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By Electronic Delivery to regs.comments@federalreserve.gov

Jennifer J. Johnson
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Ave., N.W.
Washington, DC 20551

Re: Docket No. R-1404 (RIN No. 7100 AD63), Debit Card Interchange Fees and Routing

Ladies and Gentlemen:

This letter is submitted on behalf of Visa Inc. ("Visa") in response to the notice of proposed rulemaking ("Proposed Rule") by the Board of Governors of the Federal Reserve System ("Board"), published in the Federal Register on December 28, 2010. The Proposed Rule requests public comment regarding the Board's proposed new Regulation II to implement the debit interchange fee and debit transaction routing provisions of Section 920 of the Electronic Fund Transfer Act ("EFTA"). Visa appreciates the opportunity to comment on this important matter.[1]

Visa understands that Section 920 is ambiguously worded in many respects and was included in the broader Dodd-Frank Act with effectively no legislative history, no hearings, no findings, and no debate. Nonetheless, Visa believes that the Proposed Rule includes provisions that are not required by the EFTA and are ill advised because they will strongly deter debit card usage, consumer functionality, innovation, investment, and the development of future payments systems, including the debit card system. Moreover, we believe that the Board has the discretion under the statute to implement Section 920 in a manner that reduces the negative impact of its rules, particularly to consumers. As a result, Visa believes that the Board should make a number of significant modifications to its Proposed Rule, including:

(1) adopt an "average effective" rate approach to interchange fees that would permit payment card networks to manage interchange fees to an effective average "safe harbor" in order to encourage debit card usage and provide interchange fees that are more proportional to the

[1] Visa's response consists of this letter as well as the following supplemental appendices: (1) Appendix A – Submission of Benjamin Klein, Andres Lerner, Kevin Green, and Guy Ben-Ishai on economic analysis of competition in debit payments and the proposed regulations; (2) Appendix B – Submission of David B. Humphrey and Edward C. Ettin on issuer incremental costs; and (3) Appendix C – Submissions of J. Thomas McCarthy and Itamar Simonson on trademark issues.

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underlying costs of transactions than fees that would result from the Board's cap-based approach;

(2) permit issuers to recover all incremental costs of a transaction, consistent with the statutory language;

(3) confirm, consistent with the plain language of the statute, that the exclusivity provision prohibits an issuer or network only from imposing a restriction that limits a debit issuer to enabling fewer than two unaffiliated networks on a debit card, rather than adopt the alternative proposal of requiring two unaffiliated networks for each authorization method -- which would create unnecessary cost, redundancy, consumer confusion and trademark harm; and

(4) protect the cardholder's right to select the preferred network over which her electronic debit transactions are routed.

Visa believes that each of these modifications would properly implement the statutory language. We address each in turn below, as well as a number of other concepts raised by the Board's request for comment. Finally, as discussed below, we believe that the Board should provide sufficient time for implementation of the Proposed Rule given the challenges that will be faced by payment card networks and debit issuers tasked with developing the changes necessary to comply with the final regulation.

I. Debit Interchange Fees

Section 920 of the EFTA, as amended, establishes the limitation that a debit interchange fee must be "reasonable and proportional" to an issuer's cost with respect to a transaction for those issuers and products covered by the regulation.[2] In turn, the EFTA directs the Board to prescribe "standards" for assessing whether an interchange transaction fee is reasonable and proportional to the issuer's cost with respect to the transaction.[3] That is, the Board is not directed to set precise rates, but rather standards against which rates may be evaluated.

Nonetheless, the Proposed Rule includes two alternative approaches that would directly set rates, not standards for assessing rates. Under the first alternative ("Fee Alternative 1"), an issuer would be permitted, for each debit transaction, to receive no more debit interchange than the greater of: (1) seven cents per transaction; or (2) an amount that is equal to its Board-permitted costs per transaction related to authorization, clearance and settlement, but not more than twelve cents per transaction.[4] Under the second alternative ("Fee Alternative 2"), an issuer would be permitted to receive no more debit interchange than twelve cents per transaction.[5]

Visa believes there are three core assumptions in both Fee Alternatives that are fundamentally flawed. First, both alternatives provide a cap rather than an average effective rate approach. An average effective "safe harbor" would allow flexibility to manage differing types of transactions in the system and better take account of transactions with higher value or higher

[2] 15 U.S.C. § 1693o-2(a)(2).
[3] 15 U.S.C. § 1693o-2(a)(3)(A).
[4] 75 Fed. Reg. at 81,755.
[5] *Id*. at 81,756.

risk, or lower value or lower risk, at levels that would be more efficient for the overall system. Further, an average effective rate would allow for more effective use of interchange incentives – within the defined "safe harbor" – to encourage best practices and fraud control, and encourage competition between networks along this dimension.

Second, both Fee Alternatives fail to include statutorily permitted incremental costs for authorization, clearance and settlement of an electronic debit transaction. Indeed, the Board has acknowledged that its caps in both Fee Alternatives fall *below* the costs for some issuers. The Board should include all incremental costs related to a transaction, including, among others, those for network fees and fraud losses. Also, consistent with other federal statutes which provide for a "reasonable" rate, the Board should include a measure of a rate of return. Failure to include the full measure of statutory costs will discourage investment and innovation in electronic debit transactions and unduly harm cardholders.[6]

Third, the Board should allow for a fraud-related adjustment to the debit interchange fees to insure that networks and issuers continue to innovate and develop effective solutions in combating fraud. The statute allows the Board to adjust interchange to provide for the full costs of fraud prevention and data security, and Visa urges the Board to do so in a non-prescriptive way. Doing so will allow the industry to remain nimble in responding to the increasingly sophisticated methods used by criminals.

Each core issue is addressed in detail below, in addition to further comments on an exemption certification process and the implementation of the regulations.

A. The Fee Alternatives

A "cap" approach has a number of inherent flaws, and the Board should instead propose an average effective rate approach with a safe harbor. Among other issues, setting caps is inconsistent with the statutory language, needlessly involves the government in price setting rather than establishing standards, and creates unbalanced cost and revenue implications for low-value or low-risk transactions versus high-value or high-risk transactions. These issues are better addressed by an average effective rate approach, where each network can offer interchange rates that attempt to best balance the cost, risks and quality of its transactions, while remaining consistent with the rate calculated by the Board at the system-wide level as a safe harbor—similar to the requirements in other markets where interchange rates have been regulated.

Further, both Fee Alternatives are inconsistent with the statutory language. We believe that the Board specifically excluded a number of issuer costs that are clearly permitted and appropriate under the statute, including network fees and other costs directly related to authorizing, clearing and settling electronic debit transactions. Both Fee Alternatives are also

[6] To the extent the Board does impose a cap, Fee Alternative 2 would be more efficient in that it does not require an individualized examination of issuer costs.

inconsistent with constitutional requirements for government-mandated price controls because they establish caps that are below issuer costs.[7]

Under either Fee Alternative, by mandating specific caps, and doing so at such unreasonably low levels, the Proposed Rule would also effectively eliminate a critical form of pricing competition among issuers and networks. We believe that this result represents a discretionary action by the Board that is inconsistent with the mandate under Section 904(a) to maximize consumer benefits to the extent practicable. The Proposed Rule itself recognizes that the proposed caps do not permit a debit card issuer to recover even the incremental costs of providing debit card services allowed by the statute, but the "Board notes that even the highest cost issuers have sources of revenue in addition to interchange fees, such as cardholder fees, to help cover their costs."[8] Nothing in the statutory language suggests the Board should implement Section 920's calculation of permissible issuer costs in a manner that effectively requires increases in cardholder fees for issuers, which is also inconsistent with the EFTA.

1. The Board's "Cap" Approach is Not Required by the Statute, and Presents Significant Challenges

The statute provides that the Board must prescribe rules that establish "standards" for assessing whether an interchange transaction fee is "reasonable and proportional" to the cost incurred by the issuer with respect to the transaction.[9] We do not believe that the Fee Alternatives in fact implement this requirement. Indeed, they are contrary to the plain language of the statutory text.

For example, the statutory language provides that a "reasonable and proportional fee" relates to an issuer's actual costs: *i.e.*, that an interchange fee shall be "reasonable and proportional to the cost incurred by the issuer with respect to the transaction."[10] The Proposed Rule, however, would set specific rate "caps" that the Board recognizes will not allow many issuers to recover even their actual costs (an issue which raises constitutional takings and due process concerns).[11] The higher the ticket size, the more likely that all issuers are receiving less in interchange than each issuer's individual cost of supporting a given debit transaction.

Further, while we support the use of safe harbors, the statute provides that the Board shall "establish standards" for assessing whether an interchange fee is reasonable and proportional to the issuer's costs, but does not state that the Board may set prices. By setting "caps" rather than, for example, adopting an average effective interchange approach, the Board would effectively set specific market prices directly—a result not required by the statute. Except in very limited circumstances, government price-setting has been universally recognized as inefficient compared to prices set by competitive market forces. We believe that would also be the case here.

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[7] A more extensive discussion of the constitutional and government ratemaking precedent is included in a letter submitted to the Board by The Clearing House Payments Company ("The Clearing House"). Visa agrees with the positions on constitutional requirements set forth in that letter, hereinafter *Clearing House Comment.*

[8] 75 Fed. Reg. at 81,737.

[9] 15 U.S.C. § 1693o-2(a)(3)(A).

[10] 15 U.S.C. § 1693o-2(a)(2).

[11] *See Clearing House Comment* at pp. 26-32, 38-41. To be sure, the constitutional issues raised by the proposed regulations are not limited to those set forth here or in the *Clearing House Comment* (which generally focuses on these issues as relates to the Board's proposed rulemaking).

A cap-based approach presents a number of practical issues. While "caps" based on the average cost of a debit transaction may work properly from a cost recovery perspective for an average-dollar, low-risk transaction, by definition such a cap would not compensate issuers for higher-value, higher-risk or disputed transactions in which issuers incur higher-than-average cost. As transaction amounts rise, the corresponding fraud-to-sales ratio (and the likelihood of fraud) increases along with issuer expenses. Further, issuers incur significantly higher costs in merchant segments or channels where transactions have higher fraud rates or require extra "handling" including chargebacks, disputes, card replacements, and returns. Such merchants also generate an excessive level of "write-offs" because the cost of processing a chargeback is greater than the value of the transaction.

As a result, for many transactions, issuers would receive interchange fees that are less than the permitted costs incurred with respect to those transactions, and substantially less than the total costs for the transactions. Such compensation would fail to meet the statutory requirement that the Board establish standards to assess whether issuers are receiving interchange that is reasonable and proportional to (not below) such costs. The Board's caps will discourage costly transactions as issuers are likely to adopt more restrictive authorization requirements. As a result, merchants in higher-risk or higher-ticket environments would see more frequent declines from issuers when they attempt to process electronic debit transactions, forcing them to fall back on other payment options that may be more costly and less efficient or causing them to lose sales altogether. In extreme cases, it may be so unprofitable for issuers to serve a segment that networks simply turn off debit acceptance to such merchants, rather than risk consumer confusion that could result from excessive declines by a significant number of issuers. Cardholders, who have come to rely on the widespread availability of debit, may find that they are unable to use their card with merchants or on transactions that they have in the past.

A cap-based approach also presents practical challenges for low-value or low-risk transactions. Given the below cost "cap" that the Board proposed, issuers will have significant incentives to select networks that provide the highest possible interchange rate for each and every transaction. This would include low-value or low-risk transactions, which issuers would seek at the highest available rates in part to offset the lower interchange they would be receiving on the higher cost or higher risk transactions. In effect, by setting a below-cost cap, the Board will have set a single common market price for electronic debit transactions. Applying such rates to low-value transactions, including, for example, quick-service meals and beverages, or other small convenience purchases, may force merchants with a significant number of such transactions to stop accepting debit cards. In contrast, permitting networks to manage to an effective rate over time allows for differentiation of pricing approaches, in addition to facilitating positive network behaviors, resulting in investments to improve the payment system's safety and consumer utility. In addition, the Board indicates that it selected the use of "caps" to address a concern with issuers not having "incentive[s] to minimize their costs" and "incur[ing] higher costs than they would otherwise," and to ensure that issuers are not compensated for inefficiently high-cost programs.[12] We believe that the Board's analysis mischaracterizes issuer incentives. Issuers always have long-term incentives to reduce card program costs and increase their overall profit, regardless of interchange pricing. The Board also suggests that caps are necessary to prevent issuers from essentially "gaming" the issuer-specific interchange in Fee Alternative 1.

[12] *See* 75 Fed. Reg. at 81,737.

But, there would be no incentive for issuers to incur unnecessary additional costs in an attempt to receive higher interchange fees under Fee Alternative 1's issuer-specific determination, just to recover those additional costs and no others.

Each of these impacts would be substantially reduced if the Board adopted an "average effective" interchange approach, rather than caps.

2. The Average Effective Rate Approach

Section 920 should be implemented through the Board establishing a safe harbor limit on the debit interchange that may be received (either by regulated issuers or on regulated products), based on its analysis of permissible costs. We argue below that such costs should include far more costs than recognized by the Board in the Proposed Rule. At whatever level the Board allows issuers to recover costs, however, the safe harbor should be implemented by requiring a network to meet an average effective interchange rate over its total regulated business for a defined period of time, rather than directly or indirectly setting specific caps at the transaction level.

Compared to the Board's cap-based approach, regulating through an average effective interchange rate would facilitate more risk-based and market-based factors being taken into account in the setting of debit interchange fees. Networks would compete for issuers, as they do today, based in part on the extent to which they align interchange with the underlying issuer costs for particular transactions, and invest in more effective fraud control, risk management, and efficient processing. In Appendix A, Professor Klein (with his co-authors) addresses the average effective rate approach in his submission; he concludes that it makes economic sense for the networks to have the ability to establish differential interchange rates that reflect different merchant segments, fraud risks and transaction sizes.[13] Humphrey and Ettin, in Appendix B, also address the average effective rate and conclude that if a regulated price or "cap" were required to be met on average at the network level, issuers and merchants could better match benefits with costs, issuer/network systems would be less dramatically changed, greater competition among issuers via their networks would occur, and resources would be more efficiently allocated with a minimum of cross-subsidy among merchants with different risks or ticket sizes.[14]

This approach would not only provide payment card networks with the flexibility to set interchange rates to enhance the control for risk (*e.g.*, fraud), but also to provide incentives to merchants and issuers to adopt more efficient processing solutions or safer technologies. These incentives include encouraging merchants to improve data quality at the point of sale, comply with emerging data security initiatives and engage in best practices for fraud prevention. While proposed comment 3(b)-4 states that a payment card network would be permitted to establish different interchange fees for different types of transactions or merchants within the proposed caps, because the proposed maximum cap of 12 cents is so low relative to current debit interchange rates and underlying issuer costs, payment card networks would have no real

[13] *See* Submission of Professor Benjamin Klein, Dr. Andres Lerner, Dr. Kevin Green, and Dr. Guy Ben-Ishai ("Klein Submission") § IV.B, pp. 69-71. Professor Klein is a Professor Emeritus of Economics at the University of California, Los Angeles.

[14] *See* Submission of David B. Humphrey and Edward C. Ettin ("Humphrey and Ettin Submission"), pp. 11-12.

flexibility to differentiate interchange fees in a meaningful way without creating interchange rate structures that result in revenue to the issuer substantially below even the allowable costs. In contrast, by managing to an average effective rate, payment card networks would have an ability to set certain rates for low-value transactions that use the best processing practices, and higher rates for riskier transactions where merchants failed to follow such best practices (*e.g.*, missing data fields and delay between authorization and settlement). If payment card networks cannot provide these incentives because every transaction must fall within the proposed low caps, it is likely that certain issuers will limit the ability of their cardholders to use their products for certain transactions. In addition, costs to all issuers will increase over time due to the inability to incent best practices for fraud control, data security and processing quality. Certain merchant best practices, such as providing accurate and complete processing information, PCI compliance, use of Verified by Visa, and the like, could become less prevalent because networks could not impose higher interchange fees if best practices are not followed, effectively making electronic transactions less secure and efficient.

Under an average effective rate approach, the payment card networks and issuers would have the beneficial flexibility to adjust interchange rates in response to real-world transactions that do not fit the profile of having statistically average size or risk. Under the cap approach, for example, with interchange rates likely set at or near the proposed cap, debit issuers would receive $0.12 for the purchase of a $4.00 cup of coffee and bagel (an effective rate of 300 basis points), even though this is a relatively low-risk and low-ticket transaction. Debit issuers likewise would receive $0.12 for a high-ticket purchase, like a $1,200 flat screen TV (an effective rate of 1 basis point), even though the transaction carries far more risk of fraud or post-transaction disputes.[15]

Some merchant segments with significant numbers of smaller-value transactions (*e.g.*, coffee shops, newsstands, and vending machines) may find it impossible or uneconomic to continue to accept transactions with a $0.12 interchange fee. This is a higher debit interchange rate than Visa applies today on low ticket transactions of this type.[16] Likewise, issuers will have an incentive to limit the ability for their cardholders to make higher-ticket, higher-risk transactions where $0.12 falls dramatically below cost. Since most consumers would not carry sufficient cash for larger purchases, many do not carry paper checks, and many large sales take place where cash or check are not available payment options (*e.g.*, the Internet and mail order), these consumers would be required to use credit cards (if available) or abandon their purchases altogether. We believe that the average effective rate model results in a market dynamic that would better address these issues and better preserve broader use and growth of electronic debit transactions across all transaction types.

At the same time, by determining the amount of the safe harbor rate based on issuer cost data, the Board will ensure that interchange received through each network is within the statutory mandate. Indeed, as the Board has already recognized, a form of averaging or aggregating is

[15] Without explanation, the EFTA does not require the Board to consider the tremendous value that electronic debit transactions provide to merchants, who have steadily expanded their acceptance of these products for the past 20 years.

[16] These rates are shown on Visa's published rate sheet as "CPS - Small Ticket." Today, more than 30% of Visa Check Card (or signature) transactions are at relatively small ticket sizes.

appropriate under the statute, given the infeasibility of determining costs on an issuer-by-issuer, transaction-by-transaction basis.

In sum, imposition of a cap by the Board would impair both high-ticket and low-ticket debit transactions, and lead effectively to cross-subsidies between such channels since low-value transactions would be associated with relatively high interchange compared to costs, and high-value transactions would be associated with interchange that does not remotely cover cost. Generally without an average effective rate approach, the customer experience would also be degraded, and ultimately the growth of commerce using electronic debit transactions could be potentially dampened. These effects are the opposite of what an effective regulatory model should seek to accomplish.

3. Administering the Average Effective Rate Approach

Administration of the average effective rate approach by the Board would be straightforward. The Board would determine the average effective interchange in the same manner as it has in the Proposed Rule – by surveying issuers' debit-related costs, identifying eligible issuer costs, and then assigning an average effective debit interchange rate to be applied across all regulated debit card issuers and products (the "Average Effective Debit Interchange Rate"). The Board's assigned level of debit interchange would serve as a "safe harbor" – all debit networks would be required to demonstrate that they comply with the safe harbor on their regulated volume, and as a result all regulated issuers and products participating in those networks would be automatically deemed to have complied with the safe harbor as well, without separate examination at the individual issuer or program level.

Under this approach, a network could set different rates based on merchant size, merchant segment, acceptance channel (*e.g.*, card present vs. card not present), processing requirements or other factors, so long as the network's overall effective debit interchange rate is maintained at the Average Effective Debit Interchange Rate. Unlike the proposed Fee Alternatives, the burden of determining and setting individual rates would be placed on competitive and independent choices of the networks (rather than price-setting by the Board), while preserving the ability of networks to use interchange to provide stakeholder incentives to grow participation in, and strengthen the quality of transactions being processed over, a given network.

As an example, a network may choose to set a higher interchange rate for certain transactions, such as a higher-risk, e-commerce purchase. The average effective rate approach would ensure that rates could not be so high or such transactions so frequent as to drive the overall system average over the safe harbor, over time. To ensure that was the case, the network would need to structure its interchange rates so that there would be enough transactions significantly below the effective average (*e.g.*, an interchange fee of $0.04 for a $4.00 purchase of coffee and a bagel, a much more common debit transaction) to result in a system-wide average of the safe harbor (*e.g.*, 12 cents, under the current proposal). We note that on a percentage basis compared to the merchant's sales amount, the hypothetical rates above would be more reasonable and proportional, and ultimately more equitable relative to the outcome under the Board's proposed per-transaction caps.

The average effective rate approach would allow networks to mitigate the imbalances in value based on ticket sizes and other factors. If the Board were concerned about a specific individual rate being too high, it could set a benchmark upper boundary, such as three times the safe harbor rate (*e.g.*, 36 cents if the safe harbor were set at 12 cents); however, that should be unnecessary due to the inherent constraining impacts of a weighted average.

In addition, the Board could establish a network compliance program, requiring on-going monitoring via regular reporting by each and every network, to ensure that each network's Average Effective Debit Interchange Rate adhered to the safe harbor over a pre-determined measurement period (*e.g.*, 12 to 18 months). In the event that a particular network was at risk of exceeding the safe harbor over the full measurement period, that network would have to implement changes to its rates in order to bring its average effective rate back within the safe harbor. In the event that a network nevertheless exceeded the safe harbor over the full measurement period due to unexpected transaction volumes, the Board could permit some modest level of inadvertent variation from the safe harbor or require corrective actions, including reversals of interchange as necessary to return that network's average effective rate to the safe harbor.

Adopting this approach would also be consistent with situations in other markets where the market basis for interchange has been replaced by the regulation of debit interchange fees, namely the EU and Australia; in each case, an "average effective" rate approach has been implemented.[17] Visa believes regulation of interchange is generally not appropriate economic policy and distorts free-market competition, and it is difficult to compare different market and regulatory environments. However, even these strict regulatory schemes have recognized the need to preserve flexibility for networks to compete through pricing innovation and for issuers to receive different compensation across a range of factors, within an average effective rate.[18] By adopting caps, the Board would be creating a unique regulatory environment in the United States, with the potential for disadvantageous consequences.

4. Proposed Fee Alternatives

Notwithstanding the above, in the event that the Board decides to adopt caps as it has proposed, Visa concurs with the Board's assessment that attempting to limit the level of interchange "separately for each issuer and each transaction presented to that issuer . . . would be impractical and difficult to administer and enforce, and would introduce undesirable economic

[17] Professor Klein also addresses the similarities between the average effective rate approach and the regulatory schemes in Australia and the EU. *See* Klein Submission § IV.B, p. 71.

[18] For example, under the EU model, a payment card network is permitted, within the average effective limitation, to set "rates for particular categories of transaction as it sees fit, and in particular in order to incentivize the adoption, by merchants and their acquirers, of secure technology and innovation." The weighted average is calculated on a yearly basis, and ongoing compliance and monitoring is managed by a European Commission-approved trustee. *Available at* http://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_6186_3.pdf. Similarly, in Australia, the weighted average of interchange fees implemented by the networks must not exceed a benchmark calculated by the Reserve Bank of Australia ("RBA"). The RBA calculates a standard which is reset every three years and "allows for significant flexibility in the setting of individual fees" (Payments System Board Annual Report 2010 at 11, *available at* http://www.rba.gov.au/publications/annual-reports/psb/2010/pdf/2010-psb-ann-report.pdf).

incentives."[19] The Board's Fee Alternative 1, however, suffers from similar issues; as compared to Fee Alternative 2, it would be more challenging for the industry to implement and more challenging for the Board to monitor and enforce.

Thus, while we continue to believe the Board should adopt an average effective rate approach, among the Fee Alternatives, Fee Alternative 2 would be the more appropriate of the two. Fee Alternative 2 would avoid the administrative and compliance challenges associated with annual issuer-cost calculations and certification. For example, it would allow payment card networks to simplify their interchange rate schedules, as opposed to having to track and provide rates at levels of seven, eight, nine, ten, eleven and twelve cents per transaction for covered issuers and covered transactions (in addition to any separate "exempt" interchange rates).

It is also not clear that these varied rates could actually be implemented during the first year that the Board's rule is effective because of the absence of relevant data and potential implementation challenges associated with a certification process. Visa explains in further detail below the need for the Board to establish a single, consistent certification process. Creating two distinct schedules for exempt and non-exempt issuers and programs already represents an implementation challenge for the entire industry. Enabling issuer-specific interchange rates would be exceptionally complicated for networks and acquirers to deploy, and the added complexity and unpredictability of transaction volumes across many interchange rates would limit the ability of acquirers to set merchant discount rates effectively.

Moreover, Visa also supports the Board's decision not to set separate "caps" based on authorization method (*e.g.*, PIN v. signature) or other transaction differences (*e.g.*, card present v. card not present). As discussed in section II.A.1, there are many authentication methods beyond PIN and signature that are used by the industry in the authorization process, and implementing the best method specific to a channel or segment is an area of important industry competition and innovation.

B. Costs

The Board has taken an overly narrow view of the types of costs that it would allow as a basis for the proposed "caps" by limiting those costs to arbitrarily defined "average variable costs." Moreover, the Board has specifically excluded a number of costs that are clearly incremental and relate to authorization, clearance and settlement, including, for example, network fees and fraud losses. As described in further detail in the submission of Morrison & Foerster dated February 22, 2011, and which we adopt here, the Board should consider all costs an issuer incurs with respect to electronic debit transactions, including costs related to network fees, customer service, claims processing, risk management, card production and program administration, as well as fraud losses and fraud prevention.

1. The Board Should Provide for the Recovery of Additional Incremental Debit Card Program Costs

Section 920(a) provides two factors for the Board to consider in connection with its debit interchange rulemaking. Specifically, the statute states that the Board must consider the

[19] 75 Fed. Reg. at 81,736.

functional similarity between electronic debit transactions and check transactions that are required within the Federal Reserve bank system to clear at par, and in setting costs it must distinguish between the incremental "cost incurred by an issuer for the role of the issuer in the authorization, clearance and settlement of a particular electronic debit transaction" and "other costs" that are not specific to a particular electronic debit transaction.[20]

The reasonable interpretation of these sections is that the Board may allow for costs "specific" to a particular transaction—including, but not limited to, authorizing, clearing, and settling—but not other costs not specific to a transaction. The Proposed Rule, however, would interpret the statute to allow *only* the costs of authorizing, clearing and settling, while disallowing all other costs, even transaction-specific ones. This reading, however, renders most of § 920(a)(4)(B)(ii) superfluous; had Congress intended to disallow *all* costs other than authorizing, clearing and settling, it would have disallowed "other costs incurred by an issuer," but instead it only disallowed "other costs . . . which are not specific" to a debit transaction.[21]

Further, given the statutory mandate to consider the functional similarity between debit transactions and checking transactions, it would also be reasonable and appropriate for the Board to consider the functional dissimilarities as well. In particular, issuers bear incremental costs associated with providing funds guarantee and fraud protection; these costs provide considerable merchant benefits and are clearly variable on a transaction basis. But, the Board has read the considerations as mandatory limitations and has misinterpreted them in the process. Instead, the Board should implement the statute, consistent with the legislation, by including all incremental costs of authorization, clearance and settlement, other costs specific to electronic debit transactions, and an adjusted amount above costs to provide issuers with a positive return on such transactions (rather than just cost recovery).

The two cost concepts ("incremental costs" and "other costs") are not all inclusive. The statutory language does not require the Board to limit permissible issuer costs to those that are incremental in connection with the authorization, clearance and settlement of debit transactions. Instead, the only limitation actually imposed by the statute is that "other costs" that are not specific to electronic debit transactions may not be included. The Board, however, has excluded: (1) some incremental costs for authorization, clearance and settlement, directly contrary to the plain language of the statute, including network fees; (2) other, non-incremental costs that are nonetheless specific to electronic debit transactions; (3) any profit or return component above such costs; and (4) other non-incremental costs that are not specific to debit transactions. Only the fourth exclusion is consistent with the requirements of the statute.

2. The Board has Excluded Incremental Costs

The clear focus of Section 920 is that debit interchange fees should be limited to those issuer costs that are related to electronic debit transactions. The statutory language does not indicate that a debit interchange fee must be limited solely to the actual costs. Instead, the language simply requires that there be a "reasonable and proportional" relationship between the interchange fee and any permissible costs.

[20] 15 U.S.C. § 1693o-2(a)(4).
[21] *See also, e.g.*, *Clearing House Comment* at pp. 26-32.

Under the Proposed Rule, the Board has limited permissible issuer costs to those costs that vary with the number of transactions sent to the issuer and that are attributable to, for example, the costs of receiving and processing requests for authorization of electronic debit transactions.[22] These "permissible" costs exclude a number of truly incremental costs related to authorization, clearance and settlement that are specific to transactions. For example, fraud losses are specific to a particular electronic debit transaction, albeit an unauthorized transaction, are incurred in the process of reversing the provisional settlement of the transaction and are, therefore, part of the settlement of the transaction. A fraud loss relates directly to the unauthorized electronic debit transaction causing the loss. It is difficult to envision a more direct relationship.

The same can be said for network fees. The Board has already recognized the relationship between certain variable costs and specific, particular electronic debit transactions. Network fees that are billed to issuers on a per-transaction basis also relate directly to specific, particular electronic debit transactions. Nevertheless, the Board has expressly excluded an issuer's per-transaction fees paid to a payment card network for authorization, clearance and settlement services (*e.g.*, service fees and switch fees). The rationale for excluding these fees, which is articulated only in the second sentence of footnote 50 of the Proposed Rule, is not compelling in our view. Although the Board appears to distinguish inclusion of these fees based on check processing, as the Board itself notes, including network fees would in fact be *consistent* with paper check processing. But more importantly, including these fees would be *consistent* with the statute itself as they also relate directly to the authorization, clearance and settlement of transactions. These fees are by definition variable, and it is inconsistent for the Board to have included the charges levied by other third-party processors, but to exclude the processing fees charged by the networks.

Moreover, as Professor Klein explains, from an economic perspective there is no relevant distinction between network fees and other variable costs issuers incur in operating their debit programs.[23] Even under the narrowest reading of the statute, an issuer must be permitted to receive an interchange fee that reflects these costs. Humphrey and Ettin concur. They note that the value of network fees paid by issuers varies directly with the number of card transactions so it is difficult to see why they are not recoverable under the Board's proposal. Indeed, Humphrey and Ettin point out that there are many examples where an issuer is paying either its processor or network provider, or both, for similar or complementary services, including, for example, authorization services, decisioning, fraud scoring (using different types of scoring solutions) and exception handling (such as chargebacks, copy requests and other dispute processing needs).[24] If an issuer cannot be reimbursed at the network level for the solutions, it will not have an economic incentive to use network-level services, leading to less robust consumer utility and reducing network incentives to invest and innovate. Excluding network fees while including third-party provider costs is inconsistent and unfairly discriminates against network providers.

[22] Proposed § 235.3(c).
[23] *See* Klein Submission § IV.A.4, pp. 68-69.
[24] *See* Humphrey and Ettin Submission at pp. 8-9.

3. "Reasonable and Proportional" includes a Reasonable Rate of Return

Visa believes that practicality and constitutional requirements call for a full cost recovery for debit card issuers for costs directly related to electronic debit transactions, plus a reasonable return on investment. Moreover, the application of the cost measure would be fully consistent with the statutory language and federal ratemakings in other industries. The concept of reasonable and proportional in Section 920 is substantially similar to the requirement in traditional federal rate making that regulated rates be "just and reasonable." Federal rate making typically allows for a reasonable rate of return on investment. The traditional form of price regulation used for utilities is cost-based regulation, or "cost of service" regulation.

Although debit cards have been offered in a competitive private market with many participants and are not provided by government-sanctioned sole providers like electricity or gas, the utility cases provide a baseline for constitutional requirements when the government engages in price regulation. Under this type of regulation, a utility is allowed to set rates based on the cost of providing service to its customers, including the right to earn a limited profit or return on investment. For example, the Supreme Court has described just and reasonable rates as being rates that allow a utility the opportunity to recover its costs and earn a return "commensurate with returns on investments in other enterprises having corresponding risks."[25] In its most simplistic form, this means that a utility is entitled to establish a rate that will allow it to recover its actual incurred operating and maintenance costs, an annual return of a reasonable amount of its capital investment in the utility assets in the form of depreciation and a reasonable return on its capital investment.

4. Consequences of Limiting Permissible Issuer Costs

To the extent that the Board does not permit issuers to recover either the incremental or full costs of their debit card programs, issuers may attempt to cross subsidize debit transactions from other revenue sources or may limit their debit card programs altogether.[26] Regardless of the immediate effect on electronic debit transactions, Visa believes that adopting standards for debit interchange fees that do not provide for full cost recovery, including a reasonable return on investment, would send a strong message to the banking industry, as well as entrepreneurs and investors in new payments technologies, that the Board discourages private investment and innovation in payments. Electronic debit transactions have grown dramatically in recent years, as both consumers and merchants have found them to be an efficient and safe means of payment. The development of debit card platforms has required extensive investment. The Board will discourage private investment by banking institutions in new payment products and technologies if it adopts the position that when such investment produces a return, parties who have agreed to participate in payment transactions and agreed to pay the price associated with those payment transactions, can then obtain government intervention to reduce the return on those transactions to a level that falls well short of recovering costs. The regulation of electronic debit transactions

[25] *See Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

[26] As Professor Klein addresses in his submission, limiting permissible issuer costs in this manner may have a number of adverse economic consequences, including increased debit transaction fees and checking account fees and decreased benefits for debit cardholders, as well as reduced issuer incentives to issue and promote debit cards, which are unlikely to be offset by higher merchant acceptance of debit cards. Klein Submission §§ IV.A.1 to IV.A.3, pp. 59-68.

carries with it the inherent judgment that these transactions are important to cardholders and to the businesses accepting them, or the businesses should refuse to accept the transactions. Accordingly, any regulation of electronic debit transactions must retain the economic viability of these transactions. This consideration appears to be required by Section 904's requirements for Board rule-writing under the EFTA. In addition, both Fee Alternatives may provide disincentives for new banks to become debit card issuers in light of the additional, uncompensated costs that will be incurred before achieving economies of scale.

As Professor Klein addresses, there is economic evidence that price controls that prevent companies from properly recovering full or incremental economic costs undermine a company's incentive to supply the underlying product, resulting in a reduction of the quantity of that product supplied by the company and ultimately reducing growth in the industry. [27] Similarly, Humphrey and Ettin agree that issuers should be able to recover their costs because of, among other reasons, the unintended consequences when such costs are not recovered. [28]

While Visa believes that the Board has too narrowly interpreted the legislation and inappropriately limited permissible issuer costs, regardless of the cost methodology employed, Visa supports the Board's decision to permit recovery of the Board's permitted cost categories in a way that is calculated to cover costs for the majority of issuers that may be impacted by the regulations. However, as discussed above, we believe such a standard would have the practical impact of being reasonable and proportional to the costs of such issuers only if additional relevant incremental and other debit card transaction-related costs are included in any debit interchange standards and safe harbor.[29]

C. Fraud

Section 920 of the EFTA provides that the Board may permit issuers to receive a fraud-related adjustment (*i.e.*, increase) to the debit interchange fees that they receive. Nonetheless, the Board did not issue a proposal to implement the fraud adjustment provision, but indicated that it will consider comments in developing a specific proposal.

1. Fraud Adjustments

Visa recommends that the Board implement the statute's fraud adjustment provision by providing an increase in the permissible interchange standards that reflects issuer fraud prevention costs. Not only are issuer fraud prevention costs real costs of debit card programs, the statute does not restrict the Board's consideration to fraud costs that are specific to a transaction. Nevertheless, most fraud prevention costs relate to the authorization, clearance and settlement of transactions and are incurred with respect to specific transactions. Therefore they are also a factor the Board is required to consider in establishing standards for interchange transaction fees.

We believe that issuers should be compensated for all forms of fraud prevention and data security activities, as an addition to the permitted interchange safe harbor (or caps, if the Board

[27] *See* Klein Submission § IV.A.3, pp. 65-68.
[28] *See* Humphrey and Ettin Submission at pp. 8-9.
[29] 75 Fed. Reg. at 81,737.

maintains caps in its final rules). As discussed above, adopting an effective average interchange rate at a safe harbor representing the cost-based base rate plus the fraud adjustment would be more consistent with the fundamental objective of encouraging effective fraud prevention in electronic debit transactions than applying a fixed cap. Indeed, to a great extent current interchange rates reflect differing risks associated with different transactions. Failing to maintain this structure will discourage fraud prevention efforts with respect to higher risk transactions and remove the ability of networks and issuers to provide meaningful incentives for better data security and processing practices. Where fraud controls are less effective or precise, issuers will also be likely to decline the approval of many legitimate transactions, thereby limiting the utility of the payment system for both consumers and merchants.

The Board has requested comment on whether it should allow a fraud adjustment only for fraud prevention activities that benefit merchants by, for example, reducing fraud losses that would be eligible for chargeback to the merchants. There is no consistent way to draw such a line, and the proposal suggests a misunderstanding of how fraud is prevented in multiparty payment systems. Fraud prevention efforts virtually always benefit merchants, by allowing networks to offer a payment guarantee, by allowing issuers to approve more legitimate transactions, and by helping to reduce the risk to merchants on transactions where a chargeback may be available. In those cases where merchants are eligible to receive fraud chargebacks, such as certain online transactions, the effectiveness of issuer fraud screens gives merchants confidence to proceed with transactions despite the limited potential that the transaction could be reversed if found to be unauthorized.[30] Moreover, in many circumstances, merchant choices have a significant influence on fraud costs and risks borne by issuers—whether by offering enhanced authorization methods, selling to anonymous buyers through remote sales channels rather than face-to-face transactions or following the best available fraud controls and data protection practices. Regardless, issuers bear significant fraud prevention costs related to developing and supporting these merchant choices and benefits.[31]

In short, in order to achieve an improved and effective outcome in the context of the legislation, we believe the Board should include a fraud adjustment amount to the permitted debit interchange rate.

2. Fraud Prevention Standards

The Board has requested comment on two potential approaches to implement the statute's issuer fraud standards—a technology-specific approach and a non-prescriptive approach. Under the technology-specific approach, the Board would identify "paradigm-shifting" technologies that it believes would reduce debit card fraud in a cost-effective manner.[32] Presumably, under this approach, the Board would identify technologies and advise issuers that investment in these

[30] Merchants that use the Verified by Visa service are fully protected from fraud chargeback liability, even if issuers or cardholders are not participating. Despite this fact, some merchants choose not to use this fraud management tool and instead accept potential fraud liability.

[31] Further, as Professor Klein explains, if the Board does not permit issuers to cover fraud-related costs, it will discourage issuer innovation in fraud prevention and likely reduce debit output. *See* Klein Submission § IV.D.1, pp. 74-76.

[32] 75 Fed. Reg. at 81,742.

technologies could be recovered though interchange transaction fees. We believe that this approach would have a number of drawbacks.

First, this approach incorrectly assumes that all fraud prevention is based on technology. People and procedures also play significant, and at times more significant, roles in fraud prevention. Most data breaches and resulting fraud are caused by a failure of participants in the payment system to deploy known, existing technologies or industry-standard best business practices (*e.g.*, user access controls, password management, system access monitoring and employee training on all of the above). Focusing on technology alone assumes there is a "magic bullet" that, by itself, would result in materially more efficient fraud control.

In addition, the "paradigm-shifting" approach presumes that the Board is in a better position to identify technologies for investment than are the institutions involved in the transactions. Given the inherent complexity of electronic debit payments, including the participation of thousands of U.S. issuers, processing entities, millions of merchants and point-of-sale terminals, numerous vendors for terminals, cards, mobile phones, millions of cardholders and interoperability implications that may arise for international cards and transactions, the Board is not likely to be in a position to assess the commercial feasibility of specific technologies. A "paradigm-shifting" technology can only be assessed with hindsight, with trial and error, and long after networks, issuers, merchants or acquirers have invested substantial resources and the technology has been successfully tested, broadly implemented by many independent actors and becomes the prevalent mode of transacting. Creating an incentive structure for issuers and networks to place substantial investment in specific technologies that may be untested, or have uncertain prospects of adoption or success, would likely lead to a number of wrong turns and wasted effort. Moreover, the concept of a fraud adjustment for paradigm-shifting technology can be complex. Many technologies require a combination of issuer actions, network changes, liability rules, and merchant investment; for example, providing issuers with a higher interchange rate to adopt chip cards, for example, may create incentives for merchants *not* to install chip terminals.

The potential to be able to recover costs for only Board-approved technologies would create strong incentives to invest primarily in such technologies, which could result in an inefficient allocation of resources because it would likely discourage investment in other technologies, processes or centralized network solutions that are more effective and less costly. Moreover, the mere identification of technologies that would permit a fraud adjustment and the resulting industry shift toward them would alert creative, well-funded and sophisticated criminals to the specific technologies that they must combat. The technology-specific approach also would provide issuers with far less flexibility in order to adapt to changing technologies and fraud patterns, and the Board would need to continually monitor and update the standards as appropriate. A technology-specific approach likely would require issuer-specific interchange fees for those issuers that adopted the Board-identified technology. Finally, because infrastructure and technology is typically shared across payment products, a "paradigm-shifting" technology could not be analyzed without considering the costs and benefits of that technology on exempted issuers and products, as well as payment products outside the scope of the statute such as credit and commercial cards. Such an approach would increase costs for exempt issuers as it would likely become an industry standard that they would be required by market forces to

meet. This would inherently extend the distorting influence of the fraud adjustment provision of Section 920 beyond its proper regulatory scope.

Providing fraud compensation only for common, industry-wide technologies that are paradigm-shifting will also lead to less issuer and network competition. Effective fraud prevention is one of the factors on which issuers, networks, and acquirers compete. While some solutions require standardization to be widely adopted (*e.g.*, placement of magnetic stripe data), others do not, such as real-time, transaction level fraud detection tools. For example, Visa is constantly developing and deploying novel solutions, such as alerts sent to cardholders by text message or e-mail whenever their cards are used, or which enable cardholders to control use of the card by placing selective acceptance blocks on their cards (*e.g.*, do not allow transactions at electronic stores, or overseas). As criminals target consumers with phishing attacks and identity theft, it will be more critical going forward to engage consumers more directly in controlling fraud. Where a fraud adjustment is provided only for industry-wide solutions, incentives to invest in unique solutions would be muted, and issuers and networks would be more likely to focus their investment efforts instead on standardized, undifferentiated solutions that may be less effective and are likely to be slower to market.

As a result, Visa believes that a non-prescriptive approach would be most appropriate. For example, the Board could issue general, risk-based fraud prevention standards with which each covered issuer would be required to comply. For example, the Board's fraud prevention standards could be modeled on the information security standards issued by the Board and the other federal banking agencies to implement Section 501(b) of the Gramm-Leach-Bliley Act ("GLBA"). Under the GLBA information security standards, a bank must implement a risk-based information security program that includes, where appropriate, various measures identified by the agencies that are designed to protect customer information. A GLBA-like approach would provide a number of important benefits. It would allow each covered issuer to tailor its fraud prevention program based upon the nature and scope of its actual debit card practices. Moreover, this approach would provide both the Board and covered issuers with the flexibility to adapt with changes in technology, as well as changes in fraud activities and techniques. Networks would also be more likely to compete for issuer, acquirer and merchant participation by using differentiated solutions where feasible, and common standardized solutions where more appropriate. Similarly, in his analysis of the two general approaches to fraud standards considered by the Board, Professor Klein concludes that "[f]rom an economic perspective, the rule that the Board adopts should provide issuers and networks with the greatest possible flexibility to develop and maintain innovative and effective fraud prevention programs and technology."[33]

3. PIN v. Signature

The Board also requested comment on whether it should limit the fraud adjustment to card-present PIN transactions. As noted below, networks use many authentication methods in addition to, and in connection with, the constantly blurring signature and PIN methods of authorizing debit transactions. Many networks that could be described as "PIN debit networks" have significant volume on transactions not authorized by a PIN, while a significant percentage

[33] *See* Klein Submission § IV.D.1, p. 75.

of "signature debit" transactions are processed under parameters that permit the merchant to forgo printing a receipt and collecting a signature, and protect merchants from issuer chargebacks on these transactions. To effectively address this complexity and avoid creating misalignment of incentives for fraud control, the Board would have to consider making fraud adjustments for each type of authentication method, including new authentication methods that the industry deploys, some of which may use dynamic data and may be more effective than any current static authentication methods. Arbitrarily limiting the fraud adjustment to PIN might dissuade or otherwise impact the deployment of such existing or new authentication methods. For example, use of a contactless chip transaction (*i.e.*, dynamic data) without a PIN could be more secure than using a magnetic stripe transaction where a static PIN is used (particularly due to the risk of PIN breach and resulting ATM fraud). As another example, a card-present transaction at an Automatic Fuel Dispenser is typically authorized with either a PIN or the use of an address verification service (*e.g.*, zip code). By limiting the fraud adjustment to PIN, the Board would be making the determination that one authentication method is superior to, or less prone to fraud risks than the other, when that is not always the case.

Limiting a fraud adjustment to card-present PIN transactions would have a number of negative consequences as debit issuers may increasingly decline high-value signature transactions, and may limit signature program growth by applying usage fees to cardholders. As a consequence, smaller merchants and other merchants that do not currently accept PIN, such as online, mobile or telephone order merchants, could lose sales, or such sales might be driven to higher cost payment methods, such as cash, check or credit.[34] Linking the fraud reimbursement to PIN-based transactions would promote the use of an older, static authentication value that should eventually be replaced by dynamic data over time. It would also ignore the preference of a substantial number of consumers *not* to risk having their financial PIN exposed at the point of sale (*e.g.*, to shoulder-surfing or more sophisticated theft such as card skimming).

Indeed, industry studies show that static PIN data is under increasing attack, and there have been a number of instances of merchants exposing PINs to compromise by failing to follow industry-required PIN security programs. If the Board incents greater reliance on PIN-based transactions, the Board should anticipate an increase in PIN compromises and related ATM fraud, which would be borne by issuers and increase issuer costs and risk. In addition, as Professor Klein explains in his submission, the view that PIN transactions are preferable from a fraud standpoint is based on a flawed understanding of PIN-debit chargeback and fraud rates.[35] Without further information and study by the Board about the relationship between PIN compromises and ATM fraud, the Board would risk incenting behavior that results in more, not less, fraud liability.

D. Exemption Certification Process

The Board requested comment on whether it should establish a consistent certification process and reporting period for the small issuer, government debit, and reloadable prepaid

[34] Although fraud liability is typically borne by the merchant for transactions at online merchants where the merchant has not installed available authentication methods, such as Verified by Visa, issuers may still decline such transactions because of the limited cost recovery available through interchange, and the high cost of processing a chargeback, making those transactions unsupportable without consumer fees.

[35] *See* Klein Submission § IV.D.2, pp. 76-78.

exemptions to the debit interchange fee limitations. We believe that the Board should establish such a certification process, both to ensure consistent treatment across the industry and in light of the Board's role in monitoring and enforcement. Moreover, if consistent, industry-wide certification processes are not established, there is a risk that similar transactions or issuers would be treated differently among the multiple payment card networks. The administrative, monitoring and compliance burden on the industry and on the Board will also be higher if multiple certification processes are maintained in parallel by each network.

Turning first to issuers, Visa believes that the Board should annually publish a list of non-exempt issuers based on asset size that the industry may rely on in applying the appropriate schedule of rates. Visa also believes that it would be important for any asset-based exemptions to apply for a full year, to avoid unnecessary processing changes and provide for greater revenue certainty for annual planning and budgeting (whether for issuers, networks, acquirers or merchants). Visa proposes that the Board publish such lists by March 1st, based on the prior year's data, so that networks have updated information to apply within the standard, industry-wide systems release that occurs in April of each year.[36] It is Visa's recommendation that once coded as exempt or non-exempt, the relevant issuers be coded as such until the April systems release of the following year.

With regard to products, although Visa will have some information on particular products or programs, it would not have all the necessary detail to determine whether any given product is exempt. Thus, Visa believes the Board should administer the validation and notification with regard to exempt products as well. Issuers would notify the Board whether a specific product they issue is exempt, including identification of the network(s) with which they process debit transactions and the debit Bank Identification Number (BIN) and account ranges under which they may have exempt products. We believe that the certification process for exempt government-administered and reloadable prepaid programs should be performed by the Board whenever needed. These programs are developed and deployed throughout the year and cannot be tied to a specific timetable, especially in consideration of the unique requirements for government-administered programs.

Visa foresees considerable effort from payment card networks, issuers and the Board in order to coordinate and conduct the initial review and validation of the multiple types of exemptions (across all combinations of issuer size, government-administered programs and reloadable prepaid products). This may leave issuers and payment card networks with insufficient time to develop and modify system programs and tables to support the exempt issuers and programs, leaving insufficient time for testing among issuers, payment card networks, and acquirers. With minimal time to update their merchant billing systems, much of the interchange reductions may not be able to be passed through to merchants, from their acquirer.[37] Traditional timelines have provided a degree of issuer, acquirer, and merchant

[36] Visa and other payment networks typically do "systems releases" on a common date in order to ensure efficiency for the vast number of participants in multiple networks who are required to make periodic (and sometimes significant) processing changes required by each network. Visa can provide the Board with a list of common systems release dates that have already been scheduled over the next several years.

[37] For comparison, Visa typically announces interchange and pricing adjustments with three to six months' notice, and then provides a four-week client testing period prior to the effective date of the change. This notice period allows issuers and acquirers to test with the payment network to ensure that their coding logic and downstream

notification and implementation support that clearly cannot be provided between final Board requirements in late April, issuer certification at some later date, and implementation in July.

Even with compressing the schedule and reducing testing and validation, a July 21 timeframe is unlikely to be achieved. As a result, a July implementation may cause qualified exempt programs to not be coded correctly in time by networks or other processors, and to be subject to the same interchange reductions applied to non-exempt debit issuers and products, or could result in errors if systems are not sufficiently tested. To avoid this potential outcome, and as discussed in the next section, it is Visa's recommendation that at a minimum, the Board should provide at least six to twelve months from the release of the final rules for the industry to come into compliance with the debit interchange limitations.

E. Timing of Implementation of Debit Card Interchange Fee Restrictions

The Board has noted that its proposed Fee Alternatives would "significantly reduce[] interchange fees from current levels."[38] Notwithstanding this significant reduction, networks, issuers and acquirers will have only a number of months before Section 920 and the final rule's interchange fee limitations go into effect. We believe that an effective date of three months following the issuance of final rules would present significant difficulties to payment card networks and their participants. Further, requiring a drastic reduction in interchange fees followed by a potential increase due to a fraud adjustment would also be needlessly disruptive. In this regard, we believe that the Board should determine that covered rates are reasonable and proportional until a date that coincides with a traditional systems release, ideally April 15, 2012.

This approach would provide additional time for payment card networks and issuers to digest the Board's final rule and design and implement appropriate solutions. As the Board is aware, a July implementation would represent an out-of-cycle processing release for the multitude of acquirers, processors, issuers and merchants. As noted above, all processing participants have historically followed a schedule of common April and October releases, and plan their technology requirements and personnel resources to accommodate those dates. A July release date would add the unexpected expense and need to coordinate on a new major release date for network participants, resulting in considerable implementation risk and may interrupt already planned security upgrades or other "between release" systems deployment efforts.

In addition, an effective date that is approximately 90 days from the issuance of a final rule is an incredibly short timeframe in which to redesign and appropriately test systems for an entire industry. Payment card networks (and even issuers) cannot realistically begin redesigning systems based on the Board's proposal in light of the number of issues that still must be resolved in the regulatory process. We believe that the Board should provide at least six, and ideally 12, months for the industry to prepare to come into compliance.

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reconciliation systems are working properly with Visa's systems code prior to the changes being implemented into technical production.

[38] 75 Fed. Reg. at 81,737.

II. Exclusivity and Routing

Subsection (b) of Section 920 imposes limitations on payment card issuers and networks regarding the restrictions that may be imposed on merchants and other entities in connection with the usage of debit cards for payment. The first paragraph of subsection (b) directs the Board to prescribe regulations implementing restrictions on debit card issuers and payment card networks with respect to the exclusivity and routing of electronic debit transactions.

As with the proposed interchange fee rule, we believe that the proposed exclusivity rules are inconsistent with the statute and certain constitutional principles. For example, Section 920(b), by its plain terms, prohibits only "*restrict[ing]*" the number of networks on which a transaction may be processed "by contract, requirement, condition, penalty, or otherwise."[39] Under canons of statutory construction, "otherwise" must be construed as including only affirmative restrictions similar to the kinds mentioned, but not to voluntary decisions by an issuer to limit itself to a single network.[40]

Similarly, the Proposed Rule would expressly permit a merchant to "block[] the use of signature debit altogether."[41] The statute, however, prohibits only an "issuer or payment card network" from restricting the number of payment card networks over which a merchant may route a transaction. A contractual term ensuring a customer's right to choose signature debit or PIN does not itself inhibit a merchant's routing choices; rather, the customer's refusal to provide a PIN creates the inhibition, and nothing in the statute forbids a customer from creating such an inhibition. Moreover, with respect to contractual network-exclusivity arrangements, although the statute is not expressly retroactive, the Proposed Rule implicitly seeks to nullify existing network-exclusivity contracts, instead of applying only prospectively.[42] Such pre-existing arrangements should not be regulated under the terms of the statute.

Below, Visa asks the Board, at a minimum, to follow the statute and adopt Exclusivity Alternative A, which would allow issuers to proceed with two unaffiliated networks regardless of the authentication methods available on those networks. Merchants would have the choice to decide how many networks to accept, including the choice whether to deploy only signature, only PIN, or both signature and PIN authentication devices at the point of sale. Exclusivity Alternative B, on the other hand, exceeds the statutory mandate, imposes exceptional technological complexity that would create significant unpredictability and unintended consequences, adds substantial cost for all participants, and would likely result in consumer

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[39] 15 U.S.C. § 1693o-2(b)(1) (emphasis added).

[40] *See, e.g. Wash. State Dep't of Soc. & Health Servs. v. Guardianship Estate of Keffeler*, 537 U.S. 371, 384 (2003) ("[w]here general words follow specific words in a statutory enumeration, the general words are construed to embrace only objects similar in nature to those objects enumerated by the preceding specific words") (internal quotation marks omitted).

[41] 75 Fed. Reg. at 81,752.

[42] In *Landgraf v. USI Film Products*, 511 U.S. 244 (1994), the Supreme Court held that there is a "presumption against retroactive legislation" and that "congressional enactments and administrative rules will not be construed to have retroactive effect unless their language requires this result." *Id.* at 264-65. No such language in the Durbin Amendment requires such retroactive applicability; therefore, pre-existing exclusivity contracts should not be affected by the statute or implementing regulations. *See James Cable Partners, L.P. v. City of Jamestown*, 43 F.3d 277, 278-80 (6th Cir. 1995) (holding that 1992 Cable Act, which provided that "a franchising authority may not grant an exclusive franchise," did not invalidate existing exclusive franchise agreements) (applying *Landgraf*).

confusion. With regard to routing, we urge the Board to preserve the consumer's right to be informed and choose the network on which her transaction may be carried. Both issues are discussed in detail below.

A. Exclusivity

Section 920(b)(1)(A) provides that the Board must prescribe regulations that prohibit issuers and payment card networks from restricting, including by contract or penalty, the number of payment card networks on which an electronic debit transaction may be processed to: (1) one network; or (2) two or more networks that are owned, controlled or operated by affiliates or networks affiliated with the issuer.[43] By its plain terms, this provision states that neither an issuer nor a network can restrict by agreement the number of payment card networks on a card to less than two unaffiliated networks on its debit cards.

Nonetheless, the Board has proposed for comment a second alternative, Exclusivity Alternative B, which would require at least two unaffiliated networks for each method of authorization that a cardholder may use. Exclusivity Alternative B, in which the Board would classify networks by authentication type, is fundamentally flawed in a number of ways and has a number of unintended consequences, both known and unknown:

- it is not implementable based on how the industry operates today and would place complex technological challenges and costs on all participants in the payments industry, including issuers, networks, acquirers, processors and others;

- it would eliminate the incentives for all stakeholders to invest and innovate, and inhibit the development and deployment of new methods of authentication that may reduce fraud;

- it is not justified, since merchants have the choice to decide how many networks to accept, including the choice whether to deploy only signature or both signature and PIN authentication devices at the point of sale, and all debit interchange rates and networks will be subject to whatever standard, safe harbor or cap the Board ultimately adopts;

- it could impact U.S.-issued products used internationally; and

- it would cause cardholder confusion and brand degradation, and conflicts with basic trademark policy and law.

1. The Board Should Follow the Statute

As noted, the Board has proposed two alternative approaches to implement the exclusivity limitation. Under the first approach, payment card issuers and networks would be prohibited from limiting the number of payment card networks on which a debit transaction may be processed to less than two unaffiliated networks, as set forth in the statute ("Exclusivity Alternative A"). Under the second approach, payment card issuers and networks would be

[43] 15 U.S.C. §§ 1693o-2(b)(1)(A).

prohibited from limiting the number of payment card networks on which a debit transaction may be processed to less than two unaffiliated networks for each method of authorization that the cardholder may use with respect to the card ("Exclusivity Alternative B"). We believe that the Board should adopt Exclusivity Alternative A, and revise its proposal to better reflect the statute by clarifying that it does not always require that issuers place multiple networks on each card, if they make that independent business decision, but merely restricts issuers or networks from agreeing to limit the number of networks to less than two unaffiliated networks.

With respect to Exclusivity Alternative B, nothing in the statute speaks to requiring multiple, redundant authorization methods or to having an undetermined number of unaffiliated networks that an issuer would have to enable on a card in order to be compliant. Quite simply, we believe that the Board should follow the statute.

First, Exclusivity Alternative B is based on a 1990's era environment where there were predominantly only two authentication methods in use — signature and PIN. This industry shorthand of "signature" networks and "PIN" networks, however, is a legacy holdover and not representative of the current debit card environment in which almost every network innovates and deploys multiple authentication methods during the authorization process to best address a specific merchant segment or channel and ensure a valid transaction.[44] As Table 1 below demonstrates, Visa Check Card, a legacy "signature" debit network, authenticates less than 50 percent of its transactions using a signature. In fact, Visa Check Card deploys over half a dozen authentication methods today, with more in development, to address new segments, channels, and the dynamic nature of risk and fraud in the industry. It is not uncommon for Visa to layer multiple authentication methods in the same transaction, for example in Internet transactions where AVS, CVV2, and Verified-by-Visa can all be deployed.

Table 1: Select Current Methods of Authenticating a Visa Check Card Transaction

Segment / Channel	Estimated % of Visa Check Card Transactions	Authentication Method	Notes
Face-to-Face	49%	Signature, CVV, PIN*	Card Verification Value (CVV) is obtained from the magnetic stripe to verify that the card is not invalid or counterfeit
Face-to-Face Small Ticket	25%	CVV	Transactions where no signature is required and available on transactions <$25 in most card present merchant segments
Automated Fuel Dispenser	9%	AVS	Address Verification Service (AVS) is a cardholder verification tool based on the

[44] For the reasons above, in the event the Board adopts Exclusivity Alternative B, Visa believes that the Board's proposed definitions of "Personal Identification Number (PIN) debit" and "Signature Debit" would be inadequate, in that describing authorization as "typically" dual message or single message does not capture the dynamic nature of authentication. Indeed new services often blur the two, *e.g.*, Visa's real-time clearing authorizes a "signature" transaction in what is closer to a single message format. If the Board adopts Exclusivity Alternative A, those definitions should be rendered superfluous.

(AFD)			cardholder's billing address; most commonly used for AFDs, it can be used in other unattended terminal environments and for card-not-present mail, telephone, and Internet orders
Internet	12%	CVV2, Verified by Visa	Card Verification Value 2 (CVV2) is a 3-digit security number that can be obtained from the back of the card; though heavily used for Internet transactions, it can be used in card-present transactions including manual key-entered transactions Verified by Visa (VbV) is a password-based Internet authentication solution enabling verification of a cardholder's account ownership during the online purchase
Mail Order / Telephone Order	4%	CVV2, AVS	Both are described above
Contactless / Mobile	<1%	dCVV, ATC	Dynamic Card Verification Value (dCVV) is dynamically generated for every transaction in which the card is read over the contactless interface. Application Transaction Counter (ATC) ensures the proper sequence of transactions and is used as a dynamic data component for every contactless transaction
In Development	NA	Dynamic CVV2	A dynamic replacement of CVV2 that uses non-static data

*Visa Check Card transactions are enabled with PIN authentication fields, though they are not currently in use.

Other networks also continue to pioneer new authentication mechanisms and other transaction features and functionality, with the net result being that the most successful become industry standards adopted by numerous participants. For example, Card Security Codes like CVV2 have become an industry standard among many networks for Internet purchases, whereas Verified by Visa and MasterCard SecureCode have seen significant, but not ubiquitous levels of adoption. Authentication methods like dCVV look to improve authentication based on dynamic data made possible by contactless chips and mobile phone technology. Other examples of authentication innovation include PINless debit that serves an increasing number of segments, and technologies for using PIN over the Internet (using services like Acculynk). Overall, network competition and flexibility to develop stronger and more dynamic authentication techniques have been the primary drivers of declining industry fraud rates despite ever-increasing use of debit cards in new merchant segments and channels.

It is also relevant that most merchants that currently accept debit cards with only one type of authorization method do so primarily at their choice. In addition, authorization choices by merchants are a balance of risk factors, as certain authorization methods may give more liability

protections if used. Given the rapid innovation in the industry, the blurring of legacy authorization and processing distinctions, and the merchant's ability to accept or not accept as many networks or types of networks as they wish (along with the authorization options they offer), there is no reason for placing the burden on issuers to ensure that there are two unaffiliated networks capable of processing every means and mode of authorizing transactions on their cards.

Second, Exclusivity Alternative B would substantially increase the cost of compliance for issuers and networks and likely would require substantial changes to existing network and processor infrastructures across the entire payments value chain of millions of participants. Not only would the industry have to bear the cost of implementation of such a drastically new system, each issuer's cost would increase, as issuers would be forced to arrange a minimum of two networks for PIN and signature, with two sets of contracts for each, two sets of network rules and requirements, two sets of processing connections and likely re-issuance of cards and terms and conditions. Given the number of authorization methods in place today beyond signature and PIN, it is not feasible to ensure that enabled networks cover all possible authentication methods.

This additional cost for redundant functionality would be inefficient and provide no benefit to issuers or their cardholders. Nor would it be feasible in the near term, or without substantial industry effort. While networks, issuers and acquirers currently have the ability to handle multiple PIN networks on the same debit card, they do not currently have the systems in place to handle multiple signature-based networks on the same card. Enabling those networks on a debit card would require the replacement and/or reprogramming of millions of merchant terminals, as well as substantial changes to software and hardware for networks, issuers, acquirers and processors in order to build the necessary systems capability to support multiple signature debit networks for transaction processing and back-office operations. Without trying to capture every technical issue, as an example, one significant operational problem with enabling two signature debit brands on one card is that payment cards are routed using BIN range segregation such that cards with a BIN prefix starting with "4" are processed through Visa and cards with a BIN prefix starting with "5" are processed through MasterCard. Most devices at the merchant employ logic that directly identifies the network by BIN range. For example, if some issuers of cards with the BIN prefix "4" also enabled their cards to support another brand, the device would not know when a "4" card may also be carrying another brand. Millions of devices would have to be reprogrammed. Similar technical challenges around BIN management would arise and have to be solved in issuer, processor, and network systems.

Even if the technological issues were addressed, the payment card networks could have inconsistent or conflicting operating regulations and rules since two signature networks have never been on the same card and thus there was never a reason for harmonization. Variation in operating regulations has been a basis for network competition. Given that these regulations and rules are the foundation of systems that are built to carry over 10,000 transactions a second, any modifications or potential ambiguity about the governing rules of a transaction could have material consequences on system reliability, not to mention cost. Further, such changes could also affect processing of non-U.S. cards, or interoperability of U.S. cards that are used overseas. Any changes to these cards would have to comply with the ISO standard governing magnetic

stripe-enabled payment cards, which has governed worldwide for the past forty years. Compliance may be both technically challenging and costly.

Third, Exclusivity Alternative B, when combined with the Board's apparent proposal of sole merchant control over routing, would all but eliminate the ability and incentives of issuers and networks to innovate or create unique or differentiated features for consumers. There would be little or no incentive to develop new authentication methods, such as biometrics or other technologies, which will allow new transaction types, form factors or be more effective in reducing fraud. Mobile payment technologies are expected to take root over the next several years, but will clearly require investment in intellectual property, software applications, marketing, and infrastructure. If, for example, a payment card network developed a unique authorization method for debit transactions based on a cell phone, under Exclusivity Alternative B it could not be employed on any debit card, unless the network's competitors developed and offered a similar authorization method. That is, because Exclusivity Alternative B would require two unaffiliated networks per authorization method, any new authorization method or form factor that was not available on two unaffiliated networks apparently could not be implemented on debit cards without violating the Board's rule.

The Board itself highlighted this issue when it noted that "an issuer may be unable to implement these new methods of card authorization if the rule requires that such transactions be capable of being processed on multiple unaffiliated networks."[45] Would the requirement of multiple authorization options be imposed during testing or at the pilot stage, before new authorization technologies are ready for wider adoption? Would each network that invested in creating the necessary technology be required to get consent from every merchant if fewer than two networks were available and, if so, would the regulations even permit the merchant to waive by contract its ability to route every authentication method over multiple routing options? Whatever the answers, under Exclusivity Alternative B, the development and adoption of innovative authorization technologies would be inherently subject to delay and depend on many uncontrollable variables. As a result, many valuable innovations would never be implemented.

Innovation is typically driven by competition and a desire for product and service differentiation — where a network develops proprietary technology, including software, hardware or other intellectual property, or engages in targeted consumer education and marketing, to create a preference over other products. The ability to drive such consumer preference, by offering a better feature or by being a first mover, is what typically justifies the investment in a new technology or features. For example, "contactless" authorization methods are an example of payment card network investments that are not made equally among the networks. We believe that the Board should encourage this type of "proprietary" technology development, rather than create a structure that would keep new technologies from getting off the ground until multiple networks have coordinated on how they will work, and made the necessary investments to support them. Under the Board's proposal, a network with unique authorization technology would be required either to license or to give away its intellectual property to its competitors, or wait for them to make the same investments, before an issuer could deploy its unique product. A competing network may not have the same technology strategy, capabilities or resources, or may decide to "hold up" the innovation of the first mover,

[45] 75 Fed. Reg. at 81,749.

until it has caught up. As a result, the innovation simply could not lawfully be offered or could be substantially delayed, as the Board recognized. This stifling of competitive forces effectively removes incentives to invest in such innovation, is not required by the statute and is contrary to the constitutional goal of encouraging innovation by granting exclusive rights to inventors for a certain time.[46]

We believe that networks should be free to innovate on all dimensions, including authorization processing structure and other features or functionality of debit cards, to put the best product on the market, as opposed to being tied to an historical authorization type that was relevant in the 1990s, began blurring in the 2000s and would soon be irrelevant if innovation were allowed to continue.[47]

2. The Board's Brand Limitations

Exclusivity Alternative B and the brand restrictions set forth in proposed comment 7(a)-(5) ("Brand Restrictions") would also contravene federal trademark law and policy and result in consumer confusion and substantial damage to the Visa brand. Section 920 does not speak to any requirements for branding or logos on debit cards. The Board should not implement rules that are not mandated by Section 920 and which would conflict with other federal laws and policies.

By requiring two unaffiliated payment card networks for each method of authorization, Exclusivity Alternative B would inevitably lead to debit cards bearing multiple signature debit brands. Although the Board has proposed that debit cards would not be required to display the brand, mark or logo of each signature debit network enabled on the card (see comment 7(a)-(6)), issuers could and are likely to identify the enabled networks by displaying the networks' brands on the debit cards themselves. This would result in consumers receiving "dual-branded" debit cards, such as a debit card bearing both the Visa and Discover trademarks or the Visa and MasterCard trademarks. In addition, the Board has proposed that networks would be prohibited from restricting the use, size and location of competitors' brands, marks or logos on debit cards (see comment 7(a)-(5)). As a result, Visa would not be able to prohibit issuers from issuing debit cards on which the Visa logo is displayed side by side with the MasterCard or Discover logos in the same size and with the same prominence.

The Proposed Rule conflicts with the twin principles of federal trademark law: (1) to prevent consumer confusion as to the source or origin of goods or services or as to the sponsorship, affiliation or connection of the providers of the goods or services; and (2) to protect the investment of trademark owners in their marks.[48]

As Professor McCarthy explains in his submission at Appendix C, if consumers receive debit cards bearing the Visa trademark and the Discover trademark, for example, consumers are likely to believe that: (1) Visa and Discover are one and the same, when they are not; or (2) there

[46] Professor Klein addresses in his submission this substantial reduction in network and issuer incentives to invest in developing innovative authorization methods. *See* Klein Submission § III.A.2, pp. 55-58.
[47] If necessary, the Board could re-assess this approach over time in the event that a particular new authentication form becomes so unique and so ubiquitous, that it effectively has replaced the more common card-based products.
[48] *See* Submission of Professor J. Thomas McCarthy ("McCarthy Submission"), p. 3.

is some affiliation or connection between Visa and Discover, when there is not.[49] The Board's Proposed Rule would blur the distinction between Visa and other signature debit networks. This is precisely the type of confusion prohibited under the Lanham Act.[50]

In addition, Exclusivity Alternative B would substantially damage the value of the Visa brand. Visa has spent considerable time, effort and money in making the Visa brand one of the most recognized brands in the United States and around the world.[51] According to Millward Brown's Top 100 Most Valuable Global Brands 2010, the Visa brand ranks #18 in overall brand value, compared to the MasterCard brand, which ranks #67. Among financial institution brands, the Visa brand ranks #2, compared to the MasterCard brand at #15. The Discover brand was not ranked on either list. Furthermore, according to the Ipsos Brand Health Tracker (2010 2nd quarter), which measures overall brand strength across five dimensions (relevance, understanding, uniqueness, popularity, and quality), the Visa brand is 43 points ahead of the MasterCard brand and 80 points ahead of the Discover brand in the United States. In addition, Visa has spent substantial time, effort and money in developing and shaping consumer perception of the Visa brand, including its ubiquitous acceptance ("everywhere you want to be"), benefits, such as loyalty programs, security features, Zero Liability and the like. Such benefits and brand perceptions differentiate Visa from its competitors.

Requiring the Visa brand to appear on debit cards with Discover, MasterCard, or other signature debit brands would unquestionably harm the Visa brand. As Dr. Simonson explains in his submission, a debit card displaying two recognized, competing signature debit brands is likely to be perceived as being of lower quality and less distinctive than a card that carries just the Visa brand.[52] Competitors' brands, such as the MasterCard and Discover brands, would enhance their equity, not based on any successful branding, communications strategy and corresponding investments, but simply because of their mandated association with the Visa brand on debit cards. Conversely, Visa would effectively lose control over the Visa brand and its perception by consumers, because any harm to the other brands displayed alongside the Visa brand would negatively affect the Visa brand. As Professor Simonson concludes, the implications for Visa of a rule resulting in the display of two competing signature debit brands on debit cards are far-reaching and can potentially dilute the brand equity and favorable brand associations that Visa has built and developed over several decades at great expense.[53] Visa cannot depend on another brand for maintaining its own brand equity. Visa is the common umbrella brand for Visa-branded payment products and its common merchant acceptance brand — harmful impacts and degradation to the Visa brand would not be limited to U.S.-issued debit products governed by the regulations, but would extend to credit, commercial, and non-U.S. issued products and services (as the "dual-branded" cards would be seen, and cause similar confusion, outside the U.S.).

The Board's proposal is akin to a government mandate that both Coke and Pepsi appear over one soda fountain spigot, and regardless of which soda the consumer requests, the merchant dispenses whichever one the merchant prefers. The Board would be undermining the

[49] *See id.* at p. 4.
[50] 15 U.S.C. §§ 1114 and 1125(a).
[51] *See* McCarthy Submission at p. 3. *See also*, Submission of Dr. Itamar Simonson ("Simonson Submission") ¶ 28.
[52] *See* Simonson Submission ¶ 43. *See also* McCarthy Submission at p. 4.
[53] *See* Simonson Submission ¶ 14.

commercial incentive of networks to invest in providing better, cheaper or more efficient services to cardholders. In the Coke example, all of Coke's investment in better products or differentiated offerings would be just as associated with the competitor's brand as with Coke's, and the ability to communicate those differences to consumers would be effectively destroyed. Nothing in Section 920 requires or suggests that result. In fact, it appears contrary to EFTA regulatory mandates of Section 904(a) to fail to consider the impact of the Board's regulations on competition in the provision of electronic banking services, and it also is contrary to the twin purposes of trademark law – to avoid consumer confusion and to protect a trademark owner's investments in their mark. The trademark-related provisions included in the Proposed Rule should be clarified to confirm that nothing in Section 920 is intended to impair the ability of networks to impose or maintain card branding or other trademark-related requirements to protect against confusion from co-residence of competing consumer payment brands. Thus, the Board should not restrict the ability of Visa or other networks to restrict the size and location of other trademarks, brands or logos on payment cards.

In addition, the Board should clarify that its Proposed Rule is not intended to change the card-design and related security requirements that networks have generally applied to all of their payment card products, whether debit, credit or otherwise. For example, issuers in the Visa system are required to use a standard card design, including the Visa logo (as specified, color, design, etc.), in the same location in the lower right hand corner of the card, reproduced in a specific size, with the card account number, expiration date and cardholder name in a standardized place and various security elements, such as the dove design hologram, signature panel, CVV2, magnetic stripe and other information, in standardized places. Some of these requirements are subject to ISO standards. Some, like the placement of the "debit identifier" on Visa and MasterCard debit cards, are required by the 2003 merchant class action litigation settlement, and others are part of the network security programs to minimize the ability of criminals to create (and support the ability of merchants and law enforcement to detect) fraudulent cards. These requirements are supported through Operating Regulations, vendor approval requirements and merchant education programs, and the requirements generally apply on a worldwide basis so that merchants anywhere can have means to immediately recognize "bogus" Visa cards. These features are particularly important for merchants in less developed areas or without real-time authentication methods. Changing these standard card design elements for U.S.-issued cards could lead to confusion for cardholders shopping at merchants that accept such cards in foreign jurisdictions. We understand that MasterCard, Discover, American Express and non-U.S. payment systems generally have similar types of requirements, for similar reasons. Nothing in Section 920 requires or suggests that the Board should alter these core card-design requirements of the major payment card networks.

B. Routing

Section 920(b)(1)(B) also provides that the Board must prescribe regulations that prohibit issuers and payment card networks from restricting a merchant that accepts debit cards from "direct[ing] the routing of electronic debit transactions for processing over any payment card network that may process such transactions."[54] The Board has proposed to implement this routing limitation by prohibiting debit card issuers and payment card networks from inhibiting

[54] 15 U.S.C. §§ 1693o-2(b)(1)(B).

the ability of merchants to direct the routing of electronic debit transactions for processing over any payment card network that may process such transactions.[55] Proposed comment 7(b)-1 clarifies that the rule's routing limitations apply only with respect to the payment card networks that the debit card issuer has enabled to process transactions for that card. We support the Board's decision to read the statute's exclusivity and routing provisions together in this manner.

Nonetheless, proposed comment 7(b)(1) states that a debit card issuer or payment card network would not be permitted to prohibit a merchant from encouraging or discouraging a cardholder's use of a particular method of debit card authorization. Moreover, in the Supplementary Information, the Board states that this proposed comment means that, for example, a merchant could not be prohibited from encouraging the use of PIN debit by "blocking the use of signature debit altogether."[56] In essence, the Board would provide merchants not only with the continued ability to "steer" toward their preferred payment method, but also with authority to represent inaccurately to consumers through point-of-sale or other signage that they accept a certain network's cards or functionality, while in fact declining to do so. In addition, while many consumers prefer not to expose their financial PIN in public merchant settings, the Board's proposal would literally take away consumers' ability to control the exposure to the merchant of their PIN, if they want to use their debit card.

More fundamentally, the Board's interpretation forecloses a consumer's selection of how her transaction is handled and likely would have a number of unintended consequences. Currently, while permitting merchant steering, Visa Operating Regulations require that merchants honor a debit cardholder's choice when the cardholder indicates at the point of sale a preference that the transaction be processed as a Visa transaction. Moreover, these Visa requirements prohibit merchants from misleading consumers about the payment system that is being used to handle the transaction. Some cardholders simply prefer to enter a PIN, and some absolutely refuse. The Board's proposal seems to indicate that merchants should be allowed to refuse the consumer's choice, and potentially mislead the consumer as to the network transaction that the customer is entering into. Visa believes that such a reading may not have been the Board's intention, and requests clarification on this point.

Debit cardholders have a number of reasons to have a preference for how their transactions are handled. In certain circumstances, a debit cardholder may receive certain benefits or features associated with her card transaction only over the Visa network. As a result, if a merchant steers the cardholder to a non-Visa network, the consumer may lose access to certain features or functions associated with her Visa account that were the basis for the cardholder's selection of a debit card transaction. For example, Visa's Zero Liability policy does not apply if transactions are processed on non-Visa networks. While issuers may individually offer a similar level of protection for other transactions, they are typically not required to do so by PIN debit networks. Visa issuers generally offer their debit cardholders protections that go beyond Regulation E requirements on Visa transactions, such as "claims and defenses" chargebacks (*e.g.*, goods not as described). In addition, many optional consumer services, such as Visa Alerts that notify cardholders by email or text message when their card has been used

[55] Proposed § 235.7(b).
[56] 75 Fed. Reg. at 81,752.

according to parameters set by the cardholder, operate only when the authorization response message is processed through VisaNet.

In order to be effective, cardholders need to understand the circumstances in which such alerts and similar services like cardholder-selected controls on where their cards can be used will or won't work, and cardholders should be able to select the means of processing the enabled features they value. In addition to fraud-control features, certain networks offer promotions, like sweepstakes or a chance to win Super Bowl tickets, where eligibility to win requires processing by the network offering this benefit. Issuers typically are required to provide disclosures to cardholders indicating the circumstances in which the cardholder will receive that feature (*e.g.*, "only when processed by Visa" or "not available on PIN transactions"). If the merchant substitutes transactions through a different network, the consumer may not receive that benefit or feature, making accurate issuer disclosure difficult if not impossible. The Board acknowledges that the ability to deliver such enhanced features is likely to be compromised or eliminated by its proposal.[57] Visa maintains that the statute does not require such a result.[58]

Moreover, the Board's proposal would create a tension with Section 920's "discount" provision, which limits discounting for payment by use of debit card to discounts and in-kind incentives that "do[] not differentiate on the basis of the issuer or the payment card network."[59] This provision indicates Congressional intent that transactions on a particular payment card network that a merchant has chosen to accept should not be singled out for discriminatory treatment in discounting, let alone absolute blocking of transactions.

From a policy perspective, the combination of the Exclusivity Alternative B, the forced co-residence of competing consumer brands and ability of the merchant to override consumer preferences or mislead the consumer as to the network handling his or her transaction, would effectively destroy the ability of networks or issuers to offer differentiated features or benefits. Commercial incentives to offer differentiated features and benefits among networks would be eliminated, as consumers would have no way to express their preference for such features by selecting their network for processing. Nor could such features or benefits be marketed effectively, as disclosures could not accurately inform consumers about when they may (or may not) receive such features or benefits – it is not even clear given the unfettered routing language that the consumer would be aware, after the fact, of the network that handled her transaction. Debit products would be homogenized along the lowest common denominator, and new technologies, benefits and features driven at the network level would be effectively squelched, even if they provided valuable services, greater efficiency, better fraud control or other benefits to consumers. In his submission, Professor Klein addresses the free-riding between debit networks likely to occur as a result of the proposed routing and exclusivity restrictions, which would undermine incentives to invest in improving and promoting debit card products to

[57] 75 Fed. Reg. at 81,748-49.

[58] Professor Klein also addresses the significant adverse consequences for cardholders that may occur if the Board implements regulations that eliminate consumer choice. These consequences include significant consumer confusion and the loss of the ability to choose a network based on the fraud and chargeback protections, benefits and cardholder fees associated with the network. *See* Klein Submission § III.A.1, pp. 50-55.

[59] 15 U.S.C. § 1693o-2(b)(2)(A)(i).

consumers.[60] Nothing about Section 920 requires such an anti-competitive and anti-consumer result.

For these reasons and for consistency with the requirements of Section 904, we believe that, at a minimum, the Board must require that merchants continue to honor consumer choice for the routing of their electronic debit transactions. At an absolute minimum, and driven by the same rationale, we believe merchants must inform customers of the network that will carry the transaction before the transaction is consummated. Such a requirement would be consistent with the congressionally declared purpose of the EFTA itself, which is to protect consumers—"[t]he primary objective of this title . . . is the provision of individual consumer rights."[61] This requirement could be implemented in a number of ways, including clarifying that networks may continue to require physical point-of-sale merchants to allow the consumer to choose whether a PIN is entered and e-commerce merchants to include specific network disclosure and choice in the e-commerce environment.[62] As technology advances and point-of-sale hardware allows the consumer to choose the network from among the available choices, merchant disclosures at the point of sale may ultimately be required to inform the debit cardholder that she has the right to choose the network transaction that will be used to complete her transaction. We believe that not providing for consumer choice, or disclosure at a minimum, would inevitably lead to all networks offering the same minimum level of consumer benefits, stifling innovation and investment in differentiation among network competitors.

C. Timing of Implementation of Exclusivity and Routing Restrictions

The Board has proposed separate effective dates for the two Exclusivity Alternatives—specifically, Exclusivity Alternative A would be effective October 1, 2011, or Exclusivity Alternative B would be effective January 1, 2013. We believe that, even to the extent that the Board was to adopt Exclusivity Alternative A, the effective date should be timed to coincide with regularly scheduled industry-wide systems changes. Even though Exclusivity Alternative A would require the addition of fewer networks, it would nonetheless require significant industry-wide changes. For example, many exempt and non-exempt debit card issuers will need to reach business terms and negotiate new contracts with unaffiliated payment card networks for debit transactions. Connectivity will have to be established with new payment card networks and internal processing systems will need to be upgraded to support those networks before a debit card may be enabled with an additional payment card network. Acquirers and processors will have to be notified of the new network assignments for each debit card program and their routing tables updated for each issuer and card program.

More importantly, certain prepaid products which currently do not support multiple routing options will require additional time to become compliant. For example, Flexible Spending Account ("FSA") and Health Reimbursement Arrangement ("HRA") cards require

[60] *See* Klein Submission at § III.A.2, pp. 55-58.
[61] 15 U.S.C. §1693(b).
[62] At the physical point of sale, for debit cards with multiple debit networks, consumer choice is generally facilitated today by the distinction between the consumer entering her PIN number for a PIN debit transaction, versus signing or conducting a "no signature required" (or automated acceptance device) transaction for Visa debit card. In the e-commerce environment, merchants provide detailed drop-down menus that offer the consumer specific network options, allowing the consumer to choose the network.

functionality that identifies qualifying health care expenses versus non-qualifying expenses in order to comply with federal tax laws governing the use of these cards with tax-favored healthcare spending accounts. Visa, other payment card networks, merchants and others were required by IRS Notice 2007-02 to develop Inventory Information Approval System ("IIAS") standards for facilitating such identification of transactions. It will take some time for a solution to be developed that will specifically address the complexities that certain products like HRA cards present.[63]

Many of the proposed changes could require revisions to cardholder disclosures, if certain features of the card such as alerts or rewards will going forward be eliminated, or will only work in more limited circumstances where the merchant happens to route the transaction as necessary to support that feature. Sufficient time needs to be built into the implementation timeline to support such notifications to cardholders. In this regard, we believe that the effective date for Exclusivity Alternative A should at least coincided with a release date, and ideally be extended to October 2012.

If the Board were to adopt Exclusivity Alternative B, again, we urge the Board to adopt an implementation date that is even further extended. As the Board recognized, Exclusivity Alternative B introduces even more complexity and challenges to implementation and the system than Exclusivity Alternative A. Further, January 1, given its proximity to the holiday season where systems are at peak usage, would be an unusually challenging time to introduce systems changes and testing during what is considered a "black-out" period for making any systems changes. Visa believes the Board should choose a date that also coincides with a regular system release date, and given the complexity and challenges associated with Exclusivity Alternative B it should be at least 36 months past that considered for Exclusivity Alternative A.

III. Circumvention

Section 920(a) also provides the Board with certain regulatory authority over non-interchange network fees to the extent they are used to circumvent or evade the restrictions to interchange set forth in Section 920(a). It is our understanding that Section 920 was modified before passage to specifically exclude the routine regulation of network fees, and therefore was not intended to regulate the structure and amount of non-interchange fees set by networks. Rather, the statute provides that the Board may prescribe regulations regarding any network fee to ensure that the fee is not used to: (1) directly or indirectly compensate an issuer with respect to an electronic debit transaction; and (2) circumvent or evade the restrictions of this subsection and regulations prescribed under such subsection.[64] In this regard, the statute defines the term "network fee" as "any fee charged and received by a payment card network with respect to an electronic debit transaction, other than an interchange transaction fee."[65]

The Board has proposed to implement the statute's interchange fee circumvention provision by prohibiting an issuer from "receiv[ing] net compensation from a payment card

[63] As a general matter, there is nothing in Section 920 that requires an issuer to accept a second network that does not support the product features and services that an issuer may currently provide to its cardholders.
[64] 15 U.S.C. §§ 1693o-2(a)(8)(B)(i), (ii).
[65] 15 U.S.C. §§ 1693o-2(c)(10).

network with respect to electronic debit transactions."[66] Proposed comment 6-1 indicates that "net compensation" would occur if the total amount of non-interchange payments or incentives received by an issuer from a payment card network in connection with debit transactions exceeded the total amount of fees paid by the issuer to the network for debit transactions during the year. Visa reads the comments, specifically proposed comment 6-1(ii), to narrow compensation to issuers considered in the net calculation analysis to those incentives generally included in contractual terms related to brand decisions, such as marketing incentives and volume incentives, among others. Signing bonuses would be a similar form of incentive. Although not addressed in the comments, we would assume and request clarity that fixed incentives, such as signing bonuses, would be eligible for pro rata treatment over the term of the contract, as these are an element of network competition for issuer brand decisions. We further understand from the comments that funds to the issuer for data security breaches, fines for breaches of operating regulations or chargebacks would be excluded from that calculation. The exclusion of such fines is consistent with the purpose of the statute's circumvention provision, which is focused on issuers receiving other compensation that would have the effect of circumventing the debit interchange fee limitations.

One issue that the Board has not addressed is the treatment of existing contractual relationships. Visa believes that fee arrangements entered into prior to the passage of Section 920 cannot reasonably be viewed as evasions of the interchange fee limitations in Section 920. The economics which drove these relationships were negotiated before Section 920 was enacted or even proposed, and were driven by the market dynamics at the time. Thus, Visa believes that these fee arrangements should be grandfathered.

IV. Competition Analysis

While the Proposed Rule does not analyze the market dynamics of debit cards or the Board's economic theories, the Board appears to have concluded that there is a "market failure" that the Board has been charged with correcting.[67] It appears that unsubstantiated allegations and incorrect assumptions about market competition contributed to the Board's proposed conclusions and approaches – from its decision to narrowly focus on average variable costs, to its alternative proposals on exclusivity and routing, to its proposal on fraud adjustment. Visa feels compelled to respond. We do not submit this material to invite the Board to adjudicate the merchants' incorrect allegations of market failure, which are more properly the province of court proceedings. However, where the Board has discretion to implement various options for adopting implementing regulations for Section 920, it should favor options that are more likely to provide demonstrable consumer benefits, enhance competition among issuers, networks, and acquirers, support cost-effective fraud prevention, and provide appropriate commercial and investment incentives to encourage the usage, growth and continued evolution of electronic debit transactions.

As referenced above, we are providing with this letter a submission by Professor Benjamin Klein, Dr. Andres Lerner, Dr. Kevin Green, and Dr. Guy Ben-Ishai. Among other things, Professor Klein explains the economic role of payment cards and interchange fees, that

[66] Proposed § 235.6(a).
[67] Meeting of the Board of Governors of the Fed. Reserve System Hr'g Tr. at 20-23, Dec. 16, 2010.

interchange fees are not evidence of network market power and that cost-based interchange fees are not more efficient or more competitive than the market-based fees in effect today. [68] To the contrary, Professor Klein further explains that there is no economic basis to conclude that debit interchange fees are inefficiently high. In this regard, Professor Klein shows that to the extent there have been any increases in certain debit interchange fees over time, such as PIN debit increases in the early 2000s, such increases reflect competition for debit issuance, which has benefited consumers and led to significant growth in debit use and acceptance. [69]

Professor Klein provides background on the growth in debit card usage and merchant acceptance as merchants compete to provide consumers options for payment that consumers prefer, and use the utility of payment cards to open new, more efficient sales channels. [70] He explains the valuable benefits merchants receive from debit card acceptance, including the incremental sales delivered by payment systems due to consumer loyalty to payment cards and greater efficiency at the point of sale. In addition, Professor Klein explores the broad range of methods of steering available under the Visa Operating Regulations to merchants who wish to direct consumers to use a different form of payment. Based on this analysis of market dynamics, Professor Klein then provides further support for the key points noted above in this letter.

V. Scope

Although we have not attempted to address every issue potentially raised by the Proposed Rule, we address below certain areas where the Board specifically requested comment or where there may be a more severe unintended impact.

A. Three-Party Networks

Under the Proposed Rule, the term "payment card network" would be defined as an entity that: (1) directly or indirectly provides the services, infrastructure, and software for authorization, clearance, and settlement of electronic debit transactions; and (2) establishes the standards, rules, or procedures that govern the rights and obligations of issuers and acquirers involved in processing electronic debit transactions through the network.[71] In this regard, proposed comment 2(m)-1 clarifies that the term would include "an entity that serves in the multiple roles of payment card network and issuer and/or acquirer, such as in the case of a three-party system," if the entity's guidelines, rules or procedures covered its activities as an issuer or acquirer.

The Board separately requests comments on whether it is appropriate to apply the debit interchange fee standards to three-party payment card networks in which the payment card network serves as both the card issuer and merchant acquirer for payments on the network. We believe that the Board's interpretation (*i.e.*, that three-party networks should be covered) is

[68] *See generally* Klein Submission § I, pp. 7-40.
[69] *See generally id.* § II, pp. 40-49.
[70] *See generally id.* §§ I.B.3, II, pp. 35-49.
[71] Proposed § 235.2(m).

consistent with the plain language of the statutory definition of "payment card network" and with the apparent Congressional intent.[72]

Some "three-party" networks actually permit third parties to issue their debit products, such as Discover, which apparently offers a "signature debit" product.[73] There is no basis for distinguishing such issuance under the statute from participation in the Visa, MasterCard, STAR, Pulse or other networks. Even where the system issues a proprietary debit or prepaid program, such as the American Express Gift Card, however, the Board accurately notes that in a three-party payment card network, the merchant pays the network a merchant discount that includes the sum of an interchange fee, acquirer costs and other fees.[74] As a result, there is a risk that a three-party network could purport to apportion some or all of its merchant discount to its role as network or acquirer, and thereby circumvent the debit interchange fee limitations.

We believe it is critical that the Board address this issue. For example, the Board could request that each of the three-party networks provide the Board with an allocation of what parts of their pricing are acquirer fees, network fees or revenue to their issuing business, along with justification to support such allocations. The Board could then assess the validity of such allocations against other information it has received from debit issuers and "four-party" networks. Alternatively, the Board could require that the three-party networks at a minimum require that part of their merchant acceptance contract identify regulated "interchange" on their billing statement.

There is no basis for exempting such "three-party" networks from the exclusivity and routing restrictions. To do otherwise would create both an unlevel playing field between such issuers and other issuers that choose to participate in regulated networks, and would create a potential loophole where the regulation could be circumvented in any situation where the network and issuer are the same entity. The consequences of exempting three-party networks from the interchange fee standards and other requirements are examined by Professor Klein, who explains that such an exemption would tilt the competitive balance in favor of such networks for reasons that have nothing to do with economic efficiency or consumer welfare.[75]

B. Non-Traditional Payment Systems

The Board also requested comment on whether non-traditional or emerging payment systems would be covered under the statutory definition of "payment card network." As the Board noted, Section 920 defines the term "payment card network" broadly as any "entity that directly, or through licensed members, processors, or agents, provides the proprietary services, infrastructure, and software that route information and data to conduct debit card or credit card transaction authorization, clearance, and settlement, and that a person uses in order to accept as a form of payment a brand of debit card, credit card or other device that may be used to carry out debit or credit transactions." While the Board has narrowed the application of this definition (*i.e.*, by requiring that an entity also establish the issuer and acquirer standards for the processing of transactions over the network), to avoid regulations that unfairly discriminate between

[72] *See* 15 U.S.C. § 1693o-2(c)(11).
[73] *See* Klein Submission §IV.E, p. 79, n. 258.
[74] 75 Fed. Reg. at 81,727.
[75] *See* Klein Submission § IV.E, pp. 78-79.

businesses competing for the same electronic debit transactions or create loopholes that may impact the effectiveness of the regulations, we do not believe that any payment system that meets the Board's definition should be excluded.

The interchange fee limitations of Section 920 apply broadly to any type of electronic debit transaction, except where expressly excluded by the statute. That is, the statute does not distinguish based on the type of payment card network over which a covered electronic debit transaction is processed, and our understanding is that many growing "alternative" payment card networks, such as PayPal, conduct parts of their business in a manner that would meet the statutory definitions, including setting rules and requirements for participation, using a common mark denoting acceptance at multiple unaffiliated merchants, and conducting transactions via "asset accounts" that are accessing demand deposit account funds. At a minimum, "alternative" networks should not be permitted to evade the interchange or exclusivity and routing restrictions through processing methods that operate, in economic substance, like other debit payment card networks. In this regard, we do not believe that the Board should selectively exclude networks from the interchange fee or other limitations. Moreover, to the extent the Board determines that any specific means used by alternative payment networks to access asset accounts is to be excluded, the Board should monitor such networks to assess changes or evolution of their processing models to ensure a level playing field going forward.[76]

C. Business Debit

The Proposed Rule would define the term "account," in pertinent part, as "a transaction, savings, or other asset account . . . established for any purpose."[77] In addition, proposed comment 2(a)-1 would clarify that the term "account" (and, as a result, the Proposed Rule's debit interchange fee limitations and exclusivity and routing provisions) includes business accounts. We believe that the Board should limit the scope of the Proposed Rule to consumer-purpose accounts that are primarily for personal, family or household purposes. We believe that such a limitation would be consistent with the purpose of the statute itself and avoid possibly severe unintended effects. The extension of these regulations to business accounts would reduce issuer revenue on business debit cards by over 90 percent. The higher average purchases, nature of card usage for business-to-business spending (which remains predominantly in expensive invoice and check transactions), and different operation of business debit programs, such as multiple employee cards on a single account, make these card programs inherently different and deserving of different treatment.

At a minimum, the Board should study business debit separately, assessing the issuer costs associated with business card programs and potential consequences of these regulations, before imposing the dramatic changes that this regulation would have on small businesses that both use these cards and choose to accept them. In this regard, Section 903 states that the "primary objective" of the EFTA is "the provision of individual consumer rights."[78] While Section 920 itself does not include any express limitation, we believe that it is reasonable to

[76] Professor Klein's submission addresses the substantial competitive advantages such non-traditional payment systems may receive if they are not covered by the debit interchange fee limitations. *See* Klein Submission § IV.E, pp. 79-80.
[77] Proposed § 235.2(a).
[78] 15 U.S.C. § 1693(b).

interpret the scope of Section 920 consistent with the rest of the statute. That is, business debit should not be covered by Section 920. In this regard, we note that Visa imposes strict qualifications for the issuance of a Visa Small Business Debit card. If the Board excluded business debit transactions from the final rule, Visa would continue to impose such strict qualification criteria to ensure that the exclusion was not used to treat covered consumer debit cards as small business cards. Failing to exempt small businesses may result in a reduction in debit card services to small businesses where debit cards provide important cash management, reporting and accounting benefits.

D. ATM Transactions

The Board has requested comment on the application of the Proposed Rule to ATM transactions and networks. By its plain terms, Section 920's interchange fee limitations apply only with respect to fees paid for purchase transactions at merchants and received or charged by issuers. As indicated by the Board, however, "interchange" fees for ATM transactions are paid by the issuer and ultimately received by the ATM acquirer. As a result, to the extent that a fee in connection with an ATM transaction is paid by the issuer and received by the acquirer, that fee should not be considered an "interchange transaction fee." We believe that the Board should clarify this issue in an express exemption. This would be consistent with the use of the term "payment" in the definition of the term "electronic debit transaction" in the Proposed Rule.

In light of the significant differences between ATM transactions and traditional electronic debit transactions, we believe that the application of the debit interchange limitations to ATM transactions would be nonsensical. The nature of ATM transactions (cash access) and associated economics are vastly different from the broad network of merchants and channels in which debit purchases are made. In addition, the imposition of the exclusivity and routing provisions on ATM transactions—whether Alternative A or B is ultimately adopted—would simply add yet another redundant cost to issuer programs without any basis under the statute or articulated policy benefit. Providing multiple ATM networks on a card for conducting ATM transactions has no connection to merchants, or merchant routing of purchase transactions. We believe that applying the proposed regulations to this channel without an express study and recognition of these differences would be inappropriate and likely would result in a variety of unintended consequences. We recommend that the Board expressly note that ATM networks, issuers and acquirers are specifically excluded.

E. Credit and Charge Cards

In its Proposed Rule, the Board has interpreted the statutory definition of "debit card" to include deferred and decoupled debit cards, and, as a result, those types of cards would be subject to the interchange fee limitations. In addition, the Board notes that issuers may design or offer products with "credit-like" features in an effort to have such products fall outside the scope of the interchange fee limitations. Moreover, the Board cautions that "the EFTA and Regulation E provide that no person may condition the extension of credit to a consumer on such consumer's repayment by means of preauthorized electronic fund transfers."[79] Nonetheless, the Board should distinguish between a requirement for repayment by preauthorized electronic fund

[79] 75 Fed. Reg. at 81,729.

transfers and permitting a credit card or charge card customer to make payment by periodic electronic fund transfer and other means. That is, while the EFTA and Regulation E prohibit conditioning an extension of credit on repayment by preauthorized electronic fund transfers, they do not prohibit permitting (as opposed to requiring) such repayment. In this regard, we believe that the Board should clarify that, to the extent that a card product is subject to the Truth in Lending Act and Regulation Z, it would not be considered a "debit card" for purposes of Section 920 and the interchange fee limitations. This result is supported by the plain language of Section 920, which distinctly uses and defines the terms "debit card" and "credit card."[80]

F. Geographic Scope

We support the Board's decision to limit the scope of its proposal to debit card accounts opened in the United States and to transactions conducted on those accounts within the United States. Nonetheless, we believe that the Board should provide additional guidance regarding the definition of United States, such as a list of covered jurisdictions.

We note that the programming associated with ensuring that covered transactions comply with the pricing limitations based on whether those accounts occur within the "United States" actually represents a significant undertaking. In addition, multiple PIN networks that facilitate transactions for issuers including into or out of the territories and possessions may not be as prevalent as they are within the fifty states and the District of Columbia (the Board may have more detailed information on this from its network surveys). We therefore would suggest that the Board limit the geographic scope of its proposal further to the fifty states and the District of Columbia. Puerto Rico, Guam, American Samoa and the host of other territories and possessions are extremely small in the number of local merchants and issuers, and in the percentage of total US transactions they represent. In this regard, the costs associated with the reprogramming would not be insignificant, although the percentage of debit transaction volume occurring outside of the fifty states and the District of Columbia is less than 0.4%. At a minimum, implementation timelines should be extended for these territories, possessions or subdivisions, given the high level of system impact relative to the very low level of merchant or acquirer benefit in the form of lower interchange.

If the Board elects to include all U.S. territories and possessions as has been suggested, Visa requests that local issuers be included in the data sampling and reporting the Board provides as part of their certification process, to distinguish which issuers and debit products are exempt versus non-exempt from the debit interchange regulation.

* * * *

[80] 15 U.S.C. §§ 1693o-2(c)(2), (3).

We appreciate the opportunity to comment on this important matter. If you have any questions concerning the issues raised in this letter, do not hesitate to contact me at (415) 932-2244.

Sincerely,

/s/

Joshua R. Floum
General Counsel

Appendix A

Economic Analysis of the Federal Reserve Board's Proposed Regulations to Implement EFTA Section 920

Benjamin Klein, Andres Lerner, Kevin Green and Guy Ben-Ishai

Docket No. R-1404

RIN No. 7100 AD63

Economic Analysis of the Federal Reserve Board's Proposed Regulations to Implement EFTA Section 920

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Executive Summary

We have been asked by Visa Inc. ("Visa") to provide comments on the proposed regulations to implement Section 920 of the Electronic Fund Transfer Act ("EFTA"), mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act").[1] In particular, we have been asked to conduct an economic analysis of (1) proposed alternatives for prohibiting debit network exclusivity and routing restrictions by debit networks and issuers; and (2) proposed alternatives for establishing a cost-based regulation of debit interchange fees. The opinions expressed in the report represent our views, not those of Visa Inc. We describe our qualifications at the end of the report in Appendix A.

This report begins with a discussion of economic issues relevant to assessing competition and economic efficiency in the debit card industry generally, and the proposed regulations to implement Section 920 of EFTA in particular. We subsequently turn to addressing the issues identified in the Federal Reserve Board's Notice of Proposed Rulemaking. Our key conclusions on those issues are as follows:

Network exclusivity and routing: The Federal Reserve Board seeks comment on two proposed alternatives for implementing the prohibition on debit "network exclusivity."[2] The first alternative (Alternative A) would require a debit card to have at least two unaffiliated payment card networks. An issuer could comply with this alternative, for example, by having one signature network (*e.g.*, Visa debit) and one unaffiliated PIN debit network (*e.g.*, Star) on a card. The second alternative (Alternative B) would require debit cards to have at least two unaffiliated payment card networks for each method of authorization. Under such an alternative, a debit card enabled for signature and PIN authentication would need to have at least two unaffiliated signature debit networks and two unaffiliated PIN debit networks.

Alternative B would require that every debit card enabled for signature and PIN have at least *four* debit networks. Moreover, the Merchants Payment Coalition (MPC) and others advocate certain "routing restrictions" that would eliminate the ability of a cardholder to choose the network over which its transaction would be routed. These requirements would go beyond prohibiting network exclusivity or mandating multi-homing, neither of which imply the elimination of consumer

[1] Board of Governors of the Federal Reserve System, Debit Interchange Fees and Routing Notice of Proposed Rulemaking, December 16, 2010 [hereinafter Notice of Proposed Rulemaking].

[2] Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub. 111-203), Sec. 920 (b)(1)(A).

choice. Similarly, these requirements seem inconsistent with EFTA Section 920, which aims to prohibit (1) network exclusivity and (2) restrictions on merchant routing by *issuers* and *networks*, but does not restrict the ability of *cardholders* to have a say in what debit system to use.

From the cardholder perspective, the loss of choice will have significant adverse consequences. Different debit networks on the same card could have different fraud and chargeback protections, different benefits, and potentially different cardholder fees, to offer competitive options that win customer preference. But the cardholder would not be able to choose the network over which to execute a debit transaction, and thus would not be able to decide whether to obtain these protections, services, and other benefits, or be able to control the transaction fees that he or she may pay. Moreover, Alternative B would create significant consumer confusion because certain cardholder protections, benefits, and fees would apply on some transactions made on a debit card but not others, without the cardholder choosing or, in many cases, even knowing.

The loss of cardholder choice also would reduce the debit networks' incentives to compete for cardholders by innovating, providing valuable benefits and protections, and offering lower fees to issuers (which are passed through to cardholders). Because cardholders would have no choice as to the debit network that is used, there would be little gain to debit networks and their issuing banks from competing by providing valuable cardholder benefits or lower cardholder fees. In fact, Alternative B would create a free-riding problem between debit networks because all debit networks on the card would benefit from investments and promotion by one debit system to encourage use of the card. The return on investments by one payment system that induced the cardholder to use its debit card would be captured by whatever network convinces the merchant to give it routing preference. Rather than investing in product attributes that cardholders value, other debit systems would simply pay merchants to route transactions through their networks, benefiting from the cardholder interest and usage created by the investment and promotion by a rival debit system. This free-riding problem would undermine the incentives of debit systems to promote debit and to improve debit cards for cardholders, including incentives to introduce new debit technologies.

The ultimate result of this free-riding and, more generally, the reduction or elimination of competition on the cardholder side, would be a market equilibrium in which cardholders would receive few benefits and would bear most or all the costs of operating the debit networks. There is no basis in economics that such an equilibrium would be efficient or competitive. Moreover, the reduction of competition for cardholders and free-riding by debit networks ultimately would reduce debit card usage and volume. Cardholder benefits and promotion of debit have been important factors in spurring the widespread adoption and rapid growth of debit during the last two decades. If these incentives to offer benefits and promote debit usage to cardholders are substantially reduced,

cardholders likely will substitute to other forms of payment. In sum, Alternative B would eliminate consumer choice, inhibit competition and innovation, reduce debit card use, and ultimately harm consumers. Although Alternative A also would reduce competition on the cardholder side to some extent, Alternative A would have less drastic impacts on suppressing competition among debit networks for cardholders.

Advocates of Alternative B, such as MPC, claim that Alternative B would lead to more competition between networks for merchant routing which, in turn, would lead to lower costs to merchants (via either interchange fees lower than the regulated rate or reduced network fees to acquirers). However, a payment system that is less costly to merchants is not necessarily more competitive, efficient, or better for consumers. There is no basis in economics for the assumption that competition for cardholders is less important than competition for merchants, or that regulation should minimize the cost to merchants, regardless of its effects on cardholders.

Neither is there any economic basis for the argument that competition for cardholders is perverse because it may involve higher interchange fees if necessary to win issuer and cardholder preference. The view that competition between payment systems is perverse is based on the incorrect premise that interchange fees are the "price" of debit card services. But the total price of the payment card should consider both sides of the market—merchant costs and cardholder fees and benefits. Reduced cardholder fees and increased cardholder benefits are effectively lower prices to cardholders. Lower interchange fees could mean a lower total price only if pass-through by issuers is lower than pass-through by merchants, but there is no empirical basis for such a proposition. The U.S. retail banking industry is highly competitive, which tends to increase the pass-through rate by issuers, and the available empirical evidence indicates that cardholders have benefited substantially from debit interchange fees.

Neither is there any economic or empirical basis for MPC's claim that lower debit interchange fees would lead to lower retail prices for consumers. Although higher debit interchange fees do tend to increase merchants' costs of completing a debit transaction, they also expand consumers' shopping options and thereby make the demand facing a merchant more elastic. Even a small increase in the elasticity of demand faced by retailers can induce retailers to set lower retail prices by an amount that offsets the increase in merchant costs. In addition, merchants' cost reduction from a decrease in interchange fees likely would be offset by cardholders moving to higher cost payment methods. Consistent with these economic forces, there is no empirical evidence that increases in debit interchange fees have led to higher retail prices.

Allowable costs under the proposed interchange fee standards: The proposed standards would allow issuers to recover through interchange fees only certain narrowly defined variable costs that are "directly attributable" to authorization, clearance, and settlement ("ACS") of a debit transaction. There is no dispute that under the proposed regulations, interchange fees would not cover many of the costs directly related to the issuer providing electronic debit transactions including:

(1) variable costs other than those included in the narrow definition of "ACS" costs identified by the Board staff (e.g., the cost of erroneous or fraudulent transactions and network fees paid by issuers);

(2) costs that are variable but may not be "transaction-specific" (e.g., the cost of producing and distributing debit cards, providing periodic cardholder statements, and educating consumers);

(3) costs that involve "shared" resources with other bank functions (e.g., costs associated with handling cardholder inquiries and disputes regarding transactions); and

(4) costs that are fixed (e.g., costs of implementing and running a debit card program, including the cost of developing and maintaining systems for processing electronic debit transactions).

Issuers' inability to cover their cost of electronic debit transactions through interchange fees would have adverse economic consequences for cardholders. The shortfall of interchange fee revenues would compel issuers to increase debit fees and decrease benefits to cardholders. This would reverse the trend of lower cardholder fees and greater cardholder benefits since the mid-1990s. This trend has taken a variety of forms, including lower (or zero) checking account fees, the elimination of debit transaction fees, enhanced cardholder protections on debit transactions (such as zero liability and enhanced dispute resolution rights), and the proliferation of debit rewards programs. Mandated reductions in interchange fees significantly below issuers' costs would compel issuers to reverse these trends—*i.e.*, to increase debit transaction and checking account fees and to decrease protections and other benefits to cardholders. There is consensus among banking experts that consumers will lose many of the benefits they have received from debit interchange fees if interchange fees are dramatically reduced. In fact, some banks have already begun to take such actions in anticipation of the proposed regulations.

Moreover, the shortfall in interchange fee revenues would undermine issuers' incentives to issue and promote debit cards. These reduced incentives, combined with lower cardholder usage of

debit resulting from higher fees and lower benefits, would hinder the growth of debit (both signature and PIN). The volume of both signature and PIN debit transactions has grown rapidly since the mid-1990s based on any objective yardstick. Debit has become the payment method of choice for millions of US consumers. But this trend would be reversed, or at the very least the growth of debit would be slowed considerably, if interchange fees do not cover issuers' costs of their debit card programs.

The reduced issuance and cardholder usage of debit would not be offset by higher merchant acceptance of debit cards. Use by cardholders is more sensitive to a change in price than card acceptance by merchants. This is because interchange fees increase the value of the payment network not just to cardholders, but also to merchants, who benefit from incremental sales. Higher merchant discounts that result from higher interchange fees are offset by the benefits to merchants through increased incremental sales and customer demand. In fact, for some range of positive interchange fees, merchant acceptance may *increase* with higher interchange fees. Lower price sensitivity on the merchant side implies that a substantial reduction in interchange fees, particularly to a level that does not cover many issuer costs, will lead to a reduction in the volume of debit transactions. In fact, the number of merchants that accept debit (both signature and PIN) has grown rapidly since the mid-1990s, even though PIN debit interchange fees have increased at various times during that period.[3]

In order to prevent hampering the growth of debit, allowable costs should include, at a minimum, network fees paid by issuers, fraud loss costs, and other variable and fixed costs incurred by issuers to support electronic debit transactions, as well as an adjustment for the costs of fraud prevention.

Implementation of interchange fee standard: The Federal Reserve Board proposes two alternatives for implementing the interchange fee standard. The first alternative (Alternative 1) adopts a standard that is issuer specific. Under this standard, an issuer would be permitted to recover only a subset of its average variable costs of ACS up to a cap of 12 cents per transaction, with a "safe harbor" of 7 cents per transaction. Under Alternative 2, any interchange fee at or below 12 cents per transaction would be permitted, independent of an individual issuer's costs.

[3]As described in more detail in Section II, PIN debit interchange fees have generally increased over the last decade, due to increased competition for issuance. However, since 2004, Visa's average effective debit interchange fees have been essentially flat at a system level, although some products or segments have experienced increases while others have experienced decreases.

The interchange standard or safe harbor in either alternative should be applied to the overall average effective interchange fee for the debit card network, not to each debit transaction. Payment networks set different levels of interchange fees for different types of transactions in order to compete more effectively with other payment networks and with other forms of payment in the marketplace and increase network output. The ability to vary interchange fees to reflect variation in fraud and other risks that can vary by merchant segment, transaction size, and authorization method is economically efficient. There is no economic basis for effectively eliminating networks' ability to use such differential pricing.

If one of the Board's proposed alternatives is to be adopted, Alternative 2 would be preferable from an economic perspective, as it would place substantially less administrative burden on industry participants and reduce the monitoring burden of the Board. Calculating average variable costs for individual issuers would be complicated, prone to errors, and open to debate. In contrast, setting an overall industry standard would allow the Fed staff to use statistical sampling and other data collection and analysis techniques that would reduce cost to both the Board and the industry, and increase the accuracy of the cost estimates. Moreover, networks would not have to establish and maintain separate interchange fee schedules for each individual issuer.

The regulation adopted by the Federal Reserve Board also should provide issuers and networks with the greatest possible flexibility to develop and maintain innovative and effective fraud prevention programs and technology. Moreover, fraud adjustments should not be limited to PIN debit card transactions or be designed to discourage signature debit. The view that PIN debit is superior to signature debit solely because PIN debit transactions have lower average fraud rates is based on a flawed understanding of PIN debit fraud rates, and ignores the fact that PIN debit simply has not been available to cardholders in certain merchant segments to date, such as e-commerce, where fraud rates are higher. A common fraud adjustment that does not depend on whether the transaction is PIN or signature would provide issuers with appropriate incentives to undertake fraud prevention investments.

I. Economic Framework for Analysis

A. The economic role of payment cards

1. Competitive payment system balancing

a) Payment card systems deliver incremental sales to merchants that accept the card by providing benefits to cardholders

To understand the role of payment cards, including debit cards, it is necessary to begin by discussing why merchants accept payment cards. A fundamental dimension of retail competition is offering improved services and transaction environments in an attempt to win business from rivals. Merchants compete with each other by offering services that customers desire in an attempt to attract the business of those customers. Merchants spend considerable resources in offering services to attract customers, such as placing stores in convenient locations, offering free parking, constructing or maintaining attractive premises, advertising extensively, and providing knowledgeable sales people. The purpose of providing these services that are valuable to the merchant's customers is to generate profitable incremental sales. All these services entail considerable cost, but each individual merchant determines whether a particular cost is justified by the expected incremental sales generated. This kind of competition between merchants creates significant benefits for consumers.

Merchant decisions to accept payment cards, including debit cards, are analogous to their decisions to compete by offering these other services. Payment cards are not just a transactional mechanism, but are a means by which merchants compete for sales. Like other valuable services that merchants offer consumers, merchant acceptance of payment cards generates incremental sales for merchants because it is a service that consumers value. Acceptance of payment cards thereby helps a merchant compete against other merchants by offering a payment option that is preferred by some customers.

In addition to the inter-merchant demand effects from merchant acceptance of payment cards, payment cards increase aggregate sales for a merchant segment as a whole because consumers tend to spend more when using payment cards. McDonald's publicly acknowledged that accepting payment cards, including debit, has been key to increasing sales, delivering higher than average ticket-lift.[4] A study conducted at quick-service restaurants indicated that average

[4] *Nuggets and Cards,* CARDTRAK, July 25, 2005.

transaction amounts were 30 percent higher when customers used a payment card.[5] Another study indicated that accepting debit and credit cards at vending machines more than doubled the average amount spent by consumers.[6] Signature debit also can be used for Internet transactions, which comprise a very large share of sales in some merchant segments.[7] In fact, some retailers that base their business model on Internet sales (such as Amazon) likely would not exist without payment cards; because of the availability of such efficient payment mechanisms, other merchants are able to extend their sales channels from "bricks and mortar" to e-commerce or mail order. By enabling these new and growing forms of commerce, payment cards help drive incremental sales and support more efficient methods of retail operations. In contrast, cash and checks effectively cannot be used for Internet commerce.[8]

Payment systems are able to generate incremental sales for merchants because many consumers are loyal to a particular payment card they wish to use. This loyalty is created because of the convenience and safety of the payment card. Cardholders can access their funds without the risks and inconvenience of carrying cash, and can make their purchase decisions without being constrained by the amount of cash they happen to be carrying at the time of purchase. Cardholders can also get cash back on PIN debit purchases and avoid ATM fees. Chargeback rights and fraud protection significantly increase the security of transactions for consumers and mitigate the risks created by doing business with unfamiliar or distant merchants.[9] Some debit cards also provide rewards (e.g., in the form of airline miles) or cash back to cardholders. These card benefits entice

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[5] Brian Brus, *Catching the cashless wave: With credit buyers soaring, fast-food restaurants swallow costs to savor benefits*, OKLA. CITY J. RECORD, July 14, 2005.

[6] *Card Payments at Vending Machines Boost Sales*, PR NEWSWIRE, Nov. 19, 2004.

[7] For instance, around one third of all airline bookings are made online. (*CyberSource Online Fraud Report on Airlines Now Available,* PR NEWSWIRE, April 28, 2009.) Online book purchases account for 21.8 percent of all book purchases. (Jim Milliot, *Looking at Who Buys What Where*, PUBLISHERS WEEKLY, Dec. 1, 2008.)

[8] PIN debit also is not widely used for Internet transactions yet because of the difficulty of PIN validation and the discomfort that many consumers feel using their PIN in an on-line environment. Acculynk has been developing and promoting a PIN debit solution for the internet for several years. After a consumer enters his card number into a designated field, the consumer has the option to complete the purchase as a PIN debit transaction using a virtual PIN pad that appears on the screen and scrambles the numbers each time the consumer enters a digit. Whether these types of solutions will be widely adopted or not depends in large part on whether they turn out to be a more efficient and secure method in this channel. (Fredrick H. Lowe, *Accel/Exchange, Acculynk Plan To Test PIN-Debit On the Web,* ATM & DEBIT NEWS, Vol. 10, No. 4, Nov. 20, 2008; Will Hernandez, *Pulse Rolls Out Internet PIN-Debit Payments As Acculynk Gains More Traction*, PAYMENTSSOURCE, July 14, 2010.)

[9] A "chargeback" refers to a transaction for which there is a billing dispute between the merchant and the cardholder and the cardholder requests a reversal of charges on the transaction. Chargeback rights diminish the risk to the cardholder that he or she will be overcharged by the merchant, dissatisfied with the product, or not receive the product at all. Such rights therefore increase the willingness of cardholders to do business with an unfamiliar merchant. Visa also "guarantee[s] that [the cardholder] won't be held responsible for fraudulent charges made with [the cardholder's] card or account information." (http://usa.visa.com/personal/security/visa_security_program/zero_liability.html.)

cardholders to shop at merchants that accept the debit card, and thereby lead to profitable incremental sales from cardholders that prefer to use that card.

b) Competitive payment system equilibrium involves balancing the two sides of the market

Payment systems, including debit card networks, compete in two-sided markets.[10] In two-sided markets, firms supply products demanded by two inter-related groups of consumers. Payment cards are demanded by cardholders, who gain the ability to consummate a transaction with the card rather than with some other medium of exchange that may be less desirable, and by merchants, who benefit from the ability to increase their sales by accepting payment methods that customers wish to use. The demands of cardholders and merchants for a payment card system are interdependent—the value of a payment system to consumers increases with the number of merchants that accept the card, and the value of a payment system to merchants increases with consumer use of the card. In fact, it is useful to characterize a payment card transaction as a single product that is jointly consumed by the cardholder and the merchant. Because cardholders and merchants jointly consume a single product, their consumption of payment card transactions must be directly proportional. A payment system can increase its output only if it attracts demand on *both* sides of the market. Payment systems therefore try to increase transaction volume by competing both to increase cardholder use and to create wide acceptance among merchants, taking into account the interdependent interactions between cardholders and merchants.

The competitive determinants of market prices in two-sided markets differ fundamentally from pricing in one-sided markets. In one-sided markets, a higher price leads to lower output but higher revenue per unit. Pricing in one-sided markets therefore entails a trade-off between selling a larger number of units at a lower price or a smaller number of units at a higher price. In a two-sided market, such as a payment system, these competitive forces operate in a more complex way because of the interaction between the two sides of the market. A payment system must take into account the effects of a fee on demand on both sides of the market. For instance, a fee increase to one side of the market may result in increased overall demand because of effects on the other side of the market. The trade-off between price and output observed in one-sided markets also exists in

[10] *See, e.g.*, Benjamin Klein, Andres V. Lerner, Kevin M. Murphy & Lacey L. Plache, *Competition In Two-Sided Markets: The Antitrust Economics Of Payment Card Interchange Fees*, 73 ANTITRUST L.J. 571 (2006); Howard H. Chang & David Evans, *The Competitive Effects of the Collective Setting of Interchange Fees by Payment Card Systems*, 45 THE ANTITRUST BULL. 641 (Fall 2000); Julian Wright, *The Determinants of Optimal Interchange Fees in Payment Systems*, 52 J. INDUS. ECON. 1 (March 2004); Richard Schmalensee, *Payment Systems and Interchange Fees*, 50 J. INDUS. ECON. 103 (June 2002); Jean-Charles Rochet and Jean Tirole, *Cooperation Among Competitors: Some Economics of Payment Card Associations*, 33 RAND J. ECON. 549 (2002).

two-sided markets, but only if one considers the sum of fees on both sides of the product market—cardholder fees and merchant fees.

The cardholder fee may include transaction fees net of cardholder benefits (such as fraud protection, chargeback rights, extended warranties, free travel insurance, cash back, and rewards). These benefits effectively amount to lower cardholder fees of using the payment system, and may result in a negative price to cardholders. The merchant fee (the merchant discount) is the amount subtracted from the transaction before payment is made to the merchant. In open loop payment systems (such as Visa, MasterCard and PIN debit systems) cardholder and merchant fees are set by issuers and acquirers. Payment systems influence cardholder and merchant fees with the use of interchange fees. Higher interchange fees have the effect of increasing the cost to acquirers and therefore increasing the fee some acquirers charge to merchants. But higher interchange fees also decrease the cost to issuers and therefore create increased incentives for issuers to lower cardholder fees and/or increase benefits.

2. Positive interchange fees are not evidence of network market power

a) A fee structure in which merchants pay a substantial part of the costs of the system that benefits them is implemented by payment systems regardless of market position

The fundamental economic arrangement implemented by payment systems described above—where the payment system balances the two sides of the market—is implemented by payment systems in general, regardless of whether the system is established or a new entrant. The fact that merchants ultimately pay for a substantial part of the costs of operating the payment system that benefits them, including some of the cost of creating a loyal cardholder base, is a result that one would expect from the normal competitive process between payment systems. Since delivering customers to merchants is the economic essence of all payment card systems, we would expect such a fee structure to exist regardless of the payment system's market position.

There are many examples of small payment systems with relatively high merchant discounts. For example, some emerging payment systems such as PayPal collect a fee from sellers but not from buyers.[11] In fact, PayPal charges merchants fees that are equal to or in some places greater than debit merchant discounts despite its smaller size.[12] Another example is fleet cards, which are

[11] *See* www.paypal.com.

[12] https://www.paypal.com; Interlink Interchange Reimbursement Fees, Oct. 2010; Visa U.S.A. Interchange Reimbursement Fees, Oct. 2010.

accepted by many merchants.[13] Interchange fees for fleet cards are often higher than debit interchange fees, despite the fact that they represent a very small share of payment transactions.[14] Similarly, American Express credit and charge cards have a higher average merchant discount than Visa and MasterCard credit cards, despite the fact that American Express accounts for a smaller share of transactions.[15] The Visa and MasterCard credit card systems implemented a similar pricing structure in their infancy, when they comprised a very small share of transactions.[16]

Conversely, a number of other new entrants who have sought to compete by offering a low merchant discount rate (traditionally Discover, but more recently Tempo and others) have struggled to gain traction because their products have not been sufficiently attractive to consumers. Tempo (formerly known as DebitMan), for example, tried to develop an alternative debit network by offering merchant fees equal to about half that of debit card interchange.[17] Despite gaining acceptance at around 200,000 merchant locations, the company reportedly found the development of the network to be uneconomic and abandoned the payment network in 2008.[18]

Other products or services that deliver customers to firms also have fee structures in which one side of the market pays a large portion of system costs. For instance, newspapers deliver eyeballs to advertisers. Newspaper publishers collect from advertisers a large part of the cost of producing the newspaper content, as well as printing and delivering newspapers to readers. Just as

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[13] Fleet cards are payment cards provided by companies to their employees for use at certain merchants such as fuel, repair, and other automotive merchants at the discretion of the fleet operator. Suppliers of fleet cards offer a variety of tracking tools to fleet operators to monitor and control card usage and prevent fraud. They also offer various volume discounts and other incentives for fleet operators to use outlets in the network. Merchant benefits from accepting fleet cards include incremental sales, guaranteed payment, and other transactional benefits.

[14] For example, Credit Card Processing Services lists the Wright Express interchange fee for pay at the pump as 3.5% +15 cents, while Visa's fee is 0.91% + 22 cents for debit. (http://www.ccps.biz/payatpump.html.)

[15] As of 2008, the average merchant service fee for American Express was 2.55 percent. (American Express, *Annual Report*, 2008, p. 22.) In 2008 Visa's and MasterCard's average credit interchange fee ranged from 1.5 to 2.0 percent. (Robin Prager, Mark Manuszak, Elizabeth Kiser, and Ron Borzekowski, *Interchange Fees and Payment Card Networks: Economics, Industry Developments, and Policy Issues*, Federal Reserve Board, 2009 [hereinafter Fed Staff Working Paper], p. 12.) The Nilson Report reported American Express's total credit card volume in 2009 at $423.7 billion, compared to MasterCard's total credit card dollar volume of $525.4 billion and Visa's total credit card dollar volume of $830.1 billion. (THE NILSON REPORT, No. 942, Feb. 2010.)

[16] After Bank of America moved in 1971 to an open-loop payment card structure (first known as National BankAmericard, Inc. and ultimately Visa), its initial interchange fee was 1.95 percent, compared to Visa's average interchange for consumer credit cards in 2008 of 1.86 percent. (David S. Evans & Richard L. Schmalensee, PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING 154 (2nd ed., The MIT Press 2005) [hereinafter *Paying with Plastic*].)

[17] Kate Fitzgerald, *A Crossroads Ahead for Interchange?* CARDS & PAYMENTS, March 2, 2009.

[18] *Id.* It is our understanding that Tempo still offers other products, such as affinity debit cards that are tied to a cardholder's existing account and co-branded with MasterCard or Discover. Authorization of these debit cards is conducted over the card network's systems. However, settlement is conducted through ACH. These products are distinct from Tempo's alternative debit network discussed above. (*See also*, Sean Sposito, *Reform's Effect Unclear on Decoupled Debit*, AMERICAN BANKER, Sept. 3, 2010.)

the merchant discount covers much of the cost of building a loyal cardholder base through card benefits and rewards, the charge to advertisers covers much or all of the cost of getting readers. Of course, advertisers would prefer to pay only for the cost of printing their ads (*i.e*., the ink and paper costs). However, the fact that advertisers pay for much of the cost of attracting readers does not indicate that the newspaper publisher has market power. Any newspaper or payment card system, regardless of size, would implement such a fee structure in competition with other newspapers or payment card systems. Similar economic considerations apply to many two-sided Internet based businesses that have grown rapidly in recent years, such as Google, Facebook and Groupon. Google derives most revenues from advertisers, who get access to eyeballs generated by Google's search engine. Facebook is funded through advertising revenues. Groupon, a "deal-of-the-day" website, delivers customers to retailers, who fund the service. Advertisers and retailers cover most of the costs of operating these services, whereas consumer fees are minimal or zero.

Thus, the claim that interchange fees are an exercise of market power—the effect of which is to anticompetitively raise the cost of merchant acceptance—is flawed. A similar cost structure is implemented by payment systems and other services that deliver customers to merchants, regardless of their market position.

b) <u>The total price of the payment card should consider both sides of the market—merchant costs and cardholder fees and benefits</u>

The market power of a payment system may influence the ability of the payment system to charge a total price above costs, but has no predictable effect on interchange fees. The total price collected by the payment system, which is equal to the sum of the fees charged to cardholders and to merchants, will depend on the competitive environment of the payment system, as well as short-run demand and supply conditions in the payment system market. This effect of competition on the total price collected by the payment system is analogous to pricing in one-sided markets.

However, the relative fees to the two sides of the market are independent of the total price collected by the system. Consider, for example, a hypothetical payment card system with a very small market share that competes against numerous rivals that constrain the system to collect a total price that equals total costs. Despite being competitively constrained to a total price that only covers its costs, such a payment system likely would find it optimal to balance the two sides of the market, and may even set a negative fee on the cardholder side of the market and a fee greater than total costs on the merchant side. Competition from other rival systems would not prevent the payment system from charging a fee on the merchant side that is greater than the total cost of supplying the payment system, because a rival payment system that offers a lower merchant discount also will have higher cardholder fees (or fewer cardholder benefits) and a smaller and less loyal cardholder

base. Therefore, the rival system will have less ability to deliver incremental sales and will provide a lower value to merchants. Competition, even if vigorous, does not force a payment system to set fees to each side of the market that equal or approximate the costs incurred on that side.

There is no reason to expect that a small payment system in a very competitive market will balance the two sides of the market any differently than an established payment system. Relative fees to merchants and cardholders are unrelated to whether a particular payment system has a significant market position. Rather, the relative fees paid by cardholders and merchants are determined by two-sided market balancing considerations, which are invariant to the degree of payment system market power. The role of interchange fees is to influence *relative* merchant and cardholders costs and not the total price collected by the payment system.[19] Although higher interchange fees increase costs to acquirers, which are often passed on to merchants in higher merchant discounts, they also offset issuer costs, and therefore lead to lower cardholder fees, more innovation, and other features that may encourage usage such as cardholder protections or rewards. A higher interchange fee therefore does not indicate that the payment system is collecting a higher total price. It indicates only that the payment system has decided that the value of the payment system is enhanced by collecting a higher *fraction* of the total price from merchants rather than cardholders. Accordingly, higher interchange may increase transaction volume and enhance value by balancing merchant and cardholder participation.

In fact, a reduction in payment card system competition, say if Visa and MasterCard merged their debit operations, may in fact lead to lower, not higher, interchange fees. The effect on interchange fees of a reduction in payment system competition would depend on the reduction in demand elasticity on the merchant side of the market relative to the reduction on the cardholder side. To the extent that competition between payment systems for debit issuance has led to increases in interchange fees, a reduction in competition between payment systems likely would have the effect of reducing competition on the cardholder side more than on the merchant side. Accordingly, a reduction in payment system competition likely would lead to lower interchange fees. This is consistent with the fact that increased competition for issuance with American Express and Discover as a consequence of the *United States v. Visa* decision (which allowed these closed-loop payment systems to compete for agreements with banks that also were members of Visa or

[19] Only if pass-through by issuers is lower than pass-through by merchants would higher interchange fees imply a higher total payment system price, but there is no empirical basis for such a proposition. (*See* discussion, Section I.B.2.)

MasterCard) put upward pressure on credit card interchange fees, a result anticipated in the court proceedings.[20]

c) Interchange fees do not restrict payment system output

Moreover, in contrast to an exercise of market power, higher interchange fees often *increase* rather than restrict payment system output. Positive interchange fees incentivize issuers to issue cards and offer card benefits, and therefore increase cardholder use. Card use by cardholders is more sensitive to a change in interchange fees than card acceptance by merchants. Interchange fees have a small effect on merchant acceptance because, although they tend to increase the cost paid by merchants, they also increase the value of the payment system to merchants. In fact, for some range of positive interchange fees, merchant acceptance may *increase* with higher fees.[21] This is consistent with the significant increase in merchant acceptance of PIN debit cards in the past 10 years, despite some increases in PIN debit interchange fees.[22]

Reduced price sensitivity on the merchant side implies that investments made to increase cardholder demand for the product or reduce cardholder costs will result in a greater effect on system growth than investments made to increase merchant demand or reduce merchant costs. The positive effect on output of a price cut is enhanced by cutting prices to the most price-sensitive consumers. The negative effect on output of a price increase is minimized by increasing prices to the least price-sensitive consumers. In the case of changes in interchange fees, which are always necessarily both a "price" increase to one side and "price" cut to the other side, output is enhanced by taking into account price sensitivity on each side of the market. A transfer payment from acquirers to issuers increases cardholder use more than it decreases merchant acceptance, increasing payment system transactions. Thus, in contrast to one-sided markets, an increase in interchange fees typically does not imply a reduction in output, as price increases do in one-sided markets.

This output enhancing effect of balancing the two sides of the market is widely recognized in the economics literature.[23] It was also recognized by the Fed staff in its working paper on

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[20] United States v. Visa U.S.A., Inc.,163 F. Supp. 2d 322, 408-09 (S.D.N.Y. 2001). *See also*, *Visa Hikes Credit Card Fees to Blunt AmEx's Thrust*, DIGITAL TRANSACTIONS, Feb. 24, 2004, describing increased competition with American Express for issuance, among other factors, as one of the reasons that Visa raised interchange fees in 2004.

[21] As we discuss in Section I.B.3.b, the ability of a debit network to raise debit interchange fees is constrained by several competitive factors. At some level of interchange fees, merchant participation would decline, and overall system value and output would decrease.

[22] *See* discussion, Section II.B.1.

[23] *Supra* note 10.

interchange fees, concluding that "[o]n the card user side of the market, card user fees (rewards) would be expected to rise (fall), thereby making the card less attractive to consumers, compared with other payment methods. Overall, the effect of consumer substitution away from the regulated card system would likely dominate that of increased merchant acceptance, leading card use for the system to decline."[24] In most situations, an output expansion is taken as evidence of procompetitive effects of a particular business practice, and evidence against the proposition that the firm has exercised market power.

Indeed, as a matter of economics, Visa or other debit networks have incentives to set interchange fees that increase payment system output because interchange fees are not network revenue; payment networks collect only service and transaction processing fees which are paid by issuers and acquirers either on a per-transaction basis or as a percentage of the transaction amount.

MPC and its economists claim that higher interchange fees anticompetitively restrict payment system output because they limit merchant acceptance of the payment card.[25] However, this claim incorrectly focuses only on the cost to merchants, but not the benefits created by the payment card system. Merchant acceptance is driven not only by the cost of acceptance, but also by the value that individual merchants derive from the payment system. With lower interchange fees, the value of the payment system to cardholders may be reduced, and the system's ability to deliver profitable incremental sales to individual merchants would therefore be diminished. Interchange fees that appropriately balance incentives for participation in the payment network thus allow the payment system to offer a higher value product to merchants.

Moreover, even if a high interchange resulted in lower merchant acceptance, as MPC claims, this would not indicate a restriction of output. The "output" of a payment system is the volume of transactions, not the number of merchants that accept the card. Transactions are a function of merchant acceptance, merchant steering, and cardholder use. Analogously, the output of a particular product is not the number of retailers that stock the product; it is purchases by consumers,

[24] A restriction of payment system output is not the potential concern with debit interchange fees expressed by the Fed staff. Rather, in its working paper, the Fed staff states that "[i]n this case, the misallocation would involve excessive use of certain payment methods (presumably credit cards and perhaps signature debit cards) at the expense of others relative to the 'efficient' level. Absent such evidence of an inefficient outcome, some would argue that government intervention is unwarranted." (Fed Staff Working Paper, pp. 47, 53.)

[25] MPC states that "[t]he result has been the convergence of PIN and signature rates … a trend that has contributed significantly to the suppression of PIN debit acceptance in the United States." (Submission of the Merchants Payment Coalition to the Board of Governors of the Federal Reserve System Regarding Section 920 of the Electronic Fund Transfer Act, Oct. 27, 2010 [hereinafter MPC Paper], p. 5.) Similarly, Salop et al. claim that "[h]igher PIN debit interchange fees by Interlink and the smaller networks reduces merchants' incentives to install PIN pads to accept PIN debit, *ceteris paribus*." (Steven C. Salop and Charles River Associates, "Economic Analysis of Debit Card Regulation Under Section 920," Oct. 27, 2010 [hereinafter Salop Paper], p. 19). They further state that "[I]nterchange fees also reduce merchant acceptance of PIN debit cards in general." (Salop Paper, pp. 19-20.)

which are a function of both retailer distribution and customer choice. Indeed, the number of merchants accepting Visa signature debit cards and the number of consumers holding those cards have both grown substantially during the last decade.[26] Such rapid growth in participation on both sides of the two-sided market suggests that prices are relatively balanced with demand on the two sides of the market. Similarly, contrary to MPC's claim that higher interchange fees have suppressed PIN debit, the acceptance, issuance, and transaction volume of PIN debit have increased rapidly in the past decade. (*See* discussion, Section II.)

d) Cost-based interchange fees are not more efficient or competitive

In one-sided markets, competition tends to drive prices towards long-run costs over time.[27] However, there is no basis in economics that cost-based interchange fees are more efficient or competitive than interchange fees set based on balancing the value provided to each side of the market, even if they result in fees on one side that are above cost-based levels. Cost-based interchange fees are neither a competitive nor socially efficient market equilibrium. This conclusion is widely accepted in the economics literature on two-sided markets.[28]

Similarly, the Fed staff states in its working paper on interchange fees that "[i]n general, an efficient interchange fee is not solely dependent on the cost of producing a card-based transaction nor is it equal to zero."[29] The Fed staff explains that "[a]n efficient interchange fee may yield prices for card services to each side of the market that are 'unbalanced' in the sense that one side pays a higher price than the other."[30] The Fed staff also criticizes cost-based regulation of interchange fees, concluding that "the determination of which costs should be included in a cost-based fee is

[26] Between 2000 and 2007, the compound annual growth rate for Visa signature debit cards issued was 15.3 percent and the compound annual growth rate for merchants accepting Visa signature debit was 7.9 percent. From 2000 to 2009, the compound annual growth rate for merchants accepting Visa signature debit was 7.2 percent. After 2007 Visa stopped reporting Visa signature debit and Interlink cards issued separately and instead only reported cards issued for Visa signature debit and Interlink combined. (THE NILSON REPORT, No. 738, April 2001; THE NILSON REPORT, No. 760, March 2002; THE NILSON REPORT, No. 902, May 2008; THE NILSON REPORT, No. 942, Feb. 2010.)

[27] Dennis W. Carlton & Jeffrey M. Perloff, Modern Industrial Organization, 4th ed. (Addison-Wesley, 2005), pp. 56-86.

[28] *See* Julian Wright, *The Determinants of Optimal Interchange Fees in Payment Systems*, 52 *J. of Indus. Econ*. 1 (2004); Benjamin Klein, Andres V. Lerner, Kevin M. Murphy & Lacey L. Plache, *Competition In Two-Sided Markets: The Antitrust Economics Of Payment Card Interchange Fees*, 73 ANTITRUST L.J. 571 (2006); Richard Schmalensee, *Payment Systems and Interchange Fees,* 50 J. OF INDUS. ECON.103 (2002); Richard Schmalensee and David Evans, *The Economics of Interchange Fees and their Regulation: An Overview*, MIT Sloan Working Paper No. 4548-05 (2005), p. 5.

[29] Fed Staff Working Paper, pp. 3, 18.

[30] *Id.*, p. 3.

necessarily arbitrary" and "the economic theory underlying the efficient interchange fee provides no rationale for either a strictly cost-based interchange fee or an interchange fee of zero."[31]

Economics does indicate, however, that if issuers are not allowed to cover the costs of their payment programs, they will either pass on such costs directly to cardholders or have limited incentives to encourage payment card use. As we discuss in Section IV below, issuers must incur significant costs, in addition to the basic costs of authorizing, clearing, and settling transactions, to operate a debit card program, including providing cardholder protections and other benefits that encourage card use. Because cardholders are much more price sensitive than merchants, imposing such costs on consumers would be detrimental to payment system volume and economic efficiency. Thus, to the extent that interchange fees must be regulated below the private level, it is important to ensure that interchange fees cover all of issuers' costs of operating a debit card program and encouraging debit use.

B. There is no economic basis to conclude that debit interchange fees are inefficiently high

MPC and its economists claim that current levels of debit interchange fees represent an exercise of market power by the debit networks and that they create a social inefficiency. For example, MPC claims that "[e]conomic theory also supports the conclusion that debit interchange is not necessary, and that it likely reduces consumer welfare. Network market power is responsible for the creation of the current debit interchange scheme under which interchange fees far exceed the competitive market level."[32] However, contrary to these claims, there is no economic basis to conclude that debit interchange fees are inefficiently high.

In its working paper on interchange fees, the Fed staff concludes that in theory, interchange fees can be too high or too low from a social efficiency perspective, stating that "it is not entirely clear that, under the status quo, the market is in fact generating outcomes that are inefficient (or at least less efficient than would result from intervention)."[33] They also conclude that "determining whether observed patterns of card fees (including interchange fees) and card usage are socially

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[31] *Id.*, pp. 47-48.

[32] MPC Paper, p. 5. Similarly, Doug Kantor, Counsel for the MPC, testified that interchange fees are not subject to any price competition. (Testimony of Doug Kantor, Counsel for Merchants Payments Coalition, Before The U.S. House of Representatives Financial Services Subcommittee on Financial Institutions and Consumer Credit Hearing, "Understanding The Federal Reserve's Proposed Rule on Interchange Fees: Implications and Consequences of The Durbin Amendment," February 17, 2011 [hereinafter MPC Testimony], p. 6.)

[33] Fed Staff Working Paper, p. 52. *See also id.*, p. 53: "The extent to which various interventions could alleviate concerns in payment card markets is unknown and any intervention could have unintended adverse consequences for the payment card market and the overall retail payments system. Whether such unintended consequences might yield distortions that outweigh any efficiency gains from intervention is an important consideration."

optimal is an extremely difficult task."[34] However, in connection with the proposed regulations, the Fed staff also seems to have accepted, at least in part, some of the claims made by MPC and its economists. In particular, the Fed staff suggests that, in practice, debit interchange fees may be inefficiently high because competition between debit networks for cardholders tends to drive up interchange fees and thereby lead to higher prices for consumers.[35] Below, we discuss the lack of any economic or empirical basis for these conclusions.

1. *There is no economic or empirical basis for the proposition that higher debit card interchange fees lead to higher prices for consumers*

a) Economic theory does not indicate that higher interchange fees lead to higher retail prices

The MPC and its economists claim that current market-based interchange fees have led to higher prices for consumers because merchants generally pass on to consumers the costs of debit card acceptance through higher prices for goods and services.[36] However, contrary to these claims, there is no basis in economic theory for the proposition that higher interchange fees lead to higher retail prices.

MPC's economists cite a variety of economic studies of sales taxes and excise taxes which purport to find that increased taxes on merchants are fully passed on to consumers in higher retail prices.[37] On the basis of these studies, they claim that merchants pass through 100 percent or more of the merchant discount to customers. And, because interchange fees tend to raise the merchant discount, they conclude that interchange fees lead to higher prices for all consumers.[38] This argument fails.

Higher interchange fees do tend to indirectly increase merchants' costs, but this is only a partial and incomplete analysis of the effect of interchange fees on merchant prices. There are fundamental differences between a merchant's economic incentive to pass on a sales or excise tax, on which MPC's economists base their claims, and the economic effects of interchange fees on

[34] Fed Staff Working Paper, p. 2.

[35] Transcript to the Meeting of the Board of Governors of the Federal Reserve System, December 16, 2010 [hereinafter, Board Transcript], pp. 21, 25.

[36] MPC Paper, p. 6; Salop Paper, pp. 2, 20.

[37] Salop Paper, p. 28.

[38] *See, e.g.*, Salop Paper, p. 2: "[t]he high interchange fees raise the merchant discounts charged by acquiring banks to merchants. These higher discounts raise the costs of all the competing merchants who accept these cards, which in turn results in these fees being passed through to consumers in the form of higher merchandise prices. This merchant-side pass-through rate is likely to be very high. Economic studies of the analogous price impact of sales taxes have found cost pass-through rates approaching 100%, or even more."

retail prices. In particular, while increased interchange fees tend to indirectly raise the costs to merchants, they also have economic effects on the cardholder side of the market.

Payment cards, including debit cards, expand consumers' shopping options and thereby make the demand facing a merchant more elastic. Payment cards make it possible for customers to shop at many merchants where they would not otherwise. The transactional convenience, security, and cardholder protections associated with payment cards make it possible for a much wider variety of merchants to meet the needs of a given customer. Because of the additional security provided by network chargeback rules and dispute resolution procedures, for example, consumers can comfortably deal with unfamiliar merchants and low-overhead discounters. Signature debit cards also enable consumers to make purchases over the Internet and over the telephone, and thereby take advantage of low-priced opportunities and greater variety of goods and services from merchants beyond their nearby physical surroundings.

Compared to checks, debit is accepted at a much larger number of merchants. Even when a merchant accepts checks, it may do so only for regular customers who have an ongoing relationship with the store. Moreover, it frequently is impractical to use checks for many transactions for which debit cards are used routinely and at places where the speed of transaction is important, including all online and telephone transactions, automated fuel dispensers and vending machines, parking garages, quick service restaurants and many other small dollar transactions, self-service check-out lines, purchases on board airline flights, and transactions in foreign countries. Therefore, payment card consumers can choose from a significantly larger number of alternative merchants for many of their purchases.

Moreover, in contrast to cash, debit card consumers have a greater ability to make large durable goods purchases when they see favorable prices or to stock up on staple items that are on sale because the customers are not limited to cash in their wallet. Signature debit expands the merchants available to consumers more than PIN debit because signature debit cards are accepted by a larger number of merchants than PIN debit.[39] Therefore, signature debit cardholders can choose from a larger number of alternative merchants for many of their purchases than PIN debit users can.

By increasing shopping options for consumers, payment cards make the demand faced by individual merchants more elastic, and the greater elasticity of demand leads retailers to price closer to cost. Merchants have an incentive to implement lower prices and capture incremental sales from

[39] Roughly 24.4 percent of merchant locations that accept Visa accept PIN debit. (THE NILSON REPORT, No. 942, Feb. 2010; Notice of Proposed Rulemaking, p. 115.)

debit (and credit) card customers, who have greater shopping options. Because interchange fees provide increased incentives for card usage, they enhance the effect of making the demand faced by individual merchants more elastic and decreasing retail prices. In fact, even a small increase in the elasticity of demand faced by retailers can induce retailers to set lower retail prices by an amount that offsets the increased merchant costs from interchange fees. For instance, a small increase in the elasticity of demand faced by an individual retailer, say from negative 3.0 to negative 3.1, will reduce the retailer's profit maximizing margin by slightly more than one percentage point.[40] This one percentage point decline in margin is substantially larger than the reduction in interchange applicable to the typical merchant's transactions due to the proposed regulation, which is on the order of one quarter of one percent of sales.[41] Payment cards therefore can have the effect of inducing merchants to set lower retail prices. Consumers, including customers using cash and checks, benefit from the lower merchant prices resulting from the higher demand elasticity of customers using payment cards.[42]

In sum, in contrast to sales taxes, economics predicts that interchange fees may in fact lead to lower, not higher, retail prices.

b) Merchants' cost reduction from a decrease in interchange fees would be offset by cardholders moving to higher cost payment methods

The analysis by MPC and its economists is also incomplete because they assume, without basis, that (1) a reduction in debit interchange fees would not change the relative use of different payment methods; and (2) other payment methods are all less costly to merchants than debit cards. However, neither of these assumptions is valid. As detailed below, a substantial reduction in debit interchange would likely induce cardholders to switch to competing payment methods that are often more costly to the merchants. This was recognized by the Fed staff in its working paper, which noted that "[t]he extent to which merchant costs decline would depend on the merchant costs associated

[40] An elasticity of demand is a measure of the sensitivity of the quantity demanded of a product to a change in its price. More precisely, it gives the percentage change in quantity demanded in response to a percentage change in price. An elasticity of demand of negative 3.0 implies that a merchant's unit sales would decline by 3 percent if it raised its prices by 1 percent. An increase in a merchant's elasticity of demand from 3.0 to 3.1 implies a reduction in the merchant's margin over marginal cost ((price-marginal cost)/price) from a 33.3 percent margin to a 32.3 percent margin.

[41] The Fed Survey reported that the average interchange fee on debit transactions was 44 cents or about 1.14 percent of average transaction value. (Notice of Proposed Rulemaking, p. 27.) For a merchant with 30 percent of sales that are paid with debit, a 73 percent reduction in this fee to 12 cents would imply an interchange fee reduction equal to 0.25 percent of sales (one-quarter of one percent of sales).

[42] Steve Salop and Joseph Stiglitz analyze an analogous economic effect in which consumers' "stocking-up" decisions that increase shopping flexibility induce merchants to set lower retail prices. (Steve Salop and Joseph E. Stiglitz, *The Theory of Sales: A Simple Model of Equilibrium Price Dispersion with Identical Agents*, 72 AM. ECON. REV. 1121, 1125 (1982).)

with the payment methods to which consumers switch (and could theoretically increase, if consumers switch to a payment method that is more costly to merchants)."[43]

The proposed reduction in debit interchange fees can be expected to lead to a significant decline in consumer demand for debit. When debit interchange falls, banks would have significantly less incentive to promote debit usage to their cardholders. As discussed in detail in Section IV, banks will likely also increase cardholder fees and reduce card benefits such as debit rewards programs. In addition, debit may lose share to reloadable pre-paid cards and other emerging systems such as PayPal and BillMeLater.[44] Moreover, as discussed in Section IV below, if the Board chooses to apply interchange caps at the level of the individual transaction rather than at the system level, issuers may have incentives to limit use of payment cards in merchant segments where the cap is well below actual issuer cost (such as segments with relatively high fraud costs). For all these reasons, consumers will have incentives to reduce their debit usage in favor of other methods of payment, such as credit, cash, and checks. As detailed below, the shift away from debit to other methods of payment can increase merchant costs because debit cards are often less costly to merchants than other payment methods.

While MPC's economists assume that merchants' cost of processing debit is higher than the cost of other payment methods such as cash and check, they provide no support for this assumption. Both the Federal Reserve and the Government Accountability Office recently have questioned whether there is sufficient evidence to establish that cash is less costly than debit. In particular, after reviewing the available empirical research, the Government Accountability Office concluded that "while most of the studies we reviewed found cash to be the least expensive payment form to process, the methodologies used in the studies were not consistent and the data contained in many of them were outdated."[45] Similarly, the Federal Reserve concluded that "precise estimates of the costs to merchants of accepting a form of payment—checks, cash, debit, or credit—are difficult."[46]

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[43] Fed Staff Working Paper, p. 47.

[44] *See* discussion, Section IV. E.

[45] Government Accountability Office, *Credit and Debit Cards, Federal Agencies Benefit from Card Acceptance, but Have Limited Ability to Control Interchange Fee Costs*, Testimony Before the Financial Services & General Government Subcommittee, Committee on Appropriations, U.S. Senate, June 16, 2010 [hereinafter GAO Benefit Study, June 2010], p. 9.

[46] Board of Governors of the Federal Reserve System, Report to the Congress on the Disclosure of Point-of-Sale Debit Fees, Nov. 2004, pp. 9-10.

The economic research indicates that the cost of alternative payment methods depends critically on the purchase amount and the merchant category for which payment is offered.[47] For instance, the studies indicate that cash can be more costly than debit for large purchases.[48] They also indicate that checks and some other methods of payment frequently generate greater costs for merchants than debit for typical purchase amounts in many merchant categories.[49] In addition, as described in more detail below, this research ignores or understates several other benefits that merchants obtain from debit.

Merchants incur a wide range of operational and labor costs associated with non-electronic payments. Such costs often include greater handling costs, counterfeit, insufficient funds, tender time, float and potentially longer operating hours. Although such costs are frequently excluded from comparisons of processing costs across payment methods, they are potentially far greater than the proposed merchant savings in debit interchange. These additional costs of using cash and checks can be significant relative to the merchant discount associated with debit card transactions.

For example, the 2010 Federal Reserve Payments Study reports that roughly 0.45 percent of checks are returned unpaid, accounting for $103 billion in 2009.[50] In comparison, the acceptance of Visa debit cards avoids merchants' collection risk because payment is guaranteed by Visa issuers and because the merchant can verify whether the customer has sufficient funds at the time of transaction. If a merchant complies with the debit network authorization procedures, it generally does not face the risk of unpaid or insufficient funds. Similarly, the merchant does not bear risk of fraud losses in face to face transactions if the transaction is properly authenticated or in e-commerce

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[47] *See*, *e.g.,* Daniel Garcia-Swartz, Robert Hahn, and Anne Layne-Farrar, *The Move Toward a Cashless Society: Calculating the Costs and Benefits*, 5 Rev. of Network Econ. 175 (2006) [hereinafter, Garcia-Swartz et al.], which indicates that the processing costs of cash vary considerably across different merchant categories. For instance, the cost of cash for a $100 purchase in a grocery store ($2.60) is more than five times the cost of the same purchase amount in an electronics store ($0.50). Within the same merchant category, the cost of cash expressed as a percentage of the purchase amount varies tremendously across different purchase amounts. For grocery stores, for instance, the cost more than triples from a $54 purchase to a $12 purchase (as a percentage of the purchase amount it increases from 0.8% to 2.6%). (*Id.,* pp. 184, 192*.)*

[48] *See*, *e.g*., Garcia-Swartz et al., p.184, which indicates that although cash remains the least costly method for grocery store merchants at typical transaction sizes, for a $100 purchase at a grocery store, the merchant's processing cost of signature debit ($2.27) is lower than the cost of cash ($2.61). Similarly, Humphrey et al. explain that "while cash is clearly the cheapest on a per transaction basis, it is on par with the cost per $100 in sales for a check, ACH, or a debit card " (David Humphrey, Magnus Wilesson, Ted Lindblom and Goran Bergendahl, *What Does It Cost to Make a Payment*, 2 REV. OF NETWORK ECON, 159 163 (2003).)

[49] *See*, *e.g*., Garcia-Swartz et al., Table 5, which indicates that for a $65 purchase at an electronics store, signature debit ($1.52) is less costly than checks ($1.63). This is also consistent with the General Accountability Office report which concluded with respect to checks that payment cards have lower processing costs and are deposited in merchant accounts faster than checks. (GAO Benefit Study, June 2010, p. 8.)

[50] Federal Reserve System, *The 2010 Federal Reserve Payments Study Noncash Payment Trends in the United States: 2006 - 2009*, Dec. 8, 2010, p. 9.

transactions if the merchant uses available fraud prevention tools. One indication of the magnitude of such merchant costs and risks is the cost of check guarantee services, which are provided by third parties to merchants to insure against collection risk. Check guarantee services are generally more expensive than the fees paid by merchants for debit, even though they are analogous to just one of the functions provided by debit cards.[51] Compared to the cost of returned checks, merchant fraud costs from debit cards are small.[52]

The Federal Reserve Board investigated merchant costs of accepting different payment methods in 2004.[53] In its report to Congress, the Board suggested that the cost of cash and checks includes a wide range of indirect costs. With respect to cash, the Board stated that "[t]he primary costs of accepting cash include labor costs (specifically, the wages of employees who handle cash), security costs, and fees paid to depository institutions for cash-handling services."[54] With respect to checks, the report listed several additional costs such as "labor costs (the wages of employees who handle checks), expenses related to maintaining the merchant's automation infrastructure, and the cost of managing 'exceptions,' such as bounced or fraudulent checks … the 'float,' or the time elapsed before a check clears, and the delay that occurs in the checkout line when a customer writes a check at the cash register," as well as payments to third party check processors.[55] The Board concluded that "[n]onmonetary costs make up a large share of the merchant's cost of

[51] According to one merchant services provider, "the Guarantee Processor charges the merchant a Discount Fee (percentage) on ALL checks they accept, usually around 1.50% (or in the range), and agrees to cover all returned checks, provided that the merchant has followed the Processor's Check Acceptance Rules. The fee scale varies by merchant type and the associated risk, but is rarely lower than 0.99%. A per item Transaction fee of around $0.15 to $0.35 is also charged." (http://www.merchantseek.com/checkg.htm.) First Data's TeleCheck system offers a promotional rate of 1.39 percent plus 25 cents per transaction and states that this is less than the industry standard of 1.85 percent plus 35 to 50 cents per transaction. (http://www.instamerchant.com/check-guarantee.html.) MPC attempts to dismiss the relevance of the costs of check guarantee services. They state that "the price of check guarantee services is inapposite" because the "the price of check guarantee services also reflects the higher risks of checks (relative to debit transactions), including the fact that checks typically have higher tickets, and the critical fact that, unlike electronic debit transactions, there is no real-time authorization with most checks." (Supplemental Submission of the Merchants Payment Coalition to the Board of Governors of the Federal Reserve System Regarding Section 920 of the Electronic Fund Transfer Act, Nov. 2, 2010, p. 5.) But that is precisely our point—that checks are more costly to the merchant than debit cards because of the higher risk and lack of real-time authorization.

[52] A recent publication by the Federal Reserve Bank of Kansas City indicates that merchants incur only 38 basis points of a single cent for every $100 in fraud costs for debit and credit card transactions. (Richard Sullivan, *The Changing Nature of U.S. Card Payment Fraud: Industry and Public Policy Options*, Federal Reserve Bank of Kansas City Economic Review Second Quarter 2010, Table 3 at 113.)

[53] Board of Governors of the Federal Reserve System, Report to the Congress on the Disclosure of Point-of-Sale Debit Fees, Nov. 2004.

[54] *Id*., p. 10.

[55] *Id*.

processing cash and, to some extent, checks. In contrast, the primary costs of accepting debit and credit take the form of fees paid by the merchants to other parties."[56]

A 2008 GAO Report regarding the cost of acceptance of different payment methods by Federal agencies reached similar findings. It reported that payment card use leads to a "reduction in costs and exposure to fraud and errors from misplacing or miscounting cash and checks,"[57] and reductions in checkout time,[58] personnel expenses associated with preparing cash and check deposits,[59] and other processing costs.[60] The report concluded that "[f]ederal entities realize benefits from accepting credit and debit cards, including increased customer satisfaction, fewer bad checks and cash thefts, and improved operational efficiency."[61]

The high cost of accepting checks is indicated by the fact that many merchants do not accept checks, or have stringent requirements to do so, despite the fact that checks have a zero merchant discount. This illustrates that many merchants consider the risk of non-payment and other costs of checks to be significantly greater than for payment cards. In addition, merchants that currently accept a high proportion of checks relative to other merchant segments (e.g., supermarkets) are typically merchants with a high number of repeat customers who are able to minimize fraud losses from bad checks through such methods as issuing check cashing cards, maintaining lists of

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[56] *Id.*, pp.10-11.

[57] Government Accountability Office, *Credit and Debit Cards, Federal Entities Are Taking Actions to Limit Their Interchange Fees, but Additional Revenue Collection Cost Savings May Exist*, GAO Report to Congressional Requesters, May 2008 [hereinafter GAO Fees Study, May 2008], p. 17. The GAO Report describes that according to Amtrak officials, "accepting cards onboard trains for ticket and food and beverage sales resulted in fewer instances of employee theft of cash." (*Id*.)

[58] According to some studies, the use of credit cards reduces checkout time by up to 75 percent. *Paying with Plastic*, , p. 93 (estimating that payments using cards take 17 seconds while it takes 73 seconds using checks); Garcia-Swartz et al., p. 201.

[59] The GAO report highlighted several such operational efficiencies. (GAO Fees Study, May 2008, p. 17.) Officials stated that accepting cards has reduced the costs associated with processing checks, and that funds are deposited in accounts faster when customers use credit or debit cards than when they use checks. (*Id.*) The reduction in personnel expenses is even greater for Internet purchases and purchases at self-service checkouts. For instance, "Amtrak officials stated that customers' ability to purchase tickets using cards, especially through the Amtrak Web site, has reduced their labor costs." (*Id*., pp. 17-18.) Self-service checkouts are common in gas stations and have been deployed at other retailers such as supermarkets.

[60] According to the GAO report, "[b]y accepting cards, federal entities incurred less expense in transporting cash, lower losses from theft of cash." (*Id.*, p. 17.) The GAO report also notes that "many officials cited that card acceptance improved internal operations. For example, officials at the Department of the Interior stated that payments made by credit cards result in a more streamlined bookkeeping approach because card sales involved less paperwork (for reconciliation) than other payment forms. Defense Commissary Agency (DeCA) officials also stated that they believed that the labor associated with reconciling sales declined as a result of the reduced cash volume. The officials mentioned additional operational efficiencies, including reductions in costs and exposure to fraud and errors from misplacing or miscounting cash and checks." (*Id*.)

[61] GAO Fees Study, May 2008, p. 16.

customers who have written bad checks in the past, and developing personal relationships with customers. Merchants in many segments are unable to take such precautions.

Moreover, MPC and Salop et al. consider only the merchants' costs and ignore the fact that debit cards also reduce payment costs incurred by cardholders and financial institutions compared to paper based payment methods such as cash and check. In fact, studies cited by Salop et al. indicate that cash and checks are not cheaper than debit when costs to all participants in the payment system are taken into account. Borzekowski and Kiser, for instance, conclude that "[f]rom a societal perspective, however, debit is cheaper than either cash or paper processed checks; thus, limited acceptance of these cards could be welfare decreasing."[62] They also state that "[a]ccording to merchant reports, cash is a relatively inexpensive method of payment for merchants to accept; however, from a societal standpoint, cash production and handling is costly for both governments and depository institutions."[63] Another study of payment method costs concludes that because "electronic payment costs between one-third and one half that of a paper-based instrument, a country may save 1% of its GDP annually as it shifts from a fully paper-based to a fully electronic-based payment system."[64]

Recent empirical studies indicate that many debit users would likely substitute to payment methods that may be more costly to the merchant, such as checks and credit, rather than to cash.[65] For example, a publication in the *Journal of Banking and Finance* concluded that there is a "substantial degree of price sensitivity and substitutability between debit and credit."[66] Salop et al. combine cash and checks and suggest that "debit substitutes primarily for cash and checks," citing two empirical research papers.[67] Although both papers indicate that cash historically has had the highest substitution rate for debit, both of the papers cited find that a debit cardholder is as likely to switch to credit or checks as she would be to switch to cash. The first paper by Borzekowski and Kiser estimates that 52 percent of debit card holders would actually switch to either credit or

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[62] Ron Borzekowski and Elizabeth K. Kiser, *The Choice at the Checkout: Quantifying Demand across Payment Instruments*, 26 INT. J. IND. ORGAN. 889 (2008).

[63] *Id.*

[64] David Humphrey, Magnus Wilesson, Ted Lindblom and Goran Bergendahl, *What Does It Cost to Make a Payment*, 2 REV. OF NETWORK ECON 159 (2003).

[65] Note that the net cost to a merchant of credit also would need to account for the positive effect of credit on consumer demand.

[66] Jonathan Zinman, *Debit or Credit?*, 33 J. BANK & FINANCE 358, 359 (2009).

[67] Salop Paper, p. 23 (citing Ron Borzekowski and Elizabeth K. Kiser, *The Choice at the Checkout: Quantifying Demand across Payment Instruments*, 26 INT. J. IND. ORG. 889 (2008); Ron Borzekowski, Elizabeth K. Kiser and Shaista Ahmed, *Consumers' Use of Debit Cards: Patterns, Preferences, and Price Response*, 40 J. MONEY, CREDIT BANKING 149 (Feb. 2008).)

checks.[68] Similarly, the paper by Borzekowski et al. indicates over 51 percent responded that they use debit cards instead of credit cards or checks.[69] Thus, contrary to the claims by Salop et al., a substantial fraction of cardholders likely would switch to more costly payment methods in response to a debit interchange decrease. To the extent that a large fraction of cardholders would switch to such payment methods, merchant costs likely would increase as a result of reduced debit usage.

c) There is no basis for claims that debit card users are "cross-subsidized" by customers using other payment methods

MPC asserts that because the cost to a merchant when a customer uses a debit card is greater than the merchant cost associated with a customer's use of cash or check, the extra merchant cost when customers use payment cards is supposedly reflected in higher overall average merchant prices paid by both payment card customers and customers who use other means of payment. Consequently, according to MPC, customers who use cash and checks "cross-subsidize" payment card users.[70] However, there is no economic basis for claims that debit card users are "cross-subsidized" by customers using other payment methods.

As we discuss above, there is no basis for the presumption that debit cards are more costly to merchants than other payment methods when all costs are taken into account. Thus, there is no empirical basis for the proposition that such cross-subsidization exists. In addition, even if the proposed regulation did result in a decline in the merchant's costs of accepting debit, there is no "cross-subsidization" if merchants do not charge higher prices to reflect increased debit interchange fees. As discussed above, higher interchange fees encourage increased cardholder demand to use debit, which makes merchant demand more elastic.

Moreover, even if some "cross-subsidization" did exist, it would be part of the normal competitive process unrelated to the creation or exercise of market power. "Cross-subsidization" between groups of consumers occurs whenever a merchant charges the same price to consumers that are more costly to service than other consumers. These common cases where merchants do not pass on differential costs to the particular consumers using specific services may involve a "cross-subsidization" of some consumers by others (*e.g.*, of consumers who drink multiple cups of coffee by consumers who drink only one cup) and potentially "excess" consumption (*e.g.*, of coffee

[68] Ron Borzekowski and Elizabeth K. Kiser, *The Choice at the Checkout: Quantifying Demand across Payment Instruments*, 26 INT. J. IND. ORGAN. 889, 917 (2008).

[69] Ron Borzekowski, Elizabeth K. Kiser and Shaista Ahmed, *Consumers' Use of Debit Cards: Patterns, Preferences, and Price Response*, 40 J. MONEY, CREDIT BANKING 149, 159 (2008).

[70] Salop Paper, p. 31. *See also* Board Transcript, pp. 25-26.

or delivery services). However, such "cross-subsidization" between consumers is common throughout the economy, and does not indicate an exercise of market power.

Lastly, MPC and Salop et al. argue that debit interchange fees act as a regressive "tax" on low income consumers, who they believe are less likely to use debit cards than cash.[71] However, if merchants do not charge higher prices to reflect increased debit interchange fees, there is no "tax," whether regressive or not. Moreover, some analysts have concluded that lower income cardholders are likely to bear significant costs from the elimination of no fee "free checking" accounts as they get transferred into higher fee accounts. For instance, the *Wall Street Journal* recently reported that "[m]any big banks are experimenting with new monthly maintenance fees and considering additional charges on credit cards and checking accounts as they search for replacement revenue. Industry observers predict the changes will force low-income customers out of traditional banking."[72] Similarly, in JPMorgan Chase & Co's latest earnings call, CEO Jamie Dimon stated the new fees the bank will be forced to levy could push out 5 percent of current bank customers because the customers will not be able to afford to maintain their accounts with the new added costs.[73] Further, other analysts have claimed that some low income consumers may be harmed if the regulation of debit causes a shift to less regulated alternatives that may be more costly for consumers, such as some types of reloadable prepaid cards.[74]

d) <u>There is no empirical evidence that decreases in interchange fees have led to lower retail prices</u>

There also is no empirical basis for the proposition that lower interchange fees lead to lower prices for goods and services, and even less so that there is 100 percent pass-through of interchange fee savings from merchants to consumers. For instance, the experience in Australia with interchange regulation shows that while cardholder fees have increased and the value of rewards has decreased, there is no evidence of lower retail prices. In its 2008 review of the evidence, the RBA concluded that "[n]o concrete evidence has been presented to the Board regarding the pass-through of these [merchant cost] savings [to consumers], although this is not

[71] Salop Paper, pp. 19-20, 31; MPC Paper, p. 6; MPC Testimony, pp. 9-10.

[72] Dan Fitzpatrick, *BofA to Test New Account Structure, Fees*, THE WALL STREET JOURNAL, Jan. 5, 2011. *See also Fed Rule May Bring End To Free Checking*, PAYMENTSSOURCE, Dec. 22, 2010; Kate Fitzgerald, *MasterCard Sees 'Upside' For Its Market Share In New Debit Interchange Rules,* PAYMENTSSOURCE, Sept. 23, 2010; David Morrison, *NAFCU: Credit Union Members Most Hurt By Fed Interchange Rule*, CREDIT UNION TIMES, Dec. 17, 2010.

[73] Maria Aspan, *Debit Fee Caps May Hurt Poorest Customers: Dimon*, REUTERS, Jan. 14, 2011.

[74] *See, e.g*. Robin Sidel and Apartajita Saha-Bubna, *Banks Pin Revenue Hopes on Prepaid Cards*, THE WALL STREET JOURNAL, Dec. 6, 2010.

surprising as the effect is difficult to isolate."[75] Chang, Evans, and Garcia-Swartz (2006) cite a survey of merchants conducted in Australia and conclude that "[t]he very little empirical evidence there is suggests that, in fact, merchants have tended not to pass through the reduction in the merchant discount to consumers in the form of lower prices. Cannex, an independent research group, surveyed merchants in Australia regarding the impact of the interchange fee regulation on their regular business practices. Among merchants who reported a change in the merchant discount during the previous year, less than 5 percent declared that they had reduced prices to consumers."[76] Even as of today, six years after the regulation of interchange fees, there has been no reliable empirical evidence suggesting that retail prices in Australia have decreased.

More generally, several studies have found that retail prices are frequently sticky, and that a reduction of cost is less likely to generate a corresponding price reduction whereas an increase of costs is more likely to induce a corresponding price increase. For instance, Borenstein, Cameron, and Gilbert (1997) reported that retail gasoline prices respond more quickly to increases than decreases in crude oil prices.[77] Similarly, Peltzman (2000) reports that "the immediate response to a positive cost shock is at least twice the response to a negative shock" across a large number of industries, and that such asymmetries are not temporary.[78]

This is particularly likely to be true for small reductions in merchant costs. The Fed Survey reported that the average interchange fee on debit transactions was 44 cents or about 1.14 percent of average transaction value.[79] For a merchant with 30 percent of sales that are paid with debit, a 73 percent reduction in this fee to 12 cents would imply an interchange fee reduction equal to 0.25 percent of sales (one-quarter of one percent of sales). This amounts to about $0.10 out of a $40.00 transaction. The evidence on price rigidities, and particularly the asymmetric response to price decreases, makes it unlikely that merchants would pass through such small decreases in cost.

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[75] Reserve Bank of Australia, Reform of Australia's Payments System: Preliminary Conclusions of the 2007/08 Review, April 2008, p. 23. Consistent with this view, the U.S. Government Accountability Office also noted that since the regulation of credit card interchange fees in Australia, "there is no conclusive evidence that lower interchange fees led merchants to reduce retail prices for goods; further, some costs for card users, such as annual and other fees, have increased." (GAO Fees Study, May 2008, Highlights.)

[76] Howard Chang, David Evans, and Daniel Garcia Swartz, *The Effect of Regulatory Intervention in Two-Sided Markets: An Assessment of Interchange-Fee Capping in Australia*, 4 REV. OF NETWORK ECON. 328, 341 (2005) [hereinafter Chang et al. 2005].

[77] Severin Borenstein, C. Cameron, and R. Gilbert, *Do Gasoline Prices Respond Asymmetrically to Crude Oil Price Changes?* 112 QUART. J. ECON. 305 (1997).

[78] Sam Peltzman, *Prices Rise Faster than they Fall*, 108 J. POL. ECONOMY 466 (2000).

[79] Notice of Proposed Rulemaking, p. 27.

2. There is no economic or empirical basis for the claim that interchange fees are inefficient because of less than complete "pass-through" of interchange fees by issuers to cardholders

To assess the impact of interchange fees on consumers, one cannot focus solely on the alleged effect of interchange on merchant prices. One must also consider the benefits that cardholders receive on the other side of the market, such as reduced transaction fees and higher benefits (such as rewards and chargeback and fraud protections). As the Fed staff recognized, "any savings that consumers might realize at the point of sale could be offset by fee increases at their banks as well as changes in terms that debit cardholders face for card use and deposit accounts."[80]

a) <u>There is no empirical basis for the proposition that pass-through by issuers is lower than pass-through by merchants</u>

The MPC and its economists argue that pass-through on the issuer side is lower than pass-through on the merchant side. For instance, the MPC claims that a reduction in interchange fees would benefit consumers because "retail prices would decrease by more than debit card fees would increase (or debit card rewards would decrease)."[81] Similarly, Salop et al. conclude that interchange fees are "passed through to consumers in the form of higher merchandise prices. . . . [a]t the same time, we have seen no evidence that issuers pass through to debit card users such a large fraction of the interchange fees they receive."[82]

The MPC and its economists, however, provide no meaningful evidence to support their conclusion that pass-through on the cardholder side is more limited than pass-through on the merchant side. Salop et al. cite a number of publications, two of which provide an estimation or empirical support for the extent of issuer pass-through.[83] One of the two referenced publications. Chang, Evans, and Garcia-Swartz (2005), studies the impact of a mandated reduction in interchange fees in Australia on cardholders. It states that "[i]n the months that followed the introduction of the regulation (and likely in the months that preceded the regulation as well) they [issuers] recovered between 30 and 40 percent of that loss [interchange revenue loss] through the imposition of higher fees."[84] But this estimate accounts only for the increase in cardholder fees and does not take into account reductions in cardholder rewards and other cardholder benefits. The Reserve Bank of

[80] Board Transcript, p. 26.

[81] MPC Paper, p. 6.

[82] Salop Paper, p. 2. Salop et al. also state that "the evidence shows that merchants are likely to pass through to customers more of their lower costs from lower interchange revenues (by reducing retail prices) than issuers are likely to pass through in the form of higher cardholder fees (or reduced cardholder rewards)." (Salop Paper, p. 26.)

[83] Salop Paper, p. 29.

[84] *See* Chang et al. 2005, p. 339.

Australia estimated that the average credit card reward decreased by 20 basis points.[85] Similarly, another study estimated that "[c]ardholders in Australia are paying approximately AU$480 million each year in additional fees" as a result of the regulations and recognized that "[a]t the same time, card benefits have been reduced significantly. Thus, cardholders are now paying higher fees and receiving lower card benefits."[86] The other document cited by Salop in support of the proposition that pass-through on the cardholder side is more limited is a 2006 study from the European Commission, which estimated a pass-through rate of 25 percent.[87] However, a review of the report by David S. Evans, Jean-Charles Rochet and Richard Schmalensee concluded that the statistical analysis in "the Interim Report has no reliable evidence on the extent to which either acquirers or issuers pass through interchange fees."[88]

b) The U.S. retail banking industry is highly competitive

Moreover, Salop et al. rely entirely on estimates of issuer pass through related to credit cards in foreign countries. But U.S. retail banking markets are generally highly competitive, which tends to increase the pass-through rate relative to countries with less competitive card issuing markets.[89] Competition among banks for checking account holders induces financial institutions to pass through interchange fee revenues to cardholders in a variety of forms, including lower checking account fees, lower debit transactions fees, greater cardholder rewards, more limited cardholder liability, and other benefits to checking account holders, such as more ATMs, more convenient branches, longer banking hours, and more service staff.

There is no basis to conclude that U.S. retail banking is less competitive than many other merchant industries in the U.S. John Nannes, former Deputy Assistant Attorney General of the Antitrust Division of the U.S. Department of Justice ("DOJ"), stated in 1998 that "retail consumers typically have local banking alternatives available to them, such as other banks, thrifts and credit

[85] Testimony of Dr. Philip Lowe, Before the Australian House of Representatives Standing Committee on Economics, Finance and Public Administration, Reference: Reserve Bank of Australia Annual Report 2004, Aug. 12, 2005, pp. 26-27.

[86] CRA International, *Regulatory Intervention in the Payment Card Industry by the Reserve Bank of Australia: Analysis of the Evidence*, April 28, 2008, pp. 13-14.

[87] Interim Report I: Payment Cards, Sector Inquiry under Article 17 Regulation 1/2003 on retail banking, European Commission, April 12, 2006, p. 56 and Annex 5.

[88] David Evans, Jean-Charles Rochet, and Richard Schmalensee, *The European Commission's Interim Report on Payment Cards: Some Comments and Suggestions*, June 21, 2006, p. 5.

[89] For example, Chang et al. report that the Australian credit card issuing market is far more concentrated than the U.S. and in fact conclude that contrary to the U.S., the Australia issuing market is "highly concentrated." The authors report that the four leading banks in Australia collectively account for 66 percent of total deposits and about 85 percent of all credit card issuing. They conclude that "Given that card issuing in Australia is relatively concentrated we would not expect full [issuer] pass through." (Chang et al. 2005, pp. 330, 334.)

unions, sufficient to prevent the creation or exercise of market power."[90] According to former Federal Reserve Chairman Alan Greenspan, a wave of consolidations in the banking industry has not "reduced [the] overall competitiveness for consumer financial services."[91]

The competitive nature of the U.S. retail banking industry is reflected in the relatively low market concentration. The Federal Deposit Insurance Corporation publishes annual statistics on concentration in local banking markets. According to these statistics, the vast majority of metropolitan areas surveyed by the FDIC would be categorized as unconcentrated under standard concentration measures used by the DOJ and Federal Trade Commission ("FTC").[92] Of the 25 metropolitan areas surveyed by the FDIC in 2010, 18 are unconcentrated, 6 are moderately concentrated, and only one metropolitan area is highly concentrated.[93] The concentration of the retail banking industry is significantly lower than in several retail segments in which MPC members operate. A 2004 study of grocery stores, for instance, reported that 100 of 316 metropolitan area markets would be classified as highly concentrated.[94]

The MPC and its economists are internally inconsistent on the issue of issuer pass-through. Salop et al., for instance, claim that issuing banks went to great lengths to incentivize their cardholders to use signature debit rather than PIN debit by offering greater rewards and other benefits and charging lower fees on signature than on PIN, but simultaneously argue that there is no economic evidence that issuers pass through the benefits of increased interchange to cardholders.[95]

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[90] Statement of John M. Nannes, Deputy Assistant Attorney General, U.S. Department of Justice Before the Committee on the Judiciary, United States House of Representatives, Concerning Mergers in the Financial Services Industry, June 3, 1998, p. 5.

[91] Remarks by Chairman Alan Greenspan at the Federal Reserve System's Fourth Annual Community Affairs Research Conference, Washington, D.C., April 8, 2005.

[92] The DOJ/FTC Horizontal Merger Guidelines classify markets as either unconcentrated, moderately concentrated, or highly concentrated on the basis of the Herfindahl-Hirschman Index ("HHI"), a common measure of market concentration. The guidelines classify markets as unconcentrated if their HHI is below 1,500, moderately concentrated if their HHI is between 1,500 and 2,500, and highly concentrated if their HHI is above 2,500. The DOJ/FTC guidelines do not equate a concentrated market with an uncompetitive market; rather the guidelines merely provide minimal thresholds for establishing whether a horizontal merger may require further investigation as to its competitive impact. (U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, Aug. 19, 2010.)

[93] Federal Deposit Insurance Corporation, *Highlights from the 2009 Summary of Deposits Data,* 3 FDIC QUARTERLY 29, Table 5 at 34 (2009).

[94] Craig M. Newmark, *Price-Concentration Studies: There You Go Again,* Prepared for the DOJ/FTC Merger Workshop, "Concentration and Market Shares" panel, Feb. 14, 2004, p. 29. In addition, there have likely been increases in concentration in many areas since 2004 when this study was done.

[95] *See, e.g.*, Stephen Craig Mott, "Industry Facts Concerning Debit Card Regulation Under Section 920, October 29, 2010 [hereinafter Mott Paper], pp. 8-10; Salop Paper, p. 19.

c) The empirical evidence indicates that interchange fee revenues result in lower cardholder fees and greater cardholder benefits

Consistent with the competitive nature of retail banking generally, there is considerable economic evidence that issuers pass on to cardholders interchange revenue in the form of lower transaction fees and checking account fees, innovative services and other features, and greater rewards and other benefits. Salop et al. rely on evidence that the current rate of signature debit card rewards is substantially less than the interchange fee on these cards.[96] For example, they report that roughly thirty percent of debit transactions are conducted on cards offering rewards, and that the typical rewards rate is 25 basis points compared to an interchange fee of 142 basis points.[97] However, this focus on the average rewards rate is not the correct economic analysis to determine the relevant economic pass-through rate. From an economic perspective, pass-through should be measured on all dimensions, including checking account fees and account holder benefits, not just on fees and rewards for debit transactions. As the Fed staff stated, the "banks use the revenues from these interchange fees to offer more attractive deposit account terms to their customers …."[98] Accordingly, one must look at the entire checking account package to determine the effect of interchange fees on cardholders.

Checking account fees: The market evidence shows that competition between banks and growing consumer usage of debit in recent years induced issuers to pass through interchange revenue to consumers by reducing checking account maintenance fees. According to numerous industry sources, "free" checking accounts have become increasingly common over the past decade.[99] A study by Bankrate.com, for instance, reported that the percentage of checking accounts in its annual survey considered "free," that is accounts with no monthly service charges and no minimum balance, had increased steadily from 2003, reaching a high of 76 percent in 2009.[100] The Bankrate.com checking studies also show both a steady decline in the minimum amount required to open a non-interest checking account without fees, as well as a decline in the minimum balance that a cardholder of such account would need to maintain to avoid paying fees.[101] Similarly, a GAO

[96] Salop Paper, p. 29.

[97] *Id*.

[98] Board Transcript, p. 22.

[99] *See, e.g.,* Bankrate.com 2010 Checking Study *available at* http://www.bankrate.com/finance/checking/more-banks-are-yanking-free-checking-1.aspx; E. Scott Reckard, *At Many Banks, No More Free Checking*, L.A. TIMES, Feb. 4, 2011; Jennifer Waters, *Bank of America Categorizes Clients, Adds Fees*, MARKETWATCH, Jan. 6, 2011; *Fed Rule May Bring End To Free Checking*, PAYMENTSSOURCE, Dec. 22, 2010.

[100] Bankrate.com 2010 Checking Study *available at* http://www.bankrate.com/finance/checking/more-banks-are-yanking-free-checking-1.aspx.

[101] *Id.*

study reported that monthly checking account fees have gradually declined in recent years and identified the increasing use of electronic payments and debit cards in particular as one of the reasons for the decline in such fees.[102]

A substantial decrease in interchange fees likely would reverse the recent proliferation of free checking accounts. One banking analyst recently stated that "[r]evenue from debit card transactions provides the 'economic foundation' to offer mass-market free checking services. … If the bulk of that revenue disappears, banks will be compelled to restructure their core products and begin charging consumers fees for consumer checking accounts and other products."[103] There is evidence that the trend toward greater consumer benefits has already begun to reverse due to anticipated reductions in interchange fees. For instance, the Bankrate.com study noted that the number of checking accounts with no monthly fees declined by about 10 percent in 2010, and attributed the decline to regulatory changes on overdraft fees and anticipated reductions in debit interchange.[104] Similarly, a recent survey of community banks by the Independent Community Bankers of America ("ICBA") found that 72 percent of community banks will stop offering free checking accounts because of the Dodd-Frank Act.[105] Further, 61 percent said they will require a minimum balance, and 65 percent said they will increase qualification standards.[106]

Debit transaction fees: The historical difference in debit transaction fees between signature and PIN debit provides evidence of consumer benefits of higher interchange. Debit transaction fees historically were far more common for PIN than signature debit, consistent with the fact that signature debit had higher interchange fees than PIN debit. For instance, a 2002 Pulse study reported that while no issuers charged signature debit transaction fees, 26 percent imposed PIN

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[102] Government Accountability Office, *Bank Fees - Federal Banking Regulators Could Better Ensure That Consumers Have Required Disclosure Documents Prior to Opening Checking or Savings Accounts*, Report to the Chairwoman, Subcommittee on Financial Institutions and Consumer Credit, Committee on Financial Services, House of Representative, Jan. 2008, pp. 1, 70.

[103] Kate Fitzgerald, *Debit Cards Would be 73% Less Profitable Under New Fed Rules: Report*, PAYMENTSSOURCE, Dec. 23, 2010. This also is consistent with the fact that some banks have limited the availability of "free checking" and/or higher interest rates on account balances to consumers who make a minimum number of debit card transactions. For example, Chase waives account fees if a cardholder makes five or more debit transactions during a statement period. (*More Chase Customers Could Pay Fee for Checking Account*, USA Today, Dec. 16, 2010.) Several other banks offer higher interest rates to consumers who make a minimum number of debit card transactions. (*See, e.g.,* https://www.lgeccu.org/; http://www.bankofupson.com/; http://www.firstfederal.com/.)

[104] In Bankrate's 2010 Checking Study, the percentage of checking accounts considered "free," that is accounts with no monthly service charges and no minimum balance, fell from 76 percent in last year's study to 65 percent in this year's study. The drop reverses a steady increase of free checking accounts dating back to at least 2003. (Bankrate.com 2010 Checking Study *available at* http://www.bankrate.com/finance/checking/more-banks-are-yanking-free-checking-1.aspx.)

[105] ICBA News Release, *Survey: Fed Debit Card Rule Will Harm Community Bank Customers*, Feb. 14, 2011.

[106] *Id*.

debit transaction fees on cardholders. The study also noted that PIN debit transaction fees "are not new," as many issuers had begun collecting transaction fees from cardholders since they first launched the PIN debit program.[107] Similarly in a 2004 survey, the Federal Reserve found that although debit transaction fees were relatively infrequent, PIN debit fees were imposed nearly three times more frequently than signature debit fees.[108]

Moreover, as PIN debit interchange fees have increased in recent years, most banks have eliminated fees on PIN debit. A recent study by Pulse reported that less than one percent of cardholders incurred such debit transaction fees in 2007.[109] In fact, by 2007 only seven of the top 100 financial institutions surveyed by Bankrate.com charged a fee for any type of debit transaction.[110] There is evidence that this trend may reverse, however, as financial institutions try to make up lost interchange revenue. According to the ICBA, because of the proposed regulations, 50 percent of surveyed banks said that they will begin imposing a per-transaction fee for debit card use.[111]

Debit rewards: The market evidence indicates that competition between banks in recent years induced issuers to pass through interchange revenue to cardholders by increasingly offering debit rewards programs. Debit rewards programs did not start proliferating until the early 2000s. In 1999, for instance, only one debit card offered frequent flier miles as a reward.[112] As issuers have competed to attract checking account holders in recent years, debit rewards programs and other forms of debit promotion have been rapidly expanding. By 2008, debit reward programs were being offered by the vast majority of leading issuers. According to a Mercator study, only one of the

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[107] Pulse Debit Issuer Survey: Cardholders Fees and Industry Outlook, Aug. 2, 2002, pp. 1, 11.

[108] The survey indicates that among households that are familiar with their financial institution's fee policy, 13.1 percent of households reported that they were charged PIN debit fees while only 4.5 percent of households reported signature debit fees. (Board of Governors of the Federal Reserve System, Report to the Congress on the Disclosure of Point-of-Sale Debit Fees, Nov. 2004, p. 26.) Moreover, the level of PIN debit fees was not insignificant. In particular, the survey reported that some cardholders paid as much as $2 for a PIN debit transactions and that the median fee was 75 cents per transaction. (*Id.*, p. 17.)

[109] A 2000 First Data/Star report indicated that 14 percent of PIN debit cardholders incurred transaction fees (Mercator Advisory Group, *Setting Goals for Debit Reward Programs: Balancing Revenue Goals and Brand Loyalty*, Feb. 2006, p. 16); a 2004 Federal Reserve 2004 study reported that 17 percent of cardholders incurred transaction fees (Board of Governors of the Federal Reserve System, Report to the Congress on the Disclosure of Point-of-Sale Debit Fees, Nov. 2004, p. 26); by contrast, a 2008 Pulse report indicated that only 0.6 percent of cardholders incurred fees (*PULSE 2008 Debit Issuer Study Reveals Continued Debit Growth and Potential Improved Performance Among U.S. Debit Card Issuers*, BUSINESS & FINANCE WEEK, May 12, 2008).

[110] Ellen Cannon, *Analysis: Check Card Fees Gone*, Bankrate.com, March 12, 2007.

[111] ICBA News Release, *Survey: Fed Debit Card Rule Will Harm Community Bank Customers*, Feb. 14, 2011. The ICBA survey also found that 72 percent of community banks will impose a monthly or annual charge for debit card use. (*Id*.)

[112] Jan M. Rosen, *Personal Business; The Siren Swipe of the Debit Card*, N.Y. TIMES, October 31, 1999.

leading 25 debit issuers did not offer a debit reward programs and most leading issuers offered multiple programs in 2008.[113] Similarly, according to a 2010 Pulse Study, 58 percent of financial institutions currently offer a debit rewards program on at least some of their accounts.[114]

Moreover, signature debit cards have offered rewards more frequently than lower interchange PIN debit cards. A Mercator study from 2006 stated that "the majority of the debit reward programs promote the use of signature debit at the POS, as this offline use generates additional revenue from the higher interchange structure associated with signature offline debit."[115] In fact, Mercator concluded in a similar report that "[a]bout 89 percent of the reward programs offered by the Top 50 banks apply to signature-based debit card transactions only, the remainder rewards customers for either signature debit or PIN debit transactions … PIN transactions usually earn points at a lower rate."[116]

Accordingly, both the evidence from the US and the international evidence are consistent with the view that a substantial portion of the decline in interchange revenue from the proposed regulation will be reflected in higher fees and reduced benefits for checking account holders. As described in detail in Section III.A.2 below, there is widespread consensus among U.S. banking industry observers that this will occur. In fact, some banks have already begun to take such actions.

Consistent with this evidence, the Fed staff questioned whether a reduction in interchange will benefit consumers, stating that "one of the first things that issuers may do is reduce or eliminate debit card reward programs. And these changes that may happen at the bank may be somewhat more visible to consumers than any savings that they realize at the point of sale. So overall I think it is hard to anticipate what the overall effect on consumers will be."[117]

3. There is no economic or empirical basis for claims that competition between networks perversely leads to inefficiently high interchange fees

a) <u>The view that competition between payment systems is perverse incorrectly assumes that the interchange fee is the total "price" of debit card services</u>

[113] Mercator Advisory Group, *Re-examining Debit Rewards at the Top Fifty Banks*, September 2008, p. 5.

[114] Pulse, *Executive Summary 2010 Debit Issuer Study*, June 2010, p. 15.

[115] Mercator Advisory Group, *Setting Goals for Debit Reward Programs: Balancing Revenue Goals and Brand Loyalty*, February 2006, p. 21.

[116] Mercator Advisory Group, *Re-examining Debit Rewards at the Top Fifty Banks*, September 2008, p. 6.

[117] Board Transcript, p. 27.

MPC also claims that competition between networks perversely leads to inefficiently high interchange fees.[118] MPC contrasts this to prices in one-sided markets, where competition generally leads to lower, not higher prices. The Fed staff appears to have accepted this premise in part, concluding that "in most markets increased competition leads to lower prices. However, in payment card markets competition between networks tends to drive interchange higher."[119]

The view that competition between payment systems is perverse is based on the incorrect premise that interchange fees are the total "price" of debit card services. As we describe above, the total price of the payment card should consider both sides of the market—merchant costs and cardholder fees and benefits. There is no economic or empirical evidence that competition between payment systems drives up the total price of debit transactions. And, neither MPC nor any other critics of payment card interchange fees claim that it does.

Cardholders benefit from the competition between payment networks. As described above, much of this competition occurs at the issuer level in the form of lower transaction fees and checking account fees, innovative services and other features, and greater rewards and other cardholder benefits. As the Fed staff stated, the "banks use the revenues from these interchange fees to offer more attractive deposit account terms to their customers…"[120] Such forms of competition are not inefficient or wasteful. Reduced cardholder fees and increased cardholder benefits, such as rewards, cardholder protections, and innovative services, are effectively lower prices to cardholders. In turn, increased cardholder benefits provide benefits to merchants, as they enhance the payment system's ability to deliver incremental sales. The higher benefits increase the extent to which cardholders seek out merchants that accept debit cards, and the extent to which they seek to use debit cards for a greater share of their spending. Both of these factors imply that merchants can expect greater incremental sales from accepting debit cards. Thus, although higher interchange fees tend to increase merchant discount fees, if there is an appropriate balancing of incentives, they also allow for the provision of a more valuable product. Consequently, there is no economic basis for concluding that a payment system is less competitive, or that competition is perverse, solely because it has a higher interchange fee.

In fact, this is the sort of competition that the DOJ pressed for in *U.S. v. Visa*. Both the District Court and the Court of Appeals for the Second Circuit believed that Visa competed with other

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[118] Salop Paper, pp. 2, 18; MPC Paper, pp. 3-4.

[119] Board Transcript, p. 21. *See also* Fed Staff Working Paper, p. 4 ("In general competition among payment networks is unlikely to exert downward pressure on interchange fees because the networks tend to focus their competitive efforts on getting their card to be the favored card of a consumer.")

[120] Board Transcript, p. 22.

payment card networks in a market for "network services" in which the payment networks are the sellers, and the issuers of cards and merchants are the buyers. The Appellate Court noted that competition for issuance was evidenced by the fact that Visa and MasterCard "pay millions of dollars in incentive payments in the form of discounts from the price for network services to selected issuing banks to compete for their business and [that] the banks play Visa and MasterCard against [each] other to obtain lower net prices and higher value for card network services."[121] In short, DOJ was seeking to enhance exactly the same type of competition for issuance that the MPC condemns in this proceeding as "perverse" competition that ultimately harms consumers.[122] Moreover, the court in *U.S. v. Visa* was seeking to promote product innovation such as "cards that are able to link to transaction accounts, to asset management accounts, to sale of mortgages or other financial products that [banks] offer[]."[123] As the district court concluded, increased competition for issuance would lead to the networks "offering new and better products and services."[124] Similarly, the appellate court agreed that such competition would cause the networks "to design and market their products more competitively."[125] However, as discussed in detail in Section III below, the proposed regulations are much more likely to suppress, rather than encourage, such innovation in debit card network services.

b) Visa's ability to raise debit interchange fees is constrained by several competitive factors

Salop et al. seem to suggest that competition between payment networks *always* drives interchange fees higher, with limited or no constraints, because merchants have little or no ability to influence the customer's decision.[126] Similarly, the Fed staff stated that "merchants who ultimately foot the bill for their customer's payment choices have little or no ability to influence the customer's decision with regard to what payment method to use."[127] However, Visa's ability to raise debit interchange fees is constrained by several competitive factors. For example, merchants have significant ability to influence the choice of payment method used by customers. First, the merchant decides which payment methods to accept, including which debit networks. Obviously, if a merchant does not accept a particular debit card network, its customers cannot choose to use that debit card

[121] *U.S. v. Visa U.S.A., Inc.*, 344 F.3d 229, 382 (2d Cir. 2003).

[122] MPC Paper, pp. 3-4.

[123] *Visa U.S.A. Inc.,* 344 F.3d at 241.

[124] *U.S. v. Visa U.S.A. Inc.*, 163 F. Supp. 2d 322, 396 (S.D.N.Y. 2001).

[125] *Visa U.S.A. Inc.*, 344 F.3d at 243.

[126] Salop Paper, pp. 18, 59.

[127] Board Transcript, p. 22.

at the merchant. Thus, the merchant has the ultimate choice of which payment methods can be used by customers.

Many merchants do not accept particular debit card networks, including Visa debit and Interlink. For instance, according to Visa, Interlink is accepted at 1.4 million merchant outlets, which is only 17.5 percent of the merchants who accept signature debit.[128] Moreover, many merchants do not accept Visa debit (or MasterCard debit). For example, Costco accepts American Express and PIN debit cards, but does not accept Visa, MasterCard, or Discover credit or debit cards.[129] Similarly, supermarket Aldi accepts PIN debit cards, but does not accept Visa, MasterCard, Discover, or American Express credit or debit cards.[130] Arco gas stations are another example of a merchant that does not accept credit or debit cards from Visa, MasterCard, Discover, or American Express, but does accept PIN debit cards.[131]

MPC and its economists ignore the ability of merchants to refuse to accept particular debit card networks. Competition for merchant acceptance places a significant constraint on debit interchange fees. Moreover, because of two-sided network effects, reduced merchant acceptance decreases the value of the payment network to cardholders, which in turn reduces the value to merchants, and so on. Thus, network effects intensify the negative impact on the payment network of reduced merchant acceptance.

Many merchants find it in their interest to accept debit cards, including Visa debit and Interlink, because it is in their interest to carry products that are demanded by their customers. It makes economic sense for many merchants to accept Visa signature debit and Interlink because acceptance leads to profitable incremental sales. But this value that merchants derive from payment card acceptance does not mean that they have no ability to decide not to accept these debit cards.

The competitive constraint imposed by merchant acceptance is particularly significant for the Visa signature debit network because of the importance the Visa payment system places on "universal merchant acceptance." Broad merchant acceptance is a key characteristic expected by Visa cardholders. Therefore, if a large merchant drops acceptance of Visa debit cards, it could potentially have a large effect on future demand by cardholders for the Visa payment system. And once key merchants drop acceptance of Visa, the consumers who wish to carry or use only one

[128] http://usa.visa.com/personal/using_visa/interlink.html, accessed Feb. 14, 2011; Notice of Proposed Rulemaking, p. 19.

[129] Costco Wholesale Annual Report 2010, Aug. 29, 2010, p. 10.

[130] http://www.aldifoods.com/.

[131] http://www.arco.com/.

payment card will move towards the card that retains the greater level of merchant acceptance. Moreover, this network effect will also make it easier for some of the remaining merchants to drop acceptance of the card as well. Consequently, Visa faces a strong economic imperative to avoid any decrease in merchant acceptance. This consideration places downward pressure on Visa debit interchange fees. Keeping interchange fees at a level that assures broad merchant acceptance is absolutely critical to the value proposition that Visa offers merchants as well as cardholders. In fact, Visa debit interchange fees have declined in recent years for many merchants. For example, Salop's own Exhibit 1 shows that signature debit interchange for all four merchant categories considered by Salop et al. have declined substantially in the last ten years.

Moreover, it is important to recognize that a network's volume of transactions is determined not just by whether merchants accept the payment network, but also by whether they accept rival payment cards. Interchange fees, therefore, are also constrained by the effect of higher interchange fees in inducing merchants to accept other payment cards. For example, if Visa increased Visa debit interchange fees significantly, it is likely that more merchants would begin to accept additional debit competitors (such as PIN debit networks), and Visa's share of the transactions would decrease.

Competitive market constraints on interchange fees also exist because merchants may attempt to steer consumers to use alternative payment cards and payment methods. Merchants have significant ability to steer transactions from signature debit to other forms of payment, including cash, PIN debit, or checks (if they so desired). Visa's Operating Regulations, for example, explicitly allow discounting for cash, check, and PIN debit, and have for many years.[132] Discounts for these other payment methods nonetheless are rare, but not because of any Visa rules.[133] Rather, discounts are rare because most merchants do not have incentives to charge discounted prices to customers for not using signature debit (and credit) cards.

Merchants do engage in a variety of other methods to steer signature debit transactions to PIN debit. Perhaps the most prevalent of these methods is to program PIN pads in a way that "steers" consumers toward PIN and/or makes it difficult or confusing for the consumer to make a signature debit transaction. For example, many PIN pads require the consumer to counter-intuitively press the "credit" button to make a signature debit transaction. Similarly, some PIN pads will prompt

[132] Visa International Operating Regulations, Oct. 15, 2010, Discount Offer - U.S. Region Section 5.2.D.2., p. 405.

[133] A few U.S. merchants have charged lower prices for cash in the past (*e.g.*, some gas stations offered cash discounts in the 1980s), but even these relatively isolated examples were largely abandoned. (John M. Barron, Michael E. Staten & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. POL'Y ISSUES 89, 89 (October 1992).) We understand that the practice of cash discounts may be increasing among gas retailers more recently.

the consumer for her PIN number as soon as the card is swiped. In order to make a signature transaction, the consumer has to counter-intuitively press the "cancel" key, or even more counter-intuitively the "credit" key, if she does not want her transaction routed to a PIN network.[134] Another method is to have the sales clerk orally prompt the consumer for a PIN.[135] Such steering can have a significant effect on the payment systems used at the merchant. For instance, Mercator "estimated in 2007 that major retailers can switch 80 to 90 percent of their debit card purchases to PIN transactions."[136]

II. The Debit Card Industry

The MPC and its economists make a number of claims that U.S. debit competition has been distorted by market power and "cross subsidies," which they argue have resulted in economic inefficiencies. In particular, they claim that increases in PIN debit interchange fees in recent years reflect the exercise of market power and argue that competition does not work properly in the debit marketplace.[137] They also argue that increases in PIN debit interchange fees reflect an anticompetitive strategy by Visa to suppress the growth of PIN debit. For instance, MPC claims that "[s]ince Visa has acquired the Interlink PIN network, it has been using its market power to raise PIN debit interchange to signature debit levels. Containing the growth of PIN debit has been a cornerstone of Visa's strategy in debit since the 1990s…. Current interchange structure for debit transactions in the United States is a function of network market power."[138] However, increases in PIN debit interchange fees did not result from an exercise of market power by the debit card networks, or a strategy to suppress the growth of PIN debit. Rather, increases in PIN debit interchange fees reflect increased competition for PIN debit issuance that resulted from fundamental changes in the PIN debit industry. To understand this increased competition for issuance, it is important to describe the origins of debit networks.

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[134] Robin Sidel, *As card fees climb, merchants push PINs*, THE WALL STREET JOURNAL, January 16, 2007.

[135] *Id.*; Jeremy Simon, *Merchants Encourage Use of PINs for Debit Card Payments*, Creditcards.com, May 14, 2007; *Small Merchants Get PIN-Steering Feature*, CARDLINE, July 28, 2008; Mercator Advisory Group, *A Look At Steering – By Both Issuers And Merchants*, May 2006; Larry De Palma, *Why Aren't More Merchants Prompting for PIN?*, DIGITAL TRANSACTIONS, Nov.-Dec. 2005.

[136] Jeremy Simon, *Merchants Encourage Use of PINs for Debit Card Payments*, Creditcards.com, May 14, 2007.

[137] MPC Paper, p. 4; Salop Paper, p. 13.

[138] MPC Paper, p. 4.

A. Increases in PIN debit interchange fees reflect increased competition for issuance that resulted from fundamental changes in the PIN debit industry

1. The origins of the debit industry

Most of the major PIN debit card networks began as proprietary automated teller machine ("ATM") networks serving only a particular bank's ATMs.[139] By the mid-1970s, these systems largely were replaced by shared electronic funds transfer ("EFT") regional networks, owned by multiple banks, which allowed cardholders to use ATM locations at other banks.[140] These regional ATM networks proliferated throughout the United States.[141]

The EFT networks began routing point of sale PIN debit transactions on a small scale in the early 1980s, which allowed customers to pay for merchandise directly with their debit cards.[142] Many of these networks compelled the bank issuers that participated in the ATM network to also offer PIN debit through "mandatory participation" rules. As a result, PIN transactions did not require a new card as most of the networks required banks to allow ATM cards to be used for retail transactions.[143] In effect, these "mandatory participation" rules gave the networks a significant cardholder base without having to compete for issuance.

Because the regional systems had little or no merchant bases and large cardholder bases, they found it optimal to adopt pricing and marketing strategies that were designed to induce merchants to invest in PIN pads, including low interchange fees. As Richard Garman, CEO of Electronic Payment Services, stated "[o]nline interchange was set at an artificially low level several years ago to encourage merchant acceptance."[144] Similarly, the Fed staff wrote in its working paper that "[t]he need to encourage merchant investment in PIN terminals may also have contributed to relatively low PIN debit interchange fees, particularly in the early years of PIN debit. In contrast,

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[139] Fumiko Hayashi, Richard Sullivan and Stuart E. Weiner, *A Guide to the ATM and Debit Card Industry*, Federal Reserve Bank of Kansas City, 2003 [hereinafter Hayashi 2003], pp. 12-14.

[140] *See, e.g.*, *For Pulse, TYME was Right for an EFT Network Buy*, ATM & DEBIT NEWS, Vol. 1, No. 32, June 14, 2001; Hayashi 2003, pp. 12-15.

[141] By the early-1990s there were about 40 PIN debit networks operating in the U.S. (Fumiko Hayashi, Richard Sullivan and Stuart E. Weiner, *A Guide to the ATM and Debit Card Industry, 2006 Update,* Federal Reserve Bank of Kansas City, 2006 [hereinafter Hayashi 2006], p. 35.)

[142] The first such system was installed at the Massachusetts-based chains of Angelo's and Starkmarket in 1976. (Hayashi 2003, p. 14.)

[143] *Paying with Plastic*, p. 82.

[144] *A Showdown Looms at the POS Corral*, BANK NETWORK NEWS, June 9, 1998.

signature debit, which utilizes the same infrastructure as MasterCard and Visa credit cards, does not require merchant investment in new equipment."[145]

During the 1990s both Visa and MasterCard also entered the PIN debit POS business, Visa with its purchase of Interlink in 1991 and MasterCard with the creation of its Maestro payment system in 1992.[146] Unlike the regional networks, Interlink was not an ATM network and could not use ATM service and mandatory participation rules to attract issuers. This put Interlink at a competitive disadvantage because other on-line networks could use their positions in ATM service to achieve widespread issuance in a region.

As PIN debit increased in popularity during the mid-1990s, EFT networks began to expand their geographical coverage through consolidation, first evolving into "super-regional" networks and more recently into national networks.[147] The number of PIN debit networks declined from about 40 during the early and mid-1990s, to 14 in 2006.[148] As the PIN debit networks expanded geographically, most merchants began to accept each of the major "national" PIN debit networks such as Star, NYCE, PULSE and Interlink. The share of PIN outlets accepting Star, for example, increased from only 26 percent in 1998 to 89 percent in 2006, while the percentage accepting Interlink increased from 46 percent in 1998 to 78 percent in 2006.[149]

Wide merchant acceptance of most major PIN debit networks increased competition for issuance because it allowed issuers to remove some "bugs" from debit cards without sacrificing merchant acceptance.[150] Since all major PIN debit networks were accepted at most large merchants

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[145] Fed Staff Working Paper, p. 27.

[146] *Company News; Visa Planning Debit Service,* N.Y. TIMES, June 12, 1991 at D4; http://www.mastercard.com/us/company/en/newsroom/myths_facts.html. The two card networks had already been players in the ATM marketplace since the 1980s, Visa with its Plus ATM network and MasterCard with its Cirrus ATM network. (Hayashi 2003, pp. 10-13.)

[147] *See, e.g*., Mercator Advisory Group, *Network Exclusivity: The Changing Direction of the Industry*, Research Note 2008 ("The STAR, PULSE and NYCE networks, once only regional networks, then super-regional, are now national networks that have saturated the majority of POS acceptance locations to the extent that the need for multiple network connections to provide cardholders with unlimited card access has diminished.").

[148] Hayashi 2006, pp. 10, 35.

[149] THE NILSON REPORT, No. 687, March 1999; THE NILSON REPORT, No. 879, May 2007. Nilson has not reported the number of merchants accepting PIN debit since 2007.

[150] The growth from many regional networks to a handful of national networks, and the implications for issuers' ability to remove bugs from cards, has been recognized by industry analysts and the Fed Staff. For instance, one analyst stated that the "STAR, PULSE and NYCE networks, once only regional networks, then superregional, are now national networks that have saturated the majority of POS acceptance locations to the extent that the need for multiple network connections to provide cardholders with unlimited card access has diminished." It also explains that "[a]s consolidations within the industry expanded the footprints of the leading networks nationwide, a reliance on multiple networks increasingly became unnecessary." (Mercator Advisory Group, *Network Exclusivity: The Changing Direction of the Industry*, Research Note 2008.) Similarly, the Fed Staff wrote in its working paper that "[i]n the early

that accepted PIN debit, removing one or more of the bugs was far less likely to result in situations where the bank's cardholders would be unable to use their cards. Consolidating PIN networks to a single brand also enabled issuers to create cost efficiencies from fewer membership fees, fewer funds settlement points, and consistent back office operations. Accordingly, the ability of issuers to reduce the number of bugs on their debit cards without the risk of substantial loss of merchant acceptance led to increased competition for issuance among PIN debit systems. In particular, it increased an issuer's ability to "play off" one PIN debit system over another in order to negotiate better terms. As long as the issuer believed that it would not lose significant merchant acceptance, it could drop bugs with relatively lower interchange fees in favor of networks with higher fees and greater acceptance.

2. Increases in PIN debit interchange fees have reflected competition for debit issuance and cardholder use and did not result from an exercise of market power

The competitive forces outlined above led PIN debit systems to compete for issuance by increasing interchange fees. Issuers' ability to remove some PIN debit bugs from cards led debit networks to compete for issuance—*i.e*., to be one of the PIN debit networks on issuers' cards. In particular, it led debit networks to compete for issuance through higher interchange fees, lower transaction and assessment fees, and by providing other card benefits. While MPC and their economists attribute much of the increase in PIN debit interchange fees to Interlink's large share of PIN debit and use of preferred issuance contracts, much of the increase in PIN debit interchange fees had occurred by 2003-2004, even though Interlink's share of PIN debit volume was only 16.1 percent in 2003 and 21.3 percent in 2004.[151] This suggests that increased competition for issuance, not Visa's alleged market power as asserted by MPC, was the key force driving PIN debit interchange fee increases.

Contrary to MPC's claims, increases in Interlink interchange fees to compete for issuance made economic sense absent any claimed motivation by Visa to suppress the growth of PIN debit. In fact, Interlink's share of PIN debit volume *increased substantially* following Interlink's interchange fee increases. After decreasing rapidly during the previous seven years, Interlink's share of PIN

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days of PIN debit, each network covered a fairly small geographic area, and many banks sought to offer their customers wider merchant acceptance of their PIN debit cards by "multi-bugging" the cards (*i.e.*, issuing cards that bore the logos of and could be used on multiple PIN networks). Over time, individual networks expanded their geographic coverage through a combination of mergers and organic growth, and in some cases, networks' geographic regions began to overlap one another." (Fed Staff Working Paper, p. 27.)

[151] Share is based on monthly transactions in March of each year. (ATM & DEBIT NEWS, *2004 EFT Data Book*, Vol. 3, No. 44, Sept. 11, 2003; ATM & DEBIT NEWS, *2005 EFT Data Book*, Vol. 4, No. 45, Sept. 16, 2004; ATM & DEBIT NEWS, *2006 EFT Data Book*, Vol. 5, No. 44, Sept. 15, 2005.)

debit transactions increased from around 10 percent in 2001 to about 40 percent in 2006.[152] These significant PIN debit share gains indicate that it was economically rational for Visa to raise PIN debit interchange fees for reasons having nothing to do with a supposed suppression of PIN debit growth.[153]

The fact that Visa's PIN debit rivals increased interchange fees also indicates that increases in PIN debit interchange fees reflect legitimate competition for issuance rather than an anticompetitive strategy to suppress PIN debit growth. MPC and Salop et al. claim that "[a]s Visa continued to drive up Interlink interchange rates, the competing PIN debit networks raised their rates to maintain levels of issuance under the pricing umbrella created by Visa's market power."[154] However, other PIN debit systems often led interchange fee increases. Indeed, the historical analysis of interchange rates provided by Salop et al. indicates that there are several instances where competing PIN networks maintained comparable or higher interchange fees than Interlink.[155] Similarly, a 2005 article stated that "higher rates for Interlink come in the wake of rate increases by regional electronic funds transfer networks, most recently NYCE, which this summer bumped its average interchange fee up 1.5 cents to 22 cents. … Indeed, the Interlink rate increase 'is a continuation of the marketplace battle for issuers,' … 'NYCE's increase leapfrogged the old Interlink pricing, which jeopardizes the business case for issuers to sign with Interlink.'"[156]

The substantial increase in Interlink's share and transaction volumes, and the fact that Visa's PIN debit rivals raised their interchange fees to similar levels, suggest that raising Interlink interchange fees was a rational competitive strategy, and not part of an anticompetitive strategy to exercise market power or restrict the growth of PIN debit.

3. Cardholders have benefited from changes in the debit industry

The changes in the debit industry discussed above have produced substantial cardholder benefits. Competition between issuers has taken a variety of forms, including lower checking

[152] Share is based on monthly transactions in March of each year. (DEBIT CARD DIRECTORY 2001 EDITION, (Faulkner & Gray, Inc., 2001); ATM & DEBIT NEWS, *2007 EFT Data Book*, Vol. 6, No. 44, Sept. 21, 2006; ATM & DEBIT NEWS, *2008 Revised Edition EFT Data Book*, Vol. 7, No. 40, Sept. 27, 2007.)

[153] Profitability of interchange fee changes to Visa depends on the effect of those changes on volume. This is because interchange fees are just a transfer payment from the acquiring bank to the issuing bank and not Visa revenue; Visa's revenue is driven by volume.

[154] MPC Paper, p. 5. *See also* Mott Paper, pp. 13-14; Salop Paper, pp. 1-2.

[155] For a $40 Supermarket transaction at the Base Supermarket interchange rate, for instance, Salop's Figure 1b indicates that both Maestro and NYCE had interchange fees equal to or often times higher than Interlink from about 2004 to 2009. (Salop Paper, Exhibit 1b.)

[156] *Interchange Rates in Play at First Data*, AMERICAN BANKER, Feb. 9, 2005.

account fees, elimination of debit transaction fees, increased cardholder rewards, innovative services and other benefits such as zero liability. As detailed above, most banks have eliminated transaction fees on PIN debit transactions as PIN debit interchange fees have increased, and fewer cardholders incur any checking account maintenance fees since the mid-1990s. Many cardholders have benefited from zero liability protection and enhanced dispute resolution and chargeback rights on Visa's signature debit and Interlink products. Moreover, expansion in debit usage, issuer competition, and competition with other forms of payment have led to the adoption by some issuers of debit rewards programs and other cardholder benefits. (*See* discussion, Section I.B.2.c above.) These reductions in fees, and increases in card benefits, are economically equivalent to decreases in the price of debit card services to consumers.

B. Competition for issuance and for cardholders has led to significant growth in debit use and acceptance

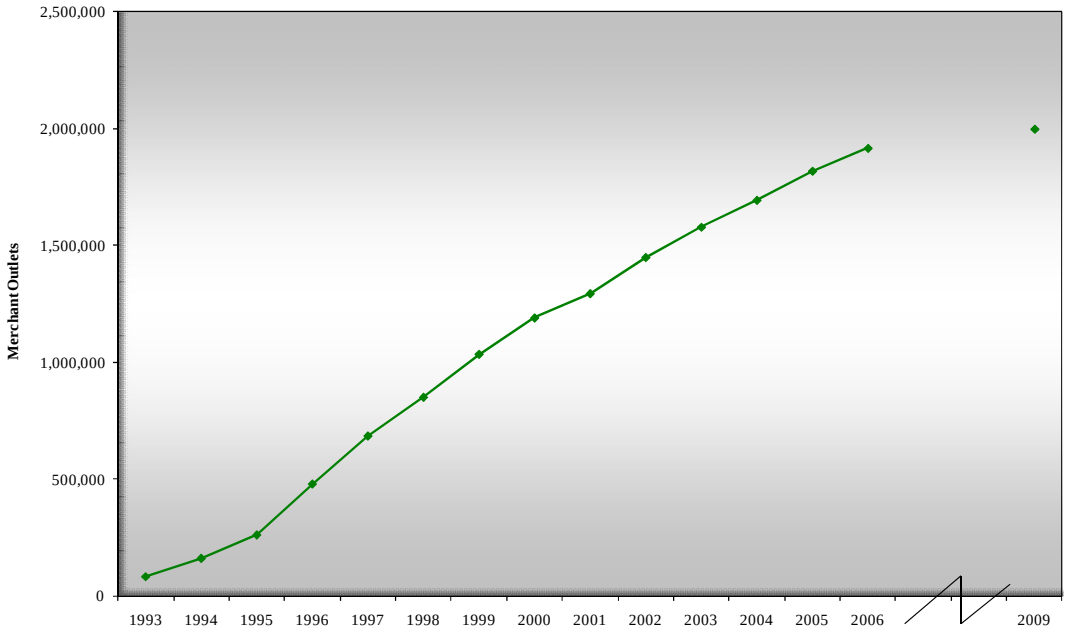
1. There is no economic or empirical basis for the proposition that higher debit interchange fees have suppressed merchant acceptance of PIN debit

Contrary to MPC's claim that higher debit interchange fees have suppressed the growth of PIN debit, and hindered the growth and development of debit overall, both forms of debit have grown extremely rapidly over the last two decades. MPC and Salop et al. present no empirical evidence that higher interchange fees on either PIN or signature debit have suppressed debit growth. Rather, Salop et al. merely suggest that higher interchange fees have suppressed debit growth by reducing merchant acceptance of PIN debit.[157] However, there is no economic or empirical basis for such a claim. MPC incorrectly assumes that higher interchange fees necessarily reduce output in the PIN debit segment. As we describe above, in contrast to higher prices in one-sided markets, a higher interchange fee does not necessarily lead to lower output. Neither is there any economic basis for the claim that higher interchange fees necessarily reduce merchant acceptance so long as the payment system offers a value proposition that is competitive to other available payment methods. Because interchange fees increase value to cardholders, they also raise the value to merchants of accepting the payment card (*see* discussion in Section I.). In fact, as shown in Exhibit 1, the number of merchant outlets with PIN debit capabilities has grown rapidly during the period where PIN debit interchange fees experienced occasional increases, increasing by 8 times from 1995 to 2009.[158]

[157] Salop Paper, pp. 2, 30-31.

[158] Sources: THE NILSON REPORT Nos.525, 549, 564, 589, 615, 641, 665, 687, 711, 737, 759, 785, 809, 833, 856, 879 and Notice of Proposed Rulemaking, pp. 19-20, 115.

Exhibit 1: Merchant Outlets with PIN Debit Capabilities



PIN pads initially were concentrated in particular segments such as grocery, fuel, and discount retail. Growth in the early part of this decade has been attributed to the expansion of PIN debit acceptance outside of these "everyday spend" categories. For instance, Macy's started accepting PIN debit at its stores in 2002.[159] More recently, PIN pads have expanded to retailers such as large electronic stores, home improvement stores and quick service restaurants. Examples of major merchants that have adopted PIN pads during the relevant period include Banana Republic, Barnes & Noble, Bed, Bath & Beyond, Best Buy, GAP, Comp USA, Home Depot, Kmart, Lowe's, Macy's, Nordstrom, Ross, Office Max, Old Navy, Staples and Toys R Us.[160]

2. Interchange fees have led to increased issuance, promotion, and cardholder use of signature and PIN debit

Moreover, PIN debit transaction volume is driven not just by merchant acceptance, but also by issuance and cardholder use. Interchange fees have led to increased issuance, promotion, and cardholder use of signature and PIN debit. Bank issuers promote debit card use in many ways. Such promotion has included direct mail marketing by banks, banking center messages and in-

[159] *Networks Showing Continued Rise in POS Transactions*, ATM & DEBIT NEWS, Vol. 2, No. 24, April 11, 2002. "It's really expanding beyond the early market of supermarkets and gas stations. The Home Depots and Wal-Marts generate an incredible amount of volume," Stacey Pinkerd, Visa's Head of Consumer Debit Products, said in 2002. (*Network Volumes Up as Bigger Merchants Back Use of PINs*, ATM & DEBIT NEWS, Vol. 2, No. 43, Aug. 29, 2002.)

[160] *See e.g., PIN Prompting Sways Debit Card Use*, CARDS & PAYMENTS, July 2006.

branch promotion, bank statement inserts, incentive and rewards programs to activate and use the debit card, and word-of-mouth promotion by the bank's cardholders. Industry reports note the increased adoption of debit rewards programs and other forms of debit promotion in recent years.[161] These promotion measures have served to inform consumers about the convenience and benefits of the product and to encourage debit card use.

The growth of debit can also be attributed to the significant investments made by Visa and its issuing banks to increase the use of debit cards. For example, Visa spent approximately $128 million from 1995 to 1999 on advertising to promote the Visa Check card and approximately $617 million for the period from 2000 to 2010.[162] Visa also has supported bank issuer promotion efforts through the provision of funds for media advertisement and other bank marketing programs.[163] Visa has made large investments to educate consumers about using debit cards and to promote the use of debit cards. Visa also introduced its Visa Extras rewards program in 2003.[164] MasterCard also has invested heavily to expand usage of its signature debit cards during this period.

Both signature and PIN debit usage have benefited from the high levels of debit promotion by Visa and its issuing banks. The promotion of Visa signature debit by both Visa and its issuing banks caused many more consumers to carry and use debit cards at the point-of-sale. Because the vast majority of outstanding Visa debit cards have both signature debit and PIN debit capabilities, the resulting increase in consumer knowledge about, and comfort with using, debit cards at the point-of-sale has had a positive effect on the use of PIN debit cards, particularly because of merchant efforts to steer debit transactions to PIN debit. Early usage of PIN-based debit was low because many cardholders were not familiar with when or how to use it. With the widespread adoption of signature debit, and the corresponding awareness of the established Visa and MasterCard brands (and the many millions of dollars spent on consumer education and advertising), debit usage accelerated rapidly. PIN debit grew despite lack of consumer awareness because of merchant steering and "free-riding" on signature debit and consumers' broad recognition of the Visa and MasterCard brands. As *ATM & Debit News* reported, "[g]rowth in offline debit card use can be traced, in part, to the millions of promotional dollars spent each year by Visa and MasterCard International, and online debit growth appears to be going along for the ride."[165] At the same time,

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[161] *See* discussion, Section I.B.2.c above.

[162] Information provided by Visa Inc.

[163] *See, e.g.,* Visa Inc. Form 10-K, Sept. 30, 2008, pp. 71, 238; Visa Inc. Form 10-K/A, Sept. 30, 2007, pp. 11-12.

[164] *"Visa Extras" Rewards*, THE NILSON REPORT, No. 803, Jan. 2004.

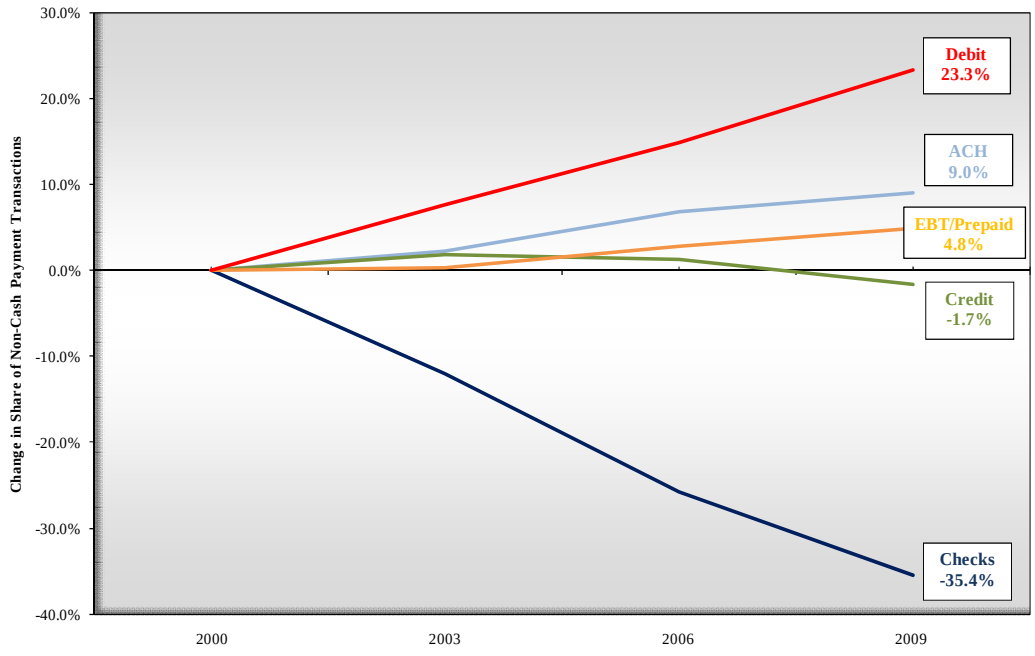
[165] *Debit Card Volume Is Up Using PINs And Signatures*, ATM & DEBIT NEWS, Vol. 1, No. 43, Aug. 30, 2001.

PIN debit has grown at similar or even higher rates without any significant investment in consumer awareness by the PIN networks themselves.

3. The empirical evidence indicates that the volume of both signature and PIN debit transactions have grown rapidly

Competition between debit networks for signature and PIN debit issuance have not "suppressed" debit usage, as MPC and its economists claim. In fact, debit has grown rapidly relative to other payment methods. For example, data from the Federal Reserve's payments studies indicates that the share of total noncash payments accounted for by debit more than tripled from 11.4 percent in 2000 to 34.8 percent in 2009, a gain of over 23 share points.[166] By comparison, the share of checks declined from 57.8 percent in 2000 to 22.4 percent in 2009, a loss of 35.4 share points. The share of credit card transactions was down slightly from 21.5 percent to 19.8 percent.

Exhibit 2: Debit Share of Non-Cash Payment Transactions Increased Substantially from 2000 to 2009



PIN and signature debit both grew rapidly over this period, with signature debit increasing its share of payments from 7.3 percent in 2000 to 21.5 percent in 2009 and PIN debit increasing its

[166] Noncash payments include checks, ACH, debit cards, credit cards and EBT/prepaid cards. In 2000 and 2003 only EBT is reported. (2004 Federal Reserve Payments Study, Appendix A: Tabular Results at 11, Dec. 2004; 2007 Federal Reserve Payments Study, Appendix A: Tabular Results at 17, Dec. 2007; and 2010 Federal Reserve Payments Study, 4.2 Tabular Results at 22, Dec. 8, 2010.)

share from 4.1 percent in 2000 to 13.3 percent in 2009.[167] In fact, PIN debit has grown at a faster rate than signature debit in the past decade. Signature debit has grown at a compound annual rate of 17.9 percent, while PIN debit has grown at 19.1 percent from 2000 to 2009, the period when PIN debit interchange fees increased due to the competition for issuance described above.[168] The rapid growth of PIN debit is particularly notable because certain segments, such as e-commerce, are not well suited to PIN-authorized transactions. The rapid growth of both PIN and signature transactions undermines MPC's claims that the growth of the debit industry has been "suppressed" by market power and economic inefficiencies. In sum, the use of debit has grown extremely rapidly based on any objective yardstick. Debit has become the payment method of choice for millions of US consumers.

III. Network Exclusivity and Routing Restrictions

The Fed staff propose two alternative "network exclusivity" standards. The first proposed alternative (Alternative A) requires a debit card to have at least two unaffiliated payment card networks.[169] An issuer could comply with this alternative, for example, by having one signature network (*e.g.*, Visa debit) and one unaffiliated PIN debit network (*e.g.*, Star) on a card.[170] Alternative B would require a debit card to have at least two unaffiliated payment card networks for each method of authorization. Under such alternative, a debit card enabled for signature and PIN authentication—the most common configuration in the U.S. today—would need to have at least two unaffiliated signature debit networks and two unaffiliated PIN debit networks.[171] In addition, the proposed regulation would prohibit issuers and debit networks from restricting a merchant's ability to direct the routing of debit card transactions.[172]

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[167] *Id*. EBT/Prepaid Card includes only EBT in 2000 and 2003. Prepaid cards including general purpose and private label were only reported for 2006 and 2009.

[168] 2004 Federal Reserve Payments Study, Appendix A: Tabular Results at 11, Dec. 2004; 2007 Federal Reserve Payments Study, Appendix A: Tabular Results at 17, Dec. 2007; 2010 Federal Reserve Payments Study, 4.2 Tabular Results at 22, Dec. 8, 2010. *See* Salop Paper, Exhibit 1, and Mott Paper, p. 13, for data on PIN debit interchange fees.

[169] In this paper, we address the Fed staff's proposal that Alternative A requires debit cards to have at least two unaffiliated payment card networks. We understand that Section 920 of the EFTA may also be interpreted only to prohibit issuers or networks from agreeing to limit the number of networks to less than two unaffiliated networks. Under this interpretation, an issuer is not always required to place multiple networks on each card if the issuer makes an independent business decision not to do so.

[170] Memo to the Board of Governors of the Federal Reserve System, Proposed Rule on Debit Interchange Fees and Routing, Dec. 13, 2010 [hereinafter Fed Staff Memo], p. 13.

[171] *Id.*

[172] *Id.*, p. 14.

As we discuss below, both alternatives would reduce choice for consumers, and would undermine network competition and innovation in ways that will harm consumers. However, if one of the Board's proposed alternatives is to be adopted, Alternative A—requiring debit cards to have at least two unaffiliated payment card networks—is preferable. Alternative A provides merchants with two debit networks on which transactions may be routed, and does not carry as great a risk of reduced competition, innovation, and consumer choice as Alternative B.

A. Alternative B would inhibit competition and innovation, and ultimately harm consumers

1. Alternative B goes beyond mandating multi-homing or prohibiting network exclusivity—it essentially mandates that cardholders not have any choice in the debit network they use

MPC and others, such as Adam Levitin of Georgetown University, claim that Alternative B will better advance the goals of the Durbin Amendment and benefit consumers.[173] In particular, Levitin describes Alternative B as meeting the Amendment's objective of restricting network exclusivity and requiring "multi-homing."[174] However, Alternative B would inhibit competition and innovation, and ultimately harm consumers.

Network exclusivity refers to a contract between a network and an issuer that requires the issuer to have functionality for only one system on its cards. Multi-homing refers to a situation in which users participate in multiple networks or platforms.[175] For instance, in the video game industry, customers may multi-home by using both Sony PlayStation and Microsoft Xbox consoles. On the other side of the market, software developers may also multi-home by producing games for both consoles. Notably, the payment card industry is *currently* characterized by multi-homing on both sides of the market. Most merchants accept multiple payment cards and payment methods, and thus "participate" in various payment networks. Similarly, cardholders typically carry several payment cards, and therefore also participate in multiple networks (although some claim that because most cardholders prefer to use one payment card, the economic effect of such multi-homing is limited). Thus, the proposed regulation does not mandate multi-homing in an industry currently characterized by single-homing.

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[173] Adam J. Levitin, Cross-Routing: PIN and Signature Debit Interchangeability Under the Durbin Amendment, Georgetown University Law Center Working Paper, November 2010 [hereinafter Levitin Paper].

[174] Levitin Paper, p. 4. Levitin states that "[t]he key provision of the second part of the Amendment is the so-called 'multi-homing' provision." (*Id.*)

[175] *See, e.g.*, Jean-Charles Rochet and Jean Tirole, *Platform Competition in Two-sided Markets*, 1 J. EUR. ECON. ASS'N 990, 995 (2003), describing multi-homing as a situation in which "a fraction of end users on one or the two sides connect to several platforms."

Alternative B goes beyond mandating cardholder multi-homing or prohibiting network exclusivity. It requires that every debit card with signature and PIN capability have at least *four* debit networks.[176] Moreover, MPC and Levitin advocate the implementation of certain "routing restrictions" which would eliminate all consumer choice over these four networks.[177] Instead, merchants on their own would choose over which of those four networks the transaction would be processed. For instance, Levitin proposes that merchant "cross-routing" between PIN debit and signature debit also be required—that is, that a merchant could process a signature debit transaction over a PIN debit network and vice versa.[178]

Requiring at least four unaffiliated payment card networks, coupled with a merchant's ability to route electronic debit transactions over any of the networks, would undermine the ability of a cardholder to control, and perhaps even to know (unless the regulations require merchants to inform consumers), over which network a transaction would be routed. Thus, even if a cardholder wished to pay using Visa signature debit, for example, the merchant would be able to override such a choice and process the transaction via the debit network of its choice. It would be up to the merchant to decide over which signature debit or PIN debit network to process the transaction. In addition, while some consumers may prefer not to expose their PIN in public merchant settings, Alternative B would take away the consumer's ability to control the exposure to the merchant of her PIN, if she wants to use her debit card. Conversely, other consumers that prefer to enter their PIN could be compelled to sign. Essentially, Alternative B and the routing restrictions advocated by MPC and Levitin would eliminate any cardholder say in the choice of debit network. A cardholder would no longer get to decide whether to use Visa debit or MasterCard debit, or whether to use signature debit or PIN debit. In fact, eliminating cardholder say in the choice of debit network is one of the stated goals of proponents of Alternative B. MPC claims, for instance, that "merchants should be able to choose the network over which to route each debit card transaction."[179]

This argument presumes that all possible routing options carry the same consumer value, and thus consumers should be indifferent. On the contrary, networks each have their own operating regulations and offer varying levels of cardholder protections and benefits. This variability fosters competition and innovation in payments, which has been evident throughout the historical rise in debit usage.

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[176] As Levitin states, "there would be at least four networks competing for all debit transactions." (Levitin Paper, p. 9.)

[177] Salop Paper, pp. 60-61; Levitin Paper, p. 11.

[178] Levitin Paper, p. 9.

[179] MPC Paper, pp. 15-16.

Notably, the Durbin Amendment does not seem to require the elimination of consumer choice. According to the Durbin Amendment, "an issuer or payment card network" shall not "restrict the number of payment card networks on which an electronic debit transaction may be processed to (i) 1 such network; or (ii) 2 or more such networks which are owned, controlled, or otherwise operated by (I) affiliated persons; or (II) networks affiliated with such an issuer."[180] The Amendment further requires that payment networks and issuers not restrict the ability of merchants to direct the routing of the transaction.[181] Thus, the Amendment seems to prohibit (1) exclusive network agreements and (2) issuer and network restrictions on merchant routing. But it does not restrict the ability of *cardholders* to have a say in how their transactions are routed, or suggest that merchants should disregard consumer choice or preference when making their routing decisions. Nor does it seem to require that every debit card have functionality for four debit networks.

In fact, Levitin appears to acknowledge this, stating that "[o]n its face, the Durbin Amendment appears to merely prohibit exclusive network arrangements in debit card issuance. Arguably, the requirement would be satisfied with the inclusion of a single signature and single PIN debit network on a card (as long as they are not affiliated with each other)."[182] However, Levitin claims that this "overly narrow reading of the multi-homing provision would both frustrate its purpose and defeat its stated requirement that merchants have the ability to choose the network on which any given electronic transaction is to be routed. Multi-homing can fulfill its potential only if it results in competition for each transaction on a field that card issuers cannot effectively control."[183] But multi-homing does not mean the elimination of cardholder choice, nor does the goal of the Durbin Amendment appear to be such elimination. Moreover, as we discuss below, such a fundamental change in the nature of the debit industry would not make the industry more competitive or efficient. In fact, the elimination of consumer choice would fundamentally undermine competition between payment networks on the cardholder side of the market, including networks' incentives to innovate in ways that would benefit cardholders.

From the cardholder perspective, the loss of choice likely would have significant adverse consequences. For example, many cardholders may prefer to use Visa signature debit or Interlink

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[180] Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub. 111-203), Sec. 920 (b)(1)(A).

[181] *See, e.g.*, Fed Staff Memo, p. 12: "EFTA Section 920 requires the Board to issue rules prohibiting issuers and networks from restricting the number of networks over which a debit card transaction may be routed to one such network or to two or more affiliated networks (a practice known as 'network exclusivity'). The statute also requires the Board to issue rules prohibiting issuers and networks from inhibiting the ability of a merchant to direct the routing of debit transactions over a particular network."

[182] Levitin Paper, p. 5.

[183] *Id.*, p. 7.

PIN debit because both of these networks provide zero liability protection for fraud and enhanced dispute and chargeback rights.[184] Similarly, some debit networks may offer cardholder rewards or other benefits. Moreover, routing over some debit networks after the regulations are adopted could lead the consumer to be charged a transaction fee, whereas other routing outcomes may lead to no fees being applied. Visa also offers cardholders features such as the ability to receive transaction alerts and selective authorization systems which work only if the transaction is routed through the Visa system (called VisaNet).[185] But under Alternative B, the cardholder would not be able to choose the network over which to execute a debit transaction, and thus would not be able to choose whether to obtain these protections, services, and other benefits, or be able to control the transaction fees that he or she pays.

This potential harm to consumers from allowing merchants to choose transaction routing was recognized by Fed staff. For example, the staff report states that:

> "[f]rom the cardholder perspective, however, requiring multiple payment card networks could have adverse effects. In particular, such a requirement could limit the cardholder's ability to obtain certain card benefits. For example, a cardholder may receive zero liability protection or enhanced chargeback rights only if a transaction is carried over a specific card network. Similarly, insurance benefits for certain types of transactions or purchases or the ability to receive text alerts regarding possible fraudulent activity may be tied to the use of a specific network. Requiring multiple unaffiliated payment card networks, coupled with a merchant's ability to route electronic debit transactions over any of the networks, could reduce the ability of a cardholder to control, and perhaps even to know, over which network a transaction would be routed. Consequently, such a requirement could reduce the likelihood that the cardholder would be able to obtain benefits that are specific to a particular card network. Moreover, it may be challenging for issuers or networks to explain to the

[184] http://usa.visa.com/personal/security/visa_security_program/zero_liability.html; *Visa Adds Chargeback Rights to Its Rapidly Growing Interlink Card*, DIGITAL TRANSACTIONS NEWS, Dec. 1, 2004.

[185] In 2009 Visa launched Visa Alerts, a service provided by Visa and issuers that gives cardholders "near real time" alerts of account activity. If a transaction occurs on VisaNet that meets a cardholders pre-selected criteria the cardholder is instantly notified via SMS text message, email or through the Visa Mobile application. The alert contains the amount of the transaction, time, date and any relevant merchant information of the transaction in question. Cardholders can select criteria such as purchase amount, international transactions, card not present transactions, declined transactions, cash withdrawals, and/or gasoline purchases. Cardholders can subscribe to Visa Alerts through their issuer. (Visa Press Release, "Visa Transaction Alerts No Available to Clients in North America," Nov.17, 2009.) Visa also launched its Targeted Acceptance feature which allows a cardholder to pre-select authorization criteria for spending on her card. For instance, a cardholder can set merchant types the card can be used at; spending limits; and/or geographic limits. If a transaction is outside of these limits it is automatically declined. (*Now in Pilot, Visa's Consumer Alerts Set to Roll out Later This Year*, DIGITAL TRANSACTIONS, March 27, 2009.) These examples are illustrative only, as Visa offers numerous other services (*e.g.*, cancellation of preauthorized bill payment) and promotions (sweepstakes, Super Bowl ticket contests, merchant-specific promotions, rewards) that depend on processing through VisaNet in order for the service to be applied to the transaction.

cardholders that they will receive certain benefits only if a merchant chooses to route their transaction over that particular network."[186]

Merchants will have incentives to steer transactions to the network with the lowest cost to themselves, and ignore the cardholder protections and benefits that each network may or may not provide. Merchant interests often are not aligned with cardholder interests. For example, if the merchant can reduce its costs by choosing networks with "merchant friendly" fraud and chargeback policies, it may do so even if the cardholder would have preferred that the transactions were routed over other networks.[187] This can also lead to inefficiencies if the ability to avoid potential liability by routing transactions to "merchant friendly" networks causes the merchant not to take actions to reduce fraud and disputes, even when the value of such actions in terms of reduced fraud would enhance the overall value to all participants in the system.

In addition, Alternative B would create significant consumer confusion. Transactions on different networks can have different rules regarding cardholder protections, different rewards and other benefits, and different fees. Different transactions on the same card would be run on different networks, depending on the network the merchant chose. On some transactions, different cardholder protections, benefits, and fees would apply compared to other transactions on the same card. In fact, cardholders may not even know which network a particular transaction is run on. If confronted by fraud or an unscrupulous merchant, the cardholder would be confronted with different rules, depending on the network chosen by the merchant.

Although MPC and Levitin recognize that consumers essentially would lose all choice of debit network, they claim that cardholder choice is unnecessary because debit networks are (or should be) homogeneous commodities.[188] Today, debit networks do not offer homogenous commodities—debit cards and networks are competitive, offer a variety of features and functions, and the debit industry has exhibited consistent innovation and change since its inception. But

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[186] Notice of Proposed Rulemaking, pp. 112-113. The Fed staff notes that, "[t]hese benefits are often provided for transactions routed over signature debit networks; they are less commonly available for PIN-debit transactions." (*Id*., footnote 92.)

[187] The merchant would be more likely to engage in this type of behavior when it is difficult for the consumer to determine whether they should blame the merchant or the issuer when their card does not perform as they expected.

[188] Levitin explains that "[t]he particular routing as among approved issuers should not matter because of the commodity service provided by payment card networks. The role of a payment card network in a payment card transaction is to link the funding source of the transaction—a deposit account, a prepaid account, or a line of credit—to the merchant's bank… The networks provide the pipelines that transmit transaction authorization data to the issuer and then transmit the funds from the issuer to the acquirer." (Levitin Paper, pp. 9-10.) *See also id*., p. 10: "While the pipeline technology used for payment card authorization, clearance, and settlement (ACS) is impressive and proprietary, the service provided by the various networks is virtually identical from the perspective of any network participant—issuers, acquirers, consumers, and merchants." Levitin also claims that PIN debit networks are essentially the same as signature debit networks, because a "PIN debit network is easily capable of capturing and transmitting all the necessary data for signature debit authorization." (*Id.,* p. 11.)

homogeneity of debit networks would be the likely result of a regulation mandating that consumers lose all choice. Levitin's position essentially advocates a market outcome in which debit networks do not compete by providing cardholder protections and other benefits, or by charging lower fees. There is no basis in economics that such a market outcome is more competitive, efficient, or generally good for consumers. MPC and Levitin claim that making all debit networks homogeneous commodities and eliminating cardholder choice would reduce costs to merchants, as the only effective dimension of competition between networks that remains would be the fees charged to acquirers. But, as we discuss above and throughout this paper, a payment system that is merely less costly to merchants is not necessarily more competitive, efficient, or better for consumers. This is especially the case under the proposal advocated by MPC and Levitin, because cardholders would receive few if any benefits and pay high transaction fees.

Given the proposed routing rules, even Alternative A will inhibit cardholder choice to some extent. But under Alternative A, cardholders would retain some choice over which network to use, while merchants would still have discretion to make independent acceptance decisions, offer discounting, or steer cardholders to use PIN versus signature debit. Cardholders would retain some control over the debit network they use because they would have some choice over the authorization method used (*i.e.*, PIN or signature). That is, for a card with functionality for one signature and one PIN debit network, cardholders would be able to choose the debit network by entering a PIN or by signing (although merchants' attempts to steering from one debit network to another in effect may reduce cardholder choice). In addition, Alternative A would have less drastic impacts on suppressing competition among debit networks for cardholders.

2. Alternative B would undermine incentives to compete by innovating and providing valuable benefits and protections to cardholders, and create a free-riding problem between debit networks

MPC, its economists, and Levitin claim that Alternative B would enhance competition between debit networks and benefit merchants. For instance, Salop et al. state that "the rules may help to foster longer-run network competition, and this might allow for potential future deregulation of interchange fees. In addition, these rules will encourage the networks to compete on the network quality dimensions provided to merchants, such as the stability and availability of the network and network response time."[189] However, they focus entirely on the merchant side of the market, ignoring cardholder benefits that would be lost as a result of reduced competition on the cardholder side, as well as adverse effects on innovation.

[189] Salop Paper, p. 55. *See also*, MPC Paper, p. 14: Alternative B "could help reduce network market power and possibly lead to greater competition over time."

Alternative B would suppress competition between debit networks on the cardholder side of the market. In particular, the loss of cardholder choice of debit network would reduce debit networks' incentives to compete for cardholders. Because cardholders would have no choice as to the debit network that is used, there would be little gain to debit networks from competing through lower issuer fees or offering valuable cardholder benefits. For instance, a debit network that offers low fees to issuers or valuable cardholder protections would not gain competitively relative to a debit network that charges very high fees or offers no cardholder protections at all. In fact, to the extent that the latter network would be able to set lower fees on the merchant side of the market, it would take share away from the network offering valuable cardholder benefits and low fees. The ultimate result of this competition would be a market equilibrium in which cardholders would receive few benefits and would bear most or all the cost of the operating the debit networks. There is no basis in economics for concluding that such an equilibrium would be more efficient or competitive. MPC claims that Alternative B would "possibly lead to greater competition [for merchants] over time."[190] However, the additional "competition" for merchants created by Alternative B comes at great cost in terms of loss of cardholder benefits and choice, consumer confusion, reduced competition and innovation on the cardholder side of the market.

Alternative B also would create a free-riding problem between debit networks. In particular, all debit networks on the card would benefit from investments and promotion by one debit system (*e.g.*, Visa debit) to encourage use of the card. In fact, the return to investments by one payment system that convinced the cardholder to use its debit card would be captured by whatever network had convinced the merchant to give it routing preference among the networks on the card. Rather than investing in product attributes that cardholders value, other debit systems would simply pay merchants to route transactions through their networks, benefiting from the cardholder usage created by the investment and promotion by a rival system. This free-riding problem would undermine incentives to invest in improving debit cards and promoting debit, and would ultimately reduce debit usage.

Free-riding between debit card networks would undermine incentives to introduce new debit technologies, which are expected to revolutionize the payment cards industry in the next few years. As the Fed staff recognized in its working paper, "reducing the distinctions among card networks, mandating multi-bugged cards would be likely to degrade the values of the network brands and to reduce incentives to innovate."[191] Many payment networks, wireless providers, financial institutions, and others have been investing in developing and deploying contactless and mobile phone based

[190] MPC Paper, p. 14.

[191] Fed Staff Working Paper, p. 52.

payment technologies. For instance, Visa has recently introduced a contactless technology named payWave that enables account holders to make purchases by waving a Visa payWave-enabled card or mobile device in front of a secure reader.[192] To enable the service, a chip is embedded in the card (or other device such as a mobile phone or key fob), which sends the account information to the secure reader at the point of sale. Visa also has partnered with DeviceFidelity to launch a solution that combines Visa's payWave technology with DeviceFidelity's In2Pay technology to transform a mobile phone with a microSD memory slot into a mobile contactless payment device.[193]

Many different types of investments are required by both Visa and card issuers to provide these new services to cardholders. First, Visa has to develop and/or acquire the underlying technology. Visa also has to ensure that it is accepted and properly installed at a sufficient number of merchants to be attractive to cardholders. Second, Visa must attract card issuers that are willing to invest in issuing cards or other devices with the new chip technology, and educating cardholders how and where they can use the devices to make payments. In addition, both Visa and the issuers have to invest in promoting the new technology to get cardholders interested in using it and merchants interested in accepting it. Obviously, debit networks would have a much smaller incentive to make these investments if merchants could use the technology to process transactions through rival debit networks that are required to be enabled on the card or other device. In fact, Visa could make these investments to build cardholder demand for the new technology and merchant demand to accept it, and the vast majority of the resulting transactions could go to whichever of its competitors was able to convince merchants to favor it in routing decisions.

Moreover, under Alternative B, there would be far less incentive to develop new authorization methods that would enable new transaction types, or be more effective in reducing fraud. If a payment card network developed such an authorization method, under the Board's proposal it apparently could not be deployed on any debit cards, unless the network's competitors have developed and offered a similar authorization method. Since Alternative B would require two unaffiliated networks per authorization method, any new authorization method or form factor that was not available on two unaffiliated networks apparently could not be implemented on debit cards without violating the Board's rule. To promote competition, the proposed rules should not require that the deployment of such innovative technologies be delayed until multiple networks can be enabled on the card.

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[192] Visa payWave For Merchants Frequently Asked Questions *available at* http://usa.visa.com/download/merchants/paywave_merchant_faq.pdf.

[193] Visa Press Release, "Visa Mobile Contactless Payments Solution Certified for Commercial Use," Dec. 7, 2010, *available at* http://corporate.visa.com/media-center/press-releases/press1083.jsp.

In the payments industry as in many others, innovation is typically driven by competition. Payment networks compete with their rivals by, for example, developing innovative technology, and engaging in effective branding, consumer education and marketing, in order to create a preference for their products over competing products among consumers, issuers and merchants. Under the Board's proposal, such an innovative network may be required to license or even give away its intellectual property to its competitors, or wait for them to make similar investments, before an issuer could deploy its unique product.

Alternative B also would undermine the significant investments that Visa has made to grow the debit category. As we discuss above, Visa has made significant investment to support bank debit issuance and promotion. In competing for bank issuance, Visa often agreed to provide banks with marketing allowances and other funding for debit promotion activities.[194] Similarly, Visa and its issuing banks historically have made other types of investments to convince consumers to use their debit cards at the point of sale, such as providing greater liability protections, greater dispute and chargeback rights, rewards programs and other cardholder services. Alternative B essentially forces Visa to "share" the value of these investments with rival signature debit networks. In essence, all Visa debit cardholders would become cardholders of other debit networks. This is analogous to forcing eBay to allow all its sales listings to also be available on other online auction networks. Such policies are harmful to innovation and the competitive process.

The importance of innovation in the payment card industry was highlighted by Governor Warsh: "we're looking for a dynamic competitive market place for payments broadly. And I think recent evidence suggests that we continue to see more convenience, more options, and more choice for consumers. And this is a development that our rule should try to encourage rather than discourage."[195] Similarly, Chairman Bernanke stated that "it is very important that we, as Governor Warsh said, do all we can to preserve the dynamism, competition and innovation in payments which has obviously been an important feature of that area for quite a long time."[196] Alternative B would have the opposite effect.

B. Alternative B would undermine the growth of debit

The free-riding by debit networks described above, and resulting diminished incentives to invest in and promote debit, would ultimately reduce debit card usage and volume. As we discuss above in Section II., cardholder benefits and promotion of debit have been important factors in

[194] *See e.g.,* Visa Inc. Form 10-K, Sept. 30, 2008, pp. 71, 238; Visa Inc. Form 10-K/A, Sept. 30, 2007, pp. 11-12.

[195] Board Transcript, p. 53.

[196] *Id.*, p. 60.

spurring the widespread adoption and rapid growth of debit during the last two decades. To the extent that these incentives to offer benefits and promote debit usage to cardholders are substantially reduced, cardholders likely will substitute to other forms of payment, including checks, cash, credit, pre-paid cards and, depending on the final scope of the Board's rules, alternative systems such as PayPal and others that may not be similarly restricted by such regulations.

The substantial compliance costs for making multiple signature debit networks available on many debit cards, which the staff has recognized, also would reduce incentives to issue debit cards and further inhibit the growth of debit. Alternative B would require the replacement and/or reprogramming of millions of merchant terminals, as well as substantial changes to software and hardware for networks, issuers, acquirers and processors.[197] These costs may be particularly significant for smaller issuers. Such investments would be particularly onerous in light of the Board's proposed limitations on interchange fees. Issuers would have little incentives to make such investments, particularly if the regulations do not allow issuers to cover the costs of their debit programs, an issue we address next.

IV. Proposed Interchange Fee Standards

A. The proposal to limit interchange fees to average variable cost of narrowly defined "ACS" categories will undermine issuers' incentives to issue and promote debit cards

1. Interchange fees that are limited to issuers' average variable cost of ACS would not cover many of the costs of issuer debit programs

The proposal to limit interchange fees to average variable cost of the narrowly defined "ACS" categories would undermine issuers' incentives to issue and promote debit cards. The proposed standards would allow issuers to recover only certain variable costs that are "directly attributable to authorization, clearance, and settlement of the transaction."[198] Fed staff also recommends that the proposed standards not allow an issuer to recover through interchange fees (1) costs that are specific to a particular transaction, but not included in the Fed staff's narrow definition of ACS (*e.g.*, costs of responding to customer service inquiries, the cost of erroneous or fraudulent transactions, and network fees paid by issuers[199]) or (2) costs that are not specific to a particular transaction (*e.g.*,

[197] Notice of Proposed Rulemaking, p. 114.

[198] Fed Staff Memo, p. 5.

[199] Network fees that issuers pay for ACS functions are clearly part of issuers' ACS costs.

the cost of producing and distributing debit cards, providing periodic cardholder statements, general costs of deposit accounts, and overhead).[200]

As discussed above, there is no reason to conclude that cost-based interchange regulation would be more socially beneficial compared to market-based rates; it instead will likely reduce debit transaction growth, innovation, and valuable card features. That said, there is even less basis—and certainly no economic theory—to suggest economic policy benefits from a cost-based interchange regulation that covers only a limited portion of issuer costs in providing debit services. There is no disagreement that under any of the alternatives being considered, issuers will not be able to cover many of the costs that they incur in providing their debit programs for the benefit of cardholders and merchants. Examples of costs of operating debit card programs that likely would not be covered by the proposed regulations include:[201]

▪ The costs of customer service, including call centers and online and in-branch support services where general and transaction-specific customer concerns are addressed
▪ The costs of responding to alleged and actual erroneous electronic debit transactions and absorbing associated fraud losses (which are mandated by the Electronic Fund Transfer Act and Regulation E)
▪ The costs of regulatory compliance and disclosures (including compliance with the Electronic Fund Transfer Act and Regulation E requirements)
▪ Card production and delivery costs
▪ Costs associated with selling and distributing debit cards
▪ Cost of cardholder rewards and incentives
▪ The costs of reissuance of lost or compromised debit cards
▪ The actual costs of responding to alleged and actual data breaches involving electronic debit transactions
▪ The costs of maintaining electronic debit transaction records
▪ The costs of debit program research and development
▪ The costs of customer education and marketing regarding use of debit cards and customer rights and responsibilities
▪ Costs of providing cardholders their periodic statements and other customer notices

[200] *Id*.

[201] The Clearing House and Financial Services Roundtable Letter to Board of Governors of the Federal Reserve System, Re: Rulemaking pursuant to the debit interchange transaction fee restrictions in the Dodd-Frank Act, Nov. 1, 2010, p. 6; Merchant Payment Coalition Letter to Board of Governors of the Federal Reserve System, Nov. 30, 2010, pp. 2-3.

▪ Data and systems security costs
▪ All network fees, including fees for "assessments" and "chargebacks"
▪ All non-variable costs (*i.e.*, fixed costs)

Many of these costs have substantial variable components. As the Board staff has recognized, whether a particular cost is "fixed" or "variable" depends on many factors, such as the magnitude of the increment to output that is being considered, and the time horizon considered.[202] As the magnitude of the relevant change in output increases and the length of the relevant time frame increases, most of the costs that appear "fixed" in the short run become variable. For example, if a bank increases the number of debit card holders by twenty percent, it may be able to operate in the short run without increasing its call center and other customer service staff. However, if the increase is permanent, customer service levels will likely decline significantly if the customer service staff is not scaled up. These costs therefore are variable. Accordingly, the proposed regulation will not allow issuers to cover many of the variable costs of their debit programs, much less the total costs.

In addition, the Board appears to have eliminated from "allowable costs" many cost categories that might involve shared resources between debit support functions and other demand deposit account ("DDA") related functions. For example, one variable, transaction-specific cost excluded from allowable costs are costs associated with handling cardholder inquiries and disputes regarding transactions. Issuers incur significant costs to process cardholder inquiries and disputes, and these costs clearly relate to the settlement of those transactions. The fact that some component of the costs is "shared" with other DDA functions does not mean that they are not variable with respect to the volume of debit transactions. For instance, although the same bank systems and personnel may also deal with some DDA accountholder inquiries that are not related to debit card transactions, those systems and personnel likely would have to be expanded if debit transaction volume for the issuer grows considerably. There is no economic basis for ignoring these legitimate costs of supporting debit card transactions which likely have a significant variable component.

In sum, there is no economic basis for restricting allowable costs to the very narrow interpretation of ACS costs adopted by the proposed regulations. There is no dispute that under the

[202] As the Fed staff has noted, "One commonly-used economic definition of incremental cost refers to the difference between the cost incurred by a firm if it produces a particular quantity of a good and the cost incurred by that firm if it does not produce the good at all. Other definitions of incremental cost consider the cost of producing some increment of output greater than a single unit but less than the entire production run. However, under any of these definitions, the increment of production is larger than the cost of any particular transaction." (Notice of Proposed Rulemaking, p. 64, citing William J. Baumol, John C. Panzar, and Robert D. Willig, *Contestable Markets and the Theory of Industry Structure* (Harcourt Brace Jovanovich 1982).)

proposed regulations, interchange would not cover many of the legitimate costs of issuer debit programs.[203]

2. Limiting interchange fees to narrowly defined ACS costs would undermine issuers' incentives to issue and promote debit cards, which in turn would harm consumers, who will have fewer and less attractive options for debit cards

The proposed reductions in interchange fees would undermine issuers' incentives to issue and promote debit cards and would harm consumers. As described in Section I.B.2. above, debit interchange fees lead to lower cardholder fees and greater cardholder benefits because competition among banks for checking account customers leads them to pass through the revenue they obtain from higher interchange fees. This competition takes a variety of forms, including lower checking account fees, reducing or eliminating transaction fees for debit transactions, and offering cardholder rewards, innovative services, and other benefits for debit card transactions. The market evidence described above shows that consumers have benefited in all of these dimensions in recent years.

The Fed staff recognizes that competition among issuers for checking account customers provides significant benefits to debit cardholders. For example, Fed staff stated that "[t]he banks use the revenues from these interchange fees to offer more attractive deposit account terms to their customers including in some cases rewards for making payments with debit cards."[204] A significant reduction in debit interchange fees, especially if issuers are not able to cover their variable costs of operating their debit programs, will undermine issuers' incentives to issue and promote debit cards, which in turn will mean that consumers will have fewer and less attractive debit card choices.

There is a high degree of consensus among banking experts that consumers will lose many of the benefits they have received from interchange on debit if interchange fees are dramatically reduced. Most industry analysts predict substantial reductions in rewards programs and increases in consumer fees. Some examples are listed below:

- A recent Oliver Wyman report noted that "[r]evenue from debit card transactions provides the 'economic foundation' to offer mass-market free checking services." The report indicated that the proposed regulation would make debit cards "significantly unprofitable." It suggested that banks will be compelled to restructure their core products and begin

[203] Even if the regulated interchange fee covered the full accounting costs of operating the debit business, including both fixed and variable costs, it still would not include a normal return on the capital invested by issuers in the debit business. This is why regulated rates for public utilities typically provide for a profit margin above costs to provide a return on invested capital as well as economic incentives for continued investment and growth. In a two-sided market such as payment cards, an issuer that cannot cover these costs with interchange fees likely will seek to recover them in other ways such as by raising cardholder fees and reducing cardholder benefits.

[204] Board Transcript, p. 22.

charging fees for checking accounts and other products if the bulk of interchange revenue would be reduced. The report further characterized the proposed regulation as having "massive and far-reaching consequences for retail banks" and concluded that "the new economics associated with operating a debit card portfolio are likely to lead to fewer rewards programs, more consumer fees."[205]

- A senior manager with First Annapolis Consulting stated that "[i]ssuers likely will reduce the number of points and percentage of cash back cardholders can earn on purchases or to raise the number of points needed to buy merchandise if interchange is capped."[206]

- Similarly an executive with First Annapolis Consulting has recently noted that a reduction in interchange fees would likely reduce debit card rewards and increase fees for banking services as "banks attempt to recoup lost interchange revenue." The executive also indicated that large issuers "would have less of an incentive to promote debit-related products and services and either would shift activities toward credit-based services or add new fees to demand-deposit accounts." He concluded that merchants may be further harmed by the proposed standard by "a decline in the average ticket size if debit card use declines with less promotional activity and consumers shift more of their transactions back to cash and paper checks."[207]

- Caroline Lane, an executive with Co-Op Financial Services, suggested that although she has not "gathered enough data to say whether credit unions are favoring a per-transaction or per-account fee," many credit unions are "absolutely looking at repricing" their financial services following the proposed debit standard.[208]

- According to Steven Stapp, CEO of San Francisco's Federal Credit Union, the new interchange "will be very bad for the industry … [e]specially those credit unions that rely on fee income or have debit rewards programs, as they will need to eliminate these services."[209]

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[205] Kate Fitzgerald, *Debit Cards Would be 73% Less Profitable Under New Fed Rules: Report*, PAYMENTSSOURCE, Dec. 23, 2010.

[206] Andrew Johnson, *Debit Revenue Under Fire, Rewards Need A Revamp*, AMERICAN BANKER, June 25, 2010.

[207] Kate Fitzgerald, *Debit-Interchange Amendment Potential Effects Debated*, ISO & AGENT WEEKLY, June 17, 2010.

[208] *Fed Rule May Bring End To Free Checking*, PAYMENTSSOURCE, Dec. 22, 2010.

[209] *Credit Union CEOs Plot Strategies In Wake of Fed Debit Rule*, PAYMENTSSOURCE, Dec. 23, 2010.

- According to the President and CEO of the Credit Union National Association, "the loss of interchange fee income for small issuers and the costs of having to belong to more payment networks will have a horrendous impact on credit unions that offer debit cards and their ability to build net worth. … Any significant reduction in interchange income will require higher fees paid by consumers. Thus, consumers will be left paying for the bonanza to merchants—which is not what Congress intended."[210]

- According to another executive of First Liberty Nation Bank, "[i]f the proposal reduces the income source to 12 cents per transaction, FLNB will not make sufficient income to support the program. I estimate our loss would be $314,000 or $5.11 per account. Since our customers want the cards, we will not get out of the program. We will seek to charge our customers for the service."[211]

In fact, some banks have already begun to take such actions. JPMorgan Chase & Co. recently announced that it will phase out its debit rewards programs as it prepares for changes as a result of pending Federal Reserve rules that will limit debit interchange.[212] A report also stated that "Chase last month stopped giving bonuses to bankers and branch managers for signing up new debit card customers. And beginning in February the bank will no longer issue debit rewards cards to new customers, Charlie Scharf, Chase's CEO of retail financial services told analysts at the Bancanalysts Association of Boston Conference."[213] Similarly, it was reported that Bank of America recently introduced monthly checking account fees ranging from $6 to $25.[214] The bank instituted the new checking account fees in an attempt to "grapple[] with revenue lost to regulatory and other changes."[215] It was also reported that "competitors such as J.P. Morgan Chase & Co. (NYSE:JPM) and Wells Fargo & Co. (NYSE:WFC) already have slapped new fees on checking accounts."[216] A similar article reported that Wells Fargo is charging $5 a month for new checking accounts, and its CEO "warned last month of more 'costs that will be passed along to customers.'"[217] The same

[210] Letter to the Board of Governors of the Federal Reserve System from Bill Cheney, Dec. 17, 2010.

[211] Letter to the Board of Governors of the Federal Reserve System from Paul J. Henry, Regarding The Impact on Community Banking from Provisions of Section 1075 of the Dodd-Frank Act Related to Debit Card interchange Fees, Dec. 17, 2010.

[212] Kate Fitzgerald, *Chase to Phase Out Debit Rewards Program*, PAYMENTSSOURCE, Nov. 5, 2010.

[213] *Id.*

[214] Jennifer Waters, *Bank of America Categorizes Clients, Adds Fees*, MARKETWATCH, Jan. 6, 2011.

[215] *Id*.

[216] *Id*.

[217] E. Scott Reckard, *At Many Banks, No More Free Checking*, L.A. TIMES, Feb. 4, 2011.

article reports Citibank and Chase are or will be imposing similar fees.[218] "At Citibank, depositors who make fewer than five debit-card transactions a month already pay $8 a month for checking. Chase is imposing fees next week on customers whose deposits and balances aren't big enough—$10 a month on the West Coast."[219]

The additional fees and charges are not limited to the large banks; as discussed above in Section I.B.2.c., smaller community banks also will likely charge consumers new fees. The ICBA study found that 93 percent of community banks will charge customers for services that are now free.[220] The survey found that 72 percent of community banks will tack on annual or monthly charges for debit card usage; 61 percent of community banks will impose a minimum balance; 50 percent will impose a per-transaction debit card fee; and 72 percent said they will no longer offer free checking accounts.[221] In addition, community banks surveyed said other services such as mobile banking and online banking will no longer be free.[222]

These projections of reductions in cardholder rewards and other cardholder benefits and increases in cardholder fees are consistent with the experience of mandated reductions in credit card interchange fees in Australia, where cardholders incurred both higher fees and lower card benefits such as rewards after the reduction of interchange. In fact, the Fed staff recognized that there will likely be adverse effects on cardholders, stating that "one of the first things that issuers may do is reduce or eliminate debit card reward programs. And these changes that may happen at the bank may be somewhat more visible to consumers than any savings that they realize at the point of sale. So overall I think it is hard to anticipate what the overall effect on consumers will be."[223] Similarly, the proposed debit regulation likely would lead to reductions in other cardholder benefits and protections.

3. Limiting interchange fees to narrowly defined ACS costs would undermine the growth of both signature and PIN debit

The proposed reductions in interchange fees would undermine the growth of debit. As a matter of economics, price caps that fail to fully cover a regulated firm's economic cost undermine the firm's incentives to supply the product and reduce the quantity that it provides as well as its

[218] *Id*.

[219] *Id*.

[220] ICBA News Release, *Survey: Fed Debit Card Rule Will Harm Community Bank Customers*, Feb. 14, 2011.

[221] *Id*.

[222] *Id*.

[223] Board Transcript, p. 27.

growth relative to unregulated alternatives. Considerable economic evidence demonstrates the effects of price controls that prevent firms from fully recovering economic costs. Examples include price controls of gasoline,[224] rent controls,[225] and limits on payments to providers under Medicaid.[226]

The economic effects of price controls are somewhat more complex in the case of two sided markets such as payment cards. Price controls on interchange fees, particularly if they do not cover issuers' costs, would cause a variety of responses by issuers, all of which likely would reduce the usage and growth of debit in the U.S. The reduction in interchange would substantially reduce issuer promotion of debit. In addition, issuers would be more likely to charge fees for debit transactions, would reduce cardholder protections and other card benefits, and would raise other types of checking account fees.

Consumers in turn would respond to lower card benefits and higher fees by reducing their demand for debit. The reduction in the relative growth of debit would be significant because cardholders are sensitive to both fees and rewards. For instance, Borzekowski and Kiser indicate that "[o]n average, a 1.8% fee on a debit card transaction (nearly all of which are charged only on PIN transactions) is associated with a 12% decline in the likelihood of use."[227] Similarly, another paper by Chin and Hayashi finds that debit use is sensitive to rewards.[228] Since issuers and cardholders typically are more sensitive to changes in payment system prices than merchants are, the proposed reductions in interchange fees would significantly reduce payment system output.

Debit usage will decline for other reasons as well. The proposed rules requiring multiple networks on every card and giving merchants control over routing decisions would further reduce innovation and promotion by networks and issuers, and frustrate consumer choice and increase cardholder confusion.[229] In addition, to the extent that debit card networks are regulated to a greater degree than other types of competing payment instruments, they will be handicapped in their ability

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[224] *See, e.g.*, Paul MacAvoy and Robert S. Pindyck, *The Economics of the Natural Gas Shortage* (North-Holland, Amsterdam, 1975); Paul Joskow, *Energy Policies and Their Consequences After 25 Years*, 24 The Energy Journal, pp. 17-50 (2003).

[225] *See, e.g.*, Edward Glaeser and Erzo Luttmer, *The Misallocation of Housing under Rent Control*, 93 AMER. ECON. REV. 1027 (2003).

[226] David C. Grabowski, *A Longitudinal Study of Medicaid Payment, Private-Pay Price and Nursing Home Quality* 4 INT. J. HEALTH CARE FINANCE ECON. 5, 23 (2004).

[227] Ron Borzekowski and Elizabeth K. Kiser, *The Choice at the Checkout: Quantifying Demand across Payment Instruments*, 26 INT. J. IND. ORG. 889, 891 (2008).

[228] Andrew Ching and Fumiko Hayashi, *Payment card rewards programs and consumer payment choice*, 34 J. BANKING FINANCE 1783 (2010).

[229] As discussed in Section III, some examples of services and innovation that may be lost include cardholder alerts, selective authorization services, and more uncertain adoption of mobile payment systems.

to compete with these other systems. Banks will have economic incentives to promote other forms of payment to their customers, including credit, pre-paid cards, ACH-based systems, and others that are less subject to (or not subject to) the interchange and routing regulations.

Despite all of these negative effects of the proposed regulations on debit volume, MPC's economists claim that merchant acceptance of PIN debit and/or debit in general will expand significantly when debit interchange fees are reduced, and that such expanded merchant acceptance will increase consumer usage of debit.[230] However, there is no reason to expect a large increase in merchant acceptance of or consumer usage of debit as a result of reduced interchange fees. To begin with, MPC's economists allege that that the vast majority of large merchants currently must accept Visa and MasterCard signature debit (if not PIN debit) so that they do not risk losing sales due to cardholder preferences for a particular payment type. For example, Dr. Salop states:

> "merchants have strong economic incentives to accept cards that operate on Visa and MasterCard's debit networks. Hundreds of millions of consumers carry Visa and MasterCard debit cards and they use them with increasing frequency. While the cost to the merchant of accepting debit (including the merchant discount, which reflects the interchange fee) currently is high, the merchant's overall profit on the sale is typically larger than that cost. Thus, losing the sale would be costlier to the merchant than accepting debit and paying the high interchange fee."[231]

This implies that few new merchants would begin to accept debit cards when interchange fees are reduced. While MPC and their economists argue that many more merchants will accept PIN debit,[232] this is the wrong question for determining the effect of the regulation on overall debit usage. Since the vast majority of the merchants that might begin accepting PIN debit after interchange fees decline already accept signature debit, there is no reason to expect a major increase in consumer usage of debit. Moreover, even with regard to merchant acceptance of PIN debit, there is no economic basis for the proposition that merchant acceptance will increase significantly, if at all. As we discuss above, merchant acceptance is driven not only by the cost of acceptance, but also by the value that individual merchants derive from the payment system. With lower interchange fees, the value of the payment system to cardholders will be reduced, and the system's ability to deliver profitable incremental sales to individual merchants would therefore be diminished.

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[230] Salop Paper, pp. 2, 30-31.

[231] Salop Paper, p.14.

[232] Salop Paper, pp. 30-33.

Absent a major increase in debit acceptance by merchants, the only other possible source of increased debit usage would come from additional merchant promotion of debit. For example, merchants could offer discounts or rewards for debit usage. However, as discussed above, such merchant discounting programs are uncommon. Merchants have always had the ability to offer discounts to steer consumers to cash, checks or PIN debit, but very few merchants have attempted to do so.

As a result, any possible gain in debit usage from the merchant side would be insufficient to offset the reductions in cardholder demand to use debit due to higher cardholder fees, lower cardholder benefits, and reduced issuer promotion of debit. The resulting declines in debit usage also will be exacerbated by the fact that debit networks will have substantially reduced incentives to innovate under the proposed routing rules, and will be restricted in their ability to compete against other less regulated forms of payment such as credit, ACH based systems, pre-paid card systems, and others.

4. At a minimum, allowable costs should include any network fees paid by issuers and other variable costs incurred by issuers such as fraud losses.

Issuers should be permitted to recover network fees and other variable costs incurred by issuers such as fraud losses. The Staff Report proposes that per-transaction network processing fees be excluded from allowable costs. This is inappropriate since these fees clearly are variable, and they also relate directly to the authorization, clearance and settlement of debit transactions. The Staff Report states that "the Board recognizes that if network processing fees were included in allowable costs, acquirers (and, by extension, merchants) might be in the position of effectively paying all network fees associated with debit card transactions."[233] But from an economic perspective, there is no relevant distinction between the network fees that issuers pay and other variable costs that issuers incur pursuant in their debit programs, including ACS costs (which the proposed regulations acknowledge should be covered by interchange fees). Simply put, if interchange fees do not cover such variable costs, issuers will incur a loss on debit transactions and will try to recover such loses from cardholders and/or discourage debit usage.

Similarly, we believe that the Board should treat fraud losses in the same manner as the other issuer costs that it would permit issuers to recover through debit interchange fees. Fraud losses are variable costs that are incurred with respect to specific transactions and therefore are a factor that the Board should consider in establishing interchange fees. One of the reasons that debit cards have been so widely used by consumers and accepted by merchants relates to effective

[233] Notice of Proposed Rulemaking, p. 62.

management of fraud by the issuer and the network. The consumer is protected if his/her card is stolen or otherwise used illegally. Similarly, the merchant does not bear risk of fraud losses in face to face transactions if the transaction is properly authenticated or in e-commerce transactions if the merchant uses available fraud prevention tools. In contrast, the issuing bank bears the cost of actual fraud losses as well as costs for fraud prevention. We believe these costs of fraud prevention and fraud losses should be recoverable in the permitted interchange fee for issuing banks. If the issuing bank cannot recover these costs in interchange fees, they can be expected to take other actions, such as restricting the availability of debit to some cardholders, imposing more stringent transaction rules on cardholders, and/or imposing additional fees.

Moreover, competitive balancing in a two-sided market implies that network volume can be significantly increased by implementing an interchange fee that (at the very least) covers such costs. When interchange fees are determined by market competition, they generally are significantly greater than the variable ACS costs identified in the proposed regulation. This is true even when there is no plausible claim that the payment system at issue has significant market power. Accordingly, it is highly likely that the inclusion of additional cost categories that are clearly variable costs, such as network fees and actual fraud costs borne by issuers, would lead to increased debit output and reduce the negative effect of the regulations on the economic value of payment systems.

B. The interchange standard should be applied to the overall average effective interchange fee for the debit network, not to each debit transaction

There are strong economic reasons why the proposed interchange standards should be applied to the overall average effective interchange fee for a debit network, not to each debit transaction. Debit networks, such as Visa, set different levels of interchange fees for different types of transactions in order to compete most effectively with other payment networks in the marketplace. The proposed regulation should preserve the ability of payment networks to set interchange fees in this manner.

Visa currently has more than 25 interchange categories for signature debit cards, depending on such factors as merchant segment, merchant size category, whether the card is present, whether the merchant uses available fraud protection tools, and other factors.[234] For example, Visa historically created a separate interchange category for supermarkets, because substantial interchange reductions were necessary to penetrate this segment. Similarly, Visa charges higher interchange for transactions where the merchant does not obtain an electronic authorization and for card not present transactions. This approach gives Visa the flexibility to charge more for

[234] Visa U.S.A. Interchange Reimbursement Fees, October 16, 2010, p. 2.

transactions that impose greater costs on the system, and to incent merchants to use the most efficient authorization methods. With respect to fraud prevention, Visa provides lower rates when the merchant complies with PCI standards, and when the merchant implements fraud prevention tools such as requiring the 3 digit cardholder security code, using the Verified by Visa program, and verifying the cardholders' address.[235] This ability to set different interchange fees for different types of transactions allows Visa and other payment networks to compete more effectively, and also increases the total output of the network. There is no economic basis for eliminating the debit networks' ability to use such differential pricing.[236]

It also makes economic sense for Visa and other payment networks to have the ability to vary interchange fees to reflect variation in fraud and other risks that can vary by merchant segment as well as the size of the transaction. For example, it would make no economic sense to require the network to charge the same interchange fee of 12 cents per transaction for a $10 meal at McDonalds and the purchase of a $1,000 stereo system from an on-line merchant, despite the fact that the fraud risks (and likelihood of non-fraud related dispute costs) are much greater on the second transaction. Such a system would require merchants with small transactions and low fraud risks to subsidize high fraud and large transaction size merchants. It would also potentially lead to "adverse selection" problems where merchants would seek to route relatively risky transactions to networks where such risks are underpriced due to regulatory constraints. Conversely, issuers or networks would have incentives to reduce or eliminate card usage in higher risk segments even if cardholders place a high value on the ability to use cards in such segments.

Under the average effective interchange method, networks could set different rates based on merchant size, merchant segment, acceptance channel (*e.g.*, card present vs. card not present), processing requirements or other factors, so long as the network's overall average effective debit interchange rate is maintained at the appropriate standard. Similarly, this approach would allow a debit network to establish individual debit interchange rates using fixed amounts, variable amounts, or a combination of the two. Unlike caps, the burden of determining and setting individual rates would be placed on competitive and independent choices of the networks (rather than price-setting by the Board), preserving the ability of networks to use interchange to provide incentives to issuers and merchants to grow participation in, and strengthening the quality of transactions being

[235] *See e.g.,* http://usa.visa.com/merchants/risk_management/vbv.html; Visa U.S.A. Interchange Reimbursement Fees, Oct. 2010; Visa International Inc., *Operating Regulations*, Oct. 15, 2010, p. 991.

[236] The Fed staff's Notice of Proposed Rulemaking recognizes the benefits of allowing interchange fees to vary depending on the risk of the transactions. For example, the notice states, "[i]f the interchange fee standard must hold strictly for all transactions, then an issuer would be unable to receive a higher interchange fee for relatively high-risk transactions offset by lower interchange fees on relatively low-risk transactions." (Notice of Proposed Rulemaking, p. 76.)

processed over, the network. The average effective rate approach also allows networks to more effectively align revenue with cost and risk at a transaction level, and therefore to maximize the number of transactions that make economic sense for both issuers and merchants and to avoid the adverse selection problems discussed above.

Regulating the overall average effective interchange fee for the network, rather than the fees for each individual transaction, also would be consistent with the regulation of debit interchange fees in other jurisdictions, such as Europe and Australia. In Australia, for example, both the credit interchange standard and the scheme debit interchange regulation require only that a network's average interchange fee be at or below the standard. A network is permitted to differentiate between transactions as long as its average interchange meets the standard.[237] Visa's interchange schedule for debit in Australia has 15 different categories with considerable variation in interchange across categories.[238] The overall average effective rate across all debit transactions must meet the standard of $0.12 (AU). An overall average effective rate approach would also be consistent with the recent model announced by the European Commission applicable to interchange on intra-EU transactions. In the recent settlement reached by Visa Europe and the Commission, Visa Europe was required only to maintain its weighted average interchange below the standard.[239] If instead, the Board were to apply interchange caps at the level of the individual transaction, it would be creating a unique and economically inefficient regulatory environment in the United States.

C. If one of the Board's proposed alternatives is to be adopted, Alternative 2 would be preferable from an economic perspective

For the reasons noted above, we believe that the average effective rate approach would be more appropriate than interchange fee caps. If, however, the Board decides to adopt interchange fee caps as it has proposed, Alternative 2 would be preferable from an economic perspective for the reasons discussed below.

The Federal Reserve staff report describes two alternative interchange fee standards. The first alternative (Alternative 1) adopts a standard that is issuer specific. The standard is based on each issuer's cost and includes a safe harbor and an interchange fee cap. Under this standard an issuer would be permitted to recover only its average variable costs of ACS up to a cap of 12 cents

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[237] In a press release from Sept. 29, 2006, the Reserve Board of Australia clarified that its debit interchange standard only requires that "the weighted-average fee does not exceed the benchmark." (Reserve Board of Australia, Media Release 2006-08, Sept. 29, 2006.)

[238] http://www.visa-asia.com/ap/au/mediacenter/factsheets/interchange.shtml.

[239] European Commission Press Release, *Antitrust: Commission makes Visa Europe's commitments to cut interbank fees for debit cards legally binding*, December 8, 2010, p. 2.

per transaction, with a safe harbor of 7 cents per transaction.[240] Alternative 2 would set a price cap of 12 cents per transaction. Under Alternative 2, any interchange fee at or below 12 cents per transaction would be permitted independent of issuer costs.[241]

1. Alternative 2 would place substantially less administrative burden on industry participants, and reduce the monitoring burden on the Board

One of the advantages of Alternative 2 is that it would place substantially less administrative burden on industry participants, and reduce the monitoring burden on the Board. Calculating average variable costs for many individual issuers would be complicated, prone to errors, and open to debate. Issuers undoubtedly use many different cost accounting systems and likely classify similar types of expenses in different ways.

The Fed Staff Report contains the following description of the implementation and administration burden that issuer-specific interchange fees would place on industry participants:

> "Each issuer would have to account for its costs in a manner that enables it to segregate allowable costs that could be recovered through the interchange fee from its other costs, tabulate those costs on an ongoing basis, and report them to the networks in which it participates. A network that set issuer-specific fees would need to incorporate such fees into its fee schedules, including the operational ability to distinguish among many different issuers in order to apply different rates to each of those issuers' transactions. The issuers' supervisors would need to evaluate each issuer's reported costs and verify that each issuer's interchange fees appropriately reflect those reported costs."[242]

Similarly, the Staff Report states that Alternative 2 would place less administrative burden on industry participants than Alternative 1: "[a]lthough the issuer would have to report its costs to the Board every two years in accordance with § 235.8, an issuer would not have to calculate or report to the networks its maximum allowable interchange transaction fee. Similarly, a payment card network would not need to incorporate issuer-specific fees into its fee schedule, as the cap would apply uniformly to all covered issuers in that network."[243] We agree with the Staff's analysis and believe that the reduced administrative burden would provide significant advantages to an industry-wide standard rather than an issuer-specific standard as proposed under Alternative 2.

2. Issuer-specific interchange fees under Alternative 1 would reduce issuers' incentives to reduce costs

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[240] *Id.*, pp. 30-31.

[241] *Id*.

[242] Notice of Proposed Rulemaking, p. 70.

[243] *Id.*, p. 75.

If interchange fees are regulated on an issuer-specific basis, issuers will have reduced incentives to improve efficiency and reduce cost. In particular, under Alternative 1, issuers that choose to report their costs to receive an interchange fee above the 7 cent safe harbor would have a reduced incentive to control cost unless their costs exceed the cap of 12 cents. For cost increases in the range of 7 cents and 12 cents, the issuer would be fully compensated for the cost increase. Conversely, any reduction in average variable costs in the range of 7 to 12 cents would reduce the issuer's interchange allowance. Alternative 1 therefore would undermine issuers' incentives to reduce costs.

The proposed rules' narrow focus on short-run variable costs also would distort issuer incentives to make fixed investments that could significantly lower costs if the cost standards are implemented on an issuer specific basis. Even a highly efficient investment that raises fixed costs a modest amount but reduces variable costs substantially may not be adopted if it would result in an offsetting loss of interchange revenue. For example, issuers would have incentives to outsource certain functions to third parties and contract for the services by paying a per transaction price rather than incurring capital expenditures to provide such services in house, even if the in-house fixed cost method was substantially less costly overall. Since under the proposed regulations issuers would not be able to recover fixed costs through interchange fees, including those directly related to debit processing, they would have an incentive to outsource these costs. A similar incentive to outsource regardless of efficiency would exist for functions that are shared between debit and other bank services, such as customer service. By contracting with an outsourced customer service provider on a variable per debit card transaction basis, the issuer could convert an excluded cost into an included cost, even if the "in-house" solution was substantially more efficient. A regulatory framework that produces such incentive problems creates economic inefficiencies.

In contrast, under Alternative 2, issuers would be able to retain any saving they were able to generate by reducing their costs, and would have proper incentives to evaluate such efficiency enhancing investments. The Fed staff recognizes the potential inefficiencies caused by issuer specific interchange.[244] They also recognize the incentive benefits of Alternative 2, concluding that "[t]his approach provides an incentive for all issuers to reduce costs below the cap in order to retain a mark-up over costs."[245] The Staff Report also notes that these incentive problems with issuer-specific interchange fees have motivated regulatory authorities in other countries to set an overall

[244] Fed Staff Memo, p. 8: "Without a cap, issuers that choose to report their costs to receive an interchange fee above the safe harbor would not have an incentive to control cost, compared to those issuers that accept the safe harbor, because they would receive no mark-up on costs. With a cap however, these issuers would have an incentive to control their per-transaction costs to keep them below the cap."

[245] *Id*., p. 8.

industry standard including, for example, the Reserve Bank of Australia's regulation of credit and debit cards.[246]

D. The costs of fraud prevention should be included in the calculation of interchange fees

The costs of fraud prevention should be included in the calculation of interchange fees. Fraud prevention costs are legitimate costs of operating a debit system, and are closely related to ACS. Many fraud prevention technologies and activities are efficient, and benefit not just issuers but also cardholders and merchants because they lead to lower levels of fraud and disputes. Like other costs that we discuss above, if issuers are unable to recover through interchange fees the costs incurred on fraud prevention technologies and activities, they will pass those costs on to cardholders in higher fees or reduced benefits, or curtail innovation and promotion of debit. There is no reasonable economic basis for excluding fraud prevention costs from the calculation of interchange fees. Moreover, as we discuss below, the regulation adopted by the Fed should give issuers flexibility in choosing fraud prevention technologies and should not be limited to PIN debit.

1. The rule adopted by the Board should provide issuers and networks with the flexibility to develop and maintain innovative and effective fraud prevention programs and technology

The rule adopted by the Board should provide issuers and networks with the flexibility to develop and maintain innovative and effective fraud prevention programs and technology. The Fed Staff report discusses two general approaches to fraud adjustment. The first—the specific technology approach—would require the Board to identify particular "paradigm-shifting technology(ies)" that would reduce debit card fraud in a cost-effective manner, and to "determine the issuers' costs of implementing the new technology in order to set the adjustment that the issuer would receive."[247] The Fed staff recognizes potential problems with this technology-specific approach. For example, the staff report states that "[o]ne potential unintended consequence of such an approach is that standards could lock issuers into specific technologies that are not as effective at reducing fraud, or not as cost effective, as other technologies that are not identified in the standards. Substantial challenges would also remain in measuring the effectiveness of such technologies and identifying the cost of implementing new technologies in order to set an appropriate adjustment."[248] This task also would be complicated by the fact that not all fraud prevention is technology based. For example, designing and implementing effective fraud prevention procedures, and educating

[246] Notice of Proposed Rulemaking, p. 75.

[247] Fed Staff Memo, pp. 10-11.

[248] *Id.*, p. 11.

cardholders and merchants about fraud prevention, are also important. Moreover, the nature of the fraud threats facing payment systems varies significantly across different merchant segments and changes over time. In addition, developing and implementing effective fraud prevention techniques is an important element of network competition.

The second approach would establish more general standards that an issuer must meet in order to be eligible for the fraud adjustment. Such standards could require issuers to take steps reasonably necessary to maintain an effective fraud prevention program but not prescribe specific measures or technologies that must be employed as part of the program. Under this approach, the fraud adjustment would be set to reimburse the issuer for some or all of the costs of an issuer's current fraud-prevention and data-security activities and the costs of research and development for new fraud-prevention techniques. The resulting adjustment would then be added to the standard allowable safe harbor interchange fee. This method of setting the adjustment, in combination with the average effective interchange approach discussed above, would encourage efficient issuer fraud control investments. As discussed above, it also would allow networks to design effective incentives for fraud control by all network participants.

While this approach would offer much more flexibility for issuers to choose the fraud prevention strategies that make most sense for them, the staff report expresses some concern that "issuers may not have sufficient incentives to control costs or to shift from less effective to more effective fraud-prevention activities over time."[249] However, such concerns could be mitigated by setting the adjustment based on industry average costs of fraud prevention activities, rather than the actual costs incurred by specific issuers. Under an industry average cost approach, an issuer that chooses an inefficient fraud-prevention technology would bear the cost of such a technology, and would not be compensated for such costs through higher interchange fees. Accordingly, each individual issuer will have an incentive to undertake all investments in fraud prevention technology that reduce its fraud costs by more than the cost of the required investment.

From an economic perspective, the rule that the Board adopts should provide issuers and networks with the greatest possible flexibility to develop and maintain innovative and effective fraud prevention programs and technology. This approach would allow each issuer to tailor its fraud prevention program based upon the characteristics of its debit card programs. Moreover, this approach would provide both the Board and debit issuers with the flexibility to adapt with changes in technology over time, as well as changes in fraud activities and techniques. Networks also would be more likely to compete for issuer, acquirer, and merchant participation by using innovative and

[249] *Id*.

differentiated fraud prevention solutions, while taking advantage of common standardized solutions where they make more economic sense.

2. Fraud adjustments should not be limited to PIN debit card transactions or be designed to discourage signature debit

The Notice of Proposed Rulemaking asks for comment on whether the Board should consider adopting an adjustment for fraud-prevention costs only for PIN-based debit card transactions, but not signature-based debit card transactions, as advocated by some merchant representatives.[250] However, fraud adjustments should not be limited to PIN debit card transactions or be designed to discourage signature debit. The proposal to limit fraud adjustments to PIN debit is based on the view that signature debit is an "inferior" technology that should be discouraged. But this view is based on a flawed understanding of PIN debit chargeback and fraud rates.

As described above, Visa signature debit cards offer valuable chargeback and dispute resolution rights to cardholders. To the extent that such chargeback and dispute resolution policies provide significant value to consumers, and/or encourage efficiencies in the dispute resolution process among issuers, cardholders, and merchants, they can lead to increased volume of transactions on the network. Of the major PIN networks, only Interlink has equivalent chargeback protections to Visa signature debit. As discussed above, Visa decided to provide this higher level of benefits so that cardholders could have a more consistent experience with their debit cards whether a given transaction was made with a signature or PIN. In contrast, other PIN debit networks such as Star, NYCE, Pulse and Maestro do not offer this feature to cardholders.[251] Similarly, Visa offers "zero liability" on fraudulent purchases on both Visa Signature and Interlink cards that goes beyond the general requirements under Electronic Fund Transfer Act and Regulation E). In contrast, Maestro and the PIN networks do not offer this benefit, although some card issuers do make it available for PIN debit transactions as well.[252]

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[250] Notice of Proposed Rulemaking, p.90. The Notice states: "Some merchant representatives have advocated that the fraud adjustment not be used to perpetuate signature-based networks, which they believe are inherently less secure than PIN networks and for which they incur significantly more chargebacks. These merchants believe that, if the Board allows a fraud adjustment, it should be designed to steer the industry from signature debit to PIN debit, or possibly to other more secure means of authorizing transactions." (Notice of Proposed Rulemaking, pp. 90-91.)

[251] *See, e.g.,* http://www.star.com/; http://www.nyce.net/; https://www.pulsenetwork.com/. Further, major issuers of debit cards including Bank of America and Wells Fargo do not offer debit card holders chargeback protection outside those offered by Visa. (http://www.bankofamerica.com/; Wells Fargo Customer Account Agreement, March 17, 2010, p. 65.)

[252] Star does offer zero liability for web transactions through its partnership with PayPal, however, PayPal has its own zero liability policy. (http://www.star.com; http://www.star.com; http://www.nyce.net; https://www.pulsenetwork.com.)

One of the primary reasons that PIN debit fraud rates are lower than signature fraud rates is that PIN debit typically is used in face-to-face environments where fraud is less likely. PIN authorization is not widely used in many merchant segments where consumers like to use debit, including the Internet, mail and telephone order transactions, and restaurants.[253] In contrast, signature debit is more widely accepted at many different types of merchants, including "card not present" merchant segments where fraud rates are likely to be higher.

Even if one were to restrict the comparison to face to face merchants, signature debit is accepted at many more small merchants who have significantly less sophisticated fraud detection and prevention systems.[254] This is consistent with the Federal Reserve Board's acquirer survey which found that 6.7 million merchant locations were able to accept signature debit cards compared to only 1.5 million that accept PIN debit cards.[255]

In addition, PIN fraud rates appear lower than signature debit rates because much of PIN debit fraud shows up as ATM fraud rather than debit fraud. If thieves are able to steal a cardholder's PIN number, it likely makes much more sense for them to withdraw as much cash as possible from the cardholder's account at the ATM before the theft is detected and the account blocked.[256]

Accordingly, higher average fraud rates do not mean that signature debit is an "inferior" payment system compared to PIN debit, as claimed by MPC. Signature debit allows considerably

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[253] While PIN debit networks have been seeking to develop internet systems for many years, they have had little success to date. For example, Salop et al. state, "PIN debit currently is not generally accepted for card-not-present transactions." (Salop Paper, p. 32.) This may be due in part to the fact that many consumers are reluctant to use their PIN in an on-line environment. Further, some industry analyst "highly recommend [to any consumer] not entering their PIN anywhere on the Internet unless" the system is hardware based. (Will Hernandez, *PIN-Debit Use Online: Networks Appear Ready, Are ISOs?*, PAYMENTSSOURCE, Nov. 22, 2010.) Acculynk has been developing and promoting a browser based PIN debit solution for the internet for several years. (*See, e.g.*, Will Hernandez, *Pulse Rolls Out Internet PIN-Debit Payments As Acculynk Gains More Traction*, PAYMENTSSOURCE, July 14, 2010.) Whether these types of solutions will be widely adopted or not depends in large part on whether they turn out to be a more efficient, safe/secure method in this channel.

[254] Cybersource 11th Annual Online Fraud Report notes large online merchants typically employ more automation in reviewing transactions for possible fraud than smaller merchants: "In 2009, 70% of merchants reported using three or more fraud detection tools for automated screening, with 4.7 tools being the average. Large merchants dealing with higher order volumes reported using 7.3 detection tools on average. … Note that the tool usage profile for merchants over $25M in online sales is different than the overall average. These larger merchants generally use tools across all four dimensions of detection, and more often use their customer history and proprietary data during the automated screening process. They have a higher use of company-specific risk scoring models, negative and positive lists and sophisticated order velocity monitoring tools." (CyberSource, "Online Fraud Report 11th Annual Edition: Online Payment Fraud Trends, Merchant Practices and Benchmarks," 2010, pp. 4, 7.)

[255] Notice of Proposed Rulemaking, p. 27.

[256] For example, a 2010 study conducted by Javelin Strategy & Research found that the mean amount of fraud on a debit card increased 91 percent, from $3,677 to $7,042 when the PIN number was also stolen and used at an ATM. (Javelin Strategy & Research, *ATM & PIN Fraud: Bank and Consumer Losses are More Severe (and the Problem is Growing)*, April 2010, p. 5.)

more flexibility for use in different retail environments, better supporting merchant sales in those environments. Since merchants have chosen not to adopt PIN or equivalent functionality in many segments where consumers like to use debit, if signature debit were not available, consumers would find some other alternative to debit. Accordingly, it makes more economic sense for consumers, issuers, and merchants to decide on which authorization methods make most sense in different merchant segments. To the extent that PIN authorization has fraud cost advantages, PIN networks can use such advantages to compete for greater issuance, acceptance and usage, including developing technologies as needed and incenting merchant adoption in additional merchant segments.

Restricting the fraud adjustment only to PIN debit also would reduce incentives to innovate. Some innovative new authorization technologies may not currently be feasible or economic on PIN debit networks. For example, PIN authorization currently is not available on the Visa contactless and mobile pilot programs based on Visa's payWave technology discussed in Section III. above. If a fraud adjustment is not available for such new technologies, this would be an additional impediment to deployment.

If the fraud adjustment is set as a common amount that does not depend on the type of transaction (and is not issuer specific), issuers would have the incentive to adopt efficient fraud control technologies. Moreover, there would be no inefficient "subsidy" for signature debit as MPC claims. The MPC's arguments that there is an inefficient subsidy for signature debit assume that interchange fees are higher for signature than PIN. Putting aside the validity of the MPC's incorrect claim about the efficiency of signature debit rates, if the regulated interchange fee rates are the same for both forms of debit, these arguments are not valid.

E. The regulations should not create an artificial competitive advantage for three-party or other competing payment systems

One of the key economic principles of regulation is that regulation should be designed to avoid providing one category of competitors with artificial competitive advantages over other types of competitors. To the extent that four-party debit card networks such as Visa and Interlink are regulated to a greater degree with respect to key network factors such as interchange and exclusivity and routing than other types of competing payment instruments, they would be handicapped in their ability to compete with many of these other systems. This would tilt the competitive balance in favor of these competing systems for reasons that have nothing to do with economic efficiency or consumer welfare.

For example, the Board requested comment on whether it is appropriate to apply the debit interchange fee standards and other regulatory provisions such as the exclusivity and routing rules to three-party payment card networks that may be offering debit-type accounts, such as American Express[257] and Discover,[258] in situations where the payment card network acts as both the card issuer and merchant acquirer. The Board accurately notes that in such a three-party payment card network, the merchant pays the network a merchant discount that is economically equivalent to the merchant discount in a four-party transaction. Accordingly, we believe that the Board's interpretation—that three-party networks that meet the requirements for debit transactions under the regulations should be covered—makes economic sense.

In addition to three-party debit programs, the Staff Report discussed and/or requested comment on how the rules should apply to a number of other types of actual or potential payment products. These included the following:

- Payment systems in which consumers may use their mobile phone to send payments to third parties to purchase goods or services with the payment amount billed to their mobile phone account or debited directly from the consumer's bank account;[259] and,

- Payment systems where consumers use a third party payment intermediary, such as PayPal, to pay for Internet purchases, using the consumer's funds that may be held by the intermediary or in the consumer's account held at a different financial institution.[260]

As stated above, to the extent that some or all of these types of payment products receive less restrictive regulatory treatment than existing debit products, this will tilt the competitive balance in their favor for reasons that have nothing to do with economic efficiency or consumer welfare.

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[257] American Express currently offers a proprietary prepaid Gift Card, which is a regulated product. It does not appear to currently offer debit using third-party issuers. American Express has, however, studied releasing such a product since at least the late 1990s. During that time period, it even explored relationships and held discussions with issuers expressing American Express' willingness to release a competitive debit product similar to Visa debit. (American Express Company Form 10-K, Dec. 31, 2009, p. 22; Testimony of Adam Rothchild, pp. 2661-2662, *United States v. Visa*, No. 98 Civ. 7076 (BSJ) (S.D.N.Y. July 5, 2000).)

[258] Discover is the owner of one of the leading PIN debit networks, PULSE, and in 2006 launched a signature debit product, Discover Debit. According to its most recent annual report, Discover offers debit products through a variety of "third party issuer" relationships. Discover Debit is issued by a variety of financial institutions, including Central National Bank & Trust Company of Enid (Oklahoma) and 510 community banks in Texas. (Discover Financial Services Form 10-K, Nov. 30, 2010, pp. 3-4; http://pressroom.discovercard.com/data/articles/2006/02/13/200602130826130.shtml; http://www.discovernetwork.com/paymentsolutions/debit/pdf/Press_Release-IBAT_Discover_Debit_Endorsement.pdf; http://www.discovernetwork.com/paymentsolutions/debit/pdf/CNB_Enid_Article.pdf.)

[259] Notice of Proposed Rulemaking, p. 55.

[260] *Id.*

For example, the proposed regulations exclude ACH transactions from the regulations.[261] Many competitors use the ACH system to compete directly with existing debit networks. For example, PayPal is widely recognized to have a business strategy of switching transactions from major payment card brands to ACH.[262] PayPal has grown extremely rapidly in recent years by increasing its share of e-commerce transactions at the expense of traditional payment cards.[263] Similar to signature or PIN debit cards, PayPal charges merchants a percentage of the purchase price, typically in the range of 1.9 percent to 2.9 percent plus a fixed 30 cents.[264] PayPal executives were recently quoted as saying that they do not believe that they will be subject to the proposed regulations.[265] If PayPal and other similar services such as Bill Me Later, Bling Nation, and others can offer these types of services without being restricted by similar regulatory constraints on interchange and routing, they will gain a competitive advantage over the current debit networks that has nothing to do with the relative efficiencies of the systems.

[261] *Id.,* p. 44.

[262] Many PayPal accounts are funded by consumers with Visa or other payment cards. However, PayPal's business model is to switch as many transactions as possible to ACH based payments. For example, one analyst stated: "One can think of PayPal as operating a platform for buyers, sellers, and payment method providers. Of course PayPal is not neutral as to payment method providers: its business model is based on moving buyers to ACH-based transfer, which allows PayPal to avoid paying merchant fees on cards." (David S. Evans and Richard Schmalensee, "Innovations in Payments," *Moving Money The Future of Consumer Payments*, Robert E. Litan and Martin Neil Baily, eds., (Brookings 2009).)

[263] A recent article reported that PayPal "racked up 421.1 million transactions in the three months through the end of last year, a 28% increase from the same period in 2009. Dollar volume was up 26%, to $26.9 billion. Some 61% of PayPal's volume now comes from online merchants rather than from eBay's marketplace. Both transaction and dollar volume numbers include eBay's Bill Me Later unit but exclude traffic through PayPal's gateway business. PayPal finished 2010 with 94.4 million active accounts, up 17% for the year." (*PayPal Sees Durbin As 'Neutral to Positive' for Foreseeable Future*, DIGITAL TRANSACTIONS NEWS Jan. 20, 2011.)

[264] https://www.paypal.com/.

[265] A recent article reported on the following conversation with Robert Swan, CFO of EBay (owner of PayPal): "Swan cited, and quickly dismissed, another concern having to do with the potential for PayPal to be regulated by the Fed as a card network. 'I would say we do not believe this will be the case,' he said, citing the fact that PayPal doesn't levy interchange fees, the primary focus of the Durbin Amendment. … Overall, 'I think we feel comfortable with where we are" relative to Durbin, Donahoe told the analysts.'" (*Id.*) "We will be making the case that PayPal is not a payment-card network," said Sara Gorman, an Atlanta-based spokeswoman for PayPal, in a telephone interview. "We don't charge interchange fees. We're confident that we won't be regulated." (Peter Eichenbaum and Joseph Galante, *PayPal Argues Against Fee Cap as Fed Decision Looms*, Bloomberg, Jan. 19, 2011.)

Appendix A

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Professor Klein is an internationally recognized expert on antitrust economics, industrial organization and applied price theory. He has published extensively on these issues, with many of his articles published internationally, including in Europe, Latin America, China, and Russia. His research has been cited widely, including in 24 United States Federal Court (district court, appeals court, and Supreme Court) decisions involving cases in which he was not a witness. He currently serves on the Board of Editors of five academic journals, including the *Supreme Court Economic Review* and the *Antitrust Law Journal*, where he is a contributing editor.

Professor Klein has served as a consultant to various government agencies, including the Antitrust Division of the U.S. Department of Justice, the U.S. Federal Trade Commission Bureau of Competition and Bureau of Consumer Protection, the Federal Reserve Board of Governors, and the New Zealand Treasury and has testified before the U.S. Congress. Professor Klein has consulted for numerous corporations and has given expert economic evidence in various proceedings both in the United States and abroad. Many of these consulting assignments have involved the economics of payment cards, including *In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, In re: Visa Check/MasterMoney Antitrust Litigation, and First Data Corporation, et al. v. Visa U.S.A. Inc.*, where he gave expert testimony on behalf of Visa.

Dr. Andres Lerner: Andres Lerner is a Senior Vice President of Compass Lexecon and affiliated with EAC Associates, Inc.. Dr. Lerner holds a Ph.D. in Economics from the University of California at Los Angeles. He has extensive experience in antitrust matters. Dr. Lerner has published articles in leading academic journals, including the American Economic Review and the Antitrust Law Journal, and has co-edited a collection of seminal articles in antitrust economics. Dr. Lerner has written and consulted extensively in the payment cards industry, including work in *In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, In re: Visa Check/MasterMoney Antitrust Litigation,* and *First Data Corporation, et al. v. Visa U.S.A. Inc.*

Appendix A

Dr. Kevin Green: Kevin Green is a Senior Vice President of Compass Lexecon and affiliated with EAC Associates, Inc.. He holds a Ph.D. in Economics from UCLA. He has extensive expertise in antitrust, securities, corporate finance, intellectual property, and other commercial litigation. Dr. Green has published articles in academic journals such as the International Journal of the Economics of Business, Managerial and Decision Economics and the Journal of Finance and has testified in federal district court and in arbitration hearings. Dr. Green has consulted extensively in the payment cards industry, including work in *In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation* and *In re: Visa Check/MasterMoney Antitrust Litigation.*

Dr. Guy Ben-Ishai: Guy Ben-Ishai is a Senior Economist of Compass Lexecon and affiliated with EAC Associates, Inc.. He specializes in industrial organization and antitrust. He holds a Ph.D. in Economics from the Hebrew University of Jerusalem.

Appendix B

Issuer Incremental Debit Card Transaction Costs

David B. Humphrey and Edward C. Ettin

Docket No. R-1404

RIN No. 7100 AD63

ISSUER INCREMENTAL DEBIT CARD TRANSACTION COSTS

DAVID B. HUMPHREY AND EDWARD C. ETTIN*

The Durbin Amendment states that the interchange fee should reflect "...the incremental cost incurred by an issuer for the role of the issuer in the authorization, clearance, or settlement of a particular electronic debit card transaction..." 15 U.S.C. § 1693o-2(a)(4)(B). It also states that the interchange fee "... shall be reasonable and proportional to the cost incurred by the issuer with respect to the transaction." 15 U.S.C. § 1693o-2(a)(2). Unfortunately, the Federal Reserve's proposed measure of incremental cost is overly narrow in at least two ways. First, the proposal measures incremental costs over too short a time period. A multi-year period is needed to include longer-term incremental costs incurred by different sized issuers in providing this service. Second, important costs that currently vary with transactions within the one-year reporting period proposed by the Federal Reserve have been excluded. An additional issue concerns how any Federal Reserve-imposed fee or cap would be implemented and monitored in practice. The benefits and costs of a regulated interchange fee are more closely aligned when the fee is met on average across a network rather than having a single fixed fee that applies to all transactions, transactions that differ importantly in risk, value, and underlying cost. These three issues—the time interval for measuring costs, the scope of measured costs, and the most efficient way to implement and monitor regulated fees--are discussed below.

INCREMENTAL COSTS OCCUR OVER TIME, NOT JUST IN THE FEDERAL RESERVE'S ONE YEAR REPORTING PERIOD:

The legislation's focus is on debit card issuer costs associated with authorizing, clearing and settling debit transactions. These costs cover a number of transaction-related expense categories including: issuer in-house operations, issuer outsourced transaction-related services purchased from third-party processors, and issuer transaction-related costs paid to networks. The most accurate way to identify incremental transaction costs is to observe total transaction costs and see how these transaction costs actually

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vary over time. However, the value of incremental costs will vary depending on the time period selected to measure the change in debit card transaction volume.[1]

The reporting period chosen by the Federal Reserve to determine incremental costs is too short to account properly for costs that vary as transactions expand over time. Indeed, a three- to five- year time horizon was used to determine the incremental cost of debit card, credit card, and cash payments in a recent central bank of the Netherlands payment cost study. A similar study by the central bank of Belgium followed the same procedure to capture more fully incremental payment costs.[2]

Electronic payments, such as those using debit cards, experience significant economies of scale. If issuers are not permitted to recover the investments that lead to those economies there would be little incentive for future investment, which would have not only a chilling effect on future innovation, but also could cause a reduction in the capacity of issuers to deliver efficient debit card services. Indeed, an interchange fee based only on incremental transaction costs over a one-year period may not be considered reasonable and proportional to the full incremental transaction cost for authorization, clearing and settlement incurred by issuers over a longer period, and hence insufficient to maintain this banking service as a going concern.

To capture the incremental costs of maintaining the debit card service requires a multi-year horizon that includes the investments that were essential to support the expansion in card transaction volume over time. In this more realistic setting, incremental transaction costs include what the Federal Reserve has currently treated as being non-variable by virtue of focusing on the data they have collected which pertains to costs over just one year. However, as suggested below, there is a simple way to approximate the appropriate longer-term incremental debit card costs using the one-year data the Federal Reserve has already obtained.

For day-to-day variations in card transaction volume, most in-house transaction-associated costs are effectively fixed. Many transaction costs do not vary day-to-day or

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[1] In establishing a credit card interchange fee, the Reserve Bank of Australia made no explicit distinction between fixed and variable cost. They instead developed a list of specific cost categories that would be acceptable to include in the interchange fee. *See* Reserve Bank of Australia, "Common Benchmark for the Setting of Credit Card Interchange Fees," (November 2005) at pp. 12-17.

[2] Hans Brits and Carlo Winder, "Payments Are No Free Lunch," De Nederlandsche Bank, Occasional Studies, Vol. 3/Nr. 2, Table 4.3 (August 2005); National Bank of Belgium "Costs, Advantages and Drawbacks of the Various Means of Payment," *Economic Review*, I: 41-7, Table 3 (December 2005).

month-to-month, or even over a one-year period since issuers and networks build in excess capacity to accommodate expected variations in future debit card volume.

For example, the measured average 17 percent annual expansion in debit card volume--with debit card transactions rising from 15.6 billion in 2003 to 25.3 billion in 2006[3]--could not have been possible if only the one-year variable costs incurred in each year 2003, 2004, 2005, and 2006 were obtained as revenue. The investment in computers, telecommunications, call centers, and even offices that made this incremental 10 billion change in transaction volume possible would not have been compensated, resulting in a likely business decision not to encourage debit card use and thus not to expand capacity. If so, the result would have been greater use of cash and checks.

Compared to debit cards, cash and checks have been shown to incur a much larger social cost (combining the payment costs of consumers, banks, merchants, and the Federal Reserve), raising payment costs for society as a whole.[4] This takes on added importance since markedly lower interchange fees will likely encourage acceptance of debit cards by price sensitive merchant segments who have so far continued to rely on socially costly check and cash payments. The inability of issuers to cover their costs under the proposed interchange fee suggests that this transition may be restricted due to a lack of new investment to expand capacity to meet the expanded demand.

DIFFERENT APPROACHES TO MEASURING INCREMENTAL COSTS OVER TIME:

A more realistic framework for determining how costs vary with transaction volume would be to measure those costs over a multi-year time period, certainly longer than the one year reporting period used for the Federal Reserve's proposed interchange fee. There are two standard ways to determine incremental costs over a multi-year period.

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[3] Federal Reserve System, "The 2007 Federal Reserve Payment Study," at p. 4. (December 2007)

[4] D. Garcia-Schwartz, R. Hahn, and A. Layne-Farrar, "The Move Toward a Cashless Society: A Closer Look at Payment Instrument Economics," Review of Network Economics, (June 2006). When the estimated payment costs of merchants, banks, and consumers are considered together--a social cost indicator--the cost ranking and apparent average unit costs are:
Overall cost rank: cash > credit card > check > debit card (lowest cost).
Overall unit cost: $1.49 > $1.21 > $1.07 > $.90 (Table 2, in the cited paper, average of high/low transactions). While these unit cost estimates incorporate assumptions that have been criticized, this is the best information available at present.

One method would be to actually determine how transaction cost and card volume has varied over time for an individual issuer or group of issuers. This requires time-series data which can be difficult to obtain as issuers are more concerned with current costs rather than maintaining a comprehensive record of historical costs. In any event, the Federal Reserve did not collect time-series data on issuer costs. Only costs for the 2009 reporting period were collected.

A second method would be to compare costs across different issuers at the same point in time. This requires cross-section data (i.e., costs as of the same date for many issuers, each with a different transaction volume and cost). In the economics literature, the cross-section approach has been the preferred method for determining how payment costs vary with transaction volume, giving incremental costs. This is possible since payment production technologies and transaction processing are very similar across banks and payment processors so that the effects of transaction volume on incremental costs can be determined without the possible distorting influence of changes in technologies and input prices affecting the results as can occur with time-series data.

As the Federal Reserve currently has information on debit card transaction cost and volume data by different sized large issuers for 2009 rather than over time, the second method, using cross-section data to determine longer-term debit card incremental costs, would be more appropriate and achievable as the data are readily available to the Federal Reserve. Using data across different sized issuers, it is possible to determine longer-term incremental transaction costs by regressing individual issuer debit card transaction costs on the same issuer's transaction volume for a set of issuers.

APPLICATION OF THE CROSS-SECTION APPROACH TO MEASURING INCREMENTAL COSTS OVER TIME:

We have applied this second approach to a sample of banks for illustration. In this illustration, the focus is on changes in costs that may be considered largely fixed in the Federal Reserve's one-year reporting period but are seen to be variable over a multi-year time horizon. We would argue that these longer-term variable costs should be added to the proposed $0.07 variable costs (or the proposed $0.12 cap) currently identified for the 2009 one-year period.

These longer-term variable costs included in our illustration, discussed below and shown in the table below, concern cardholder inquiry costs (at $0.08 per transaction), card production and delivery costs (at $0.01), and attributable processing costs and other capital costs (at $0.01 each). To avoid double counting, costs that are already included in the proposed $0.07 interchange fee have been excluded. Network fees (at $0.04 per transaction) have also been excluded as the Federal Reserve has decided to exclude them from permissible transaction costs, although we discuss in the next section why we believe they should be included. Finally, fraud prevention and fraud activity losses (at $0.03 each) and rewards costs ($0.04) have been excluded in our example. The Federal

Reserve has requested comment on how fraud costs should be treated, and we argue in the next section that they should be included.

Our illustrative example is based on data (with some adjustments) collected from a sample of banks, but such data should be roughly within the range of that which has been collected by the Federal Reserve for 2009, although skewed toward larger volume issuers with greater economies of scale. As the Federal Reserve may adjust the data they have collected in a somewhat different manner than done here, they may obtain a somewhat different value for the longer-run estimate of incremental cost, but there is little doubt that it would be of a similar magnitude.

TABLE 1
ILLUSTRATIVE EXAMPLE
TRANSACTION INCREMENTAL COSTS

Federal Reserve Proposed Costs		$ 0.07
Longer Term Variable Costs:		
Card Holder Inquiry	$ 0.08	
Card Production and Delivery	0.01	
Attributable Processing Costs	0.01	
Other Costs	0.01	0.11
Other Variable Costs:		
Network Fees	0.04	
Fraud Prevention	0.03	
Fraud Activity Losses	0.03	0.10
TOTAL TRANSACTION INCREMENTAL COSTS		$ 0.28

Source: Argus Information and Advisory Services, LLC.

Cardholder inquiry costs are by far the largest component of these longer-term variable costs included in our example. Issuing banks must be able to talk to customers promptly and efficiently to handle customer inquiries regarding lost cards, charges and credits, and resolve disputed transactions. This is needed to manage fraud and handle individual charges and payments. Resolution of disputed transactions is part of the authorization process for debit card transactions, no different from, and just as important as, those transaction costs proposed for inclusion by the Federal Reserve. Indeed, managing disputes and inquiries is mandated by the Federal Reserve's Regulation E requirements for transaction authorization. The maintenance of call centers and the availability of the customer-facing and back-office systems to support these activities are both costly and rise with transaction volume, averaging about $0.08 per transaction.

Call centers for customer inquiry are usually carried out in-house at the larger institutions. The in-house location of this activity at larger banks reflects the lower costs and greater efficiency of such a structure, with its economies of scale and closer control and management. Nonetheless, if these costs are not recovered, issuing banks are likely to outsource these centers in order to reallocate such costs to those permissible average variable transaction costs that can be recovered under Federal Reserve rules, resulting in less economic efficiency and greater costs of providing the debit card service.

In our example, the variation in these longer run variable costs are estimated from a simple cross-section linear regression across different sized issuers using transaction cost and volume data for 2009 and is on the order of $0.11 per transaction.[5] Adding the $0.07 one-year variable cost that the Federal Reserve has proposed to the illustrative $0.11 longer-run incremental cost gives an average total incremental cost per transaction across issuers of $0.18. This would be at least 2.5 times the average variable cost of $0.07 proposed by the Federal Reserve. By considering only one component of incremental cost--the one-year variable cost for 2009--the Federal Reserve's current proposal for setting a debit card interchange fee dramatically understates the actual longer run incremental cost incurred across issuers due to transaction volume differences across these issuers.

As debit card volume expands in the future for any single issuer, that issuer will need to add more workers, more computers, expand their telecommunication facilities and probably add to the size of their existing office space. To ignore these incremental costs would greatly understate actual average incremental costs, that include the change in longer-term variable costs as volume increases (the $0.18 or more noted above), which significantly exceed the Federal Reserve's recoverable average variable incremental costs ($0.07). It is important to note that the central banks of the Netherlands and Belgium have both determined that their average debit card incremental cost per transaction accounts for 39 percent of debit card average transaction cost, a percentage that is significantly higher than the Federal Reserve's $0.07 cost would be of U.S. issuer average total transaction cost.[6]

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[5] The regression fit is good since the coefficient of determination (R^2) is .96.

[6] In the Netherlands, the average total cost of a debit card transaction was calculated to be € 0.489 in 2002 while the incremental cost of the transaction was € 0.190. In Belgium, the average total cost was € 0.55 in 2003 with an incremental cost of € 0.214. For these countries the ratio of incremental cost to average cost are both equal to .39. Applying a purchasing power parity exchange rate of $1.10 per euro to these euro values gives an incremental cost larger than the $0.18 suggested here. We have not independently validated the results of these studies, but the general methodology they employ is consistent with the analysis in this paper.

The Federal Register notice states that there is "…no single, generally-accepted definition of 'incremental cost' [p. 81735]". This is true since the measurement of incremental cost will differ (becoming larger) the greater is the time period being considered and the Federal Reserve has considered only one year. The two extreme values of incremental cost measurement described in the Federal Register notice ranged from effectively zero (when only the incremental cost of a single or even a month's worth of transactions are considered) to all transaction costs incurred from the time of initial production to a current period.[7]

The Federal Reserve, perhaps because it had only collected issuer cost data for 2009, felt restricted to considering only incremental cost on a one-year basis. It has been shown here, however, that it is possible to obtain a broader based measurement of average incremental cost by applying a simple linear regression where the slope of the estimated regression line is an estimate of average incremental cost across issuers for a period longer than the one-year period chosen by the Federal Reserve.

This approach not only yields a more accurate estimate of the underlying incremental cost across issuers than relying on the one-year reporting period used, its estimation also uses the same reporting period data collected by the Federal Reserve. One of the benefits cited by the Federal Reserve for their proposed use of average variable cost was the ease of monitoring future changes in these costs going forward. With the procedure outlined here, the same set of annual issuer cost data would be collected and used in a regression to determine how average longer-term or even total incremental issuer costs may have changed. Thus the ease of monitoring changes in incremental costs would not be degraded under the procedure used here. In addition, giving credit for these costs reduces the incentive for issuers to outsource activities to less efficient providers in order to qualify these costs as permissible under Federal Reserve guidelines.

Should the Federal Reserve adopt its "cap" rule covering 80 percent of issuers (proposed at $ 0.12), we would propose that any additional incremental costs permitted above the proposed $ 0.07 be included in the calculation of that "cap".

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[7] The latter definition was taken from Baumol, Panzar and Willig, "Contestable Markets and the Theory of Industry Structure," (1982) and referenced in footnote 51 in the Federal Register notice. This approach was taken because in a multi-output cost function it is not possible to determine the predicted average cost of any one output by itself leading these authors to suggest a measure of average incremental cost instead. This problem does not apply to the issuer cost data collected by the Federal Reserve since it is possible to compute debit card average cost directly from the data or from a single output cost function. Indeed, the regression approach illustrated above could be considered a single output cost function which does not have the problem encountered by Baumol, Panzar, and Willig.

VARIABLE COSTS EXCLUDED FROM THE ONE-YEAR REPORTING PERIOD:

In addition to neglecting incremental costs incurred over a period longer than one year, the Federal Reserve proposal excludes some critical debit card transaction costs that vary over the one-year period. We have already included in our illustrative example cardholder inquiry costs and attributable processing costs and other capital costs. Two other incremental costs that we believe should be included are noted below. These two Federal Reserve-excluded variable costs sum to $0.10, per transaction suggesting that total recoverable costs should be at least $0.28 rather than the $0.07 proposed by the Federal Reserve.

Fraud Costs:

One of the reasons that debit cards have been accepted by both merchants and consumers is the issuer's management of fraud costs. The consumer bears no cost if his/her card is stolen or otherwise used illegally and it is our understanding that with respect to the Visa network the merchant is similarly fully protected in properly authenticated, face-to-face transactions and in e-Commerce transactions where the merchant deploys available authentication tools. The issuing bank bears the risk and consequently incurs a cost, on average, of $0.03 per transaction for fraud prevention, despite which it still absorbs actual fraud losses of $0.03 per transaction, on average.

We believe these costs of fraud prevention and fraud losses should be recoverable in the permitted interchange fee for issuing banks. If the issuing bank cannot recover these costs in the interchange fee, issuing banks can be expected to impose much more stringent rules on cardholders and perhaps even charge back to merchants more fraud losses from particular transactions.

Network Fees:

The Federal Reserve proposal excludes network fees for clearance and settlement of transactions (about $0.04 per transaction). Issuing banks will continue to have every incentive to use the lowest cost network, other services being held constant, whether these costs are recovered in permissible interchange fees or not. But it is difficult to see why network fees are any different from those of other transaction costs that are recoverable under the Federal Reserve proposal.

Recovery of such costs to the issuer seem consistent with the language of the law that calls for interchange fees to reflect "…the incremental costs incurred by the issuer…" for "…clearance or settlement of a particular electronic debit card transaction." Indeed, networks and third-party processors provide similar, complementary, and often overlapping services to issuers (*e.g.*, authorization services, fraud scoring, and transaction disputes) so excluding one while including the other is inconsistent and unfairly discriminates against network providers.

Implication of Exclusion of Some Variable Costs:

There are two important possible issuer responses to the Federal Reserve's exclusion of longer-run incremental costs. First, if these costs are excluded from the interchange fee, there would likely be, as noted above, an effort to shift many of these costs to outside third-party providers since these expenses are currently included in the proposed interchange fee. It is not clear what would be gained from such shifts. If third party providers were more efficient than the issuing bank, such shifts would already have occurred. Moreover, creating this incentive for issuers to act in a less efficient manner runs the risks of actually increasing the permissible costs and the resultant regulated interchange rates over the long-run rather than providing issuers with the ability to seek the most cost-efficient solution and still recover these costs.

Second, to the extent that the cost of providing debit card services to their depositors is not covered by the interchange fee, issuing banks might impose fees on debit card users or link their "free" use to other customer-bank relationships. Alternatively, or perhaps in addition, banks could attempt to recoup these costs from all depositors by raising minimum balance requirements, raising monthly account maintenance fees, and/or lowering the interest rate paid on interest-earning transaction accounts. While such a response would help to recover some of the cost of providing debit card services to customers, it would raise the cost for all depositors. That is, costs to users of checks and cash would rise as well as the cost to debit card users. This involves the same cross-subsidy merchants have argued against that would now be implemented by banks due to establishing interchange rates below the level at which issuers can fully recover their costs. Merchants have said they had to raise prices to cover card interchange fees and may lower them as these fees are reduced while banks may raise deposit fees to cover their card costs. If this occurs, it could leave consumers in much the same position as before

IMPLEMENTING AND MONITORING A REGULATORY-IMPOSED INTERCHANGE FEE OR CEILING:

In order to harness market incentives for greater efficiency, a regulated price should not be fixed and identical for all debit card transactions. Issuer cost and risk of providing transaction services to different merchant market segments differ across these segments. For example, the risks and costs (e.g., more likely disputes, returns, etc.) in authorizing a debit card payment for a large-value purchase at an internet-based electronics retailer greatly exceed the risks of authorizing a small-value purchase at a fast food outlet or the typical supermarket transaction. The costs and benefits to issuers are in closer alignment when the regulated price is not a fixed constant, which cannot reflect these differences, but rather applies on average, permitting the costs and benefits to show through in differing prices over components or segments of total transactions.

Today, each issuer receives the same interchange fee for a like transaction in a given merchant segment on a network. The fee can differ across merchant segments to reflect the differing issuer risks involved and the differing value to merchants across debit acceptance segments. Adopting a fixed interchange fee of, say, $0.12 per transaction that applies to all transactions regardless of ticket size, merchant segment, or other factors cannot reflect such issuer/transaction risks or match merchant benefits with costs and thus reduces competition and is both unnecessarily restrictive and welfare inefficient. Much greater flexibility and efficiencies could occur if instead of having a fixed interchange fee for all transactions, issuers received a transaction appropriate interchange rate—determined and managed by their network. The network in turn would ensure that the overall average effective interchange rate for the network on regulated debit transactions would meet the $0.12 restriction as a transaction-weighted average across all transactions in all merchant segments covered by their network. As is the case today, networks would establish interchange rates such that each issuer would receive the same interchange fee for the same transaction in a given merchant segment. However, once a regulated level of interchange fee is established, the network would have to meet the regulated fee level on a transaction-weighted average basis across all merchant segments. This provides networks with the strategic flexibility to manage interchange in alignment with issuer and/or transaction risks and costs and in line with merchants' value and benefits, all while maintaining the same average regulated price across all non-exempt debit transactions.[8]

Federal Reserve monitoring of a transaction-weighted-average interchange fee would be similar to that of a single fixed fee. In both cases the interchange fee charged for each transaction would be monitored over, say, a one-year period. The network—which knows the interchange fee charged for each transaction across all participating issuers and is the centralized repository of this information—could determine and report deviations from the fixed fee or, just as easily, calculate and report the transaction-weighted-average fee received by participating issuers as an aggregate on the network over a one-year period. Reports could be made at intervals during the year to assure that the network's transaction-weighted-average was on target. If the network weighted-average fee was above/below the target level, due to a change in transaction shares driven by card users, corrective action could be implemented by the network determining and

[8] Either a fixed interchange fee for all transactions or a transaction-weighted average interchange fee can be set to equal a regulated interchange fee, as the following illustration shows. Let Ti represent the number of card transactions for market segment i and $\sum$Ti represent the sum of transactions for all i market segments. Thus Ti/$\sum$Ti is the share of market segment i in total transactions on a network and these shares will sum to 1.0. Also, define Ii as the interchange fee for market segment i. If the regulated interchange fee is $0.12, this value can be met if each Ii for each market segment is also $0.12 since then (Ti/$\sum$Ti) x Ii = $0.12. But the same regulated fee can be met if Ii for the different market segments is allowed to vary across segments such that the $0.12 value is met on average.

implementing lower/higher fees by merchant segment(s) to meet the target at the next measurement period.

The transaction-weighted-average approach would more closely follow current practice since it is the network that implements the interchange fee by merchant market segment (which is the same for each issuer for that merchant segment). Networks set different rates by merchant size, merchant segment, acceptance channel, processing requirements, and risk in order to reflect costs and better meet competitive pressures and innovation needs. The only difference would be that the network would now also report that the network met the regulated interchange fee as a transaction-weighted-average and, if not, could take corrective action to meet the desired target fee on average over the year.

The same regulated fee and/or cap could be adopted and implemented on average as would occur if those fees or caps were imposed separately on each transaction regardless of merchant segment. The benefits of the average approach, however, would be better management of risk, greater alignment of merchant costs and benefits, and greater efficiency at the transaction level since lower-risk and lower-ticket merchants would not be subsidizing higher-risk and higher-ticket merchants.

SUMMARY:

Electronic payments, such as those using debit cards, experience significant economies of scale. Debit card issuers make substantial investments in their debit card operations. The "reasonable and proportional" language of the statute implies that the recovery of all incremental costs incurred by debit card issuers is reasonable since these are the costs actually incurred. The statute does not say that recovery of only perhaps one-third of incremental costs ($0.07 versus $0.18) is reasonable. Consequently, an interchange fee based only on average variable cost in a one-year period may not be considered reasonable and proportional to the full incremental cost incurred by issuers and that recovery of average longer-term incremental costs should be the standard.[9]

Moreover, several critical variable incremental costs have been excluded from those that would be permitted to be recovered under the Federal Reserve proposal, reducing recovery of incremental costs even over the Federal Reserve's one-year reporting period. Chief among these are fraud management, fraud losses, and network fees, each of which are integral to the offering of debit cards, and for which the inability to recover costs in interchange fees are likely to have both unwanted or inefficient resource allocation implications.

Finally, requiring that the imposed fee or cap be the same for each transaction is welfare inefficient. If, instead, the interchange fee were required to be met on average on

[9] Total incremental costs are less than average total costs so not all transaction costs would be recovered.

a network, issuers and merchants could better match card acceptance benefits with costs, issuer/network systems would be less dramatically changed, greater competition among issuers via their networks would occur, and resources would be more efficiently allocated with a minimum of cross-subsidy among merchants. Monitoring compliance of the regulated rate is basically the same whether the fee is identical for all issuers for all transactions or if the fee can differ across merchant segments but must, on average, meet the regulated rate at the network level.

Appendix C

Expert Report on the Trademark Law Issues Arising from the Proposed Network Exclusivity Rules

J. Thomas McCarthy

and

Marketing Issues Arising From Proposed Network Exclusivity Rules

Itamar Simonson

Docket No. R-1404

RIN No. 7100 AD63

Expert Report on the Trademark Law Issues Arising from the Proposed Network Exclusivity Rules

Federal Reserve Board
Regulation II, Debit Card Interchange Fees and Routing

By J. Thomas McCarthy

I have been asked by Visa Inc. to give my opinion, in my capacity as an expert on trademark law, on the proposed network exclusivity rules and the associated brand restrictions set forth in the notice of proposed rulemaking dated December 16, 2010.

Qualifications.[1]

I am Senior Professor and Founding Director of the McCarthy Institute for Intellectual Property and Technology Law at the University of San Francisco School of Law. I am the author of a number of articles on trademark law and the author of the treatise "McCarthy on Trademarks and Unfair Competition" (seven volumes) first edition 1973, fourth edition published in 1996 by Thomson Reuters-West Publishing Co., with quarterly supplements, available in hardcopy, on CD-ROM and in the Westlaw database. This treatise has been relied upon as authority in over 3,000 judicial opinions.

I am also the author of: (1) the treatise "The Rights of Publicity and Privacy" (two volumes) published by Thomson Reuters-West Publishing Co. in 1987, Second Edition in 2000, updated yearly and available in hardcopy and on Westlaw. This treatise has been relied on as authority in over 3,000 judicial decisions; and (2) McCarthy's Desk Encyclopedia of Intellectual Property, with R. Schechter & D. Franklyn (one volume, 736 pp.) Third Edition published in 2004 by BNA Books, Inc.

I have received the following awards and professional recognition: the 2003 President's Award from the International Trademark Association; the 2000 Pattishall Medal for excellence in teaching trademark law from the Brand Names Education Foundation; the 1997 Ladas Professional Author Award from the Brand Names Education Foundation; the Centennial Award in Trademark Law from the American Intellectual Property Law Association (1997); the 1994 Jefferson Medal from the New Jersey Intellectual Property Association; the 1979 Rossman Award of the Patent and Trademark Office Society; and the 1965 Watson Award of the American Intellectual Property Law Association.

[1] My full curriculum vitae is attached to this report.

The Proposed Rule.

Section 920(b)(1)(A) of the Electronic Fund Transfer Act requires the Board to prescribe regulations that prohibit network exclusivity. The Board has proposed two alternative approaches to implement this exclusivity limitation.

Under the first approach ("Alternative A"), payment card issuers and networks would be prohibited from limiting the number of payment card networks on which a debit transaction may be processed to fewer than two unaffiliated networks. Under this approach, as an example, a debit card issuer would comply if its debit cards could utilize one payment card network for signature debit transactions and a second, unaffiliated payment card network for PIN debit transactions.

Under the second approach ("Alternative B"), payment card issuers and networks would be prohibited from limiting the number of payment card networks on which a debit transaction may be processed to fewer than two unaffiliated networks for each method of authorization. Under this approach, a debit card issuer would comply if it issued debit cards that could be used for both signature and PIN debit transactions and the transactions could be processed through at least two unaffiliated signature debit payment card networks and at least two unaffiliated PIN debit payment card networks.

In addition, proposed § 235.7(a)(2)(iii) ("Brand Restrictions") would prohibit network rules or guidelines that allow only that network's (or its affiliated network's) brand, mark, or logo to be displayed on a particular debit card, or that otherwise limit the number or location of network brands, marks, or logos that may appear on the debit card.

Summary of Opinion.

In my opinion, Alternative B would contravene federal trademark law and policy. Alternative B could result in the appearance of at least two signature debit brands, such as VISA and a competitor's brand, on the same debit card. This would cause confusion among consumers as to the source or origin of the transaction services offered. This would also seriously impair the value and distinctiveness of the VISA brand. In contrast, Alternative A would be less likely to result in confusion among consumers or damage to the VISA brand, because it may not result in the use of two signature debit brands on the same debit card. Regardless of whether the Board adopts Alternative A or B, the proposed Brand Restrictions contravene federal trademark law and policy to the extent that they would result in Visa not having any control over use of competitors' marks on VISA-branded debit cards.

Background On Trademark Law Principles.

Trademarks identify the *source or origin* of goods or services and distinguish the source or origin of goods or services from those of others.[2] Trademarks, such as VISA, symbolize the good will and reputation of a company. "Trademarks serve as a means of communication between otherwise unknown or anonymous producers and their prospective customers." *Restatement of the Law (Third), Unfair Competition* § 9 comment c (1995). Thus, when a

[2] Trademarks applied to services are sometimes referred to as "service marks." For purposes of this report, I will not distinguish between trademarks, service marks, marks, or brands.

customer sees a VISA payment card, the customer will know that Visa is the source of the payment processing services for transactions made using the card.

The primary goals of federal trademark law are to: (1) prevent consumer confusion as to the source or origin of goods or services or as to the sponsorship, affiliation or connection of the providers of the goods or services; and (2) protect the investment of the trademark owner in the mark. Justice Stevens characterized these twin goals of trademark law as: (a) protecting the public so that it may be confident that in purchasing a product or service "it will get the product [or service] which it asks for and wants to get"; and (b) "where the owner of a trade-mark has spent energy, time, and money in presenting to the public the product [or service], he is protected in his investment . . . ." *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 782 n.15 (1992). As Justice Holmes put it: "[A trademark] deals with a delicate matter that may be of great value but that is easily destroyed, and therefore should be protected with corresponding care." *A. Bourjois & Co. v. Katzel*, 260 U.S. 689, 692 (1923). To accomplish these twin goals, the federal Lanham Act gives trademark owners the right to prevent any use which "is likely to produce confusion in the minds of consumers about the origin of the goods or services in question." *KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc.*, 543 U.S. 111, 117 (2004).

The courts for decades have emphasized that a mark must identify a single source, not multiple sources of goods or services. *McCarthy on Trademarks and Unfair Competition* § 3:9 (2010 rev.). For example, almost a hundred years ago, Justice Oliver Wendell Holmes remarked that the trademark COCA-COLA denotes a "single thing coming from a single source." *Coca-Cola Co. v. Koke Co. of America*, 254 U.S. 143, 146 (1920). Where multiple marks of competitors are used in connection with a single good or service, consumers are likely to be confused as to the source of the good or service. Indeed, consumers would not know which entity is ultimately responsible or accountable for the product or service offered. This is why products and services almost universally bear a single mark identifying a single source.

The *VISA* Mark Is Famous And Is One Of Visa's Most Valuable Assets.

For a company like Visa, its brand is one of its most valuable assets. The VISA mark serves as the symbol of the Visa company and its services. It represents the company's identity and face that the company presents to its potential customers, its users and the world.

Visa has spent considerable time, effort and money in making the VISA mark one of the most recognized brands in the United States and around the world. According to Millward Brown's Top 100 Most Valuable Global Brands 2010, Visa ranks #18 in overall brand value, compared to MasterCard, which ranks #67. Among financial institution brands, Visa ranks #2, compared to MasterCard at #15. Discover was not ranked on either list. Furthermore, according to the Ipsos Brand Health Tracker for 2010 (2nd quarter), which measures overall brand strength across five dimensions (relevance, understanding, uniqueness, popularity, and quality), Visa brand equity is 43 points ahead of MasterCard and 80 points ahead of Discover in the United States, according to Q2 2010 data.

The strength of the VISA mark has been recognized by the courts. In 2010, the United States Court of Appeals for the Ninth Circuit held that the VISA mark qualifies as a famous mark under the Federal Trademark Dilution Act. *Visa Intern. Service Ass'n v. JSL Corp.*, 610 F.3d 1088, 1090 (9th Cir. 2010). Famous marks are entitled to a broad scope of protection.

As a matter of law and policy, Visa has the right to protect the VISA mark and to stop others from using the VISA mark in any manner that is likely to cause confusion among consumers or dilute the strength of the VISA mark, both of which could reduce the value of the VISA mark and injure Visa's good will and reputation.

Alternative B Is Likely To Result In Confusion Among Consumers.

Alternative B would permit the use of two competing signature debit marks, such as the VISA mark and the mark of one of its competitors, on a single debit card, leading to confusion among consumers.

A debit card is the primary tangible thing that a consumer possesses and uses that represents Visa's signature debit services. Thus, when a consumer has a debit card bearing the VISA mark and the mark of a Visa competitor (effectively a "dual-branded" card), the consumer is likely to be confused as to the source or origin of the signature debit services provided through use of the card.

If a consumer were to use a dual-branded debit card for a signature debit transaction, the consumer would not know which debit card network would process the transaction. The consumer would not know which entity is responsible for reliably carrying out the transaction. The consumer would not know which company's security protocols would be used to protect the consumer's identity and cardholder information. The consumer would not know which company to complain to or compliment. The consumer might associate a positive Visa transaction with a competitor. The consumer might associate a negative transaction processed by the competitor with Visa. The consumer may attribute positive as well as negative experiences to both Visa and the competitor. Thus, allowing such dual-branded debit signature cards would blur the distinction between Visa and its competitors. Indeed, a dual-branded debit signature card may lead consumers to believe that Visa and its competitor are one and the same or, at a minimum, assume that they are related or affiliated in some way.

If a competitor receives adverse publicity, such as reports of security breaches or privacy violations, this publicity may also negatively affect consumer perception of Visa. In short, Visa would lose its ability to manage and protect associations that consumers make with VISA-branded cards, such as convenience, security, acceptance, and value, and would be at the mercy of its competitors.

Alternative B Is Likely To Reduce The Value Of The *VISA* Mark.

If the VISA mark appears on a debit card along with the mark of one or more signature debit competitors, the VISA brand and Visa's reputation would suffer by being confused with that of its competitor. While Visa has control over its own services, Visa has no control over the nature and quality of its competitor's services. The two competing brands would be inextricably linked, and along with it, the cardholder experience and confidence in using that debit card. This would reduce the strength of the VISA brand and reduce the value of the VISA mark as a unique identifier of Visa's services. Visa's reputation and good will would be at the mercy of its competitors.

In addition, even if consumers were not confused by dual-signature brand debit cards, their inability to choose VISA as the signature debit provider for purchases would reduce the value of the VISA brand. Visa has spent substantial time, effort and money in developing benefits for VISA debit card users and advertising those benefits, such as rewards, loyalty programs, security features, zero liability and the like. Such benefits differentiate Visa from its competitors. The value of this differentiation and the associated good will would be lost or at least significantly diminished if consumers could no longer direct whether their signature debit card purchases are processed by Visa or a competitor.

Alternative A Would Not Create The Same Level of Concern.

Although Alternative A would permit the use of two signature debit brands on the same debit card, Alternative A could also result in the use of a signature debit brand, such as VISA, and a PIN debit brand, such as PULSE, on the same debit card, which creates less concern for several reasons.

First, the VISA brand and Visa's competitors' signature debit brands (such as MASTERCARD and DISCOVER) are brands marketed to consumers. The companies that own these brands have each spent substantial time, effort and money in developing their brands and the associated consumer perception and services. In contrast, PIN debit network brands, such as PULSE, STAR and NYCE, are not directly marketed to consumers domestically or, at least, are not well known among consumers. Accordingly, a consumer is not likely to pay attention to the PIN network brands on debit cards and, therefore, may not associate the PIN debit network brands with the signature debit network brands.

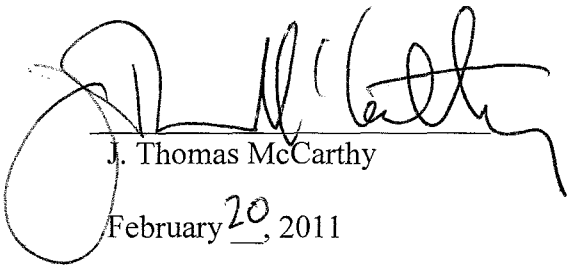
Second, consumers may already be accustomed to seeing multiple PIN debit brands on debit cards. The PIN debit brands have been identified historically through the use of small logos on the back of debit cards to notify consumers of which networks were available for processing PIN transactions. However, these PIN debit brands were not prominently featured and often simply served the function of notifying consumers where they could use their debit cards to obtain cash at ATMs.

The Brand Restrictions Should Be Eliminated.

Regardless of whether the Board adopts Alternative A or B, Visa should be allowed to maintain significant control over how other network brands appear on VISA-branded debit cards. For example, if other PIN network or signature debit brands were allowed to appear side by side with the VISA brand and with the same prominence as the VISA brand, then this may very well cause confusion among consumers. Consumers might believe that such brands are associated or affiliated with Visa. Accordingly, any limitation on Visa's ability to impose restrictions on the size or location of such brands would undermine Visa's ability to control its mark and would increase the potential for consumer confusion.

Conclusion.

For these reasons, it is my opinion that proposed Alternative B and the Brand Restrictions are contrary to federal trademark law and policy and would likely cause confusion among customers and cause damage to the VISA brand and mark.



J. Thomas McCarthy

February 20, 2011

EXPERT REPORT OF ITAMAR SIMONSON

Marketing Issues Arising From Proposed Network Exclusivity Rules

Federal Reserve Board, Regulation II
Debit Card Interchange Fees and Routing

Assignment

1. My understanding is that the proposed rules (under "Alternative B") open the possibility that debit cards used by consumers will display two well-known, promoted, competing signature debit brand logos and names, such as Visa and MasterCard or Visa and Discover. In my work as a marketing professor and a consumer researcher at Stanford University, I have not encountered any comparable situation. Indeed, as I explain in detail subsequently, similar to any other product or service, having two competing signature debit brand logos on the same debit card will cause (a) consumer confusion, (b) a likely loss of trust, (c) dilution of the brand meaning and of brand associations in the minds of consumers, (d) a loss of brand equity, and (e) a loss of control over each brand and the ability of each brand owner to reward its customers.

2. Before elaborating on these conclusions, I will explain the meaning and function of brands for both companies and consumers. I will then examine what we know about the current brand equity of Visa, and the investments that Visa has made over the years to acquire that brand equity and the trust of consumers. In the final section, I will analyze in detail the consequences for both Visa and for its customers in case debit cards display the Visa mark alongside another competing signature debit brand.

Background and Qualifications

3. I am the Sebastian S. Kresge Professor of Marketing at the Graduate School of Business, Stanford University. A copy of my curriculum vitae, which includes a

complete list of my publications, is attached as Exhibit A.

4. I hold a Ph.D. in Marketing from Duke University, Fuqua School of Business, a Master's degree in business administration (MBA) from the UCLA Graduate School of Management, and a Bachelor's degree from The Hebrew University with majors in Economics and Political Science.

5. My field of expertise is consumer behavior, marketing management, trademark infringement from the consumer's perspective, survey methods, and human judgment and decision making. Most of my research has focused on the effects of (a) product characteristics (such as brand name, price, and features), (b) the competitive context, and (c) marketing activities (such as promotions, advertising) on consumers' purchasing behavior and buying decisions, as well as how trademark infringement affects customers. My research has been widely cited by researchers in the marketing, consumer behavior, and other fields,[1] and my publication record has been ranked as one of the most prolific and influential.[2]

6. I have published three articles relating to trademark surveys and trademark infringement from the customer's perspective, including two in the *Trademark Reporter* and one in the *Journal of Public Policy & Marketing*. The two articles published in the *Trademark Reporter* were: "The Effect of Survey Method on Likelihood of Confusion Estimates: Conceptual Analysis and Empirical Test,"[3] and "An Empirical Investigation of the Meaning and Measurement of Genericness."[4] *The Journal of Public Policy & Marketin*g article, titled "Trademark Infringement from the Buyer Perspective:

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[1] *See e.g.*, Google Scholar, http://scholar.google.com (*i.e.*, by entering my last name and first initial).
[2] *See e.g.*, Steven H. Seggie & David A. Griffith, *What does it take to get promoted in marketing academia? Understanding exceptional publication productivity in the leading marketing journals*, J. of Marketing 73, 122-132 (2009).
[3] Itamar Simonson (1993), "The Effect of Survey Method on Likelihood of Confusion Estimates: Conceptual Analysis and Empirical Test," Trademark Reporter, 83 (3), 364-393.
[4] Itamar Simonson (1994), "An Empirical Investigation of the Meaning and Measurement of Genericness," Trademark Reporter, 84 (2), 199-223.

Conceptual Analysis and Measurement Implications,[5] was selected (in 1997) as the Best Article published in that journal between 1993 and 1995.

7. At Stanford University I have taught (and will be teaching again in the winter of 2011) MBA and executive courses on Marketing Management, covering such topics as buyer behavior, developing marketing strategies, building brand equity, advertising, sales promotions, and retailing. I also taught an MBA course on Marketing to Businesses, and a course on High Technology Marketing. In addition to teaching MBA courses, I have guided and supervised numerous MBA student teams in their work on company and industry projects dealing with a variety of markets.

8. I have taught several doctoral courses. One doctoral course examined methods for conducting consumer research. It focused on the various stages involved in a research project, including defining the problem to be investigated, selecting and developing the research approach, data collection and analysis, and deriving conclusions. A second doctoral course that I have taught dealt with buyer behavior, covering such topics as buyer decision making processes, influences on purchase decisions, and persuasion. A third doctoral course that I have taught deals with behavioral decision making. During the six years that I was on the faculty of the University of California at Berkeley prior to joining Stanford University, I taught an MBA Marketing Management course, a Ph.D. course on buyer behavior, and a Ph.D. course on buyer decision making. I also taught in various executive education programs, including a program for marketing managers in high technology companies.

9. After completing my MBA studies and before starting my Ph.D. program, I worked for five years in a marketing capacity at a subsidiary of Motorola Inc., serving in the last two years as the product marketing manager for two-way communications products. My work included (a) defining new products and designing marketing plans

[5] Itamar Simonson (1994), "Trademark Infringement from the Buyer Perspective: Conceptual Analysis and Measurement Implications," Journal of Public Policy and Marketing, 13(2), 181-199.

for new product introductions, (b) customer and competitor analysis, and (c) sales forecasting.

10. I have conducted, supervised, or evaluated well over 1,000 marketing research surveys, including many related to consumer behavior and information processing, trademark, branding, marketing strategies, and advertising-related issues. I serve on nine editorial boards, including leading journals such as the *Journal of Consumer Research*, *Journal of Marketing Research*, and the *Journal of Consumer Psychology*. I am also a frequent reviewer of articles submitted to journals in other fields, such as psychology, decision making, and economics. As a reviewer, I am asked to evaluate the research of scholars wishing to publish their articles in leading scholarly journals. I received (twice) the Outstanding Reviewer Award from the *Journal of Consumer Research*. I have also worked as a consultant for companies and organizations on a variety of marketing and buyer behavior topics.

11. Based on my expertise in marketing and consumer behavior, I have been asked by Visa Inc. to examine the consequences of the proposed rules, particularly the implications of allowing the display of two competing signature debit brand names/logos on the same debit cards. After summarizing my conclusions, I will first briefly discuss basic principles of branding, brand equity and its importance for both brand owners and consumers, and the strategies that companies use to promote and protect their brands. I will then review the evidence pertaining to the existing brand equity of Visa relative to competing signature debit brands. The last section will address in more detail the implications of the proposed rules, especially a rule allowing the display of two competing signature debit brands on the same debit cards, with respect to Visa's brand equity and its ability to maintain, promote, and protect its brand and customer relationships in the future.

Summary of Conclusions

12. Brands often represent the most important assets of companies, and the ability to create, maintain, enhance, and protect brands is critical for firms' survival. The value of a brand or the brand equity reflects the level of brand awareness and usage among consumers, customers' loyalty and commitment to the brand, the brand's perceived quality as well as other brand associations (e.g., the degree to which a debit card is widely accepted).

13. Through its sustained investment over several decades in the services it provides to consumers and in its brand equity (e.g., its sponsorship of the Olympics), Visa has earned a uniquely strong brand position. In particular, compared to other debit (and credit) card brands, the Visa brand has the highest consumer awareness and usage level, the highest level of consumer commitment, and the most favorable associations (e.g., it is seen as the most widely accepted card brand).

14. The proposed rules, especially the suggestion that debit cards will display two competing, recognized signature debit brands (e.g., Visa and Discover) on the same card, have the potential to create consumer confusion and cause permanent harm to the Visa brand equity. In particular:

a. If the same card displays two recognized signature debit brands, a consumer will not know which of the two brands is being used and which brand will "handle" the transaction. Considering that consumers are likely to perceive the two brands differently, such ambiguity about the card being used will harm consumers and undermine their trust in the debit card.

b. Consumers may not understand the regulators' motivations for allowing two different, competing signature debit logos on the same card. Thus, a requirement that debit cards will display two recognized signature debit brands on the same card will cause consumer confusion.

c. There will be other negative consequences for consumers in case the debit cards they use display two competing signature debit brand logos. Thus, for example, consumers will not know if the zero liability and other protection available to users of a Visa signature debit card are available to them when they use a card with two signature debit marks.

d. The implications for Visa of displaying two competing signature debit brands or logos on debit cards are far-reaching and can potentially dilute the brand equity and favorable brand associations that Visa has built and developed over several decades at great expense, using evidently effective marketing strategies. Thus, a debit card displaying two recognized, competing signature debit brands is likely to be perceived as being of lower quality and less distinctive than a card that carries just the Visa brand.

e. The other brand on the card (e.g., Discover) will likely greatly enhance its brand equity, not based on any successful branding or communications strategy and corresponding investments, but simply because a new regulation required Visa to permit the Discover logo to be placed on debit cards on which the Visa brand appears. In addition, because Discover, for example, is primarily known as a credit card brand and Visa is well known as a credit card and debit card brand, Discover would significantly enhance its brand equity for debit transactions to Visa's detriment solely as the result of its brand appearing with the Visa brand on debit cards.

f. Moreover, Visa will effectively lose control over its brand and its perception by consumers, because any harm to the other signature debit brand displayed alongside the Visa brand may negatively affect the Visa brand as well.

g. In addition, a rule that will permit having two competing signature debit brands on the same debit card will greatly limit the ability of the two brands to

implement their independent marketing strategies and interact with consumers the way other companies do.

h. Although Alternative A requires two unaffiliated networks, Alternative A is of potentially less concern than Alternative B, because it could result in a signature debit brand and an unaffiliated PIN debit brand on the same debit card. Unlike signature debit brands, PIN network brands are not widely marketed to or well known by consumers. Therefore, PIN network brands would not have the same levels of brand awareness or perceived brand associations as signature debit brands. In addition, many debit cards today include the marks of both signature and PIN debit networks (with the PIN network mark typically displayed on the back of the card). As a result, consumers are less likely to perceive the PIN debit brands as identifiers of the source of the card and not likely to be confused.

i. Regardless of whether the Board adopts Alternative A or Alternative B, the Board should recognize more generally that Visa and other branded payment networks should be permitted to maintain card branding or other trademark-related requirements to protect against consumer confusion due to the display of two competing brands on the same consumer payment cards. Thus, the Board should not restrict the ability of Visa or other networks to restrict the size and location of other trademarks, brands or logos on payment cards.

The Meaning and Roles of Brands and Brand Equity

15. The American Marketing Association has defined a brand as follows: "A brand is a name, term, sign, symbol or design, or a combination of them intended to identify the goods and services of one seller or a group of sellers and to differentiate them from the competition."[6] A brand is thus a product or service whose characteristics

[6] For other definitions of brands and related discussion, see K. L. Keller (2003), *Strategic Brand Management*, 2nd Ed., Ch. 1, Pearson; P. Kotler and K.L. Keller (2009), *Marketing Management*, 13th ed., Pearson.

distinguish it from other products or services. Throughout history, marketers/sellers have branded their products (for example, medieval goldsmiths). Marketers can use branding virtually anywhere a consumer has a choice, including products, services, stores, TV programs, and so on.

16. Brands often represent the most important assets of companies, and the ability to create, maintain, enhance, and protect brands is critical for firms' survival. Thus, for example, the Tiffany, Sony, and Nike brands command a price premium and generate customer loyalty. More recently introduced brands such as Google, Facebook, and Netflix have gained a special place in the minds of consumers (and the financial community).

17. Consumers learn about brands based on past experiences with the product, their observation of other consumers, word-of-mouth, and finding out which brands satisfy their needs (and which do not). As consumers' lives become more complicated, the ability of a brand to simplify decision making and decrease risk is invaluable. Brands often represent a certain level of perceived quality, which allows satisfied consumers to easily and quickly choose the product again.

18. "Companies have paid large earning multiples for brands in mergers or acquisitions, often justifying the price premium on the basis of the extra profits to be extracted and sustained from the brands, as well as the tremendous difficulty and expense of creating similar brands from scratch. Wall Street believes strong brands result in better earnings and profits performance for firms, which, in turn, create greater value for shareholders."[7] Branding strategies are effective and brand value is created when consumers are convinced that there are meaningful differences among brands in the product or service category. Successful brands (e.g., Ivory soap, Gillette, 3M) have been able to maintain a leading market position for decades.

[7] P. Kotler and K.L. Keller (2009), *Marketing Management*, 13th ed., Pearson.

19. The term *brand equity*, as the name implies, refers to the value and associations of the brand. There are different models of brand equity, which emphasize different aspects. For example, advertising agency Young and Rubicam (Y&R) developed a model of brand equity called brand asset valuator (BAV). Based on research with almost 500,000 consumers in 44 countries, BAV provides comparative measures of the brand equity of thousands of brands across hundreds of different categories. There are five key components—or pillars—of brand equity, according to BAV:

- *Differentiation* measures the degree to which a brand is seen as different from others.
- *Energy* measures the brands sense of momentum.
- *Relevance* measures the breath of a brand's appeal.
- *Esteem* measures how well the brand is regarded and respected.
- *Knowledge* measures how familiar consumers are with the brand.

20. Professor David Aaker[8] defined brand equity as including four key components: brand awareness, brand loyalty, perceived quality, and brand associations that, in combination, add to or detract from the value provided by a product or service. According to Aaker, brand management starts with developing a *brand identity*—the unique set of brand associations that represent what the brand stands for and promises to customers, an aspirational brand image.

21. *Brand elements*, such as brand names and logos, are those trademarkable devices that identify and differentiate the brand. Most strong brands employ multiple brand elements. For example, McDonald's has a well-known logo (the Golden Arches) that is associated with its restaurants, fast food, low prices, and particular slogans (e.g., "I'm Loving It"). Similarly, Nike has the distinctive "swoosh" logo, the "Just Do It"

[8] See, for example, D. Aaker (1991), *Managing Brand Equity*, Free Press.

slogan, and the "Nike" name based on the winged goddess of victory. Marketers choose brand elements to build as much brand equity as possible.

22. There are two basic approaches to measuring brand equity. An *indirect* approach assesses potential sources of brand equity by identifying and tracking consumer brand associations and knowledge. A *direct* approach is based on an evaluation of the actual impact of brand image/knowledge on consumer decisions and behavior (e.g., recommendations). It is noteworthy that marketers distinguish brand equity from *brand valuation*, which is the job of estimating the total financial value of the brand.

23. Considering that the brand is the firm's key asset, a brand needs to be carefully managed so that its value does not depreciate. In particular, maintaining clear, distinctive, and unique brand associations as well as consumer trust are essential for the long term survival of the brand. Brands that have been successful in that regard, such as Coca-Cola, Heinz ketchup, and Apple Computer, have correspondingly been able to remain a market leader with distinctive, unique associations in the minds of consumers. They have achieved this strong position by continuing to improve their products, services, and marketing, without diluting the brand meaning and favorable associations that distinguished them from competing brands.

24. Indeed, brand equity is reinforced by marketing actions that consistently convey the meaning of the brand in terms of: (1) what products the brand represents, what core benefits it supplies, and what needs it satisfies, as well as (2) how the brand makes products/services superior, and which strong, favorable, and unique brand associations should exist in the minds of consumers. Reinforcing brand equity requires a great deal of effort and continued innovation. It often also involves great, continuous investments in advertising and other promotional activities (e.g., sponsoring high-profile events).

25. Deciding how to brand (i.e., what brand name to use) new products is especially critical. When a firm uses an established brand to introduce a new product, the

product is called a *brand extension*. When marketers combine a new brand with an existing brand, the brand extension can also be called a *sub-brand*, such as Honey-Nut Cheerios, Apple iPod, Cadillac CTS automobile, and American Express Blue cards. The existing brand that gives birth to a brand extension or sub-brand is the *parent brand*. If the parent brand is already associated with various products through brand extensions, it can also be called a *family brand*. Many firms have decided to leverage their most valuable asset (i.e., their parent brand) by introducing a host of new products under their strongest brand names. It is noteworthy that most (as high as 80% or even more) new products are in fact line or brand extensions. This reliance on brand extensions illustrates the critical importance of having a strong brand that can be leveraged and extended. In addition, the parent brand (also referred to as a "master brand") requires greater protection than other brands, because the parent brand plays a more prominent role for each product and service offered by the firm. As such, any negative associations with the parent brand are likely to have a direct and profoundly negative impact on the brand extensions.

26. In particular, two main advantages of brand extensions are that they can facilitate new-product acceptance and provide positive feedback to the parent brand and company. Consumers can make inferences and form expectations about the composition and performance of a new product based on what they already know about the parent brand and the extent to which they feel this information is relevant to the new product. For example, when Sony introduced a new personal computer (Sony Vaio) tailored for multimedia applications, the Vaio consumers may have felt comfortable with its anticipated performance because of their experience with and knowledge of other Sony products.

27. By setting up positive expectations, extensions reduce risk. It also may be easier to convince retailers to stock up and promote a brand extension, because of increased consumer demand. From a marketing communications perspective, an

introductory campaign for an extension does not need to create awareness of both the brand *and* the new product, but instead it can concentrate on the new product itself. Extensions can thus significantly reduce costs of the introductory launch campaign. Extensions also can avoid the difficulty -- and expense -- of coming up with a new name and allow for packaging and labeling efficiencies.

The Visa Brand and Its Meaning to Consumers

28. Since at least the 1980's, Visa has invested billions of dollars in its brand and various communications that have differentiated it from other brands. As explained above, effective marketing and branding strategies enhance brand equity and can lead to a sustainable competitive advantage. Indeed, while specific product features can often be easily copied by competitors, a superior brand equity that a company earns based on long term, sustained investments and initiatives can produce a more sustainable competitive advantage. One important factor has been Visa's diligent adherence to a clear and consistent parent brand strategy, whereby positive equities associated with the parent brand are transferred to its products and services in the United States and internationally. This has helped extend the reach and overall impact of the Visa brand through its broad portfolio of Visa-branded products and services

29. Consider in particular the brand value that Visa established starting in the 1980's through its sponsorship of the Olympics and other successful campaigns. In his branding textbook, Professor Keller offers the following analysis:[9]

> "Back in 1985, Visa and MasterCard were seen as essentially identical products that faced stiff competition … Visa set out to create a differentiating and enduring perception of its brand as the best payment method … Visa was positioned as the brand with superior acceptance by virtue of hard-hitting comparative ads with

[9] K. Keller (2003), *Strategic Brand Management*, 2nd ed., p. 381, Pearson.

> American Express. The 'It's Everywhere You Want to be' campaign featured interesting, unique, and prestigious locations … In terms of even marketing, Visa aligned itself with high-profile events. … Starting in 1988, the Olympics became Visa's biggest event association. Visa's Olympic involvement has helped to reinforce their desired positioning as a high-quality, globally accepted product. The effects of these sponsorship and other communication efforts have been dramatic. Research has shown that Visa is now perceived as more widely accepted than other cards and, as a result, as the card of choice for personal and family shopping, personal travel and entertainment, and even international travel, a former American Express stronghold."

30. Consumer research studies, which were conducted for the purpose of making business decisions, have shown that, though its sustained efforts, Visa has created the highest brand equity in the debit card category. Furthermore, the Visa brand has often been included among the top 100 brands in the world (see, e.g., the *Bloomberg BusinessWeek Top Global Brands*; *Interbrand's Best Global Brands*; *BrandZ Top 100 Best Global Brands*), based on ranking produced by different organizations that employ a variety of methodologies to assess brand value.

31. We can evaluate specific components of Visa's brand equity and differentiation based on a standard model of brand equity,[10] which focuses on four key dimensions: brand awareness, brand loyalty, perceived quality, and other brand associations. I will next examine what we can learn from the findings of consumer studies (conducted for the purpose of making business decisions) regarding the brand equity of Visa compared to other competing brands.

32. *Brand Awareness*. According to consumer surveys conducted in 2009 and 2010 by two well-known market research companies ("Ipsos" and "tns"):

[10] D. Aaker (1991), *Managing Brand Equity*, Free Press.

- Visa is the first brand that comes to mind for the majority of consumers
- Visa continues to have a strong lead over other brands in terms of claimed current brand ownership and past 3 months usage (for both credit and debit categories)
- Consumers tend to use Visa more frequently than other cards

33. *Brand Loyalty*. Key findings from the Ipsos and tns surveys pertaining to brand loyalty and commitment include the following:

- Visa has by far the most loyal users among payment card owners.
- Across major payment card brands (Visa, MasterCard, Amex, Discover), Visa enjoys the highest level of owner commitment.
- Based on a 10-point scale ("likelihood to recommend their card"), Visa has nearly twice as many promoters as detractors – yielding an attractive "net promoter score." Discover has the weakest score – with almost as many detractors as promoters in its base.

34. *Perceived Brand Quality and Brand Associations*. The Ipsos and tns studies also surveyed the perceived quality and associations of Visa and other debit card brands. They found that he Visa brand is seen by consumers as the most widely accepted, the most convenient to use, the most secure, the most trustworthy, and as the best way to pay.

35. In conclusion, Visa has successfully created very strong brand equity, which is arguably its most important asset and the primary source of its competitive advantage. Thus, regulations that would dilute the Visa brand equity and change the rules of market competition such that any competitive advantage will be greatly diminished will cause far-reaching harm to the company and a primary asset.

Consequences of the Proposed Rules For Debit Card Brands and For Market Competition

36. A key potential implication of the proposed rules is that debit cards used by consumers may display two known signature debit brands, such as both Visa and MasterCard or Visa and Discover. There are several important reasons why a requirement permitting the display of two competing signature debit brands on the same debit card will cause significant harm to both consumers and brand owners, particularly a brand such as Visa that has earned substantial brand equity based on its investments over several decades.

Implications For Consumers

37. Consider, for example, a situation in which a consumer has a debit card that displays the logos and names of both Visa and Discover. Such a consumer will probably perceive the two signature debit brands differently. The research reviewed above indicates that, by and large, Visa's brand equity is superior to that of Discover on all brand equity dimensions, including awareness, loyalty, perceived quality, and other brand associations. But if the same card displays both the Visa and the Discover logos, how can the consumer know which of the two brands is being used and which brand will "handle" the transaction? The answer will not be obvious.

38. Most consumers may not follow or understand the regulators' motivations for allowing two different, competing signature debit logos on the same card or what the implications are of using such a card. A requirement that debit cards display two recognized signature debit brands on the same card will cause consumer confusion. Thus, as Professor McCarthy pointed out in his submission to the Board, consumers will be confused as to the source of the card and the brand it represents.

39. In particular, consumers will not know which of the two signature debit brands displayed on the card will actually "take care" of their transaction, and correspondingly, may have less trust that the transaction and related charges will be handled appropriately. Trust is especially important in the context of financial transactions. Many consumers cannot or just do not bother to track all transactions and

may rely instead on the reputation of and experience with the card (e.g., their prior satisfactory experience with Visa debit card transactions). But the trust in the card and the reliability of the charges depend on the consumer's perception of the card being used. And if Discover is perceived as less trustworthy or even just as lesser known than Visa, the consumer will not know which of the two will actually "handle" the transaction and how reliable it is. Relatedly, in case any debit card transaction is mishandled, the consumer may not know who is responsible for addressing the problem. In addition, because the Discover brand is well known for credit card services and the Visa brand is known for both credit and debit card services, consumers may believe that a payment card bearing both the Discover and Visa brands is a credit card. Thus, in addition to not knowing whether the transaction would be "handled" by Discover or Visa, consumers may also be confused as to the nature of the transaction. If the consumer favors debit transactions over credit transactions, this confusion could adversely affect the consumer's desire to use the card.

40. There are at least two other negative consequences for consumers in case the debit cards they use display two competing signature debit brand logos. First, some debit cards offer reward programs whereby consumers earn credit or points, which can later be converted to cash or other benefits. Suppose a consumer is a member of a reward program offered by the issuer of a Visa card and is now required to use a debit card that displays both the Visa and MasterCard logos. The consumer would not be able to choose which of the two brands will be used for a particular transaction. Instead, that decision will be in the hands of the merchants. Accordingly, such a consumer may not know if particular transactions will or will not count as qualified purchases or earn reward points. As explained further below, such a dual signature debit brand approach will greatly limit the ability of issuers of Visa cards and other such companies to implement and control their reward programs.

41. In addition, debit and credit cards are often status symbols for consumers. A consumer may feel more comfortable using a debit card displaying the Visa logo as opposed to other logos. However, once more than one signature debit logo appears on the card, the symbolic meaning of the card to the consumer will be lost or diluted.

Implications For Visa

42. The implications for Visa of displaying two competing signature debit logos on debit cards are far reaching and can potentially dilute the brand equity that Visa has built and developed over several decades at great expense, using evidently effective marketing strategies. For example, as described above, Visa's sponsorship of the Olympics and other communications campaigns since the late 1980's has helped support its positioning as the most widely accepted brand in the U.S. and internationally. Importantly, these campaigns focused on the Visa brand, rather than any particular type of card.

43. But if debit cards will display two signature debit brands, such as Visa and Discover, the meaning of this hard-earned brand position in the minds of consumers will be greatly weakened and diluted, with Discover free-riding and benefiting from Visa's marketing investments and marketplace success. In particular, the debit card with the two signature debit brands is likely to be perceived as being of lower quality and less distinctive than a card that carries just the Visa brand. Indeed, prior research suggests that consumers may average the perceived quality of the two displayed brands.[11] In other words, the perceived quality of the two-brand signature debit card will be somewhere between the perceived quality of Visa and Discover, which (consistent with the research reviewed above) means that it will be seen as significantly inferior to a Visa card.

[11] CM Troutman and J. Shanteau (1976), "Do Consumers Evaluate products by Adding or Averaging Attribute Information?" *Journal of Consumer Research*, Vol. 3.

44. Beyond quality, the various Visa brand associations, which were detailed above, will be similarly diluted by the presence of a second recognized signature debit brand on the same debit card. For example, debit cards displaying Visa alongside another signature debit brand (e.g., Discover) will negatively affect the perceived differentiation of the Visa brand in terms of trustworthiness, acceptance, convenience, and many other features. Similar to other brands that have earned brand associations that are more favorable than competing brands, Visa would be harmed if it lost its hard-earned consumer perceptions due to any rule change that interferes in normal competitive market forces.

45. Moreover, as indicated, the other signature debit brand on the card (e.g., Discover) will likely enhance its brand equity, not based on any successful branding or communications strategy and corresponding investments, but simply because a new rule allowed placement of its logo on debit cards on which the Visa brand appears. In addition, because Discover, for example, is primarily known as a credit card brand and Visa is well known as a credit card and debit card brand, Discover would significantly enhance its brand equity for debit transactions to Visa's detriment solely as the result of its brand appearing with the Visa brand on debit cards. Thus, the proposed rules will effectively diminish marketplace competition and equalize the perceived equity of all brands. Furthermore, the rules will create a highly unusual market in which a brand such as Discover will free-ride on the hard-earned equity and perceived value of another brand. I have studied many markets, yet I have not encountered any market in which a firm with a high-quality brand (as perceived by consumers) is forced to place on the same product a lower-quality, competing brand name/logo.

46. Moreover, Visa will effectively lose control over its brand and its perception by consumers, because any harm to the other signature debit brand displayed alongside the Visa brand may also negatively affect the Visa brand. For example, if the second signature debit brand on the card becomes involved in a controversy or is using a

negatively perceived celebrity as its spokesperson, consumers may choose to avoid using a debit card that displays that brand despite the fact that the Visa logo is also on the card. More generally, a brand cannot afford to be dependent on another brand for maintaining its brand equity. But the presence of two signature debit brands on the same debit card will force a link in the fortunes and perceptions of the two brands. While such a link and spillover effect may benefit the brand with lower brand equity, it can cause significant harm to the superior brand.

47. Yet another consequence of a rule that will allow having two competing signature debit brands on the same debit card is that it will greatly limit the ability of the two brands to implement their independent marketing strategies and interact with consumers the way other companies do. For example, different brands often appeal to different consumer segments, which means that the segmentation strategy of the other signature debit brand on the card may interfere with the marketing strategy of Visa, not only for debit services but for credit and other services as well.

48. Based on the foregoing analysis and from a marketing perspective, Alternative A would be less problematic than Alternative B. I understand that Alternative A would require networks and issuers to enable a debit card to use two unaffiliated payment networks, which could include one signature debit network and one PIN debit network. I also understand that Alternative B would require networks and issuers to enable a debit card to use at least two unaffiliated networks for *each type of transaction*, such as two unaffiliated signature debit networks and two unaffiliated PIN debit networks. My analysis above focused on the use of two signature debit brands, such as VISA and Discover, on the same debit card. The use of one signature debit brand with one PIN network brand (such as Star and NYCE) on the same debit card would not present the same level of concern subject to certain conditions, except to the extent such brands are well known to consumers. Unlike signature debit brands, my understanding is that PIN network brands are generally not widely marketed to or well known by

consumers in the United States. Although I have not seen marketing studies on this point, I believe that domestically these brands would not have the same brand awareness, brand loyalty, or perceived brand associations as signature debit brands, such as Visa and Discover. Even though a consumer may have a Visa-branded debit card that also identifies the competing PIN debit networks that can process PIN transactions made using the card, consumers would not associate the PIN debit brand as the *source of the card*. Moreover, as noted above, many debit cards already include the marks of both signature and PIN debit networks (with the PIN network mark typically displayed on the back of the card). Therefore, based on these distinctions between signature debit brands and PIN debit brands, Alternative A would not create the same level of concern as Alternative B.

49. Regardless of whether the Board adopts Alternative A or Alternative B, for the reasons set forth in this paper, the Board should recognize more generally that Visa and other branded payment networks should be permitted to maintain card branding or other trademark-related requirements to protect against consumer confusion from co-residence of competing consumer payment brands on the same debit cards. Thus, the Board should not restrict the ability of Visa or other networks to restrict the size and location of other trademarks, brands or logos on payment cards.

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