

Meeting Between Federal Reserve Board Staff and Representatives of First Data

April 11, 2016

Participants: Louise Roseman, Jeffrey Marquardt, Mark Manuszak, Jessica Stahl, Krzysztof Wozniak, Aaron Rosenbaum, Slavea Assenova, Stephanie Martin, and Clinton Chen (Federal Reserve Board)

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Summary: Representatives of First Data met with Federal Reserve Board staff to discuss their concerns regarding merchant routing choice for EMV (chip-based) debit card transactions. First Data representatives noted that network rules that require a point-of-sale terminal screen instructing cardholders to choose which application identifier (AID) the terminal should read are in conflict with applicable federal law, are confusing to consumers, are resulting in loss of merchant routing choice and are leading to large shifts of traffic to Visa and MasterCard from the other debit networks. They further stated that merchants should be permitted to rely on the common AID, which they indicated includes all of the networks enabled on the card. The representatives and Board staff discussed how these concerns relate to the Regulation II network routing provisions.

Attachment

Challenges with EMV Debit Routing

April 2016

Executive Summary

Situation

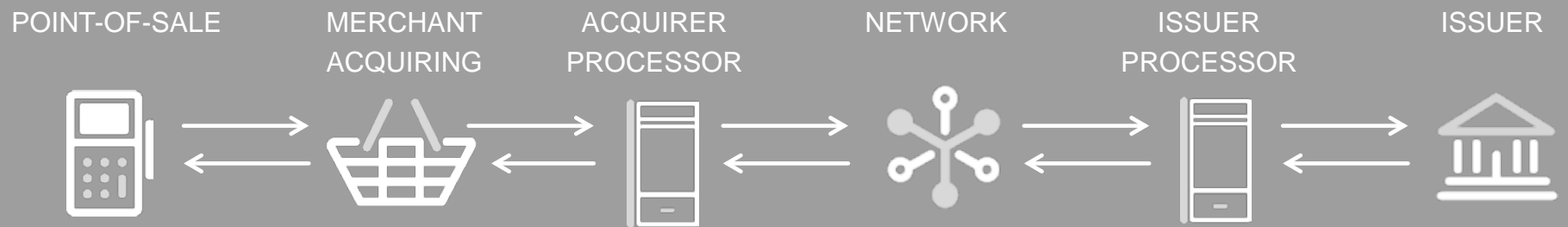
- The U.S. is in the process of EMV migration. These EMV-enabled debit and credit cards effectively prevent counterfeit card fraud at the Point of Sale (POS) by embedding a computer chip on the card.
- In order to preserve merchant routing choice in compliance with Dodd-Frank, the computer chip embedded on EMV-enabled debit cards in the U.S. must include what is known as the Common Application Identifier (Common AID).
- STAR led adoption of the Common AID; it was the first network to announce and issue Common AID, enabling debit EMV in the U.S.
- The Common AID provides merchants with access to *all* of the networks that the issuer has selected to be on the debit card, in compliance with Dodd-Frank, and also allows merchants to honor cardholder requests for PIN or signature. Conversely, the Global AID, included on EMV debit cards to facilitate international transactions, only allows access to one payment card network and eliminates merchants' routing choice.
- With network competition and Dodd-Frank compliance protected through the Common AID, Visa and MasterCard have now re-interpreted their operating rules to require the merchant's EMV POS terminals to prompt *the consumer* to choose the AID that the merchant must use for routing the transaction. This effectively circumvents the merchant's access to the Common AID in most, if not all, transactions, and funnels those transactions exclusively to Visa or MasterCard. This action is simultaneously creating consumer confusion at the POS.
- Forcing merchants to cede their choice of AID/network to consumers has negative net consumer benefit and creates substantial market gain for Visa and MasterCard while materially threatening debit network competition in the U.S.
- *Timing is critical.* Every merchant is in the process of re-certifying their point of sale terminals to support EMV. If the EMV certification process requires that POS terminals prompt the consumer to choose the AID, *it will be difficult and likely many years before the consumer prompting screen is removed.*

Desired State

- Visa and MasterCard stop implementing and enforcing network rules that have the intent or effect of inhibiting merchants from choosing the network for routing of debit transactions, thereby helping to preserve a robust competitive environment for debit networks in compliance with Dodd-Frank.

About First Data

First Data operates critical infrastructure for the payments industry, offering a comprehensive collection of assets, at scale, that uniquely straddle merchants and issuers



- Cloud based POS and terminals
- Mobile payments
- eCommerce gateway
- Proprietary First Data terminal line
- Terminal deployment and service & repair (TASQ)

- 6.1mm global merchant relationships
- \$1.8 US merchant transactions processed
- Transactions processed account for ~10% of US GDP)

- Authorization, clearing & settlement
- Credit risk management
- Interchange qualification
- Debit routing optimization
- Chargeback and dispute handling
- Risk & fraud
- Reporting

- STAR PIN debit network
- Money Network open loop prepaid network
- Debit gateway

- Account storage and maintenance
- Credit risk management
- Authorization risk scoring
- Fraud and dispute case management
- Fraud detection and notification
- Statement, compliance and authentication
- Collections

- 3.5 thousand US financial institution relationships
- 751 million US accounts on file

EMV Landscape

EMV-enabled terminals

- U.S. merchants with EMV-enabled terminals are in the range of 30-50%
- Visa: Over 750,000 merchant locations (17%) to-date in 2016
 - *Source: Visa 1Q16 earnings, January 28, 2016*
- MasterCard: 40% of terminals chip capable at end of 2015
 - *Source: MasterCard 3Q15 earnings, October 29, 2015*
- The EMV Migration Forum believes 50% of terminals will be enabled by the end of 2016, 90% by the end of 2017



EMV-enabled debit & credit cards

- There are more EMV credit cards (40-45%) than EMV debit cards (20-30%)

Visa

- More than 200 million Visa chip cards were issued as of December 2015:
 - 43% of all credit cards, representing 72% of purchase volume
 - 21% of all debit cards, representing 45% of purchase volume
 - *Source: Visa 1Q16 earnings, January 28, 2016*

MasterCard

- 60% of cards in U.S. were chip-enabled at end of 2015
 - *Source: MasterCard 3Q15 earnings, October 29, 2015*
- Expect almost all U.S. cards to be upgraded before the end of 2017
 - *Source: MasterCard 4Q15 earnings, January 29, 2016*

EMV & the Common AID

- In 2013, First Data and the newly-formed Debit Network Alliance met with representatives of the FTC and FRB and proposed that the industry establish a Common U.S. Debit AID for EMV implementation.
- An industry agreement was reached that a single application on the card would support both the Common U.S. Debit AID (for domestic purchases) and the Global AID (for international interoperability).
- By its design, the Common AID fosters competition among debit networks and establishes a standardized checkout experience for consumers – allowing the merchant to select from all networks for which the card has been enabled by the issuer (in compliance with Dodd-Frank), while also allowing merchants to honor cardholder requests to authenticate by either PIN or signature.

Global Brand On Card



EMV Application on Card

Visa VSDC Application

MasterCard M-Chip Application

Discover DPAS Application

AIDs Supported in Application

Visa Standard AID

U.S. Common AID

MC Standard AID

U.S. Common AID

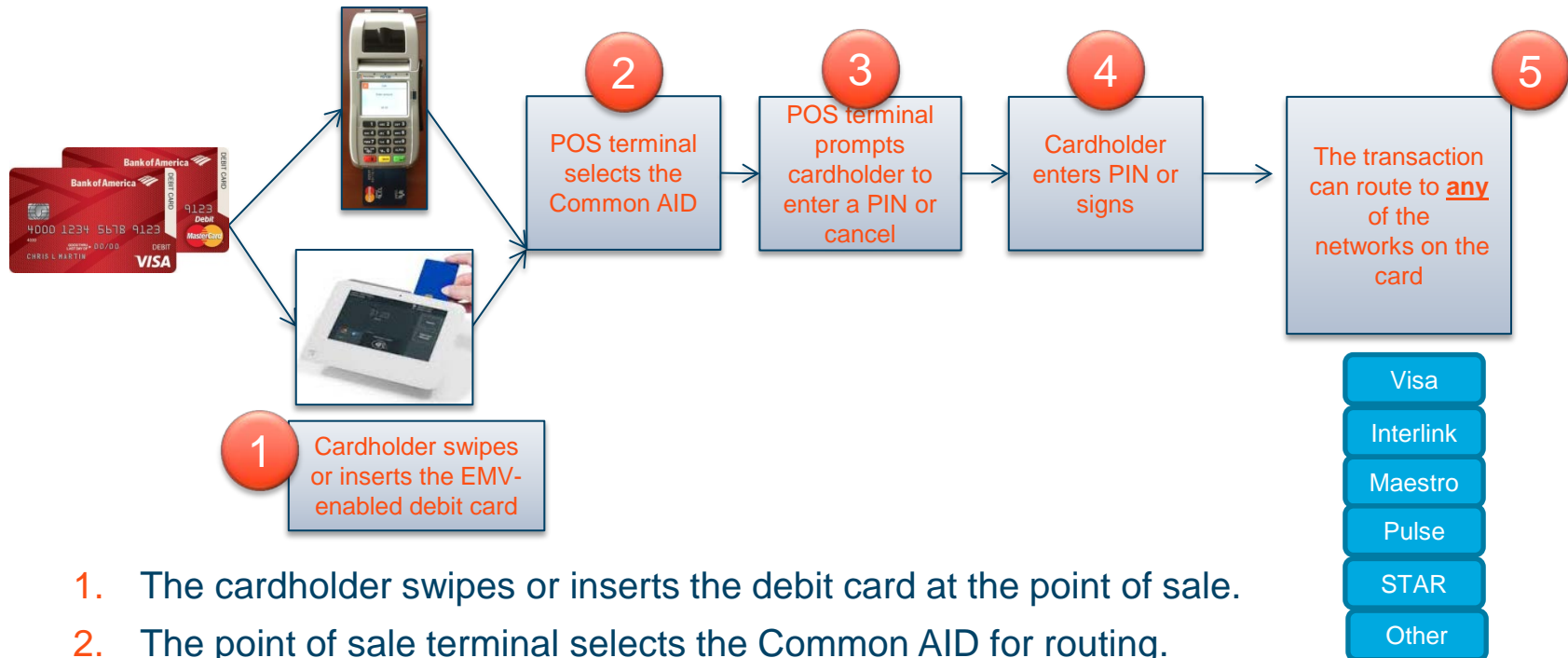
Disc Standard AID

U.S. Common AID

Common AID Routing on EMV-Enabled Debit Cards

To comply with Dodd-Frank, EMV chips in U.S.-issued debit cards must be capable of routing to multiple debit networks.

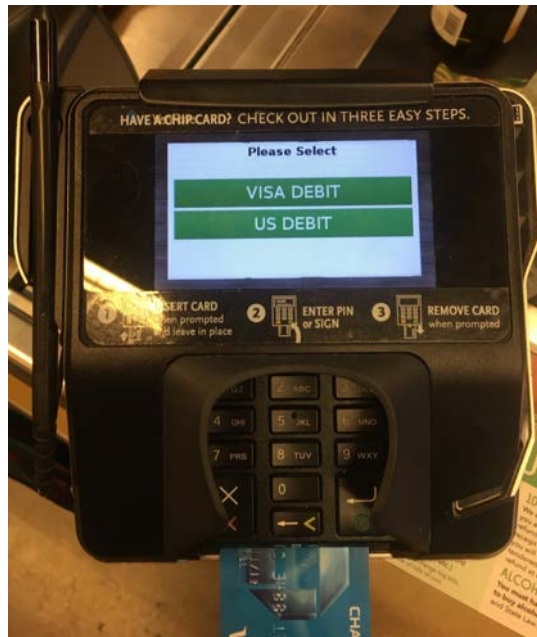
The Common AID works with all debit networks and preserves merchant routing choice. The Global AID is also included on the card for international interoperability.



1. The cardholder swipes or inserts the debit card at the point of sale.
2. The point of sale terminal selects the Common AID for routing.
3. The point of sale terminal then prompts the cardholder to enter a PIN.
4. The cardholder enters a PIN or signs for the transaction.
5. The merchant is able to choose between any of the debit networks enabled on the card (for the chosen cardholder verification method) for the routing of the debit transaction.

Networks Attempt to Preclude Merchants from Selecting Common AID

- In the past several months, consumers who swipe or insert their debit cards have been presented with new, confusing screens.



- These screens are being mandated by MasterCard and Visa, effectively precluding the merchant from selecting the Common AID and precluding the transaction from being routed to anyone other than Visa or MasterCard.

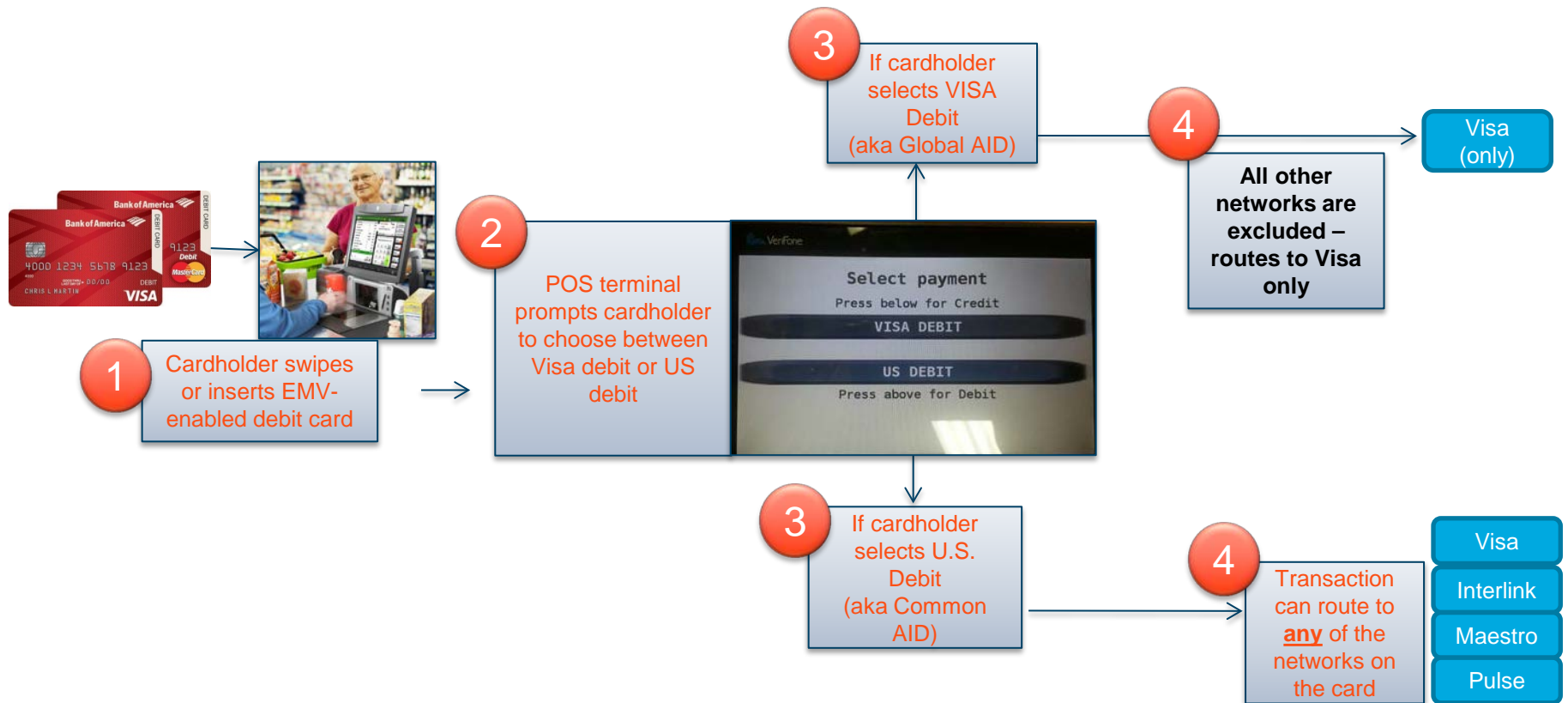
Visa Network Steering Rules

- In September 2015, Visa issued a bulletin reminding merchants of its network rule that requires merchants to allow cardholders to complete a debit transaction by using a signature instead of a PIN at the point of sale.
- The Visa bulletin also stated that its network rules require merchants to allow cardholders to choose whether each individual transaction should be routed over the Visa network instead of a network selected by the merchant.
- These Visa network rules are now being implemented on EMV POS terminals through screens that allow the cardholder to select the Global AID, thus barring the merchant's access to the Common AID and all other networks that the issuer has enabled on the card.

Visa Rule 1.5.4.6 – Selection of Payment System – US Region

- In the U.S. Region, if a Cardholder presents a Visa Card that is in the Merchant's category of acceptance and that bears a Mark representing another payment service:
 - The Merchant must honor the Cardholder's request if the Cardholder indicates that the transaction is to be processed as a Visa Transaction.
 - The Merchant may process the transaction as something other than a Visa Transaction despite an initial indication by the Cardholder that the transaction is to be processed as a Visa Transaction, but only if the Cardholder agrees that the transaction may be processed as something other than a Visa Transaction. The Merchant may not mislead the Cardholder concerning what payment service or system will be used. If the Merchant provides any information regarding the customer's rights related to various transaction choices, that information must be accurate.

Forced Global AID Routing – Visa Example



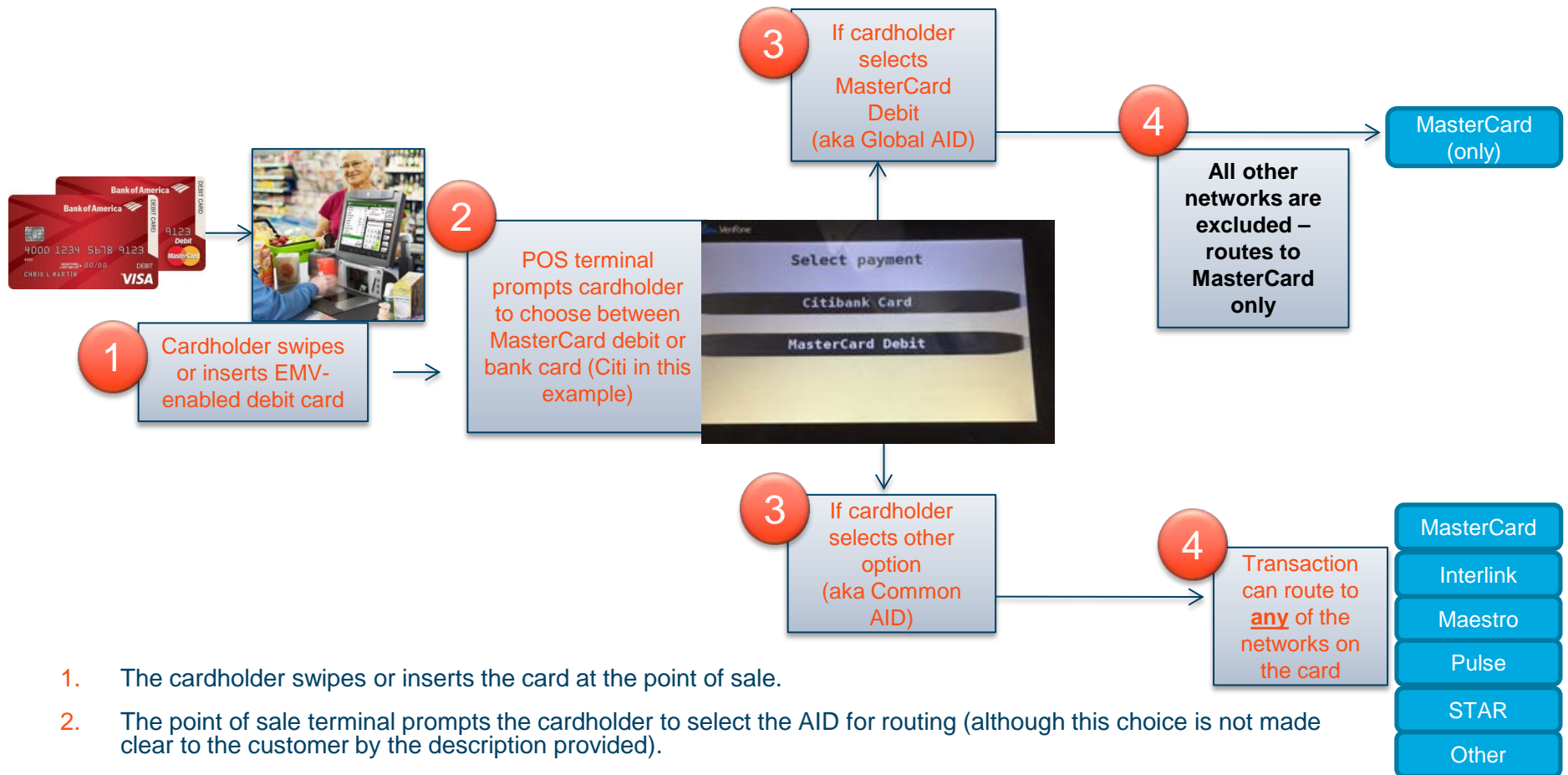
1. The cardholder swipes or inserts the card at the point of sale.
2. The point of sale terminal prompts the cardholder to select the AID for routing (although this choice is not made clear to the customer by the description provided).
3. The cardholder essentially has to make a choice between two options: Visa or “US Debit.”
4. If the cardholder picks Visa Debit, the transaction must route to Visa per the Global AID – in other words, the merchant has no choice for routing when the Global AID has been selected.

If the cardholder picks US Debit, the consumer is choosing the Common AID and all U.S. debit networks (including Visa) will be available for routing – preserving merchant choice in accordance with Durbin.

MasterCard Network Steering Rules

- MasterCard's network rules now require that all EMV POS terminals must allow the cardholder to select the AID. These rules further expressly prohibit terminals that automatically select the Common AID.
- As with the Visa rules discussed earlier, these MasterCard network rules are being implemented on EMV POS terminals through screens that allow the cardholder to select the Global AID, thus barring the merchant's access to the Common AID and all other networks that the issuer has enabled on the card.

Forced Global AID Routing – MasterCard Example



1. The cardholder swipes or inserts the card at the point of sale.
2. The point of sale terminal prompts the cardholder to select the AID for routing (although this choice is not made clear to the customer by the description provided).
3. The cardholder essentially has to make a choice between two options: MasterCard or another option (the issuing bank can pick the name for the 2nd option – in this example, a Citibank card).
4. If the cardholder picks MasterCard Debit, the transaction must route to MasterCard per the Global AID – in other words, the merchant has no choice for routing when the Global AID has been selected.

If the cardholder picks the other option (whose name varies), the consumer is choosing the Common AID and all U.S. debit networks (including MasterCard) will be available for routing – preserving merchant choice in accordance with Durbin.

Visa's and MC's Rules and 12 CFR § 235.7(a)

- “An issuer or payment card network shall not directly or through any agent, processor, or licensed member of a payment card network, by contract, requirement, condition, penalty, or otherwise, restrict the number of payment card networks on which an electronic debit transaction may be processed to less than two unaffiliated networks.” 12 CFR § 235.7(a).
- Visa's *network rule* requiring that merchants allow cardholders to choose whether each individual transaction should be routed over the Visa network, as compared to a network selected by the merchant, restricts the merchant to a single network on these electronic debit transactions. See § 235.7(a).
- Similarly, by forcing merchants to allow cardholders to select the Global AID, Visa and MasterCard are, *through their network rules*, restricting transactions to the single network that is supported by the Global AID. Not coincidentally, this single network (depending on the card) is either Visa or MasterCard.
- This is different from a situation where the merchant is limited to a single network because *the merchant* has chosen not to install a PIN pad, or *the merchant* has given the cardholder the choice to authenticate the transaction using signature. Here, unlike those other circumstances, the merchant has lost its choice between multiple networks due to *network rules* forcing it to give up its ability to choose the network through the Common AID.

Visa's and MC's Rules and 12 CFR § 235.7(b)

- “An issuer or payment card network shall not, directly or through any agent, processor, or licensed member of the network, by contract, requirement, condition, penalty, or otherwise, inhibit the ability of any person that accepts or honors debit cards for payments to direct the routing of electronic debit transactions for processing over any payment card network that may process such transactions.” 12 CFR § 235.7(b).
- “An issuer or payment card network is prohibited from inhibiting a merchant’s ability to route or direct an electronic debit transaction over any of the payment card networks that the issuer has enabled to process an electronic debit transaction for that particular debit card.” Official Board Commentary on Regulation II - 12 CFR § 235.7(b).
- By forcing merchants to cede their selection of network to the cardholder, or compelling merchants to allow the cardholder to select the Global AID (thus precluding the merchant from processing the transaction over any network other than Visa or MasterCard), Visa and MasterCard are – *through their network rules* – inhibiting the merchant’s choice of network. See § 235.7(b).

The FRB Commentary on PIN Selection Is Informative

- Merchants have traditionally allowed cardholders to choose whether to enter a PIN or instead use their signature to authenticate a debit transaction. This will likely continue in the EMV era.
- However, according to the Board, a *network rule* that *requires* merchants to give this choice to cardholders would violate 12 CFR § 235.7(b), because it would inhibit the merchant's choice from among the networks on the card:
 - “Under proposed § 235.7(b) and comment 7(b)-2.i, merchants may not be inhibited from encouraging the use of PIN debit by, for example, setting PIN debit as a default payment method or blocking the use of signature debit altogether.” Board Analysis of Regulation II, Federal Register Vol. 75, No. 248, 81722, at 81752.
 - See, also, Federal Register Vol. 75, No. 139, 43394, at 43453 (noting that “a payment network and a few issuers” objected to the Board’s Analysis, then proceeding to adopt the example as proposed).
- If a network rule requiring merchants to give cardholders the choice between PIN and signature violates § 235.7(b) because it would inhibit the merchant's choice of network, a network rule requiring merchants to completely cede their choice of network to the cardholder would certainly violate § 235.7(b).

First Data's Position

- To foster debit network competition, Dodd-Frank explicitly gives merchants the ability to choose the network over which a debit transaction is to be routed from among all networks the issuer has enabled on the card, and it prohibits any network from forcing merchants to cede this decision to others.
- By mandating that the customer be permitted to pre-select the AID/network, Visa and MasterCard rules inhibit the merchant's ability to route the transaction to the lowest-cost network, thereby raising costs to merchants and, ultimately, to consumers.
- While a merchant may elect to offer choices to their customers, any network rules, regulations, or bulletins that mandate that merchants cede the choice of AID/network conflict with the Durbin Amendment and undermine debit network competition in the U.S.

Conclusion

- We believe that the repositioning of rules significantly limits merchant network choice.
- By enforcing their respective network routing requirements, Visa and MasterCard are creating structural inhibitions that drive away network competition.
- Forcing merchants to cede their choice of AID/network to consumers has negative net consumer benefit and creates substantial market gain for Visa and MasterCard while materially threatening debit network competition in the U.S.
- Without intervention, Visa and MasterCard market dominance and brand recognition will likely force other debit networks out of business.
- Eliminating or modifying Visa and MasterCard rules that deny merchants the ability to select the AID/network will help preserve debit network competition.