumers due to the convenience and ready access to credit they provided. These programs were inefficient, however. Each merchant had to conduct underwriting to determine which customers qualified for the credit. Legal compliance costs grew as the programs were increasingly regulated. Merchants learned that the availability of credit can increase sales, but collecting on that credit can be expensive. This problem was compounded for merchants because the borrowers from whom they sought to collect were the very customers from whom they derived their sales—and collection activities often fail to create customer loyalty.

The powerful desire of merchants to benefit from cards, combined with the relative inefficiency of the two-party systems (*i.e.*, the merchant card programs), created opportunity for others and, in 1950, Diners Club introduced the first so-called "universal" credit card that could be used at any store or business that chose to accept it. In 1958, American Express followed and offered its own card. Diners Club and American Express both used the three-party system, in which a single company issues the cards, signs up merchants to accept the cards, and completes the transactions.

In the 1960s, banks began to use a four-party system to offer their own credit card programs. One group of banks created MasterCharge (which became Mastercard in 1979). Around the same time, Bank of America licensed a group of banks in the United States to issue its BankAmericard (which eventually became known as Visa). These four-party systems created even greater efficiencies and benefits by bringing together the cardholders and merchants of hundreds, eventually thousands, of banks to complete transactions. Four-party systems are less expensive and more efficient than the two-party or three-party systems—a benefit to competition that our antitrust laws encourage.

More and more merchants, especially small businesses, were drawn to these card offerings as the benefits, which far outweighed the costs, became more widely known. Small- and medium-sized businesses realized the great value of Mastercard and other four-party systems because it was too expensive for them to issue their own proprietary cards. One can imagine the reaction of a merchant that had struggled with the underwriting; administrative, legal, and credit risk; and other problems associated with its own credit card when Diners Club offered to perform those functions for the merchant's customers. The prospect of guaranteed payment alone (*i.e.*, getting paid for a transaction even if the customer does not pay the credit card bill) was hard to resist.

Today, Mastercard has built on the benefits of the four-party model to make payments faster, safer, and less expensive for merchants. As with consumers, Mastercard offers a powerful value proposition to all merchants, large and small:

- Incremental transactions, driven from consumer preference, ability to buy when low on cash, and access to new customers with greater purchasing power
- Increased sales
- Greater sales throughput from better customer checkout experience
- Guaranteed consumer payment for goods and services
- Reduced risks and security concerns (*e.g.*, fraud liability protections and dispute resolution processes)
- Higher customer engagement and loyalty given data-backed insights, card-linked offers, and co-brand programs
- Operational efficiencies (*e.g.*, no losing cash and paying armed guards to haul it, and faster settlement of funds)

We keep billions of electronic payments safe through end-to-end encryption, tokenization, and authentication. We spot anomalous activity and identify fraud before it occurs. Our technology ensures that genuine transactions are not declined—and that keeps consumers happy. Beyond operating a payment network that brings incredible value to merchants, we improve business for merchants in other ways.

Today, merchants derive enormous benefits from payments industry competition, including the ability to provide an unprecedented number of payment options for their customers. This affords merchants enormous flexibility in their business. For example, a merchant can offer its customers the choice to pay by cash, check, general-use card, proprietary card, installment loan, ACH, or real-time payment. Moreover, this choice permits a merchant to manage its costs of payment acceptance. Merchants that prefer certain types of payment can restrict payment options in their stores, or they can offer other payment options but steer their customers to the preferred methods, as many merchants are doing with debit or proprietary cards. Merchants that prefer to receive payment by cash have many options too, such as requiring payment in cash or providing incentives, such as cash discounts, to encourage their customers to forgo other payment options.

Even with this array of choices, merchants continue to offer card options. Merchants are rational and will accept a type of payment if it makes business sense. For example, the convenience of cards means consumers will spend more than they would if they had to pay with cash or checks. Cards generally are faster than other forms of payment, meaning merchants can serve their customers more quickly. Many cardholders understand that certain Mastercard cards provide financial benefits far more valuable than other forms of payment. A merchant understands the value in offering acceptance at a certain cost in lieu of potentially losing the sale to a competitor. Indeed, merchants often will accept a competing payment that costs them significantly more than Mastercard.

The value of Mastercard to merchants may never have been more important than during the height of the pandemic. In March 2022, online spend was up +84% compared to pre-pandemic levels. However, 9 million small businesses did not have an online presence then. Within four weeks, Mastercard established "Digital Doors," a program that has helped more than 20,000 small businesses get online through digital enablement tools. Thanks to efforts like these, American small businesses that started an online store during the pandemic saw average monthly sales growth of 6%, compared to those that did not create a digital presence.

Small business owner Michelle Cadore is one such example. Ms. Cadore is a designer who owns and operates DA SPOT NYC, a Brooklyn-based clothing boutique that showcases the works of Black designers and entrepreneurs. At the beginning of the pandemic, DA SPOT NYC was forced to close for six months, while Ms. Cadore looked for alternative methods to keep her business afloat. After securing several grants, she utilized Mastercard's Digital Doors Program, which offers guidance and resources to digitally transform small businesses and build a robust e-commerce platform. Using Mastercard tools such as its Small Business Digital Readiness Diagnostic, Ms. Cadore conducted an analysis of her digital business and can now protect her business against downturns. She attributes her partnership with Mastercard to increasing her sales by 300% since she began working with us.

Ursula Smith is another incredible example of perseverance during the pandemic. Ursula is a small business owner in Birmingham, Alabama who had long nurtured a dream of opening her own studio to introduce children of color to ballet, tap, and West African dance. After nearly two decades of starts and stops, she opened the doors of the Ursula Smith Dance Studio in the heart of the city's historic Civil Rights District on February 1, 2020. She suddenly had to pivot to a digital world, which included setting up and hosting free virtual dance workshops and launching a web store with class options. Since then, Ursula has hosted more than 150 virtual dance classes and rehearsals.

In addition to fostering digital enablement, Mastercard works to support small businesses through access to capital, giving entrepreneurs the tools they need to succeed. For example, an estimated 41% of Black-owned businesses across the U.S. shut down between February and April of 2020 according to the Federal Reserve Bank of New York, outpacing all other owner groups. To address this inequity, we formed the Strivers Initiative, which is a consumer-facing platform that elevates the visibility of Black female business owners overcoming obstacles to maintain and grow their businesses, providing them with access to capital, a suite of security technology for the businesses, and lasting partnerships and mentorship.

Mastercard allows all merchants to reach their audiences more effectively. When contrasted against a system in which a merchant runs a lay-away plan or other credit extension program, the benefits of outsourcing that function to the Mastercard system is clear. Not only does a merchant receive guaranteed payment, but what it pays for acceptance is well below the costs it would incur to run its own credit program. According to the Federal Reserve, the average annual consumer credit card charge-off rate—which is the amount of credit that a bank or credit union extends that is not repaid by the borrower—has been roughly 4.5%. The average credit interchange rate for Mastercard has been roughly 1.9%.

In short, no one is forcing merchants to accept Mastercard. Merchants accept Mastercard because the benefits of acceptance drastically exceed the costs.

The Merchant Discount and Interchange

Since the inception of these payment systems, merchants have paid to their acquirers a "merchant discount" rate in exchange for the benefits of card acceptance. In a three-party system, the merchant discount is paid directly to the single entity that provides the services to the merchant. For example, in the Discover system, the merchant discount is paid to Discover, which issues the card, licenses the merchant to accept the card, and enables transactions.

In a four-party system, the merchant pays the merchant discount to the acquirer (*i.e.*, the bank) that licensed the merchant to accept the card. That merchant discount rate enables a merchant to accept and process card transactions.

Since 2004, Mastercard management has been responsible for establishing default interchange for our system in the United States when there are no other established settlement terms in place between an issuer and an acquirer. Although Mastercard establishes interchange and collects and remits it on behalf of our financial institution customers, *we do not keep any portion of interchange*. Nonetheless, interchange is a critical part of our system because issuers must be compensated for extending credit, managing fraud, and paying rewards to consumers.

Mastercard considers many factors in determining interchange, and there are always competing considerations. If we set interchange too high, the merchants' desire and demand for Mastercard acceptance will drop. If we set interchange too low, the card issuers' willingness to issue and promote Mastercard-branded cards will drop, as will consumer demand for those cards when issuers cease promoting Mastercard cards with extensive cardholder benefits. Mastercard management works diligently to maximize the output of the Mastercard system by setting interchange at levels that enable it to compete effectively for both issuance and merchant acceptance. Three-party systems like American Express and Discover set their merchant discounts to establish a similar objective. Generally, merchants pay the highest merchant discount for accepting American Express, the lowest for accepting Discover, and somewhere in between for accepting Mastercard-branded cards. Merchant discounts for accepting Visa cards are understood to also fall somewhere in between American Express and Discover. Other new payment options, like BNPL, often cost merchants far more than Mastercard.

Mastercard Rate Changes

In January 2020, Mastercard publicly announced our intent to adjust credit interchange effective April 2020. These proposed changes were the first significant changes since 2006. Due to the pandemic, we delayed our plans to adjust default interchange rates. In 2021, we again delayed our proposed changes. On April 22, 2022, we adjusted interchange, with some rates going up and some going down. To be clear: the net effect of our recent changes ***is neutral*** (*i.e.*, cumulative impact of less than 1 basis point).

Among our changes: we lowered rates for merchants with transactions below $5, directly supporting smaller businesses. These "small ticket" transactions represent more than 10% of Mastercard credit transactions. As a result of our recent cuts, the rate for a small ticket credit transaction is now less than the price-controlled rate for a debit transaction under Reg II. We also lowered rates for hotels, rental car companies, casual dining, and daycare facilities.

It is true that some of our rates also went up. For example, default rates increased modestly at grocery stores. Since 1992, we have set rates at grocery stores at an incredibly low number to incent acceptance. But gone are the days of long checkout lines at grocery stores and delays while someone writes a check. Most grocery stores have adopted self-checkout terminals, which allow one employee to staff more than a dozen terminals concurrently. Online delivery services at grocery stores have also increased sales and ticket size by promoting electronic payments at checkout. As such, a rebalancing of our system was warranted. Even so, the new rate for grocery is still one of our lowest default rates, and it is 10% lower than the retail card present rate.

To put rates into historical context, in 2018, the average cost of credit acceptance for Mastercard and Visa cards was 2.26%, according to Nilson Report. Since then, the rate has fallen by 4 basis points and remained flat during the pandemic. Contrary to false claims, we do not have unilateral pricing power to continue to escalate interchange. Rather, recent market changes have forced declines, even from American Express. Since 2014, the cost of accepting American Express has fallen by 22 basis points, according to Nilson Report. Our merchant partners are paying less and receiving more value than they did even a few years ago.

Transaction Security and Tokenization

Mastercard invests heavily in the security of our network. Mastercard has increased its resources to support innovation and technology designed to protect our payments system for cardholders, merchants, and financial institutions. These innovations included our U.S. rollout of chip card technology and our introduction in recent years of security technologies such as Mastercard Safety Net, Mastercard Identity Check, our Mastercard Biometric Card, and ID Theft Protection. These innovations come at a significant cost and produce real results. For example, our SafetyNet technology stopped real-time fraud attacks and prevented more than $10 billion in potential fraud in 2021 alone.

One of our more recent developments is our creation of a tokenization service that protects consumers and merchants from payment fraud by encrypting card numbers and deploying dynamic data in the authentication of transactions. We pair our world-class payment security with our Zero Liability fraud protection that protects consumers from fraud when making purchases.

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For decades, Mastercard has built a payment ecosystem that brings enormous net benefits and efficiencies to all those that make, accept, or process payments. It has done so while facing larger and stronger network competitors and continually evolving competitive challenges from new entrants, including FinTechs and BNPL firms. We recognize competition is a critical issue in Congress and we appreciate the opportunity to testify. I am happy to answer any questions from the Committee.