EXHIBIT 4

REDACTED

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER – FILED UNDER SEAL

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

IN RE PAYMENT CARD INTERCHANGE FEE AND MERCHANT DISCOUNT ANTITRUST LITIGATION **This Document Applies to: All Cases.**	**No. 05-MD-1720 (JG) (JO)**

REPLY DECLARATION OF ALAN S. FRANKEL, Ph.D.

RELATING TO THE PROPOSED CLASS SETTLEMENT

REDACTED

1. Introduction

1. I submitted a declaration[1] ("Frankel Declaration") concerning elements of the proposed class settlement[2] ("Proposed Settlement") on April 10, 2013. I previously submitted a report ("Frankel Report") and a rebuttal report ("Frankel Rebuttal Report") concerning liability and damages issues in this case.[3]

2. In the Frankel Declaration, I explained the bases for my three main opinions: (1) merchants benefit from the ability to steer customers to less costly payment methods, an ability that is enhanced by the Proposed Settlement; (2) the relief provided by the Dodd-Frank Act and the DOJ Settlement is helpful to merchants, and the Proposed Settlement's preservation of that relief is therefore valuable; and (3) the ability to surcharge credit card transactions, refuse to accept cards (or surcharge them) at particular banners, and the requirement for MasterCard and Visa (together, "the Networks") to negotiate with buying

---

1 Declaration of Alan S. Frankel, Ph.D. Relating to the Proposed Class Settlement, April 10, 2013 ("Frankel Declaration").

2 In Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, No. 05-MDL-1720 (JG)(JO) Definitive Class Settlement Agreement.

3 Report of Alan S. Frankel, Ph.D., July 9, 2009 ("Frankel Report"); Rebuttal Report of Alan S. Frankel, Ph.D., June 22, 2010 ("Frankel Rebuttal Report"). My background and qualifications regarding the issues in this case are also described in those reports. Since submitting my Rebuttal Report, I have submitted two reports and testified as an expert on behalf of Canada's Commissioner of Competition in a case against MasterCard and Visa regarding certain of those networks' merchant rules. I also spoke about related issues at conferences hosted by the Federal Reserve Bank of Kansas City in March 2012, and The Clearing House Association in New York in November 2012. I attach my current CV as Exhibit 1. In preparing this declaration I drew on my extensive research into these issues as described in my earlier reports in this case, the materials cited therein, and in my published writings. I attach a list of materials that I specifically relied on in preparing this declaration in Exhibit 2.

groups of merchants in good faith will generate significant benefits for merchants by providing additional, effective means of constraining the Networks' market power.[4]

3. Professor Jerry Hausman has filed a report[5] ("Hausman Report") addressing certain liability issues, the Proposed Settlement, and my conclusions regarding the likely economic effects of certain aspects of the Proposed Settlement, particularly the reform of MasterCard and Visa no-surcharge rules. Professor Hausman also describes what he believes would be more effective relief for merchants (and presumably believes would be a better settlement) – elimination of the Defendants' "honor-all-cards" rules.[6]

4. In Part 2, I address the standard by which I evaluated the Proposed Settlement. Professor Hausman evaluates the Proposed Settlement with reference to a standard of whether it will "eliminate [the Networks'] market power" and prevent interchange fees from being set "above the competitive level."[7] He does not explain what he means by "the competitive level" of interchange fees.[8] In any event, I did not evaluate the effects of the Proposed Settlement with respect to a benchmark of whether it will eliminate the Defendants' market power and will

---

4 Frankel Declaration, ¶¶4-6.

5 Report of Professor Jerry Hausman, In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, May 28, 2013 ("Hausman Report").

6 Professor Hausman appears to be advocating elimination of the Defendants' "honor-all-cards" rules as an alternative to the settlement's modification of the Defendants' no-surcharge rules, but his report is somewhat ambiguous on this point. If he were advocating elimination of the Defendants' "honor-all-cards" rules in addition to the relief contained in the Proposed Settlement, that would not alter my analysis or conclusions in a substantive way.

7 Hausman Report, ¶53. MasterCard's honor-all-cards rules require that a merchant that accepts any MasterCard branded credit card accept all such credit cards, and merchants that accept any MasterCard branded debit card accept all such debit cards. Visa also has a similar honor-all-cards rule.

8 To the extent that he defines the "competitive" interchange fees to be those which would result from the absence of the honor-all-cards rule, it would be merely a tautology for him to assert that his proposal (to eliminate the honor-all-cards rule) would result in the competitive level of interchange fees.

REDACTED

result in perfectly competitive pricing to merchants for acceptance of MasterCard and Visa credit cards but rather "whether that relief will benefit the members of the class by reducing the cost to merchants to accept MasterCard or Visa credit card payments from their customers."[9]

5. In Part 3, I review Professor Hausman's analysis of the "business stealing" effect, how that effect contributed to market power, and how it can make surcharging more difficult and less likely for some merchants. I explain, however, that surcharging generates less of a business-stealing effect than the all-or-nothing choice that merchants have had until now, so surcharging can be expected to generate enhanced competition. I also explain why surcharging is likely to generate less of a business-stealing problem for merchants than the remedy that Professor Hausman would prefer, the elimination of the Networks' "honor-all-cards" rules.

6. In Part 4, I show that the available economic evidence supports my conclusion that the ability to surcharge is valuable to merchants. In particular, with interchange fees as high as they are in the United States, merchants are likely to surcharge; consumers react to surcharging by switching in significant numbers to alternative non-surcharged cards and payment methods; and the ability to surcharge constrains the level of fees that card networks charge to merchants. Professor Hausman disagrees that merchants will surcharge or that surcharges will constrain the level of interchange fees, but I explain that his conclusions rest on an incomplete and flawed review of the evidence. I also discuss Professor Hausman's opinions concerning state surcharge-related statutes and American Express's policy. Professor Hausman believes that those factors eliminate any benefits that otherwise might be derived from the

9 Frankel Declaration, ¶1.

elimination of the Networks' no-surcharge rules. I disagree, and I explain why those factors affect but do not eliminate the benefits to merchants from the Proposed Settlement.

7. In Part 5, I respond to criticisms by Professor Hausman and by Professor Michael Weisbach of my projections which show that even modest amounts of surcharging and responses to surcharging can generate billions of dollars in savings to merchants. I explain that their criticisms do not alter my conclusion or the usefulness of my projections for illustrating the basis for my conclusion. I respond in more detail to their criticisms in Appendix A.

8. I end in Part 6 with a brief conclusion.

2. Professor Hausman's Claim That The Proposed Settlement Will Not "Eliminate" The Defendants' Market Power Or Establish "Competitive" Interchange Fees Is Irrelevant To My Conclusions

9. The standard by which the reasonableness of a settlement is evaluated is a legal issue, not an economic one. Professor Hausman recommends reforms to MasterCard and Visa honor-all-cards rules that he conjectures (in combination with technological advances) could result in the "elimination of [those Networks'] market power in the future."[10] In contrast to his opinion concerning the effects of the honor-all-cards rule, Professor Hausman predicts that "modification of the no surcharge rule would not eliminate [the Networks'] market power, and interchange would continue to be above the competitive level."[11]

10. I was neither asked, nor did I address, whether the Proposed Settlement would eliminate MasterCard's or Visa's market power altogether. Instead, I explained in my previous

[10] Hausman Report, ¶10.

[11] Hausman Report, ¶53.

REDACTED

declaration that my assignment was "to evaluate the likely economic impact of the relief with respect to merchant rules contained in the [Proposed Settlement], and, in particular, whether that relief will benefit the members of the class by reducing the cost to merchants to accept MasterCard or Visa credit card payments from their customers."[12] I concluded that the Proposed Settlement will generate benefits for merchants and *constrain* MasterCard's and Visa's market power. When evaluating the value of the Proposed Settlement to merchants, I concluded that it was reasonable to assume that the additional constraints could lead to a reduction of roughly 1-4 basis points (0.01% - 0.04%) per year in the average level of interchange fees, not that competitive forces would speedily drive credit card merchant discount rates to competitive levels. Indeed, MasterCard and Visa interchange fees have increased significantly over the past fifteen years. Slowing and reversing that trend would represent a substantial benefit to merchants relative to what they otherwise would pay even if merchants do not quickly obtain fully competitive prices for card acceptance services. Professor Hausman's straw man argument and extreme standard miss the point of my analysis.

3. Professor Hausman's Analysis Of No-Surcharge Rules Is Inconsistent With His Analysis Of Honor-All-Cards Rules

11. In this part, I review what Professor Hausman refers to as the "business stealing" effect, how it contributes to the Networks' market power, and how surcharging generates less of a business-stealing effect than declining a Network's cards altogether and thereby reduces a Network's market power. Professor Hausman contends that eliminating the Networks' honor-all-cards rules, to permit merchants to selectively accept credit cards by some issuers but not

[12] Frankel Declaration, ¶1.

REDACTED

others, would reduce the Networks' market power. He fails to note that surcharging is likely to involve less of a business-stealing effect than selective acceptance and is therefore more likely, not less, to constrain the Networks' market power.

12. Professor Hausman agrees with me about many of the economic features of the marketplace. Although his terminology differs somewhat from mine, Professor Hausman agrees that MasterCard and Visa each possesses significant market power with respect to general purpose card network services.[13] One of the sources for that market power is what Professor Hausman refers to as a "business stealing" effect that causes merchants adopting a cost-reducing strategy to lose sales and profits to merchants that do not adopt such a strategy. To explain, with the Anti-Steering Rules in place, a merchant's main option with respect to MasterCard or Visa credit cards to avoid paying high fees was to discontinue to accept one (or both) brands. For example, suppose that Visa increased its merchant fees so that they cost significantly more to a merchant than MasterCard credit cards. If the merchant considered whether to stop accepting Visa credit cards, it would have to take into consideration two main issues. First, some of the merchant's customers who prefer to use a Visa credit card would likely continue to patronize the merchant but use another credit card, debit card, checks, or cash when completing transactions. But other customers might switch to a competing

[13] Frankel Report, Part 4; Hausman Report, ¶¶10, 27. Unlike me, Professor Hausman contends that all debit cards are in a single relevant market, and that Visa, but apparently not MasterCard, possesses market power in that market. Hausman Report, ¶41. I have explained in detail in my earlier reports the bases for my opinions regarding market definition and market power. Although Professor Hausman's reasoning concerning the relevant debit card market(s) is flawed, and MasterCard, like Visa, possesses market power over the acceptance of signature debit transaction, issues concerning market definition and market power are not directly relevant to the subjects I addressed in the Frankel Declaration. I note, however, that the Proposed Settlement provides relief with respect to MasterCard debit cards. In particular, should current Federal Reserve regulation of MasterCard debit card interchange fees terminate merchants will have the option to surcharge MasterCard debit card transactions under the terms of the Proposed Settlement.

REDACTED

merchant that continues to accept Visa credit cards. Merchants that continue to accept Visa cards "steal business" from those that do not.[14] Professor Hausman and I agree that, for many merchants, losing sales can be relatively costly because merchants tend to earn significant incremental profits on those sales.[15] Declining to accept Visa credit cards would only be profitable if the savings from lower payment costs exceed the lost profits on sales to customers who defect to competing merchants. For most typical merchants, this analysis leads to a conclusion that refusing to accept Visa (or MasterCard) credit cards is not an economically viable strategy.

13. Professor Hausman argues that the same business-stealing effect that deters merchants from dropping acceptance of either MasterCard or Visa credit cards will also deter merchants from *surcharging* credit card transactions.[16] Using a similar analysis as described above for refusing to accept a brand of cards altogether, Professor Hausman notes that if enough customers defect from a merchant that surcharges the brand carried on the customers' preferred credit card to merchants that do not surcharge, then surcharging will not be profitable.

14. Professor Hausman's analysis is incomplete. I explained in my Declaration that the business-stealing effect can create a "first mover disadvantage" for some merchants that

---

14 Merchants would be better off if they could coordinate their acceptance decisions. Without coordination, all end up accepting the card and none gain this "business-stealing" benefit relative to other merchants. While bank interchange fee income was determined on behalf of all banks collectively through MasterCard and Visa, merchants could not coordinate. The Proposed Settlement includes a provision designed to facilitate merchant coordination in negotiating with MasterCard and Visa. Frankel Declaration, Part 4.5.

15 Hausman Report, ¶¶44, 66.

16 Hausman Report, ¶¶44, 76.

REDACTED

may make them reluctant to be among the first to surcharge credit cards.[17] There is an important distinction between the effects on a merchant of dropping a brand of credit cards altogether and accepting that brand of credit cards with a surcharge. As I explained in my initial report, "[a]lthough merchants are generally reluctant to stop accepting cards because of the possibility of lost sales, there is less risk of such lost sales from surcharging."[18] If a merchant drops acceptance of a Network's cards, the merchant cannot accept any transactions under any terms from customers using that Network. If the customer does not carry a credit card that the merchant continues to accept, or the customer has strong preferences to use a particular card, the customer may be likely to patronize a different, less preferred merchant (in order to continue using the cardholder's preferred, or only, credit card). If, on the other hand, the merchant continues to accept the Network's cards with a surcharge, then some customers who prefer to patronize the surcharging merchant will continue to do so and pay the surcharge (in which case the merchant also obtains the additional surcharge revenue to defray the cost of card acceptance) rather than switch to another merchant. By surcharging costly credit card transactions, the merchant can also profitably offer lower posted prices to customers who use lower cost payment brands and methods.[19] Lower posted prices will tend to increase the merchant's sales and profits on sales to users of lower cost payment methods such as debit cards and cash.

17 Frankel Declaration, Part 4.1.1.

18 Frankel Report, ¶184.

19 Frankel Rebuttal Report, Part 4.6.2.

REDACTED

15. Surcharging the use of a card does not eliminate the business-stealing effect, but it reduces that effect relative to not accepting a card thereby increasing the Networks' loss of transactions as they increase their merchant fees – i.e., surcharging reduces the Networks' market power. The *ability* to surcharge thus creates a deterrent to the Networks from increasing their fees that does not exist when merchants' only choice is whether or not to accept each credit card brand.

16. Professor Hausman agrees that MasterCard and Visa have maintained their market power through use of various "restrictive policies."[20] Professor Hausman further agrees that merchants would benefit further by obtaining additional means to intensify competition faced by MasterCard and Visa. But Professor Hausman focuses on the effects of the hypothetical elimination of the Networks' honor-all-cards rules. Professor Hausman argues that elimination of the Networks' honor-all-cards rules, so that a merchant could selectively accept a Network's cards issued by some banks but not others, or the Network's standard credit cards but not the Network's "premium" credit cards, would lead to lower interchange fees.[21]

17. Although some merchants might selectively accept only some of the Networks' cards (if they were permitted to do so), the ability to surcharge is more likely to be used or credibly threatened and therefore a more effective steering tool for merchants. This is because, although Professor Hausman addresses the business-stealing problem that enhances the Network's market power with respect to refusal of acceptance or surcharging, he neglects

[20] Hausman Report, ¶47.

[21] Hausman Report, ¶¶48-52.

to consider business stealing when he discusses selective acceptance. Professor Hausman reasons that if there were no honor-all-cards rules, an individual merchant could refuse to accept the cards from an individual Issuer unless that Issuer agreed to accept lower interchange fee rates. In Professor Hausman's opinion, this would be sufficient to reduce interchange fees although he does not say whether it would attain his own standard of establishing "competitive" interchange fees. But the "business-stealing" problem confronting merchants from surcharging is also present were a merchant to consider dropping acceptance of a particular Issuer's credit cards following the hypothetical elimination of the honor-all-cards rule. Indeed, the problem could be worse because the likelihood of a given customer leaving without making a purchase would be higher if the merchant did not accept a card carried by the customer than if the merchant accepted the card with a surcharge. If the customer lacks any other payment method, then the customer is certain to leave if the merchant does not accept the card, while with a surcharge some of those customers will stay and pay the surcharge. Similarly, some customers will choose to leave even if they have alternative payment mechanisms if they cannot use their preferred card, but, again, some of those customers would remain and pay the surcharge if that were an option.

18. Ultimately, using any steering strategy, a merchant must compare the lost profits from customers who have no accepted means of payment available (or who defect to other merchants to use a preferred credit card) to the savings resulting from customers who continue to patronize the merchants at a lower cost and additional customers attracted to the merchant due to its ability to offer lower prices. Some merchants might conclude that selective acceptance is a viable strategy. But because surcharging offers an additional option to

REDACTED

customers – to continue using their preferred card with a surcharge – it can be expected to result in a reduced probability of losing a sale to an affected customer along with the resulting profit from that sale. If, as Professor Hausman contends, the ability to adopt selective acceptance would be likely to benefit merchants, then so will the ability to surcharge.[22]

4. The Evidence Shows That The Ability To Surcharge Is Valuable To Merchants

19. In my initial declaration, I reached the following conclusions relating to how merchant surcharging operates as a competitive tool to reduce costs and constrain the Networks' market power:

a. Merchants are more likely to apply surcharges to a brand or type of credit card transactions as the level of merchant fees for accepting those cards increases.[23]

b. Consumers do not like to pay surcharges and often switch to other credit card brands or payment methods to avoid paying surcharges.[24] Merchants that surcharge thus benefit directly by shifting a significant number of transactions to lower cost payments and by recovering the fees they pay to accept high cost credit cards from the customers who choose to use them.

c. The business-stealing effect is a negative consequence to merchants that surcharge credit card transactions: some customers will defect to non-surcharging merchants. This will slow or deter the adoption of surcharging by some, but not all, merchants when merchant fees are at high levels, such as they are in the United States.[25]

d. When cardholders switch to non-surcharged payments, credit card networks and Issuers lose transaction volume and fee revenue. Networks therefore have an

---

[22] Separately, Professor Hausman argues that the state statutes which may restrict surcharging and American Express's policies with respect to surcharging reduce the potential effectiveness of surcharging. Hausman Report, ¶54. I discuss those issues in Part 4.4.

[23] Frankel Declaration, ¶33.

[24] Frankel Declaration, ¶40

[25] Frankel Declaration, ¶36.

economic incentive to set merchant fees at lower levels if merchants can surcharge than if merchants cannot surcharge.[26]

e. All merchants tend to benefit from the ability to surcharge, whether they surcharge or not, because of the constraining effect that merchants' collective ability to surcharge has on the level of interchange fees and network fees established by the card network.[27] Merchants also benefit to the extent that consumers' general preferences shift from using higher cost, more frequently-surcharged credit cards, to lower cost payment cards and methods (e.g., debit cards).[28]

f. To the extent that statutes in some states restrict merchants' ability to surcharge credit card transactions, that will reduce, but not eliminate, the benefits to merchants from gaining the ability to surcharge.[29] Similarly, to the extent that American Express's "non-discrimination" policy persists, that policy will reduce, but not eliminate, merchant benefits from the ability to surcharge credit card transactions.[30]

20. In my Declaration, as with my earlier reports, I supported my analysis of the effects of relaxing the no-surcharge rules with available evidence from the record in this case and from jurisdictions where surcharging has been permitted. Professor Hausman agrees that surcharging can, in principle, benefit merchants and constrain interchange fee rates.[31]

---

26 Frankel Declaration, Part 4.1.3.

27 Frankel Declaration, ¶44.

28 Frankel Declaration, ¶69.

29 Frankel Declaration, Part 4.6.1.

30 Frankel Declaration, Part 4.6.2.

31 Hausman Report, ¶76. Professor Hausman supported abolition of the no surcharge rule in New Zealand and reached conclusions similar to mine. See, e.g., Brief of Evidence of Professor Jerry Hausman, May 4, 2009, in Commerce Commission v. Cards NZ Limited et al., ¶5.2 ("Evidence from Australia demonstrates that some merchants will levy surcharges for credit card use to recover the MSFs when the 'no surcharge' rule is eliminated. If the no surcharge rules were relaxed, a significant number of consumers would switch to other lower cost payment vehicles, e.g. credit cards which did not have a surcharge. The result would be lower merchant costs since merchant acquirers would compete to keep their MSFs low so that their transactions would not be surcharged, and this business strategy would in turn place competitive pressure on issuers to keep any interchange fees low so that transactions using their cards would not be singled out for surcharge. Thus, an increase in competition would occur if the Visa and MasterCard no surcharge rules were eliminated..." "The least cost acceptance vehicle for many merchants is [debit cards]. The use of [debit cards] will increase if surcharges are levied on credit card transactions. Also, I would expect the usage of credit cards

REDACTED

However, in this case Professor Hausman disagrees with my interpretation of some of that evidence and concludes that surcharging in the United States is unlikely to occur or to be effective in eliminating Visa and MasterCard's market power. In the remainder of this Part, I review the main sources of evidence concerning the effectiveness of merchants' ability to surcharge and Professor Hausman's interpretation of that evidence. I explain that the evidence supports my conclusion that the ability to surcharge is beneficial to merchants.

4.1 Many Merchants Surcharge When Merchant Fees Are At Levels Prevailing For MasterCard And Visa Credit Card Acceptance In The United States

21. In my reports and Declaration, I concluded that economic incentives and common sense suggest that the likelihood that merchants will surcharge increases with the level of merchant fees that they pay to accept a particular brand of cards.[32] Evidence to support this conclusion included acknowledgements of this effect by MasterCard,[33] an Australian Bank,[34] Defendants' expert Professor Klein,[35] and Defendants' expert Professor Topel.[36] In addition, I noted that surcharging and discounting were found in European merchant surveys to be more common in the Netherlands, where merchant fees were higher,

---

with lower [merchant fees] to increase because surcharges on those cards would be lower that the surcharges on cards with higher [merchant fees]."

32 Frankel Declaration, ¶33; Frankel Report, ¶¶117, 184; Frankel Rebuttal Report, ¶265.

33 "Payments System Regulation: Response by MasterCard Worldwide to the Issues for the 2007/08 Review," (Submission to the Reserve Bank of Australia), August 31, 2007, pp. 16-17 ("Merchants will have a higher incentive to surcharge the higher merchant fees are[...] An increase in merchant service fees will clearly raise the gains from surcharging relative to the costs, and hence make it more likely that surcharging will occur.").

34 Letter of 31 August 2007 from Westpac Banking Corporation to Michelle Bullock, Head of Payments Policy Department, Reserve Bank of Australia, p. 2.

35 Expert Report of Dr. Benjamin Klein, December 14, 2009, ¶106 ("[A] higher interchange fee may increase merchants' incentives to steer cardholders away from using the payment card...").

36 Deposition of Robert H. Topel, Ph.D., April 20, 2010, p. 187.

REDACTED

than in Sweden, where merchant fees were lower.[37] In Australia, surcharging is more common for higher cost cards such as American Express than for lower cost cards such as MasterCard or Visa.[38]

22. I also concluded that surcharging was likely to occur in the United States in the absence of rules prohibiting it if the Networks did not reduce the level of their interchange fees. The Networks' interchange fee rates in the United States are among the highest in the world, and substantially higher than any other country in which surcharging was permitted as of 2008.[39] I also cited a study prepared by consultants for Visa that concluded that "[i]f the no-surcharge model was rescinded in the United States, it could lead to a significant reduction in interchange revenues. ... A large proportion of merchants would probably start surcharging."[40]

4.1.1 In Australia, Merchants Commonly Surcharge Cards That Carry Merchant Fees Similar To The Networks' Cards In The United States

23. The experience with credit card reform in Australia, including the elimination of no-surcharge rules in that country, provides a particularly rich source of data and information. The Reserve Bank of Australia ("RBA") – the country's central bank – used its regulatory authority to permit merchants to surcharge credit card transactions beginning in 2003. The results support my conclusions that surcharging is more likely as the level of merchant fees

---

37 Frankel Declaration, ¶33.

38 East & Partners, Merchant Surcharging in Australia: Market Analysis Report Addendum for Friedman Law Group LLB [sic], March 2007, Table 2 ("a merchant who applies surcharges for a specific card type is three times more likely to surcharge AMEX than Diners cards and almost eight times more likely to surcharge AMEX compared to Visa cards.") Note that Diners is accepted by far fewer merchants than American Express.

39 Expert Report of William Wecker, December 14, 2009, Figure 1.

40 Frankel Rebuttal Report, ¶266, citing OC&C Strategy Consultants, "Visa – Litigation and the Changing Landscape – A Time for Strategy," January 2006, VUSAMDL1-07908117.

increases and that surcharging is likely at the level of merchant fees prevailing in the United States.

24. At all times since 2003, the average cost to merchants in Australia to accept an American Express or Diners Club card has significantly exceeded the cost to merchants to accept a MasterCard or Visa credit card. The RBA also began to regulate MasterCard and Visa credit card interchange fee rates in 2003. Since the beginning of 2004, the cost to merchants to accept American Express cards has exceeded the cost of accepting MasterCard or Visa credit cards by an average of 1.2% of the purchase amount.[41] As a result, merchants in Australia have been far more likely to surcharge American Express card transactions than MasterCard and Visa credit card transactions. A survey conducted by East & Partners in Australia found that 39.1% of 2,243 merchants surveyed applied surcharges to at least some of their credit card transactions in June 2013.[42] Among the 33.3% of merchants that accepted American Express cards,[43] however, 78.1% applied surcharges to American Express cards.[44] A similar 79.2% of (far less numerous) merchants that accept Diners Club cards, another expensive brand, surcharge those cards.[45] I discuss Diners Club further in Part 4.3.

---

41 Reserve Bank of Australia Statistical Release C3, "Average Merchant Fees for Debit, Credit and Charge Cards," http://www.rba.gov.au/statistics/tables/xls/c03hist.xls (accessed June 22, 2013). Professor Hausman inaccurately describes the trend in this differential cost. Hausman Report, ¶80. I discuss this trend further in Part 4.3.

42 East & Partners, "Australian Merchant Payments: Market Analysis Report," June 2013 ("East & Partners, June 2013 Report"), Table 25.

43 Id., Table 11.

44 Id., Table 31.

45 Id.

25. American Express in Australia is a useful benchmark for the likelihood that merchants would want to surcharge MasterCard and Visa credit card transactions in the United States. That is because American Express has charged merchants an average of 2.11% of the transaction amount to accept American Express cards since December 2003.[46] Merchants pay even more than this – roughly 2.34% – in the United States to accept MasterCard and Visa credit cards (as of December 2009).[47]

26. I noted in my Declaration that by December 2010, the RBA reported that 30% of Australian merchants overall were surcharging at least some credit card transactions.[48] By June 2012, the proportion of merchants surcharging credit card transactions had risen to 36% of surveyed merchants.[49] Figure 1 below updates Figure 1 in my Declaration. In addition, the 2013 update to the survey used by the RBA shows, as I noted above, that 39.1% of merchants now surcharge in Australia. Professor Hausman claims that my focus on the percentage of merchants that surcharge is "misguided" because it is inconsistent with a consumer panel study conducted by the RBA that found only 5% of participants' credit card transactions were

---

46 Reserve Bank of Australia Statistical Release C3, "Average Merchant Fees for Debit, Credit and Charge Cards," http://www.rba.gov.au/statistics/tables/xls/c03hist.xls (accessed June 22, 2013). By contrast, merchants have paid an average of only 0.91% in Australia to accept MasterCard and Visa credit card transactions, so it is unsurprising that they are less likely to surcharge those brands in Australia.

47 Frankel Declaration, ¶39.

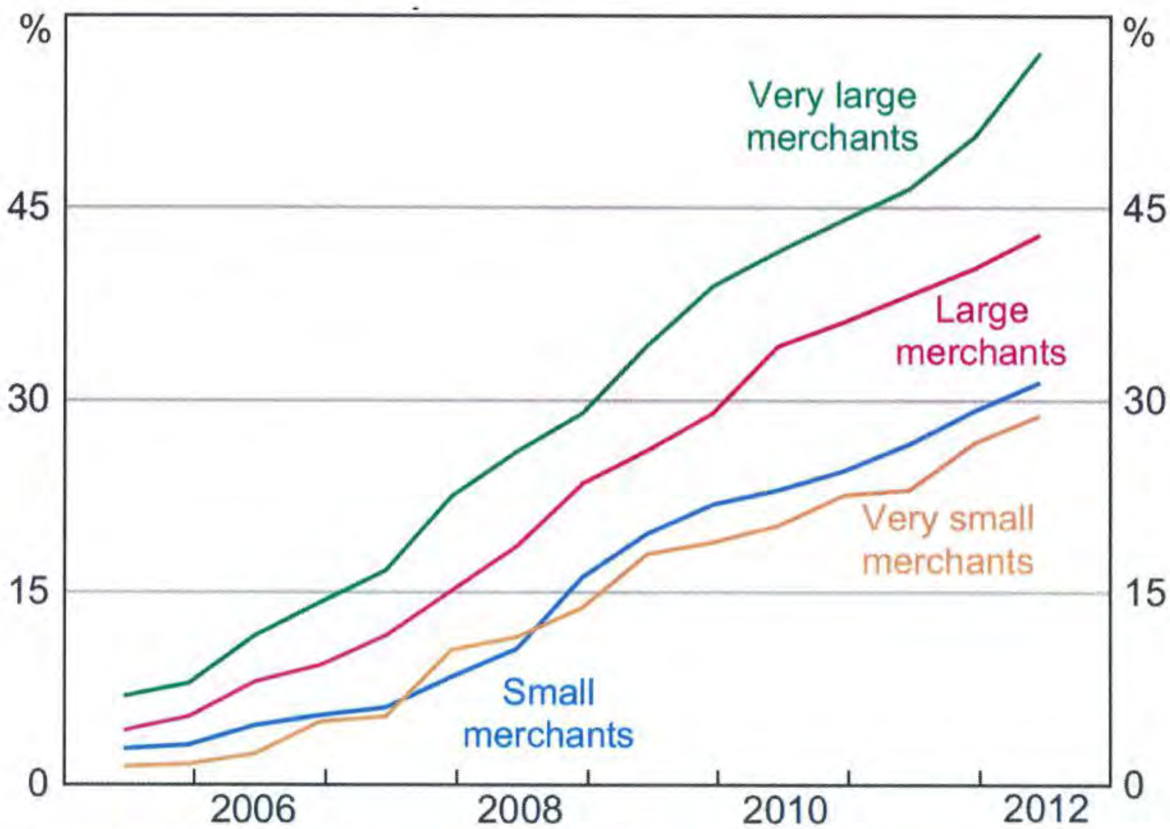
48 Frankel Declaration, ¶72, citing Reserve Bank of Australia, "Review of Card Surcharging: A Consultation Document," June 2011, p. 2. Even though MasterCard and Visa merchant service fees are substantially lower than American Express's, many merchants still surcharge them, although a smaller fraction of merchants accepting MasterCard and Visa surcharge those transactions than do merchants accepting American Express. This is consistent with my conclusion that higher rates to merchants are likely to result in higher levels of surcharging.

49 Reserve Bank of Australia Payments System Board Annual Report, 2012, p. 25.

REDACTED

surcharged in 2007 and 2010, and, he claims, "it is the volume of transactions that are surcharged which provides the important economic factor."[50]

Figure 1
Merchant Surcharging in Australia since No-Surcharge Rules Lifted in 2003



Source: Reserve Bank of Australia Payments System Board Annual Report, 2012, http://www.rba.gov.au/publications/annual-reports/psb/2012/pdf/2012-psb-ann-report.pdf, p. 25.

27. Professor Hausman is incorrect for two reasons. First, there is no inconsistency between finding that a large fraction of merchants surcharge and a much smaller percentage of credit card transactions are surcharged. As I already explained, merchants are far more likely to surcharge American Express transactions and Diners Club transactions (if they accept one or

---

50 Hausman Report, ¶71.

both of those brands) than they are to surcharge the much less costly (in Australia) MasterCard and Visa credit cards. In December 2006, for example, a survey found that less than half of merchants that surcharged applied a surcharge to all credit cards; rather they disproportionately surcharged American Express cards.[51] American Express and Diners Club account for less than 20% of Australian credit and charge card transactions, with MasterCard and Visa accounting for the rest.[52] While all surveyed merchants in Australia accepted MasterCard and Visa credit cards in June 2013, only 33.3% of surveyed merchants accepted American Express cards (and only 6.9% accepted Diners Club cards).[53]

28. Professor Hausman's second error is his related statement that it is the volume of transactions that *are* surcharged that is the "important economic factor." By surcharging only American Express cards (or American Express and Diners Club cards), however, merchants often induce their customers to switch to alternative, non-surcharged payment methods. This often will result in consumers using non-surcharged MasterCard and Visa credit cards. Finding that a much lower percentage of transactions are completed using surcharged credit cards is, in part, a reflection of the success of surcharging as a steering strategy. Inducing customers to use less costly payment methods that *are not* surcharged is one of the main purposes of surcharging. In addition, as I discuss further in Part 4.3, the mere *threat* to surcharge constrains the level of fees charged to merchants. Figure 1 shows that the likelihood of surcharging

---

51 East & Partners, Merchant Surcharging in Australia: Market Analysis Report Addendum for Friedman Law Group LLB [sic], March 2007, Table 2 ("a merchant who applies surcharges for a specific card type is three times more likely to surcharge AMEX than Diners cards and almost eight times more likely to surcharge AMEX compared to Visa cards.") Note that Diners is accepted by far fewer merchants than American Express.

52 http://www.rba.gov.au/statistics/tables/xls/c02hist.xls, accessed June 24, 2013.

53 East & Partners, June 2013 Report, Table 11.

increases with merchant size in Australia. Yet some large "strategic" merchants in Australia now receive extremely low interchange fee rates from MasterCard and Visa and do not surcharge.[54] To the extent they obtain these rates in part because they can credibly threaten to surcharge MasterCard and Visa transactions, this would also account for a relatively low percentage of transactions that are actually surcharged.

29. Professor Hausman suggests that the willingness of merchants to apply credit card surcharges in Australia does not shed light on the willingness of U.S. merchants to surcharge credit card transactions because, he asserts, retail competition is more intense in the United States than in Australia. He is apparently asserting that firms without market power are unlikely to surcharge. But 31.1% of "very small merchants" in Australia now surcharge.[55] In the United Kingdom, which Professor Hausman believes to be a useful benchmark for the United States,[56] the country's competition authority has concluded that the likelihood of surcharging is not related to a merchant's market power.[57]

30. While a merchant facing little competition may not suffer much from the business-stealing effect when surcharging, it is also true that in some highly competitive markets sellers will differentiate their prices to reflect differential costs. In the United Sates, retail gas stations have sometimes offered differential prices for credit card and cash

[54] See, "Visa Interchange on Domestic Transactions in Australia," http://www.visa.com.au/ap/au/aboutvisa/interchange/interchange.shtml (visited August 9, 2013); "MasterCard domestic purchase transactions interchange fees for Australia," http://www.mastercard.com.au/merchant/getting_started/interchange_rates.html.

[55] See Figure 1 and East & Partners, June 2013 Report, Table 25.

[56] Hausman Report, ¶86.

[57] United Kingdom Office of Fair Trading, "Payment Surcharges: Response to the Which? Super-Complaint, July 2012 ("OFT Surcharging Report"), ¶5.19.

REDACTED

transactions due to the additional cost of accepting credit cards. The same has been true in Australia, leading to reduced interchange fees, as I discuss in Part 4.3. In addition, the intensity of competition varies among MasterCard and Visa "merchants" in the United States (which, for example, includes local governments, airlines, medical offices, commuter railroads, utilities, and many other types of sellers of goods and services in addition to retail stores like Wal-Mart). While business stealing concerns will deter some merchants from applying surcharges, others will likely surcharge, which lessens the business-stealing problem facing another merchant that elects to surcharge. [redacted][58] That is why the incidence of surcharging is likely to grow over time as it has in Australia.[59]

4.1.2 Professor Hausman Misstates The Facts About The Level Of Interchange Fees and Merchant Fees In The United Kingdom

31. Professor Hausman argues that the experience with credit card surcharging in the United Kingdom, where merchants have been able to surcharge credit card transactions since 1992, "provides a better comparison" to what can be expected in the United States than does the experience of American Express in Australia.[60] He cites data which he interprets as

---

58 [redacted] AmerExpMDL1720_0030683 – 708, at 695.

59 [redacted] AmerExpMDL1720_0030000, p. 2.

60 Hausman Report, ¶86.

showing that surcharging is at "very low rates" in the United Kingdom despite "interchange rates... which remain quite high."[61]

32. Professor Hausman misstates the facts. First, the average Visa credit card interchange fee rate in the United Kingdom in 2007 [redacted] as in the United States.[62] Second, the number reported by Professor Hausman overstates the average merchant service fee in the U.K. Professor Hausman relies on a report from the United Kingdom's Office of Fair Trading ("OFT") – the country's competition authority. The U.K. report estimates that the "illustrative costs of processing card transactions" for travel providers, i.e., the merchant service fee and other card transaction processing costs such as chargebacks and overhead, is 1.9% to 2.3%.[63] Professor Hausman finds that range similar to my estimate of the weighted average credit card merchant discount rate in the United States in 2009 of 2.34%.[64] The U.K. figures, however, include costs in addition to the merchant service fees, which the U.S. figures do not. The OFT Surcharging Report shows that the *unweighted* average merchant discount rate for retailers in the travel sector studied by the OFT – i.e., excluding those additional costs not included in the U.S. estimate – was 1.8%.[65] The report further notes that larger merchants tend to obtain lower card merchant discount rates than smaller merchants.[66] Thus, the *weighted* average merchant discount rate (typically referred to in the U.K. and

---

61 Id.

62 [redacted]

63 OFT Surcharging Report, pp. 69-70.

64 Hausman Report, footnote 75.

65 OFT Surcharging Report, p. 67.

66 Id., p. 66.

Australia as the "merchant service charge") is lower than 1.8%. The OFT reports that the interchange fee in the U.K. typically accounts for about 70% of the merchant discount rate. With a weighted average interchange fee of [redacted] as reported by Dr. Wecker, this suggests that the weighted average credit card merchant discount rate in the U.K. is roughly [redacted] = 1.4%. This comports with a report prepared by U.K. consultants DotEcon for MasterCard in December 2003.[67] The DotEcon study includes a chart from a third-party source showing that, in 2002, the average merchant discount rate in the U.K. was about 1.5%.[68] This is well below the 2.34% that I estimated for the United States.

33. Furthermore, the U.K. figure cited by Professor Hausman contains other costs that do not appear in the U.S. figure, and so it is not an apples-to-apples comparison. Professor Hausman's figures, rather, include estimates made by the OFT of costs *in addition to* merchant discount rates as reported for the U.S., including average "charge back" costs, "overhead" costs, "intermediaries fees," and merchants' "own costs."[69] I did not include any such costs when estimating the weighted average U.S. credit card merchant discount rate. Thus, Professor Hausman is simply incorrect that merchant discount rates in the U.K. are similar to those in the

67 Economic Evidence in Support of MasterCard's Response to the Statement of Objections, December 2003 (MCI_MDL03_00015034).

68 Id., p. 14. DotEcon's own survey reports that the average merchant discount in the UK in 2003 was about 1.3% for the largest merchants and 2.0-2.5% for the smallest. Id., p. 63.

69 OFT Surcharging Report, ¶C.24 and Table C.3. The OFT was investigating how the level of surcharges compared to merchants' total costs of accepting credit card payments, and so added these additional cost elements.

REDACTED

United States, let alone that interchange fees in the U.K. are "quite high," particularly by U.S. standards.[70]

34. The OFT Surcharging Report found that 14% of businesses in the U.K. applied surcharges to credit cards, and 9% applied surcharges to charge cards.[71] "Charge cards" consist of American Express and Diners Club, and East & Partners reports that only 10.1% of 505 surveyed merchants in the United Kingdom accepted American Express or Diners Club cards in 2009.[72] This suggests that a significant percentage of merchants that accept American Express or Diners Club cards in the U.K. apply surcharges to those cards.[73]

35. The OFT concluded that "[r]etailers should still be able to impose transparent surcharges to consumers who choose to use payment mechanisms which cost more to process and offer discounts to consumers who choose to use payment mechanisms that cost less to process."[74] It explains:

> The OFT considers there are potentially benefits to both consumers and retailers if retailers are able to impose differential charges for different payment mechanisms. Surcharging or discounting different payment mechanisms can signal the costs of accepting each mechanism and therefore can help consumers make efficient choices between them. Consumers are then able to decide whether the benefits to them of paying by, for example, credit card... exceed the cost of paying by credit card. However, to achieve these signalling benefits, surcharges must be broadly in line with efficiently incurred costs.

---

70 Visa interchange rates for the United Kingdom in 2008 were low relative to other countries. See Wecker Report, Figure 1.

71 OFT Surcharging Report, ¶5.5.

72 East & Partners, "Australian and UK Credit Card Surcharging Perspectives: Custom Analysis for NERA Australia, November 2009, (HOUSTON001120), Table 16.

73 East & Partners' report on surcharging in the U.K. included only 51 merchants that accepted American Express or Diners Club in addition to MasterCard and Visa, 19 of which (37.3%) applied surcharges. Id., Tables 16, 19. That reported percentage is "for indicative purposes only" and not likely reliable as a specific percentage.

74 OFT Surcharging Report, ¶1.18.

REDACTED

> Transparent differential pricing can restore the connection between the consumer, who makes the choice on what payment mechanism to use, and the retailer who pays for that choice and so counteract the market power of card networks. If retailers charge consumers the true cost of processing the payment mechanism, this puts direct pressure on payment card providers to compete to ensure that customers use their payment mechanism rather than their competitors'. This may in turn apply pressure on card networks to reduce their [card acceptance fees].[75]

36. The amount of actual surcharging in the U.K. is also significant. The document cited by Professor Hausman reports that, in the U.K., Treasury estimated that a total of £275 million ($409 million) in credit card surcharges was collected by U.K. merchants in 2010.[76] Even setting aside the higher interchange fee and merchant fee rates in the United States (and therefore likely higher surcharge amounts when merchants apply surcharges), U.S. retail sales were 8.9 times as large as U.K. retail sales in 2010,[77] implying that if the U.K. is used as a benchmark as Professor Hausman suggests, U.S. merchants would have collected roughly $3.2 billion in surcharge revenue in 2010 if they had been free to do so. Thus, even if there were no further benefits to merchants from lower merchant service fees or steering to lower cost payment methods, Professor Hausman's suggested benchmark would still generate billions of dollars per year of benefits to merchants. I do, however, conclude that there will be other benefits.

---

75 OFT Surcharging Report, ¶¶4.7-4.8.

76 UK Department of Business, Innovation & Skills, "Consultation on the Early Implementation of a Ban on Above Cost Payment Surcharges," September 2012, p. 11 (Hausman Attachment R), p. 11. The pound/dollar exchange rate was .673 pounds per dollar in 2010, according to the IRS. See, http://www.irs.gov/Individuals/International-Taxpayers/Yearly-Average-Currency-Exchange-Rates.

77 See, United Kingdom Office for National Statistics, Retail Sales Series ValNSAT; U.S. Census Bureau, Monthly Retail Trade and Food Services, Series 44000, Retail Trade: U.S. Total.

37. As I have explained, the Networks have an economic incentive to keep their fees low enough so that the benefits to merchants from surcharging do not exceed the costs, including the lost profits suffered by early adopters of surcharging due to the business-stealing effect, so that the market does not "tip" towards routine surcharging. In addition, customers who shift to lower cost payments like debit cards generate significant benefits to merchants. Thus, it is incorrect to conclude from the fact that a modest percentage of merchants actually surcharge credit cards that the ability to surcharge is not beneficial to merchants, even aside from the surcharge revenue that merchants can generate to offset their costs. As an Australian merchant trade association explains,

> Importantly, many merchants have used the threat of surcharging to negotiate lower merchant service fees and then have refrained from surcharging after gaining a reduced price. Therefore the impact of merchants' ability to surcharge is more widespread than may be seen by the frequency and level of surcharges in the market.[78]

4.2 Surcharging Causes Many Customers To Switch To Non-Surcharged Payment Options

38. In my reports and Declaration, I explained and cited evidence which showed that when merchants surcharge a credit card brand, a significant percentage of their customers switch to alternative, non-surcharged credit card brands and payment methods.[79] Professor Hausman does not dispute this economic effect of surcharging, which is a direct way that merchants benefit from their ability to surcharge. Indeed, he concludes, as I do, that

[78] Australian Merchant Payments Forum, "Submission to the Reserve Bank of Australia: Response to Review of Card Surcharging," 20 July 2011, p.9.

[79] Frankel Rebuttal Report, ¶¶268-70; Frankel Declaration, ¶¶40-43.

"consumer sensitivity to surcharging is likely to reduce credit card use where surcharging is used in a given industry."[80]

39. In my Declaration, I also explained that even merchants that do not surcharge can expect a reduction in credit card use as other merchants surcharge those cards and consumers respond by shifting their preferences generally towards using debit cards, which are not surcharged.[81] Professor Hausman cites to a Visa Europe report that argues:

> Even in countries where surcharging is permitted, very few retailers choose to use the option as they recognize it does not encourage custom — nonetheless the very possibility of surcharging still has negative consequences.[82]

40. The Visa Europe report explains that these consequences are as I described: the use of the surcharge causes card usage to decline generally throughout the retail sector, not just at merchants that surcharge:

> Even when the practice of surcharging is limited, the very risk of surcharging can still have profound effects on the reputation of the payment card system. The waiving of the [no-surcharge rule] will consequently lead to a reduction in the number of cardholders and/or the level of card use.[83]

4.3 The Ability To Surcharge Constrains The Level Of Merchant Fees When They Are At The Level Prevailing In The United State

41. All merchants benefit from relaxation of no-surcharge rules by the collective pressure of merchant surcharging or ability to surcharge that constrains the level of card

---

80 Hausman Report, ¶89.

81 Frankel Declaration, ¶69.

82 Visa Europe, "Acknowledging the consequences of surcharging," 2009, (Attachment S to Hausman Report), p. 4, quoted at Hausman Report, ¶89.

83 Visa Europe, "Acknowledging the consequences of surcharging," 2009, (Attachment S to Hausman Report), p. 2.

REDACTED

acceptance fees. In my previous reports and Declaration, I explained that Networks have used Anti-Steering rules to insulate them and their member banks from this competitive pressure. The Networks have long fought the elimination of no-surcharge rules because differential pricing is the most economically direct way to steer consumers to make lower cost choices without eliminating a choice altogether. Consumers choosing lower cost payment options generate precisely the kind of competitive pressure that will tend to constrain the level of interchange fees.

42. There are other Anti-Steering Rules that are not modified by the Proposed Settlement, including the honor-all-cards rule upon which Professor Hausman focuses. Although merchants would benefit from elimination or modification of the remaining restraints on their steering strategies, that does not mean that they will not benefit from the relaxation of no-surcharge rules. In Professor Hausman's view, by contrast, only elimination of the honor-all-cards rule (and perhaps "no-bypass rules") could constrain the level of interchange fees.[84]

43. Further reform of the Networks' honor-all-cards rules (i.e., to permit merchants to make separate acceptance decisions among different types or interchange fee levels of a Network's credit cards) has been proposed in Australia,[85] and the existence of the honor-all-cards rules has been challenged in Canada[86] and New Zealand.[87] However, I am not aware of

[84] Hausman Report, ¶10.

[85] Reserve Bank of Australia, "Reform of Australia's Payments System: Conclusions of the 2007/08 Review," September 2008, http://www.rba.gov.au/payments-system/reforms/review-card-reforms/pdf/review-0708-conclusions.pdf, p. 16. The RBA has not acted on this proposal since it was issued in 2008.

[86] http://www.ct-tc.gc.ca/CMFiles/CT-2010-010_Notice%20of%20Application%20pursuant%20to%20section%2076%20of%20the%20Competition%20Act%20-%20Price%20Maintenance_1_38_12-15-2010_7965.pdf, ¶54. The Competition Tribunal recently ruled that the Commissioner's complaint did not fit the particular section of the Competition Act under which the case was filed, and so dismissed the complaint, but nevertheless found that the no-surcharge rule produced

any jurisdiction in which the honor-all-cards rules have in fact been eliminated so as to generate evidence concerning the magnitude of the effects of such a policy change. In New Zealand, for example, where both Professor Hausman and I served as experts on behalf of the New Zealand Commerce Commission, the Commission reached settlements with MasterCard and Visa organizations and member banks that ended enforcement of the Networks' no-surcharge rules but not their honor-all-cards rules.[88]

4.3.1 Australian Evidence Supports My Conclusion That The Ability To Surcharge Constrains High Merchant Card Acceptance Fees

44. In my reports and Declaration, I cited evidence from Australia supporting my conclusion that the ability to surcharge credit card transactions has benefitted merchants and constrained the level of merchant discount rates in that country. In particular, I explained that American Express and, to a somewhat lesser extent, the much smaller Diners Club networks have reduced their merchant discount rates in response to surcharging. Because the rates charged by those networks have been similar to (and now lower than) MasterCard and Visa merchant discount rates in the United States, I concluded that the Australian experiences of American Express and Diners Club provides a useful benchmark for surcharging behavior and effects that could be expected for MasterCard and Visa in the United States.

"an adverse effect on competition." No similar finding was announced with respect to the honor all cards rule. http://www.ct-tc.gc.ca/CasesAffaires/Decisions/FilesFichiers/CT-2010-010/PDFs/ENG/CT-2010-010-VisaMasterCard-DecisionSummary.pdf.

87 http://www.comcom.govt.nz/cards-and-payments-australasia-2010-conference-15-march-2010/

88 Settlement between the Commerce Commission and Visa International Service Association and Visa Worldwide Pte Limited ("Visa"), CIV-2006-485-2535, August 12, 2009; Settlement between the Commerce Commission and MasterCard International Incorporated ("MasterCard"), CIV-2006-485-2535, August 24, 2009. http://www.comcom.govt.nz/dmsdocument/10749; http://www.comcom.govt.nz/dmsdocument/10746.

REDACTED

45. Professor Hausman disagrees with my assessment of the effect of the elimination of the no-surcharge rule in Australia. He argues that surcharging has not been responsible for *any* of the reduction in the merchant fees charged by American Express and Diners Club in Australia. Rather, he argues, American Express and Diners Club reduced their rates only because merchants can easily refuse to accept those brands and because MasterCard and Visa merchant discount rates fell substantially due to the RBA's regulation of interchange fees. [89] He also argues that surcharging has not pressured MasterCard and Visa to reduce their interchange fees.[90]

4.3.1.1 Surcharging Contributed To Merchant Fee Reductions By American Express And Diners Club

46. After a lengthy regulatory process, in 2003 the RBA ordered the reduction of MasterCard and Visa interchange fees and compelled all card networks to permit surcharging by Australian merchants. MasterCard and Visa argued at that time that competitive forces would not pressure American Express and Diners Club to reduce their merchant fees.[91] As I showed in my Declaration, MasterCard and Visa were wrong: American Express and Diners Club merchant card acceptance fees have declined significantly since 2003.[92]

47. The RBA made several changes to the competitive landscape in Australia: it reduced MasterCard and Visa interchange fees, eliminated no-surcharge rules, and took other

89 Hausman Report, ¶80.

90 Hausman Report, ¶69.

91 MasterCard International Incorporated, "Response to the December 2001 Consultation Document of the Reserve Bank of Australia," March 2002, p. 37; Visa International, "Submission to The Reserve Bank of Australia: Inclusion of Closed Card Schemes in the Designation Process," 17 April 2001, p. 6.

92 Frankel Declaration, ¶71.

REDACTED

actions, including publishing average merchant fee rates and liberalizing access rules for acquirers. Each of these actions was designed to enhance competition. The simultaneous reduction of MasterCard and Visa interchange fees and the elimination of no-surcharge rules, in particular, do not create a controlled experiment in which only the latter occurred. Based on the available evidence and economic analysis, I have concluded that both policy changes benefited merchants and were significant causes of reductions in American Express and Diners Club merchant fees.[93]

48. Professor Hausman disagrees. As I discussed in Part 4.1, Professor Hausman focuses on the percentage of transactions that are actually surcharged and neglects the importance that the *ability* to surcharge has had on the level of American Express fees in Australia as American Express tries to prevent the use of surcharging by merchants to steer transactions away from American Express. There is, in fact, evidence that American Express has responded to the surcharging and potential surcharging of its cards by agreeing to charge merchants lower merchant discount rates.[94]

49. [redacted]

---

[93] See, e.g., Alan S. Frankel, "Towards a Competitive Card Payments Marketplace," in Reserve Bank of Australia, Payments System Review Conference, Proceedings of a Conference held in Sydney on 29 November 2007 (2008), pp. 33-34; Frankel Report, ¶¶457, 459; Frankel Rebuttal Report, Part 4.7.

[94] In other words, merchants did not have to drop or threaten to drop American Express cards because they could surcharge them, which generated less of a business-stealing effect. Although American Express is not accepted as widely in Australia as MasterCard and Visa, many merchants (e.g., travel related merchants) likely would have found it unprofitable to drop American Express. But nearly 80 percent of merchants that accept American Express cards now surcharge those cards, according to a recent survey. See, East & Partners, June 2013 Report, Table 31.

REDACTED

[redacted]

[redacted]

[redacted]

50. [redacted]

---

95 Declaration of Dhun Karai, head of Group Financial Services for Woolworths, September 22, 2009, attaching as Exhibit 1, Statement of Evidence of Dhun Karai, 14 November 2008 (submitted in the New Zealand Commerce Commission litigation) ("Karai Declaration"), ¶¶5.17-5.18. [redacted]

96 Karai Declaration, Exhibit 1, ¶5.6.

97 Karai Declaration, Exhibit 1, ¶¶5.17-18.

REDACTED

[redacted]

[redacted]

[redacted]

	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]			[redacted]	

Source: Karai Declaration, ¶¶5.6-5.18.

51. In 2011, Woolworths reaffirmed that:

> [T]he intention to surcharge has been one of Woolworths' single most effective pricing negotiation tool for the domestic and international card schemes. This has assisted Woolworths' brands, which undertake 18% of all debit transactions and 12% of all credit card transactions in Australia, in not introducing surcharging currently. In certain brands we have achieved an almost 50% reduction in pricing, allowing us in the current economic and highly competitive environment to provide our customers with better value.[98]

52. Woolworths is not an isolated example. As I noted in Part 4.1, the Australian Merchant Payments Forum (a trade association) stated in a submission to the RBA that "Importantly, many merchants have used the threat of surcharging to negotiate lower

[98] Letter from Dhun Karai, Head of Group Financial Services, Woolworts Ltd. to Dr. Chris Kent, Head of Payments Policy Department, Reserve Bank of Australia, 25 July 2011, http://www.rba.gov.au/payments-system/reforms/submissions-card-surcharging/woolworths.pdf.

REDACTED

merchant service fees and then have refrained from surcharging after gaining a reduced price."[99]

53. [redacted]

> [redacted][100]

54. American Express argued to the RBA in 2007 that "Merchant benefits from the reforms include: lower merchant service fees; increased bargaining power with acquirers from the ability – or the threat – to surcharge; and the potential for a new independent line of revenue from surcharging profits."[101] American Express continued:

> Although surcharging is not a customer-friendly practice, increasing numbers of retail and service providers now surcharge some or all credit cards; and many others use the threat of surcharge to influence consumers' choice of payment method or to negotiate lower prices from a merchant acquirer. American Express estimates that as a result of surcharging, consumers are now providing merchants with more than $845 million in additional revenue each year.[102]

---

[99] Australian Merchant Payments Forum, "Submission to the Reserve Bank of Australia: Response to Review of Card Surcharging," 20 July 2011, p.9.

[100] AmerExpMDL1720_0033060.

[101] American Express Australia Limited, "Review of Payments System Reforms: A Submission to the Reserve Bank of Australia," August 2007, p. 9. American Express continued, stating that "none of [these benefits] appears to be passed on to consumers." I disagree with that portion of American Express's argument, as I have explained in my reports in this case.

[102] Id. $845 million in Australian dollars in 2007 was equivalent to US $680 million. U.S retail sales exceeded Australia's retail sales by a factor of 23.2 in 2007. See,

REDACTED

...

The ability to surcharge – or threaten to do so – has given large merchants a wide range of choices in dealing with acquirers. Acquirers are left with a binary proposition of lowering merchant service fees or suffering whatever damage a merchant chooses to inflict on the scheme's brand by surcharging. In this respect, the reforms have left acquirers with significantly reduced bargaining power.[103]

55. [redacted]

---

http://www.abs.gov.au/ausstats/meisubs.NSF/log?openagent&850101.xls&8501.0&Time%20Series%20Spreadsheet&C366BE5A5B41626FCA257BBB001234E7&0&Jun%202013&05.08.2013&Latest and U.S. Census Bureau, Monthly Retail Trade and Food Services, Series 44000, Retail Trade: U.S. Total, http://www.census.gov/econ/currentdata/dbsearch?program=MRTS&startYear=2007&endYear=2007&categories=44000&dataType=SM&geoLevel=US&adjusted=1&notAdjusted=1&submit=GET+DATA.

[103] American Express Australia Limited, "Review of Payments System Reforms: A Submission to the Reserve Bank of Australia," August 2007, p. 9.

[104] AmerExpMDL1720_0030057.

[105] AmerExpMDL1720_0030120, p. 5 (emphasis added).

[106] Id., p. 6.

[107] AmerExpMDL1720_0033177.

REDACTED

[redacted][108]

56. Professor Hausman nevertheless concludes that *none* of the reduction in American Express or Diners Club merchant fees can be attributed to the ability of merchants to surcharge those cards.[109] He states that "the merchant fee gap" – the difference between American Express or Diners Club merchant fees and MasterCard/Visa merchant fees in Australia – "has remained relatively constant."[110] That is incorrect, particularly for American Express. (I discuss Diners Club further below.)

57. American Express's merchant fees have declined steadily since the RBA reforms were implemented in 2003, and they continue to decline. The difference between American Express merchant fees and MasterCard and Visa merchant fees has fallen by one-third since 2005 and is now below the gap which prevailed in March 2003 (i.e., before the RBA's interchange fee regulations took effect). This has occurred despite efforts by American Express and Diners Club to induce merchants not to surcharge or not to differentially surcharge those cards relative to other credit cards.[111] Merchants have apparently benefitted individually by accepting lower fees from the more costly card networks in exchange for an agreement to "blend" surcharges – e.g., not to surcharge American Express or Diners Club cardholders more

---

108 AmerExpMDL1720_0031405.

109 Hausman Report, ¶83 ("surcharging has not constrained AMEX and Diners merchant fees"); ¶93 ("this decrease in Australian AMEX merchant service fees has not been caused by surcharging.").

110 Id, ¶83.

111 Reserve Bank of Australia, Review of Card Surcharging: A Consultation Document, June 2011, http://www.rba.gov.au/publications/consultations/201106-review-card-surcharging/pdf/201106-review-card-surcharging.pdf, p. 6.

REDACTED

than other cardholders.[112] [redacted] Thus, while American Express has likely slowed the decline in its merchant discount rates caused by surcharging, it has not been able to halt that decline.

58. Diners Club is a much smaller network than American Express. In the Asia-Pacific region, Diners Club purchases totaled only *one-ninth* as much as those for American Express in 2011.[113] East & Partners reports that less than one-quarter as many surveyed merchants accepted Diners Club in Australia as accepted American Express.[114]

59. The same "blending" that slows the decline of merchant discount rates for American Express (and which American Express purchases through targeted rate reductions to individual merchants) may occur with Diners Club only without Diners Club having to offer lower rates as frequently to attain this outcome. That is because many merchants that accept Diners Club transactions treat those transactions the same as they treat American Express transactions.[115] Because most merchants that accept Diners Club cards likely get only a small fraction as many Diners Club transactions as American Express transactions, Diners Club may be

---

112 Australian Merchant Payments Forum, "Submission to the Reserve Bank of Australia: Response to Review of Card Surcharging," 20 July 2011, p. 4 ("Blended surcharges have effectively been used as a negotiating tool by some merchants to lower their merchant fees. Any constraints on blended surcharges would weaken merchants negotiating position, potentially resulting in higher MSFs and in turn higher prices to consumers.").

113 Nilson Report #1002, September 2012, p. 11.

114 East & Partners, "Australian Merchant Payments: Market Analysis Report," February 2010, Table 11.

115 Some merchants in Australia differentially surcharge different brands of credit cards to individual basis points of detail, but it is more common for merchants that surcharge to have a common, round number surcharge for MasterCard and Visa (if any), and, if different, a common, round number surcharge for American Express and Diners Club (if accepted).

able to free-ride to an extent on American Express's efforts to suppress differential surcharging as some merchants will not bother to have a separate surcharge rate just for Diners Club.

60. Although Diners Club rates have not declined by as much as American Express's rates, Diners Club has faced competitive pressure from surcharging and from lower MasterCard and Visa rates. Between March 2003 and March 2013, the average Diners Club merchant discount rate declined by 31 basis points (0.31%).[116] A report submitted by Diners Club in Australia stated that "competitive forces have led to falls in Diners Club MSFs over time. From the time that merchants have been permitted (but not obligated) to surcharge, these falls have been particularly large."[117]

61. Professor Hausman quotes from an RBA report issued in 2008 to support his argument that it was only the ability of merchants to refuse American Express and Diners Club cards, and not at all their ability to surcharge those cards, that caused the decline in American Express and Diners Club merchant discount rates. However, that report also explains the RBA's conclusion that:

> [T]he available evidence strongly supports the idea that relative prices matter to consumers' choice of payment instrument.
>
> Confidential data from one card scheme indicate that when surcharges are imposed on a particular type of card, use of that card declines substantially. Where merchants have imposed a surcharge on one scheme only, or imposed a higher surcharge on one scheme than another, there have been large shifts in payment patterns away from the scheme with higher surcharges.[118]

---

116 http://www.rba.gov.au/statistics/tables/xls/c03hist.xls (accessed June 24, 2013).

117 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 (commercial-in-confidence version), p. 11.

118 Reserve Bank of Australia, "Reform of Australia's Payments System: Preliminary Conclusions of the 2007/08 Review," April 2008, p. 18.

REDACTED

62. [redacted]

> [redacted][119]

4.3.1.2 Whether Surcharges Are Sufficient To Result In Interchange Fees Of 0.50% or 0.30% Is Irrelevant To Whether They Will Benefit U.S. Merchants Now Paying Many Times That Amount

63. Professor Hausman relies repeatedly on a straw man argument – that surcharging has not caused MasterCard and Visa to reduce their interchange fees in Australia from current levels (regulated at 0.50%) – to support his conclusion that surcharging would have no effect on MasterCard and Visa in this country, where interchange fee rates are roughly four times as high as in Australia. This is illogical and wrong.

64. Professor Hausman claims that I stated in an Australian proceeding that "surcharging was not sufficient to constrain the exercise of market power by VMC"[120] and that "surcharging is not sufficient to constrain interchange fees."[121] Referencing the same Australian proceeding, the Objecting Plaintiffs and Objectors similarly state that I "argu[ed]

---

119 [redacted]

120 Hausman Report, ¶79.

121 Hausman Report, ¶91.

forcefully" in that proceeding "that it would be a mistake for the RBA to try to solve the market failure that underpins interchange with surcharging," and that "Dr. Frankel's declaration in this case omits any reference to this past testimony—because it starkly conflicts with his current position."[122] These claims that my opinions here are inconsistent with my opinions in Australia are false.

65. The Objectors excerpt from the following passage from one of my submissions in Australia. The bolded portion, however, was not quoted by Objectors.

> But, although "increased willingness" of merchant[s] to surcharge is useful both to intensify constraints on interchange fees (and possibly scheme fees) and improve price signals to the banks' cardholder customers, there is no evidence that the ability to surcharge is sufficient to constrain interchange fees **to the current cap, let alone drive the schemes to reduce those fees to the Board's suggested new target of 0.30%**.[123]

66. The Objectors quotation is misleading because it omits the bolded portion of the last sentence and other relevant context. Professor Hausman (who quotes the entire sentence) ignores the fact that the passage states the opposite of what he claims. I wrote specifically that merchant surcharging is, in fact, useful "to intensify constraints on interchange fees."[124] In the Australian proceedings in 2007-08, I explained that it was desirable to eliminate no-surcharge rules.[125] I further explained my conclusions that:

122 Objecting Plaintiffs' And Objectors' Memorandum In Opposition To Motion For Final Approval Of Settlement, May 28, 2013, p. 51.

123 Id., quoting from Alan S. Frankel, Ph.D. on Behalf of Australian Merchant Payments Forum, Comments in Response to the Preliminary Conclusions of the 2007/08 Review (June 30, 2008), at 11-12 (Shinder Declaration, Exhibit 98).

124 Id.

125 The Reserve Bank of Australia's Review of Payment Systems Reforms: Comments of Alan S. Frankel, Ph.D. on Behalf of the Australian Merchant Payments Forum, 30 August 2007, p. 54.

REDACTED

- Surcharging creates "pressure *from cardholders who make payment choices at the point of sale* to reduce... interchange fees which result from those choices."[126]
- "[C]ompetitive pressure on networks to constrain the amount of the interchange fee is more effective if a merchant can choose the network, reflect its relative costs in point-of-sale surcharges and discounts, or otherwise effectively influence consumers to choose the merchant's preferred network."[127]
- "Even merchants' mere *ability* to impose surcharges on credit card transactions can have procompetitive effects."[128]
- "Although merchants' ability to surcharge will not prevent networks entirely from using interchange fees to artificially increase merchant fees, it will constrain the amount of overcharges imposed through interchange fees."[129]
- "The elimination of no-surcharge rules [in Australia] intensified competition."[130]

4.3.2 Countries Where Surcharging Is Permitted Have Below-Average Interchange Fee Rates

67. Professor Hausman claims that the ability to surcharge has not constrained interchange fee rates in the U.K. or Australia.[131] I have already discussed why I believe he is mistaken. In addition, while cross country comparisons may be complicated as a result of a number of factors which vary across countries, data produced by Visa's expert, Dr. Wecker, show that countries that permit surcharges on average have notably lower credit card interchange fees than other countries. Dr. Wecker's tabulation of Visa data for 2008 indicates

126 "Towards a Competitive Card Payments Marketplace," in Reserve Bank of Australia, Payments System Review Conference, Proceedings of a Conference held in Sydney on 29 November 2007 (2008), p. 12 (emphasis in original). The November 2007 RBA conference constituted a part of the RBA's review of payment system reforms. My conference paper published by the RBA was based on (and a more detailed elaboration of the view I express in) my initial submission to the RBA.

127 Id., p. 26.

128 Id., p. 27 (emphasis in original).

129 Id.

130 Id., p. 34.

131 Hausman Report, ¶¶54, 86, 88. In fact, Visa has reduced interchange fee rates in the U.K., while rates in the United States have increased.

Visa's average credit card interchange fee rate in a country as well as whether that country permitted surcharging of credit card transactions. As I previously noted, the average Visa credit card interchange fee in the United States was [redacted] in 2008. Professor Wecker identified Australia, Belgium, Denmark, Israel, the Netherlands, Switzerland, and the United Kingdom as countries which permitted surcharges in 2008.[132] As shown in Table 1, the weighted average interchange fee in those countries was [redacted] excluding Australia where interchange fees were directly regulated), compared to [redacted] in the rest of the world (and [redacted] in the United States) where surcharging was not permitted.

Table 1
Visa Weighted Average 2008 Credit Card Interchange Fee Rates In Surcharge and No-Surcharge Countries

U.S.A.	[redacted]
All No-Surcharge Countries	[redacted]
Australia	[redacted]
Belgium	[redacted]
Denmark	[redacted]
Israel	[redacted]
Netherlands	[redacted]
Switzerland	[redacted]
U.K.	[redacted]
All surcharging countries	[redacted]
Surcharging countries excluding Australia	[redacted]

Source: Backup to Wecker Report, Figures 1-3.

4.4 State Statutes And American Express's Policy Reduce But Do Not Eliminate The Benefits To Merchants From The Ability For Merchants To Surcharge MasterCard and Visa Credit Card Transactions

68. For the reasons I have discussed, I conclude that merchants' ability to surcharge is an important competitive tool that can be expected to constrain the Networks' market power and interchange fee rates in the United States. In my Declaration, I described two factors that

---

[132] Backup data to Professor Wecker's Figure 1.

may reduce the benefits that merchants obtain from the ability to surcharge MasterCard and Visa credit card transactions: state surcharge-related statutes and American Express's "non-discrimination" policy.[133] Professor Hausman concludes not only that these factors will reduce the effectiveness of surcharging but will entirely eliminate it. This is an extreme position that is unsupported by economic evidence or theory.

4.4.1 State Statutes

69. Professor Hausman argues that eleven states (accounting for 41% of U.S. retail commerce), as he interprets their laws, currently prohibit surcharges and legislation has been introduced "which would either prohibit or significantly restrict the ability to surcharge" in another seventeen states.[134]

70. I understand that under the terms of the DOJ settlement, a merchant may establish a (separate, higher) credit card price, provide a (lower) price available for cash and debit card transactions and promote the lower of these prices, and that this strategy may be possible even in states that prohibit "surcharges."[135] The New York Attorney General has similarly stated that the New York statute (similar to those of several other states) permits a merchant to post separate cash and credit card prices.[136]

---

[133] Frankel Declaration, Part 4.6.

[134] Hausman Report, ¶¶57-58. I understand from counsel that, as of now, little of the proposed legislation is proceeding in the legislative process.

[135] Response of Plaintiff United States to Public Comments on the Proposed Final Judgment, Case 1;10-cv-04496-NGG-RER, June 14, 2011, p. 26. I also understand from counsel that state statutes might not be enforceable to the extent they prevent credit card surcharges.

[136] At a hearing on June 14, 2013, an Assistant Attorney General for the State of New York represented to the Court the Attorney General's interpretation of that statute, which is consistent with the terms for surcharging set forth in the Settlement Agreement. The statement to the Court by the Assistant Attorney General was as follows:

REDACTED

71. As I have explained, to the extent that some states' statutes prevent merchants from surcharging credit card transactions, the existence of those statutes has not been subjected to a marketplace test.[137] Professor Hausman, for example, conjectures that MasterCard and Visa, which have not previously set higher interchange fees for merchants located in particular states, would begin to do so to charge higher fees to merchants located in no-surcharge states. I find this scenario speculative and unlikely. Even were MasterCard and Visa to implement such a strategy, that could undermine the support for the state statutes or proposed statutes discussed by Professor Hausman.

72. Professor Hausman identifies a litany of questions and uncertainties that will confront a merchant deciding to surcharge when that merchant has interstate transactions. He assumes that these uncertainties will deter merchants from surcharging. But merchants will not tend to adopt the less advantageous practice when there is uncertainty. Merchants, which Professor Hausman agrees are highly competitive, will likely seek profitable opportunities to locate their operations, when possible, in states that give them the most freedom to implement their desired business strategies. The experience with interstate collection of sales taxes

---

> The way our office interprets the statute is that it doesn't -- we are going after merchants who entice consumers to commence an economic transaction by advertising one price and then, once they arrive at the register, informing them when they pull out their credit card that they are going to be subject to a surcharge above and beyond that. So as long as the two prices -- the credit card price and cash price -- are displayed with equal prominence, our office doesn't think that violates the statute.
>
> THE COURT: So you are interpreting a false advertising statute.
>
> MR. COYLE: Essentially, yes, that's how our office enforces it.

Expressions Hair Design v. Schneiderman, 13 Civ. 3775 (JSR), (S.D.N.Y.), Transcript of June 14, 2013, pp. 5-6.

137 Frankel Declaration, ¶60].

suggests that unless it is clear that the merchant is legally obligated to adhere to the practices required by state statutes in the customer's state, and that the merchant faces likely adverse consequences for not complying with that state's requirements for its own businesses, the merchant is unlikely to do so.

4.4.2 American Express's Policy

73. Professor Hausman characterizes the Proposed Settlement as enabling "Visa and MasterCard to adopt AMEX's surcharging restrictions."[138] That is an incomplete characterization of the Proposed Settlement's linkage to American Express's policy, and, as I explained, the Proposed Settlement's reference to American Express's policy may not be a significantly binding constraint on merchants. Even without that linkage, the economically significant impediment to steering generated by American Express's policy remains. It is the American Express policy that generates the competitive problem, not the Proposed Settlement's reference to it.[139]

74. The American Express policy is being challenged in other litigation. If the policy were to be eliminated, this issue is moot. If not, then I explained that the benefits to merchants of the ability to surcharge MasterCard and Visa credit card transactions will be reduced, but not eliminated, because some merchants will still have an economic incentive to surcharge MasterCard and Visa transactions. These include merchants that do not accept American Express cards, merchants that have few debit card transactions and might surcharge MasterCard, Visa, and American Express credit and charge card transactions alike, and

[138] Hausman Report, ¶10.

[139] Frankel Declaration, Part 4.6.2.

merchants that accept American Express cards but would find it advantageous to stop accepting those cards so they can surcharge the Networks' credit cards.[140]

75. The economic reality is that many U.S. merchants do find that it is unprofitable to decline to accept American Express cards, but American Express's higher fees deter some merchants from accepting its cards. For merchants at or near the margin between accepting and rejecting American Express cards, a new economic factor to consider (assuming American Express's policy remains in force) will be the effect that accepting American Express will have on the merchant's ability to implement a surcharging strategy. Some merchants that otherwise would decide to accept American Express cards will not, and some that accept American Express may revisit that decision. The ability to surcharge will thus provide additional incentive to not accept American Express cards, or to push for lower fees in order to accept American Express cards, in the event that American Express's rules remain in effect.

76. In short, although I agree that state statutes and American Express's policy may reduce the benefits to merchants to the extent they remain in effect, those factors will not eliminate the benefits to merchants of the Proposed Settlement.

5. Professor Hausman and Professor Weisbach Misunderstand The Purpose Of My Illustrative Projections Of Benefits To Merchants From The Ability To Surcharge

77. Professor Hausman and Professor Michael Weisbach criticize[141] the computations that I made to illustrate that "even modest responses to the threat of surcharging or modest amounts of surcharging will result in substantial savings and recoupment

[140] In addition, the ability to credibly threaten to drop American Express to pursue the latter strategy can generate pressure on American Express to reduce its fees.

[141] Hausman Report, Part VII; Declaration of Michael S. Weisbach, May 24, 2013.

REDACTED

of costs by merchants."[142] In my Declaration, I explained that I was asked by class counsel to provide some estimate of the value to the class of the relief provided by the Proposed Settlement.[143] I noted that this is not a retrospective analysis of damages, and the ultimate value to merchants is difficult to estimate and will be affected by a number of significant economic and legal factors.[144] These factors cannot all be measured by empirical analysis or econometric forecasting techniques. I thus did not purport to undertake an econometric modeling exercise of the sort that a macroeconomic forecaster might use to predict GDP growth, inflation, or housing starts a number of quarters in advance. Rather, I merely aimed to *illustrate,* using reasonable assumptions that are consistent with the available economic evidence, that even if there are only modest effects from relaxing the Networks' no-surcharge rules, those effects will tend to generate billions of dollars of savings and cost recoupment to merchants.

78. I respond to Professor Hausman's and Professor Weisbach's specific criticisms in Appendix A. However, my opinion that even modest responses to surcharging or modest amounts of surcharging will result in substantial savings and recoupment of costs by merchants does not depend on the precision of my assumptions, and, although Professor Hausman disputes the likelihood of even a modest response occurring, neither Professor Hausman nor Professor Weisbach dispute my basic conclusion. Neither Professor Hausman nor Professor Weisbach present an alternative set of projected benefits derived from a process that meets

---

142 Frankel Declaration, ¶66.

143 Frankel Declaration, ¶1.

144 Frankel Declaration, ¶65.

REDACTED

their own described standards for generating "scientific" or "reliable" estimates. Nor have they disputed my conclusion from my computational exercise – modest amounts and effects of surcharging will result in substantial savings and recoupment by merchants. In Appendix A, I discuss some of these criticisms and explain in more detail why they are incorrect, unfounded or irrelevant, and do not alter my stated opinion or the usefulness of my computations to illustrate that opinion.

6. Conclusion

79. Professor Hausman argues that the Proposed Settlement will not eliminate the market power of MasterCard or Visa or make the prices merchants pay to accept those networks' credit cards "competitive." But that does not mean that the Proposed Settlement lacks significant benefits for merchants or will not significantly improve the level of competition. Professor Hausman offers the extreme opinion that the Proposed Settlement will not even constrain the extent of the Networks' market power, and, by implication, will not benefit merchants. He contends that essentially no merchant will surcharge the Networks' credit cards and that, even if they did, that would generate no benefit to other merchants that do not or cannot surcharge. For reasons I have explained, I conclude that Professor Hausman's conclusions are not supported by the available economic evidence, and that even modest effects of the Proposed Settlement will, in the aggregate, generate substantial savings and recoupment of costs for merchants.

August 14, 2013

Alan S. Frankel

Appendix A: Detailed Responses To Professors Hausman And Weisbach Regarding Projected Merchant Benefits

1. I performed two series of computations to illustrate numerically how modest amounts of surcharging or responses to surcharging can generate substantial benefits for merchants. My first set of computations was based on the experience of American Express in Australia following the RBA's regulation of MasterCard and Visa credit card interchange fee rates and the ability of merchants to surcharge the higher cost American Express card transactions. The Australian example is analogous to the situation now in the United States where the Federal Reserve has regulated debit card interchange fee rates and merchants can now surcharge MasterCard and Visa credit card transactions. Relying on the pressure that American Express faced to reduce its rates is also sensible, as I have explained, because American Express's average merchant discount rate in Australia is similar to the average merchant discount rate for MasterCard and Visa in the United States.

2. In my second set of computations, I assume the extent of surcharging and response to surcharging in the United States would be only a fraction of that in the first set but that there will still be some response.[145] This is intended to reflect the possibility that the American Express no-discrimination policy will remain in effect despite ongoing litigation over that policy and that some state surcharge statutes remain in effect and might restrict surcharges of MasterCard and Visa transactions in those states.

[145] This is consistent with my analysis described above. Even Professor Hausman concedes that some merchants will, in fact, surcharge. Hausman Report, ¶53. When some U.S. merchants have been permitted to surcharge in the past (e.g., for some university, utility, and government transactions), they have frequently done so. Frankel Report, ¶162; Frankel Rebuttal Report, ¶129-30; Frankel Declaration, ¶30.

REDACTED

A.1 Professor Hausman's Criticisms

3. **Lack of "precision."** Professor Hausman believes that my computations lack precision.[146] He agrees with me that estimating the benefits to merchants (let alone with "precision") is difficult, and he does not attempt to do so himself.[147] In any event, the purpose of my computations is not to attempt to determine the exact amount of the benefit to merchants. Rather, I aim to illustrate that even modest amounts of surcharging and effects of surcharging, such as those which I conclude will likely occur, can generate significant amounts (in the billions of dollars) of savings and recoupment of costs to merchants in the United States. My assumptions and computations are well suited for that more general purpose.

4. **Rate of decline of interchange fees.** One element of my computations is the assumed response of MasterCard and Visa to merchants' ability to surcharge in the United States. For my first set of computations of the potential surcharging benefits, I assume that MasterCard and Visa interchange fee rates will decline by 0.04% per year, an annual amount that represents only about one-fiftieth of the current level of interchange fees. Such a response is entirely plausible, and I noted that such a response is consistent with the experience of American Express in Australia during the past three years.[148]

5. Professor Hausman criticizes my assumption that interchange fees will decrease by 0.04% per year due to surcharging. He argues that my assumption is not based on any "econometric analysis or economic analysis."[149] That is incorrect. I have performed an

---

146 Hausman Report, ¶92.

147 Hausman Report, ¶92.

148 Frankel Declaration, ¶71.

149 Hausman Report, ¶93.

extensive economic analysis that I have described in great detail. I did not perform an "econometric analysis" to generate the assumption of 0.04%; instead, I relied on the rate at which American Express fees have recently declined in Australia as a benchmark for what might be expected to occur here. I was not attempting to forecast the outcome of the Proposed Settlement with precision; rather, I was providing an illustration of the basic proposition that even if the relief granted under the Proposed Settlement were to generate only very modest responses (consistent with the economic evidence), those responses would generate billions of dollars of benefits for merchants. I agree that there were multiple regulatory changes in Australia that make it difficult to determine precisely how much of the American Express's merchant service fee reductions over the years were due to surcharging as opposed to competitive pressure from reduced MasterCard and Visa fees. Professor Hausman states that I should have performed "an econometric analysis, which controls for the effects of regulation,"[150] but he performs no such analysis himself. Indeed, as I discussed earlier in my declaration, since there is widespread agreement among the parties involved in Australia that the ability to surcharge has reduced American Express's merchant service fees, such an analysis could conceivably produce a somewhat higher or lower number, but I have already provided calculations using a substantially lower number and doing so does not change my basic conclusion.

6. In any event, my use of the American Express history in Australia is reasonable for this purpose. As Figure 2 shows, American Express's average merchant discount rate in Australia has fallen by up to 0.15% in a single year at times since the RBA reduced MasterCard

[150] Id.

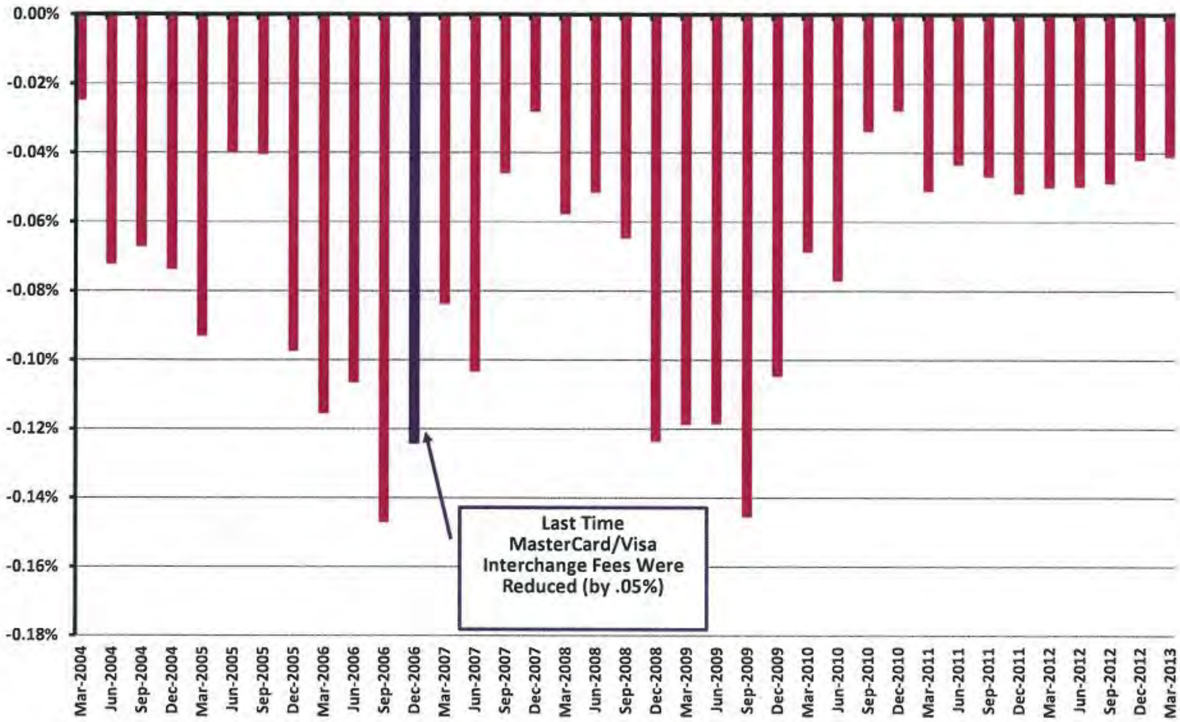
REDACTED

and Visa interchange fees and eliminated no-surcharge rules. I could have relied on this history of reductions in American Express rates, but I did not. Instead, I focused on reductions in the difference between American Express and MasterCard/Visa merchant discount rates in the past several years. Even after interchange fees declined in Australia, average MasterCard and Visa merchant discounts continued to decline, probably as a result of other reforms that made the acquiring market more competitive and transparent (including publishing average merchant discount rates).[151] Because MasterCard and Visa rates continued to decline for a few years by more than the amount by which interchange fees were reduced, focusing on the rate at which American Express closed the gap is conservative – American Express fees were falling by more than the gap was closing.

151 See Frankel Declaration, Figure 2.

REDACTED

Figure 2
American Express Average Merchant Discount in Australia:
Change From Year Earlier, 2004-13

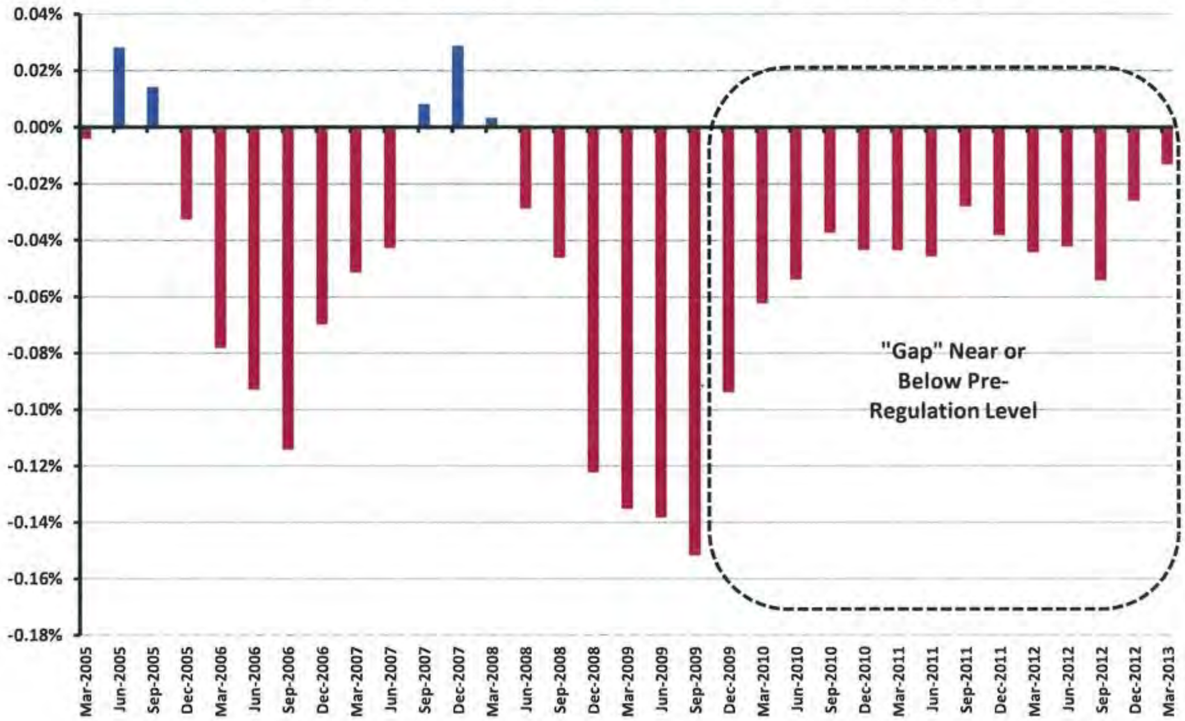


7. Initially, the gap between American Express's average merchant discount rate and the average merchant discount rate paid by merchants to accept MasterCard and Visa credit cards increased because the effect of reduced interchange fees on MasterCard and Visa merchant discount rates occurred very quickly. At its peak (in the three months ending June 2004), the gap between American Express merchant discount rates and MasterCard and Visa merchant discount rates stood at 1.42%. Figure 3 shows the history of changes in the gap since the beginning of 2005.

REDACTED

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER – FILED UNDER SEAL

Figure 3
Changes In The "Gap" Between American Express and MasterCard/Visa Merchant Discount Rates in Australia From Year Earlier, 2005-13



8. As Figures 2 and 3 show, in the early years following the RBA reforms in 2003, declines in American Express merchant discount rates and the gap between American Express and MasterCard/Visa rates generally declined by more than 0.04% per year – sometimes much more. I assumed that MasterCard and Visa interchange fees would decline by 0.04% per year to eliminate any concern that the decline in American Express fees was driven by reduced MasterCard and Visa interchange fees, which have not changed since 2006, rather than by surcharging, which continues to affect the marketplace. Since late 2009, the gap has been similar to or below the gap which existed at the beginning of 2003. Yet American Express merchant discount rates have continued to decline.[152]

[152] The slower decline in the gap in the most recent reporting periods does not reflect a slowdown in the decline of American Express's fees below 4% per year (see Figure 2) rather a recent reduction in the average MasterCard/Visa average merchant discount rate.

9. **Relying on American Express rather than Diners Club.** Professor Hausman also implies that I should have given equal weight to the experience of Diners Club in Australia as I gave to American Express.[153] I disagree. As I described in Part 4.3.1, Diners Club is a niche brand in Australia and the Asia-Pacific region with charge volume and merchant acceptance far below that of American Express. Many merchants treat Diners Club transactions the same as they treat American Express transactions because they have very few of the former.[154] Diners Club thus gains the benefit of some of American Express's fee reductions (to reduce the extent and amounts of surcharges) without itself having to reduce its rates as much. But Diners Club has reduced its average merchant discount by 0.31% since 2003.[155]

10. **No regulation of U.S. interchange fees.** Professor Hausman also states that surcharging of MasterCard and Visa in the United States will not be analogous to surcharging of American Express in Australia, because, unlike Australia, there has been "no regulation of interchange" with the settlement in the United States.[156] Professor Hausman is mistaken. There was no direct regulation of American Express fees in Australia, just surcharging and the regulation of the low-cost option to which I compared American Express – MasterCard and Visa credit cards. Similarly, there is no regulation of MasterCard and Visa credit card interchange fees in the United States, just surcharging and the regulation of the low cost option here – debit cards.

11. **Surcharges actually paid.** Professor Hausman criticizes my assumption that "100% of transactions at merchants who surcharge will be paid by consumers."[157] He notes the significant

---

[153] Hausman Report, ¶94.

[154] See, e.g., disclosure attached to letter from Richard Murray, Chief Financial Officer, JB Hi-Fi, to Dr. Chris Kent, Head of Payments Policy Department, Reserve Bank of Australia, July 27, 2011, p. 4. http://www.rba.gov.au/payments-system/reforms/submissions-card-surcharging/jb-hi-fi.pdf. Many Australian merchants similarly disclose common surcharges for American Express and Diners Club.

[155] http://www.rba.gov.au/statistics/tables/xls/c03hist.xls.

[156] Hausman Report, ¶94.

[157] Hausman Report, ¶95.

REDACTED

difference between the percentage of merchants in Australia that surcharge and the percentage of credit card transactions that are reportedly surcharged.[158] His criticisms are misplaced, and he misunderstands my computations.

12. Many merchants in Australia only surcharge American Express (and Diners Club if they accept it). The most recent survey data from Australia find that 39.1% of merchants overall surcharge at least some card transactions. But only 33.3% of merchants accepting MasterCard and Visa credit cards also accept American Express cards, and *78.1% of the merchants that accept American Express cards surcharge American Express*. (Only 6.9% of merchants accept Diners Club cards, and 79.2% of those that do surcharge Diners Club transactions.)[159]

13. The much lower percentage of overall transactions that are actually surcharged reflects the fact that at least some major merchants have received low merchant fee rates in exchange for not surcharging, many merchants only surcharge the high-cost brands, and many consumers in Australia switch to debit cards or non-surcharged credit cards at merchants that surcharge some or all credit cards.

14. It would be helpful if data were available from Australia showing the number and size of merchants that surcharge, the number and size of merchants that have negotiated lower fees in exchange for not surcharging, the pattern of card use at merchants that surcharge compared to those that do not, and so on. But such data are not available, so I made reasonable, simplifying assumptions. Despite the fact that nearly four out of five merchants in Australia that accept the benchmark American Express cards surcharge those cards, I conservatively assume for my purpose here that merchants accounting for 20% of MasterCard and Visa charge volume in the United States will (very gradually) decide to surcharge those cards over a ten year period.

158 Id.

159 These statistics are reported in East & Partners, June 2013 Report.

REDACTED

15. Professor Hausman errs by assuming that a merchant can only benefit from surcharging if a transaction is actually surcharged. Thus, he focuses on the reported 5% of credit card transactions in Australia that are surcharged. Professor Hausman neglects to consider the benefit that a merchant obtains when a customer switches from using a high-cost card to a lower cost payment method or is deterred from surcharging by receiving lower merchant discount rates. In fact, the study that he cites from Australia reports that most customers who confront a surcharge switch to a non-surcharged credit or debit card. Although it is based on survey responses to hypothetical questions, the report states that if confronted by a surcharge for using a credit card, more consumers state that they would use a non-surcharged card or cash than would use the credit card and pay the surcharge.[160] This benefits merchants just as collection of surcharge revenue benefits merchants.

16. For my computations, I made a simplifying assumption that avoids an unnecessary complication to the tables: I assumed that the amount of surcharges will exactly equal the difference between the cost to the merchant of accepting MasterCard and Visa credit cards and the cost to the merchant of accepting a debit card, which I assume consumers use when they wish to avoid a credit card surcharge. Thus, the surcharging merchant either saves that difference or collects the surcharge equal to the same difference, and it is immaterial to the computation of benefits whether the cardholder actually pays a surcharge or not. This is a conservative assumption, because merchants have been more likely in fact to charge surcharges similar to the amount of their credit card merchant discount rate, not the difference between that rate and lower cost cards.[161]

---

[160] 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," June 2011, p. 31.

[161] In fact, merchants have been accused of "profiteering" or collecting "excessive" surcharges. Whatever the merits of those claims, they represent a benefit to merchants that I have not considered. The Proposed Settlement sets a cap on brand-level surcharges designed to limit the ability for merchants to set surcharges above 1.8 times the level of the interchange fee plus the network fee. Proposed Settlement, ¶42(a), ¶55(a). Product-level surcharging is capped by the difference between a product's cost to the merchant and the regulated debit card rate.

17. **Business-stealing effect.** Professor Hausman states that I did not "take into account the competitive effect of surcharging where customers will switch their purchases to merchants who do not surcharge. This consumer switching behavior will lead to decreased profits for merchants, holding other factors constant."[162] Professor Hausman is wrong on two counts. I took this factor into account when I assumed that only a modest percentage of merchants will actually surcharge. In addition, he is wrong because merchants in the aggregate do not suffer any lost profits when a customer switches from one merchant to another.

18. **Decreased credit card charge volume.** Professor Hausman then claims that I do not "take into account the likely change from decreased use of credit cards from the effects of surcharging."[163] I assume that credit card charge volume, <u>absent surcharging</u>, will continue to grow at 8.5% per year.[164] Professor Hausman states that "if surcharging is effective at decreasing interchange rates, banks will decrease their rewards and increase annual costs for credit cards, as has been observed in Australia which will lead to a slower growth rate of credit card usage, especially for VMC credit cards."[165] He states that this claimed omission leads to upward bias in my computations.[166] This criticism is illogical and incorrect. Moreover, I did take this factor into account.

19. Reduced credit card charge volume *benefits merchants*; it does not harm them. If I overestimate credit card charge volume, this means I *underestimate* the benefits to merchants from the ability to surcharge.[167] As I just explained, my computations assume that merchants benefit equally

---

162 Hausman Report, ¶96.

163 Hausman Report, ¶97.

164 I discuss this assumption further in response to Professor Weisbach, below.

165 Hausman Report, ¶97. I do not agree that reductions in interchange fees have clearly led to increases in cardholder fees in Australia, but that issue is not directly relevant to my conclusions.

166 Hausman Report, ¶99.

167 I explained in my earlier reports that credit card use does not increase merchant retail sales in the aggregate. See, e.g., Frankel Rebuttal Report, Part 5.3.4.

REDACTED

either by collecting surcharge revenue or by shifting charge volume to debit cards. Merchants that do not surcharge benefit from lower interchange fees, but they *also* benefit in my computations from a general shift of some charge volume from credit cards to debit cards (Tables 1 and 2, column 7). The 8.5% growth rate is merely a baseline starting point; the tables clearly label column 1 as showing credit card charge volume each year assuming "no surcharging." My computations then take into account that some of those transactions will not be made using credit cards if surcharging is permitted.

20. **Encouraging use of American Express cards.** Professor Hausman states that I fail to take into account that lower MasterCard and Visa interchange fees will lead to increased use of higher cost American Express cards, as occurred in Australia.[168] As I have described previously, MasterCard made a similar argument about Australia.[169] Like MasterCard, Professor Hausman has it backward.

21. One of Professor Hausman's main criticisms of my economic analysis is his claim that reductions in MasterCard and Visa interchange fees cause American Express to reduce its merchant discount rates. In fact, Professor Hausman (incorrectly) attributes *all* of the reduction in American Express's fees to the reduction of MasterCard and Visa interchange fees. There is a debate in Australia whether the RBA regulations caused an increase in American Express's market share or whether that would have occurred anyway.[170] It does not matter. I have shown that, in Australia, the reductions in

---

168 Hausman Report, ¶98. Professor Hausman states that usage of American Express and Diners has increased by approximately 35% since RBA regulations began. This is misleading because usage of all payments has increased. MasterCard and Visa usage have increased as well. Also, the RBA reports that surcharging of credit cards has led to increased use of debit cards. 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," June 2011, p. 16.

169 MasterCard's General Counsel claimed in 2005 that the RBA reforms "will inevitably lead to higher merchant fees" and that "[The RBA] have managed to find a way to hurt both cardholders and merchants at the same time." Noah Hanft, "Let's Get Real," in Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities?, proceedings of the Federal Reserve Bank of Kansas City Payments Conference, May 2005, pp. 211-12.

170 Changes in reporting methods and coverage make it difficult to determine by precisely how much the American Express and Diners Club share of transaction volume in Australia has increased. The unadjusted reported charge volume share appears to be roughly four to five percentage points higher now than before

American Express's merchant discount fees outweigh any additional cost to merchants resulting from a shift of some transactions from MasterCard or Visa to American Express or Diners Club.[171] My computations reflect savings from lower MasterCard and Visa interchange fees, surcharge revenue on MasterCard and Visa transactions, and lower usage of MasterCard and Visa credit cards and more use of debit cards. I did not include higher costs from any shift to using American Express cards, but I also did not include savings from lower American Express merchant discount rates, which in Australia have been of greater magnitude.

22. **American Express's no-discrimination policy and state statutes.** Finally, Professor Hausman notes that the Australian benchmarks that I use may not be applicable because of his assumption that American Express's no-discrimination policy in the U.S. will continue and his assumption that surcharging is and will continue to be prohibited in a number of states. As I have explained, the American Express policy and state statutes (to the extent they restrict surcharging), if unchecked, will reduce the benefits to merchants, but will not eliminate those benefits. That is why I prepared Table 2 with highly conservative assumptions that greatly reduce the computed effects of the ability to surcharge.[172]

23. I have considered each of Professor Hausman's criticisms. None of them alter my conclusion that even modest amounts of surcharging and modest responses to surcharging will generate

---

the regulations, but the numbers are not directly comparable. See, http://www.rba.gov.au/statistics/tables/xls/c02hist.xls.

[171] Alan S. Frankel, "Towards a Competitive Card Payments Marketplace," in Reserve Bank of Australia, Payments System Review Conference, Proceedings of a Conference held in Sydney on 29 November 2007 (2008), pp. 36-37.

[172] Professor Hausman speculates that MasterCard and Visa will begin to price discriminate so that merchants in no-surcharge states will not get the benefits of lower fees. I do not find that likely, but even if he were correct, his analysis is incomplete. With nationwide interchange rates, MasterCard and Visa would take into account the most profitable interchange fee rates overall, given surcharging in some states but not others. With state-specific rates, merchants in no-surcharge states would still benefit from a general reduction in the usage of credit cards, but all of the interchange fee reduction would accrue to the benefit of merchants in the surcharging states.

REDACTED

significant benefits for U.S. merchants or my conclusion that the computations that I performed to illustrate those benefits are useful for that purpose.

A.2 Professor Weisbach's Criticisms

24. Professor Weisbach fundamentally mischaracterizes the nature and purpose of my computations regarding the benefits of surcharging and, like Professor Hausman, offers a variety of specific criticisms. Like Professor Hausman, he offers no alternative estimates of his own.

25. **No economic basis.** Professor Weisbach begins by asserting that the various assumptions that I used "have no economic basis."[173] That is incorrect. I have explained in detail the economic analysis and evidence that supported my assumptions.

26. **Standards for a "forecast."** Professor Weisbach characterizes my assumptions to be the result of econometric forecasts, and he then criticizes my assumptions for not meeting the detailed requirements for econometric forecasting.[174] He criticizes my computations as not being "reliable as financial forecasts."[175] But I did not undertake an exercise in econometric or financial forecasting. Rather, I performed computations based on reasonable assumptions grounded in economic evidence to generate reasonable estimates of the potential benefits to merchants.

27. For example, as I discussed earlier, Professor Hausman and I disagree about the likely extent of surcharging and the likely responses of MasterCard and Visa to surcharging. This is an economic debate, but it is not a dispute over econometric modeling methodologies or estimation of, e.g., confidence intervals. I noted the difficulty in the context here of developing a precise estimate of the value to merchants of the ability to surcharge using a detailed forecasting approach.[176] But such an

---

173 Weisbach Declaration, ¶3.

174 Weisbach Declaration, ¶¶4-9.

175 Weisbach Declaration, ¶9.

176 Frankel Declaration, ¶65.

approach was not necessary to show accurately that the modest amounts of surcharging and modest responses to surcharging that are supported by the economic evidence will generate substantial savings and recoupment of costs for U.S. merchants.

28. After offering a variety of criticisms of my computations for failing to adhere to his proposed standards for econometric forecasting and estimation, Professor Weisbach notes that I do not refer to my calculations as statistical "estimates."[177] Professor Weisbach contends that evidence other than that generated by econometric forecasting models "provides no guidance."[178] I disagree. In fact, were Professor Weisbach to offer an econometric forecasting model of the benefits of surcharging, after evaluating it carefully before reaching any conclusion, I would be skeptical of its usefulness as the questions presented may not readily lend themselves to such an approach in a situation like that which exists here.

29. **Discounting future benefits.** Professor Weisbach notes that I did not express the benefits to merchants in terms of present discounted value, i.e., reducing future benefits for the time value of money and risk.[179] That is correct. There was no need to do so because these computations were not done, e.g., for purposes of computing damages; I was instead illustrating the general magnitude of benefits that could be anticipated rather than establishing a value with precision, as I have already discussed. Nevertheless, Professor Weisbach could have discounted the annual savings and recoupment of costs that I project to present discounted value if he believes that to be appropriate and helpful to the court. But he did not. Nor did he describe what methodology he believes appropriate to determine the correct discount rate in the circumstance here or what discount rate results from any such methodology. The amount of benefit I estimate, even reasonably discounted, remains significant.

---

[177] Weisbach Declaration, ¶16.

[178] Id.

[179] Weisbach Declaration, ¶10.

30. **Expected cash flows.** Professor Weisbach states that I should have reported the expected cash flows in each future year, i.e., "the average of all possible outcomes of the cash flow weighted by the probability that each occurs."[180] He offers no guidance as to how this might be done, makes no attempt to do so himself, and offers no reason to think that doing so (if possible) would lead to any different conclusions. Rather than let "the perfect be the enemy of the good," I presented two illustrative computations, the latter of which is extremely conservative. Since even the latter supports my conclusions, attempting to divine all possible outcomes and estimate the probabilities of each would significantly increase the difficulty and opacity of the process without providing any further insight into the actual question of interest.

31. **No scientific process used to generate assumptions.** Professor Weisbach alleges that I merely "pick[ed] numbers" to generate a result that "look[s] large" and there is no "scientific" basis for my assumptions.[181] That is absurd. I have explained in great detail in this case the economic analysis and evidence that leads to my conclusions about the effects of surcharging and no-surcharge rules and the bases for my assumptions. I did not "pick numbers" to generate a desired result; rather, I chose assumptions based on my economic analysis and then performed computations to evaluate the implications of those assumptions. Professor Weisbach might disagree with my economic analysis of the effects of surcharging, but if so, he doesn't say. He has not presented any economic analysis of his own.

32. **Growth in credit card charge volume.** Professor Weisbach asserts that I assume, "with no significant analysis," that MasterCard's and Visa's combined dollar credit card charge volume will

---

180 Weisbach Declaration, ¶13.

181 Weisbach Declaration, ¶¶14-15.

REDACTED

increase at 8% annually over the next decade. He asserts that "no empirical basis" underlies my assumed growth rate.[182] That is incorrect.

33. I assumed a baseline 8.5% annual growth in charge volume (not 8%). I clearly stated the "empirical basis" that I used – Visa's and MasterCard's combined growth rates since the recession, which have been similar to pre-recession growth rates. Professor Weisbach himself acknowledges my use of actual growth rates as empirical support.[183] He disagrees with my use of that data, but it is simply incorrect to state that I had no empirical basis for my assumption.

34. Professor Weisbach notes that I would have computed a negative (-0.2%) average annual growth rate had I relied on the period 2006-09. Whether this is so or not is irrelevant as it would be inappropriate to rely on the 2006-09 period for this purpose. The United States experienced a financial panic in 2008 and between December 2007 and June 2009 experienced the steepest recession since the Great Depression of the 1930s.[184] Consumer spending plummeted as consumers conserved their financial resources, paid down debt, and attempted to rebuild savings.

35. Professor Weisbach claims that I "selected a two-year period of particularly high growth" as the basis for my assumption.[185] Figure 4 shows the annual growth rates in MasterCard's and Visa's combined credit card charge volume using all of the data that I have been able to assemble. The figure shows graphically the basis for my assumption. Aside from his suggestion that I should have relied on a period ending in the "Great Recession," Professor Weisbach offers no projection of credit card growth of his own. He states that growth since the recession has been "much higher" than during

182 Weisbach Declaration, ¶¶17-18.

183 Weisbach Declaration, ¶18.

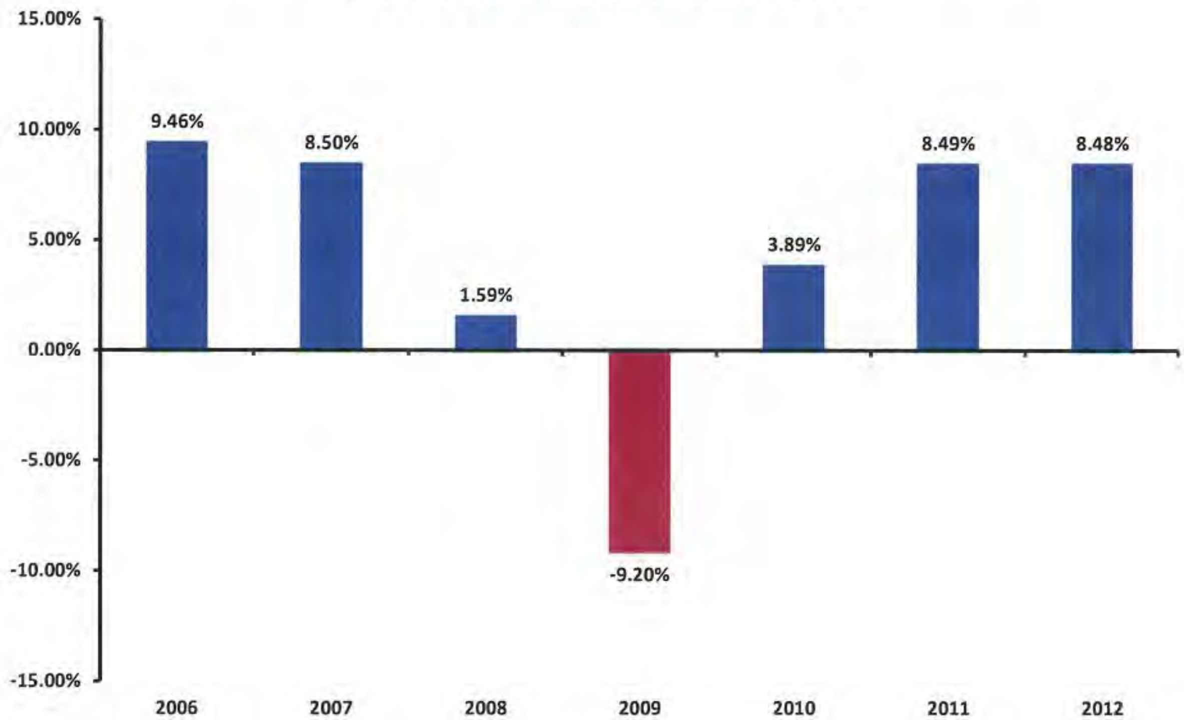
184 National Bureau of Economic Research, "US Business Cycle Expansions and Contractions," http://www.nber.org/cycles.html.

185 Weisbach Declaration, ¶19.

REDACTED

previous years.[186] As Figure 4 shows, however, annual growth before the recession was equal to or greater than 8.5%. It is true that my computations do not build in an assumption of another recession. Were one to occur, charge volume, interchange fee payments, and surcharge benefits would all be lower. I see no reason to arbitrarily assume that another recession will occur in the next few years.

Figure 4
Combined Growth Rate of MasterCard and Visa U.S. Credit Card Purchase Dollar Charge Volume, 2006-12



36. Professor Weisbach speculates that "potential regulatory, legislative, technological, or consumer-based factors... could substantially affect the use of credit cards in the future."[187] He faults me for not accounting for such factors in projecting future credit card charge volume. I disagree that this is a flaw. On the contrary, it would be inappropriate to make arbitrary adjustments to the growth of credit card charge volume based on mere speculation, and Professor Weisbach offers no guidance as to

186 Weisbach Declaration, ¶19.

187 Weisbach Declaration, ¶20.

REDACTED

how he believes such factors should be taken into account. Nor is this assumption critical to my results. Again, Professor Weisbach presents no evidence that altering this assumption would change my fundamental conclusions.

37. **Difference between credit and debit card costs.** To illustrate the benefits of shifting credit card customers to more frequent debit card use and (conservatively) collecting surcharge revenue on credit card use equal to the difference between the two, I (also conservatively) assumed illustratively that debit card transactions incurred fees of 1% of the transaction amount to simplify the computations. Professor Weisbach criticizes this assumption.

38. I could have done a more complicated and detailed set of computations to handle this issue more completely. However, had I done so, the computed benefits to merchants would have been greater, not less. Federal Reserve regulation of debit card interchange fees became effective in 2011.[188] In the last three months of 2011, the period during which the regulation was in effect, the Federal Reserve reports that the average debit card interchange fee as a percentage of the transaction amount was 0.78% and 0.79% in 2012.[189] The interchange fees for regulated debit transactions (which account for about two-thirds of total debit card charge volume) are set primarily as a fixed amount per transaction and have only related to the transaction amount to a very small extent (i.e., $0.21 + 0.05% of transaction amount, plus $0.01 additional for certain qualifying transactions). Thus, as the average transaction amount increases, such as will tend to occur in any event but will be more significant for an average credit card transaction migrating to debit, the effective percentage debit interchange fee will decline, and the savings to merchants will be even greater. Moreover, a recent Federal Court order may

188 Board of Governors of the Federal Reserve System, "Average Debit Card Interchange Fee by Payment Card Network," http://www.federalreserve.gov/paymentsystems/regii-average-interchange-fee.htm.

189 http://www.federalreserve.gov/paymentsystems/files/Avg_IF_by_PCN.xls

REDACTED

lead to further significant reductions in interchange fees on debit card transactions in the United States.[190]

39. **General migration of credit transaction volume to debit.** As I discussed in the previous section, Professor Hausman criticizes me for failing to take into account the fact that credit card usage will tend to decline as interchange fees decline. As I explained, I did, in fact, take that into account. Professor Weisbach, in fact, criticizes me for doing so.

40. I assumed, conservatively, that the growth rate of credit card use would be reduced by 1% per year at merchants that do not surcharge. As I noted, evidence from Australia shows that credit card usage generally slowed, and debit card usage accelerated, following the RBA reforms.[191] I could have undertaken a more thorough investigation of this issue and perhaps refined my estimate of this effect, but I instead chose a very conservative assumption which accounts for only about one-tenth of the overall estimated benefits. As with the other issues discussed, Professor Weisbach offers no alternative estimation of this effect and no evidence that adjusting this assumption would change my fundamental conclusions. Indeed, any refinements would likely increase the benefits estimated.

41. **Use of the Australian Experience as a benchmark.** Professor Weisbach offers a number of criticisms of my reliance on the Australian experience as a benchmark for my analysis. Economists, regulators, networks, and merchants around the world have relied on the experience in Australia to make inferences about the effects of interchange fees, anti-steering rules, and changes to those practices. I will not respond in detail to all of his statements, although none of them cause me to alter my opinions.

[190] Memorandum Opinion in NACS; National Retail Federation; Food Marketing Institute; Miller Oil Co.; Boscov's Department Store, and National Restaurant Association v. Board of Governors of the Federal Reserve System, Civil Case No. 11-02075, July 31, 2013.

[191] Reserve Bank of Australia Payments System Board Annual Report, 2012, p. 10.

REDACTED

42. For example, Professor Weisbach states that "the U.S. went through the Great Recession during the period being considered, while Australia did not."[192] The recession in the U.S., however, happened in the past, not the future. I am assuming that the U.S. in the next decade does not experience another Great Recession. For that purpose, I am relying on the experience in Australia – where there was no Great Recession. I therefore disagree that this somehow reflects a flaw in my analysis.

43. Professor Weisbach states that, unlike Australia until this year, the Proposed Settlement imposes "strict limits" on the amount that a merchant may surcharge.[193] But my computations assume conservatively that merchants will surcharge only by the difference between credit card and debit card cost of acceptance. To the extent that the limits contained in the Proposed Settlement prove to be binding, in other words, it will mean that actual surcharges exceed those that I assume, and merchant benefits will exceed those I use in my computations.

44. **State statutes and American Express's policy.** Professor Weisbach contends that merchants will obtain benefits only in states that permit surcharging. I have explained in detail why this is incorrect. Surcharging will be most beneficial to merchants that actually surcharge (or else they would not surcharge), but other merchants benefit by the downward constraint on the level of interchange fees and by shifts in the general use of credit vs. debit cards. Professor Weisbach ignores these effects. He also repeats Professor Hausman's arguments that American Express's policy will inhibit surcharging, and he faults me for not offering a "reliable" quantitative analysis of this issue.[194] My response is the same as with Professor Hausman: if one believes that state statutes restrict surcharges and will remain in force, and the American Express policy will remain in effect, and these factors significantly impact the

---

[192] Weisbach Declaration, ¶25.

[193] Weisbach Declaration, ¶26.

[194] See also Weisbach Declaration, ¶38.

REDACTED

relief granted under the Proposed Settlement, then one can look at Table 2 in which the benefits are drastically reduced. They are not, however, eliminated for the reasons I explained earlier. Again, Professor Weisbach offers no guidance as to what he believes the quantitative impact of these factors might be.

45. **Rate of interchange fee decline.** Professor Weisbach repeats Professor Hausman's criticism about my assumption of a 0.04% per year decrease in the average effective interchange fee rate. He claims that I "[presume] (without proof) that it was the regulatory changes that *caused* the decline in interchange fees, and not any other reason, such as an increasingly competitive market or other potential factors."[195] This is incorrect. I did not rely on any decline in interchange fees in Australia; instead, I relied on the reduction in American Express's merchant discount rate. The market in Australia *did* become more competitive, but it did so *because* of the RBA's regulatory interventions.

46. Professor Weisbach questions whether consumers will switch from MasterCard or Visa credit cards to debit cards in the United States in the same way that they switch from using American Express cards to alternatives in Australia in response to surcharges. He conjectures that the ubiquity of MasterCard and Visa use and acceptance makes switching away from those cards unlikely.[196] In Australia, however, MasterCard and Visa are also ubiquitous.

47. The RBA study cited by Professor Hausman reports that when confronted by a surcharge for using MasterCard or Visa credit cards, only 36% of consumers indicated that they would continue to use their credit card. "A little under half" would, instead, use a debit card or cash.[197] Professor Weisbach suggests that low regulated debit interchange fees in the United States reduce promotion of debit cards and make this migration less likely. But debit interchange fees in Australia historically were

---

195 Weisbach Declaration, ¶32, emphasis in original.

196 Weisbach Declaration, ¶33.

197 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," June 2011, p. 31.

negative. Today, debit interchange fee rates are capped at 12 Australian cents per transaction (US $0.11).[198] This is less than average debit interchange fee rates in the United States, yet consumers migrate significantly to debit in response to surcharging of credit in Australia.

48. **Persistence of decline in American Express's average merchant discount rate.** In discussing my assumption that interchange fee rates will decline by 0.04% per year, Professor Weisbach states that there is evidence only that the rate has declined by that much for three years, and that, if MasterCard and Visa interchange rates decline only for three years, total savings to merchants will be only a small fraction of what I show.

49. As I showed in Figures 2, 3, and 4, however, my use of a 0.04% assumed annual decline was *conservative*. The evidence shows that the total, ten-year decline in American Express's average merchant discount rate has been 0.70%, or an average decline of 0.07% per year. The gap between American Express and MasterCard/Visa merchant discount rates has declined by an average of 0.05% for eight years. In any event, I also offer Table 2 with substantially lower assumed effects.

50. **Percentage of volume surcharged.** Professor Weisbach briefly repeats Professor Hausman's criticism concerning my assumption that merchants accounting for 20% of charge volume will eventually (after ten years) surcharge MasterCard and Visa card transactions. I responded to this in detail in the previous section.

51. **Online sales and compliance costs.** Professor Weisbach states that I neglect "the potential loss of U.S. sales from surcharged online U.S. sales."[199] It is not clear what he means by this. If some consumers switch from online merchants that surcharge to online merchants that do not surcharge or to brick and mortar merchants, this does not reduce the overall sales of merchants in the United States. He states that lost online sales result in higher search costs and thus "inflate" estimated

[198] http://www.rba.gov.au/media-releases/2012/mr-12-35.html

[199] Weisbach Declaration, ¶39.

savings to *merchants*.[200] But online sales save search costs for *consumers*. In any event, if search cost savings are significant enough to affect the savings to merchants through an indirect effect, is it unlikely that consumers will abandon online purchases.

52. Professor Weisbach also discusses the cost of administering surcharges.[201] While there may be some compliance costs to begin surcharging credit card transactions, they have not been significant enough to prevent even very small merchants in Australia from surcharging. As I have explained, technology has generally made surcharging easier, cheaper, and more likely, not less. In any event, Professor Weisbach offers no estimate of the magnitude of any such costs or any evidence that attempting to estimate such costs would change any of my conclusions.

53. I have considered each of Professor Weisbach's criticisms. None of them alter my conclusion that the computations that I performed to illustrate the benefits from even modest amounts of surcharging and modest responses to surcharging are useful for that purpose.

---

200 Weisbach Declaration, ¶39.

201 Id.

EXHIBIT 1

REDACTED

Exhibit 1

ALAN S. FRANKEL

Coherent Economics LLC
2800 Acacia Terrace
Buffalo Grove, Illinois 60089
(847) 913-8187
alan.frankel@coherentecon.com

EDUCATION

UNIVERSITY OF CHICAGO, Chicago, Illinois
Ph.D., Economics, December 1986.
M.A., Economics, March 1985.
B.A., Economics, March 1982.

PRESENT POSITIONS

COHERENT ECONOMICS, LLC,
Founder and Director, 2008 -

COMPASS LEXECON, Chicago, IL.
Senior Advisor, 2008 -
Senior Vice President, 2004 – 2008.
Vice President, 1989 - 1996.
Economist, 1985 - 1989.

ANTITRUST LAW JOURNAL
Senior Editor, 1999 -
Associate Editor 1998 - 1999
Assistant Editor 1996 - 1998

PROFESSIONAL AND ACADEMIC EXPERIENCE

LECG, Evanston, Illinois.
Director, 1998-2004
Principal, 1996-1997

UNIVERSITY OF CHICAGO, GRADUATE SCHOOL OF BUSINESS, Chicago, IL, 1983 - 1984.
Research Assistant

UNIVERSITY OF CHICAGO, COMMITTEE ON PUBLIC POLICY STUDIES,
Chicago, IL, 1983
Teaching Assistant

REDACTED

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

"Towards a Competitive Card Payments Marketplace," in Reserve Bank of Australia, Payments System Review Conference, Proceedings of a Conference held in Sydney on 29 November 2007 (2008).

"Economic Effects of Interchange Fees," with Allan Shampine, 73 Antitrust Law Journal 627 (2006).

"Transaction Costs, Externalities, and 'Two-Sided' Payment Markets," with Dennis Carlton, 2005 *Columbia Business Law Review* 617 (2005).

"Interchange Fees in Various Countries: Comment on Weiner and Wright," in Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities?" Federal Reserve Bank of Kansas City (2005).

"The Control of Externalities in Sports Leagues: An Analysis of Restrictions in the National Hockey League," with Dennis Carlton and Elizabeth Landes, 112 *Journal of Political Economy* S268 (2004).

"Editor's Note: EFT Networks And The Canadian Experience" 67 *Antitrust Law Journal* 385 (1999)

"Monopoly and Competition in the Supply and Exchange of Money," 66 *Antitrust Law Journal* 313 (1998).

"Cash Machines: Fee Disclosure and Competition vs. Regulation," with James Langenfeld, *The Global Competition Review* (August/September 1997).

"'Sea-Change' or 'Submarkets?'" (Federal Trade Commission v. Staples, Inc. and Office Depot, Inc.), with James Langenfeld, *The Global Competition Review* (June/July 1997).

"Antitrust and Payment Technologies," with Dennis Carlton, 77 Federal Reserve Bank of St. Louis *Review* 41, December 1995.

"The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee Comment," with Dennis Carlton, 63 *Antitrust Law Journal* No. 3, Spring 1995.

"The Antitrust Economics of Credit Card Networks," with Dennis Carlton, 63 *Antitrust Law Journal* No. 2, Winter 1995.

Countervailing Effects of Automobile Emission Control Regulations, Ph.D. dissertation, University of Chicago, Department of Economics, 1986.

SPEECHES

"Interchange Regulation – A Pitched Battle of Ideas," panelist, The Clearing House annual meeting, November 2012.

"Payment Innovation: Competitive Impediments and Opportunities," presented at *Consumer Payment Innovation in the Connected Age*, Federal Reserve Bank of Kansas City, March 2012.

"Does Disclosure Matter?," American Bar Association Section of Antitrust Law, Panel on the Proposed Consumer Financial Protection Agency, Washington, DC, April 2010.

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

"Towards a Competitive Card Payments Marketplace," Reserve Bank of Australia and Melbourne Business School, Sydney, Australia, November 2007.

"Evaluating Self-Regulation of Interchange Fees," Organization for Economic Cooperation and Development, Paris, France, June 2006.

"A More Competitive, Deregulated Market Structure: The Role of Networks vs. the Role of Banks," International Cards & Payments Council, Rome, Italy, October 2005

"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

"Interchange Fees in Various Countries: Comments on Weiner and Wright," Presented at *Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities?* Federal Reserve Bank of Kansas City, Santa Fe, New Mexico, May 2005.

Columbia University School of Law, *Conference on Two-Sided Markets*, April 2005.

Chicago Bar Association Antitrust Committee speaker, Credit Card Issues, February 2002.

"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

Spring Antitrust Developments panelist, Vedder, Price, Kaufman & Kammholz, P.C., May 1997.

Credit Card Pricing and Competition: The Environment Today and Future Marketplace and Regulatory Trends, before the American Bar Association, Consumer Financial Services Committee, November 1995

"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)

REDACTED

TESTIMONY AND OFFICIAL PROCEEDINGS

Report, Reply Report and Testimony in The Matter Between The Commissioner of Competition and Visa Canada Corporation and MasterCard International Incorporated.

Joint Report, Rebuttal Report, Deposition and Trial Testimony in Best Buy Co., Inc., v. Toshiba Corporation, et al., In Re: LCD (Flat Panel) Antitrust Litigation, United States District Court, Northern District Of California, San Francisco Division

Testimony before the European Commission in Visa Europe.

Brief of Evidence and Reply Brief of Evidence, in New Zealand Commerce Commission v. Cards NZ Limited and Others, DSE (NZ) Limited and Others.

Report to the Reserve Bank of Australia in its *Review of Payment Systems Reforms*.

Brief of Evidence, in New Zealand Commerce Commission v. American Express International (NZ) Incorporated

Testimony before the European Commission in MasterCard.

Brief of Evidence, in New Zealand Commerce Commission v. Westpac Banking Corporation, District Court, Auckland, New Zealand.

Brief of Evidence, in New Zealand Commerce Commission v. Bank of New Zealand, Limited, District Court, Auckland, New Zealand.

Joint Report, In the Matter of the Decision of the Office of Fair Trading dated 6 September 2005 No. CA 98/05/05 of 6 September 2005 in Case CP/0090/00/S (MasterCard Multilateral Interchange Fee), Competition Appeal Tribunal (U.K.)

Declaration, Report, Rebuttal Report, and Deposition, In Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, U.S. District Court, Eastern District of New York.

Brief of Evidence, in New Zealand Commerce Commission v. ANZ National Bank Limited, New Zealand Commerce Commission v. Bank of New Zealand, Limited, District Court, Auckland, New Zealand.

Declaration in David Salkin v. MasterCard International, Court of Common Pleas, Philadelphia County, Pennsylvania.

Report in CFS-Related Securities Litigation, U.S. District Court, Northern District of Oklahoma, and District Court for Tulsa County, State of Oklahoma.

Report in Commercial Financial Services, Inc., v. Mayer Brown Rowe & Maw, P.A., f/k/a Mayer Brown & Platt, and J.P. Morgan Securities, Inc., f/k/a Chase Securities, Inc., Civil Action No. CJ 2002 03028, District Court of Tulsa County, State of Oklahoma.

Rebuttal Testimony and Affidavit in TDS Metrocom, LLC v. Wisconsin Bell, Inc. d/b/a SBC Wisconsin, Public Service Commission Of Wisconsin Docket No. 6720-TI-175.

Affidavit and Deposition in Elizabeth A. Fischer and Jennifer Herbst, on Behalf of Themselves and All Others Similarly Situated, v. MasterCard International, Inc.

Direct Testimony and Rebuttal Testimony on Behalf of SBC Illinois Before The Illinois Commerce Commission, Docket No. 03-0553.

Report in V.P. Intellectual Properties, L.L.C. v. Nobel Biocare USA, Inc., Implant Innovations, Inc. And Implant Innovations International Corporation v. Leonard I. Linkow, And Anthony W. Rinaldi.

Report and Trial Testimony in Enrique Calva-Cerqueira v. United States of America.

Report, Deposition, Amended Report, and Direct Testimony in Charter Federal Savings Bank v. United States of America

Declaration, Deposition, Trial Testimony, and Rebuttal Testimony in Adam Schwartz vs. Visa International, Inc., Visa International Service Association, Inc., Visa USA, Inc., and MasterCard International, Inc.

Report in Cardiac Pacemakers, Inc., Guidant Sales Corporation, and Eli Lilly and Company v. St. Jude Medical, Inc., Pacesetter, Inc., and Ventritex, Inc.

Testimony before the European Commission in Visa International.

Declaration, Report, Deposition, and Supplemental Report in Columbia First Bank, FSB v. United States of America

Affidavit in Century Shopping Center Fund I, Limited Partnership v. Frank Pio Crivello

Report and Deposition in Gregory F. Daniel, et al. v. American Board of Emergency Medicine, et al.

Report and Declaration in 1st Home Liquidating Trust v. Unites States of America

Report and Deposition in Pi Electronics Corp. v. United States of America

Report in WDP Limited v. Gelatin Products International, Inc. and R.P. Scherer Corp.

Joint Declaration, Joint Report, Deposition, Trial Testimony, and Rebuttal Testimony in C. Robert Suess, et al. v. United States of America.

Declaration and Supplemental Declaration in Robert Johnstone, et al. v. First Bank National Association, et al.

Testimony in Keisha Johnson, Shapearl, et al. v. Aronson Furniture Co. and Heilig-Meyers Co.

Report, Deposition and Trial Testimony in ProtoComm Corporation v. Novell Advanced Services (Formerly Fluent)

Joint Affidavit in Kahn v. Emerson Electric Co., Hazeltine Corporation and Motorola, Inc. et al.

Affidavit, Deposition and Trial Testimony in Masco Corporation of Indiana v. Price Pfister, Inc.

Deposition in Loomis Armored, Inc. v. City of Chicago.

Joint Declaration, Joint Reply Declaration, and Joint Supplemental Declaration in the Matter of Mahurkar Double Lumen Hemodialysis Catheter Patent Litigation.

Deposition in American Fidelity Fire Insurance v. General Railway Signal Corp.

Deposition in General Farebox, et al. v. Landa Corp., et al.

Affidavit in Lincoln Savings & Loan Association v. Federal Home Loan Bank Board and M. Danny Wall.

OTHER

FAA-certified private pilot

PADI-certified open water diver

August 2013

EXHIBIT 2

REDACTED

Exhibit 2

Materials Relied Upon

Legal Filings

In Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, No. 05-MDL-1720 (JG)(JO) Definitive Class Settlement Agreement

Objecting Plaintiffs' And Objectors' Memorandum In Opposition To Motion For Final Approval Of Settlement, May 28, 2013

Declarations and Reports

Report of Alan S. Frankel, Ph.D., July 9, 2009

Expert Report of Dr. Benjamin Klein, December 14, 2009

Expert Report of William Wecker, December 14, 2009 and backup

Rebuttal Report of Alan S. Frankel, Ph.D., June 22, 2010

Declaration of Alan S. Frankel, Ph.D. Relating to the Proposed Class Settlement, April 10, 2013

Declaration of Michael S. Weisbach, May 24, 2013

Report of Professor Jerry Hausman, In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, May 28, 2013 and attachments

Depositions

Deposition of Robert H. Topel, Ph.D., April 20, 2010

Australia

"MasterCard domestic purchase transactions interchange fees for Australia," http://www.mastercard.com.au/merchant/getting_started/interchange_rates.html

"Visa Interchange on Domestic Transactions in Australia," http://www.visa.com.au/ap/au/aboutvisa/interchange/interchange.shtml (visited August 9, 2013)

Australian Bureau of Statistics, Time Series Workbook, 8501.0 Retail Trade, Australia, Table 1. Retail Turnover, By Industry Group, http://www.abs.gov.au/ausstats/meisubs.NSF/log?openagent&850101.xls&8501.0&Time%20Series%20Spreadsheet&C366BE5A5B41626FCA257BBB001234E7&0&Jun%202013&05.08.2013&Latest

Reserve Bank of Australia Statistical Release C2, Market Shares of Credit and Charge Card Schemes, http://www.rba.gov.au/statistics/tables/xls/c02hist.xls

REDACTED

Exhibit 2

Reserve Bank of Australia Statistical Release C3, "Average Merchant Fees for Debit, Credit and Charge Cards," http://www.rba.gov.au/statistics/tables/xls/c03hist.xls (accessed June 22, 2013)

Visa International, "Submission to The Reserve Bank of Australia: Inclusion of Closed Card Schemes in the Designation Process," 17 April 2001

MasterCard International Incorporated, "Response to the December 2001 Consultation Document of the Reserve Bank of Australia," March 2002

American Express Australia Limited, "Review of Payments System Reforms: A Submission to the Reserve Bank of Australia," August 2007

The Reserve Bank of Australia's Review of Payment Systems Reforms: Comments of Alan S. Frankel, Ph.D. on Behalf of the Australian Merchant Payments Forum, 30 August 2007

"Payments System Regulation: Response by MasterCard Worldwide to the Issues for the 2007/08 Review," (Submission to the Reserve Bank of Australia), August 31, 2007

Letter of 31 August 2007 from Westpac Banking Corporation to Michelle Bullock, Head of Payments Policy Department, Reserve Bank of Australia

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 (commercial-in-confidence version)

Alan S. Frankel, "Towards a Competitive Card Payments Marketplace," in Reserve Bank of Australia, Payments System Review Conference, Proceedings of a Conference held in Sydney on 29 November 2007 (2008)

Reserve Bank of Australia, "Reform of Australia's Payments System: Preliminary Conclusions of the 2007/08 Review," April 2008

Alan S. Frankel, Ph.D. on Behalf of Australian Merchant Payments Forum, Comments in Response to the Preliminary Conclusions of the 2007/08 Review (June 30, 2008), (Shinder Declaration, Exhibit 98)

Reserve Bank of Australia, "Reform of Australia's Payments System: Conclusions of the 2007/08 Review," September 2008, http://www.rba.gov.au/payments-system/reforms/review-card-reforms/pdf/review-0708-conclusions.pdf

Email from Michelle Bullock to Alan Frankel, May 31, 2009.

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," June 2011

Reserve Bank of Australia, Review of Card Surcharging: A Consultation Document, June 2011, http://www.rba.gov.au/publications/consultations/201106-review-card-surcharging/pdf/201106-review-card-surcharging.pdf

Australian Merchant Payments Forum, "Submission to the Reserve Bank of Australia: Response to Review of Card Surcharging," 20 July 2011

REDACTED

Exhibit 2

Letter from Dhun Karai, Head of Group Financial Services, Woolworts Ltd. to Dr. Chris Kent, Head of Payments Policy Department, Reserve Bank of Australia, 25 July 2011, http://www.rba.gov.au/payments-system/reforms/submissions-card-surcharging/woolworths.pdf

disclosure attached to letter from Richard Murray, Chief Financial Officer, JB Hi-Fi, to Dr. Chris Kent, Head of Payments Policy Department, Reserve Bank of Australia, July 27, 2011, http://www.rba.gov.au/payments-system/reforms/submissions-card-surcharging/jb-hi-fi.pdf

Reserve Bank of Australia, Media Release, Number 2012-35, 29 November 2012, http://www.rba.gov.au/media-releases/2012/mr-12-35.html

Reserve Bank of Australia, Payments System Board Annual Report, 2012

East & Partners, Merchant Surcharging in Australia: Market Analysis Report Addendum for Friedman Law Group LLB [sic], March 2007

East & Partners, "Australian and UK Credit Card Surcharging Perspectives: Custom Analysis for NERA Australia, November 2009, (HOUSTON001120)

East & Partners, "Australian Merchant Payments: Market Analysis Report," February 2010

East & Partners, "Australian Merchant Payments: Market Analysis Report," June 2013

New Zealand

Brief of Evidence of Professor Jerry Hausman, May 4, 2009, in Commerce Commission v. Cards NZ Limited et al.

Declaration of Dhun Karai, head of Group Financial Services for Woolworths, September 22, 2009, attaching as Exhibit 1, Statement of Evidence of Dhun Karai, 14 November 2008 (submitted in the New Zealand Commerce Commission litigation)

Settlement between the Commerce Commission and Visa International Service Association and Visa Worldwide Pte Limited ("Visa"), CIV-2006-485-2535, August 12, 2009, http://www.comcom.govt.nz/dmsdocument/10749

Settlement between the Commerce Commission and MasterCard International Incorporated ("MasterCard"), CIV-2006-485-2535, August 24, 2009, http://www.comcom.govt.nz/dmsdocument/10746

Peter R. Tayler, Cards and Payments, Australasia 2010 Conference, 15 March 2010, http://www.comcom.govt.nz/cards-and-payments-australasia-2010-conference-15-march-2010/

Canada

Commissioner of Competition v. Visa Canada Corporation and MasterCard International Incorporated (CT-2010-10), Notice of Application, http://www.ct-tc.gc.ca/CMFiles/CT-2010-

REDACTED

Exhibit 2

010_Notice%20of%20Application%20pursuant%20to%20section%2076%20of%20the%20Competition%20Act%20-%20Price%20Maintenance_1_38_12-15-2010_7965.pdf

Commissioner of Competition v. Visa Canada Corporation and MasterCard International Incorporated (CT-2010-10), Competition Tribunal Decision, http://www.ct-tc.gc.ca/CasesAffaires/Decisions/FilesFichiers/CT-2010-010/PDFs/ENG/CT-2010-010-VisaMasterCard-DecisionSummary.pdf

United Kingdom

United Kingdom Office for National Statistics, Retail Sales Series ValNSAT; U.S. Census Bureau, Monthly Retail Trade and Food Services, Series 44000, Retail Trade: U.S. Total

United Kingdom Office of Fair Trading, "Payment Surcharges: Response to the Which? Super-Complaint, July 2012

UK Department of Business, Innovation & Skills, "Consultation on the Early Implementation of a Ban on Above Cost Payment Surcharges," September 2012 (Hausman Attachment R)

Visa Europe, "Acknowledging the consequences of surcharging," 2009, (Attachment S to Hausman Report)

Other

Expressions Hair Design v. Schneiderman, 13 Civ. 3775 (JSR), (S.D.N.Y.), Transcript of June 14, 2013

Board of Governors of the Federal Reserve System, "Average Debit Card Interchange Fee by Payment Card Network," http://www.federalreserve.gov/paymentsystems/regii-average-interchange-fee.htm

Internal Revenue Service, Average Debit Card Interchange Fee by Payment Card Network, http://www.federalreserve.gov/paymentsystems/files/Avg_IF_by_PCN.xls

Internal Revenue Service, Yearly Average Currency Exchange Rates Translating foreign currency into U.S. Dollars, http://www.irs.gov/Individuals/International-Taxpayers/Yearly-Average-Currency-Exchange-Rates

Memorandum Opinion in NACS; National Retail Federation; Food Marketing Institute; Miller Oil Co.; Boscov's Department Store, and National Restaurant Association v. Board of Governors of the Federal Reserve System, Civil Case No. 11-02075, July 31, 2013

National Bureau of Economic Research, "US Business Cycle Expansions and Contractions," http://www.nber.org/cycles.html

Nilson Report #1002, September 2012

Noah Hanft, "Let's Get Real," in Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities?, proceedings of the Federal Reserve Bank of Kansas City Payments Conference, May 2005

REDACTED

Exhibit 2

Response of Plaintiff United States to Public Comments on the Proposed Final Judgment, Case 1;10-cv-04496-NGG-RER, June 14, 2011

U.S. Census Bureau, Monthly Retail Trade and Food Services, Series 44000, Retail Trade: U.S. Total, http://www.census.gov/econ/currentdata/dbsearch?program=MRTS&startYear=2007&endYear=2007&categories=44000&dataType=SM&geoLevel=US&adjusted=1&notAdjusted=1&submit=GET+DATA

Bates Numbered Documents

AmerExpMDL1720_0030000

AmerExpMDL1720_0030057.

AmerExpMDL1720_0030120

AmerExpMDL1720_0030683 – 708

AmerExpMDL1720_0031405.

AmerExpMDL1720_0033060.

AmerExpMDL1720_0033177.

Economic Evidence in Support of MasterCard's Response to the Statement of Objections, December 2003 (MCI_MDL03_00015034)

OC&C Strategy Consultants, "Visa – Litigation and the Changing Landscape – A Time for Strategy," January 2006, VUSAMDL1-07908117