COMPETITION TRIBUNAL
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PUBLIC

CT-2010-010

THE COMPETITION TRIBUNAL

IN THE MATTER OF the *Competition Act*, R.S.C. 1985, c. C-34, as amended;

AND IN THE MATTER OF an application by the Commissioner of Competition pursuant to section 76 of the *Competition Act*;

AND IN THE MATTER OF certain agreements or arrangements implemented or enforced by Visa Canada Corporation and MasterCard International Incorporated.

BETWEEN:

THE COMMISSIONER OF COMPETITION

Applicant

- and -

VISA CANADA CORPORATION and
MASTERCARD INTERNATIONAL INCORPORATED

Respondents

- and -

CANADIAN BANKERS ASSOCIATIONS and
THE TORONTO-DOMINION BANK

Intervenors

EXPERT REPORT OF ALAN S. FRANKEL, Ph.D.
March 9, 2012

TABLE OF CONTENTS

1. Introduction[1]

1.1 Assignment

1. MasterCard and Visa operate the leading credit card networks in Canada. The MasterCard and Visa networks enable merchants to sell goods or services to customers who present general purpose credit cards (*i.e.*, cards that can be used at many different merchants) as a form of payment. The Commissioner of Competition has challenged as unlawful certain rules implemented and enforced by MasterCard and Visa that restrain merchants from engaging in a variety of strategies to encourage the use of lower cost payment methods and that suppress competition for merchant transactions (the "Merchant Restraints").[2]

2. I have been asked to analyze and determine: (i) the relevant market or markets in which to evaluate the Merchant Restraints and their competitive effects; and, (ii) the competitive effects of the Merchant Restraints; specifically, whether the Merchant Restraints influence upward or discourage the reduction of the fees paid by a merchant each time a customer uses a Visa or MasterCard credit card to pay for a good or service ("Card Acceptance Fees") and whether the Merchant Restraints have an adverse effect on competition.

1.2 Qualifications

3. I have been a full-time professional economist since 1985. I am the Director of Coherent Economics, LLC, which I founded in 2008. I am also a Senior Advisor to Compass Lexecon, a leading consulting firm specializing in the application of economics to legal, regulatory, and public policy disputes.[3] From 1985 to 1996, and from 2004 to 2008, I was employed by Lexecon, most recently as a Senior Vice President. Between 1996 and 2004, I was employed by LECG, another consulting firm. I am also a Senior Editor of the Antitrust Law Journal, the leading professional journal dedicated to legal and economic issues arising in antitrust, competition, and consumer protection disputes. I have served on the Editorial Board of the Journal since 1996.

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1 Throughout this report, for simplicity, I have adopted the convention of not including internal cites or footnotes within quoted material.

2 Notice of Application of the Commissioner of Competition, filed on December 15, 2010.

3 Compass Lexecon was formed in early 2008 by the combination of Lexecon and COMPASS (Competition Policy Associates).

4. I received a B.A. in economics (with honours) in 1982, an M.A. in economics in 1985, and a Ph.D. in economics in 1986, each from the University of Chicago. My primary field of concentration in the Ph.D. program was Industrial Organization, which includes the analysis of competitive issues which arise in competition law disputes.

5. Since 1985, I have analyzed economic issues arising in connection with hundreds of antitrust and other types of disputes. Many of these engagements have concerned disputes involving financial institutions or networks. I have been engaged as an expert economist in such matters by private parties, as well as governmental agencies, including the Competition Bureau (on previous occasions), the United States Department of Justice, the United Kingdom Office of Fair Trading, and the New Zealand Commerce Commission.

6. I have been qualified as an expert witness in the United States District Courts for the Northern District of Illinois, the Eastern District of Pennsylvania, the Eastern District of Virginia, the District of Columbia, the U.S. Court of Federal Claims, and the California Superior Court in Alameda County. I have provided deposition testimony in other U.S. jurisdictions. I have also presented testimony or expert economic analysis in proceedings in Australia, the United Kingdom, New Zealand, and before the European Commission in Brussels, Belgium.

7. I began studying competition in payment card networks in 1990. Since then, I have written and spoken extensively about the economics of payment card networks and the competitive effects of practices like the Merchant Restraints. I have authored or coauthored numerous articles in professional publications concerning competitive issues in the payment card industry, which have been cited by economists, regulators, and others in many countries. In 2006, I organized the publication of an issue of the Antitrust Law Journal dedicated largely to antitrust issues arising in payment card networks.

8. I have spoken about competition in payment card networks at professional conferences on many occasions, including at events sponsored by the Federal Reserve Bank of New York; the Federal Reserve Bank of St. Louis; the Federal Reserve Bank of Chicago; the Federal Reserve Bank of Kansas City; the American Bar Association's Section of Antitrust Law; the American Bar Association's Consumer Financial Services Committee; the Chicago Bar Association; the Econometric Society in Auckland, New Zealand; the Organization for Economic Cooperation and Development in Paris, France; the International Cards and Payments Council

in Rome, Italy; and at a conference sponsored by the Reserve Bank of Australia and the Melbourne Business School in Sydney, Australia.

9. I have issued reports, testified, or been engaged as an expert witness in several jurisdictions in which competitive practices in payment card networks have been and are being investigated or challenged, including in the European Union (on three occasions before the European Commission), the United Kingdom, Australia, New Zealand, and the United States.

10. I attach my *curriculum vitae* as Exhibit 1 to this report. In conducting the analysis set out below, I have been assisted by the professional staff of the Chicago office of Compass Lexecon. I have had access to the documents, pleadings and transcripts from the examinations for discovery (including responses to undertakings) that have been produced in this case, as well as a large amount of information that is available publicly concerning these issues. In reaching my conclusions, I have relied upon my research into these topics, as well as the materials and information cited in footnotes throughout this report and which are listed in Exhibit 2. To the extent that new information becomes available, I will review it and may supplement my analysis and/or conclusions as appropriate. I understand and acknowledge the Competition Tribunal's code of conduct for expert witnesses, as indicated in Exhibit 3.

1.3 Summary of Conclusions

11. In the remainder of this report, I will explain in detail my conclusions that:

- the relevant market in which to evaluate MasterCard and Visa's Merchant Restraints is no broader than the market for credit card network (acceptance) services in Canada;
- both MasterCard and Visa possess and exercise market power in the relevant market; and
- the Merchant Restraints influence upward and discourage the reduction of the Card Acceptance Fees paid by merchants, and have an adverse effect on competition.

12. As discussed below, the evidence and reasoning underlying these conclusions are interrelated. The same economic features of the marketplace and evidence that supports my conclusion that the relevant product market is no broader than credit card network services, for example, also demonstrate MasterCard and Visa's market power and the anticompetitive effects of the Merchant Restraints. There is thus some inevitable overlap in the explanation of

the economic principles and evidence involved in reaching these conclusions, and each of my opinions should be considered within the context of this report overall.

2. Overview of General Purpose Credit Card Networks and the Merchant Restraints

2.1 MasterCard and Visa

13. MasterCard and Visa operate networks which permit the use of their branded credit cards to initiate payments to merchants. MasterCard was founded in 1966 as the Interbank Card Association, changed its name to Master Charge in 1969, and to MasterCard in 1979.[4] [redacted] In 2006, MasterCard underwent a corporate reorganization and initial public offering and is now a publicly traded stock corporation.[7]

14. Visa was founded as BankAmericard by Bank of America in 1958, incorporated as National BankAmericard Inc. in 1970, and changed its name to Visa in 1976.[8] Visa began operations in Canada in 1967.[9] Like MasterCard, for most of its history, Visa was a joint venture

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[4] MasterCard, "Company Milestones" (http://www.mastercard.com/us/company/en/ourcompany/company_milestones.html, last visited December 21, 2011).

[redacted]

[7] MasterCard Inc. SEC Form 10-K for the year 2006, p. 4 ("In May 2006, we completed a plan for a new ownership and governance structure, including the appointment of a new Board of Directors comprised of a majority of directors who are independent from our financial institution customers and the establishment of a charitable foundation incorporated in Canada, The MasterCard Foundation ('the Foundation'). Part of this plan included the completion of an initial public offering of a new class of common stock (the 'IPO'). Prior to our change in governance and ownership structure, the common stock of MasterCard Incorporated was owned by principal members of MasterCard International.").

[8] Visa Inc. Corporate Overview (http://www.corporate.visa.com/_media/visa-corporate-overview.pdf), page 9.

[9] MasterCard Canada, Maintaining Competition, p. 1 (GSSS5893_00003082 at 3086).

owned and operated by and for the benefit of its member banks.[10] Like MasterCard, Visa underwent a corporate reorganization and initial public offering; in Visa's case, this occurred in 2008.[11]

15. Following their respective reorganizations, MasterCard and Visa preserved their pre-existing practices with respect to the Merchant Restraints. Those restraints form part of the rules and regulations established by each of the Respondents to regulate the acceptance and processing of transactions using their own brands of credit cards on their respective credit card networks.[12]

2.2 Member Banks

16. Neither MasterCard nor Visa historically have directly issued credit cards to cardholders or directly supplied credit card network (acceptance) services to merchants. Instead, they provide network services indirectly to merchants and cardholders through their member banks. Individual bank members of MasterCard and/or Visa can act as card issuing banks (or "issuers"), merchant acquiring banks (or "acquirers"), or both.

17. Issuers solicit cardholders, originate cardholder accounts and issue cards, administer the cardholder accounts, authorize (or decline) individual transactions initiated on those accounts, send monthly statements to cardholders, establish credit limits and extend credit on revolving credit card accounts, collect payments from cardholders (and attempt to collect any delinquent balances), and establish the terms and conditions of cardholder accounts subject to the rules set by Visa or MasterCard, as applicable.

18. Acquirers supply general purpose credit card network (acceptance) services ("Credit Card Network Services") to merchants. In this regard, acquirers solicit merchants,

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[10] Testimony of Benett Katz, Group Executive Vice President, General Counsel, and Secretary, VISA International, Federal Trade Commission, October 26, 1995, ("Obviously, you know about VISA, It's probably the largest joint venture in the world."); Direct Testimony of Victor Dahir, United States v. Visa U.S.A., Visa International Corp., and MasterCard International Incorporated, trial transcript, pp. 4450-4451 ("Visa is a membership corporation, which to me means it is a group of financial institutions that have banded together to form a payment system for the benefit of themselves. As such, it does not have stock, it does not have shareholders, it just has members and membership interests.").

[11] Visa Inc. Corporate Overview (http://www.corporate.visa.com/_media/visa-corporate-overview.pdf), page 10.

[12] See Visa International Operating Regulations, 15 October 2011 (GSSS5893_00001550) and MasterCard Rules, 7 December 2011 (MCW_CCB_00173940).

originate merchant accounts, administer the merchant accounts, send monthly statements to merchants, establish the terms and conditions of those accounts subject to network rules, and supply merchants with network access that permits the merchants to accept credit card transactions. Acquirers also establish arrangements with their merchant clients for delivery of the proceeds from credit card transactions to the merchants' accounts.

2.3 Duality

19. Originally, a bank could be a member of MasterCard or Visa, but not both, due to a Visa rule prohibiting such "dual" membership. Duality was permitted in the United States beginning in 1976, and most major card issuing or acquiring banks became members of both MasterCard and Visa.[13] In Canada, however, duality was not permitted until 2008.[14] As Table 2.1 shows, several banks have since become members of both MasterCard and Visa in Canada.[15]

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[13] K. Craig Wildfang and Ryan W. Marth, The Persistence Of Antitrust Controversy And Litigation In Credit Card Networks, 73 Antitrust L.J. 675, 679.

[14] "The Competition Bureau's Letter to Financial Institutions — Duality and Dual Governance of Credit Card Networks in Canada," November 7, 2008 (http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/02749.html).

[15] In addition, in December 2011, the MasterCard credit card issuing business of Bank of America (MBNA) in Canada was purchased by TD Canada Trust. http://www.tdcanadatrust.com/products-services/banking/mbnanews.jsp. Wells Fargo ceased soliciting business as an issuer in July 2010. http://retailservices.wellsfargo.com/en_CA/index.html.

Table 2.1
Card Issuing Banks in Canada, 2010, Ranked by Dollar Purchase Volume

Issuer	2010 Purchase Volume (Millions)	2010 Membership
Canadian Imperial (CIBC)	$60,425.0	V/MC
Royal Bank of Canada	$57,896.4	V/MC
BMO Bank of Montreal	$36,875.4	MC
TD Canada Trust	$33,936.5	V
Fed. des caisses Desjardins	$18,762.9	V
Scotiabank	$16,593.2	V
Bank of America (MBNA)	$11,848.5	MC
PC Financial	$10,831.1	MC
Canadian Tire	$10,234.5	MC
National Bank of Canada	$6,846.9	MC
Capital One	$2,309.8	MC
HSBC Canada	$2,302.7	MC
JPMorgan Chase	$2,150.2	MC/V
U.S. Bank	$1,895.7	V
ATB Financial	$1,444.4	MC
Vancity Savings CU	$1,252.6	V
Laurentian Bank	$989.9	V
Walmart	$600.0	MC
Peoples Trust Company	$429.5	MC/V
Home Trust	$335.0	V
Bank of America Nat'l Assn.	$214.3	V
Wells Fargo Financial	$44.0	MC

Source: Nilson Report #967, March 2011.

2.4 Processors

20. Acquiring banks often contract with a "third party" processor to provide data processing and related acquiring services to merchants. These processors serve as agents on behalf of the acquiring banks and act as intermediaries between the acquirers and their merchant customers. For example, Moneris Solutions ("Moneris") is a processor formed as a joint venture between Bank of Montreal (a MasterCard member) and RBC Royal Bank (then exclusively a Visa member) in 2000.[16]

[16] http://www.moneris.com/en/AboutUs/Company.aspx. The absence of duality meant that, until 2008, merchants in Canada had to maintain acquiring relationships with separate banks in order to be able to accept both MasterCard and Visa transactions, or contract with a processor which worked with both MasterCard and Visa acquiring banks (such as Moneris) to offer a "one-stop" solution for merchant acquiring.

2.5 Network Services

21. In a cash transaction, the merchant delivers goods or services to the customer and, in exchange, the customer presents funds directly to the merchant. In a typical credit card transaction, the merchant delivers the goods or services to the cardholder and the funds flow from the customer to the merchant *indirectly* through a chain of intermediaries: the issuer delivers funds to the network, the network delivers funds to the acquirer, the acquirer delivers funds to the merchant and, typically after receipt of a monthly credit card account statement, the cardholder delivers funds to the issuer.[17]

22. The MasterCard and Visa credit networks are often called "four party" credit card systems, referring to the merchant and cardholder, together with their respective banks – the acquirer and issuer. The network (i.e., MasterCard or Visa) is, however, a fifth party involved in completing the transaction.[18]

23. The process by which funds are delivered from cardholders to merchants in MasterCard or Visa credit card transactions involves network authorization, clearing, and settlement services. The authorization process begins when a card is presented at the point of sale.[19] The merchant submits the transaction and card data to the acquirer, which routes the data to the appropriate network, which in turn routes the information to the issuer. The issuer evaluates whether to approve the transaction based on the transaction characteristics and the cardholder's account status. This process generally includes an evaluation of fraud risk based

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17 When the cardholder and merchant are customers of the same bank, the transaction is referred to as an "on us transaction."

18 The indirect flow of funds from buyers to sellers is not unique to the MasterCard and Visa credit card networks. In their economic functioning, these networks are similar to cheque clearinghouses. As William Baxter explained in 1983, "The payment systems I discuss all involve four parties and four consensual arrangements. For example, in the checking context, the parties are the payee of the check, the bank in which the payee deposits the check for credit to his account, the bank on which the check is drawn (typically a bank with which the maker of the check has a depository arrangement), and finally, the maker of the check, usually a depositor with the drawee bank. In the context of the credit card or the debit card, four functionally analogous parties are involved, although the labels attached to them differ." William F. Baxter, "Bank Interchange of Transactional Paper: Legal and Economic Perspectives," 26 Journal of Law and Economics 541, 541-42 (1983). Indeed, credit card transactions, which are now highly automated, originally generated paper charge slips which were physically sorted and shipped from merchant to the acquirer, and via the network (clearinghouse) to the cardholder's bank, in the same fashion as cheques. Like credit card transactions, cheque clearing and settling technology itself has been undergoing an electronic transformation even as cheques decline in importance for retail transactions.

19 More precisely, when the card information is presented, as the card need not be physically present, such as for an Internet transaction.

on those factors, along with account status and credit risk. The issuer sends its authorization decision to the network, which routes it back to the acquirer and on to the merchant.

24. Assuming the transaction was approved and then completed,[20] the transaction needs to be "cleared." The merchant transmits the transactional data for that and other transactions to its acquirer. The acquirer submits all of the completed transactions from all of its merchant clients to the appropriate network, which sorts the transactions by issuing bank and sends the transaction data on to the appropriate issuing bank to post to cardholder accounts. Unless the issuer disputes the transaction at this stage, the transaction is then ready to be settled so that the merchant can be paid.

25. Credit card transactions generally are "net settled." All of the amounts owed from and to each bank are summed, and each bank's settlement balance is adjusted accordingly. The networks transmit information to each acquirer regarding the transactions that were settled and transaction amounts so the acquirer can deliver funds to each merchant's account.

2.6 Fees and the Net Flow of Funds

26. Acquirers charge merchants Card Acceptance Fees for the supply of Credit Card Network Services. In effect, acquirers typically withhold a portion of the funds otherwise payable to merchants as compensation for the goods or services that merchants provide to cardholders. (Card Acceptance Fees are sometimes referred to as "Merchant Discount Rates.") A preponderance of the Card Acceptance Fees is retained by the issuers and the relevant credit card network.

27. The credit card networks set default "interchange fees" applicable to credit card transactions. The interchange fee is the component of a Card Acceptance Fee that is retained by the issuer. Interchange fees constitute the largest component, by far, of Card Acceptance Fees. Visa states that while "Issuers and Acquirers are free to negotiate bilateral interchange rates, it is considerably more efficient ... for Issuers and Acquirers to adhere to the default interchange rate."[21] MasterCard offers a similar explanation.[22] [redacted]

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[20] Some transactions are authorized but not completed. For example, a hotel or rental car company may seek a preliminary authorization for a certain amount to ensure that the account is in good standing, and then authorize and clear a different transaction for the final amount owed by the customer.

[21] Visa Response, para 30.

[redacted]

28. The fees charged to merchants to accept credit card transactions make those transactions more costly to merchants than the same transactions made using debit cards or cash. The Bank of Canada has surveyed merchants about their perceptions concerning payment costs. It reports that "[a] key finding of the survey is that most merchants perceive cash as the least costly form of payment and, in comparison, find debit cards only moderately costly and credit cards the most costly."[25] The Bank of Canada also performed its own analysis of payment costs, and found that "[c]redit cards stand out as the most costly overall because of the relatively high processing fee."[26]

29. In addition, during its examination for discovery, Visa agreed that credit cards "are a higher-cost form of payment as compared to cash, debit or cheques" and that the cost to a merchant of accepting Interac debit is typically a flat transaction fee of between 3 cents to 15 cents, as compared with Card Acceptance Fees of between 1.65 percent to 4 percent of the transaction price.[27] [redacted]

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22 MasterCard Response, paras 33, 34 and 36-37.

[redacted]

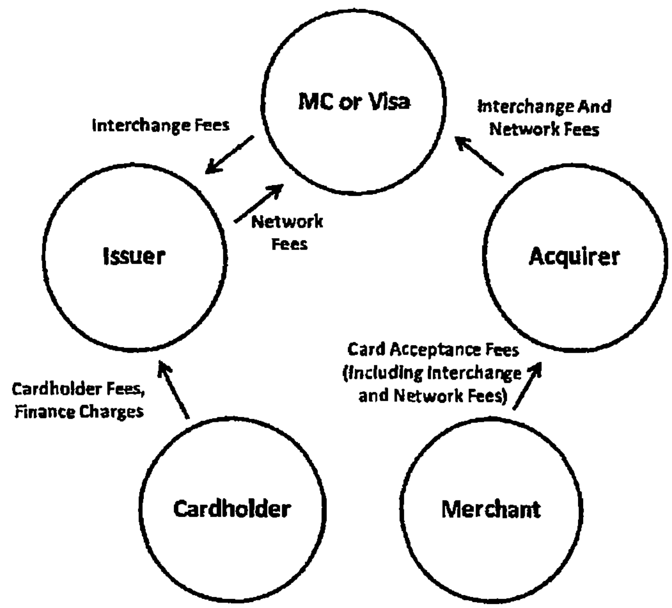
25 Carlos Arango and Varya Taylor, Merchants' Costs of Accepting Means of Payment: Is Cash the Least Costly?, Bank of Canada Review, Winter 2008–2009, pp. 15-23, (GSSS2177_00015388 at 5389).

26 Id., p. 20 (GSSS2177_00015388 at 5393). These findings are consistent with virtually all other studies on this topic. See, e.g., Allan L. Shampine, "Another Look at Payment Instrument Economics," 6 Review of Network Economics 4 (2007).

27 See Bradley Examination, December 6, 2011, pp. 446-48, 451 and Bradley Examination December 7, 2011, p. 569.

[redacted]

Figure 2.1
Fees Associated With Credit Card Transactions



30. The sum of the interchange fee and the network fee paid by the acquirer sets a floor under the total amount charged to the merchant as a Card Acceptance Fee. Because the acquirer itself incurs costs, the acquirer will also have to charge a fee of its own, although this typically represents a small portion of Card Acceptance Fees. [redacted][29]

31. In effect, the merchant pays Card Acceptance Fees that include interchange fees along with fees to its own bank and to the network. Figure 2.2 illustrates the net flow of funds that results from this process for a hypothetical $100 transaction involving a 1.5 percent

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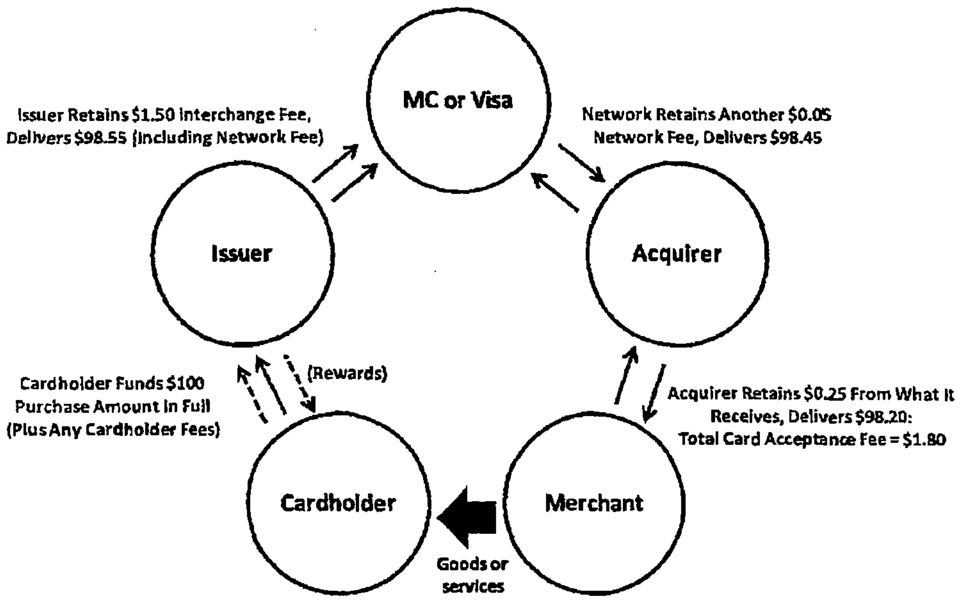
[redacted]

29 [redacted]

interchange fee, 0.05 percent network fees assessed to both banks, and a 0.25 percent acquirer fee.

Figure 2.2
Net Flow of Funds
(Hypothetical 1.5% Interchange Fee, .05% Network Fees, .25% Acquirer Fee)



32. As Figure 2.2 illustrates, when a cardholder completes a $100 purchase, the cardholder is going to be billed for the full $100 transaction amount.[30] In this example, the merchant receives only $98.20 on the $100 transaction and pays a total Card Acceptance Fee of $1.80. This $1.80 is divided between the network participants as follows. In the settlement process, the issuer will retain the interchange fee, in this case, $1.50, less the issuer's network fee, shown here in the amount of $0.05, so $98.55 is transferred by the issuer to the network. The network retains the issuer's network fee of $0.05 and the acquirer's network fee, also of

[30] The cardholder in some circumstances may also pay transaction fees (e.g. foreign currency or cross-border fees), as well as annual fees, finance charges, and penalty fees for such things as late payments. For purposes of this example, however, such additional fees and penalties are assumed to be nonexistent, and the $100 transaction results in the issuer (ultimately) receiving only $100 from the cardholder.

$0.05. The acquirer thus receives only $98.45 in connection with the $100 transaction. The acquirer then applies its own $0.25 fee and retains that amount from the amount ultimately to be paid to its merchant customer.

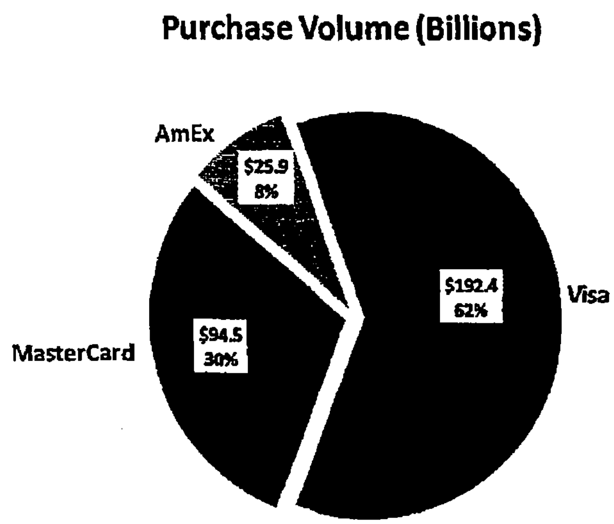
33. Finally, as Figure 2.2 indicates, some (but not all) cardholders receive rewards from issuers linked to purchase amounts. As interchange fees increase, issuers may offer rewards to more cardholders or increase the value of rewards programs. The value of rewards, however, tends to be significantly less than the interchange fees received by issuing banks, and many popular credit cards that provide rewards also carry annual fees.

34. As explained above, in a four-party system, MasterCard and Visa do not supply Credit Card Network Services directly to merchants. Rather, these services are supplied through acquirers. MasterCard and Visa provide services to acquirers, including access to the MasterCard and Visa credit card networks, on certain mandatory terms, including the requirement that the acquirers implement the Merchant Restraints. Acquirers, in turn, provide merchants with access to the MasterCard and Visa credit card networks for the purpose of allowing merchants to initiate transactions and on those networks and receive authorization, clearing and settlement services so that the merchants can be paid when their customers use MasterCard or Visa credit cards to make purchases. Again, however, the terms on which acquirers supply Credit Card Network Services to merchants are dictated by MasterCard and Visa, including the requirement that all agreements between acquirers and merchants for the supply of Credit Card Network Services include the Merchant Restraints.

2.7 Other types of "Pay Later" Cards

35. In addition to the "four party" MasterCard and Visa credit cards, there are a number of issuers of "three party" cards such as American Express, Diners Club, and Discover Card. (Discover Card is not issued to Canadian cardholders, but some merchants accept Discover Cards presented by U.S. cardholders visiting Canada.)

Figure 2.3
General Purpose Credit and Charge Cards in Canada, 2010



Source: Nilson Report #967, March 2011.

36. [redacted] As Figure 2.3 shows, American Express still accounts for only about 8 percent of general purpose card purchase dollar volume in Canada. Historically, the three party cards were labelled as such because there was only a single company (e.g., American Express) intermediating between cardholders and merchants, rather than a separate issuer, acquirer, and network.[32] American Express traditionally specialized in offering "charge cards" that generally require payment of outstanding amounts in full each month, and specialized particularly in offering cards to corporate customers.[33]

[redacted]

32 In recent years, American Express has licensed banks in some regions to issue American Express branded cards. In those cases, however, American Express continues to control all merchant relationships directly.

33 American Express also offers credit cards (http://www.americanexpress.com/canada/all-cards#).

37. In addition to "four party" and "three party" credit and charge cards, some individual merchants offer their own credit cards to their customers.[34] Merchant-issued cards once were the main type of credit cards in use, but usage of these cards was eclipsed long ago by general purpose cards, as merchant cards were less efficient and less functional because they can only be used at selected merchant locations.

2.8 "Pay Now" Debit Cards

38. Debit cards are (typically) general purpose cards that are funded directly from cardholders' bank accounts rather than through the extension of short- or long-term credit by the issuing bank.[35]

39. Debit cards evolved in two main ways around the world. The first was as an extension of the functionality of automatic banking machine ("ABM," or automatic teller machine "ATM") cards. By the 1980s, single-bank ABM systems were being displaced by shared ABM networks linking many, or even all bank ABMs in a country so that a customer of one bank could, at a minimum, access the balance in a deposit account to withdraw cash from a different bank's ABM. Once these networks were in place and most bank customers carried ABM cards (in Canada, "Interac" branded cards), merchant point of sale ("POS") terminals were also connected to the ABM network infrastructure to permit the cards to be used at retail locations to pay for products.

40. The second way in which debit cards developed was the introduction by the credit card networks of debit cards which utilize the MasterCard and Visa credit card network infrastructures. This latter type of debit card has recently been the subject of debate in Canada due to fact that MasterCard and Visa typically require the payment of interchange fees on their debit card transactions, while Interac does not. Visa Debit is currently issued in Canada only by CIBC.[36] I discuss debit cards further in Part 3 in connection with market definition issues.

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34 Following the same terminology, these have sometimes been referred to as "two party" credit cards.

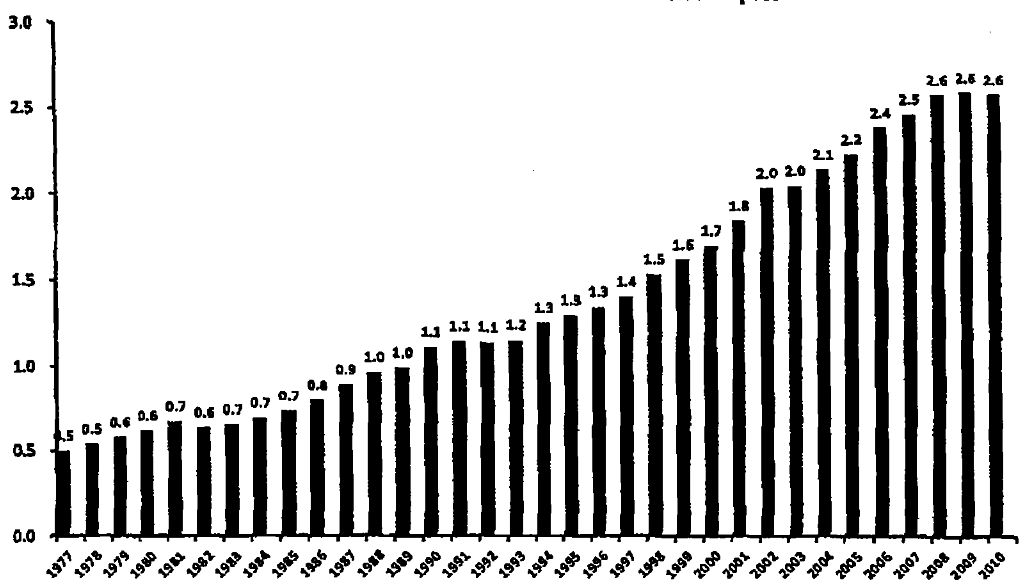
35 More recently, "prepaid," "stored value," and gift cards have also been introduced, which are forms of debit cards that are pre-funded ("pay before" cards).

36 Bradley Examination, December 6, 2011, p. 324, Q. 949.

2.9 Growth in the Importance of Credit Cards

41. General purpose credit cards originally were carried by few consumers, who tended to use them infrequently, but MasterCard and Visa credit cards are now ubiquitous. As Shown in Figures 2.4 and 2.5, in the late 1970s there was only one of those networks' credit cards for every two adults in Canada, but now there are 2.6 such cards for each Canadian adult, on average. Further, in 1977, the average Canadian adult spent only $220 per year using MasterCard or Visa credit cards, but that amount now exceeds $10,000.

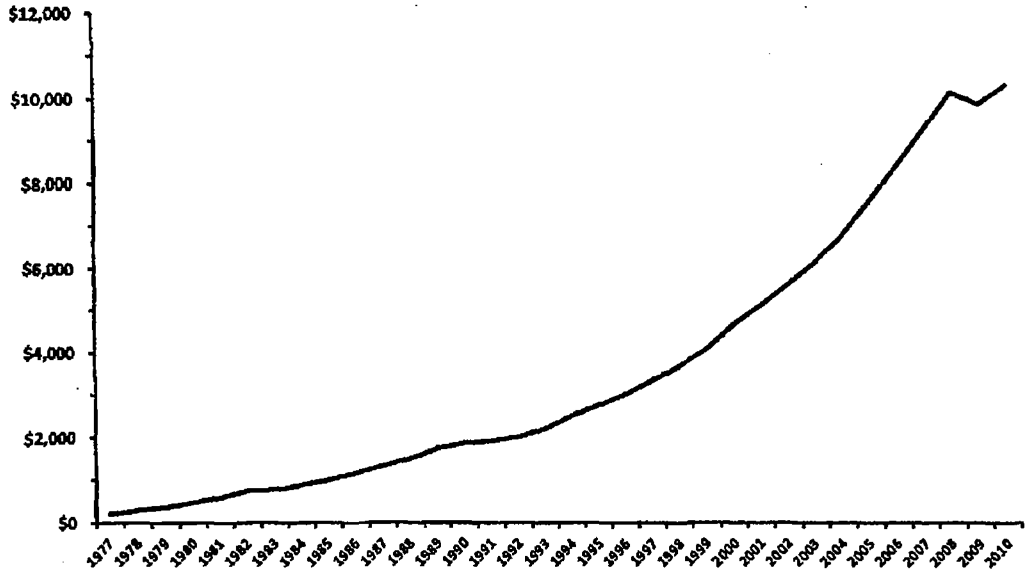
Figure 2.4
Number of MasterCard and Visa Cards Per Capita[1]



[1] Number of MasterCard or Visa cards per person aged 18 years or older excludes other brands.

Source: Canadian Bankers Association, Credit Card Statistics: Visa and MasterCard (series DB38 - PUBLIC); Statistics Canada, Statistics Canada. Table 051-0001 - Estimates of population by age group and sex for July 1.

Figure 2.5
Annual Retail Purchase Volume Per Capita[1] (MasterCard and Visa)

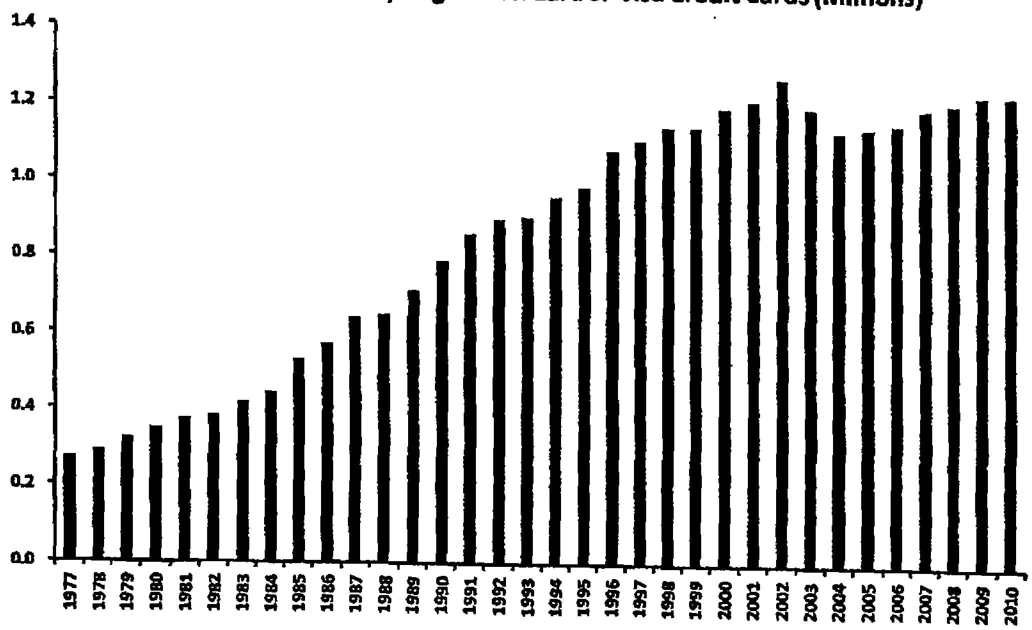


[1] Number of MasterCard or Visa cards per person aged 18 years or older; excludes other brands.

Source: Canadian Bankers Association, Credit Card Statistics: Visa and MasterCard (series DB 38 - PUBLIC); Statistics Canada, Statistics Canada. Table 051-0001 - Estimates of population by age group and sex for July 1.

42. Acceptance of MasterCard and Visa credit cards by merchants has also become widespread. As Figure 2.6 shows, the number of locations in Canada at which MasterCard or Visa credit cards are accepted grew from 300,000 in 1977 to around 1.2 million by 2000 and has remained at around that level since.

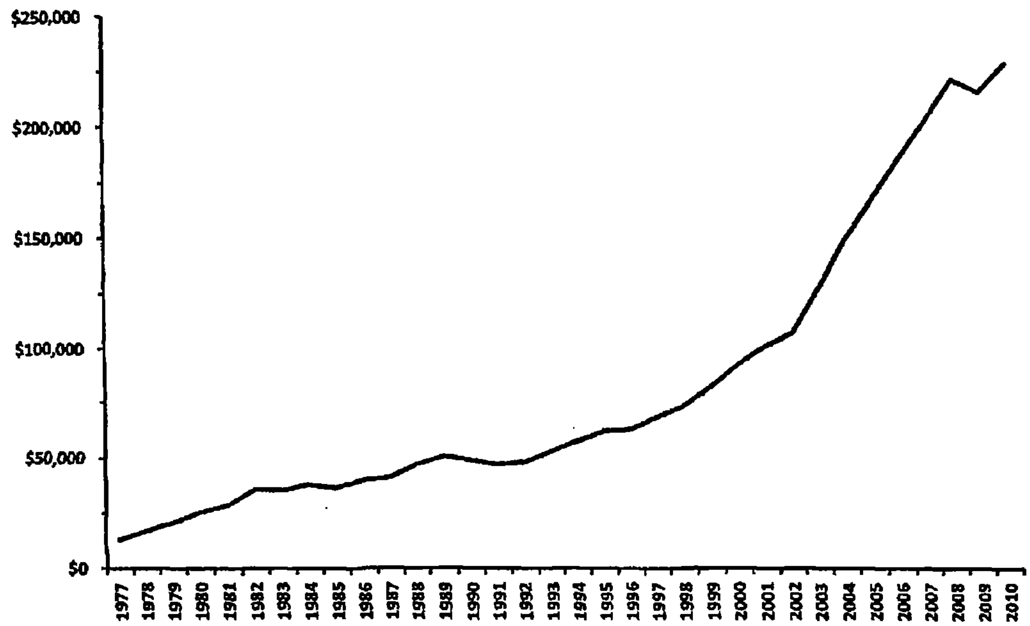
Figure 2.6
Merchant Outlets Accepting MasterCard or Visa Credit Cards (Millions)



Source: Canadian Bankers Association, Credit Card Statistics: Visa and MasterCard (series DB38 - PUBLIC).

Moreover, as Figure 2.7 shows, whereas the average merchant location accepting credit cards took in only about $13,000 in sales on credit cards in 1977, by 2010 the average location accepted nearly $230,000 of spending on credit cards.

Figure 2.7
Purchase Volume Per Merchant Outlet Accepting Credit Cards



Source: Canadian Bankers Association, Credit Card Statistics; Visa and MasterCard(series DB38 - PUBLIC).

2.10 The Merchant Restraints

43. MasterCard and Visa enforce extensive sets of rules and regulations on merchants that accept their respective credit cards.[37] As noted above, among these rules is a set of competitive restrictions that limit a merchant's freedom to engage in a variety of steering strategies to encourage the use of lower cost payment methods, discourage the use of higher cost credit cards, and/or recover the additional cost associated with higher cost cards specifically from the customers who use them. These restrictions include "Honour-All-Cards Rules", "No-Surcharge Rules" and "No Discrimination Rules" – the Merchant Restraints at issue in this case.

44. Historically, the Respondents' Honour-All-Cards Rules required that a merchant accepting any MasterCard cards must accept all cards bearing the MasterCard brand, and a

[37] See Visa International Operating Regulations, 15 October 2011 (GSSS5893_00001550) and MasterCard Rules, 7 December 2011 (MCW_CCB_00173940).

merchant accepting any Visa cards must accept all cards bearing the Visa brand.[38] As I will explain, some exceptions have emerged in recent years.

45. The No-Surcharge Rules prohibit merchants from adding an additional fee or charging a higher price to customers who present the networks' cards for payment. MasterCard's rule states that "A Merchant must not directly or indirectly require any Cardholder to pay a surcharge or any part of any Merchant discount or any contemporaneous finance charge in connection with a transaction" and that "[f]or purposes of this Rule... [a] surcharge is any fee charged in connection with a Transaction that is not charged if another payment method is used."[39]

46. No-Discrimination Rules have taken varying forms and have multiple aspects. For example, MasterCard's Honour-All-Cards Rule includes the statement "[a] Merchant must maintain a policy that does not discriminate among customers seeking to make purchases with a Card."[40] MasterCard also has a separate rule which states that "[a] Merchant must not engage in any acceptance practice that discriminates against or discourages the use of a Card in favor of any other acceptance brand."[41] The Merchant Restraints are discussed further in Part 5, below.

47. The Honour-All-Cards Rules, No-Surcharge Rules, and No-Discrimination Rules prohibit merchants from treating customers differently at the point of sale depending on the identity of the issuing bank or the particular card type carrying the MasterCard or Visa brand. These Merchant Restraints also prohibit merchants from treating customers less favourably at the point of sale than the merchants treat customers who use alternative card brands or types, or alternative payment methods.

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38 MasterCard rule 5.8.1 ("A Merchant must honor all valid Cards without discrimination when properly presented for payment.") (See: MasterCard Rules, 7 December 2011 (MCW_CCB_00173940 at 4061)); Visa International Operating Regulations (GSSS5893_00001550 at 2056) ("A Merchant must accept all Cards properly presented for payment as specified in the 'Merchant Acceptance Standards' table.").

39 MasterCard Rule 5.11.2. See: MasterCard Rules, 7 December 2011 (MCW_CCB_00173940 at 4064).

40 MasterCard Rule 5.8.1. See: MasterCard Rules, 7 December 2011 (MCW_CCB_00173940 at 4061).

41 MasterCard Rule 5.11.1. See: MasterCard Rules, 7 December 2011 (MCW_CCB_00173940 at 4064).

48. In the United States, legislative action in the late 1970s and early 1980s permitted merchants to offer discounts for cash transactions, and MasterCard and Visa responded by permitting cash discounts.[42] Discounting has been permitted in Canada since at least 2001.[43] Discounts for other payment methods or brands, however, were restricted.[44]

2.11 The "Code of Conduct" and Changes to Merchant Rules

49. On April 16, 2010, the Minister of Finance released a voluntary "Code of Conduct for the Credit and Debit Card Industry in Canada." (the "Code of Conduct").[45] Among the provisions of the Code of Conduct were requirements for the Respondents to modify their Honour-All-Cards Rules so that "merchants who accept credit card payments from a particular network will not be obligated to accept debit card payments from that same payment card network, and vice versa."[46] In addition, network rules were to "ensure that merchants will be allowed to provide discounts for different methods of payment (e.g., cash, debit card, credit card). Merchants will also be allowed to provide differential discounts among different payment card networks."[47]

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42 Levitin, Adam J., "*Priceless? The Economic Costs of Credit Card Merchant Restraints*", 55 UCLA Law Review 1321 (2008).

43 See: http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/01028.html.

44 See, e.g., Competitive Impact Statement, United States et al. v. American Express Company, American Express Travel Related Services Company, Inc., MasterCard International Incorporated, and VISA Inc., Civil Action No. CV-10-4496, October 4, 2010, pp. 4-5 ("The Visa Merchant Restraints challenged in the Complaint prohibit a merchant from offering a discount at the point of sale to a customer that chooses to use an American Express, Discover, or MasterCard General Purpose Card instead of a Visa General Purpose Card. Visa's rules do not allow discounts for other General Purpose Cards, unless such discounts are equally available for Visa transactions... The MasterCard Merchant Restraints challenged in the Complaint prohibit a merchant from 'engag[ing] in any acceptance practice that discriminates against or discourages the use of a [MasterCard] Card in favor of any other acceptance brand.' ... This means that merchants cannot offer discounts or other benefits to persuade customers to use an American Express, Discover, or Visa General Purpose Card instead of a MasterCard General Purpose Card. MasterCard does not allow merchants to favor competing card brands.").

45 Code of Conduct for the Credit and Debit Card Industry in Canada, as updated May 18, 2010, http://www.fin.gc.ca/n10/data/10-049_1-eng.asp.

46 Id.

47 Id.

50. MasterCard and Visa agreed to abide by the Code of Conduct.[48] As a result, merchants have some additional strategies– at least conceptually – that they could use to steer transactions at the point of sale to preferred payment brands and payment methods. However, MasterCard and Visa restrictions on surcharging persist and, as I explain in Part 5.3, prohibit a significantly more effective competitive mechanism to steer transactions at the point of sale to lower-cost payment methods. Further, although merchants can make separate acceptance decisions regarding a network's credit cards and debit cards, the networks' Honour-All-Cards Rules remain in force with respect to the different types of credit cards issued by their member banks, such as "standard", "high spend," "premium high spend," and "commercial" MasterCard credit cards, and Visa "classic," "Infinite," and "commercial" credit cards.

3. Relevant Market

3.1 Framework for analysis

51. It is common in competition matters for economists to analyze the relevant market in which the products are sold. Market definition and market power are closely related concepts. Markets are defined typically as part of an indirect inquiry into whether one or more suppliers possess or are expected to obtain market power.[49] Where direct evidence exists to enable a determination concerning market power, market definition may be an unnecessary step.[50] I explain in Part 4 that, in this case, there is direct evidence that MasterCard and Visa each possess market power. However, the indirect evidence, based on structural features of the marketplace, also supports that conclusion. An analysis of those structural features begins with the determination of the relevant market.

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48 "Statement from MasterCard Canada," press release, April 16, 2010, http://www.mastercard.com/ca/company/en/press/2010/04_16_statement.html; "Media Statement - Visa Statement Regarding the Canadian Code of Conduct," press release, May 17, 2010, http://www.visa.ca/en/aboutcan/mediacentre/news/17052010/index.jsp.

49 See, *e.g.*, *United States v. Visa U.S.A., Inc. et al.*, 98 Civ. 7076 (BSJ), S.D. of N.Y., October 9, 2001, pp.15-16 ("[T]he object of the inquiry in defining the market is to identify the range of substitutes relevant to determining the degree, if any, of the defendants' market power."); Dennis W. Carlton, "Market Definition: Use and Abuse," 3 Competition Policy International 3 ("Market definition is a crude though sometimes useful tool for identifying market power.").

50 Jonathan Baker, "Market Definition: An Analytical Overview," 74 Antitrust Law Journal 129, p. 131 (2007) ("[M]arket definition may not be required when market power or anticompetitive effect can be demonstrated directly..."); see also, James A. Keyte and Neal R. Stoll, "Markets? We Don't Need No Stinking Markets! The FTC And Market Definition," 49 Antitrust Bulletin 593 (2004); American Bar Association, Market Power Handbook (2005), p. 18.

52. A relevant market consists of a set of substitute products (sold in a specified geographic area) the presence of which constrains the pricing of the products in question to the competitive level.[51] This case involves restrictions with respect to Credit Card Network Services – i.e., MasterCard and Visa general purpose credit card network (card acceptance) services. Thus, I consider, for example, whether the existence of alternative methods of payment that a merchant can accept such as debit cards, cash, cheques, and merchant-issued credit cards are in the same relevant market as Credit Card Network Services.

53. A standard approach to defining relevant markets is the "hypothetical monopolist" test.[52] The hypothetical monopolist test begins with the smallest set of products that includes the products in question, and adds substitute products until a hypothetical monopolist of all of the products in the set could profitably impose a "small but significant and non-transitory increase in price" ("SSNIP") above the levels that would exist in a competitive market – i.e., exercise market power.[53] In a merger context, the reference price typically is the price prevailing prior to the proposed merger.[54] In other contexts, use of the existing price in the hypothetical monopolist test can lead to incorrect results (*i.e.*, an overly broad definition of the product market) due to what economists have referred to as the "cellophane fallacy."[55] Because anticompetitive conduct may already have resulted in prices being elevated to a supra-competitive level, a hypothetical monopolist might not raise prices further, even though the hypothetical monopolist would be able to maintain prices well in excess of the competitive level. The hypothetical monopolist test thus is a conservative test in a setting such as this; if a hypothetical monopolist could increase prices profitably, then the market is no broader than the products in the set being evaluated, but if a hypothetical monopolist cannot raise prices further,

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51 Competition Bureau Canada, Merger Enforcement Guidelines (hereafter MEGs), Part 3.2 ("The overall objective of market definition in merger analysis is to identify the set of products that customers consider to be substitutes for those produced by the merging firms...") and Part 4.2 ("Market definition is based on substitutability..."). http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/cb-meg-2011-e.pdf/$FILE/cb-meg-2011-e.pdf. I discuss below how the analysis of relevant markets is affected by the fact that this case involves an analysis of a competitive issue outside of the merger context.

52 MEGs, Part 4.3.

53 Id.

54 Id, Part 4.6.

55 See, e.g., George W. Stocking & Willard Mueller, "*The Cellophane Case and the New Competition*," 45 Am. Econ. Rev. 29 (1955); Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization 646 (4th ed., 2005).

the test could be inconclusive if there is evidence that prices are already elevated above the competitive level.

3.2 Implications of the Hypothetical Monopolist Test

54. The Commissioner contends that "the relevant market for consideration of the competitive effects of the Merchant Restraints is the supply in Canada of Credit Card Network Services" which permit merchants to obtain "authorization, clearance and settlement of transactions for merchant's customers that pay using the Respondents' respective brands of credit cards."[56]

55. MasterCard and Visa suggest that the market is far broader. MasterCard contends that the relevant market is "the market for payment services" and includes services provided by "all other methods of payment" including "a Visa card, an Amex card, an Interac card, a cheque, cash, a store card, Pay Pal or any other form of payment."[57] Visa similarly contends that it "competes against other payment services and payment options in the Canadian payments industry" and "Visa Canada denies that Visa credit cards do not compete with other forms of payment, including cash, cheques, debit cards, other card based payment products and various electronic forms of payment, such as Pay Pal."[58]

56. Merely "competing" with an alternative product, however, is insufficient to link them in a common relevant product market for antitrust analysis. At some level, car sellers might "compete" for customers who might be able to use public transit, but car manufacturers and suppliers of public transit are unlikely to be properly considered in the same relevant product market when evaluating competitive conduct of car manufacturers. The hypothetical monopolist test provides a framework for determining whether products are in the same relevant market that requires much more than simply noting that some other product is an alternative to some customers or "competes" in some vague way.

57. In fact, it is useful to consider what one would need to find to conclude that the relevant product market is *broader* than Credit Card Network Services.[59] Applying the

56 Notice of Application, paras 80 and 81.

57 MasterCard Response, paras 44 and 45.

58 Visa Response, para 52.

59 I discuss the geographic scope of the market in Part 3.9.

hypothetical monopolist test, such a conclusion would require the finding that even if there were only *one* acquirer in Canada to which merchants could turn to obtain Credit Card Network Services, that hypothetical monopolist acquirer could not profitably charge merchants more for Credit Card Network Services than merchants pay in the presence of competition among networks and acquirers. MasterCard and Visa's assertion that the relevant market consists of all payment methods (including cash and cheques) means that a hypothetical merger between MasterCard, Visa, American Express, and the credit card operations of all of their member banks, so that a single firm supplied all Credit Card Network Services in Canada, would not result in higher prices for such services nor cause any other harm to the Canadian public due to the remaining competitive constraints posed by Interac cards, cash, PayPal and so on. This position is contradicted by the economic evidence and is, moreover, implausible on its face.

58. To illustrate, suppose following such a hypothetical merger to monopoly in the credit card industry the sole remaining acquirer of credit card transactions in Canada increased Card Acceptance Fees by 5 percent for at least one year.[60] For example, if merchants were paying 2.0 percent with the existing degree of competition among acquirers, following the merger the remaining firm increased Card Acceptance Fees to 2.1 percent. If the market were broader than Credit Card Network Services, the credit card monopolist would find that it would lose so many transactions to PayPal, cash, etc. that the price increase would be unprofitable.

59. Even setting aside consideration of "cellophane fallacy" issues, which merely reinforces the point, it is highly unlikely that such a price increase would cause enough merchants to drop acceptance of the Respondents' branded credit cards so as to make the increase unprofitable and competitively unsustainable. In fact, as shown previously in Figure 2.6, despite increases in Card Acceptance Fees in recent years, the number of merchants accepting MasterCard and Visa credit cards continues to increase. Moreover, the Merchant Restraints at issue in this case eliminate competitively important tools that merchants otherwise could use to reduce usage of the Respondents' credit cards without having to drop acceptance altogether. In other words, a demonstration that the Merchant Restraints do in fact cause anticompetitive harm, such as higher Card Acceptance Fees, is economically equivalent to a demonstration that the relevant market is not broader than the set of services so affected (or else the harmful effects would not have been competitively sustainable).

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60 These are typical benchmarks used in defining relevant markets, although other amounts might be considered "significant" depending on the context. MEGs, Part 4.3.

3.3 Previous Findings Concerning Relevant Product Markets in the Credit Card Industry

60. The markets defined in cases involving the credit card industry have changed substantially over the years. In *National Bancard Corporation v. VISA, U.S.A ("NaBanco")*, a roughly 30 year old U.S. case involving an antitrust challenge to Visa's interchange fees, the court found that Visa credit cards competed (at least, in the early 1980s) in a broad relevant "payment systems" market that included all other forms of payment, including "VISA, MasterCard, T&E [travel and entertainment] cards, merchants' proprietary cards, merchants' open book credit, cash, travelers cheques, ATM cards, personal checks and check guarantee cards."[61] The analysis of market definition in *NaBanco* was based on descriptions of substitutes available to consumers at the point of sale in a simple analysis that predated the introduction of the hypothetical monopolist test and modern market definition principles.[62] Further, as former Visa executive Broox Pèterson explained in a 2007 interview, "much of the rationale on which the court [in *NaBanco*] upheld the interchange reimbursement fee in the 1980's is out-of-date in today's circumstances."[63]

61. Since *NaBanco*, as shown in a compilation produced by the U.S. Federal Reserve Bank of Kansas City (attached as Exhibit 4), the practices of MasterCard and Visa have been the subject of legislative, legal, and regulatory investigations or actions in dozens of jurisdictions seeking to enhance competition in credit card markets.[64]

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61 *National Bancard Corporation v. VISA, U.S.A.*, 596 F. Supp. 1231, 1257 (SDFL 1984), aff'd, 779 F.2d 592 (1986).

62 The *NaBanco* Court's market definition finding is criticized at Dennis W. Carlton and Alan S. Frankel, The Antitrust Economics of Credit Card Networks, 63 Antitrust Law Journal 643, 652-53 (1995); see also, Alan S. Frankel, Monopoly and Competition in the Supply and Exchange of Money, 66 Antitrust Law Journal 313, 318-19 (1998) (hereafter, Monopoly and Competition).

63 "Global not-for-profit joint ventures between commercial entities: an interview with Broox W. Peterson, former Senior Vice President and Assistant General Counsel, Visa International and Visa U.S.A.," Review of Business, March 22, 2007, reprinted at http://www.thefreelibrary.com/Global+not-for-profit+joint+ventures+between+commercial+entities%3A+an...-a0165359563 (hereafter Interview with Broox W. Peterson, March 22, 2007).

64 Exhibit 4 updates lists first published in Terri Bradford and Fumiko Hayashi, Developments in Interchange Fees in the United States and Abroad, Federal Reserve Bank of Kansas City, Payments System Research Briefing, April 2008, http://www.kansascityfed.org/Publicat/PSR/Briefings/PSR-BriefingApr08.pdf, and lists many regions in which networks have been prohibited from enforcing no-surcharge rules. Some developments (for example, in member states of the European Union) are evolving.

62. Although not all of the competition law cases subsequent to *NaBanco* have been focused on Credit Card Network Services sold to merchants, they generally have found (or the parties did not disagree) that the relevant market is substantially narrower than the court found in *NaBanco*. For example:

- In a dispute between Visa and the owner of Discover Card in the United States in the early 1990s, "Visa itself adopted" a definition of the relevant product market as no broader than the provision of general purpose credit and charge card services, "excluding all forms of payment except credit and charge cards."[65]

- In a case brought by the United States Department of Justice, the court rejected MasterCard and Visa's claim of a broad relevant market including "all methods of payment including cash, checks and debit cards" and agreed with the government expert's opinion that there is a "general purpose card market separate from other forms of payment and a card network market comprised of the suppliers of services to the general purpose card issuers."[66] The court based its decision, in part, on its findings that "[i]n setting interchange rates paid by merchants to issuers (through the merchants' acquiring banks), both Visa and MasterCard consider, and have considered, primarily each other's interchange rates, and secondarily the merchant discount rates charged by Discover and American Express,"[67] and that "both Visa and MasterCard have recently raised interchange rates charged to merchants a number of times, without losing a single merchant customer as a result."[68]

- In another U.S. case, brought by merchants, the court focused on the perspective of merchants in finding that "[t]here is no genuine issue of material fact requiring trial with respect to the fact that the relevant market, at its broadest, is the provision of general purpose credit and charge card services. The evidence establishes conclusively that merchants have not switched to other payment devices despite significant increases in the interchange fees on the defendants' credit cards. (In this respect, the evidence suggests an even narrower product market, i.e. general purpose credit card services alone.) That

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65 *In re Visa Check MasterMoney Antitrust Litigation*, Memorandum and Order, 96-CV-5238 (JG), April 1, 2003, p. 5.

66 *U.S.A. v. Visa, et al.*, 98 Civ. 7076 (BSJ), S.D. of N.Y., October 9, 2001, p. 17. More recently, MasterCard and Visa settled a case brought by the United States Department of Justice against those networks and American Express, in which the Department alleged relevant markets consisting of "the General Purpose Card network services market" as well as a narrower market consisting of "the General Purpose Card network services market for merchants in travel and entertainment ('T&E') businesses." Complaint for Equitable Relief, in *United States of America, et al., v. American Express Company, American Express Travel Related Services Company, Inc., MasterCard International Incorporated, and Visa Inc.*, Civil Action No.1:10-cv-04496 (EDNY), October 4, 2010; see also Competitive Impact Statement, October 4, 2010, p. 6.

67 U.S.A. v. Visa, et al., 98 Civ. 7076 (BSJ), S.D. of N.Y., October 9, 2001, p. 20.

68 Id., pp. 25-26.

consumers might switch to another form of payment in the event of a surcharge on their credit card transactions does not alter the fact that there is no cross-elasticity of demand at the merchant level between defendants' products and all other forms of payment."[69]

- In a case challenging MasterCard's interchange fees, the European Commission determined that, on the merchant acquiring side of the industry, "[t]he supply and demand side analyses show that card acquiring services are neither sufficiently substitutable with cash and cheque related services, nor with bank giro-, nor with direct debit services. The Commission therefore retains as relevant product market for assessing the MIF [interchange fee] the market for acquiring payment card transactions. It can be left open whether this market can be further sub-divided into credit card acquiring and debit card acquiring or whether acquiring for MasterCard products is a product market on its own."[70]

- In an earlier case involving Visa's interchange fees, the Commission explained that it "does not share Visa's view that the relevant market comprises all consumer means of payment" and rejected specifically the inclusion of "distance payments (giro transfers and so on)" as well as "cash and cheques" in the relevant market.[71]

63. In the remainder of this part of my report, I explain why – consistent with the conclusion on relevant market in the decisions referenced above – I conclude that the relevant market in this case is no broader than the market for Credit Card Network Services claimed by the Commissioner. In short, even in the face of prices for Credit Card Network Services well in excess of competitive levels, merchants do not have a sufficient ability to reduce their purchases of Credit Card Network Services so as to render such prices unprofitable and competitively unsustainable.

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69 *In re Visa Check/MasterMoney Antitrust Litigation*, Memorandum and Order, 96-CV-5238 (JG), April 1, 2003, p. 5 (emphasis in original).

70 Provisional Non-Confidential Version, Commission Decision of 19/XII/2007 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (COMP/34.579 MasterCard COMP/36.518 EuroCommerce and COMP/38.580 Commercial Cards) To Be Notified To: MasterCard Europe S.p.r.l., MasterCard Incorporated and MasterCard International Incorporated, para 307 (hereafter Provisional Non-Confidential Version, Commission Decision of 19/XII/2007) (GSSS3806_00009840 at 9930).

71 In the 2002 Visa decision, The Commission determined that it need not reach a determination whether other types of payment cards competed in the same relevant market with particular types of Visa cards. Commission Decision of 24 July 2002, relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Case No COMP/29.373 — Visa International — Multilateral Interchange Fee) (notified under document number C(2002) 2698), (2002/914/EC).

3.4 General Purpose Credit Cards are Functionally Different from Other Payment Methods

64. Merchants that accept MasterCard and Visa credit cards cannot effectively substitute acceptance of other payment methods for those cards, in part because – as the Commissioner notes[72] – the Respondents' general purpose credit cards have distinct attributes from the perspective of the merchants' customers, and those customers tend to have strong preferences to use particular forms of payment for particular types of transactions. The distinct features of credit card transactions from the perspective of consumers include deferred payment (including an interest-free period between the time a purchase is made and the date at which payment is due), revolving credit (purchases made on a credit card may be paid by the cardholder over a period of time), protection against fraudulent transactions, and the ability to make purchases remotely.[73]

65. Unlike credit cards, which allow customers to defer payment and provide a form of revolving credit,[74] debit cards require that funds be available in the cardholder's bank account at the time of the transaction. [redacted] in a document submitted to the European Commission,

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72 See Statement of Grounds and Material Facts, paras 24 to 26.

73 See, *e.g.*, Bradley Examination, December 5, 2011, pp. 198-210, Qs. 535-75; Transcript of Examination for Discovery of Kevin Stanton, November 15, 2011, pp. 734-800, Qs. 1926-2081. See also, MasterCard International Incorporated, Submission to Reserve Bank of Australia, June 8, 2001 (as revised July 20, 2001) (GSSS0035_00017478 at 7496) ("Today, the ease with which a tourist can pay for his/her accommodation, meals, shopping, and transportation in a foreign country without having to deal with the cumbersome and time consuming business of conducting foreign currency exchange at home or abroad, is entirely due to services provided by credit cards... It is therefore not an exaggeration to suggest that the growth of international tourism in recent decades would not have been possible – at least not at the same rate – had credit card services not been available."); (GSSS0035_00017478 at 7500) ("International credit cards are nothing less than the 'fuel' that drives the growth of international online transactions and e-commerce activities.").

74 While charge cards permit the deferment of payment, in contrast to credit cards they do not give cardholders the option to revolve balances.

[redacted]

Visa claimed that "the structure and functionality of [credit cards and debit cards] are not the same and that they are based on totally different cost structures" and that:

> Credit cards, while to some extent competing with debit cards, offer a different function to debit cards – namely the inherent feature of an unsecured extended credit facility and interest-free period which incur additional cost. The credit facility offered by credit cards is valued by merchants and cardholders alike and serves a different purpose to the payment service provided by a debit card.[76]

In addition, Visa explained that:

> Whereas a debit card transaction is dependent upon there being sufficient funds in the bank account (unless an overdraft facility has been agreed), a credit card transaction requires a detailed creditworthiness assessment and a cross-check as to the available credit limit. The costs of risk management and fraud checks are more expensive for credit cards which do not have the relative security of a deposit account.[77]

Visa also asserted that "credit cards and debit cards are different as regards end-user demand and cost levels and structures" so that "there is no rationale for expecting their fees to be the same or similar."[78] [redacted]

In testimony before the Standing Senate Committee On Banking, Trade And Commerce, in April 2009, the Head of Visa Canada testified that "[w]e recognize that debit is a different market than credit."[80]

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[76] Visa Europe, Response To The Consultation On The European Commission's Interim Report I: Payment Cards, 21 June 2006(GSSS2177_00038228 at 8240).

[77] Id., (GSSS2177_00038228 at 8240).

[78] Id., (GSSS2177_00038228 at 8241).

[79] Email from Mike Bradley to Charles Kimble, Brian Weiner, and Sue Whitney, January 12, 2009, (VISA00001136).

[80] Testimony of Tim Wilson, Head, Visa Canada, before The Standing Senate Committee On Banking, Trade And Commerce, April 22, 2009, Minutes of Proceedings, at 5:33. Visa recognizes that debit cards historically have tended to displace the use of cheques, and, to an extent, cash, rather than the use of credit cards. See, *e.g.*, Varla Taylor, Trends in Retail Payments and Insights from Public

66. [redacted] For larger transactions, the difference is even more significant. If debit cards were good enough substitutes for credit cards so as to be considered part of the same relevant market, enough merchants would accept Interac debit exclusively or shift enough of their credit card transactions to debit cards (given the significantly lower cost to merchants and considering that, according to Interac, "9 in 10 Canadian adults have a banking card and therefore have

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Survey Results, 25 Bank of Canada Review (Spring 2006) , http://www.bankofcanada.ca/wp-content/uploads/2010/06/taylor.pdf, p. 27 ("Since their introduction in 1994, debit cards have almost completely displaced cheques, and, to a certain extent, cash as a method of making retail payments at the point of sale. Credit cards may have also affected the use of cash at the point of sale, but debit cards currently represent the closest substitute."). [redacted] access to Interac products and services"[82]) to cause MasterCard and Visa to reduce their Card Acceptance Fees.

67. The Respondents also claim that individual merchant cards should be included within the scope of the relevant market.[83] As described earlier, credit cards issued by individual merchants once were used more frequently than general purpose credit cards, but they were inherently limited by the fact that they could be used at only a single merchant's locations. Just as shared ABM networks (in Canada, Interac) displaced banks' individual ABM systems, usage of general purpose credit cards has greatly surpassed use of merchant-issued cards. As MasterCard has explained in testimony before the US Congress, "[m]erchants were the first to recognize the benefits of payment cards when, in the 1920s, individual merchants began to issue credit cards to their customers..." but "the relative inefficiency of the two-party [merchant-issued card] systems, and the merchants' lack of expertise and operational infrastructure for lending created opportunity for entry by other providers..."[84] As a result, "it is far less expensive and less burdensome" to operate "the three- and four-party system cards."[85] [redacted]

[redacted]

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[82] http://www.interac.ca/media/researchfacts.php. Interact also reports that there were 24 million monthly Interac Direct Payment users in 2010 (http://www.interac.ca/media/stats.php).

[83] See, e.g., MasterCard's Response, para. 14.

[84] Testimony of Joshua L Peirez, Group Executive, Global Policy and Associate General Counsel, MasterCard Worldwide, before the United States Senate Committee on the Judiciary, July 19, 2006.

[85] Id.

[redacted]

68. Of course, most of the more than one million merchants in Canada that accept MasterCard or Visa credit card transactions do not issue their own credit cards and lack the scale to plausibly do so. Consequently, even if a cardholder were willing to carry a wallet filled with merchant-issued cards, the cardholder would still require a general purpose card in order to use a credit card at most merchants in Canada.

3.5 Merchants "Must Take" Both MasterCard and Visa Credit Cards to Succeed

69. MasterCard and Visa explain that merchants obtain significant benefits by accepting their respective credit cards.[87] For example, MasterCard and Visa claim that by accepting credit cards merchants increase their sales.[88] In fact, it is correct that *individual* merchants that accept MasterCard and Visa credit cards will tend to gain some sales at the expense of competing merchants that refuse to accept those cards.[89]

70. It is precisely these benefits to individual merchants, and the threat that they will lose sales to rival merchants if they refuse to accept MasterCard and Visa credit cards, that makes it competitively necessary for most merchants who accept credit cards to do so.[90] A

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87 See, *e.g.*, Visa Response, paras 23, 31, 36 and 59; Visa Concise Statement of Economic Theory, paras 4 and 10; MasterCard Response, para 65. See also MasterCard Canada Interchange Rate Programs: Overview and Frequently Asked Questions, (MCW_CCB_00060634 at 0634) ("For the small fee they pay their acquirer, merchants who accept payment cards receive many benefits, including guaranteed payment, increased sales, ecommerce capability, reduced cash handling costs, automatic currency conversion, and access to millions of international cardholders in-store and online.") (Visited January 2, 2012); comments of William Sheedy, Executive Vice President, Interchange Strategy, Visa U.S.A., in "*Interchange Fees: Network, Issuer, Acquirer, and Merchant Perspectives: Panel Remarks,*" Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities? Federal Reserve Bank of Kansas City (2005), pp. 181-82. ("But merchants have benefited tremendously as well. There are fantastic examples of ticket lift, faster throughput at the point of sale, more payment guarantees, and the ability for merchants to deploy more effective product delivery channels—such as automated fuel dispensers, electronic commerce, self-checkout, and the like.").

88 See, *e.g.*, Visa Response, para 23; Visa Concise Statement of Economic Theory, paras 4, 6, 7 and 10; MasterCard Response, paras 57 and 58.

89 To be clear, accepting credit cards cannot increase sales in the aggregate to a significant extent, and, in fact, anticompetitively high card acceptance fees will increase merchants' costs and prices, thereby depressing merchant sales in the aggregate. Thus, if there are two merchants in a city, and both take credit cards, their sales will likely decline due to anticompetitively high fees. However, if either merchant dropped credit cards, then it would lose far more sales, and the card accepting merchant would gain those sales.

90 The Chairman of the United Kingdom's Office of Fair Trading coined the term "must-take cards" to reflect this feature of the marketplace. John Vickers, "*Public Policy and the Invisible Price: Competition Law, Regulation and the Interchange Fee,*" in Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities?, Federal Reserve Bank of Kansas City (2005), pp. 231-247, p. 234 ("Especially in a number of lines of retailing it would be substantially detrimental to a retailer's business

merchant that declines to accept credit cards stands to lose significant sales and profits as a result. This makes a typical merchant's willingness to accept credit cards price "inelastic" – that is, relatively unresponsive to the price charged to the merchant for Credit Card Network Services. Inelastic demand for credit card acceptance indicates that the market is not broader than Credit Card Network Services. Otherwise, as prices for Credit Card Network Services increased, merchants would cease accepting credit cards and instead rely on lower cost payment methods such as Interac.

71. Even when consumers carry multiple brands of credit cards, they tend to have strong preferences to use a particular credit card, often a rewards card.[91] In the economics literature, cardholders are said to tend to "single home" – *i.e.*, carry a single card or act as if they do – while merchants tend to "multi-home" – that is, accept all of the major brands.[92] Even if Card Acceptance Fees for one brand are significantly greater than for another brand (or type of payment), the losses to a merchant from losing even a few sales tend to exceed the additional Card Acceptance Fees – so the merchant accepts the card notwithstanding the higher fees. For example, Klein et al. (who have consulted for Visa) illustrate in a type of "critical loss" analysis how a merchant would evaluate whether to accept a particular MasterCard or Visa credit card. They note that "a non-trivial number of the merchant's customers are likely to carry only one of the bankcards or have a preference for using a particular payment card" so that "not accepting either one of the cards is likely to lead to an unprofitable loss of sales."[93] They continue:

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not to accept at least the cards of the two main schemes [*i.e.*, Visa and MasterCard], above all because the retailer would otherwise risk losing profitable business to rival retailers. In short, there is an element of 'must-take'.").

91 See, *e.g.*, Visa Canada, "Living in a Duality World" (VISA00474866 at 4885, 4889 and 4896);; Benjamin Klein, Andres V. Lerner, Kevin M. Murphy And Lacey L. Plache, "*Competition In Two-Sided Markets: The Antitrust Economics Of Payment Card Interchange Fees*", 73 Antitrust Law Journal 571, 585 ("Additionally, consumers that carry alternative cards are likely to prefer a particular card as a result, for example, of a specific reward program. Therefore, merchants are likely to lose profitable incremental sales if they do not accept all cards."). Marc Rysman analyzed Visa data in the United States and similarly found that about 42% of U.S. cardholders carry only one brand of card, and cardholders who do carry multiple brands have strong preferences to use particular cards. Marc Rysman, "*An Empirical Analysis of Payment Card Usage*", LV Journal of Industrial Economics 1 (2007), Table V and p. 17 ("rewards programs... give consumers good incentives to place all of their spending on a single card").

92 See, e.g., Rysman, An Empirical Analysis, Jean-Charles Rochet and Jean Tirole, "*Two-sided markets: a progress report*", 37 RAND Journal of Economics 645 (2006).

93 Klein et al, Competition in Two-Sided Markets, p. 585.

> In fact, a merchant need not lose very many sales to make it uneconomic to drop acceptance of either Visa or MasterCard. To illustrate, assume that it costs merchants about 2 percent, on average, to complete a transaction when a consumer pays with, say, a Visa credit card. We can further reasonably assume that dropping Visa credit cards results in half of the lost Visa credit transactions being made with other credit and charge cards and the other half being made with other payment methods. The transaction fee savings on transactions that would have been made with a Visa credit card will depend upon the average cost of other credit and charge cards and non-credit alternative payment methods. If we assume that the transaction cost of using other credit and charge cards is also about 2 percent and that the cost of non-credit payment methods is about half the cost of credit, or 1 percent, then the average potential transaction fee savings from dropping the Visa credit card would be about 50 basis points (the difference between the 2 percent cost of Visa credit and the average of non-Visa payment methods of 1.5 percent). Assuming this potential cost savings and an average merchant gross margin of approximately 25 percent, a merchant need only experience a 2 percent decrease in the sales that would have been made with Visa credit cards (or 1 in 50 sales) for it not to be profitable for the merchant to drop acceptance of Visa credit. A similar calculation would apply to any other payment card used by the merchant's customers.
>
> Consequently, the demand for a particular system's payment card is likely to be significantly less price-sensitive for merchants than for cardholders.[94]

72. In other words, according to the analysis described by Klein et al., if only 2 percent of cardholders switch merchants rather than payment methods, dropping the credit card brand would be unprofitable to the merchant. [redacted] Furthermore, as discussed in the preceding paragraph, those who carry both brands of card tend to have strong preferences to use a particular card, which is problematic for a merchant who accepts only other brands.

73. This analysis also shows why a "small but significant" increase in Card Acceptance Fees is unlikely to be deterred by the prospect of lost merchant acceptance. If

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94 Id., pp. 585-86.

[redacted]

accepting MasterCard cards results in a merchant paying a 2.0 percent Card Acceptance Fee, on average, a five percent increase in that Fee (due to a hypothetical monopolist acquirer), would result in a Card Acceptance Fee of 2.1 percent. The merchant who (as discussed in paragraph 71 above) finds it unprofitable to drop MasterCard credit cards to rely on, say, Visa and Interac will almost certainly not find it profitable to cease accepting Visa or MasterCard credit cards in response to an increase of 10 basis points in Card Acceptance Fees.[96]

3.6 The Merchant Restraints Make Acceptance of Credit Cards Less Substitutable with Other Payment Methods at the Point Of Sale

74. The preceding analysis assumed that a merchant's only choices when faced with a "small but significant" increase in Card Acceptance Fees are to continue accepting the cards at the higher price, or drop the credit cards altogether and suffer an unprofitable amount of lost sales. But, if free to do so, merchants might choose an intermediate strategy. As Klein et al. explain, "it is important to recognize that merchant demand elasticity will not be determined entirely by merchant decisions regarding acceptance. As merchant fees associated with a payment card increase, merchants may not only decide to refuse to accept the payment card, but also may steer consumers to use alternative payment methods."[97] But, throughout their history, MasterCard and Visa have prohibited or minimized merchant steering through their merchant rules, some of which are the subject of this case. Because, as Klein et al. explain, merchant steering strategies make demand for card acceptance *more* elastic, it also follows that these anti-steering rules make that demand *less* elastic.

75. I describe the competitive effects of the Merchant Restraints in detail in Part 5. For now, I note that restrictions on merchants' ability to steer transactions to alternative payment methods at the point of sale have the economic effect of making demand for each type (and brand) of payment less elastic and tend to narrow the relevant market. Thus, in the presence of the Merchant Restraints, the relevant market is no broader than Credit Card Network Services.

3.7 Pricing Evidence

76. If the relevant market were broader than Credit Card Network Services, then when the price of those services rose significantly, merchants would shift transaction volumes to

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96 This analysis also suggests that MasterCard and Visa retain significant additional unexploited market power.

97 Klein et al, Competition in Two-Sided Markets, pp. 586-87.

other substitute payment methods and away from the now higher priced cards. But that has not happened.

77. [redacted] The price for card acceptance – the Card Acceptance Fee – also incorporates the network fees paid by merchants and acquirer margin, but the interchange fee is by far the largest component of the Card Acceptance Fee. [redacted]

Figure 3.1

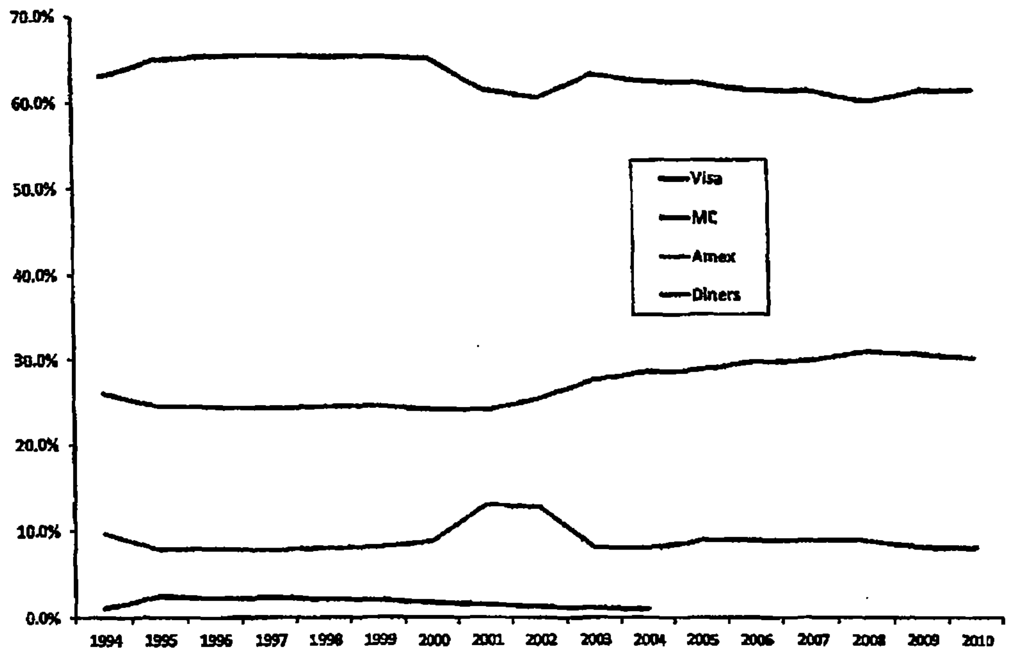
[redacted]

Note: [redacted]

Sources: [redacted]

78. If merchants could easily shift transaction volume from one credit card network to the other, they would have driven volume from Visa to MasterCard in the 1990s, and now back towards Visa. But that did not happen. [redacted]

Figure 3.2
General Purpose Credit and Charge Card Dollar Volume Share in Canada
1994-2010



Sources: Nilson Reports #967 (Mar 2011), 944 (Mar 2010), 920 (Feb 2009), 897 (Feb 2008), 878 (Apr 2007), 855 (Apr 2006), 835 (Jun 2005), 811 (May 2004), 791 (Jun 2003), 766 (Jun 2002), 741 (Jun 2001), 718 (Jun 2000), 692 (May 1999), 668 (May 1998), 645 (Jun 1997), 620 (May 1996), 598 (Jun 1995).

79. If accepting one of the brands of credit cards is not (in the presence of the Merchant Restraints) a good substitute for accepting the other brand, then it is unlikely that other, less similar products will be good enough substitutes to be considered part of the relevant market. Indeed, that result is confirmed by the results of a natural experiment in Canada – the introduction of a very low cost Interac debit card system in 1994. Interac does not require the payment of interchange fees, so merchant fees are very low for Interac transactions – generally less than 10 cents per transaction. Yet the introduction of this lower cost payment card network did not cause MasterCard and Visa to reduce their interchange fees. Rather, MasterCard and Visa interchange fees continued to increase after the low-cost Interac Direct Payment service was introduced.

3.8 "Two-Sided Market" Issues do not Alter the Analysis of the Relevant Market

80. The MasterCard and Visa credit card networks are described by the Respondents as examples of "two-sided" markets, reflecting the fact that services must be provided both to cardholders and to merchants for their credit card systems to function.[98] The Respondents claim that the relevant market for competition analysis must be defined to encompass "both sides" of this two-sided marketplace.[99] That is incorrect.

81. The standard approach to defining markets involves adding the closest *substitutes* to a proposed market until a hypothetical monopolist of the market could exercise market power. Card issuing services provided to cardholders are *complements to*, not *substitutes for* card acceptance services provided to merchants, in a manner similar to the way that nuts are complements to bolts. Just as the availability of many competing suppliers of nuts does not help a purchaser avoid harm from a hypothetical monopolist of bolts, the existence of competing card issuers would not protect a merchant from harm due to a hypothetical monopolist acquirer.

82. Competition *among acquirers* protects merchants with respect to the small portion of Card Acceptance Fees *controlled by individual acquirers.* [redacted][100]

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[98] See MasterCard Response, paras 49, 84, 94 and 100(a); MasterCard's Concise Statement of Economic Theory, para 6; Visa Response, paras 2, 26 to 31, 36; Visa Concise Statement of Economic Theory, paras 4 to 7 and 16.

[99] See MasterCard Response, paras 49, 84, 94 and 100(a); MasterCard's Concise Statement of Economic Theory, para 6; Visa Response, paras 2, 26 to 31, 36; Visa Concise Statement of Economic Theory, paras 4 to 7 and 16. Before the European Commission, MasterCard argued that the relevant market must include both cardholder services and merchant services together. Provisional Non-Confidential Version, Commission Decision of 19/XII/2007, (GSSS3806_00009840 at 9917) ("MasterCard holds that together with its issuers and acquirers, it provides card payment services simultaneously to cardholders and merchants. The distinct services of MasterCard, of issuers and of acquirers are to be analysed as 'the MasterCard payment service' which is defined as 'co-operation enabling service' or 'demand co-ordinating service' to cardholders and merchants."). The Commission concluded that, "MasterCard's approach to defining markets in industries with two-sided demand cannot be accepted. Two-sided demand does not imply the existence of one single 'joint product' supplied by a 'joint venture.'" Id., (GSSS3806_00009840 at 9918).

[100] [redacted]

83. As the president of MasterCard Canada explained in testimony before The Standing Senate Committee on Banking, Trade and Commerce, merchants benefit from "intra-system competition that allows them to shop around for the best merchant processing deal available."[101] Economists David Evans and Richard Schmalensee (both of whom have frequently consulted for Visa) similarly explain that "there is evidently intense competition for merchant accounts... The bidding process and the threat of switching have helped drive down the prices paid by major merchants."[102] With a hypothetical monopolist, however, there would be no such competition among MasterCard and Visa acquirers and Card Acceptance Fees would be higher: the "switching" that constrains Card Acceptance Fees is limited to alternative acquirers of credit card transactions (eliminated under the hypothetical monopolist test), not alternative payment methods.

84. The "two-sided market" issue generally involves a claim that any increase in *interchange fees* – which increases Card Acceptance Fees to merchants – results in increased benefits to cardholders, either in the form of lower cardholder fees, increased rewards, or both.[103] Even if true, that would be irrelevant: Card Acceptance Fees can be increased not only by changes in interchange fees, but also by changes in network fees or acquirer fees charged to merchants. Therefore, it cannot be assumed that increases in Card Acceptance Fees will provide increased benefits to cardholders or even increased revenues to issuers. But the premise is also incorrect. Of those Canadians who have access to credit cards, 29 percent do not receive *any* rewards on any credit card.[104] Rewards, moreover, are typically worth significantly less than the interchange fees paid by merchants.[105]

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101 Testimony of Kevin Stanton, President, MasterCard Canada, before The Standing Senate Committee on Banking, Trade and Commerce, April 22, 2009, Minutes of Proceedings, at 5:6.

102 David Evans and Richard Schmalensee, *Paying With Plastic* (2nd ed. 2005), p. 261.

103 See, *e.g.*, MasterCard Response, para 94; Visa Concise Statement of Economic Theory, para 6.

104 Carlos Arango, Kim P. Huynh and Leonard Sabetti, How Do You Pay? The Role of Incentives at the Point-of-Sale, Bank of Canada Working Paper 2011-23, October 2011, p. 7. See: http://www.bankofcanada.ca/wp-content/uploads/2011/10/wp2011-23.pdf)

105 This is easiest to see with simple cash-back reward programs. While interchange fees now average about 1.6 – 1.8 percent (Figure 3.1), typical cash back rewards cards in Canada generally offer 1 percent or less cash back on purchases, when spending requirements and tiers are taken into account. Moreover, the cards with the greatest rewards often carry annual fees. To illustrate, the TD Canada Trust Rebate Rewards Visa card, for example, carries no annual fee, but offers only 0.5 percent back on the first $3,000 of annual spending, then 1 percent for amounts beyond that. (http://www.tdcanadatrust.com/products-services/banking/credit-cards/td-reward-cards/rebate.jsp) At the

85. The United States Department of Justice (the "US DOJ") confronted a claim that the market should be defined to include "both sides" in a case involving the merger of two U.S. debit card networks owned respectively by First Data and Concord. As Renata Hesse and Joshua Soven explain, the US DOJ concluded that the two-sided features of the debit card marketplace do not alter the standard use of the hypothetical monopolist test on the acquiring side alone.[106]

86. Similarly, the European Commission rejected MasterCard's claim that the two-sided features of the credit card market alter the standard use of the hypothetical monopolist test on the acquiring side alone. In rejecting MasterCard's proposed relevant market, the Commission stated, in part, as follows:

> MasterCard's concept of market definition is also inconsistent with the Commission's long standing case practice in defining product markets in industries with two-sided demand. The very examples MasterCard cited in reply to the Statement of Objections of 24 September 2003 in support of MasterCard's market definition show that its concept is contrary to consistent Community competition policy.
>
> MasterCard referred to the newspaper market as a "two-sided market", because newspapers and magazines provide services to advertisers, as well as to readers. However, the Commission has always defined services to readers and services to advertisers as separate product markets despite interdependence of demand. As regards MasterCard's other example for "two-sided markets", software platforms, the Commission reached the conclusion in its Microsoft decision that due to its specific characteristics and the lack of realistic substitutes, the market for streaming media players (a software application) constitutes a relevant product market that is distinct from the markets for client PC operating systems or work group server operating systems despite the fact that demand for these products is "two-sided", that is to say inter-

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average spend per card in Canada ($4,052 / year) as reported by the Canadian Bankers Association (http://www.cba.ca/contents/files/statistics/stat_cc_db038_en.xls), the effective cash back amount on this card is 0.63 percent. [redacted] "Integrated Economics Strategy," April 6, 2010, p. 31, VISA00502155 at 2185.

106 Renata Hesse and Joshua Soven, "*Defining Relevant Product Markets in Electronic Payment Network Antitrust Cases*," 73 Antitrust Law Journal 709.

dependent. The Commission's decision was upheld by the Court of First Instance.[107]

3.9 The geographic market is Canada

87. With very limited exceptions, Canadian merchants must obtain Credit Card Network Services from MasterCard and Visa member banks (and their processing agents) in Canada.[108] There is no prospect that because, for example, Card Acceptance Fees are far lower in Australia than in Canada that a Canadian merchant can obtain Credit Card Network Services through an Australian acquirer, and thus pay the lower Australian rates. In fact, merchants in Canada are prohibited from doing so virtually without exception.[109] The Respondents also treat Canada as a separate geographic market in other ways. For example, MasterCard and Visa apply different rules in Canada than in other jurisdictions, and pricing (including default interchange fees) is customized for Canada.[110] As Visa essentially concedes in its Response and in an answer to an undertaking given on discovery in this proceeding, the geographic market, therefore, is limited to Canada.[111]

4. MasterCard and Visa Possess Market Power

88. MasterCard and Visa's market power in the market for Credit Card Network Services is demonstrated both by indirect evidence relating to structural features of the marketplace, and by direct evidence. Many of the same factors that lead to a conclusion that the relevant market is no broader than the provision of Credit Card Network Services in Canada

107 Provisional Non-Confidential Version, Commission Decision of 19/XII/2007, (GSSS3806_00009840 at 9920 and 9921).

108 See, *e.g.*, Bradley Examination, December 9, 2011, pp. 1326-27, Qs. 3796-99. See: Visa International Operating Regulations, 15 October 2011 (GSSS5893_00001550) and MasterCard Rules, 7 December 2011 (MCW_CCB_00173940).

109 See Bradley Examination December 9, 2011, pp. 1326-29, Qs. 3796-3807. See also Statement of Grounds and Material Facts, paras 86 and 87.

110 See, *e.g.*, Id and Bradley Examination, December 5, 2011, pp. 98-101, Qs. 289-93; Stanton Examination, November 11, 2011, pp. 53-55, Q. 148-51, pp. 224-28, Qs. 666-78 and pp. 232-33, Qs. 695-703. See also: MasterCard Rules, 7 December 2011 Chapter 11 (Canada Region Rules) (MCW_CCB_00173940 at 4169).

111 Visa accepts this in its Response filed in this proceeding: "Visa Canada considers that in general terms the relevant geographic market is national in scope, with the proviso that there are several aspects of Visa Canada's business that are cross-border or international in nature." Visa Response, para 54. See also, Q. 3796 of the Discovery of Michael Bradley ("To advise if [Visa] will take the position that the relevant market in this matter is anything other than Canada") and Visa's accompanying response ("Visa will not take that position").

also lead to a conclusion that both MasterCard and Visa possess market power with respect to those services. In fact, the hypothetical monopolist test described in Part 3, above, is not merely hypothetical: MasterCard and Visa can and do set prices – or price floors – that have the same economic effect as if all of their acquirers merged into a hypothetical monopolist or set prices collectively. As discussed below, MasterCard and Visa have not been deterred from imposing significant increases in Card Acceptance Fees (unrelated to any costs or changes in costs). Nor have they suffered a significant loss of transaction volume as a result, because of the Merchant Restraints at issue in this case.

4.1 Structural Evidence Supports a Conclusion that MasterCard and Visa Possess Market Power in the Relevant Market

4.1.1 The Market is Highly Concentrated

89. As previously indicated in Figure 3.2, Visa is the leading credit card network in Canada, followed by MasterCard, and, more distantly, American Express. [redacted] Market shares are generally similar today. Figure 3.2 shows the respective market shares of Visa, MasterCard and American Express, measured by dollar transaction value.[113] By any standard, the relevant market is (and has always been) highly concentrated. Visa's own share, while gradually diminishing as MasterCard's grows, is 58.1 percent based on purchase transaction volume and 61.5 percent based on dollar value of purchase transactions.[114] MasterCard's share (36.0 percent based on purchase transaction volume and 30.2 percent based on dollar value of purchase transactions), while lower than Visa's, is growing.[115] The four-firm concentration ratio (or CR4) – the sum of the shares of the top four firms – has never been below 100 percent. The Herfindahl-Hirschman Index – the sum of the squared shares, which would be 5,000 for a market with only two equally sized firms, and 1,000 for a market with ten equally sized firms – is 4,713 based on transactions and slightly

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[redacted]

113 Nilson Report, the source used for Figure 3.2, ceased reporting Diners Club results in Canada after 2004. Shares based on the number of transactions.

114 Nilson Report #967, March 2011; "Purchase" transactions exclude cash advances from banks and similar transactions GSSS5389_00002602 at 2608).

115 Id.

higher based on dollar volume. This is a level generally considered to be highly concentrated.[116]

4.1.2 The Merchant Restraints Have the Economic Effect of Dividing the Market, Allocating Transactions, and Enhancing Market Power

90. As I explained in Part 3, the Merchant Restraints (*i.e.*, the No-Surcharge Rule, the Honour-All-Cards Rule and the No-Discrimination Rule) eliminate merchant strategies that otherwise would constrain market power and broaden the relevant market by facilitating merchants' ability to shift transaction volume from higher cost cards and networks to lower cost payment methods.[117]

91. It has been recognized in the economics literature, including by economists who have consulted for Visa, that under these conditions each network possesses what amounts to a "bottleneck monopoly."[118] In other words, market power *exceeds* the level that otherwise might be suggested by market shares alone, as high as those are. As a result of the Merchant Restraints and other anti-steering rules, merchants have essentially faced an all-or-nothing choice of accepting all of a Network's cards or none, with no intermediate strategies. This has insulated MasterCard and Visa from competition for merchant transactions both with one another and with other actual or potential payment networks and methods, including Interac debit.

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116 The United States Department of Justice, for example, considers an HHI above 2500 to be a "highly concentrated market." U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, August 19, 2010, p. 19. The Competition Bureau, unlike the US DOJ and US Federal Trade Commission, does not delineate "safe harbours" or otherwise characterize specific ranges of HHIs. Enforcement Guidelines, p. 19.

117 MasterCard and Visa also benefit from the legacy of additional restraints only recently altered that historically prohibited other forms of merchant "steering", such as merchant discounting for use of alternative credit card brands.

118 Jean-Charles Rochet and Jean Tirole, "*Externalities and Regulation in Card Payment Systems*", 5 Review of Network Economics 1 (2006), p. 8 ("[E]ach system holds a monopoly of access to its own cardholders (in the same way each telecom operator enjoys a monopoly over the termination of calls made to its subscribers). Thanks to this competitive bottleneck, it can 'charge' a monopoly [Card Acceptance Fee]."). Under conditions similar to those actually existing, Graeme Guthrie and Julian Wright explain that "when sellers multihome (whenever doing so is an equilibrium), competition between payment schemes does not change interchange fees at all, which remain stuck at the monopoly level." Graeme Guthrie and Julian Wright, Competing Payment Schemes, LV Journal of Industrial Economics 37, 51 (2007).

4.1.3 Entry Into the Relevant Market is Difficult and Insufficiently Likely to Prevent the Exercise of Market Power

92. The "two-sided" feature of credit card networks makes entry by new networks costly and difficult. Economists (and others) who have consulted for Visa or MasterCard have explained that there is a "chicken and egg problem" confronting potential entrants insofar as they must simultaneously convince cardholders to carry and use the would-be entrant's credit card, and merchants to accept that card.[119] In fact, there have been no new significant credit card networks in Canada since MasterCard entered in 1973. Even the Discover Card network, which began full-scale operations in the United States in 1986, has not issued cards in Canada (and historically has been accepted in Canada only to a limited extent to serve U.S. holders of that card).[120]

93. In 1998, when there was no duality in Canada (*i.e.*, banks could only issue either MasterCard or Visa branded credit cards, but not both), MasterCard was concerned about the possibility that a proposed bank merger between the Royal Bank and the Bank of Montreal ("BMO") would result in the largest MasterCard issuer (*i.e.*, BMO) becoming a Visa issuer. [redacted]

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119 For example, Robert Pindyck, who has consulted for MasterCard, explains: "Clearly the value to consumers and merchants of participating in a payment card network increases with the size of the network, i.e., with the total number of consumers who carry and use the cards, and with the number of merchants that accept the cards. This creates a 'chicken and egg' problem: to create a card network, consumers must be convinced that merchants will accept the card, and merchants must be convinced that consumers hold the card and want to use it. This makes the creation of a new network difficult at best, and creates challenges for an existing network that wants to expand to other regions of the world where currently its presence is minimal or nonexistent." Robert S. Pindyck, "*Governance, Issuance Restrictions, And Competition In Payment Card Networks*," (2007), p. 4. Visa experts have similarly acknowledged the existence of a "chicken and egg" problem confronting an entrant in this marketplace. See, e.g., David Evans and Richard Schmalensee, Paying With Plastic (1st ed. 1999), p. 138 ("Payment cards are useless to consumers unless merchants accept them, but merchants have no reason to accept cards unless consumers carry them and want to use them.").

120 Discover Card has recently expanded its merchant acceptance in Canada through an arrangement with Moneris. http://www.moneris.com/AboutUs/MediaCentre/NewsAndEvents/2010/Month/Oct%2026.aspx.

[redacted]

[redacted]

94. The highly concentrated market for Credit Card Network Services, the Merchant Restraints that insulate MasterCard and Visa from competition, and difficult and costly entry conditions all suggest that MasterCard and Visa each possess market power.

4.2 Direct Evidence Demonstrates MasterCard and Visa's Market Power

95. There is direct evidence that MasterCard and Visa each possess market power. This direct evidence includes each Network's ability to use interchange fees (and network fees) directly to increase prices paid by merchants without suffering a significant loss of merchant transactions, and their use of price discrimination and value-based pricing unconnected to any costs of serving merchants.

4.2.1 MasterCard and Visa Interchange Fees Demonstrate their Market Power

96. There is no dispute among economists, including economists who have consulted for and/or testified on behalf of MasterCard and Visa and who defend interchange fees, that the Networks' interchange fees increase the prices merchants pay for Credit Card Network Services.[123] For example:

- "The interchange fee puts a floor under the [Card Acceptance Fee]. Indeed, since the acquiring side of the business is fairly competitive, one can expect changes in [Card Acceptance Fees] to generally reflect changes in interchange fees."[124]

- "In the U.S., where acquiring is highly competitive, changes in interchange fees lead to roughly equal changes in [Card Acceptance Fees]."[125]

[redacted]

[123] MasterCard and Visa, and economists retained by them, have defended the interchange fee system as economically efficient, but they do not dispute that interchange fees increase the prices paid by merchants.

[124] David Evans & Richard Schmalensee, Paying With Plastic (1st ed. 1999), p. 199.

[125] Richard Schmalensee, "Payment Systems and Interchange Fees, 50 Journal of Industrial Economics 103, 103 (2002).

- "A reduction in interchange fees will lead to reductions in [Card Acceptance Fees]. This proposition is almost trivial. If this were not the case, it would be difficult to understand why merchants complain so vociferously about interchange fees."[126]

- "[W]hen a consumer uses a Visa card to make a purchase at a particular merchant, the merchant's acquiring bank pays an interchange fee on the transaction to the consumer's card-issuing bank. The acquiring bank currently pays an average effective interchange fee on Visa credit card transactions of approximately 1.80 percent to the issuing bank.

  Because the interchange fee is a major element of the acquiring bank's cost of processing the payment card transaction, it is a major element in determining the amount the acquiring bank charges the merchant to handle the transaction, that is, the [Card Acceptance Fee]."[127]

- "Because they are competitive, Acquirers play no role in our analysis. They just pass through the interchange fee to the merchants."[128]

97. [redacted]

98. By requiring the payment of interchange fees, and setting the level of those fees, MasterCard and Visa have demonstrated and exercised the ability to directly control and increase the level of Card Acceptance Fees. This is demonstrated by the effects of significant changes to the level of interchange fees in Australia, where the Reserve Bank of Australia tracked the average level of Card Acceptance Fees before and since interchange fees in that country were substantially reduced. As Figure 4.1 shows, when the interchange fee was reduced by an initial 0.4 percentage points, there was an almost identical reduction in the level of Card Acceptance Fees – notwithstanding that most Australian merchants were on "blended,"

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126 Bob Stillman, "*Seven Truths About Regulating Interchange*," The Law and Economics Of Interchange Fees and Credit Card Markets, International Center for Law and Economics, December 808, 2009, http://www.laweconcenter.org/section-blog/27-symposiums/55-interchange-fee-blog-symposium-document.html.

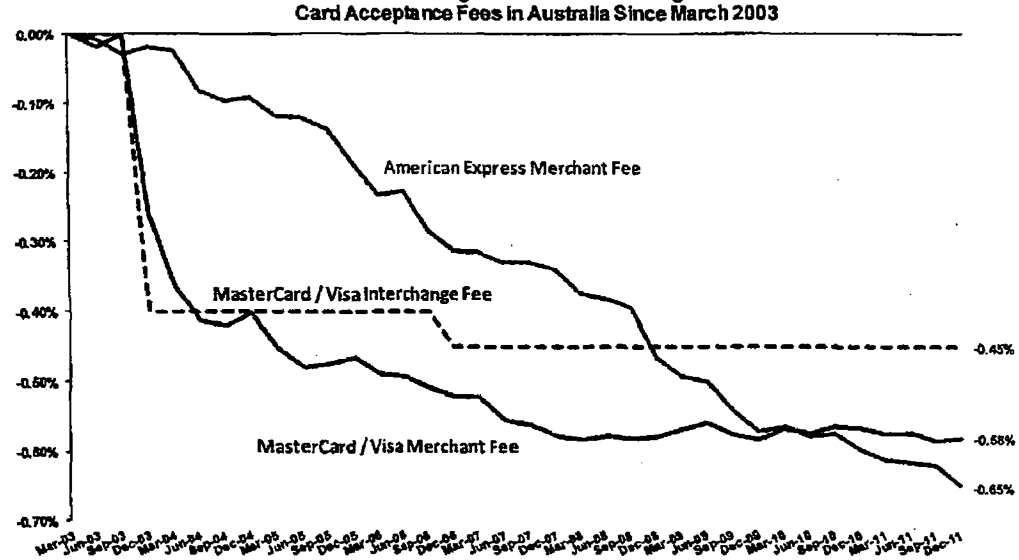
127 Klein et al., Competition in Two-Sided Markets, p. 572.

128 Jean-Charles Rochet and Jean Tirole, "*Cooperation Among Competitors: Some Economics of Payment Card Associations*", 33 Rand Journal of Economics 549, 555 (2002).

[redacted]

not "interchange-plus" pricing contracts.[130] Under a blended pricing contract, a merchant pays a single, fixed rate in respect of its acceptance of all of a Network's credit cards. In contrast, under an interchange plus arrangement, the acquirer charges the merchant the applicable interchange fee, plus any fees that are payable to the Network, plus an additional amount that is retained by the acquirer, so interchange fee changes automatically change the Card Acceptance Fee by an equal amount.

Figure 4.1
Cumulative Change in Level of Interchange Fee and Card Acceptance Fees in Australia Since March 2003



Source: http://www.rba.gov.au/statistics/tables/xls/c03hist.xls.

99. MasterCard and Visa's ability to control prices to a significant degree and for a sustained period of time through their interchange fee systems is a direct demonstration of their market power.

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[130] Reserve Bank of Australia, Payments System Board 2007 Annual Report, p. 26. [redacted]

4.2.2 Inelastic Merchant Demand in the Face of Increased Interchange Fees Reflects MasterCard and Visa Market Power

100. Suppliers that do not possess market power cannot increase prices significantly relative to those of substitute products because they would lose too many sales for such a price increase to be profitable. The demand facing such individual sellers is therefore price *elastic*. By contrast, suppliers that possess market power face relatively *inelastic* demand (at the competitive price) and can raise prices above the competitive level without losing so many sales that the price increase would be unprofitable.[131] Thus, the ability to raise prices profitably (without a change in costs) is a sign of market power.[132]

101. MasterCard and Visa can use and have used interchange fees and network fees to increase merchants' Card Acceptance Fees significantly without suffering unprofitable losses of transaction volumes, because merchants' demand for Credit Card Network Services is very *inelastic*, and is made even less elastic by the Merchant Restraints.[133] In fact, MasterCard and Visa, and economists who have testified on behalf, cite the relatively inelastic nature of merchant demand for credit card acceptance as a *justification* for the Respondents' interchange fees, and the level of those fees. For example, Visa submitted a report in Australia which claimed that its interchange fees are "socially optimal" due to the "less elastic (though not infinitely so) demand of merchants."[134]

102. Of course, MasterCard and Visa have long enforced the Merchant Restraints and other anti-steering rules in Canada which have prevented merchants from using many potential

131 As I discussed earlier when describing the "cellophane fallacy," firms with market power may have already exercised it to the full extent that is possible and so are unable to further raise prices profitably. An inability to further raise prices profitably therefore does not mean that a firm lacks market power.

132 Increases in marginal costs (the cost of providing one additional unit of output) will generally lead to increases in prices whether or not the firm has market power.

133 Inelastic *market* demand for a product by itself need not give rise to high prices; competition among suppliers tends to drive prices down towards costs even when demand for the product is inelastic. Demand for a given firm is generally more elastic than demand for an industry. For example, demand for food is inelastic, but demand for food from a particular grocery store is likely to be relatively elastic. Interchange fees, however, result in a persistently high level of fees to merchants notwithstanding competition among acquirers. The fees are set by MasterCard and Visa, and acquirers cannot unilaterally reduce them.

134 Visa International, Response to the Reserve Bank of Australia's Consultation Document and Report of Professor Michael Katz, March 2002 (prepared by Network Economics Consulting Group Pty Limited) (VISA00579022 at 9044).

steering or "discouragement" strategies, further increasing the amount by which the Networks could profitably increase Card Acceptance Fees. [redacted] In 2008, Visa increased its acquirer-side assessment fee by a factor of six, from one basis point to six basis points. [redacted][136]

[redacted]

[135] See: Pricing's Role in Visa's Business, Revenue Planning & Financial Objectives (VISA00024523 at 4529).

[136] [redacted]

[137] As I describe above, the elasticity facing any individual acquirer – the "firm elasticity of demand" – might be relatively high if the acquirer attempts to increase its own acquirer fee in the face of effective competition among acquirers, notwithstanding the inelastic market demand facing the acquirers collectively, which MasterCard and Visa exploit with their interchange fees and network fees.

[138] [redacted]

104. Similarly, Visa's representative, Michael Bradley (Head of Products Visa Canada), testified on discovery that Visa's pricing is based on value, not cost.[139] As shown previously in Figure 3.1, the weighted average credit interchange fee on MasterCard and Visa transactions has increased significantly over time, and recently quite dramatically by MasterCard, based on such "value" considerations.

[redacted]

139 See Bradley Examination December 8, 2011, pp. 1070-71, Qs. 3028-30. See also Bradley Examination, December 9, 2011, p. 1233, Q. 3517.

[redacted]

107. In reaching its determination concerning market definition in *U.S. v. Visa and MasterCard,* the court noted that "both Visa and MasterCard have recently raised interchange rates charged to merchants a number of times, without losing a single merchant customer as a result."[143] [redacted] This fact not only demonstrates that the relevant market is no broader than Credit Card Network Services, but also that MasterCard and Visa possess market power in that market.

4.2.3 Extensive Price Discrimination Demonstrates the Respondents' Market Power

108. Price discrimination occurs when different customers pay different prices unrelated to any differential costs of serving those customers. In a competitive market, for example, a customer who buys aspirin to treat a heart condition will pay the same price as a customer who buys aspirin to treat a headache. A firm with market power, however, may be able to charge the customer with a heart condition a higher price. Successful price discrimination requires at least some market power (because pricing is not related strictly to costs), the ability to identify customers with less elastic demand, and the ability to prevent resale from customers receiving a low price to customers being charged a higher price.[145]

109. MasterCard and Visa engage in extensive price discrimination. Most obviously, their fees (or a major component of their fees) are typically expressed as a percentage of the transaction amount, which automatically results in higher fees for larger value transactions, and increases in fees over time as average transaction amounts increase. [redacted]

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143 *U.S.A. v. Visa, et al.*, 98 Civ. 7076 (BSJ), S.D. of N.Y., October 9, 2001, p. 26.

144 [redacted]

145 See, *e.g.*, Dennis Carlton and Jeffrey Perloff, Modern Industrial Organization (4th ed 2005), p. 294.

[redacted] Moreover, Visa's *debit* interchange fee is also based in part on a percentage of the transaction amount, despite the fact that debit transactions do not entail any of the *ad valorem* issuer costs sometimes cited as justification for credit card interchange fees.[147]

110. MasterCard and Visa network fees also increase with the size of the transaction, but there is no evidence that network costs are any higher for a $100 transaction than for, say, a $5 transaction, and, indeed, cheque clearinghouses and many debit card and ABM networks charge a small flat fee per transaction.[148]

111. [redacted] In Canada, MasterCard now lists thirty domestic credit card interchange fee categories, with additional rate categories for international transactions, while Visa lists twenty-four interchange fee categories for domestic Canadian credit card transactions, also with additional categories for international transactions.[150] [redacted]

[redacted]

147 http://www.visa.ca/en/aboutcan/mediacentre/interchange/pdf/visa-interchange-rates-current.pdf. MasterCard and Visa have also used percentage based interchange fees for their branded debit card programs in the United States. (Originally, there were almost no interchange fees on debit transactions in the United States, and MasterCard and Visa began with small fixed debit card fees.) Interac, by contrast, has successfully operated since 1994 with no interchange fee at all.

148 Issuing banks may extend more credit for larger transactions, but will also receive higher interest income from such transactions. Also, since merchants have no say as to whether credit is extended by the issuing banks, it would be peculiar to charge the same merchant more for a "riskier" credit card transaction than a less risky transaction when the merchant has virtually no ability to monitor, decline, or surcharge the claimed "riskier" transaction. In any event, interest rates on credit card lines of credit are routinely explained as being as high as they are as a result of these same credit losses, float, and other costs which are sometimes claimed to justify interchange fees.

[redacted]

150 http://www.mastercard.com/ca/wce/PDF/MasterCard_Interchange_Rate_Overview.pdf; http://www.visa.ca/en/aboutcan/mediacentre/interchange/pdf/visa-interchange-rates-current.pdf.

[redacted]

112. As noted above, MasterCard and Visa do not charge more for some card transactions than others because they are more costly. Setting prices based on detailed evaluations of each customer's willingness to pay (rather than costs and competition) is a direct indication of market power.

113. In sum, MasterCard and Visa possess market power in the market for Credit Card Network Services as demonstrated both by indirect evidence and by direct evidence, including the ability of each network to use interchange fees (and network fees) directly to increase Card Acceptance Fees paid by merchants without suffering a significant loss of merchant transactions, and their use of price discrimination and value-based pricing unconnected to any costs of serving merchants.

5. Anticompetitive Effects of the Merchant Restraints

114. In this part, I explain the basis for my conclusions that the Merchant Restraints do in fact "influence upward and discourage the reduction of" Card Acceptance Fees paid by merchants and have an adverse effect on competition.

5.1 The Merchant Restraints Influence Upward and Discourage the Reduction of the Card Acceptance Fees Paid by Merchants and Have an Adverse Effect on Competition

115. The Merchant Restraints prevent and distort price competition between the credit card networks (and between the credit card networks and other payment methods) with respect to the level of Card Acceptance Fees. By reducing price competition for merchant transactions

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[redacted]

and the elasticity of demand they face from merchants, the Merchant Restraints influence upwards and discourage the reduction of Card Acceptance Fees. In fact, with the Merchant Restraints in place, the networks "compete" primarily over which network can offer issuers the opportunity to collect the *highest* fee revenue from merchants.

116. Competition is distorted as the Merchant Restraints suppress price signals and prevent them from serving their usual role in steering consumers to make efficient choices. The high Card Acceptance Fees paid by merchants and merchants' inability to surcharge credit card transactions also means that some merchants that would accept credit cards do not do so.[152] At merchants that do accept the cards, consumers have inefficient incentives because they do not face at the point of sale (or "point of interaction") the relative costs of the payment method being selected. As a consequence, consumers have an increased incentive to use higher cost payment methods, further increasing merchant costs. [redacted]

5.1.1 Competition in Unrestrained Retail Markets Typically Leads to Differential Pricing Based on Costs, which Constrains the Prices of Higher Cost Suppliers

117. When products are economic substitutes and the price of one of those products rises relative to the prices of the others, all else equal, sellers of the now higher priced product will lose sales to sellers of the lower cost products. This substitution constrains competitors in a market from unilaterally increasing their prices to the monopoly level, but the same effect exists even if the products are not close enough substitutes to be considered part of the same relevant antitrust market. Even monopolists in a relevant antitrust market are constrained at some point in part by the ability and willingness of buyers to rely instead on alternative products.

118. In normal competitive markets, when the cost to retailers of one product increases relative to the cost of another, the retailers tend to increase the retail price of the first relative to the second. This is an economically efficient outcome where consumers face retail

152 Evidence for this can be seen by the need for card networks to offer special low interchange fees for "emerging" merchant sectors (such as supermarkets and, more recently, quick-serve restaurants), and in the fact that many universities only accept credit card payments if they are permitted to surcharge those transactions.

[redacted]

prices that reflect the costs of what they are purchasing. For example, if the cost of one brand of cola increases, the retailer will typically raise the shelf price for that brand.

119. The ability for sellers to establish different prices for different goods or services is a fundamental part of the competitive landscape among retailers. Without it, retail prices would generally be far higher. The Merchant Restraints prevent merchants from charging higher prices for higher-cost credit cards, thus reducing or eliminating the ability of merchants to charge consumers retail prices that reflect the costs of what they are purchasing.

120. Consider a hypothetical scenario in which supermarkets sell Coca Cola products, Pepsi Cola products, and a less popular (e.g., store brand) cola that costs the supermarkets less and which they therefore sell at lower retail prices than the leading branded products. But suppose Coca Cola and Pepsi Cola each begin to require that any supermarkets selling their branded products do not charge a higher price for their brands than for any other brands, similar to the No Surcharge Rules enforced by MasterCard and Visa. A supermarket that otherwise would sell Coke and Pepsi at higher prices than the store brand could choose to continue to stock all brands but only at the same price. In that case, the price charged for all three products would now tend to be driven by the weighted average cost to supermarkets for all three brands. The result would be that buyers of the store brand would pay higher prices than they otherwise would, effectively subsidizing purchasers of Coke and Pepsi. The merchant could discontinue stocking Coke and Pepsi and sell only the store brand at the same low price as before. But if competitors continue to stock Coke and Pepsi, and that drives a significant fraction of shoppers to switch retailers, then the merchant would lose all of the incremental profit that it would have earned on *all* of those customers' purchases, not just on soft drinks.

121. Assuming that most merchants in this hypothetical scenario continue to sell Coke and Pepsi, then the initial effect is that Coke and Pepsi sales would increase while sales of the store brand would decrease, because supermarkets could no longer charge a higher price for the leading brands than for the store brand. In addition, however, Coke and Pepsi would have strong economic incentives to increase their prices from the former level. Note that Coke and Pepsi previously set prices to maximize their profits given the availability of the lower cost store brand at a lower price – and each other's products at higher prices. Had both Coke and Pepsi increased their prices before, they would have lost sales to the store brand, and had only one of them increased prices it would have lost sales as well to the other. With the same-price rule in effect, however, retail prices for Coke and Pepsi increase by no more than the increase in the

price of the other brands. For a given price increase to the retailer, then, there will be fewer sales lost with the rule in place than without it; in other words, the elasticity of demand decreases. With less elastic demand, both Coke and Pepsi can profitably raise their prices from the former level towards the monopoly level.

122. Now suppose that instead of increasing their prices generally, Coke and Pepsi introduced "Premium Coke" and "Premium Pepsi" that contained the same beverages but in special cans that contain sweepstakes entries worth, on average, a small but noticeable amount to consumers – say, $0.05 per can. Suppose, too, that Coke and Pepsi charged prices to supermarkets for these premium products that were $0.10 per can higher than for their standard products. Without "all products" or "no surcharge" rules, an individual merchant might choose to, (a) stock the premium products at the same price as other cans of Coke and Pepsi, (b) stock the new products but at a higher price than for regular Coke and Pepsi, or (c) not stock the new products. The no-surcharge (and no-discrimination) rule prohibits option (b). If Coke and Pepsi also impose an "all products" rule, option (c) is also eliminated. The merchant thus must either drop all Coke and Pepsi products or charge the same price for both the regular and premium products; because of the no-surcharge rule, that price must also be equal to the price of the store brand. The all-products rule thus eliminates a competitive response to price increases – an option made even more important by the existence of the no-surcharge rule. In this example, the additional cost to merchants of providing the cans with the sweepstakes entries is greater than the value of those entries, so the new product would be competitively unsustainable at the price charged to merchants by Coke and Pepsi – consumers would tend not to purchase them. But, under a regime of no-surcharge and all-products rules, because the merchants' customers get *some* benefit by choosing the premium cans, they will tend to greatly prefer those cans, which are higher-priced for the merchant. The increased sales of higher-cost Premium Coke and Pepsi drives up costs and prices (and profits to the suppliers) and harms consumers overall as the price they pay for soft drinks increases – whether the consumer purchases cans of regular Coke or Pepsi, Premium Coke or Pepsi, or even the store brand – and by more in the aggregate than the value of sweepstakes winnings.

5.1.2 The Ability to Surcharge Credit Card Transactions Constrains the Level of Card Acceptance Fees

5.1.2.1 The Likelihood that Merchants will Surcharge Increases with the Level of Credit Card Acceptance Fees

123. The competitive economic effects of MasterCard and Visa No-Surcharge Rules and Honour-All-Cards Rules are essentially the same as those of the hypothetical Coke and Pepsi rules discussed above. In the absence of the Merchant Restraints, if MasterCard or Visa increased their network fees and interchange fees, merchants would have several competitive options available: they could continue to accept all MasterCard and Visa cards at the same price as for other payment methods; they could surcharge MasterCard and Visa card transactions to reflect their higher costs; they could selectively decline some particularly high cost MasterCard or Visa card types to keep their average costs of accepting those brands (and thus their prices) lower; they could accept all MasterCard and Visa cards and only surcharge premium cards carrying the highest rates, and so on. Competition among merchants would determine which strategies were successful. It may be a successful strategy for some merchants *not* to discourage or surcharge any MasterCard or Visa credit cards as a service to their customers. As Klein et al. explain:

> It is common for merchants to incur costs for various services that do not benefit all customers to the same extent without passing on these differential costs to the particular consumers using the services. For example, merchants frequently offer without charge a number of amenities that only some customers use, including parking, gift wrapping, extended store hours, and delivery. Another obvious example is the practice of restaurants to offer free coffee refills.[154]

Critically, however, these decisions are made *by the individual merchant* facing competition from other merchants. Some merchants choose to provide free coffee refills, but others charge for refills, and similarly for parking, gift wrapping, and delivery. Competition will, and should, sort these matters out. Today, MasterCard and Visa's rules eliminate this competitive process among merchants with respect to payment services. By distorting competition among merchants, moreover, the Merchant Restraints distort and suppress competition between MasterCard and Visa with respect to Card Acceptance Services.

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[154] Klein et al, Competition In Two-Sided Markets, p. 617.

124. Absent the Merchant Restraints, some merchants would impose surcharges for use of MasterCard or Visa credit cards. [redacted][155] Moreover, surcharging credit card transactions would unbundle retail prices. As in the soft drink example, prohibiting a credit card surcharge means that customers choosing a less costly product pay higher prices, while customers choosing the more costly product may pay lower prices (and, on average, customers pay more overall). With surcharging, the higher price for credit card transactions and the lower price for other payment methods will induce some consumers at the margin to switch from using credit cards to cash, debit cards, or other non-surcharged payment methods acceptable to the merchant. [redacted]

[redacted]

125. The higher the price charged to merchants for Credit Card Network Services, the more likely merchants are to surcharge credit card transactions. As an Australian bank explained in discussing merchants' ability to surcharge following elimination of the no-surcharge rules in that country:

> [P]ricing signals are no longer suppressed and are visible to all end-users wishing to avail themselves of them. According to the East & Partners report 74% of corporate merchants, 70% of commercial merchants and 60% of SME merchants are surcharging today, or are planning to do so or are considering doing so. Those merchants who do not perceive the value of card acceptance in the absence of surcharging have the option to surcharge their customers or steer them towards less costly payment methods. Where the value of card acceptance is high enough without surcharging at current interchange rates, merchants do not surcharge. With interchange levels currently regulated at potentially a lower than equilibrium rate, it is likely that most merchants will not surcharge. However given the competitive environment that has been generated by RBA's

155 [redacted]

> reforms, if interchange is deregulated, the level of surcharging is likely to be positively correlated with the level of interchange rates. Any other conclusion appears to sit uncomfortably with the normal dynamics of a competitive marketplace.[157]

[redacted]

127. It may take some time for surcharging to become widespread. Initially, merchants may be reluctant to surcharge if their competitors do not, while their customers are not accustomed to confronting surcharges at the point of sale (and thus react more negatively than if surcharges were already a widely established business practice). Over time, however, customers become less surprised by surcharges, making it less costly for merchants to pursue this strategy. This is borne out by evidence from Australia. As Figure 5.2 shows, the proportion of merchants in Australia that surcharge at least some credit card transactions has increased steadily since the elimination of the no-surcharge rules in that country in 2003.

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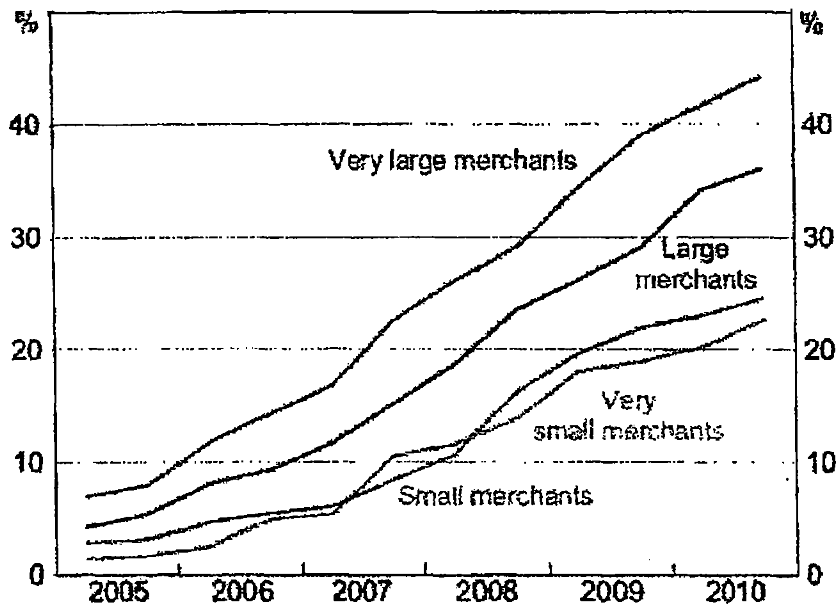
157 Letter to Michele Bullock, Head of Payments Policy Department, Reserve Bank of Australia, from Alexandra Holcomb, General Manager, Working Capital & Trade Solutions, Westpac Banking Corporation, 31 August 2007, re: Review Of The Reforms To Australia's Payments System, p. 2 (http://www.rba.gov.au/payments-system/reforms/review-card-reforms/pdf/wbc-03092007.pdf).

158 "Payments System Regulation: Response by MasterCard Worldwide to the Issues for the 2007/08 Review," August 31, 2007 (MCW_CCB_00172135 at 2154).

159 "Payments System Regulation: Response by MasterCard Worldwide to the Issues for the 2007/08 Review," August 31, 2007 (MCW_CCB_00172135 at 2155).

160 C. Christian von Weizsäcker, "Economics of Credit Cards - Expert Report on behalf of MasterCard International Incorporated and Europay International SA," dated 23 January 2002, (MCW_DOJ_00424431 at p. 10).

Figure 5.2
Percentage of Merchants Reporting at Least Some Surcharging in Australia



Source: Reserve Bank of Australia, Review of Card Surcharging: A Consultation Document, June 2011, (GSSS6134_00000965 at 0968)..

128. However, the proportion of credit card transactions where a surcharge was *actually* paid has remained flat, indicating that surcharges are having the expected effect of steering customers towards lower cost payment methods.[161]

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161 John Bagnall, Sophia Chong, and Kylie Smith, "*Strategic Review of Innovation in the Payments System: Results of the Reserve Bank of Australia's 2010 Consumer Payments Use Study*," Reserve Bank of Australia, June 2011 (GSSS5893_00000337 at 0354) ("In December 2010, almost 30 per cent of merchants surcharged at least one of the credit cards they accepted, compared with just over 8 per cent in June 2007. However, consumers appear to have become more sensitive to surcharges, or better at avoiding them; the proportion of credit card transactions where a surcharge was actually paid by the consumer was virtually unchanged between 2007 and 2010, at around 5 per cent.").

5.1.2.2 Surcharging Credit Card Transactions Is Effective at Steering Transactions to Lower Cost Payment Methods and Brands

129. Evidence from Australia confirms the (logical and expected) result that when merchants surcharge their highest cost credit cards, customers tend to react by significantly reducing their use of the surcharged cards.

130. In Australia, due to regulatory intervention, interchange fees on MasterCard and Visa transactions are now much lower than in Canada. The (regulated) weighted average interchange fee cap is 0.50 percent in Australia.[162] [redacted] However, the average Card Acceptance Fees in Australia for American Express and Diners Club transactions (which remain unregulated) are significantly higher – in December 2011, 1.86 percent for American Express and 2.11 percent for Diners Club. [redacted] Many merchants that surcharge card transactions in Australia, in fact, impose those surcharges only on American Express and Diners Club transactions, or set higher surcharges for use of those higher cost cards. A report prepared for Diners Club, for example, concludes that this differential surcharging – *i.e.*, direct interbrand price competition at the point of sale that had been suppressed as a result of network no-surcharge and no-discrimination rules – has had a significant effect on cardholder payment choice:

> [M]erchants feel more confident in their ability able [sic] to surcharge Diners Club than other types of credit cards and some have chosen to surcharge Diners Club (and American Express) but not Visa or MasterCard. The effect of surcharging Diners Club has been to significantly reduce the number of transactions that are paid for using Diners Card cards.[165]

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162 See, e.g., Reserve Bank of Australia, Reform of Australia's Payments System: Preliminary Conclusions of the 2007/08 Review, April 2008, (VISA00461545 at 1550).

[redacted]

164 "Merchant Fees for Credit and Charge Cards," http://www.rba.gov.au/statistics/tables/xls/c03hist.xls.

165 The Allen Consulting Group, "Review of Reform of Australia's Payments System: Regulation of Credit Card Payments and the role of Diners Club," September 6 2007 Report to Diners Club (commercial-in-confidence version), http://www.rba.gov.au/payments-system/reforms/review-card-reforms/pdf/dc-06092007.pdf, p. 12. [redacted]

5.1.2.3 Card Networks Have a Strong Economic Incentive to Reduce Card Acceptance Fees to Reduce the Incidence of Surcharging

131. Because higher fees lead to more surcharging (and at higher amounts) – when surcharging is permitted – and because more surcharging leads to less usage of the surcharged cards, the credit card networks have a strong economic incentive to keep fees lower when merchants can surcharge than when they cannot. This is why they have a correspondingly strong economic incentive to enforce no-surcharge rules.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

172 Videotaped 30(b)(6) Deposition of Visa USA Relating to Australia Testimony of Tolan Steele, November 5, 2008 (VISA00579370 at 9483).

173 See: Defendant's Counter-Statement in Opposition to Class Plaintiffs' Statement of Undisputed Facts (GSSS5893_00000549 at 0838).

[redacted]

137. [redacted] In recent submissions to the Reserve Bank of Australia, Australian merchant Woolworths Limited described the mere intention of surcharging as one of Woolworths' "single most effective pricing negotiation tools with the domestic and international card schemes" and stated that the ability to surcharge has helped Woolworths achieve in "certain brands... an almost 50% reduction in pricing," thereby allowing Woolworth's "to provide [its] customers with better value."[176] Woolworths also stated that "the abolition of the No Surcharge rule has had a very beneficial dual impact in the payments system of having a very low level of actual surcharging while delivering strong and improved price signals to significantly drive down interchange and merchant service fees."[177] [redacted]

138. Because no-surcharge rules permit MasterCard and Visa to maintain prices for Credit Card Network Services above the level that otherwise would prevail, those rules are practices which influence upward and discourage the reduction of Card Acceptance Fees. As I explained in 1998, no-surcharge rules are a form of price maintenance that are couched in language that has the appearance of holding down prices but has the actual economic effect of sustaining *higher* prices in the marketplace.[179] [redacted]

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175 See E-mail from Chris Clark to Tolan Steele (VISA00310125 at 0127) and Australia & New Zealand Executive Briefing Pack (VISA00336017 at 6072).

176 See Woolworths Limited, Submission on RBA's Review of Card Surcharging (VISA00536120 at 6120).

177 Id.

178 See: Visa, Australia contactless acceptance strategy (VISA00579603 at 606).

179 Frankel, Monopoly and Competition, p. 344.

[redacted]

139. In short, the credit card networks and their consultants have repeatedly acknowledged the economic reality that merchant surcharging intensifies competition over the level of interchange fees – the largest component of Card Acceptance Fees. The competitive logic is straightforward: as Card Acceptance Fees for a brand or a particular set of a brand's cards increases, merchants will have an increased incentive to surcharge the cards, and at higher rates for more costly cards. Evidence confirms that this in fact occurs. Consumers confronted by surcharges – and differential surcharges – at the point of sale will have an economic incentive to reduce their use of surcharged cards or cards carrying the highest surcharges. Again, evidence confirms that this occurs.

140. Finally, card networks confronted by reduced usage of their branded cards due to surcharging induced by high Card Acceptance Fees for their brand will have an economic incentive to reduce those fees that does not exist in the presence of no-surcharge rules. Once again, evidence confirms this effect. In Australia, American Express has reduced its Card Acceptance Fees since 2003 by even more (-0.65 percent) than MasterCard and Visa Card Acceptance Fees have declined (-0.58 percent) – see Figure 4.1 – despite the fact that MasterCard and Visa interchange fees were reduced significantly by regulatory order, while American Express' fees remained unregulated (aside from elimination of No-Surcharge and No-Discrimination Rules).[161] Moreover, Card Acceptance Fees for American Express transactions continue to decline, eroding the premium relative to MasterCard and Visa, notwithstanding the fact that Card Acceptance Fees for MasterCard and Visa have been essentially unchanged for the past four years.

141. In Canada, absent MasterCard and Visa No-Surcharge Rules, competition would have led some merchants to surcharge or threaten to surcharge those brands of credit cards, and more so as MasterCard and Visa increased the average level of those fees (and especially

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[redacted]

[161] Diners Club, a small, high cost, "three party" network, has experienced reductions in its average Card Acceptance Fees of 0.26% in Australia since early 2003. http://www.rba.gov.au/statistics/tables/xls/c03hist.xls.

for individual merchants that pay above average Card Acceptance Fees). This would have induced more customers at the margin to use Interac cards, or cash, for more of their transactions, thus reducing the profitability to the networks and their bank members from the fee increases. The No-Surcharge Rules, however, freed MasterCard and Visa from any concern over these effects, enabling them to profitably set higher interchange fees and thus, higher Card Acceptance Fees.

5.1.3 Honour-All-Cards Rules Influence Prices for Credit Card Network Services Upward

142. The Honour-All-Cards Rules have two main aspects: an "all issuers" aspect that prohibits a merchant from accepting some credit cards but not others based on the identity of the bank that issued the card and an "all products" aspect that prohibits a merchant from accepting some types of cards within a credit card brand but not others (*e.g.*, standard or core, premium, commercial).[182] By eliminating an option for merchants to selectively accept only some of the Respondents' credit cards, the Honour-All-Cards Rules make demand facing each Network less elastic and permit the Networks to maintain higher Card Acceptance Fees. The rules also inhibit the emergence of competition *among issuing banks* over the level of their interchange fees.

[redacted] As the Reserve Bank of Australia has explained, removing

[182] A merchant cannot decline to accept a particular (validly presented) card for other reasons, such as the transaction amount (also encompassed by restrictions on minimum or maximum purchase amounts) or the profitability of a particular sale. See: MasterCard rule 5.8.1 ("A Merchant must honor all valid Cards without discrimination when properly presented for payment.") See: MasterCard Rules, 7 December 2011 (MCW_CCB_00173940 at 4061) and Visa International Operating Regulations ("A Merchant must accept all Cards properly presented for payment as specified in the 'Merchant Acceptance Standards' table.") (GSSS5893_00001550 at 2056).

[redacted]

these restrictions was an alternative to addressing the Networks' anticompetitive conduct through direct regulation of interchange fee rates:

> If the Board is to remove the existing interchange regulation, its view is that further steps would need to be taken to improve the ability of merchants to put downward pressure on interchange fees. Accordingly, in addition to the modifications to the honour-all-cards rule... the Board sees it as important that payment schemes allow merchants to make independent acceptance decisions for each type of card for which a separate interchange fee applies. This would allow a merchant to refuse acceptance of, say, premium cards if it thought the cost of acceptance was too high relative to the benefit gained.[184]

144. In addition to enabling merchants to make separate acceptance decisions based on the type of MasterCard or Visa card, and the associated interchange fee rate, eliminating the Honour-All-Cards Rules makes possible the development of intrabrand competition over the fees among each Network's member banks.

145. MasterCard and Visa claim that their network-set interchange fees are "default" fees that are assessed in the event that there is no bilateral agreement in place between the issuing bank and the merchant (through its acquiring bank).[185] [redacted] In fact, the Merchant Restraints eliminate any economic incentive for issuers to agree to accept lower interchange fees on a bilateral basis with a merchant (or its acquirer). It is generally argued by the Networks and their consultants that the combination of the Honour-All-Cards Rules and the rules requiring the payment of interchange fees gives each individual card issuing bank "hold up" monopoly power over each merchant.[187] The Honour-All-Cards

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184 Reserve Bank of Australia, Reform of Australia's Payments System: Preliminary Conclusions of The 2007/08 Review, April 2008, (VISA00461545 at 1579). In its final report, the Bank similarly concluded that "the Board is of the view that if it proceeds with deregulation of interchange fees – and is relying on competitive forces to help ensure that interchange fees do not rise – it needs to provide merchants with all possible negotiating tools to ensure maximum competitive pressure on these fees." (GSSS0035_00015041 at 5016).

185 See MasterCard Response, paras 33, 34 and 36; Visa Response, para 30.

[redacted]

187 See, *e.g.*, Klein et al., Competition in Two-Sided Markets, p. 574 ("Given an honor-all-cards rule, bilaterally negotiated interchange fees in the absence of a default interchange fee would create an incentive for individual card issuers in an open-loop payment card system to 'hold up' acquirers by

Rules create an environment in which to reject a particular issuer's credit cards, a merchant would have to reject all credit cards carrying the brand (or brands) issued by that issuer. No individual issuing bank thus has an economic incentive to reduce its interchange fees generally or through bilateral agreements with merchants, because the Merchant Restraints impede the ability of merchants to favour customers of lower cost issuers.[188] If cutting prices gets no better treatment at the point of sale, the bank will gain no incremental customers and no incremental transaction volume.

146. If, instead, a merchant could make separate acceptance and surcharging decisions according to the identity of the issuing bank, the issuing banks then would have an increased economic incentive to compete with one another over the fees charged to merchants when their respective MasterCard and/or Visa cards are presented at the point of sale.[189]

147. The no-surcharge and Honour-All-Card Rules remove or reduce the economic incentive to compete with respect to the fees charged to merchants. It follows that in the

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demanding arbitrarily high interchange fees on transactions made with their cards. In particular, individual Visa and MasterCard issuers would have the incentive to take advantage of the fact that merchants accepting Visa or MasterCard have agreed to honor all cards to make unreasonably high interchange fee demands."); Testimony of Timothy J. Muris On Behalf of the Electronic Payments Coalition, Before The Subcommittee On Commerce, Trade, And Consumer Protection Of The Committee On Energy And Commerce, House Of Representatives, February 15, 2006, "The Law And Economics Of Interchange Fees," p. 8 ("A systemwide fee, set by Visa, avoids the costs of the resulting 'hold up' problem that would exist if merchants have to accept cards from every Visa issuer. Without a set fee, individual issuers could demand higher interchange fees in any bi-lateral negotiation. Because of the need to honor all cards, acquirers could not respond by refusing to accept cards from certain issuers.").

[188] A limited exception may arise in the context of co-branded credit cards. These are Visa or MasterCard general purpose credit cards that also bear the name or mark of a merchant, the use of which may entitle the cardholder to rewards or benefits from or at the merchant. Merchants that have the scale to participate in co-brand card programs may be able to steer transactions to a particular issuer and thus negotiate a more favourable arrangement from that issuer. But the merchant remains powerless to negotiate lower fees with any other issuer.

[189] The New Zealand Commerce Commission recognized this effect in negotiating settlements with MasterCard, Visa, and their New Zealand member banks over interchange fees and no surcharge rules. By permitting differential surcharges according to the identity of the issuing bank, the Commission increased the likelihood of interbank competition over the level of interchange fees. See, Peter R Taylor, General Counsel, New Zealand Commerce Commission, "New Zealand's market-based solution to interchange fees," Cards and Payments Australasia 2010 Conference, 15 March 2010, http://www.comcom.govt.nz/cards-and-payments-australasia-2010-conference-15-march-2010/ ("Importantly, the schemes have agreed not to enforce any rules prohibiting merchants from surcharging or using other methods to steer customers towards other payment options, including between a particular scheme's issuers or card types."). Permitting a merchant to reject a particular issuer's cards is an extension of the same principle.

absence of the no-surcharge and Honour-All-Cards Rules, Card Acceptance Fees would be lower.

5.1.4 The Merchant Restraints Have Insulated MasterCard and Visa from Competition from One Another and from Potential Substitutes or Entrants

148. Normally, when a supplier increases its price unilaterally and unrelated to cost increases, it risks losing some sales to competitors or to new entrants that offer more competitive prices. The Merchant Restraints interfere with and even reverse this normal competitive process. The result is a form of "perverse" competition in which networks with lower prices are characterized in the industry as being at a "competitive disadvantage" and networks with higher prices are characterized as having an advantage and better able to grow at the low price network's expense.[190] Explaining an increase in Visa's interchange fees, for example, William Sheedy, then Visa's executive vice president in charge of interchange (now Group President of the Americas for Visa), was quoted by the industry newspaper American Banker as follows:

> Visa U.S.A. said its announcement Monday that it will raise interchange fees for credit card transactions – a move bound to further anger merchants. -- was a competitive necessity after MasterCard raised its rates in January.
>
> William M. Sheedy, Visa's executive vice president in charge of interchange, said in an interview Monday that for years his company has kept interchange fees lower than MasterCard partly to secure merchant acceptance.
>
> But the new rates, which will still be slightly lower than MasterCard's, mark a recognition that Visa has reached near-ubiquitous merchant acceptance and must now focus on the happiness of its members, who profit from interchange fees and had been defecting to MasterCard.
>
> "If we were gaining share with merchants, I think that could have offset" the lower payoffs for issuers, Mr. Sheedy said. But "we were losing share to merchants and issuers. In certain instances, we have had difficulty in securing issuer brand decisions because of our lower fee."[191]

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190 Address by Mr. I.J. Macfarlane, Governor, Reserve Bank of Australia, to Australasian Institute of Banking and Finance Industry Forum 2005, Sydney, 23 March 2005, p. 8.

191 "Visa Says MasterCard's Fee Hike Forced Its Hand," American Banker, Tuesday, June 18, 2002.

149. Of course, Visa was not "gaining share with merchants" because merchants were precluded by MasterCard and Visa rules from favouring customers who used the lower-priced Visa credit cards by applying surcharges (or higher surcharges) on higher-priced MasterCard transactions.

[redacted]

151. If merchants in Canada had been permitted to surcharge credit card transactions in the period before 2006, it likely would have been more common for Visa transactions to be surcharged than MasterCard transactions, and at higher rates when both were surcharged.

[redacted]

193 This is a conservative estimate, as it is based on the average transaction amount for both networks, and Visa's average transaction amount appears to have been somewhat greater than MasterCard's. See, e.g., Nilson Report #598 (June 1995), 620 (May 1996), 645 (June 1997).

[redacted]

This would have steered credit card transactions from Visa to MasterCard and put significant competitive pressure on Visa to reduce its rates, as cardholders would have preferred under the circumstances to use MasterCard credit cards. [redacted]

152. [redacted]

[redacted]

[redacted]

200 "Canadian Interchange / Product Game Plan" (Draft), (VISA00045025) [redacted]

[redacted]

[redacted] See also Canadian Interchange and Product Plan (VISA00067188 at 7190, 7196 to 7200 and 7203). [redacted]

[redacted]

157. MasterCard and Visa's position in Australia illustrates the anticompetitive effects of the Merchant Restraints in Canada. [redacted] However, in Canada, MasterCard and Visa prohibit merchants from surcharging any of their credit card payments, resulting in a much larger distortion. The Merchant Restraints also impede competition from other existing or new payment providers and networks. If surcharging were permitted, a lower cost entrant might have succeeded by avoiding merchant surcharges, while MasterCard and Visa were surcharged by merchants at rates corresponding to their higher acceptance costs. But an entrant is unable to benefit from that normal competitive response, because the Merchant Restraints prevent merchants from using surcharges to steer

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[redacted]

[204] Visa AP Pty Ltd, Reserve Bank of Australia Review of Card Surcharging, July 2011, (VISA00536090 at 6103).

transactions away from the higher-cost MasterCard and Visa credit cards and toward low-cost alternatives.[205]

5.1.5 The Merchant Restraints Eliminate Constraints on Card Acceptance Fees

158. Card Acceptance Fees – the total amount of fees paid for Credit Card Network Services – are comprised of the interchange fee, the network fee (or "assessments"), and the acquirer's own fee. The first two components – set by MasterCard and Visa – together comprise most of what merchants pay to accept credit card transactions. [redacted][206] [redacted][207]

159. As an economic matter, network fees on the acquiring side are borne by merchants, just as interchange fees are. For example, as Desjardins Card Services (an acquirer) explains:

> Payment network fees are billed to acquirers such as Desjardins Card Services (DCS) by payment networks such as VISA and MasterCard for the use of their services. The fees are used to maintain and improve payment processing infrastructures and related services.
>
> DCS has chosen to bill payment network fees clearly and separately on merchant's statements of account **at the same rate that they themselves are billed by VISA and MasterCard**:
>
> - 0.060% of the net monthly volume for VISA
> - 0.064% of the net monthly volume for MasterCard.[208]

[redacted]

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[205] Similarly, a merchant could not choose to surcharge MasterCard and Visa transactions, and provide its own store-issued credit cards (with no surcharge).

[206] Canadian Acquirer's Pricing Methodology (VISA00241513 at 1516).

[207] [redacted]

[208] http://www.desjardins.com/en/communiquer/liste-questions/produits-services-entreprises/solutions-marchands.jsp (emphasis in original).

[redacted]

161. [redacted][211] On discovery, Visa's representative, Michael Bradley, agreed

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[redacted]

211 [redacted]

that in the normal course of business, it would not be profitable for an acquirer to do otherwise.[212]

162. It is the total Card Acceptance Fee that influences the likelihood that a merchant will surcharge a credit card, and by how much, or drop acceptance of a particular credit card brand or type. The Merchant Restraints protect all of the components of that fee from competition at the point of sale. In practice, acquiring is competitive; merchants can shop around for a better acquiring fee. But no matter which acquirer they select, they will face the same network fee and interchange fee schedule. [redacted][213]

163. Thus, elimination of the Merchant Restraints will constrain all of the components of the Card Acceptance Fee together (including the acquirer's own fee).

5.2 The Ability to Surcharge Costly Credit Cards has a Different Competitive Effect than the Ability to Offer Discounts

164. The Respondents claim that the ability to offer discounts for cash or other payment methods is equivalent to the ability to surcharge credit card transactions. For example, in its Response, Visa "expressly denies that surcharging is a uniquely effective means of steering customers to adopt other forms of payment" and claims that "Canadian merchants have an array of options (apart from surcharging or refusing to accept certain types of credit cards) available to them to persuade customers to use other forms of payment, including ... offering the customer a discount or rebate, including an immediate discount or rebate at the point of sale."[214] Similarly, Klein et al. claim that "[a] discount for cash and checks is analytically equivalent to a surcharge for credit."[215] [redacted]

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212 See Bradley Examination December 9, 2011, p. 1125, Q. 3203.

213 [redacted]

214 Visa Response, paras 58 and 59. See also MasterCard Response, paras 61 to 64.

215 Klein, et al, Competition in Two-Sided Markets, p. 619.

[redacted]

165. As an initial matter, it is useful to note that this theoretical equivalence argument concedes that surcharges result in lower posted retail prices (which I discuss further in Part 5.3). Suppose two merchants sell gasoline in a city at $1.00 per litre and do not differentiate between cash and credit card sales. Then, one merchant offers a $0.02 discount for cash and the other merchant assesses a $0.02 surcharge for credit card transactions. As a matter of economic theory, it will <u>not</u> be the case that the discounting merchant posts a price of $1.00 (paid by credit card customers) and offers $0.98 for cash customers, while the surcharging merchant posts a price of $1.00 (paid by cash customers) and charges $1.02 for credit card customers. If that were the case, all customers would be better off switching to discounting merchants and no one would patronize the surcharging merchant. Instead, if half of the transactions are cash and half credit, the discounting merchant will post a price of $1.01 (paid by credit card customers) and charge a net of $0.99 to cash customers, while the surcharging merchant will post a price of $0.99 and, with the surcharge, charge $1.01 to credit card customers. The first element of the equivalence argument, then, accepts that retail prices adjust completely to incorporate merchant payment costs. [redacted]

[redacted]

[redacted]

166. But that is not the end of the story. For one thing, this simple scenario assumes that there is only one credit card brand. If there are multiple brands, then a simple "cash discount" by construction assures that there is only a single credit card price, while a credit card surcharge can easily be amended to result in differential surcharges for different card brands or types – generating direct interbrand price competition between card networks at the point of sale, something that is suppressed with a policy of permitting only discounts.[218]

167. In addition, when merchants price credit card transactions differently from lower cost transactions, consumers will react by shifting some of their credit card transactions to cash or other payment methods.[219] As customers increase their use of cash or other payment methods, and reduce their use of credit cards at these two gas stations, the average price paid for gas will be lower than when the gas stations each charged only a single price for credit cards and other payment methods. And, because in the real world customers react differently to surcharges and discounts, the economic effects of the two practices – and the magnitude of the competitive constraint they create on the card networks – differ. As I will show, this economic fact has been long recognized by economists, including those who have consulted for the credit card networks, and by the networks themselves.

168. Originally, merchants were prevented even from offering discounts. When statutory changes were poised to permit merchants in the United States to charge different amounts for credit card and cash transactions, the networks accepted cash discounts but stridently opposed credit card surcharges. In 1980, economist Richard Thaler explained that the networks had an economic incentive to make this distinction because consumer behaviour differs between perceived penalties and rewards of equal magnitude.[220] The testimony of credit card network executives supported Thaler's economic analysis:

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[218] I noted this effect in Frankel, Monopoly and Competition, p. 345. [redacted]

[219] Reporting on the results of a MasterCard sponsored merchant survey, MasterCard consultants Christian Koboldt, Dan Maldoom and Roger Salsas report, "a surcharge on credit card sales would then mainly lead to a substitution into cash sales at the same retailer rather than a loss of sales to other retailers." Christian Koboldt, Dan Maldoom and Roger Salsas, "*How strong are merchant constraints on interchange fees?*", DotEcon Discussion Paper issue 11/01, April 2011, p. 8.

[220] Richard Thaler, "*Toward A Positive Theory Of Consumer Choice*", 1 Journal of Economic Behavior and Organization 39, 45 (1980) ("Credit cards provide a particularly clear example [of the

- Visa explained that "[a]ny surprises [with discounts] would be pleasant ones. This is a key distinction between these two different forms of two-tier pricing.... It is much more difficult to depict surcharges in a positive light, since they represent a penalty to credit purchasers."[221]

[redacted]

- American Express, which had significantly higher merchant discount rates than MasterCard and Visa, explained that "[t]here are those who argue that there is really no difference between a discount for cash and a surcharge for credit card use. That may be true from a strictly theoretical or mathematical viewpoint. But there's a very real difference in fact."[224] Elaborating, an American Express executive explained that "there is... a world of difference between a discount for cash and a surcharge for credit card use. Any similarity exists in theory only because the two are not functionally equivalent in the marketplace"[225] and he criticized those who argued that the two pricing practices were equivalent (so

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economic difference between rewards and penalties]. Until recently, credit card companies banned their affiliated stores from charging higher prices to credit card users. A bill to outlaw such agreements was presented to Congress. When it appeared likely that some kind of bill would pass, the credit card lobby turned its attention to form rather than substance. Specifically, it preferred that any difference between cash and credit card customers take the form of a cash discount rather than a credit card surcharge. This preference makes sense if consumers would view the cash discount as an opportunity cost of using the credit card but the surcharge as an out-of-pocket cost.").

221 Prepared Testimony of Visa U.S.A., Inc., before the Committee on Banking, Finance and Urban Affairs, Subcommittee on Consumer Affairs and Coinage, United States House of Representatives, "Hearing on Credit Card Surcharges," March 27, 1984, pp. 107-08. In his testimony before the U.S. Senate, Visa U.S.A.'s then President Charles Russell was asked, "If you're concerned with confusion and having both cash discount and credit card surcharge programs operating at the same time, how would you feel about prohibiting cash discounts but permitting credit surcharges?" Russell responded, "I think that's a giant step backward... [T]he benefits all seem to favor cash discount as opposed to surcharges." Testimony of Charles Russell, President, Visa U.S.A., Inc., Before the Committee on Banking, Housing and Urban Affairs, Subcommittee on Consumer Affairs, United States Senate, "The Cash Discount Act," February 7, 1984, p. 161.

[redacted]

224 Prepared Testimony of Hugh M. Smith, Senior Vice President, Government Affairs, on behalf of the American Express Co., before the United States House of Representatives, Committee on Banking, Finance and Urban Affairs, Subcommittee on Consumer Affairs and Coinage, "The Cash Discount Act," February 5, 1981, p. 27.

225 Prepared Testimony of Hugh M. Smith, Director, Government Affairs, American Express Co., before the Committee on Banking, Housing and Urban Affairs, Subcommittee on Consumer Affairs, United States Senate, "The Cash Discount Act," February 7, 1984, p. 105.

> both ought to be permitted), stating that "what they're doing is trying to apply some abstract ivory tower theory to the real world, without taking into account what happens in that real world."[226]

169. In other words, there is no real dispute that the ability to surcharge is different from the ability to discount. Moreover, there is no dispute that consumers react more intensely to surcharges because they perceive surcharges as "penalties."[227] As economists at the Federal Reserve Bank of Boston have explained with reference to the U.S. Department of Justice settlements with MasterCard and Visa that permitted more discounting options (but did not address the Networks' no-surcharge rules):

> Since under the Proposed Settlement, the merchants are still not allowed to surcharge, the advertised base price always has to be the *highest* price.
>
> Although cash discounts and card surcharges may have equivalent arithmetic representations in some situations, they are not equivalent from a behavioral perspective. As first shown by Kahneman and Tversky's (1979) work on prospect theory, individuals perceive a bigger impact of losses than of gains, even when the monetary value is the same (a phenomenon known as loss aversion). As a result, consumers are likely to respond differently to discounts than to surcharges even if their value is nominally arithmetically equivalent.
>
> Based on prospect theory, if consumers have to pay a surcharge for credit card transactions, they view the surcharge as a loss and are less likely to use a credit card, whereas if they are offered a discount for using cash or debit, they view the discount as a gain. Thaler (1980) makes this argument specifically about credit card surcharges and cash discounts, arguing that surcharges are perceived as an actual out-of-pocket expense, while discounts are

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226 Statement of Hugh M. Smith, then Senior Vice President, American Express Co., before the Committee on Banking, Finance and Urban Affairs, Subcommittee on Consumer Affairs and Coinage, United States House of Representatives, "Hearing on Credit Card Surcharges," March 27, 1984, p. 131. He further testified, "I also want to challenge the notion that a cash discount and a surcharge for credit card use are equivalent or interchangeable. There is a substantial difference in the marketplace." Id., p. 140.

227 Visa's corporate website states that "Visa does not allow merchants to charge consumers a fee for using a Visa card because we do not believe that cardholders should be penalized for using their cards." http://www.corporate.visa.com/viewpoints/surcharge-index.shtml. In a December 15, 2010 press release concerning this case, Visa stated that that "Visa's no surcharging protection was created specifically to shield consumers from retailers who seek to impose checkout fees and penalize consumers who choose the convenience, security and reliability of Visa over cash and cheques." http://www.visa.ca/en/aboutcan/mediacentre/news/competition-bureau-lawsuit-will-unintentionally-punish-consumers-enrich-large-retailers.jsp.

> perceived as an opportunity cost. Consumers view them differently because consumers are loss averse. If surcharges on credit card transactions are allowed, credit card use may decline, resulting in lower revenues for credit card issuers and networks. This may be why banks and credit card networks are opposed to surcharges.[228]

[redacted]

171. IKEA, which operates stores in many countries (including Canada), has experienced results consistent with this in its operations. IKEA has surcharged credit card transactions in jurisdictions where it is permitted to do so. It found that in the United Kingdom, where it surcharged credit cards (and promoted the fact that it used the revenue to subsidize lower shelf prices on special sale items), 37 percent of credit card transactions shifted to debit cards as a result. In the United States, where surcharges are not permitted, IKEA has offered a 3 percent voucher for use of PIN debit cards redeemable on the customer's next purchase, but found that only 9 percent of credit card transactions migrated to PIN debit. IKEA has concluded that "rebate is a less clear option that is hard to steer."[230]

172. As noted by Schuh et al. in the passage quoted in paragraph 169 above, surcharges permit merchants to promote their lowest available prices. A discount-only rule, however, requires a merchant using that steering or discouragement strategy to advertise and

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228 Scott Schuh, Oz Shy, Joanna Stavins, and Robert Triest, "*An Economic Analysis of the 2010 Proposed Settlement between the Department of Justice and Credit Card Networks*", Federal Reserve Bank of Boston, Public Policy Discussion Paper No. 11-4, http://www.bos.frb.org/economic/ppdp/2011/ppdp1104.pdf (2011), pp. 25-26. See also, Levitin, Adam J., "Priceless? The Economic Costs Of Credit Card Merchant Restraints", 55 UCLA Law Review 1321 (2008) ("Further, these rules [Merchant Restraints] exploit consumers' cognitive bias of reacting differently to mathematically equivalent surcharges and discounts in order to prevent merchants from pricing according to payment system costs.").

[redacted]

230 Martin Welderstrand, IKEA EU Affairs, "Competition in Card Payments", presented on June 22, 2010, at Payments Markets: Theory, Evidence, and Policy at the University of Granada, Spain, p. 12. In Ikea's case, it was hampered also by the inability under network rules to offer point of sale discounts on the immediate purchase to customers using alternative payment cards such as (PIN) debit cards.

list its *highest* prices. This makes it less likely that merchants will avail themselves of a multi-price strategy and therefore puts less competitive pressure on the credit card networks to reduce their fees. In fact, although cash discounts have long been permitted, it has been observed in most regions that very few merchants offer discounts for cash.[231] In Australia, on the other hand, after just a few years many merchants availed themselves of the option to surcharge credit cards. (See Figure 5.2.)

173. In addition to their No-Surcharge Rules, the credit card networks historically enforced "Non-Discrimination" Rules that prohibit merchants from treating customers differently depending on which credit card product the customer presents for payment. Thus, in addition to not being able to establish a list of surcharges for some or all credit card brands to steer customers to lower cost credit cards and other lower cost payment methods, merchants could not offer *any* better treatment to customers presenting a card carrying a competing brand. In particular, historically, a merchant could not offer a discount off of the posted price for any other card product at the point of sale unless the same discount was offered for a Visa card customer as well, thus effectively prohibiting interbrand competition even using discounts.

174. The Code of Conduct accepted by the Respondents in 2010 requires the Respondents to permit merchants to offer discounts for any payment method, including debit cards, and, if they choose, differential discounts across different brands of cards.[232] This represents an incremental improvement in the competitive environment, because (at least conceptually) some merchants might implement a strategy of differential discounts among credit and debit cards presented at the point of sale. But it is unlikely to be adopted widely. Among other things, it does not solve the problem that a merchant wishing to differentiate its pricing between various payment methods and card brands must still advertise its highest prices, while non-discounting competitors can advertise lower prices. Discounting options thus will have a less potent competitive effect than the right to surcharge both because discounts are less likely

231 One exception has been gasoline stations at times of high gas prices, when the interchange fees – being a percentage of the transaction amount – becomes a very high percentage of the retailer's gross margin on a sale. See, e.g., "Gas Prices Hit $4 in Western New York," Feb 26, 2012, http://www.wgrz.com/news/article/157666/37/Gas-Prices-Hit-4-in-Western-New-York- (reporting a $0.10 per gallon discount for cash); "Decision at the pump: Cash vs. Credit," July 22, 2008, http://www.cnn.com/2008/LIVING/personal/07/22/cash.vs.credit/index.html ("Gas stations across the country are increasingly offering discounts for fuel purchases made with cash as high oil prices eat into their profits.").

232 Code Of Conduct For The Credit And Debit Card Industry In Canada – Department of Finance Canada - 2010-05-18, http://www.fin.gc.ca/n10/data/10-049_1-eng.asp.

to be used than surcharges and, as explained above, because discounts have a less significant effect when used than surcharges of the same amount.

5.3 Higher Costs Resulting from the Merchant Restraints are Funded from the Retail Prices Paid by All Consumers

175. Although not directly relevant to the question of whether the Merchant Restraints have an adverse effect on competition (or to the question of whether the Merchant Restraints influence upward or discourage the reduction of Card Acceptance Fees paid by merchants), it bears noting that the Merchant Restraints also harm the public in several ways.

176. Recalling the hypothetical example of the Coca Cola and Pepsi same-price rules described earlier, the imposition of that rule increases the price of the lower cost brand. Prices charged for the higher cost brands might decline, but that outcome is uncertain: the shift of market share to the higher cost brands, combined with the elimination of important competitive constraints, could result in merchants' average cost (across all brands) exceeding the cost for the popular brands in the absence of the rule. Thus, even buyers of the higher cost brand might experience a price increase. Across all customers, however, there is an unambiguous increase in the weighted average price.

[redacted] If competing merchants set prices to reflect average payment cost of 1 percent of the sale amount, reflecting a mix of credit card (at, say, 1.5 percent) and debit card transactions (at, say, 0.5 percent), and then the merchants began to surcharge the more costly credit card transactions, competition would lead them to reduce the posted or advertised (non-credit card) prices.

178. In fact, merchants typically do operate in intensely competitive markets. As economist (and Visa consultant) Benjamin Klein has explained, the retailing sector tends to be "highly competitive" so that gains to merchants are "likely to be largely passed on to consumers

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[redacted]

as part of the competitive retailing process."[234] Of course, the same applies to increased costs imposed by the Merchant Restraints, which are also likely to be largely passed on to consumers as part of the competitive retailing process.

179. The higher average merchant costs resulting from the Merchant Restraints will be reflected in higher average posted retail prices. [redacted]

[redacted]

- "[S]urcharging credit card sales would allow the merchant to reduce the price of cash sales, thereby attracting additional customers from other, non-surcharging merchants who would charge more for cash sales as a result of spreading the cost of credit card acceptance over all prices."[236]

- "If the no-surcharge rule is lifted and price discrimination is costless to merchants, the interchange fee no longer affects the level of payment card services. The merchant price for cardholders is increased and that for noncardholders is decreased."[237]

- "Of course, merchant fees are passed on to consumers, at least in part, in the form of higher costs for goods and services."[238]

- "Although merchants absorb the costs of the discounts they are charged by acquiring banks, some, if not all, of these costs are ultimately passed along to consumers in the form of higher retail prices."[239]

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[234] Benjamin Klein, "*Competitive Resale Price Maintenance In The Absence Of Free Riding*", 76 Antitrust Law Journal 431, 465 (2009).

[redacted]

[236] Christian Koboldt, Dan Maldoom and Roger Salsas, "*How strong are merchant constraints on interchange fees?*", DotEcon Discussion Paper 11/01, April 2011, p. 28.

[237] Jean-Charles Rochet and Jean Tirole, "*Cooperation among competitors: some economics of payment card associations*", 33 RAND Journal of Economics 549, 566.

[238] David Evans and Richard Schmalensee, The Economics of the Payment Card Industry (1993), page xiv.

[239] Id., p. 61.

- "Merchants are likely to pass the extra costs, if any, of card transactions through to consumers in general, that is to cardholders and cash payers altogether... Merchants are likely to pass through cost increases into the retail price."[240]

- "Dr. Schmalensee opined that all consumers are affected by Interchange Fees through higher prices for goods and services."[241]

- "This is not to say that merchants will not pass-through some portion of any reduction in merchant discount fees; even a monopolist would find it profitable to lower prices if its input costs fell."[242]

- "As with other tax-deductible costs that merchants incur in the operation of their businesses (e.g., the costs of goods, rent, labour, advertising, etc.), costs for Merchant Services presumably have to be covered in the prices that merchants charge if they hope to make a profit."[243]

[redacted]

[redacted]

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240 Jean-Charles Rochet and Jean Tirole, "*Externalities and Regulation in Card Payment Systems*," Review of Network Economics, 5(1), pp. 4, 6.

241 Petitioners' Answering Brief, Interchange Issue, Capital One Financial Corporation and Subsidiaries, Petitioners, v. Commissioner of Internal Revenue, Respondent, June 1, 2009, p. 33.

242 Bob Stillman, "*Seven Truths About Regulating Interchange*," The Law and Economics of Interchange Fees and Credit Card Markets, December 8 & 9, 2009, International Center for Law & Economics, p. 14.

243 Visa Response, para 22. See also Bradley Examination December 9, 2011, pp. 1222-24, Qs. 3492-3497, pp. 1231-32, Qs. 3512-15 and VISA00127968 at 968.

[redacted]

181. As Federal Reserve economists have explained:

- "In exchange for the privilege of accepting credit cards, U.S. merchants pay their banks a merchant fee that is proportional to the dollar value of the sale. The merchant's bank, in turn, pays an interchange fee to the consumer's credit bank that is also proportional to the sale. Naturally, merchants seek to pass on this fee to their customers. Merchants may want to recoup the merchant fee only from consumers who pay by credit card. In practice, however, credit card associations impose a 'no surcharge rule' (NSR) that prevents merchants in the United States from doing so. Instead, merchants must mark up the retail price of goods and services for all consumers to recoup the cost of the merchant fee."[245]

- "Competitive merchants already include the cost of payments, such as the merchant fee on credit cards, in their retail price. Because most merchants accept multiple methods of payment but charge one price for all payment methods, the markup in retail prices for payment costs reflects the combined effects of low-cost and high-cost payment methods."[246]

182. [redacted]

[redacted]

245 Scott Schuh, Oz Shy, and Joanna Stavins, "Who Gains and Who Loses from Credit Card Payments? Theory and Calibrations," Research Department, Federal Reserve Bank Boston, presented at The Economics of Payments IV conference at the Federal Reserve Bank New York, March 26, 2010, page 1.

246 Scott Schuh, Oz Shy, Joanna Stavins, and Robert Triest, An Economic Analysis of the 2010 Proposed Settlement between the Department of Justice and Credit Card Networks, Federal Reserve Bank of Boston, Public Policy Discussion Paper No. 11-4, July 8, 2011, http://www.bos.frb.org/economic/ppdp/2011/ppdp1104.pdf, p. 28.

247 [redacted]

[redacted][248]

6. Conclusion

183. The Respondents contend that by enforcing the merchant restraints, they seek to defend consumers from harm.[249] But economic analysis and evidence demonstrates the opposite: the Merchant Restraints eliminate important competitive constraints on the pricing of credit card acceptance services in Canada. As a result, Card Acceptance Fees are higher than otherwise, and, because merchants lack the most effective steering tools, use of costly credit cards is increased, driving merchant costs – and retail prices – higher still.

Date: March 9, 2012

ALAN S. FRANKEL

[248] [redacted]

[249] See, e.g., MasterCard Response, para 96; Visa Response, para 1.

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PRESENT POSITIONS

COHERENT ECONOMICS, LLC,
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COMPASS LEXECON, Chicago, IL.
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Vice President, 1989 - 1996.
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ANTITRUST LAW JOURNAL
Senior Editor, 1999 -
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PROFESSIONAL AND ACADEMIC EXPERIENCE

LECG, Evanston, Illinois.
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UNIVERSITY OF CHICAGO, GRADUATE SCHOOL OF BUSINESS, Chicago, IL, 1983 - 1984.
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UNIVERSITY OF CHICAGO, COMMITTEE ON PUBLIC POLICY STUDIES,
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UNIVERSITY OF CHICAGO, DEPARTMENT OF ECONOMICS, Chicago, IL, 1980 - 1982.
Research Manager for U.S. Environmental Protection Agency contract research project.

Various consulting work, including National Association of Realtors and Synergy Inc., 1981 - 1983.

FIELDS OF SPECIALIZATION

Industrial Organization, Antitrust, Intellectual Property, Applied Econometrics, Regulation, Financial Institutions, Payment Systems, Damages.

PUBLICATIONS

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SPEECHES

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"The MasterCard Decision: An Economic Review," Organization for Economic Cooperation and Development, Paris, France, June 2008.

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"House of Cards: The Economics of Interchange Fees," Presented at *Antitrust Activity in Card-Based Payment Systems: Causes and Consequences*, Federal Reserve Bank of New York, September 2005.

"Dysfunctional Competition in Retail Payment Systems," Presented at *Innovations, Incentives, and Regulation: Forces Shaping the Payments Environment*, Federal Reserve Bank of Chicago, May 2005

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"Anticompetitive Effects of Interchange Fees," Econometrics Society Australasian Meetings, Auckland, New Zealand, July 2001

American Bar Association Antitrust Section, Financial Markets Committee *Brownbag Seminar* on interchange fees, Washington, DC, March 2001

"The Economic Analysis of Intellectual Property Damages," Panel discussion moderator, Chicago, Illinois, October 1998

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"Antitrust and Payment Technologies," presented at Antitrust and Payment Systems, Federal Reserve Bank of St. Louis, May 1995

FELLOWSHIPS

Olin Foundation Fellowship, Center for the Study of the Economy and the State, Graduate School of Business, University of Chicago, 1984.

University of Chicago Graduate Economics Fellowship, 1982 - 1984.

PROFESSIONAL AFFILIATIONS

Member, American Economic Association, 1984 - present.

Associate Member, American Bar Association, 1991 - present. (Section of Antitrust Law, Section of Intellectual Property Law)

TESTIMONY AND OFFICIAL PROCEEDINGS

Joint Report and Deposition in <u>Best Buy Co., Inc., v. AU Optronics Corp., et al., In Re LCD (Flat Panel)</u>

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OTHER

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Exhibit 3

ACKNOWLEDGEMENT OF EXPERT WITNESS

I, Alan S. Frankel, acknowledge that I will comply with the Competition Tribunal's code of conduct for expert witnesses which is described below:

1. An expert witness who provides a report for use as evidence has a duty to assist the Tribunal impartially on matters relevant to his or her area of expertise.

2. This duty overrides any duty to a party to the proceeding, including the person retaining the expert witness. An expert is to be independent and objective. An expert is not an advocate for a party.

Date: March 9, 2012

ALAN S. FRANKEL

Exhibit 4

Public Authority Involvement in Credit and Debit Card Markets: Various Countries

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Federal Reserve Bank of Kansas City
March 2012

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March 2012

Public Authority Involvement in Credit and Debit Card Markets: Various Countries

1. Interchange and Merchant Service Fees

a. Actions taken by public authorities

<table>
<tr><th>Country</th><th>Credit Card</th><th>Debit Card</th></tr>
<tr><td>Argentina</td><td colspan="2">1999: Law 25.065 for Credit Cards is enacted. The law establishes norms that regulate various aspects related to the credit, debit, and retail card systems. Among these norms is the setting of limits on the ability to implement price discrimination in merchant fees.
2005: Law 25.065 is amended with Law 26.010, which requires merchant acquirers to charge the same merchant discount rate to businesses within the same category. The maximum merchant discount rate is set at 3% for credit cards and 1.5% for debit cards.</td></tr>
<tr><td>Australia</td><td>2003: The Reserve Bank of Australia (RBA) mandates Bankcard, MasterCard, and Visa to set interchange fees on a cost-based benchmark.
2009: RBA continues interchange regulation.</td><td>2006: RBA introduces interchange standards for the EFTPOS and Visa Debit systems.
2009: RBA revises EFTPOS interchange fee standard for multilateral interchange fees.</td></tr>
<tr><td>Austria</td><td colspan="2">2003: The Austrian Cartel Court fines Europay Austria, who runs Maestro debit card payment system. The Court declares that Europay committed an illegal cartel with almost all Austrian banks with respect to a provision in the payment card contract and held interchange fees excessively high, which the Court views as an abuse of Europay's dominant position.
2006: Following the European Commission's interim reports on the retail banking industry, Austrian banks agree to review arrangements for setting interchange fees and announce that a reduction can be expected. They will also take steps to foster genuine competition in acquiring between Europay Austria and Visa Austria.
2007: Europay appeals to the Austrian Supreme Court. The Supreme Court confirms the Cartel Court's judgment and increases the fine from €5 million to €7 million, noting "undue enrichment" accrued to Europay Austria during the time of the anticompetitive behavior.</td></tr>
<tr><td>Belgium</td><td colspan="2">2006: The Belgian Competition Council accepts commitments offered by Banksys to have the investigation (which began in 2000) of its allegedly abusive conduct in electronic payment services and debit card terminals markets closed. The commitments include separate contracts for acquiring services and terminals, relaxation of exit terms for terminal rental agreements, and a number of price reductions.</td></tr>
<tr><td>Canada</td><td>2009: In March, the Senate Committee on Banking, Trade and Commerce announces that it moves forward with an investigation of Canada's credit and debit card system. In June, the investigation results are published as a report.</td><td>Mid 1990's: A consent order from the Competition Bureau of Canada allows Interac to set its own interchange fee, but since its establishment, Interac has set its interchange fee to zero.</td></tr>
<tr><td>Chile</td><td colspan="2">2005: The Chilean Antitrust Court admits a complaint filed by the National Economic Prosecutor alleging abuse of a dominant position by Transbank, the acquirer of all credit and debit cards issued in the country. The Court imposes a fine of approximately $56,000. The National Economic Prosecutor requested, among other things, the modification of the Transbank price structure in such a way that it would be public, objective, and based on costs. A partial understanding between the parties finally settles the</td></tr>
</table>

	issue, according to which, Transbank is required to reduce merchant fee ceilings and present a self-regulating plan for setting prices.	
Colombia	2004: The Superintendent of Industry and Commerce, the Colombia competition authority, passes the new Inter-bank Exchange Tariff, allowing merchants to negotiate fee rates with merchant acquirers. 2006: Credibanco (a Visa issuer) is required to exclude some costs included in its fee computation that were judged not to correspond exclusively to payment card services offered to merchants.	
Denmark	1990: The Act of Certain Payment Instruments sets a cap on merchant service charges (MSC) on internationally-branded credit/debit cards issued by Danish banks for domestic transactions at 0.75% of transaction value or 1.25% of transaction value with a minimum of DKK 1.95 on the Internet.	1990: The Act of Certain Payment Instruments sets Dankort MSC to be zero. 2003: Amendment to the Act introduces a positive MSC to Dankort transactions and reduces the fees on Maestro and Visa Electron from 0.75% to 0.4%, with a maximum of DKK 4. 2005: An annual fee per retailer replaces Dankort MSC.
European Union	2002: The European Commission (EC) reaches agreement with Visa to reduce its cross-border interchange fees by December 2007. The benchmark for its interchange fees is to be set at the level of the cost of supplying Visa payment services and cannot exceed the cost of the services which issuing banks provide, wholly or partly, to the benefit of merchants. 2007: In December, EC rules that MasterCard's interchange fees are illegal. 2008: In March, MasterCard files an appeal of the EC decision. 2009: In April, EC and MasterCard reach an interim agreement, setting MasterCard interchange rates at, on average, 0.3% for credit cards and 0.2% for debit cards (effective July 1, 2009). EC also sent a Statement of Objections to Visa asserting its preliminary view that multilateral interchange fees (MIFs) directly set by Visa violate European Antitrust rules (Article 81 EC Treaty and Article 53 EEA Treaty).	
		2010: In April, Visa Europe proposes to cap the weighted average MIF for consumer immediate debit card transactions at 0.2%. The cap is applicable to cross-border transactions within EEA and, separately, to domestic transactions in each EEA country where MIFs are either set directly by Visa Europe (Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, and Sweden) or the Visa Europe cross-border rates would apply by default. In December, EC drops its investigation into interchange fees for immediate debit.
France	1990: The Paris High Court rules that methods for determining interchange fees could be accepted in accordance with the Competition Council's statement of objections. 2011: In July, the French Competition Authority (FCA) closes its investigation concerning interchange fees, by accepting the commitments offered by the Groupement des Cartes Bancaires (a syndicate of banks issuing payment cards). Among other things, the commitment includes a reduction in the interchange fee from 0.47% to 0.3% on average for all cards (debit, differed debit, and credit cards; consumer and commercial cards). The period of the commitments is four years beginning October 1, 2011.	

	During this period, a steering committee charged by the FCA will be in charge of devising a methodology to revise fees at the expiration of the commitments. The FCA turns its attention to the interchange fees set by other payment card systems, including MasterCard and Visa.	
Hungary	2006: Gazdasagi Versenyhivatal (GVH, the competition authority of Hungary) considers intervening in the payment card market. Interchange fees are regarded as too high compared to costs, especially in the case of debit cards. Price discrimination between 'on-us' (acquirer=issuer) and 'foreign' (acquirer≠issuer) transactions is considered to have adverse effects on issuer competition.	
	2008: GVH launches an antitrust probe against several credit card companies, including MasterCard, Visa, and POS operators on suspicions of collusion on prices and practices to keep competitors at bay. 2009: GVH imposes fines upon Visa Europe, MasterCard and top commercial banks, ruling they have inhibited competition by forming an illegal bank card interchange-fee cartel.	
Italy	2010: The Italian Antitrust Authority fines MasterCard and eight banks for allegedly using licensing agreements to keep interchange fees high and passing those charges on to merchants. The order requires MasterCard to provide economic justification for its fees, and banks to revisit the terms of their contracts with merchants. MasterCard and the banks involved are given 90 days to show that the allegedly anti-competitive activities have ceased.	
Israel	2006: The competition authority in Israel reaches an agreement with banks to reduce interchange fees from 1.25% to 0.875% by 2012.	
Latvia	2011: The Latvian Competition Council decides that 22 commercial banks have infringed the Competition Law by participating in the multilateral interchange fee agreements and imposes fines to those banks.	
Mexico	2006: The Bank of Mexico and the Mexican Bankers Association agree to reduce interchange fees.	
Netherlands		2004: The Netherlands Competition Authority (NMa) fines Interpay, which operates the debit card system, and member banks for charging excessive merchant fees for PIN debit transactions. 2005: NMa withdraws the accusation and the fine imposed on Interpay but upholds the fine on the banks.
New Zealand	2007: Proceedings are initiated by the New Zealand Commerce Commission against Visa, MasterCard and member institutions of the two schemes, alleging price-fixing in the setting of interchange fees. 2009: The Commission and Visa (on August 12) and MasterCard (on August 24) agree to settle credit card interchange fee proceedings. The agreements require both	

	networks to alter the scheme rules in New Zealand, including allowing merchants to surcharge, allowing nonbanks to become acquirers, and allowing card issuers to individually set interchange fees (the networks set the maximum interchange fee rates).	
Norway		Zero interchange fee (Bank-Axept). The general position of authorities regarding the introduction of new payment systems in Norway has been that payers should cover costs. This position can be seen as early as in the 1974 report from the Payment Systems Committee.
Panama	2003 - 2004: Under the 1998 banking law, the Superintendent of Banks issues regulations for banks that issue and manage credit cards. These regulations establish procedures for approving a credit card and authorize the charges for commissions and other related items.	
Poland	2007: The Polish Office of Competition and Consumer Protection (OCCP) orders banks to discontinue their multilateral interchange fee agreements. 2008: In November, the Court of Competition and Consumer Protection (CCCP) overturns the OCCP's decision on interchange fees, holding that the participation of 20 banks in an agreement fixing the fee levels does not constitute an infringement of Art 81.1 EC nor equivalent national provision. 2010: In April, the Court of Appeal repeals the CCCP's decision and submitted it back to CCCP for review.	
Portugal	2006: Following the European Commission's (EC) interim reports on the retail banking industry, Portuguese issuers and acquirers meet some of the EC's concerns by reducing domestic interchange fees somewhat and removing preferential bilateral domestic interchange fees.	
South Korea	2005: The Korean Fair Trade Commission rules that BC Card's (South Korea's four-party scheme credit card) joint pricing of merchant service charges is a cartel, imposes a fine of 10.092 billion Korean won, and issues corrective measures. 2011: Given that the Korean Financial Services Commission is considering amending the rules to allow merchants to reject credit cards for small payments, major credit card networks decide to lower interchange fees for small merchants beginning January 1, 2012.	
Spain	2005: The Spanish Competition Tribunal denies authorizing the interchange fee arrangements of the Spanish card schemes. In December, Spanish card networks and merchants reach an agreement – coordinated by the Spanish Ministry of Industry, Tourism and Trade – for interchange fees to be reduced immediately and progressively (effective in November 2006).	

	2009: The maximum limits for credit and debit card interchange fees are extended for the 2009/2010 period. The Council of the National Competition Commission (CNC) concludes that applying the maximum limits deriving from the cost studies to intra-system interchange fees would not be appropriate. 2010: In December, the CNC Council declares the monitoring of the agreement closed to the extent that it expired on December 31, 2010. Since January 2011, Spanish card schemes have been free to decide on the level of the default interchange fees, while still enduring maximum transparency.	
Switzerland	2005: The Swiss Competition Commission and credit card issuers agree to reduce interchange fees from 1.65-1.70% to 1.30-1.35%. 2009: The Commission again opens an investigation into interchange fees for Visa and MasterCard credit cards. 2010: The Commission sets the maximum interchange fee for 2010 at 1.058%.	2009: The Commission opens a preliminary investigation into Maestro's introduction of an interchange fee. 2010: The Commission opens a preliminary investigation into "Debit MasterCard's" introduction of a domestic fallback interchange fee. 2011: The Secretariat of the Competition Commission closes preliminary investigations. It concluds that an interchange fee for Maestro card transactions could violate the Act on Cartels, while an interchange fee for Debit MasterCard might be possible within certain limits—Debit MasterCard market share is less than 15% and the amount of interchange fee, on average, is no more than 0.20 Swiss francs per transaction.
Turkey	2005: The Turkish Competition Authority makes a decision on Interbank Card Centre (BKM)'s clearing commission rate by member banks. The decision states that, in order to grant exemption to the clearing commission formula proposed by the consultancy firm on behalf of BKM, the formula must be adjusted for certain cost items.	
United States		2011: The Federal Reserve Board sets the debit card interchange fee standard for regulated banks whose asset size exceeds $10 billion (at the bank holding company level). Debit card issued by banks with less than $10 billion asset and reloadable prepaid cards are exempted from the interchange fee standard.
Venezuela	2008: In December, Resolución N° 08-12-01 is passed (effective January 2009) which states that the Board of the Central Bank of Venezuela will set the limits on merchant discount rates and trade commissions for payments made by debit and credit for each merchant category; these rates will be reviewed annually.	

b. ***Investigations initiated***

Country	Credit	Debit
Brazil	2006: In May, Banco Central do Brasil (the central bank of Brazil) issues Directive 1/2006, which focuses the payment cards industry (pricing, concentration, profitability, governance, etc.). The Directive does not establish either obligations or prohibitions and does not mandate any sanctions. In June, Banco Central do Brasil's Economic Law Office and the Secretariat for Economic Monitoring agree to cooperate in order to collect payment card industry data and to coordinate public policy actions. In September, payment card industry data collection began. 2009: The Brazilian government proposes to force a reduction in interchange fees and to end dominance by Redecard and VisaNet in the acquirer market. 2010: Banco Central do Brasil publishes *Report on the Brazilian payment card industry*.	
China	2011: The Chinese Ministry of Commerce proposes a cap on interchange fees – 0.3% of the sale up to 100 yuan (US$15 or 12 euro). The proposal also includes a cap for switch fees – China UnionPay (the country's only card network) could not charge merchants more than 0.05% on credit card sales and a maximum of 5 yuan per transaction.	
Finland	Mid 2000s: The Finnish Competition Authority launches investigations into interchange fees on EMV cards (0.31%). Traditional magnetic stripe cards charge merchants between zero to 0.05 euro per transaction.	
Germany	2006: The Bundeskartellamt (the competition authority in Germany) receives a legal complaint from the German Retail Association, alleging that fees charged to merchants for MasterCard and Visa transactions, which average 150 basis points, prevent widespread credit card acceptance in Germany.	
Norway	2004: On the initiative of the Ministry of Finance, Kredittilsynet (the financial supervisory authority) establishes a project group to report on competitive conditions in the Norwegian market for international payment and charge cards. 2005: Norges Bank (the central bank of Norway) states in its 2005 Annual Report that the regulation of interchange fees is also being considered.	
South Africa	2004: The Task Group for the National Treasury and the South African Reserve Bank recommends that the Competition Commission should investigate the possibility of a complex monopoly in the governance and operation of the national payment system. 2006: Following the findings in the report *The National Payment System and Competition in the Banking Sector*, the Commission begins a public inquiry into bank charges and access to the payment system. 2008: In December, the inquiry report is published, recommending regulation in the setting of interchange fees.	

United Kingdom	2005: In September, the Office of Fair Trading (OFT) finds that MasterCard's interchange fee arrangements are illegal. In October, OFT issues a statement of objections against Visa regarding its agreement on multilateral interchange fees. 2006: In June, the OFT's finding on MasterCard is appealed and OFT consents to its decision being set aside by the Competition Appeal Tribunal, due to a change made by MasterCard in setting interchange fees. In February, OFT launches a new investigation against MasterCard.	

Annex. Zero interchange fee schemes

Country	Credit	Debit
Belgium		Zero interchange fee (Bancontact/Mister Cash)
Canada		Zero interchange fee (Interac)
Denmark		Zero interchange fee (Dankort)
Finland		Zero interchange fee (Pankkikortti)
Luxembourg		Zero interchange fee (Bancomat)
Netherlands		Zero interchange fee (PIN)
New Zealand		Zero interchange fee (EFTPOS)
Norway		Zero interchange fee (Bank-Axept)

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2. Surcharges and Discounts (*Actions taken by public authorities*)

Country	Credit	Debit
Australia	2003: Prohibition on surcharging is lifted. 2012: The Reserve Bank of Australia has a proceeding underway to permit card networks to cap amount of credit card surcharges at amounts reasonably related to merchant cost of card acceptance.	2006: Prohibition on surcharging is lifted for Visa and MasterCard signature debit card transactions.
Austria	As of 2011, surcharging is prohibited but offering discounts is allowed.	
Belgium	As of 2011, surcharging is allowed.	
Bulgaria	As of 2011, surcharging is allowed but the payment instruments for which surcharges may be requested are specified.	
Canada		1996: Prohibition on surcharging for Interac transactions is lifted through a consent order by the Competition Bureau of Canada.
	2010: The Ministry of Finance's code of conduct for credit and debit cards requests that payment card network rules ensure that merchants are allowed to provide discounts for different methods of payment. 2012: The Commissioner of Competition brings a case challenging MasterCard and Visa no-surcharge rules and honor-all-cards rules. A hearing is currently scheduled to begin May 2012.	
Check Republic	As of 2011, surcharging is allowed.	
Cyprus	As of 2011, surcharging is allowed but the payment instruments for which surcharges may be requested are specified.	
Denmark	2011: In October, the prohibition on surcharging for domestic credit cards is lifted.	
Estonia	As of 2011, surcharging is allowed.	
European Union	2007: The Payments Services Directive (PSD) does not allow payment service providers to prevent the payee from requesting from the payer a charge or from offering him a reduction for the use of a given payment instrument. However, the PSD allows Member States to forbid or limit the right to request charges, taking into account the need to encourage competition and promote the use of efficient payment instruments. 20009-2010: The PSD is implemented into national law.	
Finland	As of 2011, surcharging is allowed but the amounts of surcharges are required to be reasonable and not to exceed the payee's actual costs.	
France	As of 2011, surcharging is prohibited but offering discounts is allowed.	
Germany	As of 2011, surcharging is allowed.	
Greece	As of 2011, surcharging is prohibited but offering discounts is allowed.	
Hungary	As of 2011, surcharging is allowed but the payment instruments for which surcharges may be requested are specified.	
Ireland	As of 2011, surcharging is allowed.	
Italy	As of 2011, surcharging is prohibited and offering discounts is limited to certain payment instruments.	

Latvia	As of 2011, surcharging is prohibited but offering discounts is allowed.
Lithuania	As of 2011, surcharging is prohibited but offering discounts is allowed.
Luxembourg	As of 2011, surcharging is prohibited but offering discounts is allowed.
Malta	As of 2011, surcharging is not prohibited.
Mexico	1993: The Mexican Competition Commission reaches an agreement with a number of banks, which forbids banks from prohibiting merchants from offering discounts for cash payments in their acquiring contracts.
Netherlands	1997: Prohibition on surcharging is lifted.
New Zealand	2009: Agreements between the Commerce Commission and Visa/MasterCard require Visa/MasterCard to allow merchants to surcharge.
Poland	As of 2011, surcharging is allowed.
Portugal	As of 2011, surcharging is allowed but the amount of surcharges is determined either by legislation or the payee.
Romania	As of 2011, surcharging is prohibited but offering discounts is allowed.
Slovakia	As of 2011, surcharging and offering discounts are limited to certain payment instruments.
Slovenia	As of 2011, surcharging is allowed.
Spain	As of 2011, surcharging is allowed.
Sweden	1995: Prohibition on surcharging is lifted. As of 2011, surcharging is generally prohibited but offering discounts is allowed.
Switzerland	2005: Prohibition on surcharging is lifted.
United Kingdom	1989: Prohibition on surcharging is lifted. 2011: In December, HM Treasury announces that the government will ban excessive surcharges on all forms of payment, and extend the ban across most retail sectors. The announcement also states that the UK will become the first European country to act by implementing forthcoming European legislation early to ban this practice before the end of 2012.
United States	2010: The Justice Department reaches settlement with Visa and MasterCard to eliminate rules preventing merchants from offering consumers discounts, rewards, and information about card costs. 2011: In July, the settlement is approved by a federal judge.

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March 2012

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CT-2010-010

THE COMPETITION TRIBUNAL

IN THE MATTER OF the *Competition Act*, R.S.C. 1985, c. C-34, as amended;

AND IN THE MATTER OF an application by the Commissioner of Competition pursuant to section 76 of the *Competition Act*;

AND IN THE MATTER OF certain agreements or arrangements implemented or enforced by Visa Canada Corporation and MasterCard International Incorporated.

BETWEEN:

THE COMMISSIONER OF COMPETITION

Applicant

- and -

VISA CANADA CORPORATION and
MASTERCARD INTERNATIONAL INCORPORATED

Respondents

- and -

THE TORONTO-DOMINION BANK
THE CANADIAN BANKERS ASSOCIATION

Intervenors

EXPERT REPORT OF ALAN S. FRANKEL
MARCH 9, 2012

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