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# Competition Policy Issues in the Consumer Payments Industry

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#### **Competition Policy Issues in the Consumer Payments Industry\***

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#### Abstract

We discuss the current structure of card networks that facilitate transactions between merchants and consumers. We find that presently fees for this intermediation are considerably higher than costs. This is facilitated by rules imposed by the card networks on the merchants that do not allow merchants to steer competition to cards that have lower fees. It has also been facilitated by the requirement that a merchant has to accept all cards of the same network (honor all cards rule) -- recently abolished in the US, as well as by the fact that the networks set the maximum interface fee between issuing and acquiring banks. We propose the abolition of anti-steering rules so that merchants are able to pass on card holders the costs of the card they use. This will facilitate inter- and intra-network competition and will improve the competitiveness and efficiency of the market.

Keywords: card networks, payment systems, anti-steering, surcharge, discrimination, oligopoly, collusion, MasterCard, Visa, American Express, credit card, debit card

JEL Classification: L13, L41, L42, L50, L89

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## **Competition Policy Issues in the Consumer Payments Industry**

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#### **Competition Policy Issues in the Consumer Payments Industry**

#### 1. <u>Overview</u>

At the completion of a sale, money changes hands. Money changing hands could be in cash or checks, and, for the last few decades, also be in electronically transmitted funds or a guarantee of prompt electronic payment to the merchant. Such electronic payments could come from a company that provides credit to customers (such as a bank organized under the Visa or MasterCard trade names<sup>1</sup>) or from one that facilitates transactions but typically does not provide credit (such as American Express), or directly from the bank where the customer has demand deposits.<sup>2</sup> The payment system intermediary facilitates the payment to the merchant by guaranteeing that the merchant receives the money, and at the same time can offer a variety of services to the cardholder, ranging from credit services to frequent flyer miles.

Credit and other bank cards facilitate transactions between merchants and consumers. Card networks collect significant fees from merchants to facilitate those transactions.<sup>3</sup> The market for facilitation of transactions is dominated by the Visa and MasterCard networks. Visa had a 42 percent share of the U.S. credit card market in 2007, MasterCard 29 percent, American Express 24 percent and Discover<sup>4</sup> 5 percent.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> For many years Visa and MasterCard functioned as not-for-profit associations of member banks. They recently made initial public stock offerings.

<sup>&</sup>lt;sup>2</sup> Although credit and non-credit cards started as single-store cards or one-type of goods (e.g. travel services) cards, they quickly evolved to payment systems that are used in a large variety of transactions.

<sup>&</sup>lt;sup>3</sup> Consumers pay extra for credit.

<sup>&</sup>lt;sup>4</sup> Discover Financial Services was spun off by Morgan Stanley in 2007.

<sup>&</sup>lt;sup>5</sup> This is reported by the Nilson Report (a trade publication) on credit card networks (issue 902, May 2008), and based on credit card purchase volume, excluding "cash" volume like cash advances and similar transactions and also excluding debit cards). Similarly, in 2006 the market shares were almost identical: Visa 42%, MasterCard 29%, American Express 23% and Discover 5%. In that year, in the US debit card

Both Visa and MasterCard charge fees (primarily to merchants) that are significantly above costs – some report that card total costs are only 13 to 15 percent of the fees charged and that total fees are about \$30 to 48 billion per year.<sup>6</sup> This combination of fees that are significantly above cost and high market shares suggests that current fees reflect market power.<sup>7</sup>

#### 2. <u>Setups of Three- and Four-Party Card Networks</u>

The intermediation of American Express involves three parties, the card holder, the merchant, and American Express, hence the name "three-party" card network. The basic structure of this setup is presented in Figure 1. It is important to note that the network (American Express) can charge fees on both sides of the market, or can choose



**Figure 1:** A Three-Party Card Network.

market, market shares were Visa: 48 percent; MasterCard 14 percent. See also http://www.forbes.com/markets/feeds/afx/2008/02/25/afx4694434.html.

<sup>6</sup> See <u>http://en.wikipedia.org/wiki/Interchange\_fee</u> and

<sup>7</sup> Although American Express has charged higher merchant fees than Visa or MasterCard, that likely reflects the higher income of its customers, additional services American Express offers and the fact that until recently it did not offer credit so did not make money on credit. So, American Express's higher fees do not imply that Visa and MasterCard's fees are competitive. In any event, if Visa and MasterCard fees were not so high, that would likely create competitive pressure on American Express to lower its fees.

<sup>&</sup>lt;u>http://www.nrf.com/modules.php?name=News&op=viewlive&sp\_id=530</u> These are just transaction facilitation fees and costs, not fees and costs in the credit market in which many card networks also participate.

to charge only one side of the market and subsidize the other. This two-sidedness of the network is a fundamental feature of network structure. This two-sidedness of the network can be exploited to support high transaction fees.

In a multiparty credit card association, such as Visa or MasterCard, merchants deal directly with "acquiring banks" that intermediate transactions to "issuing banks" who issue cards to consumers and who ultimately send them bills as well. A transaction between a customer and a merchant conducted through Visa or MasterCard is intermediated by both an acquiring bank and an issuing bank. Figure 2 shows the intermediation in a Visa or MasterCard network where the functions of acquiring (a merchant) and issuing (a card to a customer) can be done by different banks. Thus, in this setup we have four parties: the merchant, the acquiring bank, the issuing bank and the card holder.<sup>8</sup> The two-sidedness of the network remains important in the more complex networks of Visa and MasterCard.



Figure 2: A Four-Party Card Network.

<sup>&</sup>lt;sup>8</sup> In a three-party setup, such as American Express and Diners card networks, a single bank does both the acquiring and issuing functions. American Express now also has a four-party network where it is the single acquiring bank, after the restriction by the MasterCard and Visa networks prohibiting member banks from issuing American Express cards was ruled anti-competitive in *United States v. Visa U.S.A* 344 F.3d 229.

In the four-party networks, such as MasterCard and Visa, in each transaction there are three markets connected in sequence, and the surplus of each end-to-end transaction is divided among these markets. See Figure 3. The three markets are: (i) between the issuer and the consumer (market I); (ii) between the acquirer and the issuer (market II); and (iii) between the merchant and the acquirer (market III).

The interchange fee is a fee that an acquiring bank pays to an issuing bank when a merchant accepts a Visa or MasterCard for a purchase, that is, the fee that changes hands in market II. The acquiring bank pays the merchant the amount of the transaction minus both the interchange fee and an additional fee that the acquiring bank keeps for itself. Visa and MasterCard set maximum interchange fees, but almost no banks deviate from them.<sup>9</sup> Interchange fees in the US are approximately 1.8 percent on the average.<sup>10</sup> The transaction fees the merchants pay are at least as high as the interchange fees. Even if the market between acquirers and merchants were perfectly competitive, acquirers would have to charge merchants a fee at least as much as the interchange fee because the interchange fee is their marginal cost (which they of course need to pay). Most commentators agree that the market between the acquirers and the merchants (market III) is effectively competitive. Thus, if there is market power in the four-party network, it has to be in markets I and II, although its final effects manifest in market III as well.

<sup>&</sup>lt;sup>9</sup> Visa's current interchange fees are found at <u>http://usa.visa.com/download/merchants/visa-usa-interchange-rates.pdf</u>.

<sup>&</sup>lt;sup>10</sup> See <u>http://www.digitaltransactions.net/newsstory.cfm?newsid=1311</u>.



#### Figure 3: Three Sequential Markets in Four-Party Network

Both issuing and acquiring banks can charge (or be charged) on both sides of the market they intermediate.<sup>11</sup> This implies that decisions affecting pricing on one side of the market will have consequences on the other side of the market. For example, a decision by Visa or MasterCard, the issuing banks themselves, or regulators to reduce the fees that merchants pay may increase the fees that customers pay for the card or may reduce awards or other incentives that issuing banks offer to customers. The extent to which this will happen depends on whether the issuers are presently passing to their customers the (interchange) fees they receive from the merchants through the acquiring banks. That is, it depends on how competitive the card issuing market is. Of course, consumers will likely benefit when a merchant reduces prices to reflect lower intermediation fees. Because of the complexity of the market structure and the varying degrees of market power in the three markets identified, policy recommendations need to be carefully examined in terms of their impact on all sides of the markets.

<sup>&</sup>lt;sup>11</sup> Similarly in the three-party setup of American Express and Diners, the network can charge on both sides, that is charge the merchants as well as the customers who are issued the cards.

#### 3. How do Card Networks Keep Transaction Facilitation Fees High

The card networks impose various contractual restrictions, such as those against surcharges, steering, and discrimination as well as, until recently, one to honor all cards, which collectively prohibit or discourage merchants from favoring cards that offer better terms. This both reduces competition among card networks in getting merchants' business and supports high interchange fees. These restrictions are crucial.

Credit card networks have high price-to-cost markups despite non-dominant market shares. There is evidence of very significant markups of price above cost with total costs representing only 15% of revenue. It is very unlikely that consumers receive from card networks anything approaching the fees level charged to merchants. The implied profit rates are comparable to those of Microsoft and Intel which each have a dominant and almost monopoly market share. So the interesting question is how does Visa with 42% market share and MasterCard with 29% market share achieve such high markups and market power. An answer to this question will also suggest ways in which distortions can be reduced in the market for transaction facilitation.

If confronted with the cost of their transactions, consumers would most likely choose to use the card with the lowest fee in places where a number of cards are accepted. Of course price is only one of a numbers of consumer considerations. Everything else equal, however, consumers are more likely to use cards that impose lower direct costs to them. So, if consumers faced directly the costs of transaction intermediation, they would choose to use lower cost cards. Competition among the card networks would therefore drive fees down.

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The networks use a multi-pronged strategy to achieve an equilibrium with less competition. The first part of their strategy is to ensure that a card holder does not directly face the cost of using a particular card for payment. This requires two conditions: (i) the consumer must not pay more to the issuer for a card that has higher costs; and (ii) the consumer must not pay more to the merchant when he uses a card that has higher costs. The two-sidedness of the card network can easily ensure fulfillment of the first condition since costs can be recovered from the merchant side. The second condition is more complicated to implement.

Focusing on the first condition, we note that card holders do not need to face the cost to the merchant of their transactions because of the two-sidedness of the network. As long as the network can collect from one side (the merchants), it does not need to collect from the other side (the card holders), and in fact the network can even subsidize the card holders. Therefore, unless the merchants impose on the card holders additional costs when the network imposes such costs on the merchants, the card holders do not face transaction costs directly and therefore will not choose to use the lowest cost card.

Second, by imposing contractual obligations on merchants, networks make certain that merchants cannot charge different prices (to reflect the different card fees) for the same item to consumers who use different cards.

Card networks have used a number of instruments to make it difficult for merchants to respond to card fees differences. This of course facilitates achieving high fees. The first such instrument is the no surcharge rule, a contractual restriction imposed

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on merchants. The second was the honor all cards rule which was abolished in 2003 after an antitrust suit by merchants.<sup>12</sup>

# a. <u>The "No Surcharge," "No Discrimination," and "Most Favored Customer"</u> <u>Rules</u>

Essentially the no surcharge rule says that a merchant can charge the same amount for a Visa transaction as for cash, but if a merchant offers a discount for cash compared to Visa, he cannot offer the same discount to a comparable card (MasterCard). Additionally, if a merchant offers a discount to a comparable card, he must offer it to Visa as well.<sup>13</sup> This is called in economics a "most favored customer" rule. The effect of the no surcharge rule is that the merchant cannot offer better terms to customers who buy with MasterCard than with Visa, although it would make sense to do so if MasterCard's fees to the merchant were lower. This rule allows no price flexibility in the merchant's pricing. It is as if Coca Cola were to impose the requirement that a can of Pepsi be sold at the same price as a can of Coke. The only option left for the merchant who does not like the fees of a particular network is not to accept this network's card.

<sup>13</sup> See the 2008 contract of Visa with merchants

<sup>&</sup>lt;sup>12</sup> See <u>http://www.mastercard.com/us/company/en/newsroom/merch\_law.html</u> .

http://usa.visa.com/download/merchants/card\_acceptance\_guide.pdf?it=c|/merchants/|Card%20Acceptance %20Guide at 10:

<sup>&</sup>quot;No Surcharging

Always treat Visa transactions like any other transaction; that is, you may not impose any surcharge on a Visa transaction. You may, however, offer a discount for cash or another form of payment (e.g., proprietary card or gift certificate) provided that the offer is clearly disclosed to customers and the cash price is presented as a discount from the standard price charged for all other forms of payment.

The discount may not be applied to "comparable card." A "comparable card" is any other branded, general purpose payment card that uses the cardholder's signature as the primary means of cardholder authorization (e.g., MasterCard, Discover, American Express). Any discount made available to cardholders who pay with "comparable cards" must also be made available to cardholders who wish to pay with Visa cards."

An additional requirement imposed on merchants is the no discrimination rule. As MasterCard put it:

"Merchants may not engage in acceptance practices or procedures that discriminate against, or discourage the use of, MasterCard cards in favor of any other card brand."<sup>14</sup>

Industrial Organization theory has established that most-favored-customer rules can be used to increase prices to collusive levels. See Salop (1986). The intuition for this result is simple. Most favored customer rules impose on a firm the requirement to cut prices to all customers with whom it has agreed on this rule if it were to cut the price to any one customer. Thus, the loss of revenue implied by a price cut to one customer gets multiplied in the presence of the most favored customer rule. It follows that a firm is less likely to decrease price under the most favored customer rule. This effect is strengthened when a number of firms impose most favored customer rules.

#### b. <u>The "Honor All Cards" Rule</u>

High merchant fees were threatened by technological change. Debit networks, typically with PIN verification, offered lower merchant fees than traditional card networks. Debit cards in the MasterCard and Visa networks also offered much lower fees than the signature-based cards. To avoid loss of profits in credit cards, the networks imposed an honor-all-cards rule. This required that if a merchant accepted one Visa card, he also had to accept all Visa cards, both credit and debit, issued by any bank in the Visa network.

<sup>14</sup> See

http://www.constantinecannon.com/pdf\_etc/THEVISACHECKMASTERMONEYANTITRUSTLITIGATI ON.pdf at 24.

There were two aspects of this rule. First, if a merchant accepted a certain type of card (say, Visa debit) issued by one bank (say, Citibank), he was required to accept the same type of card (in this case, Visa debit) issued by another bank. The rule also imposed the requirement that a merchant accepts any other Visa products (such as Visa credit cards) if he accepted one (such as a Visa debit card). Visa's rules stated that

"[t]he Merchant shall promptly honor all valid Visa cards when properly presented as payment ...."

The second requirement, that is, to accept different types of cards of the same brand, was essentially tying and has anti-competitive consequences. To put this in context, it would be anti-competitive were Microsoft to say "if your corporation buys Windows, it also has to buy MS-Office," or were Dell to say "if you buy Dell servers you must also buy Dell laptops."

The honor all cards rule is now illegal in the United States after a win for the merchants in their antitrust suit against the card networks in 2003. The court essentially the court forbade the second requirement but confirmed the first – that networks can require merchants to honor all cards across all member banks for a specific type of card (such as a debit card).

#### 4. <u>Effects of the Present Equilibrium</u>

Transaction facilitation fees charged to merchants, primarily driven by the interchange fee, are significantly above total cost of facilitating transactions. Because most merchants do not offer discounts for paying with cash, some of the poorest parts of the population, who primarily use cash, end up paying through higher product prices for

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the costs of card use by more wealthy consumers. Card transactions are subsidized by cash transactions. Card holders do not see the fees imposed on merchants. Card holders also bear these costs only implicitly through product prices which increase for all consumers. Additionally, as the networks try to expand by signing up more issuing bank members, they have incentives to increase their interchange fees to make entry in their network more attractive and to avoid exit.<sup>15</sup> As acquirers "typically 'blend' their pricing and charge each merchant one overall merchant service fee based on the projected proportionate volume of cards from each scheme"<sup>16</sup> (network), "in effect, the lower cost scheme therefore subsidizes the higher cost scheme with the merchant receiving only perhaps some marginal benefit of the lower cost scheme's interchange rates."<sup>17</sup> Thus, at the present equilibrium, high-cost card transactions are subsidized by low-cost card transactions. And, under the present rules, interbrand (internetwork) competition does not produce lower fees – quite the opposite.<sup>18</sup>

#### 5. <u>Improving Efficiency</u>

How can efficiency be improved in this sector? The optimal approach is to help the markets work. Recognizing that the credit card set up is comprised of three two-sided

<sup>&</sup>lt;sup>15</sup> See, for example, Pete Hisey, How High Can You Go?, Credit Card Mgmt., Apr. 1999, at 105: "Visa, which says it has been at a disadvantage to MasterCard in the amount of cash it can allow an issuer to earn, says that its increases in interchange rates simply level the playing field. . . . Clearly, neither Visa nor MasterCard is content to allow the other the high ground, particularly as large issuers are deciding if they even want to stay with either association."

<sup>&</sup>lt;sup>16</sup> See letter from Bruce Mansfield, General Manager, Visa International, Australia & New Zealand, to John Veale, Head of Payments Policy, Reserve Bank of Australia (Apr. 7, 2005), available at <a href="http://www.rba.gov.au/PaymentsSystem/Reforms/CCSchemes/SubmissionsCCIStd/visa\_07042005\_1.pdf">http://www.rba.gov.au/PaymentsSystem/Reforms/CCSchemes/SubmissionsCCIStd/visa\_07042005\_1.pdf</a>.

<sup>&</sup>lt;sup>17</sup> Id.

<sup>&</sup>lt;sup>18</sup> Also *see* Frankel and Shampine (2006) at 651.

markets in sequence to each other as described above, we need to consider how to improve and enhance competition

- i. on the merchant side of the market (between merchants and acquiring banks);
- ii. in the market between issuing and acquiring banks; and
- iii. on the consumer side of the market (between consumers and issuing banks).

# a. <u>Changes in the Market Between Merchants and Acquiring Banks (Market</u> <u>III)</u>

On the merchant side of the market, I propose that card contracts allow for merchant flexibility in acceptance and pricing by merchants depending on the card's brand and type as well as on the fees charged to the merchant. That is, a merchant should be allowed to offer different discounts (or surcharges) to consumers for using a particular card if this card offers lower (or higher) fees to this merchant. Of course, this requires that the no-surcharge and no-discrimination rules be eliminated from the contracts.<sup>19</sup>

The direct consequence of changing these rules will allow the merchants to make customers face the costs of transaction facilitation and this will increase internetwork and intranetwork competition. First, the change in the rules will increase competition between the products of the same network, resulting in lower fees for all of these products. A customer faced with, say, a lower fee when using Visa debit rather than Visa signature card, will use Visa debit. Second, the change in the rules will increase

<sup>&</sup>lt;sup>19</sup> This proposal might be implementable by enforcement of existing antitrust laws against unreasonable restraints of trade. However, to avoid the delays and uncertainties of adjudication it may be simpler to enact legislation to ensure that contracts between card networks, merchants, acquiring banks and issuing banks do not restrict the ability of merchants to preferentially steer (through pricing or otherwise) customers (i) to a particular card network (Visa vs. MasterCard vs. AMEX); (ii) to a particular product of the card network (e.g. debit rather than credit card); (iii) to a particular issuer bank of the same card network (say Citibank Visa vs. Chase Visa).

competition between the card networks and thus lower fees across the board. A customer faced, say, with a lower fee by MasterCard than Visa will use MasterCard.

#### b. <u>Changes in the Market Between Issuing and Acquiring Banks (Market II)</u>

Presently in the market between acquiring and issuing banks (Market II), the network sets the maximum interchange fee and practically no bank in the network deviates from it. Thus, there is no market determination of the interchange fee in bilateral markets between an acquiring and an issuing bank. The interchange fee is set at a high level leading to acquirers charging the merchants a fee higher than the interchange fee. Card networks have built-in incentives to increase the interchange fee to attract more issuers.

To reduce the interchange fee, I propose to that the network no longer sets the maximum interchange fee. Let it be instead determined in bilateral negotiations between an issuer and an acquirer, starting from a zero fee basis (par). This would allow for bilateral negotiations between issuing and acquiring banks that could result in a variety of interchange fees that will depend on the specific pair of issuer and acquirer and their competitive conditions. The system could start from a default zero interchange fee, with the market determining any positive or negative adjustment of the fee in a bank pair.

There are two objections to this scenario. The first one is that there may be a need of two many bilateral contracts. But there is significant concentration among acquirers with 86 percent of all Visa and MasterCard volume generated by just the top ten acquirers. Similarly, 84 percent of all such volume is generated by the top ten issuers because of similar high concentration among issuers. Therefore ninety contracts are

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required to generate 72 percent of all MasterCard and Visa volume.<sup>20</sup> The second objection is that an issuer can hold out for high (monopoly) fee to an acquirer. To the extent that this is a unilateral exercise of monopoly power that was acquired legitimately, it should not be an antitrust concern. High fees by a particular issuer who brings high value transactions will hopefully attract competition by other issuers for the same customers and will, in the long run, have these customers signed by a different issuer, resulting in lower fees because of competition among issuers. Additionally, it is not clear that the imposition of high fees is not happening right now with the network setting the monopoly fee for all issuers. With bilateral negotiations, the high fees will be limited to a few issuers, instead. Moreover, since the fee will not be set collectively by the network, the incentive to set a high fee across the board to attract more issuers to the network will be eliminated.

#### 6. <u>Consequences of the Changes in the Rules</u>

Allowing inter-brand competition is expected to increase competition between the card networks. It is difficult to estimate the extent of additional competition and the extent of the reduction in fees. The "natural experiment" of Australia might give us some insight.<sup>21</sup> In 2003, the Reserve Bank of Australia ("RBA") reduced interchange fees for credit cards in Australia from an average of 0.95 percent to 0.55 percent, and in November 2006 to 0.50 percent, and at the same time allowed surcharging by

<sup>&</sup>lt;sup>20</sup> See Frankel and Shampine (2006) at 641.

<sup>&</sup>lt;sup>21</sup> See Chang, Evans and Garcia Swartz (2005), p. 329.

merchants.<sup>22</sup> Even though surcharging was not very widespread, merchant fees fell even more than the interchange fees. The Reserve Bank of Australia found:

"The fall in the average merchant service fee since the reforms is significantly larger than the decline in the average interchange fee . . . These lower merchant costs are feeding through into lower prices for goods and services (or smaller price increases than otherwise would have occurred). While merchants would undoubtedly have hoped that these lower costs translated into increased profits, competition means that just as the banks passed on their lower costs to merchants, so too must merchants pass on their lower costs to consumers."<sup>23</sup>

Additionally, the overall cost to the economy of facilitating transactions fell.<sup>24</sup>

The reforms outlined are likely to cause significantly lower fees for facilitating transactions. The subsidy from cash transactions to credit transactions is likely to be reduced. This will help poorer customers who tend to pay in cash. Within credit card transactions, the subsidy from high fees cards to low fees cards will be reduced.

#### 7. <u>Conclusion</u>

Card network fees are considerably higher than card network costs. This is facilitated by rules imposed by the card networks on the merchants that do not allow merchants to steer consumers to cards that carry lower fees. The no surcharge and no discrimination rules force merchants to not charge different prices to customers using

<sup>&</sup>lt;sup>22</sup> See Frankel (2006) at 32.

<sup>&</sup>lt;sup>23</sup> See Reserve Bank of Australia, Payments System Board, 2005 Annual Report 10–11.

<sup>&</sup>lt;sup>24</sup> Chang, Evans and Garcia Swartz (2005) report a 60 to 70% reduction in the overall cost of transactions in the economy since that note that card issuers recovered 30 to 40% of the lost interchange fee revenue by charging higher fees to cardholders. See also Frankel (2006) at 37.

different cards even though merchants may pay different fees to the card networks. Abolition of these rules would help merchants impose the cost of the payment option they use on consumers. Abolition of these rules will increase competition in payment systems, both across card networks and within each card network.

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