



**Response to the  
Reserve Bank of Australia's Consultation Document  
and  
Report of Professor Michael Katz**

**March 2002**

Visa International Service Association

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## Executive summary

### 1 General

1. This is a summary of the response of Visa International Service Association (“Visa”) to the Consultation Document issued by the Reserve Bank of Australia (the “RBA”) entitled ‘Reform of credit card schemes in Australia’ and dated December 2001 (the “RBA Report”) and the accompanying commissioned report by Professor Michael Katz (“Katz”) entitled “Network Effects, Interchange Fees and No-Surcharge Rules in the Australian Credit and Charge Card Industry” and dated August 2001 (the “Katz Report”). This response has been prepared for Visa by the Network Economics Consulting Group Pty Limited.
2. This executive summary of Visa’s detailed response commences with some general remarks and observations. It then summarises broadly Visa’s principal views and arguments on each of the RBA Report and the Katz Report as follows:
  - section 2 considers network externalities and interchange fees;
  - section 3 examines the no surcharge rule;
  - section 4 deals with the access rules;
  - section 5 addresses competition between open and closed systems; and
  - finally, section 6 summarises Visa’s specific critique of the Katz Report.
3. Following this executive summary (and commencing on page 31 of this document) is Visa’s detailed response to the RBA Report and to the Katz Report. This executive summary (which is not exhaustive) forms part of Visa’s response.
4. In Visa’s view, the RBA Report and the Katz Report fall short of the standards of regulatory analysis generally observed in other regulatory fora, both in Australia and overseas, including in that:
  - the two reports do not present both sides of the various economic arguments in an even-handed manner or with an objective analysis of their respective merits;

- there is no evidence that submissions made by interested parties have been treated equally – for example, the RBA has apparently accepted the claims and commissioned research of the Australian Retailers Association (the “ARA”) without subjecting it to critical review and analysis, while apparently dismissing, without critical review and analysis, the submissions made by Visa;
    - the findings of the Katz Report are selectively cited by the RBA where they support the RBA’s conclusions, but ignored (or mis-stated), without explanation or analysis, where they do not; and
    - inferences regarding improper motivations are drawn from the submissions of various parties where doing so is completely inconsistent with the very process of consultation.
5. From the perspective of proper public policy analysis, as well as sound regulatory and administrative practice, the burden of proof lies with the RBA to justify its proposed regulatory intervention in accordance with the criteria laid down in the relevant sections of the Payment Systems Regulation Act 1998 (Cth). In Visa’s view, the RBA has failed to discharge this burden of proof for various reasons, including that:
- models with results which do not agree with the RBA’s conclusions are criticised, though the RBA does not provide any economic model of its own or point to any economic model which supports its account;
  - the RBA’s arguments do not withstand rigorous economic modelling. While some of its individual claims may have intuitive appeal to the lay reader, they do not hold as a consistent account of rational economic behaviour;
  - the RBA endeavours to argue that current interchange fee setting processes are inconsistent with economic theory. Not only are its conclusions in this respect misconceived, but the RBA itself then puts forward a draft standard that is, in fact, fundamentally inconsistent with economic theory;
  - the RBA does not subject its arguments to the same standards of scrutiny that it claims to impose on card associations – in particular, the implied



'model' behind the RBA's conclusions makes no sense as an objective description of reality; and

- strikingly, while Katz was asked to review the approaches of which the RBA is critical, either he was not asked to review any of the RBA's core proposals or the results of his analysis have not been disclosed by the RBA.
6. The RBA Report is characterised by either a lack of understanding or, at best, a lack of acceptance, of basic concepts from microeconomics and welfare economics. Most importantly, the RBA appears to use the metric of cost minimisation rather than welfare maximisation in evaluating the effects of business practices, insofar as its normative conclusions seem overly focused on the issue of resource costs rather than welfare. Additionally, in considering whether policies are or are not desirable, the RBA places great stress on whether they do or do not benefit merchants, rather than focusing on social welfare overall – that is, the gains not only to producers but also to consumers. Placing such weight on ensuring benefits to merchants is unusual, if not unique, in Australian economic policy analysis.
  7. The RBA relies heavily on the Katz Report to support some of its conclusions, yet that report is based on a number of unsubstantiated statements, is manifestly incorrect in parts and does not represent a balanced review of the relevant economic literature.
  8. Visa has, in section 3 of the detailed part of its response, set out some preliminary observations as to what should be the appropriate methodology, both generally in the analysis of the issues addressed by the RBA and in the context of the specific legislative powers granted to the RBA. In Visa's view, many of the weaknesses in the RBA's analysis are referable to fundamental misunderstandings on the part of the RBA of the appropriate analytical framework and the role of economic modelling in normative analysis. In Visa's view, these misunderstandings lead to a significant number of errors in the analysis, findings and recommendations set out in the RBA Report.

## 2 Network externalities and the interchange fee

### 2.1 Overview

9. The RBA casts doubt on the materiality of network externalities in three ways so as to claim that interchange fees do not need to be set to take such externalities into account:

- (a) it claims the payment schemes at issue are mature, which it says means network externalities do not matter;
- (b) it claims that there is no evidence of network externalities because there are no economy-wide effects in which there is an aggregate increase in merchant sales as a result of card acceptance; and
- (c) it argues that, if there are potential network externalities, surcharging can, in any event, be used to internalise some of them, thereby reducing, or perhaps even obviating, the need to use an interchange fee to do the same thing.

### 2.2 Rebuttal of main points

10. Visa shows, in the main part of its response, that the RBA's argument as restated in paragraph 9(a) is wrong because:

- there is no evidence that the payment schemes at issue are indeed mature in any proper sense of that term;
- even if those payment schemes were mature, this would not alter the existence or significance of network externalities:
  - even in a mature network, adding another merchant will allow existing cardholders to capture any benefits of making card transactions with that merchant. Similarly, adding another cardholder will allow existing merchants to capture any benefits of accepting card transactions from that cardholder; and
  - interchange fees would still be necessary to ensure that cardholders did not exit a network and, in so doing, cause

merchants to exit the network, as a result of the reduced number of potential customers (in turn, a smaller merchant base could cause more cardholders to leave the network and so on in a vicious circle).

11. Visa shows, in the main part of its response, that the RBA's argument as restated in paragraph 9(b) is wrong because even if there were no aggregate income and sales effects from card use, the interchange fee is part of the socially optimal division of the costs of the network as a whole (including cardholder benefits) according to the demand elasticities, and more generally, willingness and ability to pay, of both cardholders and merchants. In any event, Visa demonstrates that there are, in fact, likely to be aggregate income and sales effects from card use.
12. Visa shows, in the main part of its response, that the RBA's argument as restated in paragraph 9(c) over-simplifies the case that surcharging can achieve what the interchange fee does in terms of internalising network externalities because it:
  - ignores the costs incurred by merchants of implementing surcharges on credit card usage (that is, introducing and maintaining at least dual pricing (assuming merchants do not surcharge separately for each type of credit card based on the different costs associated with each)). These are real resource costs and, if incurred, must be netted off against the gains (if any) that the RBA establishes could flow from differential charging;
  - is at odds with the empirical evidence which suggests that many merchants find it in their own interests not to surcharge credit card transactions even when allowed to do so. Those that do find it profitable to surcharge, do not set their surcharge to reflect either the merchant service fees they pay or any network externalities; and
  - in any event, surcharging has no conceivable relevance for internalising the network externalities that merchants enjoy when there is an addition to cardholders and card usage (or, indeed, when there is no loss of cardholders or reductions in card usage).
13. The RBA relies heavily on an ARA study to argue that there are few, if any, transactional benefits to merchants of accepting cards. The survey evidence in the ARA study is inconsistent with the more thorough international studies cited by the RBA and the RBA itself admits that the ARA study has a number of methodological

problems. Furthermore, the RBA does not appear to take into consideration the limited degree to which the ARA's views and data collection may be said to be representative of the retail sector as a whole or, indeed, representative of card-accepting merchants as a whole.

14. The RBA Report and the Katz Report claim that the policies and practices under dispute (in particular, the determination of a standard interchange fee rate and the no surcharge rule) arise because of market power, and would not arise in the presence of competitive forces. However:
  - these policies and practices existed prior to any of the open schemes having the largest market share among card schemes or conceivably having market power;
  - the same policies and practices under dispute are found in different countries with differing degrees of market concentration (and, it may be assumed for present purposes, differing market power dynamics); and
  - closed schemes, which according to the RBA lack market power, have adopted the same sorts of policies, at least suggesting an inconsistency in the RBA's analysis.
15. Finally, the whole premise behind the RBA's argument that interchange fees are derived from the market power of open schemes is flawed, because it has not been demonstrated that open schemes have market power (as distinct from having a high market share). The RBA has not, at least on the face of the RBA Report, undertaken any careful analysis to define the market or markets that in its view are at issue. Such a step would be a necessary precursor to assessing whether or not open card schemes possess market power. In its absence, statements about market power are essentially assertions.

### **2.3 The issue of increased sales**

16. The RBA repeatedly states that the relevant test associated with network externalities is whether there is an increase in sales overall as a result of credit card

networks.<sup>1</sup> The RBA did not, in its Joint Study with the ACCC,<sup>2</sup> set out any “test” regarding network externalities (or “network benefits” as it referred to them in the Joint Study).

17. It is not clear, however, whether the RBA views the test described in paragraph 16 as a test of whether:
  - (a) there are indeed network externalities; or
  - (b) merchants should bear the cost of internalising those externalities; or
  - (c) some other, unstated, proposition.
  
18. The interpretation given in paragraph 17(a) cannot be correct. An increase in the number of merchants accepting a card would increase the value of the card to cardholders, and an increase in the number of cardholders would increase the value to merchants of accepting the card. These two circumstances, of themselves, give rise to network externalities quite independently of any increase in overall sales. Therefore, it is not necessary to show any increase in overall sales in order to establish that there are network externalities. The RBA’s apparent position is a serious misconception and undermines its conclusions on network externalities (upon which conclusions it relies heavily).
  
19. If, on the other hand, what is meant by the RBA is the interpretation given in paragraph 17(b) (that is, that merchants should bear the cost of internalising network externalities if (and only if) there is an increase in sales overall), then that too cannot be correct. Even if the total of merchants’ sales remained constant, the

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<sup>1</sup> In the RBA Report, the RBA uses the terms “overall sales” and “aggregate consumption” (and other similar expressions) interchangeably. It nowhere defines these terms, and since it does not seem to undertake any empirical testing, it is not easy to know precisely how those terms are interpreted by the RBA.

<sup>2</sup> Reserve Bank of Australia and Australian Competition and Consumer Commission, *Debit and Credit Card Schemes in Australia: A Study of Interchange Fees and Access*, October 2000 (the “Joint Study”).

size and direction of the interchange fee would depend on how the division of total costs between cardholders, on the one hand, and merchants, on the other, affected the size of the system's network and the aggregate value of its services. Merchants, if they indeed have low resistance to accepting cards, would still pay higher fees than cardholders if a socially optimal outcome were to be achieved.

20. In practice, credit cards provide a number of benefits to both cardholders and merchants. Some examples include that:
- (a) consumers benefit by having greater control over the timing of their outlays and from their increased ability to make 'lumpy' purchases, regardless of whether aggregate consumption is increased;
  - (b) consumers benefit from the increased competition that credit card acceptance promotes among merchants. Credit cards make consumers more footloose. For example, cards allow the grouping of purchases making it worthwhile for consumers to incur the fixed costs of travelling to more distant merchants, as well as making them less dependent on store credit, thus allowing them to shop around for the best deal and so helping to promote retail competition;
  - (c) cards provide risk-shifting benefits for smaller merchants, enabling them to compete on a more equal footing with larger retailers and thus enhance retail competition. Cards do this by allowing smaller merchants to shift the risks of customer default to card issuers (rather than bearing such risks themselves or foregoing sales). In addition, all merchants benefit from economies of scale arising when issuers carry out the credit assessment process associated with becoming a credit card holder; and
  - (d) merchants benefit insofar as cards offer transactional savings and an increased ability to achieve economies of scale and scope. Even if these benefits are passed entirely back to consumers, there is a social gain.
21. The factors listed above, whilst they may not directly induce increases in aggregate consumption in a physical sense, lead, in due course, to an increase in aggregate income and in welfare, since they lead to a more efficient allocation of resources and greater productive efficiency in retail and other sectors. It is this increase in aggregate welfare, rather than the impact on the volume of sales, that is relevant to an economic assessment of the card schemes.

## 2.4 Proposed interchange standard

22. Finally in respect of the interchange fee, Visa comments on the RBA's adoption under its draft standard of a cost-based methodology in setting the interchange fee and notes that:

- there is no economic basis for adopting such an approach;
- the findings of the relevant economic literature are in accord with the position that such an approach is not consistent with welfare maximisation, other than by chance;
- the RBA's own expert, Katz, states that there is no basis for setting interchange fees at cost (or zero);
- the cost-based methodology put forward by the RBA seems seriously flawed (for example, by setting a strict incremental cost standard, the result will be a failure to recover total costs where common costs exist across products);
- the cost-based methodology put forward by the RBA must give rise to distortions as it does not accord with any theory as to how interchange fees should be set. This lack of any solid analytical basis then gives rise to implementation decisions that are essentially arbitrary; and
- the arbitrary nature of the decisions involved in the RBA's approach is illustrated in the detailed part of Visa's response by analysing the RBA's treatment of interest free periods and loyalty programs. In each of these cases, the RBA takes outlays which yield benefits that are inherently joint to the two sides of the market and seeks to apportion them as between issuers and acquirers. As this apportionment lacks any causal or analytical basis, it merely reflects regulatory preference, is inherently re-distributional, creates regulatory risk and is likely to result in economic harm.

## 3 The no surcharge rule

23. The RBA claims that the no surcharge rule imposes excess costs on merchants, because the merchant service fees faced by merchants for handling credit cards outweigh any benefits that merchants receive from credit card usage. Consequently,

the RBA argues, the no surcharge rule ultimately harms consumers because the excess costs suffered by merchants will be passed on to consumers in the form of higher retail prices. Therefore, consumers, notably those who do not pay with cards (or who would not do so if they faced a charge for card purchases) would be better off with the removal of the rule.

24. As evidence for its proposition that merchants do not derive such benefits, the RBA mainly cites data from the ARA and claims that inferences can be drawn from the fact that merchants attempt to influence customers to use payment instruments other than cards.
25. Visa does not accept that the RBA's evidence is at all robust:
  - by the RBA's own admission, the ARA sample is seriously biased and its results are inconsistent with more thorough studies carried out overseas that the RBA also cites. Furthermore, the RBA appears not to take into consideration the limited membership base of the ARA and thus the degree to which the ARA's views and data collection may be said to be representative of the retail sector as a whole or, indeed, representative of card-accepting merchants as a whole;
  - the RBA provides no evidence to support its claim that merchants, particularly by giving cash discounts, attempt to influence customers to use payment instruments other than credit cards. Moreover, even if such evidence existed (and, as elaborated further in the detailed part of this response, Visa's view is that the evidence in fact shows that merchants often encourage the use of credit cards), this does not contradict the possibility that merchants in total derive transactional benefits from accepting cards that exceed merchant service fees. This is because: (a) evidence of some merchants influencing customers to use cash does not imply that most merchants do so; and (b) merchants may prefer some of their customers to use cash, even though they would not want all of their card-paying customers to switch to such alternative forms of payment; and
  - the claim that there are no net transactional benefits seems difficult to reconcile with instances such as shopping for consumer durables, retailing by phone and internet, confirming bookings for rental cars and hotels, and so forth, which are heavily dependent on cards.



26. Even if the RBA's claim that there are no transactional benefits was correct, consumers would still benefit from no surcharge rules because these rules tend to increase competition among merchants. No surcharge rules do so because they make it more difficult for larger merchants - who have, or are in a position to achieve, sufficient scale economies to justify offering their own store cards - to discriminate in favour of their own cards, thus making it more difficult for them to lock-in those footloose customers that have no other reason to be loyal to such large merchants.
27. The RBA also claims, and its arguments imply, that removal of the no surcharge rule will lead to a situation under which merchants will pass the costs of accepting credit cards on to cardholders who, in the RBA's view, are the most appropriate parties to bear these costs. The RBA, in discussions with Visa, has claimed that the removal of the no surcharge rule sets up the necessary conditions for merchants to compete. However, it has also indicated that it thinks that it is irrelevant how many, if any, merchants surcharge. It seems to Visa, therefore, that the RBA is unclear about the ultimate outcome of lifting the rule. With due respect, if the RBA is to advocate removal of the no surcharge rule, it should at least state how lifting the rule will improve matters and in order to do this, it first has to provide a plausible assessment of how surcharging will or will not occur and with what likely effects.
28. In Visa's view, any plausible assessment of the likely extent and nature of surcharging undermines the RBA's case for lifting the no surcharge rule. This is for reasons that include the following (these are elaborated in the main part of Visa's response):
- the RBA has failed to recognise that its argument that network externalities can be internalised by surcharging is entirely undermined if, in practice, only relatively few merchants surcharge;
  - studies from other jurisdictions suggest that where the no surcharge rule has been lifted, only a small proportion of merchants impose surcharges;
  - furthermore, merchants most likely to be in a position to surcharge are those with monopoly power *vis-à-vis* all or some card-using customers, and they are likely to impose surcharges in excess of their costs of accepting cards; and

- the RBA has ignored the well-recognised concentration of retail competition in Australia – and the generally low levels of competition in many rural and regional areas where low population densities have meant that there are few competing merchant outlets – and the impact this is likely to have in terms of the incidence of excessive surcharging.
29. Visa notes that the RBA’s proposed standard only restricts a scheme’s rules, or a participant in a scheme, preventing a merchant from recovering from a cardholder the merchant’s costs of accepting a credit card issued by a participant in the scheme. It does not prevent merchants from imposing surcharges that are non-cost reflective.
  30. Although the ACCC might monitor the level of surcharging, as matters now stand, there are no powers under which the ACCC could prevent merchants from imposing excessive surcharges, unless those surcharges were misleading or deceptive, as the mere fact of excessive surcharging, like the imposition of monopoly prices, is not a breach of the Trade Practices Act 1974 (Cth).
  31. Moreover, even were additional powers granted to the ACCC, it would be extremely costly for the ACCC to undertake the necessary information gathering, investigation and enforcement action to establish that any particular case or cases of surcharging breached the provisions at issue. Relying on private contractual arrangements between a scheme, the scheme’s acquirers and the acquirers’ merchants would not avoid these types of costs and, in fact, may increase them (given, for example, the lack of private coercive powers).
  32. The costs thus incurred, be they incurred by taxpayers (through the costs of funding the ACCC or similar bodies) or by private parties (either in trying to prevent or avoid excessive surcharging) are real resource costs and must be taken into account in considering whether removal of the no surcharge rule is desirable. The RBA does not mention these costs nor take them into account.
  33. In any proper welfare assessment, the costs associated with trying to prevent excessive surcharging would be taken into account. So too would the costs engaged by consumers in seeking to avoid excessive surcharging (for example, through additional ‘shopping around’) and the loss in the efficiency of the card schemes. The RBA does not attempt any formal welfare assessment of its proposals and hence does not recognise these costs, much less weigh them up.
  34. Overall, Visa believes that the removal of the no surcharge rule is likely to lead to:

- a large number of cases where no surcharges are applied (and consequently no change in welfare occurs); and
- a minority of cases (which may, however, cover a very substantial volume of trade) where surcharging is applied excessively by retailers with market power (thus leading to reductions in welfare).

35. It follows that the removal of the no surcharge rule will, on balance, be welfare-reducing. Any costs incurred by bodies such as the ACCC, the schemes and their members, and consumers in seeking to prevent or avoid excessive surcharging only add to the loss in efficiency. Removal of the no surcharge rule will hence be undesirable from a public policy perspective.

#### **4 Access rules**

36. The RBA argues that existing Visa membership rules for issuing and acquiring are somehow disproportionate to the Visa network's prudential objectives. The RBA also argues that there is no efficiency basis for 'net issuer' rules.

37. Visa's principal concern with regard to *access rules* is that it retains the right, as a private sector joint venture arrangement, ultimately to determine its co-joint venturers (that is, how Visa's business is operated and what is in the best interests of its own growth and the interests of its participating financial institutions). As such, Visa's main concern is that any rules for eligibility are simply that and not determinative as to membership of Visa or as to the business conduct of financial institutions participating in the Visa scheme.

38. Visa is also concerned that the RBA not seek to impose rules that amount to the compulsory licensing of the Visa trademarks. Any such rules would be in breach of Australia's obligations under the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

39. Over and above these concerns, Visa shows that the RBA's claim in paragraph 36 is wrong because:

- the institutional status requirement under the Visa scheme rules which the RBA perceives as disproportionate is a consequence of the application by APRA of its rules relating to deposit-taking institutions. If APRA were

prepared to license a wider range of entities as deposit-taking institutions, then those entities would be eligible to become Visa members. Visa has chosen to ‘piggyback’ on these rules as a means of:

- providing a cost-effective and simple rule to apply (recognising the costs involved in designing a perfect set of membership rules for issuers and acquirers (even if such a perfect set of rules were possible)); and
  - minimising the discretionary power of Visa members so as to facilitate network collaboration between members who are otherwise competitors;
- the RBA’s implication that existing membership rules have been chosen to restrict entry is unsubstantiated and inconsistent with the fact that Visa did not tighten its rules after the implementation of the Wallis reforms that loosened entry into the financial sector as a deposit-taking institution; and
  - while it can be desirable to minimise discretion, it is extremely rare for it to be appropriate to reduce discretion to zero. Thus the mere fact that there is a final vetting process involving scheme members after prudential requirements are met, is irrelevant. This is particularly so, given that Visa would be effectively accountable to the RBA in the case of any refusal to accept, as a member of its scheme, any entity that is eligible for membership and seeks a direction in that regard from the RBA.
40. With respect to *‘net issuer’ rules*, the RBA claims that there is no evidence to show that issuing generates such large externalities that such rules can be justified.
41. However, the justification for any such rules does not depend on there being substantially more externalities on the issuing side of the business. Rather, any net issuer rules could be justified because issuers face higher sunk costs than acquirers. Issuers face higher sunk costs because, for example, the billing systems of issuers are likely to be substantially more complex and, by implication more costly, to manage than the systems required by acquirers. Issuers also need to incur substantially more sunk costs than acquirers for brand advertising and promotion of payment cards. This means that acquirers, which face lower exit costs, can ‘hold up’ issuers in bargaining. Net issuer rules can be needed to redress the consequent imbalance.

## 5 Open vs closed schemes: competitive neutrality

42. The RBA dismisses arguments that if open schemes are to be regulated as regards the setting of interchange fees, closed schemes should be subjected to the same (or equivalent) regulation for the following reasons:
- (a) it argues that open schemes are different from closed schemes in that only open schemes involve collectively-set interchange fees;
  - (b) it argues that if merchants could get lower merchant service fees from acquirers in open schemes, closed schemes would be forced to match these; and
  - (c) it claims that Visa's arguments are reliant on the proposition that closed schemes have completely independent pricing power.
43. Visa shows, in the main part of its response, that the RBA's argument as restated in paragraph 42(a) is misconceived because it ignores the reality that the closed schemes set an effective interchange fee (Katz, the RBA's expert, notes this in his report). That the interchange fee is "collectively" set in open schemes lies in the four-party nature of such schemes, as opposed to closed schemes where the issuer and the acquirer are (predominantly) the same entity.
44. In a closed three-party card system, the single entity owning the system sets the appropriate cardholder and merchant fees. There is no need for an explicit interchange fee to give appropriate incentives to the issuing division and acquiring division that are part of the same entity. In an open four-party card system, on the other hand, there is no single entity owning the system. Cardholder fees and merchant service fees are determined by, *inter alia*, competition between members. As such, it is necessary for the system itself (that is, the members collectively) to influence the setting of the fees by providing the appropriate incentives through the interchange fee. Without such incentives, cardholder fees and merchant service fees would be set at inappropriate levels and network externalities would not be fully internalised, to the disadvantage of cardholders and merchants, as well as of issuers and acquirers.
45. Visa shows, in the main part of its response, that the RBA's argument as restated in paragraph 42(b) is wrong. Closed schemes, unless forced by regulation to do so, will find it profitable *not* to match imposed reductions in merchant service fees. This is

because these reductions do not arise from commercial choice but rather from the imposition of methodologies for the setting of the interchange fees that take no account of the fee's role in internalising network externalities. As a result, these changes, far from making the open schemes more competitive, will according to the RBA's own arguments, undermine the very practices which drive the "excessive" popularity of card schemes in the first place. Rather than wanting to match these changes, the closed schemes will have every incentive to set their own merchant service charges and implicit interchange fees in a way that maximises the value of their networks.

46. Visa shows, in the main part of its response, that the RBA's argument as restated in paragraph 42(c) is wrong because it presumes that interchange fees can be treated as prices, when interchange fees are not a price, or even like a price, equivalent to a normal retail price set by a firm (whether dominant or otherwise). Furthermore, irrespective of how the RBA characterises its argument, if its underlying concern is that card schemes may set interchange fees above the socially optimal level, then it can be demonstrated that competitive forces are sufficient to prevent this occurring. By contrast, the RBA provides no evidence that its proposed changes would improve upon those competitive forces in ensuring that interchange fees are closer to socially optimal levels.

## **6 Katz Report: summary of response to specific claims**

### **6.1 Network externalities and aggregate sales**

47. Katz claims that 'the' public policy question is whether the use of credit cards leads to a permanent increase in sales from the perspective of the economy as a whole.
48. Visa disagrees. The use of cards is not required to lead to a permanent increase in sales in order for such use to be desirable according to any reasonable welfare measure. The models ascribed to Gans and King, Rochet and Tirole, and Schmalensee in the appendix to the Katz Report do not rely on any increase in total sales in the economy as a result of credit card usage, even though in these models the use of credit cards is welfare enhancing.
49. Katz claims that transactional benefits to merchants of credit card use have been overstated since one merchant's benefit (in terms of extra sales) is another merchant's loss (in terms of lost sales) when merchants compete.

50. However, the key implication of the fact that merchants accept cards in part to attract business away from rivals is that merchants will be more willing to accept cards than otherwise would be the case. Given the less elastic (though not infinitely so) demand of merchants, it is socially optimal to recover a greater portion of the costs of offering the joint service from the merchant side (that is, to have a higher interchange fee than would otherwise be the case).

## 6.2 Network effects and maturity

51. Katz claims that mature networks may be less susceptible to network effects because:

- (a) problems in establishing a viable network diminish as the network matures; and
- (b) at a sufficiently high level of membership, marginal changes to membership on one side will generate smaller or no benefits to users on the other side of the network.

52. His argument as restated at paragraph 51(a) is irrelevant because it is an argument about the existence of networks, rather than the existence of network externalities.

53. His argument as restated at paragraph 51(b) presumes that consumers are indifferent as between merchants. This is wrong for at least two reasons:

- it ignores the fact that there is product differentiation between merchants and this matters for many, if not most, consumers. Consumers do not view merchants as perfect substitutes. Thus, those consumers that prefer, say, shopping at Woolworths to Coles, will still receive a benefit when Woolworths starts accepting cards even if Coles already accepts cards; and
- as a card system grows over time, it tends to attract merchants from business sectors that previously had not accepted cards. The benefits to cardholders are obvious.

## 6.3 Surcharging and the internalisation of externalities

54. Katz claims that surcharges may themselves serve as a mechanism for internalising network effects.



55. However, Katz notes, and then ignores, the costs to merchants and consumers when merchants surcharge.
56. Katz also notes and then dismisses evidence from reports commissioned by the European Commission that most merchants do not, in practice, surcharge even when they are allowed to do so. Whatever the reason or reasons may be for this phenomenon, it undermines Katz's and the RBA's argument that the interchange fee would not be needed to internalise network externalities if the no surcharge rules were abolished.
57. Finally, Katz fails to mention or consider business reasons why many merchants would not find it profitable to surcharge, even if allowed to do so and even if there were no administrative costs involved in implementing surcharging. In particular, Katz ignores the prisoner's dilemma issue: in many situations, it would only be profitable for one particular merchant to introduce surcharging if all its closest competitors were to do the same.

#### **6.4 Economic analysis of efficient interchange fees**

58. Visa notes that the RBA's own expert reaches the conclusion that there is little reason to believe that it is socially optimal to set the interchange fee equal to an issuer's marginal costs (or, for that matter, its average costs) of a credit card transaction or to set it at zero. There is thus no justification afforded by the Katz Report for concluding that the setting of interchange fees based on costs (as proposed by the RBA) is a desirable standard, or even that it is likely to be closer to the socially optimal outcome than the interchange fees currently set by card associations' members.
59. It is striking that Katz, though he is willing to express strong views on the approaches freely adopted by the schemes in a commercial and competitive environment, does not subject to any scrutiny the approach the RBA proposes to implement by coercive regulation. Either he was not asked to review any of the RBA's core proposals or the results of his analysis have not been disclosed by the RBA.



## 6.5 Current practices for setting interchange fees

60. Katz raises doubts as to whether the current practices of card associations and their members in setting interchange fee levels are consistent with the predictions from economic models that assume profit maximising card associations.

61. However, Visa notes two implications of the above:

- to the extent these models are relevant (and Katz clearly believes they are), they should be used to determine the appropriate level of interchange fees. The RBA's proposed approach to setting interchange fees ignores the implications of these models completely; and
- if card association members do not set interchange fees based on the privately optimal level indicated by the economic models, then Katz's arguments about the discrepancy between the privately and socially optimal interchange fee indicated by these models are irrelevant: they cannot have any bearing on the question whether the current interchange fees are above or below the socially optimal level. Put differently, Katz's position is that the privately optimal interchange fee may be higher than the socially optimal interchange fee. But, since he also claims that the card associations' members do not set fees in accordance with the economic models, it is by no means clear why actual interchange fees could not indeed be lower than the socially optimal level, rather than higher.

## 6.6 Distortion of competition resulting from public intervention

62. Visa notes that Katz does not claim, as the RBA does, that the fact that open schemes set an interchange fee but closed schemes do not, is grounds enough for regulating only open schemes. Indeed, Katz, unlike the RBA (and uncited by the RBA), accepts that, in effect, American Express (a closed scheme) has an interchange fee.

63. Instead, Katz argues that the regulation of the interchange fee of open schemes is only justified because open schemes have more market power than closed schemes. His conclusion is based on the high market share of open schemes in the credit card and charge card sector.

64. However, this view shows a misunderstanding of the source of market power, if any, in an open scheme:

- an open scheme card association does not itself seek to make profits;
- members of Visa compete *inter se* as issuers and acquirers. Thus, as issuers, any increase in the interchange fee is, other things being equal, largely competed away in favour of cardholders;
- the aggregated share of competing members therefore does not indicate the possession of market power;
- an open scheme card association can have a large share of the market simply because, *inter alia*, it has successfully promoted competition among its members (as issuers and acquirers); and
- moreover, any power the scheme may itself have is limited by its need to compete for and retain members.

In any event, it is a mistake to infer, as Katz and the RBA have done, that card associations have market power, merely because they may have a high market share. Neither Katz nor the RBA have sought to rigorously define the market or markets in which they think the schemes operate, so their claims with respect to market power are untestable. Even putting this aside, market share *may* evidence market power, but there is no necessary correlation either way between the two concepts.

65. If the members of a card association had market power and could exercise their market power by manipulating the interchange fee, then this would involve using the interchange fee to restrict output (the number of card transactions) so as to raise the total fee revenues they collect from users (cardholders and merchants). Notably, neither the Katz Report nor the RBA Report provide any evidence (or even a claim) that members of card associations are using the interchange fee to reduce the total number of card transactions – in fact, Katz and the RBA consistently claim the opposite.
66. In rejecting Visa’s arguments that closed schemes will gain an advantage over open schemes if only open schemes are regulated, Katz argues that:
  - (a) it depends on unrealistic assumptions;

- (b) it is irrelevant that regulating open schemes will impair those schemes' ability to maximise the number of card transactions, since it has not been established that:
- members of a card scheme would try to maximise the number of card transactions absent designation; and
  - maximising the number of transactions would be in the public interest.

67. Katz, in his view as restated in paragraph 66(a), is simply mistaken. This is because, as Visa demonstrates in the main part of its response, the assumptions Katz regards as unrealistic – merchants' unwillingness to surcharge (even when allowed to do so) and the existence of card users' rebates – are in fact realistic.

68. Katz's point restated at paragraph 66(b) is irrelevant because, provided the external regulation of the card scheme's interchange fee results in a reduction of card transactions below the level that would be chosen privately, Visa's conclusions prevail - closed schemes, being unregulated, would be able to attract additional card transactions at the expense of open schemes. (Even Katz does not suggest that the RBA's proposed regulation of open schemes will result in an increase in the number of card transactions those schemes enjoy.) This outcome would be due entirely to the imposed distortion of competition and the privileging of closed card systems.

## **6.7 Welfare effects of no surcharge rules**

69. Katz claims that "in most economic models, removal of a no-surcharge rule leads to lower retail prices charged to non-card users under the assumption that merchants find credit and charge card transactions more costly than others".

70. However, the two main papers he cites in support of this claim, the paper by Schwartz and Vincent and that by Rochet and Tirole, do not arrive at unambiguous results about the welfare effects of no surcharge rules. Katz's assertion is misconceived and capable of being misleading.

## **6.8 Arguments in support of no surcharge rules**

71. Katz attempts to refute five arguments which he claims have been put forward in support of no surcharge rules:

- (a) Katz claims that the argument that there is no cross subsidy between credit card users and non-credit card users is irrelevant. Rather, in his view, what matters is whether non-credit card users face higher prices as a result of merchants accepting credit cards. He argues that this depends on whether merchants enjoy transaction benefits that exceed merchant service fees. Relying on, *inter alia*, ARA data, he argues that this condition is unrealistic for many merchants and therefore, under the no surcharge rule, non-credit card users are likely to face higher prices;
- (b) Katz challenges the argument that merchants will exploit card users by setting fees in excess of the cost of merchant service fees on the basis that the example given of Cabcharge is unrepresentative (interestingly, Katz's analysis of Cabcharge's behaviour seems to differ from the RBA's);
- (c) Katz dismisses the evidence from studies of surcharging in the Netherlands and Sweden that shows that, in fact, few merchants surcharge when allowed to do so. He dismisses this evidence by claiming that many merchants in the Netherlands study were not aware they were able to surcharge;
- (d) Katz dismisses the argument that, in the absence of the no surcharge rule, external benefits will fail to be internalised. He does so on the bases that merchants can internalise the network externalities benefits by setting surcharges and that the magnitude of these external benefits to merchants may, in any event, be small; and
- (e) Katz takes issue with Visa's car parking analogy on the basis that it is inappropriate because competition in the "credit card market" and in the "market for shopping centres" are not comparable.

72. On paragraph 71(a):

- the ARA data that Katz relies upon to demonstrate that the condition precedent is unrealistic for any merchants has severe problems, as noted briefly in paragraphs 13 and 25 above;
- paragraphs 20 and 25 above briefly explain why, for many merchants, transactional benefits are likely to exceed merchant service fees;

- the fact that some merchants may receive transactional benefits that are less than the merchant service fee they pay does not prove that non-cardholders will be worse off. Visa shows that Katz’s conclusions do not follow, so long as a significant proportion of those merchants that accept cards enjoy transactional benefits that exceed the merchant service fee they pay.

73. On paragraph 71(b), Katz misses the point. It has not been claimed that every Australian merchant will surcharge excessively. Clearly, some (perhaps many) merchants will not surcharge; but of those that do, some will find it profitable to impose surcharges that exceed an objective assessment of the costs to them of accepting cards.
74. On paragraph 71(c), Katz’s argument is contradicted by the ITM research study (which Katz cites and hence is presumably familiar with) that reports that only 10% of Netherlands’ companies said they did not surcharge because they were not aware they were allowed to, compared to 60% of those surveyed that said they did not surcharge as a “service of the company” or because surcharging was “unfriendly towards customers”.
75. On paragraph 71(d), Katz, in taking the view that merchants can internalise the network externalities benefits by setting surcharges, simply assumes away the significance of the costs for merchants of implementing surcharging. Furthermore, in taking the view that the magnitude of these external benefits to merchants may, in any event, be small, Katz also simply assumes away the important transactional benefits to merchants of accepting cards.
76. On paragraph 71(e), Katz’s criticism of the car parking analogy seems to stem from him taking the analogy literally. The point of the analogy is not that shopping centres are identical to card associations, but rather that understanding the logic of shopping centres offering shoppers free car parking and recovering the cost from the merchants offers insight into why it can be socially optimal to recover the greater part – or even all – of the costs of a card scheme from merchants, rather than cardholders alone.

## 6.9 Current card pricing practices

77. Katz points to the fact that credit and charge card users generally face a negative usage fee and a positive membership fee as evidence that the card networks’

members are not pricing to take into account the positive externality created by card scheme membership.

78. However:

- Katz does not provide evidence to show that card scheme membership is being priced above the avoidable costs of signing up cardholders;
- charging arrangements not based on usage are vulnerable to abuse, with consumers obtaining multiple cards simply to earn rebates for signing up;
- Katz's alternative for dealing with the membership externality (that the card association should cap the annual fees charged by issuers) would be difficult, if not impossible, to enforce and might well be illegal under applicable competition law principles; and
- even if Katz's alternative were enforceable and legal, network externalities would remain with respect to usage. Economic efficiency would consequently be impaired.

## 6.10 Conclusions on the Katz Report

79. The Katz Report is deeply flawed in its coverage, use of data and analysis. Important findings in the literature are not, in Visa's view, discussed in a fair and balanced way, with the result that those findings are misrepresented. No attention is paid to whether the proposals advanced by the RBA, notably in respect of interchange fees, would increase welfare. Furthermore, Katz's conclusion that there are multiple mechanisms by which the network effects arising in card schemes can be internalised is inconsistent with both empirical evidence and economic theory. As such, the Katz Report provides little justification for the intrusive regulation proposed by the RBA.

## Detailed response

### 1 Introduction

The consultation document issued by the Reserve Bank of Australia (the “RBA”) entitled ‘Reform of credit card schemes in Australia’ and dated December 2001 (the “RBA Report”), and the accompanying commissioned report by Professor Michael Katz (“Katz”) entitled “Network Effects, Interchange Fees and No-Surcharge Rules in the Australian Credit and Charge Card Industry” and dated August 2001 (the “Katz Report”), demands a strong and timely response by Visa.

This response is provided to the RBA in the context of the RBA’s invitation in the RBA Report for comments on its proposals. Visa notes that this response is not necessarily exhaustive of Visa’s concerns in respect of the current inquiry, or of the RBA Report and the Katz Report in particular. Visa looks forward to further consultation with the RBA regarding both its proposals in the RBA Report and this response, as well as further consultation in respect of additional issues that may arise from time to time.

Having said that, Visa notes that many of the arguments raised by it and others in earlier submissions to the RBA have seemingly been ignored by the RBA (at the least, Visa has not received any clear explanation as to why those arguments have not been accepted and, in the absence of such explanations, can only assume that those arguments have been disregarded). In addition, many of the same errors committed by the RBA in its Joint Study<sup>3</sup> with the Australian Competition and Consumer Commission (the “ACCC”) have re-emerged in the RBA Report despite Visa’s extensive consultations with the RBA over the last several months. Visa believes that relative to this situation the best way of making progress is for any differences of view to be made explicit and fully tested. Visa is therefore keen to continue to consult with the RBA on these matters in the coming months.

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<sup>3</sup> Reserve Bank of Australia and Australian Competition and Consumer Commission, *Debit and Credit Card Schemes in Australia – A Study of Interchange Fees and Access*, October 2000 (the “Joint Study”).

This document identifies and responds to a number of issues arising out of the RBA Report and the Katz Report. It is set out as follows:

- section 2 provides some general comments by way of overview of both the RBA Report and the Katz Report;
- section 3 sets out some preliminary observations as to what should be the appropriate methodological approach, both generally to the issues addressed in the RBA Report and in the context of the specific legislative powers granted to the RBA;
- sections 4 to 7 inclusive respond to Visa's four key areas of difficulty with the RBA Report:
  - section 4 considers network externalities and interchange fees;
  - section 5 examines the no surcharge rule;
  - section 6 deals with access rules; and
  - section 7 addresses competition between open and closed payment card systems;
- section 8 responds to the Katz Report. This is important given, *inter alia*, the reliance the RBA places on that report – a reliance that, as Visa shows, is generally selective (in that it rarely reflects important caveats that even Katz places on the arguments he makes) and, in some cases, goes far beyond what can be justified by what Katz has actually said in his report;
- section 9 comments briefly on some recent developments in Europe of relevance to the present inquiry and the issues raised in the RBA Report; and
- finally, section 10 concludes this detailed response.



## 2 General comments on RBA Report and Katz Report

The RBA Report and the Katz Report fall short of the standards of regulatory analysis generally observed in other regulatory fora, both in Australia and overseas, in that, for example:

- the two reports do not present both sides of the various economic arguments in an even-handed manner or with an objective analysis of their respective merits;
- there is no evidence that submissions made by interested parties have been treated equally. For instance and most notably, the RBA has apparently accepted the claims and commissioned research of the Australian Retailers Association (the “ARA”) without subjecting it to critical review and analysis, while apparently dismissing, without critical review and analysis, the submissions made by Visa;
- the RBA Report selectively cites findings of the Katz Report where those findings support the RBA’s conclusions (sometimes copying the Katz Report even where there are obvious errors therein), but ignores (or mis-states), without explanation or analysis, those findings of the Katz Report that do not support its conclusions; and
- the RBA relies heavily on inferences drawn from the submissions of certain, selected parties in response to its Joint Study with the ACCC where doing so is completely inconsistent with the very process of consultation in which the RBA is required to engage. For instance, the RBA infers from the fact that concerns about the impact on issuers were emphasised in some submissions that card schemes are “controlled” by the interests of issuers.<sup>4</sup> Not only, in Visa’s case, is this not true, but such inferences ignore the obvious fact that a regulated decrease in interchange fees will negatively impact issuers and their customers in the first instance (and hence some submitters may give particular emphasis to the effects of the RBA’s proposals on that group).

From the perspective of proper public policy analysis, as well as sound regulatory and administrative practice, the burden of proof lies with the RBA to justify its proposed regulatory intervention as being in accordance with the criteria laid down in the relevant

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<sup>4</sup> See, for example, RBA Report, pages 30-31 and 64.

sections of the Payment Systems Regulation Act 1998 (Cth) (as discussed in section 3.1 of this response). The burden further lies with the RBA because it is the RBA that seeks to use its coercive powers to constrain and direct participants in a well-functioning, successful sector of the economy. However, in Visa’s view, the RBA has failed to discharge this burden of proof, with its arguments in the RBA Report not progressing substantially past the highly problematic arguments presented in its Joint Study with the ACCC.

Taken at its most rudimentary, the RBA’s account of open payment schemes is that the use of cards provides few real intrinsic benefits (such as transactional benefits) to cardholders or merchants, but mainly involves card schemes inducing consumers to use cards by the provision of cardholder benefits, and then charging merchants for the right to accept these cards. Under any rational economic approach, merchants would not want to accept cards unless the benefits to them of doing so exceed the costs. While the RBA would not disagree with this proposition, its view seems to be that merchants are ‘locked into’ accepting cards based on a benefit/cost calculation, but that the benefits to merchants are comprised solely or mostly of strategic benefits (that is, the potential for competitive disadvantage relative to merchants who accept cards), rather than intrinsic benefits such as transactional benefits. It argues that, because of the no surcharge rule, consumers do not face an explicit price for using cards, and so will want to use them in order to benefit from reward points.<sup>5</sup> In the

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<sup>5</sup> Visa notes that, based on internal Visa data for the third quarter of 2001, approximately 41% of Visa’s personal credit cardholders were *not* enrolled in a credit card rewards program. Visa further notes that participation in rewards programs is not limited to high income groups. Visa’s analysis of recent data obtained from the Roy Morgan Research (Single Source Australia Jan - Dec 2001 survey) reveals that almost 60% of cardholders that participate in reward programs have a personal income that is less than \$40,000. The following table summarises the take-up of rewards schemes among cardholders who have income levels less than \$50,000:

| Income level (A\$) | Percentage of cardholders* in income group enrolled in a rewards program | Percentage of total rewards program participants | Cumulative proportion of rewards program participants |
|--------------------|--|--|---|
| Under 6,000        | 52%  | 9.8%   | 9.8%  |
| 6,000 – 9,999      | 38%  | 6.0%   | 15.8%   |
| 10,000 – 19,999    | 44%  | 11.8%  | 27.6%   |
| 20,000 – 29,999    | 50%  | 14.7%  | 42.3%   |

RBA's view, given this demand by consumers, merchants are willing to pay to accept cards in order to attract customers from rivals, even though card acceptance among merchants is alleged by the RBA to be mutually frustrating and of little intrinsic benefit. To exploit this opportunity, payment schemes are alleged to set high interchange fees, thus providing high cardholder rebates and high merchant service fees. The result, according to the RBA, is that, in aggregate terms, such schemes are undesirable.<sup>6</sup>

The RBA questions the existence of network externalities, arguing that, even if they do exist, they cease to matter for mature card systems and that, in many cases, interchange fees are not necessary for internalising whatever network externalities may be said to exist.

Visa's systematic analysis of each of the propositions underlying the RBA's view of the world shows that the RBA's account is clearly wrong. In fact, merchants are willing to join card networks so long as their average benefits from doing so (in terms of the additional

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|                 |     |       |       |
|-----------------|-----|-------|-------|
| 30,000 – 39,999 | 56% | 16.1% | 58.4% |
| 40,000 – 49,999 | 58% | 13.0% | 71.4% |

\* Visa, MasterCard, Bankcard, American Express or Diners Club credit or charge cards

Those surveyed were aged 18 years or over.

Source: Roy Morgan Research.

<sup>6</sup> The RBA seems to attribute the growth in the popularity of credit card schemes to the provision of cardholder benefits which it regards as wasteful – that is, it sees cardholder benefits in the same light that some people see advertising (that is, as wasteful). However, more sober analyses of the growth in the popularity of card schemes have attributed this to, *inter alia*, technological developments making it easier to process credit card transactions. For instance, Zywicki, T, "The economics of credit cards", Law and Economics Working Paper Number 00-22, George Mason University School of Law, at page 9 states:

"[i]n recent years, credit cards have increasingly become an effective cash substitute. This is primarily the result of technological advancements that have increased credit card processing speed. As a result, credit cards are now accepted in such places as fast food restaurants, coffee shops, parking garages, supermarkets, movie theaters, and taxi cabs."

custom and other benefits obtained) exceed an objective assessment of the costs to them in accepting cards. That this is so is exemplified in one of the major economic models cited by the RBA itself, namely Rochet and Tirole's model of merchant acceptance. This position is in stark contrast to that of the RBA which seems to imply that all merchants would be better off if none of them accepted credit cards under the terms and conditions (including the no surcharge rule) offered by Visa and other card associations.

It follows that, under the assumption that cards provide no real benefits to cardholders and merchants, if card issuers pay cardholders a rebate of a certain amount, merchants cannot be charged more than that amount in order to accept cards. Given this, the presence of any costs of actually running such a card scheme means that card issuers will not be able to break even. It follows that, if a card scheme is to exist in the first place, it must, as a matter of logic, be that cardholders and/or merchants derive real benefits from using/accepting cards (in excess of the cost of bringing these benefits forward). This, in essence, is the major proposition underlying Visa's position. This view, as the rest of this response demonstrates, is consistent with the most plausible theories of cardholding and the available empirical evidence.

In Visa's view, the fact that the RBA reaches a contrary position, ultimately adopting the very problematic arguments set out in the RBA Report, raises serious concerns regarding the RBA's methodology.

To begin with, Visa has a number of concerns regarding the RBA's approach to economic modelling and economic analysis:

- in coming to its views, the RBA criticises economic models which show results that do not agree with its own assumptions, but does not provide its own economic model or point to any economic model that supports its account. In fact, the RBA's arguments do not withstand rigorous economic modelling. While some of its individual claims may have intuitive appeal to the lay reader, they do not hold as a consistent account of rational economic behaviour;
- rather than providing a clearly laid out, consistent account of the market it is seeking to regulate, the RBA's arguments frequently seem to be based on observing behaviour that does not fit what the RBA would have expected to observe, given some simple (but un-stated) model it seems to have in mind about how interchange fees should be set in a purely hypothetical competitive market in which there are no network externalities. If the RBA were to write down this model, it would find that it would lead to many other predictions that do not match reality. This is a result of

the deficiencies of the model the RBA apparently has in mind, rather than of economically inefficient behaviour by the card associations. However, the RBA does not subject its own economic analysis to the same standards of rigorous analysis it claims to impose on the models used by the card associations;<sup>7</sup> and

- the RBA endeavours to argue that current interchange fee setting processes are inconsistent with economic theory. However, not only are its conclusions in this respect misconceived, but the RBA puts forward a draft standard that is, in fact fundamentally inconsistent with economic theory (as can be seen from Katz's discussion of that theory). Indeed, it is striking that while Katz was asked to review the approaches of which the RBA is critical, either he was not asked to review any of the RBA's core proposals or the results of his analysis have not been disclosed by the RBA.

At the same time, the RBA Report is characterised by either a lack of understanding or, at best, a lack of acceptance, of basic concepts from microeconomics and welfare economics.

Particularly important, from an economic perspective, is the fact that the RBA uses the wrong metric for evaluating the effects of business practices and policy - that is, it uses the metric of cost minimisation rather than welfare maximisation. For instance:

- at page vi of the RBA Report, the RBA writes: “[o]verall, the community is paying a higher cost for its retail payments system than is necessary”; and

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<sup>7</sup> For example, it expresses surprise (RBA Report, page 34) that when annual fees were introduced in Australia for cardholders, interchange fees actually increased. This is, in fact, precisely what would be predicted by a theoretical model of interchange fee determination (either the privately or socially optimal interchange fee). This is because higher annual fees will reduce cardholder membership and so card usage, and this can be offset by raising the interchange fee to ensure the network is appropriately balanced between promoting card holding (and usage) and merchant acceptance. Why then is the RBA surprised that interchange fees increased? Presumably because it is in effect using a purely intuitive and poorly thought through model of interchange fee determination based solely on costs.

- at page 68 of the RBA Report, in what is either a hugely surprising error or at the very least misleading, the RBA defines allocative efficiency as being “increased if a given level of output can be produced with fewer resources” when in fact this refers to productive efficiency (that is, the minimisation of resource cost).

Additionally, in considering whether policies are or are not desirable, the RBA seems to place very great weight on whether they do or do not confer benefits on merchants, rather than focusing on social welfare overall – that is, the gains not only to producers but also to consumers. Placing such weight on ensuring benefits to merchants is unusual, if not unique, in Australian economic policy analysis.

Finally, the RBA relies heavily on the Katz Report to support some of its conclusions, yet the Katz Report:

- is based on a number of unsubstantiated statements;
- is manifestly incorrect in parts; and
- does not represent a balanced review of the relevant economic literature.

These weaknesses and their implications are examined in the balance of this response.

As noted in the introduction, sections 4 to 7 of this document set out Visa’s responses to four key areas of concern in respect of the RBA Report, namely claims by the RBA regarding:

- the existence of network externalities and the relevance of these externalities to the setting of the interchange fee;
- justifications for the no surcharge rule, the current effects of the no surcharge rule and the likely effects of removing this rule;
- the efficiency of Visa’s current access rules and the true purpose behind these rules; and
- the likely effects and desirability of selective regulation of credit card schemes (the competitive neutrality issue).

Section 8 of this response then provides a critique of the Katz Report.

However, before considering in detail the key areas of concern with the RBA Report, Visa considers that it would be constructive to set out some preliminary observations as to what

should be the appropriate framework for analysis of the issues at hand, both generally and in the context of the specific legislative powers granted to the RBA. This discussion is the subject of section 3 of Visa's detailed response.

### 3 Framework for analysis

This part of Visa's detailed response is set out as follows:

- section 3.1 recalls the legislative standards for regulatory intervention by the RBA;
- section 3.2 considers the normative approach widely accepted by economists with respect to assessing whether regulatory intervention should occur in a specific instance;
- section 3.3 discusses the relevance of economic models to the question of regulatory intervention;
- section 3.4 addresses the ideal starting point in terms of the market definition and competition analysis necessary to deal with the issues at hand, given the specific legislative powers assigned to the RBA and upon which it relies in undertaking its inquiry into the reform of credit card schemes in Australia and formulating standards in response to that inquiry; and
- section 3.5 makes some observations regarding the consultation process in light of the legislative framework and certain statements made in the RBA Report.

#### 3.1 Legislative standards for regulatory intervention

In beginning to address the question of the proper analytical framework for analysis of the issues of present concern, it is first helpful to recall the legislative standards laid down for regulatory intervention by the RBA in this matter.

Under section 10B(3)(b) of the Reserve Bank Act 1959 (Cth), the Payments System Board is charged with ensuring that the powers of the RBA under, *inter alia*, the Payment Systems Regulation Act 1998 (Cth) (the "PSRA") are exercised in a way that, in the Board's opinion, will best contribute to:

- controlling risk in the financial system;
- promoting the efficiency of payments systems; and
- promoting competition in the market for payment services, consistent with the overall stability of the financial system.



For present purposes, the powers of the RBA at issue under the PSRA are its powers to:

- designate a “payment system” where it considers doing so to be in the “public interest” (section 11 of the PSRA). A “payment system” is defined in section 7 of the PSRA to mean “a funds transfer system that facilitates the circulation of money, and includes any instruments and procedures that relate to the system”. Under section 8 of the PSRA, the RBA, in considering whether a particular action would be in the “public interest” is required to have regard to the desirability of payment systems being (in its opinion), *inter alia*, efficient and competitive;
- impose an “access regime” (as defined) on participants in a designated payment system (section 12 of the PSRA). Any access regime imposed must be one that the RBA considers appropriate, having regard to: whether imposing the access regime would be in the public interest (as defined above); the interests of the current participants in the system; the interests of people who, in the future, may want access to the system; and any other matters the RBA considers relevant; and
- determine standards to be complied with by participants in a designated payment system, if it considers that determining the standards is in the public interest (as defined above) (section 18 of the PSRA).

The touchstones of “efficiency” and “competitive” that apply in respect of any proposed regulatory intervention by the RBA make relevant:

- the economic considerations discussed in this response; and
- as the RBA recognises,<sup>8</sup> the consistency of any proposed regulatory intervention with the objectives of Australian competition policy.

Given these considerations, the normative approach taken by economists towards the issue of regulatory intervention is of primary importance in assessing the broad range of options the RBA may take following the conclusion of the present inquiry. That approach is the subject of the next section.

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<sup>8</sup> RBA Report, page 11.

### 3.2 Normative approach to regulatory intervention

The purpose of this section is to consider the normative approach widely accepted by economists with respect to assessing whether regulatory intervention should occur in a specific instance.

Given the wide emphasis placed on efficiency in the relevant legislation (as described in section 3.1) and the importance of efficiency to economic analysis generally, it is not surprising that the RBA itself recognises the importance of the criterion of economic efficiency in its normative analysis. It is important to have a sound understanding of what “efficiency” means from an economic perspective. Broadly, as the RBA would be aware, an outcome is efficient when it maximises the benefits society derives from the resources available to it. It follows that a situation that can be changed in such a way as to make some parties better off without making others worse off cannot be efficient.

Consistent with this, the RBA recognises that there are three dimensions to efficiency<sup>9</sup> (generally referred to as allocative, productive and dynamic efficiency) which economists usually take account of in their normative analysis. However, Visa is concerned that, in practice, the RBA seems to be disproportionately focused on productive efficiency in its normative analysis. This is evident, for instance, in the RBA’s concern that card payment systems should be priced solely according to their resource costs.<sup>10</sup>

In addition to properly considering *all* relevant facets of efficiency, the RBA should be extremely cautious about intervening in markets, as economists generally acknowledge that it is not sufficient justification for regulatory intervention that:

- such intervention might promote efficiency in the market; or
- conditions in the market (without intervention) fall short of some ‘first best’ standard of economic efficiency.

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<sup>9</sup> RBA Report, page 11.

<sup>10</sup> This issue is discussed in section 5.2 (the no surcharge rule and cost-based surcharging).

Rather, whether regulatory intervention is justified is a matter of comparing outcomes under alternative intervention options, including the option of doing nothing. This is a simple extension of opportunity-cost reasoning.<sup>11</sup>

A typical example of how this principle of regulatory intervention has permeated into the economics profession can be found in a textbook written by the RBA's expert, Katz, where he writes:<sup>12</sup>

"It must be emphasized that while efficiency problems provide opportunities for government intervention in the economy, they do not require it. That the market-generated allocation of resources is imperfect does not mean that the government can do better. For example, in certain cases the costs of setting up a government agency to deal with an externality could exceed the cost of the externality itself. Moreover, governments, like people, can make mistakes."

In essence, what Katz is saying is that the fact that regulation might improve on efficiency is only a necessary, *but not sufficient*, ground for regulation. That this is a sensible principle to follow is evident from the fact that no real-world market exhibits the socially optimal properties of perfectly competitive markets where productive and allocative efficiency are maximised. Therefore, if improving upon efficiency in the real world to bring it closer to the

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<sup>11</sup> As Nobel Laureate in Economics Ronald Coase writes:

"[e]conomists who study problems of the firm habitually use an opportunity-cost approach and compare the receipts obtained from a given combination of factors with alternative business arrangements. It would seem desirable to use a similar approach when dealing with questions of economic policy and to compare the total product yielded by alternative social arrangements."

See Coase, R, "The problem of social cost" (1960), reproduced in Coase, R, *The firm, the market and the law*, University of Chicago Press, 1990, pages 153-154.

<sup>12</sup> Katz, M L and Rosen, H S, *Microeconomics*, 1998 (3<sup>rd</sup> ed), Irwin McGraw-Hill, Boston, Massachusetts, page 399.

standards of perfectly competitive markets were a green light for regulatory intervention, then every sector of the economy would need to be regulated.

Evidence that policy-makers clearly do not regard this as an appropriate standard for intervention can be found in the fact that such a formulation for regulatory intervention has never been seriously considered, at least in Australia.

The implication of this accepted approach for the RBA's inquiry into credit card systems is clear - in applying the touchstones of "efficiency" and "competitive" described above, the onus of proof lies with the regulator (in this case, the RBA) to demonstrate that market failures are so significant or persistent in those systems that the benefits of the regulatory interventions proposed outweigh the costs of those interventions. For the reasons outlined in this response, Visa considers that the RBA has failed to discharge this required onus of proof.

### **3.3 The relevance of economic models to normative analysis**

Given the prominence of discussion of economic models in this inquiry, Visa feels that it is worth clarifying its views on the relevance of these models to assist the RBA in its inquiry and to avoid any misunderstandings regarding the representations that these models imply.

Though economic models serve a very useful purpose in normative analysis for economists, they are not to be taken literally. Rather, the purpose of an economic model is to force the model-maker to order complex phenomena into a coherent 'story' that produces predictions or inferences that can be readily confirmed or refuted.

The Joint Study by the RBA and the ACCC acknowledges that the appropriate setting of interchange fees is a technically complex subject,<sup>13</sup> and that analysis of this subject is only comparatively recent.<sup>14</sup> These two considerations particularly highlight the need for such a rigorous approach to be adopted - and the importance of economic modelling as a disciplinary device - in the present inquiry. The RBA Report itself demonstrates the dangers of ignoring this need. More specifically, the lack of any coherent model presented by the

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<sup>13</sup> Joint Study, page ii.

<sup>14</sup> The Joint Study notes, at footnote 14 of page 27, that the seminal theoretical work dates back only to 1983.

RBA in the RBA Report has given rise to considerable difficulties in seeking to address the RBA's analysis.

For example, the lack of a coherent model being presented and obviously applied by the RBA means that it is extremely difficult in many cases to 'pin down' the specific details of the RBA's points or critiques and its reasoning. In particular, it is generally not easy to understand what the alternative 'story' proposed by the RBA is with respect to many difficult and intricate issues.

In the absence of a clearly stated, consistent and applied model, engaging in reasoned debate is made substantially more difficult because it is not always apparent whether a different conclusion has been reached due to the use of different definitions of key terms, different interpretations of empirical phenomena or different underlying assumptions. In many cases, Visa has been forced to attempt to reconstruct what the RBA's underlying arguments might be so that it can respond to these arguments in a fair and objective manner. The apparent failure of the RBA to utilise economic modelling as a disciplinary device has thus proven particularly costly in terms of the fact that many parts of the RBA's 'story' do not match with others, as the balance of this response demonstrates.

Given these considerations, it should be evident that the reason Visa has produced the model of payment card systems that it discusses throughout this response is not in order to suggest that there is a perfect correspondence between what it describes in its model and what actually happens in real life. Rather, it is to show that the inferences and predictions that can be drawn from its model, and the interpretations of empirical phenomena suggested by Visa's model, represent a more coherent, structured and relevant approach to analysing the issues than is evident from the RBA Report.

At times, the RBA seems to fault Visa's model on the grounds that the specifics of that model do not match reality perfectly. This 'reality' criticism could, however, be made of any economic model, including the widely-accepted model that firms attempt to maximise profits, and thus does not suffice as a critique of a particular economic model. The point is that the latter model is not to be taken literally as saying that firms actually maximise profits every time; rather, all that underpins the widespread use of the profit-maximising model of the firm is the realisation that it is useful to analyse firms *as if* they were maximising profits compared to alternative approaches (for example, analysing firms as if they were philanthropic organisations).

A model that in no way departed from the complexity of the real world would, in the famous phrase of Joan Robinson, be as useful as a map drawn on a scale of one to one.

However, even a condensed map is better than no map at all; a clear analytic model presented in the RBA Report would provide analytical focus and direction so that the inquiry process could potentially have been more fruitful in terms of narrowing down the ultimate source of different perspectives as between Visa and the RBA.

### 3.4 Market definition and competition analysis: RBA's approach

As noted in section 3.1, the relevant touchstones for regulatory intervention by the RBA – and supervision by the Payments System Board of the RBA's exercise of its powers – include respectively:

- the desirability of payment systems being competitive (refer the definition of “public interest” cited in section 3.1); and
- promoting competition in the market for payment services.

As a practical matter, competition occurs in markets. Hence, in analysing the impact of particular conduct on competition, or the impact that particular policy prescriptions would have on competitive outcomes, it is essential to analyse carefully the markets at issue.<sup>15</sup>

Given this, it is significant to recall the specific terms of the RBA's powers and the supervisory onus placed upon the Payment Systems Board because, throughout the RBA Report, the RBA's focus is variously on:

- a credit card market;<sup>16</sup> or

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<sup>15</sup> As one of the economists with the greatest influence on Australian competition policy has aptly put it: “[i]t is often thought that one can leap immediately and intuitively to establishing the public interest in certain conduct. Not so. What you have to study is the functioning of markets. That means that market definition is the first step.” (Maureen Brunt, *Accommodation of Multiple Criteria in Competition Policy*, OECD, 1997). Reflecting this, in *Re Queensland Co-Operative Milling Association Ltd (“QCMA”)*, the Trade Practices Tribunal stated that the identification of markets: “must be the essential first step in assessment of present competition and likely competitive effects”.

- a market for issuing and acquiring,<sup>17</sup>

rather than a market for payment services. A market for payment services is considerably wider than either of the markets upon which the RBA has based its analysis (as revealed in the RBA Report). A fundamental issue arises, therefore, as to whether the RBA has correctly analysed the issues at hand.

In order to be able to respond to the RBA's claims in the RBA Report, Visa has necessarily had to discuss its own analysis in terms of the narrower market definitions employed by the RBA in order to allow for meaningful discussion of those claims. As the rest of this response demonstrates, Visa's arguments and its position with respect to the issues discussed by the RBA remain strong and compelling even using the narrower market definitions employed by the RBA.

Visa notes that, notwithstanding the approach taken in this response in light of the necessity identified, Visa should not be taken as agreeing that the RBA has approached the issues of market definition and competition analysis in accordance with the terms of the relevant enabling legislation.

### 3.5 Consultation

Finally, Visa notes that the framework under which the RBA has proposed regulatory intervention (as described generally in section 3.1 of this response) requires that the RBA engage in the consultations presently on foot and of which this response forms part.

The purpose of consultation is, *inter alia*, to gather different views and ideas, better understand and clarify the issues at hand, obtain information or data that is relevant to consideration of the issues at hand, identify information or data that is not relevant to take into account in considering the issues at hand and to gather the perspectives and concerns of interested parties, *prior to forming a view on the matters at issue*.

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<sup>16</sup> For examples of this, see pages iii, v, vi, vii, viii, 3, 10, 31, 37, 38, 39, 71, 84, 89, 115, 116 and so forth of the RBA Report.

<sup>17</sup> For examples of this, see pages 85, 88, 103, 106, 107, 109, 125 and 126 of the RBA Report.

The objectives of consultation are largely, if not entirely, negated where the decision-making body forms its views prior to the process of consultation being undertaken. To this end, Visa notes with some surprise, the comments in the RBA Report that its proposed reform measures “have been endorsed by the Payments System Board of the Reserve Bank”.<sup>18</sup> This would seem, at best, inconsistent with the purpose of the requirement of consultation in section 28 of the Payment Systems (Regulation) Act 1998 (Cth).

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<sup>18</sup> RBA Report, page vii (at paragraph 22).



## 4 RBA Report: network externalities and interchange fees

Put very generally, it seems that the RBA's position may be shortly stated as being that:

- network externalities are either non-existent or at least immaterial;
- even if there are potential network externalities, surcharging may be able to internalise some of them, thus reducing (or even obviating) any need for an interchange fee to perform this function; and
- the interchange fee structure currently utilised is inconsistent with the objective of maximising benefits to cardholders and merchants.

Given these conclusions, the RBA advances a less publicly acceptable explanation for interchange fee levels, namely that they are hidden fees that arise as a result of the inappropriate exercise of market power by card associations.

This section examines the various propositions put forward by the RBA in support of the RBA's position and shows that each of these propositions is unsustainable. Specifically, this section considers:

- the RBA's argument that the appropriate test for whether network externalities may be said to exist is whether there is an increase in sales overall as a result of card networks' operations;
- the RBA's claim given this test, that as a matter of fact there are no economy-wide effects in which there is an aggregate increase in merchant sales as a result of card acceptance, hence there are no network externalities present;
- the RBA's claim that merchants do not receive any, or receive insufficient, transactional benefits from joining a card network, so that network externalities do not arise;
- the RBA's claim that, even if there are network externalities, they are immaterial to the setting of interchange fees for card networks because, beyond a critical mass, network effects diminish as the network gets larger. Since payment schemes are already 'mature', so the RBA argues, network externalities no longer matter;

- the RBA's claim that, even if there are potential network externalities, surcharging by merchants may be used to internalise some of them, thereby reducing (or perhaps even obviating) the need to use an interchange fee to perform this function;
- the RBA's claim that, in any case, the current interchange fee structure is inconsistent with the card schemes' stated objective of maximising benefits to cardholders and merchants by maximising network size. This is because cardholders face a positive price to join, and a negative price to use, the network. An optimal structure would, according to the RBA, more closely resemble that of mobile phones where there is a negative price to access the network. Given that the current interchange fee structure does not exhibit these characteristics, then, argues the RBA, it must follow that the current interchange fee structure is not really aimed at internalising network externalities; and
- the RBA's argument that, since interchange fees cannot (according to the RBA) be explained in terms of network externalities, the policies and practices under dispute in terms of the setting of the interchange fee arise because of an exercise of market power by the card associations.

The final subsection - section 4.8 - concludes this part of Visa's response with some observations regarding the RBA's adoption of a cost-based methodology in respect of the setting of the interchange fee level in its draft standard. This subsection also considers the RBA's failure to include in its draft standard, as part of the costs allowed to be recovered through the interchange fee, the costs of interest free periods and loyalty programs.

Visa notes, by way of precursor to the discussion of the above claims and in the vein of the discussion in section 3 of the detailed part of Visa's response, that the task of presenting a logical and consistent rebuttal of the RBA's claims is somewhat complicated by the fact that the RBA itself does not seem to take a consistent line on network externalities and their existence. For example, on page 26 of the RBA Report, the RBA writes that it considers that the arguments "that credit card schemes generate network externalities are unconvincing". Yet, on page 41 of the RBA Report, the RBA writes that "because of network effects, it is very difficult for small and/or new networks to compete with large, established ones ...". Such inconsistencies speak for themselves, but they do mean that an analyst, faced with the RBA Report, must seek to reconstruct the logic of the RBA's arguments, as is attempted here.

## 4.1 Appropriate test for network externalities

The RBA repeatedly states that the relevant test associated with network externalities is whether there is an increase in sales overall as a result of credit card networks.<sup>19</sup> Since this test was not put forward by the RBA in its earlier Joint Study with the ACCC, it deserves particular attention.

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<sup>19</sup> At page 23 of the RBA Report, the RBA claims:

“[i]t is essential that the assertion of network externalities associated with higher merchant sales be stated correctly. Higher sales on credit cards for individual merchants do not, of themselves, give rise to overall merchant benefits if:

- those sales would have taken place anyway using other payment instruments; or
- the sales have merely diverted business from one merchant to another.”

At page 25 of the RBA Report, the RBA states:

“... it is essential that the network externalities argument be correctly stated: credit card usage must result in a *permanent* increase in consumption for society *as a whole*” (original emphasis)

and at page 19 of the RBA Report, the RBA mis-characterises the proponents of the idea that interchange fees promote network externalities in the following manner:

“[t]he existence of network externalities would require that there are net social benefits to the growth of credit card schemes that would not be captured in competitive market prices. Proponents of the externalities argument focus on what they claim to be two main benefits which credit card networks provide to merchants:

- lower transaction costs with credit cards; and
- increased sales.”

The initial problem with the RBA's stated test, on top of others that will be subsequently noted, is that it is unclear whether the RBA views this 'increased sales' test as a test of whether:

- there are indeed network externalities; or
- merchants should bear the cost of internalising those externalities; or
- some other, unstated, proposition.

However, irrespective of which formulation is used, the RBA's claim is incorrect.

If what the RBA means is that whether there are network externalities depends on whether there is an increase in sales overall as a result of credit card networks, then this claim is wrong. This is because an increase in the number of merchants accepting a card would increase the value of the card to cardholders and an increase in the number of cardholders would increase the value to a merchant of accepting the card. These circumstances would, of themselves, give rise to network externalities, quite independently of any increase in overall or *aggregate* sales to merchants (which is equivalent to aggregate consumption).<sup>20</sup>

Furthermore, if the RBA is proposing a sales-based test for the existence of network externalities, this clearly goes against the conclusions of the available economic literature. Ironically, among the contributors to that economic literature on network externalities has been the RBA's own expert, Katz.<sup>21</sup>

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<sup>20</sup> In the RBA Report, the RBA uses the terms "overall sales" and "aggregate consumption" (and other similar expressions) interchangeably.

<sup>21</sup> See, for instance: Katz and Shapiro, 1985, 'Network externalities, competition and compatibility', *American Economic Review* 75(3); Katz and Shapiro 1992, 'Product introduction with network externalities', *Journal of Industrial Economics*, March; Katz and Shapiro 1994, 'Systems competition and network effects', *Journal of Economic Perspectives*; and Katz and Shapiro, 1986 'Technology adoption in the presence of network externalities', *Journal of Political Economy* 94(4). In none of these articles does Katz mention a 'sales-based' test for network externalities. Indeed, in the introductory paragraph to the first-mentioned article,

If, alternatively, what the RBA intends to suggest is that unless there is an increase in sales overall due to card networks, merchants should not bear the cost of internalising the network externalities of card networks, then this claim, too, is wrong. Even if the total of merchants' sales remained constant (and therefore aggregate consumption was unchanged), the size and direction of the interchange fee would depend on how the division of total costs between cardholders (on the one hand) and merchants (on the other) affected the size of the system's network and the aggregate value of its services (that is, the social surplus associated with the scheme). With zero change in the total of merchants' sales, merchants, if they indeed have low resistance to accepting cards, would still pay higher fees than cardholders if a socially optimal outcome were to be achieved.

In considering the benefits of payment cards, the RBA focuses on the extent of the benefits available to merchants. However, even if the benefits of card systems are one-sided in favour of consumers or accrue mostly to consumers (a claim which the RBA has in any case not proved and which this response shows is not necessarily valid in any case), this is of no relevance to an evaluation of the overall welfare effects of card networks. These depend not on the surplus to any one side of the market, but rather on the impacts on the sum of consumer and producer surplus.<sup>22</sup>

From the point of view of overall welfare, it is not clear why it would matter if merchants are or are not any better off as a result of accepting cards. Consider the development of better means of transport that reduce the costs of shipping goods as between places. Do these make

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Katz uses the term 'network externalities' interchangeably with 'consumption externalities' and refers instead to 'utility' (a term much forgotten by the RBA). Katz writes that:

"[t]here are many products for which the utility that a user derives from the consumption of the good increases with the number of other agents consuming the good. There are several possible sources of these positive consumption externalities."

<sup>22</sup> Indeed, as is noted elsewhere in this response, it is extremely unusual for public policy-makers to place special stress on, and seem to attach particular weight to, the surplus that accrues to producers rather than consumers. The RBA, with its emphasis on merchant benefits, seems unique in this respect.

merchants better off? To the extent that reduced transport costs undermine local trading monopolies, the income accruing to merchants will tend to fall, but the income available to society as a whole will rise. Moreover, to the extent to which competitive forces give each merchant no choice but to adopt these new means of shipment, and their resulting widespread adoption reduces the costs of using such means of shipment, the claim might be made that merchants are being “coerced” into cost-reduction – yet social welfare is clearly being enhanced.

Overall, the RBA’s seeming concern about merchant incomes is misplaced. Economic efficiency depends on maximising overall welfare – the sum of consumer and producer surplus – and not on the gains or losses to one side of the market alone. In contrast, the RBA, in considering efficiency issues, seems to confuse firms with final consumers. Firms are merely a means to an end and will participate in a market so long as they break even. Firms do not therefore derive utility directly from the activities in which they are engaged. The utility of final consumers, on the other hand, does matter and is the main concern of economic policy-making, at least in the context of competition policy. Indeed, the RBA’s concern with firms being ‘forced’ by competition to provide services against their will is anomalous in the area of economic policy-making. It is normally thought to be desirable that firms are ‘forced’ by market pressures to provide various services and conveniences to consumers (such as heating, lighting, clean premises, packaging, customer service and so forth) even though, in a fully competitive marketplace, these same firms do not benefit from doing so (that is, all the benefits of those services and conveniences accrue to their customers only).

It follows from the discussion so far that, by proposing an ‘increased sales’ test, the RBA’s apparent attempt to refute Visa’s arguments about network externalities or the need to internalise such externalities through an interchange fee, is unsuccessful. In summary, such a test is irrelevant to the issues at hand because:

- as a general methodological point, the ‘increased sales’ test proposed by the RBA is essentially a test that depends solely on merchant welfare and the RBA does not give any convincing reasons why this alone should be relevant to the exclusion of other considerations;
- in the specific case at hand, even if aggregate sales were unchanged, consumers benefit from the existence of payment card schemes in ways shown below to include convenience effects, pro-competitive effects and increased discretion over purchasing decisions. So long as these benefits are admitted, it does not matter,

from an economic policy point of view, whether merchants are no better off from the existence and widespread use of payment cards; and

- as a factual matter, even if aggregate sales were indeed unchanged, this would not mean that merchants do not receive other benefits – Visa demonstrates below that merchants do enjoy, in particular, transactional benefits (most obviously in new areas such as e-commerce) and the ability to exploit economies of scale and scope from the existence of card networks.

## 4.2 Evidence of increased aggregate sales

Having put forward the (ill-founded) proposition that an increase in aggregate sales is a necessary condition for network externalities, the RBA goes on to claim that there are, as a matter of fact, no economy-wide effects in which there is an aggregate increase in merchant sales as a result of card acceptance. Consequently, the RBA concludes that there are no network externalities present.<sup>23</sup> However, the RBA has provided little or no evidence to support the claim that there are no aggregate sales effects from card use.<sup>24</sup>

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<sup>23</sup> See page 27 of the RBA Report where it is stated that:

“[n]o evidence has been provided that credit card usage reduces transaction costs for merchants as a whole. Nor has evidence been provided that credit card usage leads to a permanent increase in sales for merchants as a whole, or, equivalently, a permanent increase in aggregate consumption. The evidence that is available contradicts this assertion. The claim that credit cards allow consumers to spend more than they would otherwise has merit, but only at the level of the individual consumer and only over the short run.”

<sup>24</sup> The only evidence the RBA offers seems to be a 1983 study by the Board of Governors of the US Federal Reserve System that concluded that there were “little grounds for believing that credit cards generate incremental sales in sufficient volumes to offset credit card costs to any measurable degree”: RBA Report, page 26. Although the RBA acknowledges, understatedly, that the “study itself is dated”, it nonetheless apparently considers it unnecessary to offer any more relevant evidence. Visa suggests that considerations such as: the passage of some

In contrast, Visa's view is that, for the reasons outlined in the balance of this section, card payment systems most likely do enhance aggregate sales. The evidence in support of this hypothesis derives, in part, from inferences regarding the effects of some of the benefits that cardholders receive from card systems.

A credit card, in particular, provides the following benefits to cardholders:<sup>25</sup>

- a payment service that can be used at a wide range of merchants (in Visa's case, both in Australia and internationally), whether or not the cardholder is known to the merchant;
- a simple method of obtaining cash 24 hours per day in Australia and of obtaining local currency when travelling outside Australia without making any advance arrangements to do so;
- a credit facility usually (though not always) involving an interest free period and providing the cardholder with the facility to access extended credit terms for larger purchases without incurring transaction costs (such as the costs involved in arranging for a personal loan to finance such purchases);
- an improved ability to track purchases and manage finances;<sup>26</sup> and

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20 years; the fact that the study relates to a different jurisdiction; and the entirely changed dynamics of the credit card industry since that time, all strongly militate against relying upon such dubious "evidence".

<sup>25</sup> Visa notes that non-proprietary debit cards share certain functionality characteristics - and benefits to merchants and cardholders - with credit cards. However, the following discussion is limited to credit cards for the sake of simplicity.

<sup>26</sup> For example, a 1993 US survey of supermarket grocery purchases conducted on behalf of Visa found that 77% of credit cardholders who used their credit cards to purchase groceries agreed with the statement that "I like using credit cards because they provide a record of my purchases", with 59% agreeing that "I use my credit card to help organise and manage my finances."

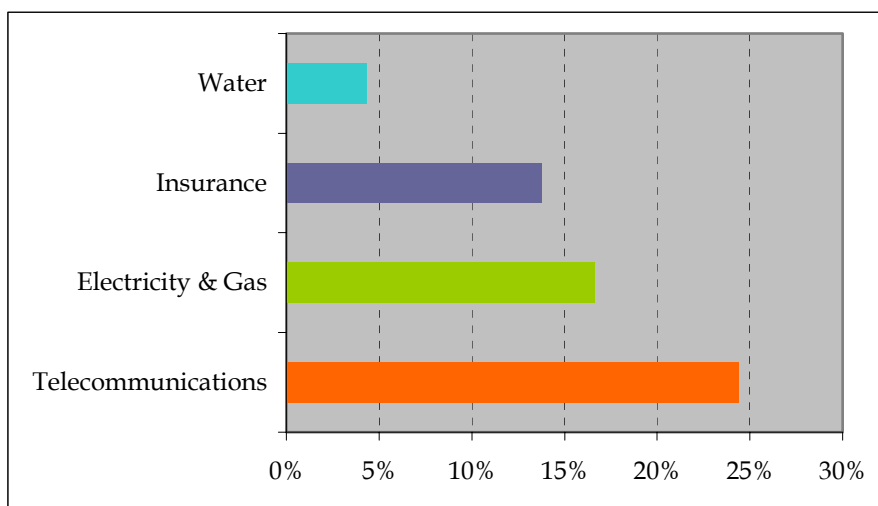


- other cardholder benefits (for example, free insurance cover, extended warranty periods, commission-free travellers cheques, preferred theatre seating, hotel upgrades, dining discounts, Auto Assist, travel assistance, events waiting lists, charity donations based on expenditure, access to international golf courses and equipment, frequent flyer points and loyalty programs).

*Prima facie*, it is implausible to argue that these benefits would not affect cardholders' decisions to join a card scheme or their behaviour having joined. Closer examination shows several means by which cardholder welfare and behaviour are likely to be affected.

First, the payment service function provided by credit cards allows card users who are shopping to incur lower transaction costs in purchasing goods or services. This function reduces transaction costs by, *inter alia*, facilitating purchases over the phone, on the Internet and so forth. Common examples include: ordering flowers over the phone or internet, booking rental cars and hotels (this is illustrated in the case study in section 4.3.2) and purchasing airline tickets (see the discussion in section 4.3.2). The fact that utilities and insurance payments account for approximately 60% of the sales volumes processed through the Visa system by Visa's Top 100 merchants (see Figure 1), attests to the extent to which consumers find it easier to transact in this way rather using than traditional payment mechanisms such as cash or cheques for utility services.

**Figure 1: Payments through Top 100 merchants (4Q 2001)**



Indeed, there are some situations where a credit card is effectively the only available means of payment, such as the payment for many goods and services purchased online. This is discussed in more detail below in section 4.3.2.

Credit cards allow the development of innovative services, which further enhance transaction benefits to cardholders through providing increased convenience. For example, Australia's largest three cinema groups (Hoyts, Village and Greater Union) are investing in a new service, "Movieline" ([www.movieline.com.au](http://www.movieline.com.au)), which will provide online ordering of cinema tickets. Customers, having ordered their tickets online, will then collect their cinema tickets by swiping their cards in kiosks located in cinema foyers.<sup>27</sup> This service, which derives its feasibility through the existence of credit cards, means that customers will not need to face peak-hour queues and possible disappointment. This is just one example of the numerous ways in which credit cards can assist in providing greater convenience for cardholders.<sup>28</sup>

The ease of use of credit cards when travelling internationally also presents an important benefit to cardholders. Furthermore, this benefit also flows through to merchants in providing them with increased sales opportunities. According to internal Visa data, the number of international transactions made through the Visa payment card system in Australia in the year 2001 was 26 million and the total value of these transactions was around \$5 billion. It is reasonable to expect that the difficulties associated with other forms of payment would mean that this expenditure by international visitors would be significantly reduced in the absence of their internationally-accepted credit (and non-proprietary debit) cards.

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<sup>27</sup> Bryant, G (Dec 2001 – Jan 2002), "The Internet is just the ticket", *BusinessOnline*, page 40.

<sup>28</sup> Though credit cards are, obviously, associated with the straightforward provision of credit, the convenience effect should not be underestimated. One econometric study of the US market by Carow, K A and Staten, M E, "Debit, Credit, or Cash: Survey Evidence on Gasoline Purchases" (1999) *Journal of Economics and Business*, 51, 409-421 found that convenience, not borrowing capacity of credit, was the greatest determinant of credit card use.

In addition, there are special 'security' related features that credit cards provide to cardholders as a payment facility that has little or no equivalent among other payment mechanisms. A notable example of this is the "Guaranteed Refund" facility that the Visa system provides if goods or services are not delivered to the cardholder. This was employed to the great benefit of Visa cardholders during the recent Ansett Airlines collapse, where approximately A\$120 million was refunded to them that would otherwise have been lost in the collapse. This type of refund was not available to Ansett customers who had purchased their tickets using cash or proprietary debit cards.

Secondly, another particularly noteworthy convenience benefit of credit cards to cardholders relates to an attribute that credit cards share with other non-cash instruments – namely, that credit cards allow users to minimise their holding of cash balances. (Credit cards have other attributes however, discussed below, which make them superior to other non-cash instruments.)

Cash and cheque accounts usually produce no or little interest while cash in the pocket earns a negative rate of return because of inflation. Given the higher rates of return elsewhere in the economy (such as in investment funds), the opportunity cost of holding cash balances can be material. Thus, using credit cards as a payment device allows all cardholders to make more efficient use of their relative incomes (this may be more highly valued by lower or fixed-income groups), and hence effectively increases that income.

Thirdly, the credit facility function offered by credit cards also means cardholders face lower transaction costs in obtaining credit compared to other possible credit instruments (for example, applying for an overdraft or personal loan in advance).<sup>29</sup> For example, personal loans:

- are a once-off form of credit, requiring a separate application to the credit provider including, in some cases, a personal visit to the credit provider's office;
- are almost always subject to application fees that are, in many cases, above the annual fees of credit cards;

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- are subject to a minimum loan amount that will frequently be more than the borrower requires for a particular purpose;
- incur interest charges from the date the funds are provided to the consumer;
- have restrictions on the approved use of the funds; and
- are sometimes subject to the provision of third-party guarantees.

Therefore, personal loans will almost inevitably be more costly to consumers, as well as provide less convenience, than credit cards.<sup>30, 31</sup>

Fourthly, the credit facility function is obviously of benefit to cardholders because it gives them greater discretion over their spending and, most notably, over its timing. This means, concretely, that cardholders can purchase goods even if temporarily they do not have the cash or funds at their disposal to make the purchase. A recent consumer survey conducted for Visa - in which, when asked whether the use of a credit card allowed them to smooth out their spending, 64% of respondents answered “yes”<sup>32</sup> - is consistent with the existence of this benefit.

An example of consumers’ increased ability to make ‘lumpy’ purchases is during the time of Christmas sales, as well as other peak retail sales times such as Mothers’ Day. As Figure 2 below shows, Christmas periods are consistently accompanied by peaks in credit card usage, generally followed by a decline in card limit usage until the next significant retail trading event.

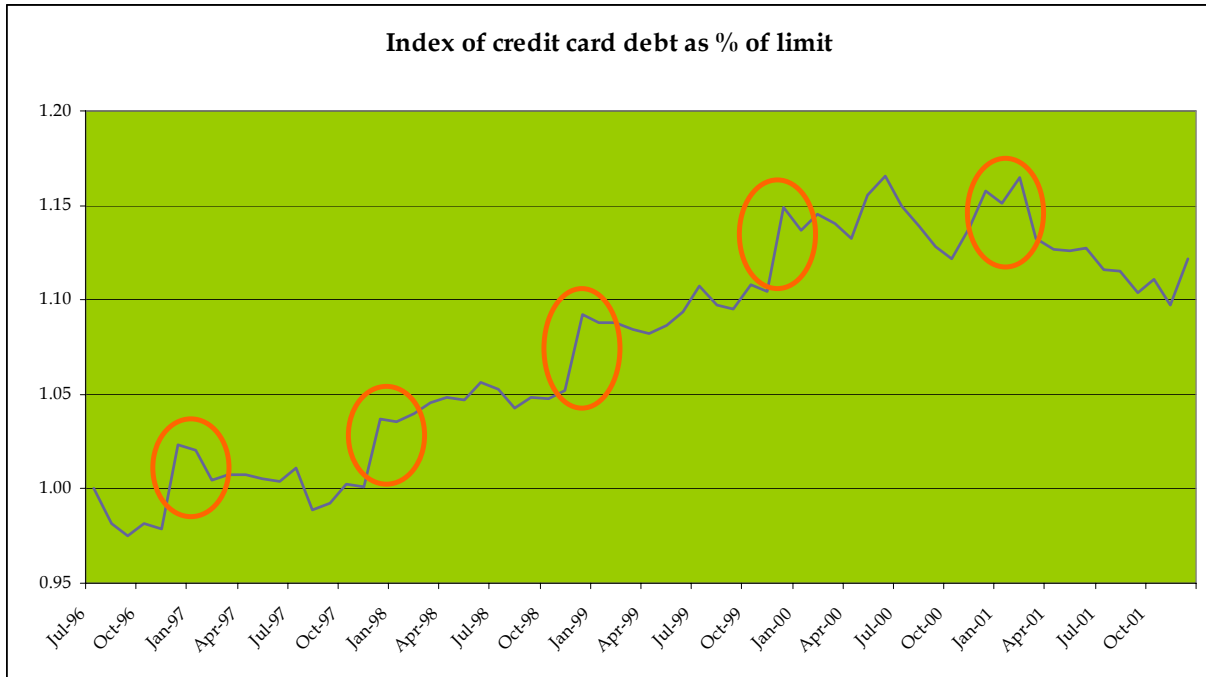
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<sup>30</sup> This is consistent with the findings of KPMG (*Credit Cards in Australia – A Research Report*, 2001) that consumers prefer credit cards to personal loans for small amounts because of: (1) the flexibility of repaying credit cards; (2) more competitive pricing; (3) transactions on credit cards do not attract bank taxes; and (4) credit cards are safer and more convenient when travelling.

<sup>31</sup> There are risk-shifting benefits for merchants from the credit facility function of credit cards – see the discussion in sections 5.1.1 and 8.9.1 of this response.

<sup>32</sup> UMR Research (February 2002), *Summary – Credit Card Issues Research*, page 30.

**Figure 2: Index of credit card debt as % of limit<sup>33</sup>**



Similar examples of consumers seeing a benefit of credit cards being a means to smooth out 'lumpy' purchases is evident from the response received from schools and parents in relation to the promotion by Visa earlier this year of the use of credit cards to pay private education school fees. All of the schools asked to participate in the promotion did so and the response rate among parents to the promotion was 10%, which is well above the usual response rate for successful direct mail promotions of around 2%. Further evidence of the desire of parents to pay for school fees by credit card is provided by the fact that expenditure with Visa at participating schools increased by 70% during 2001. School fees usually involve relatively large sums of money payable at the commencement of the academic year (or, at best, at the commencement of each term). As such, they can place considerable strain on the resources of

<sup>33</sup> Reserve Bank of Australia, *Bulletin Statistical Tables – Credit Card Statistics*, Table C1.

many families, particularly where there is more than one child in private schooling. This is, presumably, particularly the case for the parents of the 30% of students in private schools who come from families with an annual household income of \$41,600 or less.<sup>34</sup> Credit cards thus provide them with a valuable opportunity to smooth out this particular category of 'lumpy' expenditures.<sup>35</sup>

All of these examples show that credit cards allow purchases based on the value offered through the purchase, rather than based on the constraints of the consumer's funds available at any particular point in time. This benefit to consumers from holding credit cards is acknowledged by Katz, the RBA's expert.<sup>36</sup>

Fifthly, to the extent to which the credit facility function offered by credit cards provides more favourable credit and other terms compared to other credit instruments (due to cardholder benefits like free insurance cover, extended warranty periods, commission-free travellers cheques, preferred theatre seating, hotel upgrades, dining discounts, Auto Assist, travel assistance, events waiting lists, charity donations based on expenditure, access to international golf courses and equipment, interest free periods, frequent flyer points and loyalty programs), this constitutes an additional benefit to the consumer and further reduces the cost of credit.

*Taking into account all five of these features, the consumer faces a lower 'effective price' in purchasing a product using a credit card than where he or she does not have access to credit cards for payment.*<sup>37</sup> Therefore, *a priori*, it is likely that credit cards induce more sales than

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<sup>34</sup> Australian Bureau of Statistics, 1996 Census.

<sup>35</sup> The willingness of schools to participate in the promotion indicates that the schools themselves also benefit from accepting credit cards. The features of credit card payment that particularly appealed to the schools was that it provides them with simpler administration, transfers the role of debt collection to the issuers and improves their cash flows.

<sup>36</sup> See paragraph 38 of the Katz Report.

<sup>37</sup> It could be argued that because consumers receive a number of benefits from the existence of credit card systems, this negates the need for a positive interchange fee. However, this line of argument does not account for the fact that consumers have a relatively high elasticity of

otherwise, owing to the increased demand that accompanies the consequent reduction in the 'effective price' of the commodity being purchased using a credit card. Of course, this effect, like many other effects in economics, is 'on the margin'. However, even slight inducements to alter the pattern of outlays owing to such conveniences - when multiplied across the economy - can translate into sustained changes in consumption.

In addition to these considerations, Visa has, in its previous submission, noted evidence of sales effects associated with credit cards in a recent 2001 study by KPMG.<sup>38</sup> Specifically, the study found that in the 1990s, an expansion in credit card debt was accompanied by sustained growth in household consumption. KPMG estimate that if only 1% of the increase in real household consumption between 1992 and 2000 can be attributed to credit card usage, the impact on the economy would have been an increase in GDP of 0.25%.<sup>39</sup>

Though the RBA does not consider that credit cards lead to an increase in sales overall, merchants themselves do not, apparently, share this view. For example, credit cards and e-commerce allow merchants to sell into geographic areas other than those in which they have physical stores. This assists merchants in many different sectors. In the grocery sector, for example, Coles has found that 70% of its online customers have not shopped at a Coles supermarket and that the penetration of its online service is highest in those areas that do not

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demand and would more readily leave the network if the charges that they faced increased (evidence of this is presented below).

<sup>38</sup> KPMG, *Credit Cards in Australia – A Research Report*, 2001.

<sup>39</sup> The RBA attempts to refute the KPMG study by claiming (at page 26 of the RBA Report) that:

“[t]his says nothing more than that a number of economic variables have been on a strong upward trend; it says nothing about causality.”

This criticism would be stronger if Visa was relying completely on the KPMG study to establish its case. However, in addition to this, Visa has also provided a plausible and coherent theory of how credit cards might in the long run induce more sales by allowing retailers to take advantage of economies of scale and scope and offers up the KPMG report only as one piece of evidence as to the plausibility of that theory.

have a Coles supermarket.<sup>40</sup> Just Jeans provides another example of a retailer that views online sales as a way to reach customers in regional areas.<sup>41</sup> Some highly-specialist retailers' businesses simply would not be viable without the scale that e-commerce provides them. For example, through e-commerce, a women's clothing producer and retailer based in Melbourne - the Long Tall Clothing Company - is able to access the global market for sales of clothing to tall women, providing it with a viable scale despite the small size and highly dispersed nature of the local market.<sup>42</sup> In addition, having access to customers in both the northern and southern hemispheres allows it to smooth out seasonalities in demand.

Though there are obvious issues involved in going from impacts on individual merchants to aggregate effects, Table 1 below sets out some striking United States and Australian survey evidence that, in Visa's view, lends weight to the existence of such aggregate effects:

**Table 1: Retailer views on the effect of credit cards on sales**

| <i>US survey (1996)</i> <sup>43</sup>  |     |
|--|-----|
| Percentage of retailers who felt that accepting credit cards increased sales:  | 83% |
| Percentage of retailers who thought their profits would increase by accepting credit cards:  | 58% |
| <i>Australian survey (March 2002)</i> <sup>44</sup>  |     |
| Percentage of retailers who agreed that "having a credit card facility increases my sales volume":   | 88% |
| Percentage of retailers who agreed that "customers who use their credit cards sometimes buy things they wouldn't buy if they could only use cash": | 83% |

<sup>40</sup> Marriner, C (3 March 2001), "E-tailing starts to click", *Sydney Morning Herald*, page 6.

<sup>41</sup> "Most of our online customers come from regional areas where people are happy to buy online and to do returns if need be, and our strategy is to reach those customers in areas where there isn't a store": Bryant, G (Dec 2001 - Jan 2002), "Jeans are taking off", *BusinessOnline*, page 39.

<sup>42</sup> NOIE, "Advancing with e-commerce: The Long Tall Clothing Company".

<sup>43</sup> Ernst & Young, "Survey of Retail Payment Systems", *Chain Store Age*, January 1996.

<sup>44</sup> UMR Research, *Retailers Research Study*, March 2002, page 18.



Overall, the RBA's claim that credit card use does not change outlay levels seems poorly founded. But even if it were not, the relevance of the RBA's claim is not at all apparent. In effect, even if card use does not lead to aggregate sales effects, this does not defeat the point that it is economically efficient for merchants to bear the greater burden of the cost of card transactions. This is because it is efficient for any network to recover more of its costs from the party that has the greatest willingness to pay - in the present case, for the reasons discussed below, merchants.

In its January 2001 response to the RBA and ACCC's Joint Study, Visa has not relied on simply pointing out merchant benefits from increased sales to justify the present system. In the economic literature which Visa cited in that response, almost all of the models which evaluate the welfare effects of setting interchange fees in credit card schemes assume that the total number of sales in the economy as a whole is unchanged as a result of credit card usage.

Rather, what is important is precisely the fact that merchants accept cards in part to attract business away from rivals.<sup>45</sup> This means that individual merchants have a lower resistance to accepting cards than consumers. This, in turn, implies that it is efficient for merchants to bear a substantial part of the costs of the card system. Given that many of the costs fall on the issuing side of the business, the purpose of the interchange fee is to reassign costs as between merchants and card users so that this efficiency is achieved.

The RBA's arguments with respect to aggregate sales impacts are therefore both flawed and irrelevant.

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<sup>45</sup> In the terminology used by Gans and King in their submission 'Regulating credit cards in Australia: A submission to the Reserve Bank of Australia', this represents a strategic benefit to merchants. Of course, in addition to these strategic benefits, merchants also enjoy intrinsic benefits from card acceptance - these have already been discussed in extensive detail in previous passages. It could be surmised that though both cardholders and merchants derive substantial intrinsic benefits from card use, merchants alone also derive the 'strategic benefit' effect and it is this additional element which gives them a higher willingness to pay to become part of card networks and therefore a lower elasticity of demand which makes it efficient for them to bear more of the costs of the network.

### 4.3 Other evidence of network externalities

Regardless of whether cards induce a permanent increase in aggregate sales, merchants benefit from network externalities insofar as cards offer benefits to merchants that exceed the costs associated with accepting card transactions.<sup>46</sup> In addition to direct transactional benefits, changes in the pattern of sales associated with the use of cards provide merchants with an increased ability to achieve economies of scale and scope. As the number of cardholders of a card scheme increases, these benefits received by merchants also increase.

This subsection considers, particularly, two such benefits: convenience effects and ‘bigger trolley’ effects. Before doing so, the evidence put forward by the RBA that there are few, if any, transactional benefits to merchants from accepting cards is considered.

#### 4.3.1 Purported evidence of lack of transactional benefits

As noted, the RBA has argued that there are few, if any, transactional benefits to merchants from accepting cards and, in particular, that it is unrealistic to claim that merchants’ transaction benefits exceed merchant service fees they pay.<sup>47</sup>

In arguing this point, the RBA has relied heavily on an ARA study. However, by the RBA’s own admission, the methodology of the ARA study has many shortcomings compared to research carried out by the RBA itself. For example, the RBA writes of the ARA study that:

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<sup>46</sup> It is important to stress that Visa is *not* suggesting that demonstrating net benefits to merchants is a necessary condition for justifying the current arrangements. Indeed, from an economic point of view, it is entirely irrelevant whether merchants are better or worse off, so long as aggregate community welfare is enhanced. The extent of merchant benefits is considered here because of the very great stress the RBA (for reasons that are entirely unclear) places on it, rather than because of its intrinsic significance. Having said that, reductions in the costs of managing transactions, including those in retailing, are a real gain to the community and hence deserve careful consideration quite independently of the ultimate distribution of the social surplus from those gains.

<sup>47</sup> See page 86 of the RBA Report.

“These data differ from the average transaction values derived from the Reserve Bank’s Transaction Cards Statistics Collection ... The difference is most likely due to sampling. The ARA survey covered a group of retailers for which big ticket credit card sales are a relatively small share of sales. The Reserve Bank’s data averages all credit card transactions ...”<sup>48</sup>

Despite this, the RBA chooses to quote the ARA study while ignoring the results of its own data. This selectiveness is worthy of comment.

First, it is surely striking that the RBA would rely on the results of the ARA’s survey in preference to the results generated by its own, more comprehensive source (the Transactions Cards Statistics Collection). This is particularly so given that the ARA is arguably unrepresentative of the retail sector as a whole, and certainly unrepresentative of card-accepting merchants as a whole.

Secondly, and more importantly, the selective coverage of the ARA survey must introduce a bias into the results, for it is on larger transactions that the transactional advantages of credit cards are likely to be most pronounced.

#### **4.3.2 Convenience effects**

Leaving aside the flaws of the ARA study, the claim that merchants derive no transactional benefits from credit cards is implausible given what is known about the economics of the retail sector alone.

Merchants receive a convenience effect from accepting credit cards, most obviously in transaction cases where the cost of accepting alternative payment methods is very high. Instances of transactions in which the cost of alternative payment methods to credit cards is very high include phone sales, mail-order, Internet sales, sales types characterised by high cheque use, or where employee theft of cash is a particular problem. This is borne out by a recent survey of Australian merchants conducted for Visa, the results of which are set out below in Table 2:

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<sup>48</sup> RBA Report, page 24 (footnote 23).

**Table 2: Merchant survey results relevant to convenience effects of credit cards<sup>49</sup>**

| <i>Proposition</i>   | <i>% of respondents who agreed</i> |
|--|------------------------------------|
| "Credit cards can reduce the risk of theft or robbery."        | 81%                                |
| "Credit cards offset the costs associated with handling cash." | 42%                                |

Other similar convenience effects arise, for example:

- risk-shifting benefits are secured when the risks of fraud or default are passed from the merchant to issuers, who are better placed to manage the risks involved. This allows the merchant to avoid either bearing these risks itself or foregoing sales. By doing so, it enables smaller merchants, particularly, to compete on a more equal footing with larger retailers and thus enhances retail competition. For example, a recent survey conducted for Visa found that 69% of small-business respondents agreed that "credit cards make it easier for small businesses to compete against major stores with their own store cards and finance deals";<sup>50</sup> and
- all merchants benefit from economies of scale arising when issuers carry out the credit assessment process associated with becoming a credit card holder. If issuers did not carry out these functions, they would be carried out (to a greater or lesser extent) by merchants in the provision of store credit. However in providing store credit, merchants would incur a number of costs such as those associated with payment processing, account set-up, ongoing administration, collection and billing.

Given, for example, the increasing prominence of Internet sales alone, the gains associated with these convenience effects are hardly negligible. Quite possibly, the RBA's particular focus on traditional retail sectors has led it to underestimate the benefits from these

<sup>49</sup> UMR Research, *Retailers Research Study*, March 2002, page 18.

<sup>50</sup> UMR Research, *Retailers Research Study*, March 2002, page 18.

convenience effects. As such, it is worthwhile briefly focusing on certain aspects of e-commerce. This is particularly so given that, based on Visa's estimates, online credit card sales in 2001 could account for approximately 7% of total credit card sales for that year, or A\$6.21 billion.<sup>51</sup> Furthermore, on that basis, online credit card sales would have represented approximately 1.5% of total household consumption in 2001.<sup>52</sup>

According to internal Visa research, 92% of online retail payments are made by credit cards. In Australia, during the period 1998 to 2000:<sup>53</sup> the percentage of Internet shoppers using credit cards to pay online increased from 78% to 81%; Internet banking/bill payments increased from 0.6% to 8%; and telephone banking and bill payments increased from 30% to 51%. In addition, a survey by ACNielsen.consult on preferred payment options of online shoppers found that approximately 75% of shoppers prefer to pay with one of the four major credit cards (Visa, MasterCard, American Express or Diners Club) and only 25% preferred to use other cards or payment means.<sup>54</sup>

One study of growth in "business to consumer" ("B2C") e-commerce argues that the availability of payment cards, especially debit or credit cards, remains a significant determinant of e-commerce revenues around the world, with a direct and intuitively plausible association between payment card penetration rates and e-commerce revenues per

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<sup>51</sup> In June 2001, [www.consult](http://www.consult) estimated that online retailing in 2001 would be a A\$6.75 billion business (Online Consumer Retail Report, June 2001). Visa's internal estimate is that 92% of online sales are credit card transactions, so that approximately A\$6.21 billion worth of the estimated online business for 2001 would be conducted via credit cards. Based on total credit card sales in Australia during 2001 being \$91.178 billion (RBA Bulletin Statistical Tables – Table C3), online credit card sales accounted for an estimated 7% of total credit card sales.

<sup>52</sup> Estimated online credit card sales in 2001 of A\$6.21 billion as percentage of total household consumption for the fourth quarter of 2000 to the third quarter of 2001 inclusive of A\$408 billion (RBA Bulletin Statistical Tables – Table C10).

<sup>53</sup> KPMG, *Credit Cards in Australia: A Research Report*, July 2001, page 18.

<sup>54</sup> ACNielsen.consult 2002.

capita.<sup>55</sup> Given the expected growth in sales that are heavily dependent upon credit and debit cards, it is reasonable to conclude that the convenience effects identified above will also continue to grow. For example, worldwide e-commerce revenues are projected to increase substantially from an estimated US\$286 billion in 2000 to US\$3203 billion in 2004.<sup>56</sup> In Australia's neighbourhood of the Asia Pacific, it is projected that e-commerce revenues will reach more than \$338 billion by the end of 2004, with B2C e-commerce revenues forming more than \$38 billion of this amount.<sup>57</sup> One forecast by IDC suggests that by 2004, online retailing in Australia will be a A\$19.7 billion business.<sup>58</sup>

It is clear that, in many cases, online payments (which depend largely upon credit cards) provide merchants with substantial efficiencies. For instance, a research project commissioned by the National Office for the Information Economy (which looked at 34 case studies of small businesses that had adopted e-commerce) found that, of the gross benefits that the surveyed firms enjoyed from adopting e-commerce, 55% came from efficiency savings and the remaining 45% from additional revenue.<sup>59</sup> A more detailed study of the impact of e-commerce on a particular industry found, consistently, that e-commerce had facilitated a reduction in the insurance industry of brokerage and administration costs which were estimated to account for 25-30 cents of every dollar of premium, in comparison to call-centre or Internet based systems (11-12 cents compared to 2.5 cents in every dollar of premium respectively). Such savings, to a large degree, would not be possible without a payment mechanism such as credit cards.<sup>60</sup>

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<sup>55</sup> 'The ecommerce: b2c report' March 2001, produced by eMarketer.

<sup>56</sup> 'The ecommerce: b2c report' March 2001, produced by eMarketer.

<sup>57</sup> 'The ecommerce: b2c report' March 2001, produced by eMarketer.

<sup>58</sup> Marriner, C (3 March 2001), "E-tailing starts to click", *Sydney Morning Herald*, page 6.

<sup>59</sup> See <http://www.noie.gov.au/Projects/CaseStudies/Ecommerce/SummaryReport/savings.htm>

<sup>60</sup> Rochet and Tirole argue that introducing changes which disadvantage credit cards relative to other payment systems would be likely to hinder the development of electronic transactions: Rochet and Tirole, "An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems", page 14.

Given these considerations, it is perhaps not surprising that merchants are keen to shift more transactions online. This is particularly apparent in all sectors of the travel industry. Some traditional businesses, such as travel agents, are actually converting from shop-front businesses to e-commerce based businesses. For example, Travel-shop announced that it is closing its agencies to focus on e-commerce.<sup>61</sup> There is an increasing use of e-commerce by other travel agencies and recent times have seen the development of new online travel agents such as Expedia, Travelocity and wotif.com (the latter, in particular, offering last-minute specials and relying to a large extent on the existence of e-commerce and credit cards). Many other companies in the travel sector are looking to e-commerce to provide cost savings at a time when profit margins are particularly slim.<sup>62</sup> For example, Qantas has stated that: “[t]here are additional costs in doing the booking through the telephone system as opposed to someone doing their own booking direct (online)”.<sup>63</sup> Virgin Blue has found that its online system reduces the cost per transaction by more than 50% over traditional reservation systems.<sup>64</sup> Hotels and rental car companies are also taking advantage of the cost savings achievable through online bookings. For example, Thrifty recently stated that it conducts 15% of its business online and hopes to increase that proportion to 20% by the end of the first half of 2002.

Since credit cards are presently the only viable established mechanism for making payments online, this in effect means that merchants reap a substantial benefit from the use of credit cards in their e-commerce activities. This benefit should also be accounted for in any reasonable comparison of the respective merits of each payment instrument for merchants.

Convenience effects are also widespread in more traditional sectors. For example, credit cards offer the facility to make automatic deductions or standing payments (used, for example, in gym memberships and direct mail/TV shopping purchases involving a series of

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<sup>61</sup> Marriner, C (3 March 2001), “E-tailing starts to click”, *Sydney Morning Herald*, page 6.

<sup>62</sup> Cotton, K (Dec 2000 - Jan 2001), “Trouble in paradise”, *BusinessOnline*, page 26.

<sup>63</sup> Fallon, D (24 Nov 2001), “Progress, or plane unfair?”, *Sydney Morning Herald*, page 6.

<sup>64</sup> Cotton, K (Dec 2000 - Jan 2001), “Trouble in paradise”, *BusinessOnline*, page 28.

pre-determined payments). Such facilities are more cost-efficient for merchants than traditional invoicing/cheque arrangements.

Visa internal research finds that, for the fourth quarter of 2001 for example, the top 15 merchants conducted 4.8 million Visa credit card transactions for that quarter (or 3% of total Visa credit card transactions for that quarter). In the same period, utilities companies in the top 30 merchants that accept Visa, processed more than 4.8 million Visa credit card transactions, whilst pay-by-phone merchants in the top 30 merchants that accept Visa processed more than 1.7 million Visa credit card transactions. It is readily apparent that these merchants alone would not be as easily able to transact the volumes of payment business that they do, in the absence of credit cards.

A particularly illustrative example of convenience effects lies in the area of car rentals, as described below.

#### Case study:

The credit card penetration rate for the car rental sector is particularly high. For example, based on internal data, Visa estimates that its penetration rate (that is, payments made on a Visa card as a percentage of estimated total expenditure by any payment method in that sector) is 54.1%. Why is this so?

Assume a Victorian holidaymaker wants to rent a car in Queensland for a week. Further assume that the rental and insurance cost \$150 per day for 7 days and that there is a bond of \$2,000 for cash payments.

A consumer wanting to pay cash would not be able to book a local Queensland car until arrival, potentially missing out on a suitable car being available. Alternatively, the holidaymaker may arrange to send a cheque incurring costs of cheque account bank fees, postage and possibly further follow-up calls to ensure that the cheque had arrived and that the booking was confirmed. Another alternative might be to use a national car-rental service to allow the holidaymaker to use cash. This would necessitate withdrawing a large sum of money for payment, bearing personal risk in carrying large cash sums and a personal time inconvenience of travelling to the relevant rental company office.

On the merchant's side, both the cheque and cash options will necessitate completing bank deposit slips and lost staff time in making a trip to the bank to deposit (again, in the case of cash, carrying a large sum at personal risk). The Queensland car rental company may lose a potential sale where the consumer wants to pay by cash and does not want to bear the risk of missing out on a car. The merchant will face default-risk if the cash-paying holidaymaker does not return the car on the



contracted day. In addition, the merchant risks forgery and fraud (particularly for cheques). The necessity to retain the bond on premises would result in the merchant having to invest in additional security measures – for example, a merchant who hires out 10-20 cars will have \$20,000-\$30,000 cash held on premises.

By contrast, credit cards provide the car rental company with a much more convenient method of accepting both security and payment. They also allow the holidaymaker to avoid considerable inconvenience to secure a firm booking and take advantage of potentially better deals available locally.

A similar example can be found in the hotel industry. For example, based on internal data, Visa estimates that its penetration rate (that is, payments made on a Visa card as a percentage of estimated total expenditure by any payment method in that sector) is 20.8%.

### **4.3.3 Bigger trolley effects**

In addition to facilitating new, more efficient forms of transacting, credit card usage can reduce the cost to merchants of retailing by changing the pattern of sales. This is because credit cards allow customers to make more infrequent but larger purchases. The RBA implicitly criticises Visa's earlier response on this point. It appears to suggest (at footnote 23 of the RBA Report) that the data on average card transaction size is distorted by cards used for business purposes, which have a higher average transaction value. However, even if these cards were to be removed from the sample, the average card transaction size is still substantial.<sup>65</sup>

The evidence regarding bigger trolley effects is further supported by a recent survey of Australian consumers conducted for Visa, in which participants were asked whether the use of a credit card allowed them to spend more than if they relied on cash or cheques, 58% of

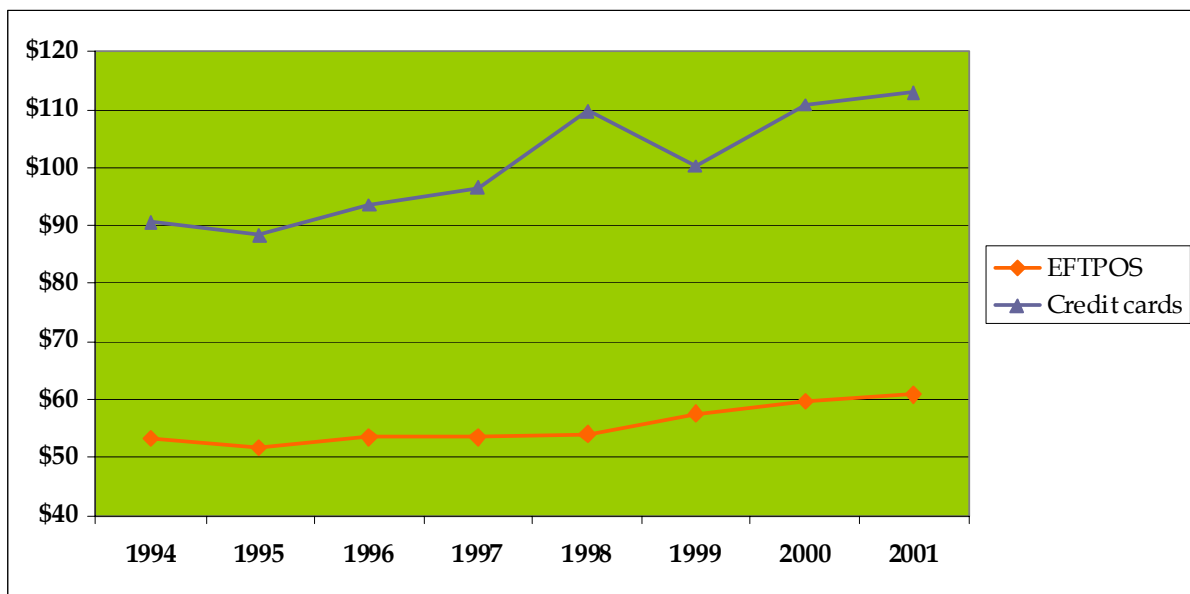
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<sup>65</sup> In Visa's case, cards used for business purposes form a small part of the overall portfolio – 205,000 such cards with an average annual spend of \$11,837. This may be compared to an average annual spend for Gold Visa cardholders of \$18,076. Furthermore, there are 1.2 million Gold Visa cardholders.

respondents answered in the affirmative.<sup>66</sup> In addition, a very recent survey of merchants came to similar results: 45% of respondents felt that credit card customers generally spend more than customers who pay by cash or cheque.<sup>67</sup>

The results of this consumer survey are further supported by data regarding average ticket size. The average ticket size of credit card payments is almost twice as high as EFTPOS payments. Though the average ticket size of EFTPOS payments has only grown 15% over the period 1994-2001, the average ticket size of credit card payments has grown by 25% (see Figure 3).

**Figure 3: Average ticket size by payment method<sup>68</sup>**



<sup>66</sup> UMR Research (February 2002), *Summary – Credit Card Issues Research*, page 30.

<sup>67</sup> UMR Research, *Retailers Research Study*, March 2002, page 19.

<sup>68</sup> APCA 2001 Annual Report.

A specific illustration of the bigger trolley effect can be inferred from a comparison of average ticket sizes for Visa credit card, in-store and online supermarket/grocery purchases:<sup>69</sup>

- approximately \$60 for Visa credit card transactions in the supermarket/grocery sector;
- average online purchase (for Coles Online) of \$170; and
- average Coles supermarket in-store transactions of \$25.<sup>70</sup>

The dollar value of the average credit card purchase is therefore more than double that of the average purchase. This reflects the fact that it is more convenient for customers to make larger grocery purchases and that cards allow them to do so without the need to either carry large amounts of cash or ensure that they have sufficient funds in their debit card account.<sup>71</sup>

In terms of the comparison between online and in-store ticket sizes, one might postulate that the difference lies in the online purchases being less frequent. However, that would be inconsistent with Coles' findings that bananas and chicken breasts, which are highly perishable, are in fact the top sellers on Coles Online.<sup>72</sup> This suggests that the difference in

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<sup>69</sup> Internal Visa data and Marriner, C (3 March 2001), "E-tailing starts to click", *Sydney Morning Herald*, page 6.

<sup>70</sup> These differences in ticket sizes are consistent with a 1993 US survey of supermarket grocery purchases conducted on behalf of Visa that found the following average ticket sizes: US\$59.66 (Visa credit card); US\$47.57 (debit cards); US\$43.42 (cheques); and US\$27.06 (cash) (Yankelovich Partners Inc, *Credit Card Use in the Supermarket*, October 1993).

<sup>71</sup> For example, a 1993 US survey of supermarket grocery purchases conducted on behalf of Visa found that 83% of credit cardholders who used their credit cards to purchase groceries agreed with the statement that "I use my credit card because it's easier than carrying cash", with 73% agreeing that "I use my credit card because I worry about carrying too much cash around."

<sup>72</sup> Internal Visa data and Marriner, C (3 March 2001), "E-tailing starts to click", *Sydney Morning Herald*, page 6.

average ticket size – online sales being almost seven times that of in-store sales - is not attributable merely to less frequent purchases. Customers clearly find the added convenience of not having to go to the store, negotiate car parking and trolley mechanics, as well as store opening times and competing in queues, a significant benefit of which they can take advantage by using their credit cards.

These “bigger trolley” effects in turn have real impacts on productive efficiency. More specifically, they favour stores that have a full range of goods such as large supermarkets and major shopping centres with concentrations of shops. In other words, retailers can take advantage of additional economies of scale and scope that are facilitated by the altered spending patterns of consumers. This is not an insignificant benefit - it leads to lower retail costs and thereby increased sales induced by lower prices.<sup>73, 74</sup>

Evidence of the importance of scale and density effects in retailing has been provided in previous submissions. Early studies of economies of scale in retailing industries are given in Arndt and Olsen<sup>75</sup> and in Savitt.<sup>76</sup> For instance, Savitt finds that store size leads to economies of scale up to around 40,000 square feet, beyond which store size does not matter, while store

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<sup>73</sup> Even merchants with market power will pass on to consumers some part of the cost savings that arise from securing scale and scope economies: see, also, the discussion in footnote 79 below.

<sup>74</sup> A recent study by McKinsey confirms that transactional technologies like credit cards - which create opportunities for the exploitation of economies of scale and scope - can lead to substantial increases in productivity. The study, available at [www.mckinsey.com/knowledge/mgi/feature/index.asp](http://www.mckinsey.com/knowledge/mgi/feature/index.asp) found that a quarter of productivity increases from 1995 to 1999 in the United States can be attributed to better retail management of stock and inventory. “Bigger trolley” effects are likely to facilitate the deployment of more efficient stock and inventory management techniques.

<sup>75</sup> Arndt, J and Olsen, L, “A Research Note on Economies of Scale in Retailing” (1975) 7(2) *Swedish Journal of Economics*.

<sup>76</sup> Savitt, R, “Economies of Scale in Canadian Supermarkets”, Canadian Association of Administrative Science, Conference Proceedings, University of Alberta, (1975).

sales density has a very significant effect on reducing average store operating expenses. In the United Kingdom, the Competition Commission found<sup>77</sup> economies of scale for supermarket store size up to 4,000 square metres and significant economies of scope in the provision of additional services such as petrol. The Commission further found that, for similar stores of Tesco (a major supermarket operator), one with petrol sales accounting for 10 per cent of its total sales would have staff costs around 12 per cent lower than one selling no petrol. In estimating price and cost functions for grocery stores in Finland, Aalto-Setala<sup>78</sup> (2000) shows that large retailers have costs about 10% below small retailers and that these cost savings are fully passed on to consumers as lower prices. Finally, it would be difficult to explain the structure of Australian retailing and (notably) the extremely high levels of concentration it displays, if scale and scope economies were not significant. By allowing these economies to be more fully achieved, cards reduce costs to the economy as a whole.<sup>79</sup>

Given these effects (of an increased ability to achieve economies of scale and scope), and those associated with facilitating efficient transactions, the RBA's claim that merchants do not derive significant transactional benefits from credit card networks seems implausible. Additionally, given that these benefits will increase as the systems' cardholding base rises, the argument that merchants do not gain as the systems expand must also seem poorly founded.

Even if these benefits are passed entirely back to consumers, however, there is a social gain. Furthermore, whilst the various cardholder and merchant benefits discussed in the above

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<sup>77</sup> Competition Commission, *Supermarkets: A report on the supply of groceries from multiple stores in the United Kingdom*, 2000.

<sup>78</sup> Aalto-Setala, V, "Economies of Scale in Grocery Retailing in Finland" (2000) 7(4) *Journal of Retailing and Consumer Services* 207-213.

<sup>79</sup> In a concentrated retail sector, there may be an increased risk that some parts of these reduced costs will be retained by merchants. However, the economies of scale and scope caused by 'bigger trolley' effects also accrue to consumers in the form of savings in time and other opportunity costs. This is because consumers can save time travelling to multiple stores, and can amortise the fixed costs of travelling a longer distance due to the scale of the outlay.

sections may not directly induce increases in aggregate consumption, they lead, in due course, to an increase in aggregate income and in welfare, since they lead to a more efficient allocation of resources and greater productive efficiency in retail and other sectors.

#### 4.4 Maturity of credit card networks

The RBA has claimed that, even if it were accepted for the reasons set out above that there are network externalities, they are immaterial to the setting of interchange fees for credit card networks because, beyond a critical mass, network effects diminish as the network gets larger. Since payment schemes are already 'mature', the RBA argues, network externalities no longer matter.<sup>80</sup>

As Visa has noted in its response to the RBA's Joint Study with the ACCC, there is no well-defined interpretation of what it means for a card network to be 'mature'<sup>81</sup> – nor has the RBA provided any indication in the RBA Report of what it means by network maturity or responded in any other way in the RBA Report to Visa's response on this point to the Joint Study. As Visa has argued, payment card networks cannot be regarded as mature under either:

- a product life cycle approach to maturity, which refers to a stage where sales growth has stopped or slowed significantly and therefore only limited scope remains for the product to expand within its existing applications; or

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<sup>80</sup> See page 17 of the RBA Report which states:

“[b]eyond a critical mass, it is possible that network effects diminish as a network gets larger. Katz, for example, notes that once a network has become established, its viability may become less sensitive to small changes in its size, and hence it may need to do less to promote growth in membership.”

<sup>81</sup> See page 12 of Visa's January 2001 report, 'Credit card schemes in Australia: A response to the Reserve Bank of Australia and Australian Competition and Consumer Commission Joint Study' and the pages following.

- an alternative view of maturity referring to a saturation point, or 100 per cent of the feasible market penetration.

Regardless of what view of 'maturity' the RBA has in mind in making its claim, the RBA has offered no evidence in support. Indeed, whatever evidence is available in fact suggests the opposite is true.

Indeed, the RBA itself has provided evidence of the fact that the payment card industry is still experiencing significant growth. For instance, the RBA notes in the RBA Report that:

- over roughly the last 10 years, the number of credit card payments per capita has risen from under 10 (or close to it) to 42 a year;<sup>82</sup>
- credit card usage has reached annual growth rates of around 26% over the past three years;<sup>83</sup> and
- credit and debit card transactions currently account for around 45% of the number of non-cash payments, almost trebling their share over the past decade.<sup>84</sup>

In addition, data collected by APCA shows that, not only has the number of transactions increased (see Figure 4) (with a particularly steep incline from 1997 onwards), but so too has the average value of transactions (see Figure 5), growing 25% between 1994 and 2001.

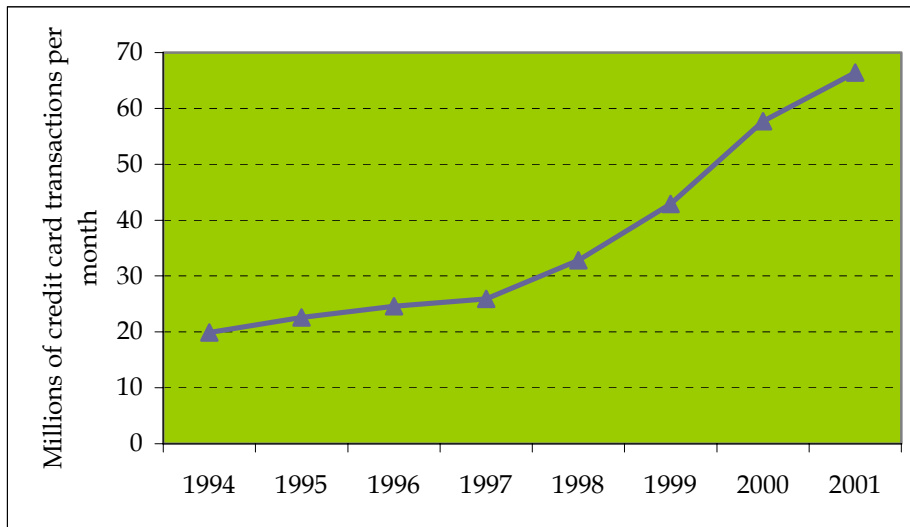
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<sup>82</sup> RBA Report, page 2 (at Figure 1.1).

<sup>83</sup> RBA Report, page 2.

<sup>84</sup> RBA Report, page 1.

**Figure 4: Trends in monthly number of credit card transactions (millions)<sup>85</sup>**



**Figure 5: Growth in average credit card transaction size<sup>86</sup>**



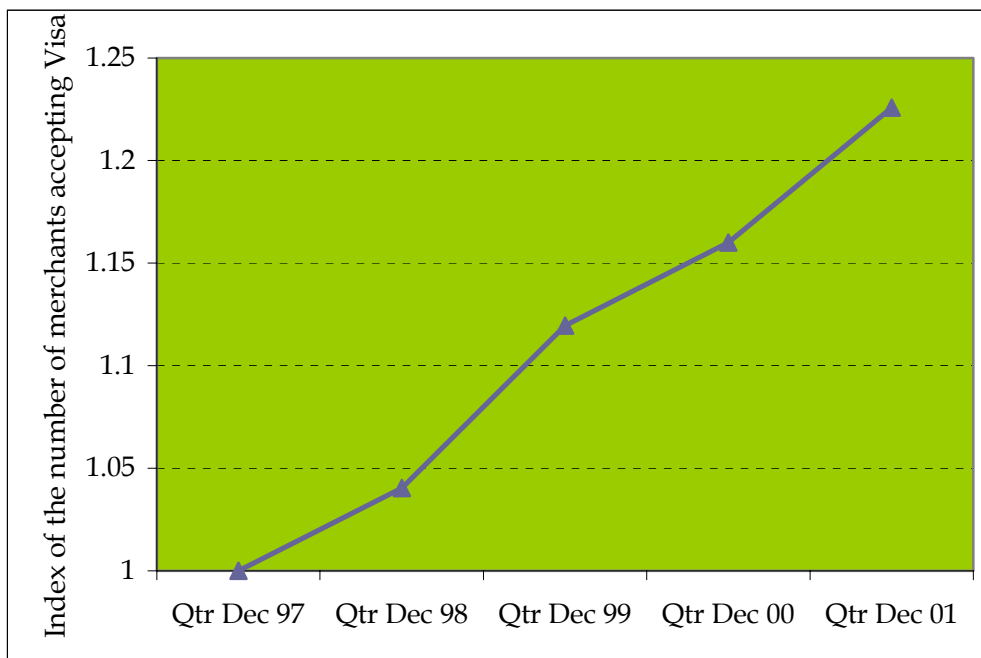
<sup>85</sup> APCA Annual Report 2001.

<sup>86</sup> APCA Annual Report 2001.



Not only has the number and size of credit card transactions been increasing, but Visa’s own data shows that there has been a substantial increase in the numbers of both merchants (see Figure 6) and cardholders (see Figure 7). Over the period 1997 to 2001 there has been a 23% increase in the number of merchants – that is, an average annual increase of approximately 6%. This has been accompanied by a strong growth in the number of cardholders, averaging 30% growth rate from 1993 to 2000.

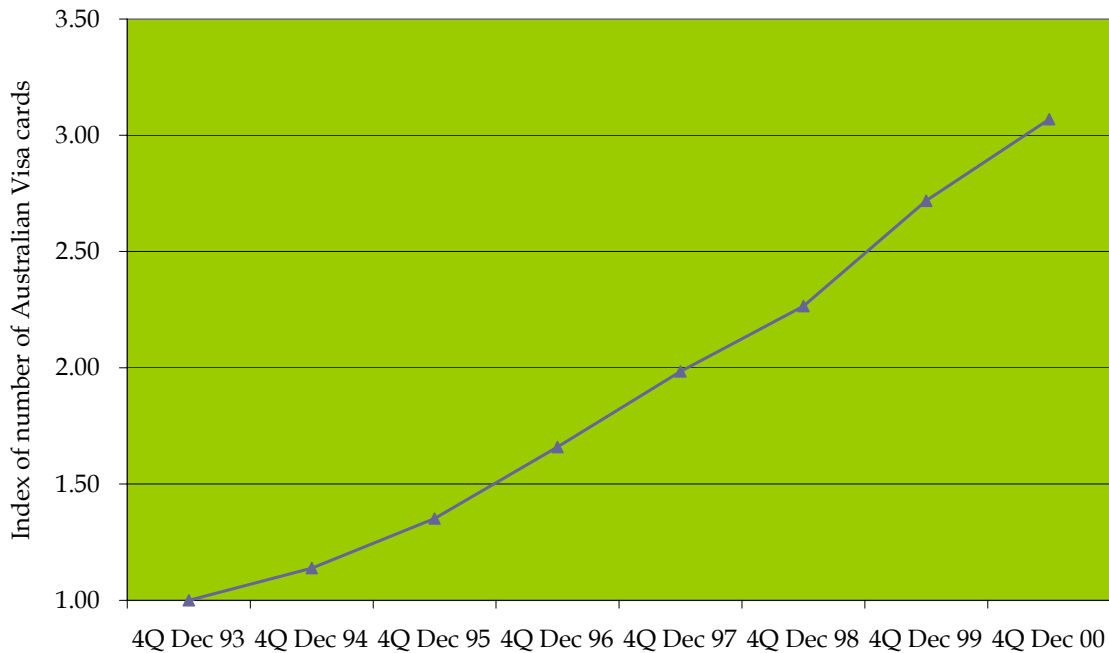
**Figure 6: Index of the number of merchants accepting Visa<sup>87</sup>**




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<sup>87</sup> Based on Visa’s internal data.

**Figure 7: Index of the number of Visa cards<sup>88</sup>**



The above data all point to strong growth in demand for credit cards, not at all what would be expected in a mature market.

Furthermore, the credit card industry in Australia has recently seen the release of a number of new products – for example, chip cards and Platinum cards. In addition, given the more extensive range of products available in the United States and other markets, it can be expected that there are still a number of new credit card products which will be introduced to the Australian market, but which are not yet available.<sup>89</sup> Both the recent introduction of

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<sup>88</sup> Based on internal Visa data.

<sup>89</sup> For example, in terms of Visa products alone: Visa Secured (linked to interest-earning savings account that serves as security for the Visa credit card – allows cardholders to begin to build good credit history); Visa Signature (offers no pre-set spending limits); Visa Check Card (transaction payments are automatically deducted from the cardholder’s checking account); Smart Visa Card (contains a computer chip that stores more than 100 times the

new products and the likelihood of more being introduced are clearly at odds with the concept of a mature market.

There are also a number of new types of commerce developing in which it is anticipated that credit cards will play a major role. These forms of commerce – generally styled “u-commerce” or ubiquitous commerce – allow the purchase of goods or services over mobile phones, laptop computers, Personal Data Assistants (for example, Palm Pilots) and so forth. Visa’s internal research suggests that there are approximately more than 50 million internet-capable phones and PDAs generating billions of dollars of purchases annually. By 2005, the value of purchases so made is expected to grow twelve-fold.

Furthermore, growth in card use shows no sign of abating even in the United States, where they were first introduced and which would be expected to be the first market where this product would show evidence of being ‘mature’. Though one commentator on the United States’ market for credit cards does discuss the growing ‘maturity’ of the card market, he also notes that recent developments have negated this:<sup>90</sup>

“Credit cards began to reach a more mature phase during the 1990s. In recent years, however, growth in credit card transactions rebounded possibly reflecting the increase of purchases of goods and services over the Internet and business-to-consumer (B2C) commerce.”

All of this shows that claims of maturity are misplaced.

However, even if the RBA were in a position to establish that credit card networks were already mature, it is unclear what would be the import of this. Consider the example of one

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information stored on a traditional Visa card, and will allow the combining of all store and discount cards in one place); Visa Buxx (designed for teenagers, this card is a prepaid, reloadable payment card); Visa Payroll (allows an employer, working with a Visa scheme participant, to make an employee’s pay available on their card, rather than issuing cash or a pay cheque); Visa Business credit card; Visa Business check card; Visa Business, Visa Corporate cards; and Visa Government cards.

<sup>90</sup> ‘Emerging trends in US payments and bill presentation systems’, Business Communications Company, November 2000.

merchant leaving a fully subscribed network. This action would affect the value that cardholders as a whole derive from the network, yet the merchant does not consider the cardholders' welfare in deciding to leave (or does not consider their welfare sufficiently from the network's perspective). The result is the creation of a (negative) network externality. There is no reason to suppose that these effects vanish, even if network membership increases to the point of maturity.<sup>91</sup> Similarly, even in a mature network, adding another merchant will allow existing cardholders to capture any benefits of making card transactions with that merchant, just as adding another cardholder will allow existing merchants to capture any benefits of accepting card transactions from that cardholder.

It may be that the RBA's proposition that network externalities would be insignificant once maturity is reached is based on the presumption that, at maturity, when the interchange fee is set at an optimal level, cardholder demand becomes inelastic with respect to lower interchange fees (that is, somehow, many cardholders become "addicted" to card use at that level). This presumption is implausible, unsupported by any evidence and in any case irrelevant. In effect, what matters is not the absolute size of the cardholder demand elasticity but rather the size of that elasticity *relative to* the elasticity of demand of merchants. If the RBA's repeated assertion that in a mature network, merchants are completely "locked in" to

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<sup>91</sup> In his contribution to the literature on network externalities, the RBA's expert, Katz, seems to display a more sophisticated understanding of the sensitivity of networks to a 'snowballing' shrinkage effect as members begin to leave the network, than does the RBA. This is because the expectations of existing members about the future size of the network also need to be taken into account. For instance, at page 824 of Katz and Shapiro 1986, 'Technology adoption in the presence of network externalities', *Journal of Political Economy* 94(4) the authors write:

"Network externalities have two fundamental effects on the dynamics of industry evolution. First, the relative attractiveness today of rival technologies is influenced by their sales histories. In effect, there are "demand-side economies of scale"; a given product is more attractive the larger is the in-place base of consumers using that product. Second ... in the presence of network externalities, a consumer in the market today also cares about the future success of the competing products."

accepting cards is correct, then maturity would not affect the socially optimal interchange fee.<sup>92</sup>

Finally, not only is the RBA confused in its treatment of the relevance of network maturity to network externalities, but it wrongly attributes a similar confusion to some of the authors it reviews. For instance, at page 28 of the RBA Report, the RBA quotes from a paper by Chang, Evans and Schmalensee that:

“... just as economies of scale do not generally persist at all levels of output, in many networks the importance of network externalities falls with network size. At some point, we would expect that additional network efficiencies from new members would fall to zero. It is hard to imagine that the Visa and MasterCard systems would gain anything at all from having one more New York bank join their systems, for instance, even though the addition of the first such bank might well have had profound network externalities.”

However, as Chang, Evans and Schmalensee themselves note in their response to the RBA Report,<sup>93</sup> the issue discussed by the RBA concerns benefits for cardholders from additional merchants and *vice versa*. By contrast, in the passage quoted above, the authors were explaining that there would not be much in the way of benefits for the Visa scheme from an additional issuer, when the issuing business is already highly competitive and serves all relevant geographic areas. That is, the new issuer is, by assumption, not offering anything that will add many new cardholders to the scheme. On the other hand, as noted above, additional cardholders always provide benefits to merchants because they represent potential new custom. Similarly, additional merchants always provide a benefit to cardholders in aggregate, because some cardholders are likely to have a preference for those merchants.

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<sup>92</sup> The RBA may be trying to say that the demands of both merchants and cardholders are *completely* inelastic, but that proposition is surely extreme and implausible.

<sup>93</sup> “An Economic Critique of the Reserve Bank of Australia’s Proposal for Interchange Fee Regulation”, March 11 2002, page 10.

## 4.5 Surcharging to internalise network externalities

Having denied that network externalities are significant, the RBA then argues that even if they were significant, interchange fees would not be needed to ensure an efficient outcome. More specifically, the RBA claims that, if there are potential network externalities, surcharging by merchants can be used to internalise at least some of them thus reducing (or even obviating) the need for the interchange fee to perform this function.<sup>94</sup> The RBA is mistaken in this view.

To begin with, Visa notes that surcharging has no conceivable relevance for internalising the network externalities that merchants enjoy when there is an addition to cardholders and card usage (or, indeed, when there is no loss of cardholders or reductions in card usage).

Additionally, it is clear that to actually internalise any externalities associated with card use, merchants would need to devise and implement complex pricing structures. These would involve designing multiple (or at least dual) pricing structures that prescribe one price for credit card purchases, another for cash purchases and so on. The resource costs and time incurred in designing such multiple pricing, followed by the ongoing costs of administering it, would seem to be a substantial barrier to its being implemented.

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<sup>94</sup> See page 19 of the RBA Report:

“The existence of network effects in credit card schemes is clear. However, whether these effects are externalities, which would not be realised without the unusual device of an interchange fee, remains controversial.”

And at page 27 of the RBA Report:

“... even if there are potential network externalities in credit card schemes, an interchange fee may not be the only way to internalise them. For some of these effects, the price mechanism itself may achieve the same outcome, through differential pricing by merchants. If merchants did indeed benefit from credit card use through lower transaction costs, they would encourage customers to use credit cards rather than other payment instruments by offering a price discount to credit cardholders.”

There are also doubts as to whether consumers would appreciate and understand such a system sufficiently for merchants to have the incentive to incur these costs. Indeed, it could be envisaged that some consumers would find dealing with such a system too difficult and would fear being confused and cheated. These considerations are likely to discourage at least some merchants from engaging in the sophisticated type of pricing needed for the RBA's claim to make sense.

The RBA's expert, Katz, recognises that these transaction costs exist. At page 17 of the Katz Report, Katz notes that:

"[i]n practice, frictions may prevent a merchant from engaging in surcharging even in the absence of formal restrictions. For example, there may be transactions costs associated with charging multiple prices, or merchants may fear some form of consumer backlash. Thus, the analysis in this section may overstate the extent to which removal of formal no-surcharge rules affects the market outcome."

Finally, even if these transactions costs did not prove sufficient to prevent any such conduct by merchants, the resources involved in implementing the complex pricing at issue represent an obvious loss to the community. In any proper welfare analysis, this loss would need to be weighed against any resulting gain and the net benefit compared to that obtaining under the current arrangements. The RBA does not put forward any such analysis.

As a result, economic analysis suggests that the RBA's claim - that merchants will set retail prices so as to correctly internalise network externalities - is implausible.<sup>95</sup> Empirical studies support this inference. This empirical evidence is discussed in greater detail in section 8.3 of this paper. However, the essence of that evidence is that differential pricing for transactions by cash and credit has not been very common, even in the jurisdictions that have legislated to remove the no surcharge rule and which therefore seem to offer merchants greater freedom to design prices in whatever form they choose.

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<sup>95</sup> Additionally, even if merchant pricing did internalise the relevant externalities, it would still need to be shown that it did so at lower social cost than the current arrangements. Given the transactions costs involved, this seems improbable.

The findings of that empirical evidence are generally borne out by survey evidence conducted on Visa's behalf:

- a survey of consumers conducted in May 2001 found that:<sup>96</sup>
  - 27% of respondents would not accept any sort of surcharge;
  - 13% of respondents would opt not to make their purchase if faced with a surcharge at any level; and
  - 39% would not pay a surcharge higher than 1%;
- a survey of consumers conducted in February 2002 found that 50% of respondents thought that retailers should absorb the costs of providing credit card facilities, whilst 73% of respondents opposed allowing merchants to charge an extra amount between 1% and 4% on top of the price of a product or service when the consumer paid with a credit card;<sup>97</sup>
- in the same February 2002 survey, participants were asked about their reactions to possible different levels of surcharging. The questions and results are set out in Table 3 overleaf:

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<sup>96</sup> UMR Research, *Quantitative Research on Credit Card Issues*, May 2001.

<sup>97</sup> UMR Research, *Summary: Credit Card Issues Research*, February 2002.



**Table 3: Consumer response to range of surcharge levels<sup>98</sup>**

| “Suppose that the system was changed so that prices would be lower, but there would be a fee for using your credit card every time you used it. Would you support or oppose the changes if the fee was ... “ | Support | Oppose | Don’t own a credit card | Unsure |
|--|---------|--------|-------------------------|--------|
| 1%   | 48%     | 40%    | 4%                      | 8%     |
| 2%   | 24%     | 63%    | 5%                      | 8%     |
| 3%   | 11%     | 76%    | 5%                      | 8%     |
| 4%   | 6%      | 82%    | 5%                      | 7%     |
| 5%   | 5%      | 83%    | 5%                      | 7%     |

These results confirm that consumers are very sensitive to both the existence and level of any surcharging. It could be expected that at least those merchants who do not possess substantial market power would, in turn, be influenced by those sensitivities in determining whether to impose a surcharge or not (or, if so, how much of a surcharge); and

- in a March 2002 survey of merchants, 82% of respondents said that they thought their customers would not favour paying an extra fee when they paid by credit card.<sup>99</sup>

These impacts (namely, resource costs for merchants, as well as likely consumer responses) could, contrary to the RBA’s assertions, be significant. The likelihood of merchants disregarding all of these factors and adopting pricing that somehow internalises the externalities involved in a card system is therefore very low at best.

<sup>98</sup> UMR Research, *Summary: Credit Card Issues Research*, February 2002.

<sup>99</sup> UMR Research, *Retailers Research Study*, March 2000, page 33.

The RBA seems to dismiss the difficulties that its claim encounters by suggesting that it probably does not matter greatly if network externalities are not fully internalised. To give this assertion credibility, the RBA cites (at footnote 15 of page 19) a well-known 1994 paper by Liebowitz and Margolis. This paper, according to the RBA, argues that the idea of network externalities as market failures is both theoretically fragile and empirically undocumented.

In fact, the statement made by Liebowitz and Margolis has unfortunately been taken entirely out of context by the RBA. Liebowitz and Margolis actually argue that network effects are primarily important insofar as they determine the optimal size of the network (through standard externality type effects), rather than in determining which network users will pick in a competitive environment. The relevant quote is given below:

“[p]erhaps surprisingly, the problem of internalizing the network externality is largely unrelated to the problem of choice between competing networks [...] In the case of positive network externalities, all networks are too small. Therefore, it is not the *relative* market shares of two competing formats, but rather, the overall level of network activity that will be affected by this difference between private and social values. This is completely compatible with the literature on conventional externalities [...] this is a far more likely consequence of uninternalized network effects than the more exotic cases of incorrect choices of networks, standards or technologies.

Network size is a real and significant issue that is raised by network effects. Nevertheless, this issue has received fairly little attention in the contemporary literature of network externality, perhaps because it is well handled by more conventional economic models.”<sup>100</sup>

As this quote makes clear, Liebowitz and Margolis’ paper implies that the RBA’s apparent concern that network effects may lead users to inefficiently select Visa rather than some smaller payment network is misplaced. Rather, quite in contrast to what the RBA claims, the paper emphasises that network externalities are significant in determining whether networks attain their optimal size. It is for precisely this reason, that is denied by the RBA, that

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<sup>100</sup> Liebowitz, S J and Margolis, S E, “Network Externality: An Uncommon Tragedy” (1994) 8(2) *Jnl of Economic Perspectives* 133 at page 135.

internalising the network externality existing between cardholders and merchants that accept cards is important for determining the appropriate size of the credit card network (and, hence, the level at which to set the interchange fee).

#### **4.6 Consistency of interchange fee setting with stated objectives**

Having argued that network externalities are not significant, the RBA goes on to assert that the current arrangements cannot in fact be aimed at correcting such externalities. This, argues the RBA, is because the current interchange fee structure is not consistent with the card schemes' stated objective of maximising benefits to cardholders and merchants by maximising network size. In effect, cardholders currently face a positive price to join, and a negative price to use, the network. According to the RBA, an optimal structure would more closely resemble that of mobile phones where there is a negative price to access the network (that is, membership is subsidised) while usage is taxed.<sup>101</sup> Given that the current interchange fee structure does not exhibit these characteristics, then, argues the RBA, it must follow that the current interchange fee structure is not really aimed at internalising network externalities.

The RBA, however, is mistaken in its argument. This is first because it does not take account of the differences between mobile phone networks and credit card networks.

The RBA's attempted analogy with mobile phone networks does not strictly hold. With mobile phone networks, adding a customer generates an externality to all those who can

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<sup>101</sup> See page 28 of the RBA Report:

"... the pricing behaviour of credit card schemes does not appear consistent with their stated objective of maximising benefits to cardholders and merchants by maximising network size. In Australia, credit cardholders face a positive price to *access* the network, in the form of annual fees, but many cardholders face a negative price for *use* of the network, in the form of loyalty points and interest free credit, even though the marginal cost of a credit card transaction is positive. A pricing strategy that would encourage credit card holding as well as use would be similar to that used by mobile phone companies." (original emphasis)

now call that person, *regardless* of whether the new mobile customer ever places a call. There are consequently gains to access rather than solely calling. This fact alone can make it efficient for mobile phone companies to subsidise access.<sup>102</sup>

Secondly, even putting the weaknesses in the analogy aside, Visa does not see how a mobile phone-like charging arrangement could efficiently be implemented in a card system. Thus, even if it were efficient to remove the cardholder annual fee, to achieve this, it would be necessary to do so at the network level.<sup>103</sup> One way this might be achieved is for financial institutions to agree on a payment from acquirers to issuers based on the number of cardholders each issuer brings to the payment system. However, such a payment could create incentives for each issuer to sign up cardholders, even if the cardholders made no transactions, assuming it could sign up such cardholders for less than the cost of the subsidy provided.

An alternative approach would be to force issuers to remove their annual fee. However, a switch from fixed fee to per-transaction recovery of costs will have implications for different types of card users. Abstracting from the unrealistic possibility of complex and close to perfect price discrimination, consumers who make few card transactions are likely to be

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<sup>102</sup> The RBA also seems unclear as to the structure of mobile phone charges. In fact, it is not the case that there is a simple tax on usage to cover the membership subsidy. Typically, the tax has fallen on the least elastic component of usage (termination fees on calls from the fixed network) while the more elastic forms of usage have faced low (and, for some call types, even negative) mark-ups. This form of taxation is in some respects similar to the principles underpinning the interchange fee.

<sup>103</sup> Note, it is not uncommon, especially in the United States and the United Kingdom, for some issuers to offer cards without annual fees. In some cases this could be due to a form of price discrimination, where such offers are targeted at individuals who are likely to make high use of the card. Very low or zero fees for cardholders could reflect the strength of competition between issuers to attract cardholders, fuelled by high interchange fees (that is, high relative to the level of interchange fees applying in Australia). A further reason why upfront fees for credit cards might be less common in some countries compared to others is where the costs of screening cardholders is lower in these countries (say due to better technologies for credit scoring).

better off relative to those who use cards a lot. As a result, high-spend users will tend to subsidise low-spend users. High-spend users will want to leave the system and join a new system that does not require them to subsidise low-spend users. Consequently, individual issuers may be able to undermine any attempt to force them to subsidise low-spend users by specialising in high-spend users. Over time, this process of specialisation could unravel any cross subsidy (by leading to higher usage fees for low-spend users than for high-spend users) and render any zero annual fee requirement ineffective.

Assuming nonetheless that an effective way of removing annual fees could be found, such a system is hardly likely to be efficient. Network externalities would remain with respect to *usage* (given that merchants do not perfectly pass through the costs and benefits of different means of payment). Recovering the fixed costs of issuing cards by increasing usage fees would thus *increase* the effect of this usage network externality, which runs from consumers' card usage decisions to merchants' benefits by discouraging usage.<sup>104</sup> In particular, a switch from fixed fee to per-transaction recovery of costs will likely imply that consumers who make few card transactions will be better off relative to those who use cards a lot. In order to efficiently price out these usage externalities, higher interchange fees would be required in order to fund sufficient cardholder benefits to induce the right amount of usage.

Thus, the elimination of fixed fee recovery for cardholders does not help to eliminate network externalities, but merely shifts them into pure usage network externalities where a higher interchange fee would then be required to internalise them.

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<sup>104</sup> Note the same logic does not apply to merchants. Acquirers undoubtedly have to recover the costs of signing up merchants, but they choose to do so largely as fees on transactions (merchant service fees). However, because merchants do not choose how many card transactions to accept, but rather just whether to accept all cards or not, the decision by acquirers to recover costs predominantly on the basis of the number of card transactions received rather than on a lump-sum basis does not lead to too few card transactions being made. This is obviously true if merchants do not surcharge or discount for different types of payments. However, even if merchants could price discriminate, since they would recover the fixed fee through higher prices, the effect on card usage would be the same as if the fee were a per-transaction one.

## 4.7 Market power and the interchange fee

Having (unconvincingly) argued that the main features and policies of the card systems cannot be explained in terms of network externalities, the RBA then seeks to give them a more sinister explanation. More particularly, the RBA and its expert, Katz, continually assert that the policies and practices under dispute, such as the level of the interchange fee, arise because of market power and would not arise from competitive forces.<sup>105</sup>

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<sup>105</sup> At page 39 of the RBA Report, the RBA claims that:

“[t]he lack of effective merchant resistance gives credit card schemes the potential to set interchange fees above the socially optimal level and promote inefficiently high levels of credit card usage, with little risk of losing merchant acceptance.”

At page 40 of the RBA Report, the RBA claims that:

“... the competitive conditions necessary to ensure that the collective setting of interchange fees is in the public interest are not present in Australia.”

In not coming up with, or presenting, its own consistent conceptual model of how interchange fees are set, the RBA has led itself to infer that the lack of responsiveness of interchange fees to competition is an indication that the practice derives from market power being abused by the credit card networks. At page 16 of the RBA Report, the RBA alleges that:

“[t]he Joint Study found that interchange fees in Australia are not reviewed regularly by credit card scheme members on the basis of any formal methodologies. It also found that the fees are higher than the costs incurred by issuers in providing credit card payment services to merchants and that – because of barriers to entry to the schemes – competition does not seem to be bringing these fees into line with costs.”

At page 33 of the RBA Report, the RBA claims that:

The RBA's inference that Australian interchange fees reflect the exercise of substantial market power seems at odds with important features of these fees. More specifically:<sup>106</sup>

- Australian merchant service fees are among the lowest in the world. Figure 8 overleaf contains the results of an international survey of merchant service fees charged to retail merchants by Visa, MasterCard, Diners Club and American Express in 1998.<sup>107</sup> Visa's Australian merchant service fee across all categories was lower in 1998 than 11 out of the 13 countries surveyed and only fractionally higher than the charges in Finland and France. The RBA and the ACCC estimated that the average Australian merchant service fee (across all schemes) in 1998 was 1.78% - this puts Australia at the lower end of the spectrum when compared internationally;

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“[d]espite these descriptions of a competitive negotiating process for determining interchange fees, the actual interchange fee structure in Australia has been highly rigid.”

Various other references to the alleged market power of card schemes in Australia can be found at pages 36 and 37 of the RBA Report.

<sup>106</sup> The Australian Bankers' Association has noted that “existing arrangements have produced interchange fees that are among the lowest in the world”: Australian Bankers' Association, *Credit Card Networks in Australia: An Appropriate Regulatory Framework*, Submission to the Reserve Bank of Australia, July 2001, page 1 (see, also, page 12).

<sup>107</sup> The 1998 survey point was chosen to accord with the year at which the RBA and the ACCC estimated the average Australian merchant service fee in their Joint Study.

**Figure 8: International comparison of merchant service fees: retail**<sup>108, 109</sup>

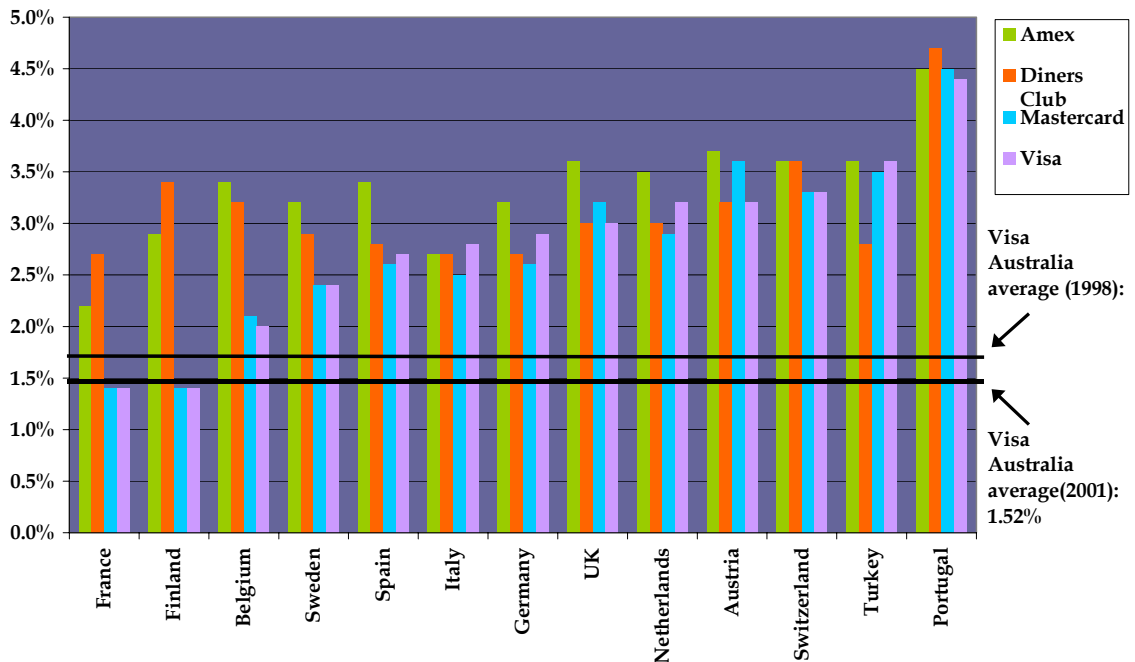


Figure 9 overleaf shows the results of an international survey of merchant service fees charged to merchants in the travel and entertainment sectors by Visa, MasterCard, Diners Club and American Express in 1998.<sup>110</sup> Similarly, this shows that, in 1998, Visa’s Australian merchant service fee across all categories was lower than in 11 out of the 13 countries surveyed.

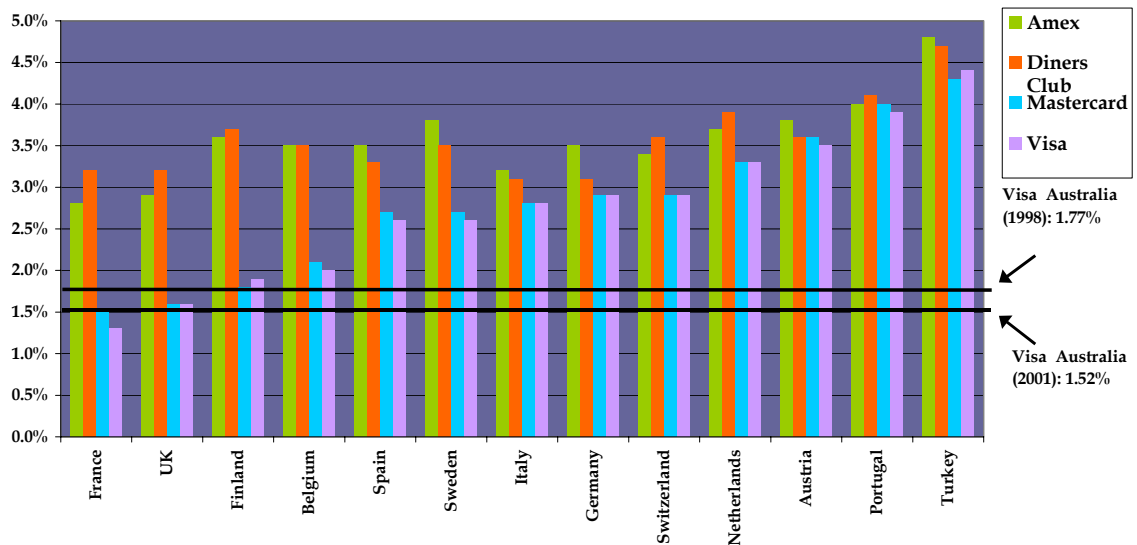
<sup>108</sup> The Australian merchant service fee for Visa reflected in the graph accompanying this footnote is its merchant service fee across *all* sectors, not just the retail sector.

<sup>109</sup> Prepared for Visa International by Taylor Nelson Sofres Finance (September 1998).

<sup>110</sup> The 1998 survey point was chosen to accord with the year at which the RBA and the ACCC estimated the average Australian merchant service fee in their Joint Study.



**Figure 9: International comparison of merchant service fees: travel & entertainment<sup>111, 112</sup>**



- Australian merchant service fees have been steadily declining over time. According to Visa’s internal data, this downward trend in merchant service fees has certainly been evident for Visa. In 1998, Visa’s members’ average merchant service fee was 1.77%, which had decreased to 1.52% by 2001 – a decrease of 25 basis points over a period of three years. This stands in stark contrast with competitors such as American Express. This suggests that at least part of the reduction in merchant service fees can be attributed to intra-scheme competition (that is, competition between acquirers within the Visa system for merchants).

Even setting these facts aside, viewed analytically, the documented evidence seems to flatly contradict the assertions made by Katz and the RBA. In particular, far from the policies and practices being symptomatic of the exercise of market power:

<sup>111</sup> The Australian merchant service fee for Visa reflected in the graph accompanying this footnote is its merchant service fee across *all* sectors, not just the travel and entertainment sectors.

<sup>112</sup> Prepared for Visa International by Taylor Nelson Sofres Finance (September 1998).

- these policies and practices existed prior to any of the open schemes having the largest market share (or volume of transactions) among card schemes or conceivably having market power in any form;
- the same policies and practices under dispute are found in different countries with differing degrees of market concentration (and, it may be assumed for present purposes, differing market power dynamics) and where credit card networks are more or less widespread; and
- closed schemes, which according to the RBA lack market power, have adopted the same sorts of policies.

These points are significant for the following reasons.

With respect to the first observation, if these policies were a consequence of an exercise of market power by the open schemes, then (if one were to equate, as Katz does, market share and market power) it should logically follow that, at the outset, when the open schemes did not have the share of the market for payment services they now enjoy, these schemes would presumably not have been able to adopt these practices. However, this is plainly not the case, as the policies at issue were adopted in the schemes' early days, if not since inception.

With respect to the second observation, if one rejects (as one should) any necessary correlation between market shares and market power, an alternative means of ascertaining the lack of a relationship between market power and the policies and practices under examination is by looking at other jurisdictions where, as noted, there are differing degrees of market concentration and, presumably, the market power of open schemes in the market for payment services may differ. The fact that open card schemes in such different jurisdictions adopt the same policies and practices suggests that these policies and practices are adopted independently of any possession of substantial market power.

With respect to the third observation, even if it is argued that all open card schemes have more or less the same market power in different jurisdictions, it is the RBA's own assumption that closed schemes have substantially less market power than open schemes.<sup>113</sup>

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<sup>113</sup> See, for example, page 118 of the RBA Report.

On that basis, if there were a relationship between market power and the practices under scrutiny, one would not expect closed schemes to adopt the same practices, yet they do.<sup>114</sup>

Finally, the whole premise behind the RBA's argument that interchange fees are derived from the market power of open schemes is flawed because it has not been demonstrated that open schemes have market power. The RBA, which does not explicitly define (much less analyse) the market which it believes to be relevant, presumes that open schemes have market power merely based on what it says is their large market share.

However, the fact that an open scheme has a large market share does not necessarily indicate that it has substantial market power.<sup>115</sup> Instead, a large market share may simply indicate a scheme that is large because it has promoted effective competition among its members, as issuers and acquirers, enhancing its attractiveness to users.

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<sup>114</sup> For instance, closed schemes also have an effective implicit interchange fee. Though this point is disputed by the RBA, it is accepted by the RBA's expert, Katz. In addition, closed schemes also make use of the no surcharge rule.

<sup>115</sup> The RBA's expert, Katz, concurs that there is no necessary correlation between market power and market shares. At page 51 of the Katz Report, Katz writes:

"By itself, the finding that credit and charge cards issued on the American Express or Diners Club networks comprise small shares of total cards or support small shares of total card-based transactions does not prove that these systems lack market power ...

For example, if business travelers using American Express corporate cards were required to use those cards when traveling for business purposes in order to qualify for reimbursement by their employers, then this requirement might generate market power for American Express with respect to merchants, particularly merchants catering to business travellers, such as airlines, hotels, and restaurants."

On this point, see also the arguments in section 8.7 of this response.

If the members of a card association had market power, and could exercise their market power using the interchange fee, then this would involve using the interchange fee to restrict output (the number of card transactions) so as to raise the total fee collected from users (cardholders and merchants). It is not clear they can do this. Notably, the RBA provides no evidence (or even a claim) that members of card associations are exercising market power in setting interchange fees to reduce the total number of card transactions (and thereby increasing the total retail price collected from cardholders and merchants). If anything, the RBA claims the opposite (that card associations (or, properly, members of card associations) set interchange fees that lead to too many card transactions).<sup>116</sup> There is an obvious inconsistency between this claim and the assertion that the members of open schemes have, and exercise, market power in setting the interchange fee.

In fact, although they may be smaller in size, closed schemes may have a *greater* tendency to raise the total fee charged to users (cardholders and merchants) since compared to open schemes, they lack any intra-scheme competition and therefore face correspondingly less competitive disciplines on their total fees.

In short, claims that the open schemes have and use market power, and that that market power is reflected in the policies and practices the RBA disapproves of, are poorly founded. The RBA, though referring often to market power, offers no serious competition analysis. This is evidenced by the RBA's failure to articulate the market(s) which it believes to be relevant and on that basis to make out the claim that the open schemes hold significant unilateral pricing discretion. Additionally, the behaviour which the RBA impugns in no way involves unilateral restriction of output, appears to have been implemented at a time when

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<sup>116</sup> At page 41 of the RBA Report, the RBA argues that:

“[t]he obvious manifestation of the absence of effective competition is the fee-setting process itself. The longstanding arrangements are characterised by secrecy, rigidity and lack of any objective and clearly articulated methodology. Such arrangements, in the pursuit of maximum credit card usage and scheme members' profits, run the serious risk of leading to overprovision of credit card services and inefficiently high merchant service fees.”

the schemes clearly had no power in any market, and has not been shown to result in persistent monopoly rents.

#### **4.8 Draft proposal: cost-based methodology**

The material presented in the preceding sections shows that the arguments and analysis raised by the RBA in support of its recommendations relating to the interchange fee do not withstand scrutiny.

Before turning to consider the RBA's arguments and analysis as to its recommendations with respect to the no surcharge rule, Visa considers it appropriate to conclude this section with some general comments on the cost-based methodology set out in the RBA's draft standard.

First, Visa notes that Chang, Evans and Schmalensee have stated that there is no economic basis for adopting a cost-based methodology for setting interchange fees.<sup>117</sup>

Secondly, the findings of the relevant economic literature are in accord with the position that such an approach is not consistent with welfare maximisation, other than by chance.<sup>118</sup>

Thirdly, the RBA's own expert states that there is no basis for setting interchange fees at cost (or zero).<sup>119</sup>

Given the weight of such authority, it is difficult to explain why the RBA favours a cost-based approach to setting interchange fees. One possible explanation is that the RBA

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<sup>117</sup> See pages 3-4 of the authors' response to the RBA Report entitled "An Economic Critique of the Reserve Bank of Australia's Proposal for Interchange Fee Regulation", March 11 2002.

<sup>118</sup> Baxter, W F, "Bank Interchange of Transactional Paper: Legal and Economic Perspectives" (1983) 26(3) *Jnl of Law and Economics*; Schmalensee, R, "Payment Systems and Interchange Fees", National Bureau of Economic Research, Inc, Working Paper 8256, April 2001; Rochet, J-C and Tirole, J, "Cooperation among Competitors: The Economics of Payment Card Associations", 16 May 2000; Schwartz, M and Vincent, D R, "Save Price, Cash or Credit: Vertical Control by Payment Networks", draft, November 2000.

<sup>119</sup> Katz Report, paragraph 103.

does not accept the fact that credit cards are two-sided networks in the sense that (as Rochet and Tirole note in their response to the RBA Report)<sup>120</sup> the key aspect, both from a business and social perspective, is to get both sides on board by balancing the demands of cardholders and merchants. An interchange fee aimed at cost allocation is inappropriate for this purpose.

Instead, a cost allocation approach is most appropriate in the context of upstream-downstream relations whereby an 'upstream unit' supplies an intermediate input to a 'downstream unit', which then serves the final consumer. At times, it seems as if the RBA favours a cost-based approach because it analyses credit card networks as if they involve upstream-downstream relations. The analogy that the RBA seems to be implicitly applying in its approach is based on the idea that the issuer (the upstream unit) supplies a service (cardholder servicing and transaction guarantee) to the acquirer (the downstream unit), which then handles the merchant. However, as has been demonstrated in the discussion on network externalities, this is a completely inappropriate analysis of the situation at hand, as it ignores the fundamentally joint nature of the service being provided.

If the RBA's cost-based methodology were to be imposed, Visa has serious concerns with both economic and practical aspects of that methodology.

To begin with, the proposed standard is both very difficult to understand and, on the best reading, less than plausible. The proposed standard requires that the charges be set on the basis of "issuers' costs ... that would not be incurred if the issuer was also the acquirer".<sup>121</sup> This seems to mean that if the issuer would incur those costs were it the acquirer (that is, were the transaction 'on us'), then the costs must be disregarded in setting the interchange fee. The logic underpinning this position is unclear: for surely the costs that need to be recouped, even consistently with the RBA's views, are the costs that the issuer would not otherwise incur, and not the costs that are incremental to the purely hypothetical position of the transaction being 'on us.' The RBA nowhere explains the relevance of an 'on us' counterfactual to the appropriate determination of its standard.

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<sup>120</sup> Rochet and Tirole, "An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems", page 2.

<sup>121</sup> RBA Report, page 58.

Even putting this lack of clarity aside, the RBA's standard seems to be based on a strict incremental cost approach. However, nowhere in the RBA Report does the RBA explain the basis for adopting a pure incremental cost approach or consider the consequences of that approach. In effect, where products share common costs, the sum of the incremental costs of the several products will be less than the total costs of the product set as a whole. As a result, assigning each product responsibility for covering only its incremental costs will lead to a failure to recover total costs.

The only conclusion that Visa can draw from this is that the RBA has decided that issuers should not be able to recover, from acquirers, any of the common costs involved in running the issuing side of the card systems. However, given that even the RBA admits that issuers provide some services to acquirers, why should issuers not be able to recoup from acquirers some part of the common costs associated with the service they provide? Visa certainly does not see any justification in economics for adopting the approach the RBA proposes in this respect.

The RBA's approach does not apparently conform to any theory of how interchange fees should be set so, ultimately, it must give rise to distortions. This lack of any basis in economic analysis creates further difficulties. In particular, it means that in determining what costs are appropriate for inclusion, the RBA must fall into essentially arbitrary distinctions between outlays that 'benefit' cardholders and outlays that 'benefit' merchants. The complexities of joint demand and supply associated with the provision of card services mean that *all* costs are incurred for the system as a whole with the result that the RBA's artificial treatment of costs cannot be sensible from an economic point of view. These difficulties are apparent in the RBA's treatment of the costs of interest free periods and loyalty programs. The RBA's approach to these is discussed in detail below.

#### **4.8.1 Interest free periods and loyalty programs**

The RBA concludes, at page 42 of the RBA Report, that any methodology for determining an interchange fee should be consistent with a set of principles that would promote more efficient and transparent pricing of credit card services. It then details six principles that any methodology should require, including principle (iii), namely that any methodology should:

“exclude from its calculations costs that are not related to payment network considerations, and are therefore not relevant to interchange fee calculations;”.

The RBA goes on to contend that “provision of the interest free period ... is not related to payment network considerations.”<sup>122</sup>

Visa does not agree. Fundamental empirical evidence indicates that interest free periods are in fact very closely related to payment network considerations. This is because interest free periods almost always occur in conjunction with one payment network or another. A payment of some kind follows all interest free periods, and the vast majority of such payments are transacted via some payment network (be it cash, cheque or another type of payment mechanism). Since, for all practical purposes, interest free periods only occur in conjunction with a payment network, they must be related.

Nonetheless, Visa sets out below its detailed response to the analysis undertaken by the RBA and the evidence put forward by the RBA. Briefly, this section:

- argues that the relevant principle put forward by the RBA does not provide any meaningful basis for determining which costs are to be included or excluded;
- rejects the RBA’s assertions that the provision of interest free periods constitutes a direct and private transaction between issuers and their cardholders and is therefore not a network consideration on the basis that this ignores the network externality associated with that direct and private transaction. The associated network externality makes the interest free periods related to payment network considerations;
- responds to the RBA’s claim that, because there exist some credit cards without an interest free period, such interest free periods are not related to payment network considerations;
- examines the house builders analogy cited by the RBA and distinguishes it from the interest free periods provided by credit card schemes;

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<sup>122</sup> RBA Report, page 49.



- questions the RBA's apparent acceptance of the proposition that recovering the costs of interest free periods from merchants would distort consumers' choices between credit cards and alternative payment mechanisms. This section discusses the problem that the term "distortionary" has been, inappropriately, used without reference to some alternative;
- rebuts the RBA's assertions that credit cards are a high cost payment instrument, on the grounds that the RBA does not take into account the benefits derived from credit cards;
- discusses Visa's view that, if the inevitable distortions associated with a cost-based approach to the setting of an interchange fee are to be minimised, that approach must take into account marketing costs such as interest free periods and loyalty programs; and
- finally, considers the likely consequences of the RBA's approach.

### ***The principle itself***

As noted above, the RBA says that it considers that any methodology for determining the interchange fee should "exclude from its calculations costs that are not related to payment network considerations".

Assuming one were to accept the principle formulated by the RBA, translating it into practice calls for an analysis of what costs should be defined as costs *related* to payment network *considerations*. Unfortunately, the key terms "related" and "considerations" are not defined by the RBA and the "principle" does not provide any meaningful basis to determine what is included or excluded within its parameters. There is no objective test against which judgements are to be made.

This problem is manifested, for example, in the RBA's 'conclusions' on interest free periods and loyalty programs, which amount only to statements that cannot be objectively tested against the principle. In addition, it is not possible either to imply a test because the RBA does not set out the basis for its view that interest free periods and loyalty programs are not related to payment network considerations.

It seems appropriate, given the stated object that any methodology utilised promote efficient and transparent pricing, that the costs to be included or excluded should be identified by reference to economic analysis.

### ***Direct private transaction***

The RBA does not seek to justify its contention that interest free periods are not related to payment network considerations (the “unrelated” hypothesis) in a robust and well argued way. For example, the RBA Report states at page 49 only that:

“[i]n the Reserve Bank’s view, since the provision of the interest free period *is a matter exclusively between individual card issuers and their customers*, passing the costs of the interest free period to merchants through interchange fees would not meet the Reserve Bank’s principles for interchange fee setting.” (emphasis added)

Visa fails to see that this can be much of a justification at all. The RBA argues that there is no network consideration in this context because the provision of the interest free period is a direct, private transaction between economic agents that they define in this situation to be comprised only of card issuers and their customers.

Again, this is an assertion in which the words lack substance. More specifically, what, if anything, does the RBA mean by “*a matter exclusively between individual card issuers and their customers*”?

If all it means is that the extent of interest free periods is *negotiated directly* as between issuers and cardholders, then no point is in fact being made: for it is the essence of an externality that it involves a transaction in which the decision-makers make choices without the welfare of all those affected by the choices being represented in the decision situation. It is for example, surely correct, under this interpretation of the RBA’s phrase, to say that the decision by a firm to locate a polluting plant in an area is a “matter exclusively between the firm and its shareholders and input suppliers”; yet, for precisely that reason, that plant will confer a negative externality on the local residents.

Alternatively, if what the RBA is saying is that the transaction is a private one, in the economic sense (that is, it involves no third party effects), then the RBA is merely stating what is in fact an assumption as if it were a conclusion.

In short, to the degree to which there is an explanation here, it is entirely circular.

### ***Evidence of cards without interest free periods***

The RBA attempts to bolster its position by observing that:

“[a]lthough the interest free period has been an integral feature of a credit card, some card issuers in Australia offer their customers a credit card without it, at a lower annual fee and interest rate on the revolving credit facility.”<sup>123</sup>

In other words, the fact that some credit cards have no interest free period is cited by the RBA in support of its “unrelated” hypothesis. From a purely empirical perspective, this is a weak line of reasoning: (1) all interest free periods are associated with the use of a payment network; (2) a small part of one payment network is not associated with any interest free periods; and (3) therefore, interest free periods are not related to payment network considerations.

Visa does not consider this line of reasoning to be credible. It does, however, raise some important issues about business practice. A brief discussion of that practice is worthwhile.

The offer of interest free periods is not uniform throughout the entire market; rather, such offers are available for different lengths of time, up to different amounts and so forth. Issuers, like other firms involved in competitive business, offer not one but a whole range of differentiated products so as to meet consumers’ differing tastes (and commercially benefit from such differentiation). The RBA seems to view the development of card systems as eroding welfare because they substitute for the use of other payment systems. However, this is almost certainly wrong. The introduction of new products increases the size of the pie since the welfare derived from the use of payment systems is increased.<sup>124</sup>

Even if one type of customer would rather not have interest free periods, this does not mean that interest free periods are unimportant:

- the reason for offering an interest free period is to attract (or retain) customers for whom a cardholder fee (the price of access to the network) would be too high from a

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<sup>123</sup> RBA Report, page 49.

<sup>124</sup> The RBA obviously does not consider payment systems – and particularly credit cards – as economic goods from which welfare can be derived. The underlying reason may be its narrow view of transaction costs as social economic waste. Applied to transport costs, one would wonder why so many resources are spent on diversified transport or other communications means.

private perspective, but who are nevertheless valuable members of the network;  
and

- even if *some* customers do not require interest free periods, this does not mean that interest free periods are unnecessary for payment systems to be viable. As Visa has dealt with at some length, it is well known that the value a merchant receives from belonging to the network depends on the number of cardholders. This means that the viability of the network depends on attracting and retaining a sufficient number of cardholders.

Even if interest free periods are not among the *necessary* defining factors of a credit card network, this does not mean that they are “unrelated” in the sense of the purportedly relevant principle to be applied. More importantly, it does not mean that costs associated with providing such interest free periods should not be recovered. Not every mobile phone contract has a free voicemail service, but voicemail is still a relevant cost – and is most certainly a benefit. Moreover, even if some credit cards do not offer interest free periods, it is nonetheless a very common feature. The offer of benefits to customers is most certainly a market mechanism and, surely, a way to encourage socially beneficial membership to a network.

In short, it is extremely difficult to understand the logic underlying the RBA’s position. Not all smoke-emitting factories pollute, but those that do, should face mechanisms that appropriately internalise the resulting externalities. It may be that not all credit cards provide interest free periods; but that fact in no way alters the economic consequences associated with those that do offer this benefit.

### ***House builders analogy***

The RBA highlights the fact that the “ARA has pointed out that although house builders benefit when financial institutions provide mortgages to their customers, no-one expects builders to pay “interchange fees” to these financial institutions”.<sup>125</sup>

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<sup>125</sup> RBA Report, page 49.

The reasoning seems to be that house builders benefit from an externality (financial institutions, thanks to their lending activities, enable the business of house building), while there is no mechanism (payment) to internalise such externality.<sup>126</sup>

As a preliminary point, Visa notes that it is not self-evident that no such internalisation of an externality occurs (even without an “interchange fee”). Indeed, simply as a factual matter, it is not uncommon for the developers of new estates to provide assistance with finance.

However, even putting these matters aside, the reality is that the RBA’s analogy misses the point. This is for two reasons.

First, whatever may or may not be the situation with respect to the builders of homes, to the extent to which the provision of an interest free period helps expand card networks, and those networks are of value to individual merchants, then it is economically appropriate for merchants to contribute to the costs involved.

Secondly and relatedly, it is clear that if the cards did not provide this functionality, substitutes for it would be provided by merchants.

In effect, when the RBA claims that the provision of interest free periods as a credit facility is a matter solely between the issuing bank and the consumer - and is unrelated to any transaction between the cardholder and the merchant - it completely ignores the history of the range of consumer credit options that merchants used to provide to consumers before the advent of credit cards. These included facilities such as lay-bys and hire purchase. These facilities are not as widespread today as they were merely a decade ago largely because the demand for small-scale consumer credit facilities has been better met by credit cards.<sup>127</sup>

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<sup>126</sup> It is interesting to note that this analogy implicitly shows that the RBA accepts the fact that merchants benefit from the externality created by credit cards. It is remarkable that the RBA accepts, without further discussion, the existence of an externality in the housing market while arguing about such in the context of credit card networks.

<sup>127</sup> This is illustrated by, for example, the 1998 acquisition by Thorn Australia Pty Ltd of the Rentlo and Radio Rentals (SA) appliance rental businesses of Philips Electronics Australia Limited. It is Visa’s understanding that the parties, in successfully opposing a complaint that the acquisition breached the merger provisions in section 50 of the Trade Practices Act 1974

Indeed, many of these superseded credit facilities were provided extremely inefficiently compared to the facility provided by credit cards.<sup>128</sup> In part, this is because, as previously discussed, it is more efficient for financial institutions to bear the risk of consumer default that tends to accompany the provision of credit, than for merchants to bear this risk. Additionally, extending small amounts of credit by means of credit cards eliminates or at least greatly reduces the costs involved in processing credit applications,<sup>129</sup> and provides consumers with far greater flexibility over expenditure decisions than was conceivable in the arrangements that have now been superseded.

Overall, the historical record makes it clear that prior to the development and widespread diffusion of cards, merchants incurred costs in providing consumers with substitutes for the flexibility in the timing of outlays that credit cards now provide. It is therefore reasonable to conclude that the card systems, by providing the functionality of the interest free period, allow merchants to avoid costs they would otherwise incur. In this sense, even the most narrowly cost-based standard would have to 'impute' to merchants, and require them to cover, the costs of this kind that the card systems allow them to avoid.

Merely to set out this task is to demonstrate its absurdity. In effect, how could a regulator, as a practical matter, determine how great the cost would be of the credit facilities that merchants would provide in the absence of the type of flexibility now offered by credit

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(Cth), argued that the level of consumer demand in the various appliance rental markets affected by the proposed acquisition had largely been directed towards other markets following the introduction of credit cards.

<sup>128</sup> Additionally, the type of consumer credit provided was, for obvious reasons, available only on highly selective terms. Thus, research has shown that merchant credit was made available mainly to high income consumers, while lower income consumers had to rely on instalment sales and other, often very expensive, means of credit to obtain flexibility over the timing of their outlays. See for example, Olney, M, 'When Your Word Is Not Enough: Race, Collateral, and Household Credit Use' *Journal of Economic History* 58 (June 1998): 408-31.

<sup>129</sup> If this activity were carried out by individual stores, as it likely would be, the costs of credit assessment would be higher in each instance and duplicated as between stores.

cards? Yet this is what the RBA, if it intends to rigorously and fairly implement its cost-based approach, would need to do.

In short, the RBA's analogy is not merely arguably inaccurate but entirely irrelevant. It is plain that as a factual matter, merchants have generally had to incur costs to provide the functionalities now provided through the interest free period. The costs involved are therefore relevant to even the narrowest cost-based standard – highlighting the enormous practical difficulties the RBA's approach entails.

### ***Distortions between alternative payment instruments***

The RBA seems to accept the view of the Cruickshank Report “that recovering the costs of the interest free period from merchants through an interchange fee distorts consumers' choices between a credit card and alternative payment instruments”.<sup>130</sup>

The issue that arises is the meaning of the term “distortionary”. This term has no meaning without reference to some alternative. Commonly, the concept is used with respect to a first-best situation. For example, an efficient, optimal state of the economy is described, characterised and used as a benchmark. A policy (or any behaviour) is then assessed and, eventually, described as being distortionary if it results in a sub-optimal outcome (or as correcting a distortion if it leads to a first-best outcome).

Visa sees that the RBA has again converted the purported outcome into a premise. In effect, the RBA can only be correct if recovering the costs of the interest free period through the interchange fee is not internalising, or helping to internalise, an externality – for if it is, then it would be distortionary *not* to include the costs of the interest free period in the interchange fee. As a result, for the RBA's reasoning to hold, it would have to be the case that either there was no such externality, or if there were such an externality, it would be socially preferable not to correct it.

Taken to their logical conclusion, the RBA's proposals suggest that the RBA is therefore merely saying “we do not believe the costs of interest free periods should be included

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<sup>130</sup> RBA Report, page 49.

because we do not accept that there are any externalities associated with card systems, or if there are such externalities, we do not believe they should be corrected”.

For its reasoning to be plausible, the RBA would need to explain why it is the case that interchange fees, which are said to be distortionary, should not be set to zero. In short, used in this context, the term “distortionary” cannot be the reason for reducing the interchange fee, though it could be a reason for eliminating it completely.<sup>131</sup> If the term “distortionary” is used to support a lower (though still positive) interchange fee, the RBA must be relying on a second-best policy (which may be the only one attainable), where a trade-off between two opposite effects has to be found. In other words, The RBA, in Visa’s view, needs to explain why the distortions they have decided to allow are acceptable whereas those it implies are currently in place are not.

### ***Credit cards as high cost payment instrument***

The RBA argues that credit cards are a high cost form of payment instrument, with those costs being associated with the provision of benefits such as the interest free period and loyalty points. As Visa has shown elsewhere, these costs are financed by:

- merchants who pay the merchant service fee; and
- cardholders who, generally, pay an annualised card fee and interest payments on revolving lines of credit.

The RBA, however, entirely disregards the benefits derived from card networks. Yet these benefits would form a key component of any welfare analysis, were such an analysis attempted.

This approach to policy analysis is inadequate at best. If applied to other goods and services in the economy, it would suggest that resources were being wasted on a massive scale in

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<sup>131</sup> Clearly, had it been shown that the interchange fee was in some way being set so as to restrict output, it could be said that reducing the interchange fee could increase welfare. But of course this is not the context in which the issues here (which go to the allocation of what are recognised to be costs) are being discussed.



markets such as those for business class air travel, high quality furniture, fast internet and any other goods or services with differentiated quality.

However, it is not sufficient to take only costs into account in estimating the efficiency of a system. Its benefits must also be taken into account. Interest free periods and loyalty programs are quite clearly benefits to be derived from card schemes. These benefits are enjoyed by:

- cardholders who obviously take advantage of these provisions and enjoy the benefits from using a payment system that is efficient, secure and widely-accepted; and
- merchants who benefit from: (1) the fact that customers prefer using cards and; (2) avoiding the fixed costs of operating their own payment facilities.<sup>132</sup>

Having identified what it perceives to be a waste of resources, the RBA proposes to extend its “no benefits” methodology into the setting of a regulated interchange fee. One likely consequence of this approach will be that there will be significantly reduced benefits derived from card networks, as the overall funding of the network (including cardholder benefits) is reduced by the lowered interchange fee.<sup>133</sup>

It is important to note that the above analogy with high-quality goods is only relevant to the *inclusion* in the interchange fee of a cost associated with interest free periods and loyalty programs. However, this is not a justification of the interchange fee itself, which is a separate issue dealt with in other sections of Visa’s response. In other words, either an interchange fee is completely ruled out – which is not realistic – or it must include the above costs.

For instance, the price of high quality furniture *must* include the additional cost of high quality, but it does not necessitate an internalisation of an externality. Hence, in that case, there would be no need for a mechanism similar to an interchange fee.

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<sup>132</sup> Note that for reasons set out at length above, even if merchants did not benefit (in the sense that they gained no additional surplus from the policy), that would not be sensible grounds for not requiring them to recover some of the costs associated with the policy.

<sup>133</sup> Or equivalently, the cost of obtaining that financing increased.

However, the payment card system has both of these characteristics: network effects and high quality. Consider an analogy to the pay TV business, where end-users benefit from being members of a larger network offering more, diversified channels. End-users receive value by virtue of the fact that the network operator signs up content providers such as FoxSport who provide benefits (TV services) direct to the end-user. However, network operators have to finance the cost of these services. In this example, the end-users (viewers) are in a similar position as merchants in payment card systems and the share of viewer subscriptions that is paid to content providers is similar to the interchange fee. This payment provides the incentive to offer better content and eventually increase the social welfare derived from the network.

### ***Interest free periods and loyalty programs as marketing costs***

The RBA proposes to mandate a cost-based method for calculating interchange fees where the only costs that could be included in the calculation of an interchange fee would be:<sup>134</sup>

- issuers' costs in processing transactions that would not otherwise be incurred if the issuer and acquirer were the same entity in those transactions. This includes the costs of receiving, verifying, reconciling and settling such transactions; and
- issuers' costs incurred in respect of fraud, fraud prevention and providing authorisation of card transactions.

The resulting reduced level of interchange fee would make it virtually impossible for issuers to promote card membership or usage and offer interest free periods and loyalty programs. However, the RBA does not seem to be concerned with this since, under its cost-based approach, it assumes that providing a "cost signal" is enough to ensure efficient, optimal usage (and membership). However, for the system to develop (or even to exist), consumers should be willing to hold and use cards. From a cardholder perspective, interest free periods and loyalty programs provide a strong incentive to join the network.

Interest free periods and loyalty programs are, to some extent, marketing costs: marketing and advertising are often a *sine qua non* for the existence of a market and are certainly an

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<sup>134</sup> RBA Report, pages 58-59.

essential element of success in many businesses. Indeed, in every other industry it is well accepted that the costs of marketing and advertising form a legitimate part of a product's total costs. Consequently, in the case of credit cards, the resulting costs should be included in the interchange fee when it is to be used as a form of cost signal. There are many other examples of such items being used to stimulate demand - discount cards for video rentals, marketing campaigns that link purchases with a chance to win major prizes, free tastings in supermarkets and frequent flyer schemes all have very similar characteristics to interest free periods and loyalty programs.

Furthermore, the similarity extends to the focus of much of the RBA's interest, namely the fear that consumers using cash and other alternative payment methods bear some of the costs associated with providing benefits to cardholders. It is clear, however, that many people buy goods and services that are promoted using similar methods to those used in credit card systems, *without directly benefiting from the promotion itself*.<sup>135</sup> For example, there is a cost associated with providing free tastings in supermarkets, yet many people who buy the goods so promoted do so without directly receiving the benefit of the free tasting.

### ***Consequences of RBA's approach***

Under the RBA's approach, where interchange fees are based on selected, limited costs, no consideration is given to the network effects of participants joining a credit card network and using their credit cards. The overall consequence is likely to be a market failure, which in turn would likely have a significant impact on credit card networks, particularly in terms of the potential to give rise to negative network externalities and so threaten the scale and long run viability of those networks:

- issuers (primarily Australian banks, building societies and credit unions) will not be able to offer interest free periods and loyalty programs and will suffer a decline in the volume and value of their card business;

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<sup>135</sup> These consumers may, of course, benefit from the indirect effects of the promotion - for example, in terms of an increased ability of the merchants undertaking the promotion to achieve economies of scale and scope.

- cardholders will not benefit from interest free periods and loyalty programs and will have reduced incentives to join a network that does not offer such benefits (even if it provides them with benefits other than interest free periods and loyalty programs);
- cardholders will substitute towards closed scheme credit and charge cards such as American Express and Diners Club, which are permitted to continue using an implicit interchange fee sufficient to fund the costs of their cards, including significant cardholder benefits;
- cardholders will also substitute towards other, potentially more costly, payment methods. Even where the substituted payment method is not more costly, cardholders will incur switching costs;
- to the extent that merchant service fees for open card schemes decline to levels even further below those of closed card schemes such as American Express, merchants' preferences for open networks will intensify. However, offsetting any benefits that merchants might receive from reduced merchant service fees, the number of closed scheme cardholders will increase, possibly dramatically, relative to open scheme cardholders;
- if total card usage declines sufficiently, some merchants who require this form of payment (for example, internet businesses) will contract and perhaps fail;
- the business of acquirers will contract, as merchants exit the network; and
- a larger share of the total value of the payment system industry will be captured by those corporations that generally operate closed card schemes.

It is speculative and ultimately implausible to claim that even merchants will be better off under this scenario. To the extent to which open card schemes no longer provide benefits, merchants will likely have to provide some of these benefits in order to attract custom and compete against other schemes, such as store cards. However, this will be at higher social cost and hence with more limited reach.

Ultimately, as the discussion of the interest free period makes clear, the RBA's standard is inherently arbitrary and hence distorting. This is because it requires taking benefits that are fundamentally joint and attributing them, without any efficiency basis, to one side or the other of a network. The RBA's response to this is simply to deny that the benefits in fact are

joint; but this claim flies in the face of the economic literature the RBA itself surveys. Visa considers that the RBA's response is a very weak basis for public policy.

## 5 RBA Report: the no surcharge rule

The RBA makes two broad claims regarding the no surcharge rule.

The first claim is that the no surcharge rule imposes excess costs on merchants, because the merchant service fees faced by merchants for handling credit cards outweigh any benefits that merchants receive from credit card usage. Consequently, the RBA argues, the no surcharge rule ultimately harms consumers because the excess costs suffered by merchants will be passed on to consumers in the form of higher retail prices. Therefore, consumers, notably those who do not pay with cards (or who would not do so if they faced a charge for card purchases), would be better off with the removal of this rule.

This claim, which is addressed in section 5.1 below, lacks foundation because it ignores many of the transactional benefits that accrue to merchants as a result of accepting cards and fails to provide any concrete examples of how retail prices are actually pushed up by card use (or in other ways quantify this alleged effect). Furthermore, the arguments used by the RBA are, in any event, misconceived in terms of the proposition the RBA seeks to establish.

The second claim is that if the no surcharge rule were removed, retailers would pass on the higher costs of accepting cards directly to cardholders who, in the RBA's view, are the most appropriate parties to bear these costs. In other words, removal of the no surcharge rule would lead (or, as the RBA has said in discussions with Visa since the RBA Report was released, set up the conditions that enable) a 'user pays' situation, allowing consumers to select the most efficient means of making payments in particular situations. This claim, which is discussed in section 5.2 below, ignores the international experience with surcharging. It also ignores the special circumstances of the retail market in Australia which are well recognised by regulators (including the ACCC) (as discussed in detail below) and which make it all the more likely that any resulting surcharging will be excessive because of retailer market power.<sup>136</sup>

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<sup>136</sup> It is also worth noting that if the RBA's claim were correct, then there would be no public benefit from regulating interchange fees once the no surcharge rule is lifted. Regulation of the interchange fee would involve administrative costs with no corresponding benefit. In Visa's view, because surcharges will not simply pass on the merchants' costs and benefits to

Having dealt with the RBA's claims, section 5.3 below considers the likely welfare impacts of removing the no surcharge rule.

## 5.1 Harm to cash users: claim of higher retail prices

As noted above, the RBA claims that the no surcharge rule imposes excess costs on merchants because the merchant service fees involved in processing credit card transactions outweigh any transactional benefits that merchants derive from credit card usage. It repeatedly expresses the concern that, if merchants do not derive transactional benefits that exceed merchant service fees, then there is an excess cost that must be recouped through higher prices to non-card using customers.<sup>137</sup> By implication, it is also argued, the no

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cardholders, regulation of the interchange fee as suggested by the RBA involves both administrative costs and a corresponding loss in economic welfare.

<sup>137</sup> This claim is made at pages 63-64 of the RBA Report:

"Scheme restrictions on merchant pricing inhibit the normal market mechanisms and have two important economic effects. The first is that the general level of prices is higher than it otherwise would be, and consumers who do not use credit cards pay more than they would otherwise."

At page 64 of the RBA Report, the RBA claims that:

"... scheme restrictions on merchant pricing mean that increases in credit card usage result in a higher general level of prices of goods and services. Consumers who use lower-cost payment instruments pay a higher price for goods and services than they would otherwise, and therefore contribute indirectly to the costs of credit card schemes."

At page 69 of the RBA Report, the RBA claims that:

"... the benefits of credit card use have been overstated. The claim made is that merchants benefit from lower transactions costs and higher sales. However, the evidence discussed in Chapter 2 suggests that credit card usage actually increases transactions costs for merchants. Moreover, no

surcharge rule distorts consumer choice towards higher cost payment mechanisms.<sup>138</sup> This argument is, of course, merely a restatement of the 'cross subsidy' claim the RBA made in its Joint Study with the ACCC.<sup>139</sup>

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evidence was provided that credit card usage leads to a permanent increase in sales for merchants as a whole that would offset their higher transactions costs."

<sup>138</sup> At page 68 of the RBA Report, the RBA claims that:

"[c]urrent price signals are therefore encouraging the use of a relatively high-cost payment instrument over lower-cost alternatives. This structure of incentives is not, in the Reserve Bank's opinion, conducive to allocative efficiency in the Australian payments system."

<sup>139</sup> The RBA claims to have backed away from the view that there is a cross-subsidy from cash users to card users. In fact, it merely reformulates its view as being that cash users are harmed by card users in the presence of the no surcharge rule which prevents merchants from passing on the costs of credit card transactions to card users. At page 66 of the RBA Report, the RBA states:

"[a]ppplied to credit card schemes, if the price paid by credit cardholders is greater than the incremental cost per unit associated with sales to these cardholders, there is no subsidy from customers who do not use credit cards. The conclusion follows that, since merchants are prepared to accept credit cards, the price must be above incremental cost per unit and there is no cross-subsidy. In the Reserve Bank's opinion, the focus on this technical definition of cross-subsidy does not address the public interest concern that consumers who do not use credit cards are harmed by scheme restrictions on merchant pricing."

At page 67 of the RBA Report, the RBA also claims that:

"[s]cheme restrictions on merchant pricing suppress price signals to consumers about the costs of different types of payment instruments. Since they do not bear any of the costs imposed on merchants when they



The balance of the discussion in this section 5.1 shows that:

- the RBA's claim lacks foundation because it overlooks many of the transactional benefits that accrue to merchants as a result of credit cards (refer section 5.1.1);
- the RBA fails to provide any concrete examples of how retail prices are actually pushed up by card use (or in other ways quantify this alleged effect) (refer section 5.1.1); and
- the arguments used by the RBA are, in any event, misconceived in terms of the proposition the RBA seeks to establish (refer section 5.1.2).

### **5.1.1 Evidence of transactional benefits**

Evidence that merchants *do* obtain significant transactional benefits from credit cards is provided in sections 4 and 8.9.1 of this response. There it was concluded that, irrespective of whether credit cards induced a permanent increase in aggregate sales, merchants enjoyed

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use their credit card, cardholders have no incentive to make an efficient choice between payment instruments."

As will be seen, no matter how the claim is formulated, the RBA's argument remains in error.

transactional benefits, including because of convenience effects and 'bigger trolley' effects.<sup>140,</sup>  
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As noted, however, the RBA claims that merchants do *not* derive transactional benefits in excess of merchant service fees. The claim that there are no net transactional benefits from

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<sup>140</sup> Note that these benefits amount to improvements in community welfare regardless of whether they are retained by merchants or are passed on to consumers. Oddly, the RBA, with its emphasis on the welfare of merchants, suggests it would be desirable were these benefits to result in merchants being 'better off' – that is, if merchants retained the benefits at issue. This is inconsistent with the usual standard in competition analysis, which believes that the gains will be greater if they occur under competitive conditions (and hence are obtained over a greater base of output). In practice, given the concentrated nature of Australian retailing, merchants are likely to retain a material share of the transactional benefits.

<sup>141</sup> Additionally it is also worth noting the comments of Gans and King in their submission 'Regulating credit cards in Australia: A submission to the Reserve Bank of Australia' who distinguish between the 'strategic benefits' to merchants of accepting credit cards and 'intrinsic benefits'. 'Strategic benefits' refer to the supposedly 'zero sum' (according to the RBA) benefits that merchants get from accepting cards solely in order to avoid a competitive disadvantage relative to other merchants, while intrinsic benefits refer to transactional and other benefits that are 'desirable and reflect improved efficiency in transacting'. Gans and King point out that the balance of evidence does not support the proposition that intrinsic benefits are less significant than strategic benefits. Rather, it is quite the opposite because:

"First, if the strategic effect is strong then pressures to discount for cash would also be strong; especially, when the interchange fee is supposedly at an artificially high level (Rochet and Tirole, 2001). However, this contradicts observations that discounting is not common. Second, banks have not changed the interchange fee despite the fact that it was set when acceptance was not widespread. Indeed, at that time any acceptance that did occur would not likely have been for strategic reasons. Given this, if the interchange fee was manipulated for strategic reasons we would expect it to rise over time as acceptance becomes more common."

card use seems difficult to reconcile with the evidence presented to the contrary in this response, including instances such as shopping for consumer durables, and retailing by phone and Internet (which exhibits significant growth potential), both of which seem heavily dependent on cards.<sup>142</sup>

As far as can be discerned, the evidence provided by the RBA that card use leads to excess costs for consumers consists of the following:

- data from the ARA survey discussed above; and
- inferences from the fact that, according to the RBA, merchants attempt to influence customers to use payment instruments other than cards.

This evidence is far from being robust.

First, as noted in section 4.3.1 above, even the RBA effectively admits that the ARA sample is biased and has a number of shortcomings compared to research commissioned by the RBA itself.<sup>143</sup> Furthermore, the ARA's survey results are inconsistent with more thorough studies carried out overseas (discussed below).

Secondly, the RBA has not provided any evidence to support its claim that merchants attempt to influence customers to use payment instruments other than cards. This is somewhat extraordinary, given its continual assertions that customers are steered to use cash (see, for example, pages 20 and 75 of the RBA Report). Indeed, the evidence reviewed in section 8.9 of this paper from jurisdictions that have dropped the no surcharge rule indicates that, at least in those jurisdictions, many merchants are reluctant to surcharge because

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<sup>142</sup> The evidence for this is discussed in section 4.2 of this document.

<sup>143</sup> Although, as noted above, the RBA does not seem to take account of the fact that the ARA is not representative of the retail sector as a whole, much less being representative of card-accepting merchants as a whole. Data from the Australian Taxation Office shows that there are a total of 205,583 small and medium enterprises in the retail sector. The ARA claims to represent 11,000 retail businesses and approximately 10,000 of these are small businesses employing less than 20 staff. In all, there are in excess of 475,000 Visa merchants in Australia.

surcharging is unpopular with customers.<sup>144</sup> This evidence suggests that if the no surcharge rule were abolished, whatever surcharging occurs is not likely to be motivated by genuine cost recovery purposes, since merchants in other countries did not regard the amount recouped through pure cost recovery as being worth the difficulty involved. Rather, as noted in section 5.2.2 of this document, surcharging, where it does occur, is more likely to come from retailers exercising their significant market power to exploit consumers.

Thirdly, if retailers are indeed substantial losers from accepting cards and hence actively steer customers towards alternative payment means such as cash, this would be difficult to reconcile with the ARA's own observation (at page 7 of its submission) that retailers, on average, transact more than 50% of their business via credit and debit cards, with some 29.4% of retail transactions being by way of bank-issued credit cards. It is surely likely that if merchants, including some of the largest business organisations in Australia, were – as the RBA claims – actively seeking to steer consumers away from cards, the RBA ought to be able to point to a discernable impact in terms of card usage and its growth.

Fourthly, cash discounts may be offered for any number of reasons – including tax avoidance – that have nothing whatsoever to do with payment cards and merchants' preferences for particular payment mechanisms over others, in terms of the relative costs of those payment mechanisms to the merchant.

Finally, other relevant indicators include recent findings that:<sup>145</sup>

- approximately 90% of merchants chose to participate in recent Visa promotions in key shopping centres when approached;<sup>146</sup>

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<sup>144</sup> Survey evidence in Australia regarding the RBA's proposals has been presented in section 4 of this response that is consistent with these international findings.

<sup>145</sup> Refer Pinpoint Pty Ltd, presentations on summaries of survey results entitled "Visa Retail Promotions Merchant Research: Summary November 2000 – December 2001" and "Visa Retail Promotions: Summary November 2000 – December 2001".

<sup>146</sup> 92% of merchants approached to participate in Visa's Christmas 2000 promotion in key shopping centres did so, whilst 89% of merchants approached participated in Visa's "Spring into Fashion" 2001 promotion in key shopping centres.

- between 51% and 83% of merchants who had participated in recent Visa promotions in key shopping centres felt that their total sales had increased as a result of their participation;<sup>147</sup> and
- between 77% and 100% of merchants who had so participated said they would be interested in participating in future promotions.<sup>148</sup>

In Visa's view, not only would merchants not so actively participate in Visa programs and promotions if they did not consider they derived transactional benefits from payment card use, but this level of participation and satisfaction suggests that merchants are not as actively endeavouring to steer customers away from cards and towards cash, as the RBA claims.

### **5.1.2 Misconceptions of the RBA's arguments**

In Visa's view, the arguments used by the RBA are, in addition to lacking in empirical support, misconceived in terms of the proposition the RBA seeks to establish.

First, even if the RBA could demonstrate that it is a common practice for merchants to steer customers towards cash, in the presence of multiple payment mechanisms this practice does not contradict the possibility that sufficient merchants receive transactional benefits greater than the amount of merchant service fees they pay so as to lower the overall retail price faced by consumers.

Furthermore, as section 8.9 of this response explains in greater detail, even those merchants that receive transactional benefits greater than the amount of merchant service fees may want to steer some of their customers to another payment mechanism if those merchants receive even greater marginal benefits (relative to costs) from that alternative payment system – that is, if at the margin of sales, taking for given sales made on credit, those merchants derive the greatest net benefit from sales made using another means of payment.

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<sup>147</sup> The respective numbers and promotions were: 83% ("Spring into Fashion" 2001); 53% (Christmas 2000); and 51% (Mothers Day 2001).

<sup>148</sup> The respective numbers and promotions were: 100% (Christmas 2000); 85% (Mothers Day 2001); and 77% ("Spring into Fashion" 2001).

As such, the mere fact that there is some steering to payment methods other than credit cards proves nothing.

Secondly, on a theoretical level, the fact that some merchants may receive transactional benefits less than the merchant service fees they pay does not prove that non-cardholders will be worse off. For reasons that are set out in section 8.9.1 of this response, non-cardholders can be better off even if only *some* merchants receive transactional benefits greater than the amount of merchant service fees they pay. As such, the RBA errs in suggesting that because (according to the RBA) some merchants receive benefits less than the amount of merchant service fees they pay, then non-cardholders must be harmed by the existence of cards.

Thirdly, even if the RBA's claim that there were no transactional benefits to merchants was correct, consumers - whether they use cash or credit cards - still benefit from no surcharge rules because these rules tend to increase competition among merchants. This is because no surcharge rules prevent merchants wishing to promote their own store credit schemes from using surcharging as a means of discriminating between general purpose credit card schemes and store credit schemes. This has a pro-competitive effect for the reasons explained in section 8.9 of this document - general credit card schemes become more widely used compared to store credit schemes than they would otherwise be if merchants were allowed to discriminate. This allows credit-constrained customers to become more 'footloose' and thereby shop around between various retailers for the best prices.

Finally, even if general purpose credit cards facilitated only the ability of credit-constrained customers to shop around, there would still be a spill-over benefit to all other customers, including to cash customers, because of the greater intensity of competition. More generally, not all customers need to be able to 'shop around' for competition to have great effect, as the most 'footloose' customers would at the margin make the most difference to the pricing pressures faced by merchants. Furthermore, the 'risk shifting' benefits discussed earlier which allow smaller merchants to compete on a more equal footing with larger merchants, are also likely to intensify competition.

## 5.2 The no surcharge rule and cost-based surcharging

Having asserted (in Visa's view incorrectly) that the no surcharge rule harms cash-paying consumers, the RBA's second (and related) claim is that the no surcharge rule prevents retailers from passing on the higher costs of accepting cards directly to cardholders who, in the RBA's view, are the most appropriate parties to bear these costs<sup>149</sup> and that therefore by implication, removing the rule would lead to such costs being passed on appropriately. In other words, removal of the no surcharge rule would lead to a 'user pays' situation and the application of consistent cost-based surcharging by merchants. This, in turn, would induce greater efficiency in the payments system, as consumers would be guided by relative price signals to correctly choose among alternative payments mechanisms.<sup>150</sup> Furthermore, the RBA has asserted, in discussions with Visa, that the removal of the no surcharge rule sets up the necessary conditions for merchants to compete. At the same time, the RBA has posited that the number of merchants that surcharge indicates nothing about the state of competition and that it is irrelevant how many, if any, merchants surcharge. With due respect, if the RBA is to advocate removal of the no surcharge rule it should at least state how lifting the rule will improve matters and in order to do this, it first has to provide a plausible assessment of how surcharging will or will not occur.

As a preliminary observation, Visa notes that the RBA has failed to recognise that its argument that network externalities can be internalised by surcharging is entirely undermined if, in practice, only relatively few merchants surcharge (and those that do surcharge, do so to an excessive extent). As the following discussion shows, the evidence shows that this is likely to be the case.

More particularly, the RBA's claim, as the following discussion shows, ignores overseas survey evidence. It also entirely disregards the special circumstances of the retail market in Australia (which are, as discussed in detail below, well recognised by regulators, including

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<sup>149</sup> See pages v and 61 of the RBA Report and page 55 of the Joint Study.

<sup>150</sup> However, some consumers may suffer transitional losses. At the point when the reforms take place and the no surcharge rule is removed, consumers who have already committed to a series of credit card payments may incur losses in being unable to avoid the surcharge by switching to an alternative payment mechanism.

the ACCC) and which imply that the surcharging that does occur is likely to be excessive because of retailer market power. In the context of the latter discussion, Visa makes a number of observations regarding the RBA's indications, in discussions with Visa, that this problem may be addressed through the ACCC exercising price-monitoring powers or through private rule arrangements.

Finally, this section also makes some observations on the rule of thumb approach that would likely follow the RBA's proposal and refutes the RBA's imputation that because merchants are "locked-in" to accepting credit cards and, therefore, to the no surcharge rule, the rule is somehow inefficient.

### **5.2.1 Evidence from overseas**

As previously noted, studies from other jurisdictions where the no surcharge rule has been lifted (discussed in detail in section 8.9 of this response and cited by the RBA itself) have found that only a small proportion of merchants impose surcharges. It is, of course, not valid to extrapolate from those studies that legislating to remove the no surcharge rule in Australia would lead to the same outcomes. However, this evidence does lend support to the argument that, even if the no surcharge rule were removed, under the best possible circumstances (that is, no complications arising from retailer market power (as discussed below)), it would not lead to widespread cost-based surcharging as the RBA might hope or claim.

As section 8.9.2 of this document notes, Katz's attempts to downplay the importance of this evidence - by arguing that surcharging has been uncommon because most retailers were unaware that they were able to surcharge - also lacks empirical support. As Katz should have known, given that he cites the report at issue, the ITM research report found that only 10% of companies said that they did not surcharge because they were not aware they were allowed to do so.

Finally, Visa notes that the Australian Bankers' Association (the "ABA"), in its submission to the RBA,<sup>151</sup> comments that, in Britain, where surcharging is permitted, it rarely occurs.

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<sup>151</sup> Australian Bankers' Association, *Credit Card Networks in Australia "An Appropriate Regulatory Framework*, Submission to the Reserve Bank of Australia, July 2001, page 35.



## 5.2.2 Risks of excessive surcharging

The retailers most likely to surcharge will be those with monopoly power or substantial market power (so that allowing merchants to surcharge is likely to be welfare-reducing). Thus, not only is surcharging likely to be uneven, but in those instances where it does occur, it will not be cost-based (much less reflective of externalities).

This consideration is likely to be especially important for Australia as it is well recognised that Australia has an extremely concentrated retail sector compared to other countries. For instance, an August 1999 report released by the Joint Select Committee on the Retailing Sector, which focused on grocery retailing, found that Australia's concentration ratios for the top three grocery retailers were higher than those:<sup>152</sup>

- in the United States where, the Committee found, the top twenty supermarkets accounted for only 38% of sales; and
- in New Zealand, where independent retailers held a grocery market share of over 50%.

Indeed, the latest A C Nielsen "Grocery Report" for September 2001 suggests that the top three grocery retailers in Australia accounted for 82.3% of retail sales of groceries.<sup>153</sup>

Against these considerations, the RBA has pointed out that grocery retailing forms but a subset of total retailing and that grocery items account for only 34% of retail trade in Australia.<sup>154</sup> However, the context of the RBA's comments was in response to a submission of

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<sup>152</sup> See [http://www.aph.gov.au/senate/committee/retail\\_ctte/retail/chap7.htm](http://www.aph.gov.au/senate/committee/retail_ctte/retail/chap7.htm)

<sup>153</sup> The figure is quoted from the September 2001 issue of "Retail World". This was before the exit of Franklins from the market so the market has subsequently become more concentrated, rather than less, because Franklins share has been divided by the sale of its stores between Woolworths, Coles and the independents. It is understood that Woolworths bought only those stores with fresh food departments which are the larger stores, representing proportionately higher total sales that previously went to Franklins.

<sup>154</sup> See page 126 of the RBA Report.

the ABA apparently to the effect that the retailing sector was more concentrated than the banking sector (the ABA's submission was confidential). Leaving aside whether this was a fair representation of the ABA's submission and the fact that the RBA goes on to draw some conclusions that may be somewhat confused as to market definition, the key issue is the importance of concentration within particular segments of the retailing sector in terms of its implications for pricing behaviour. This point deserves more careful exposition. In particular it is worth discussing:

- the importance of grocery retailing relative to the retailing sector as a whole;
- the concentration of grocery retailing and its implications for market power;
- other indicators of market power in this segment of retailing; and
- why surcharging provides additional opportunities to exploit market power.

### ***Importance of grocery retailing relative to retailing sector as a whole***

Retailing, as the RBA correctly points out, does not consist simply of grocery retailing, nor is it a single industry or market; rather it is a stage of the production and distribution system that cuts across many industries, often combining complementary inputs from different upstream industries and markets.

Granted, given this heterogeneity, while some retail sectors are highly concentrated, most notably grocery retailing, toy stores and department stores, other retail sectors are likely to be relatively unconcentrated, such as dry cleaning and take-away food outlets. As a caveat, it should be noted that in some sectors, while ownership at the retail level may be quite dispersed, retailers are tied to particular wholesalers, often through store investments (for example, pharmacies (where concentration of retail ownership is limited by legislation in New South Wales at least) and hardware stores). Franchising is also very common in retailing. Thus, even in retailing sectors that seem to exhibit more dispersion in ownership than grocery retailing, the extent of retail competition is restricted by common terms of supply, product range and services. The ability of retailers to shift between wholesalers may also be restricted. Additionally, the relevant scope of the geographical market differs in the different parts of retailing, and some activities that seem to have very low levels of concentration at a State or national level, may be relatively highly concentrated in their geographical market (properly defined).

Accepting that there are differences in degrees of concentration within the retailing sector, it is for this very reason that the RBA's attempt to downplay the possible pricing implications of allowing retailers to surcharge on the basis that the retailing sector has among the lowest profit margins of all Australian industries<sup>155</sup> is inappropriate. This is not only because profit margins are completely uninformative as to rates of return but also because these profit margins are for the industry in aggregate. Aggregate figures such as that used by the RBA hide the possibility that segments of the retailing industry such as, but not restricted to, grocery retailing, have and are able to exercise market power.

As noted, the RBA points out that 34% of retail sales are conducted through the grocery retailing sector which, according to statistics from the ARA, accounts for 54% of total food sales.<sup>156</sup> While for the purposes of classification, concentration in what is really a subset of a large sector of the economy does not seem particularly significant, it must be recalled that such classifications and aggregates by themselves are meaningless absent the context.<sup>157</sup> It would obviously matter to consumers if the grocery retailing sector was highly concentrated, if this concentration has implications for pricing behaviour.

### ***Concentration in grocery retailing and its implications for market power***

As a starting point, concentration is generally accepted as a necessary but not sufficient condition for market power, at least in industries where products are relatively homogenous.<sup>158</sup> Even interpreted at its most favourable towards grocery retailers, it is

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<sup>155</sup> See page 126 of the RBA Report.

<sup>156</sup> Page 8 of the *Retail Industry Profile 2001*.

<sup>157</sup> Actually, there are other subsets of the retailing sector which are also concentrated (such as toy stores and department stores), but for simplicity of exposition and because grocery retailing is the most significant segment, the latter forms the focus of the following discussion. The RBA itself, at page 75 of the RBA Report, notes other merchants that may be able to easily take advantage of surcharging – these include utility companies, schools, clubs and retailers of high value items.

<sup>158</sup> Concentration is not a necessary condition for market power in activities characterised by extensive product differentiation. Retailing is obviously geographically differentiated as well

undeniable that the concentration levels cited are substantial. For instance, the Joint Select Committee on the Retailing Sector, faced with the conflicting opinions of the National Association of Retail Grocers of Australia (“NARGA”) on the one hand and the big three grocery retailers on the other about the relevant market shares,<sup>159</sup> decided to commission the Australian Bureau of Statistics to independently quantify the market shares of each chain. The ABS used three measures<sup>160</sup> – on one measure, the big three had a combined market share of 75.4% in 1997-98, and, on the other two measures, they had a combined share of 62% and 53.9% respectively. Given the evidence available, it is not surprising that the Committee stated that:<sup>161</sup>

“[t]he Australian grocery retailing industry is oligopolistic in nature. That is, the market structure is characterised by a small number of firms, each of which possesses a significant degree of economic influence or market power.”

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as in terms of quality, so that aggregate concentration figures may understate effective market power.

<sup>159</sup> NARGA proposed a measure that gave the three largest grocery retailers a combined market share of 80.4%, whereas Woolworths proposed a measure that gave the three largest grocery retailers a combined market share of 43.1%.

<sup>160</sup> Measure 1 was defined as ‘supermarket and grocery stores, including the non-petrol sales of identified convenience stores of petrol stations. It comprises ANZSIC Class 5110, which consists of units mainly engaged in retailing groceries or non-specialised food lines, whether or not the selling is organised on a self-service basis’; Measure 2 was defined as ‘items in measure 1, plus liquor retailing stores, plus other food retailing stores including fresh meat, fish and poultry retailing stores, fruit and vegetable retailing stores, bread and cake retailing stores, and other specialised food retailing stores. It comprises ANZSIC Class 5110 plus 5123 (liquor retailing), 5121 (fresh meat, fish and poultry retailing stores), 5122 (fruit and vegetable retailing stores), 5124 (bread and cake retailing stores) and 5129 (specialised food retailing)’; and Measure 3 was defined as ‘items in measure 2, plus takeaway food retailing stores, which is ANZSIC Class 5125’: See [http://www.aph.gov.au/senate/committee/retail\\_ctte/retail/chap4.htm](http://www.aph.gov.au/senate/committee/retail_ctte/retail/chap4.htm)

<sup>161</sup> Paragraph 2.16 of the Report of the Joint Select Committee on the Retailing Sector.

### **Other indicators of market power in grocery retailing**

As discussed, concentration by itself is only a necessary, not sufficient, condition for market power. However, throughout its discussion, the Committee noted examples of significant barriers to entry in grocery retailing. These included:<sup>162</sup>

- capital costs;<sup>163</sup>
- rent;<sup>164</sup>
- access to new sites (among the most important barriers to entry); and
- access to new product lines (the Committee finding that the major chains have a clear advantage in this respect).

More generally, the Committee also noted the existence of sunk costs and economies of scale and scope in retailing which tend to favour the incumbent retail chains.<sup>165</sup>

The issue of whether major Australian grocery retailers have market power has also been tested in the recent *Safeways* proceedings<sup>166</sup> (where it was found that Safeway did have a substantial degree of market power, at least in the market covered by those proceedings).

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<sup>162</sup> See [http://www.aph.gov.au/senate/committee/retail\\_ctte/retail/chap5a.htm](http://www.aph.gov.au/senate/committee/retail_ctte/retail/chap5a.htm)

<sup>163</sup> It was noted that independent retailers may be paying up to 3% more for finance than the major chains, effectively limiting their scope for expansion.

<sup>164</sup> It was noted that in large shopping centres, independent retailers pay more per square metre for rent than the major chains.

<sup>165</sup> See paragraph 2.40 of the Committee's report.

<sup>166</sup> *Australian Competition and Consumer Commission v Australian Safeway Stores Pty Ltd* [1999] FCA 1269.

### ***Surcharging and exploitation of market power***

Given these considerations, there must be a substantial prospect that lifting the no surcharge rule will backfire on consumers. The ability of retailers to impose surcharges on consumers is clearly related to the degree of actual and potential competition to which those retailers are exposed. If the Committee's finding that grocery retailing is heavily concentrated and that the major grocery chains have substantial market power is accepted, then there is a material risk of surcharging being used to increase the returns on market power in respect of a substantial part of consumers' retail spending and total spending.

As noted before, this ignores the likely possibility that there are: (1) other segments of retailing that are also concentrated and therefore likely to be comprised of firms with market power, such as toy retailing, sports goods and electrical goods; and (2) other retailing segments which, although less concentrated, are tied to particular wholesalers or franchises, such that the extent of retail competition is restricted by common terms of supply/product range and so forth. The ARA's own figures - suggesting that 34% of retail sales are transacted in regional Australia - show an additional complication.<sup>167</sup> Given the long distances between regional centres, this makes regional consumers less 'footloose' and therefore more captive to retailers in their respective areas.

In response to these concerns, it could be argued that if some retailers have substantial market power, they would already be extracting monopoly rent from consumers. How then could they benefit by charging excessive surcharges if the no surcharge rule were lifted?

First, one strong possibility is that, even if they were already extracting monopoly rents, a surcharge would allow retailers to extract greater rents to the extent that surcharging serves as an effective form of price discrimination. For example, surcharging could be used to price discriminate against the less price-sensitive consumers - the fact that such consumers choose to pay using credit cards would signal to retailers that they are likely to be in this category.

Secondly, surcharging can be a facilitating device for retailers to coordinate their pricing and thus extend their market power and enhance their ability to charge higher monopoly rents. Of course, grocery retailers that already have market power may be best placed to do this,

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<sup>167</sup> See page 13 of the *Retail Industry Profile 2001*.

but others may also benefit from such an opportunity. One of the market characteristics that presently tends to mitigate against price coordination is product differentiation and the sheer number of prices or other non-price factors that need to be coordinated. This is particularly difficult at the retail level, where stores often stock thousands of different lines from multiple manufacturers. However, a surcharge is a single fee that applies across all purchases. Since this fee is highly visible and easy to signal, it may conveniently serve as a 'facilitating practice' for price coordination.<sup>168</sup> Thus, ironically, one factor that previously hindered retailers from further expanding their market power would in one fell swoop be overcome by an intervention that the RBA intended to use to benefit consumers.

Finally, lifting the no surcharge rule will also be a bonus for other merchants with market power, notwithstanding the fact that they may already be pricing in such a way that allows them to extract monopoly rents. This is because introducing a surcharge can serve as a cover for evading existing regulations. For example, regulated utilities, such as electricity companies, may take the opportunity to surcharge for card transactions over the phone. Such surcharging may become a way for regulated utilities to circumvent restrictions on utility pricing. Eventually regulators may respond by modifying regulations accordingly to proscribe this opportunistic behaviour. However, this will not happen without a lag within which consumers will suffer a clear detriment (presumably contrary to the RBA's intentions). In any case, regulatory intervention to deal with such conduct may further complicate already burdensome regulatory regimes, adding to the administrative and compliance costs those regimes impose on regulated businesses and hence ultimately on consumers.

The Commonwealth Government at least accepts that merchants, if given the ability to impose surcharges, may do so in a way that is unrelated to costs. This is evident from the fact that special legislation was introduced to prevent 'price exploitation' following the introduction of the GST. If the Commonwealth Government had accepted the RBA's view of the world – in particular, the claim that retail competition is sufficient to prevent excessive surcharging – the price exploitation provisions, and the very substantial sums spent in publicising and enforcing them, would have been a significant waste of the community's

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<sup>168</sup> The concept of facilitating practices for price coordination is well accepted among economists and regulators in the area of competition law. See for instance paragraph 404c of Areeda and Hovenkamp's *Antitrust Law* (electronic version) and George Hay, "Practices that facilitate cooperation: The *Ethyl* case", *The Antitrust Revolution*, Kwoka and White (eds), 1989.



resources. The RBA, for reasons that are not clear, has not commented on the apparent inconsistency between its views and the assessment of the situation made by the Commonwealth Government and its enforcement agencies.

Given these considerations, the RBA's assertion that surcharging is unlikely to be excessive seems poorly based. However, it is important to note that even in the absence of any substantial retailer or merchant market power, allowing surcharging is likely, given the economics of card systems, to lead to a social inefficiency. This is due to a combination of an externality and a free-rider problem. Section 8.3 of this response explains the reasoning behind this in more detail. The essence of this argument is that potential cardholders do not take into account the value merchants get from transactions that are made possible by cardholding and card usage, because each individual cardholder takes as given the number of merchants in the network, while merchants are not willing to voluntarily subsidise consumers to join a credit card network. Each individual merchant thus takes as given the number of cardholders, realising that its own contribution to a system-wide subsidy will have a negligible effect on the decision of any potential consumer to join the credit card network. As such, each merchant will face incentives to surcharge excessively.<sup>169</sup>

As noted above, the RBA has indicated, in discussions with Visa, that the problems associated with excessive surcharging may be addressed through the ACCC exercising price-monitoring powers or through private rule arrangements. This is not convincing.

Visa notes that the RBA's proposed standard only restricts a scheme's rules, or a participant in a scheme, preventing a merchant from recovering from a cardholder the merchant's costs of accepting a card issued by a participant in the scheme. It does not prevent merchants from imposing surcharges that are non-cost reflective.

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<sup>169</sup> It is worth noting that even King and Gans (who are against no surcharge rules) agree that retailers with market power will be able to use no surcharge rules as an instrument to price discriminate and exploit their market power and that this, in turn, can be inefficient (see page 3 of Gans, J and King, S, 2002, 'Regulating credit cards in Australia: A submission to the Reserve Bank of Australia', 12 March 2002. Though they claim that retailer market power should be dealt with directly, they give no idea of how and certainly do not show that the costs of doing so would be less than any net costs associated with removing the no surcharge rules and undermining card schemes, as discussed here.



Equally, although the ACCC might monitor the level of surcharging there are, as matters now stand, no powers under which the ACCC could prevent merchants from imposing excessive surcharges, unless those surcharges were misleading or deceptive. In effect, the mere fact of excessive surcharging, like the imposition of monopoly prices, is not a breach of the Trade Practices Act 1974 (Cth).

Moreover, even were additional powers granted the ACCC, it would be extremely costly for the ACCC to undertake the necessary information gathering, investigation and enforcement action to establish that any particular case or cases of surcharging breached the provisions at issue. Relying on private contractual arrangements between a scheme, the scheme's acquirers and the acquirers' merchants would not avoid these types of costs and, in fact, may increase them (given, for example, the lack of private coercive powers).

Finally, it needs to be noted that, in any proper welfare assessment, the costs associated with trying to prevent excessive surcharging would be taken into account. So too would the costs engaged by consumers in seeking to avoid excessive surcharging (for example, through additional 'shopping around') and the loss in the efficiency of the card schemes. The RBA does not attempt any formal welfare assessment of its proposals and hence does not recognise these costs, much less weigh them up.

### **5.2.3 A rule of thumb approach?**

The observations noted in the previous two sub-sections suggest that, at best, surcharging will be based on some simple rule of thumb, such as a simple mark-up for card use which is chosen as some convenient round number and which does not depend on the type of card used.<sup>170</sup> (Visa notes that, where the costs of accepting different payment mechanisms differ, a

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<sup>170</sup> In research conducted on Visa's behalf of a group of small merchants who would charge an extra fee to customers who pay by credit card were asked "for other credit cards (such as American Express or Diners Club), would you charge the same percentage fee as you'd charge for Visa or MasterCard or would you charge a lower or higher fee". The results were: 39% would charge the same fee as between all four cards; 49% would charge more for American Express and Diners Club than for Visa and MasterCard; and 12% were unsure (UMR Research, *Retailers Research Study*, March 2002).

simple “cash *vs* card” rule of thumb would not necessarily reflect cost-based surcharging, as the RBA otherwise implies.)

The RBA has signalled that the open schemes will be required to abandon their no surcharge rules. There are clear competitive concerns if this does not occur. If it does occur and a merchant has a single fee for all card transactions, this will not drive a wedge between the surcharge consumers face when using cards issued by members of open card schemes (such as Visa and MasterCard) and cards issued by closed schemes (such as American Express and Diners Club), despite differences in merchant service fees.

However, at its worst, surcharging will be used as a form of price discrimination to exploit those consumers with particularly inelastic demand who purchase using credit cards. In such cases, allowing surcharging to occur will be detrimental to the reputation, and likely the value, of the card systems, without any offsetting social benefits.<sup>171</sup>

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<sup>171</sup> The arguments discussed above on the perverse results of allowing surcharging negate the ‘neutrality’ argument sometimes used to justify why interchange fees will not matter once the no surcharge rule is lifted (for an example of the neutrality perspective, see Gans, J and King, S, ‘Regulating credit cards in Australia: A submission to the Reserve Bank of Australia’, 12 March 2002. The ‘neutrality’ argument claims that retail price differences will undo any effects of interchange fees (see, for instance, section V(a) of the Katz Report).

Gans and King, who are the major proponents of the neutrality argument, claim at page 5 of the aforementioned submission that:

‘... it is based on a key assumption, that customers have the option of purchasing goods and services at a cash (or non-credit card) price independent of prices set for other payment instruments. This could occur either:

- (i) if retail competition is sufficiently intense or
- (ii) if retailers were unconstrained in setting cash prices as opposed to prices applying to other payment instruments.”

#### 5.2.4 Lock-in effect

Finally, it is worth addressing the RBA's imputation, unsupported by any evidence, that the mere fact that merchants are "locked into" accepting credit cards and, therefore, the no surcharge rule, suggests that it is inefficient.

The RBA does not elaborate on this point. However, it is mentioned in many instances such as at page 39 of the RBA Report where it is stated that:

"[i]n the face of well-established credit card schemes with wide customer popularity, merchants claim they have little option but to accept credit cards; once they do, however, they are locked in."

Competition, almost by definition, involves a lock-in effect. For example, competitors could be said to be "locked into" providing lower prices or better services for the consumer. Consider the example of the provision of free plastic bags to customers at checkouts in supermarkets. Following the RBA's logic, it could be argued that most supermarkets appear locked into this practice. Suppose a supermarket sought to deviate from this practice by charging for plastic bags. In doing so, it might gain a reputation for being 'penny pinching' in a way that leads to a loss of reputation for service (supermarkets being providers of retail services, not simply 'middlemen' for consumer goods) and thus a reduction of custom. However, there is no evidence that, because of this lock-in, there has been a failure of competition. Rather, it is the very pressure of competition that has induced supermarkets into the universal practice of providing free shopping bags to their customers.

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They argue that based on these conditions, lifting the no surcharge rule would be beneficial because it would lead to better conditions for 'neutrality' and ensure that the costs of transacting in the economy would be minimised. This is puzzling because one would think that current card scheme rules, which allow merchants to offer cash discounts, already meet the second condition enumerated. If indeed this second condition for neutrality has already been met, then the findings of Gans and King suggest that current card use levels suit the interests of merchants because, according to Gans and King, there is limited use of cash discounting (page 6, page 9).

The RBA's attempt to impugn the no surcharge rule by reference to 'lock in' therefore makes little sense. Were regulators to seek to free firms of the constraints competition imposes on them, this would surely make consumers much worse, rather than better, off.

### 5.3 Impact of removing no surcharge rule

As implied by the arguments discussed above, the removal of the no surcharge rule is likely to lead to:

- a large number of cases where no surcharges are applied (and consequently no change in welfare occurs); and
- a minority of cases (which may, however, cover a very substantial volume of trade since they involve sales made by the biggest retailers) where surcharging is applied excessively by retailers with market power (thus leading to reductions in welfare).

It follows that the removal of the no surcharge rule will, on balance, be welfare-reducing and hence be undesirable from a public policy perspective.<sup>172</sup> The fact that costs will be incurred – by consumers, card schemes and possibly government authorities to try to prevent excessive surcharging – is likely to only add to the social loss.

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<sup>172</sup> This is quite contrary to the conclusion of the RBA at page 73 of the RBA Report that:

“[i]f removal of scheme restrictions on merchant pricing would have little effect on credit card usage and network size, it follows that the restrictions are redundant and, like unnecessary regulation in any form, can safely be abolished.”

It is also apparent from the above that, contrary to the RBA's conclusions at page 69 of the RBA Report, there is no contradiction between Visa's claims that most merchants will not choose to charge differential prices and that nonetheless restrictions on surcharging are needed to maintain network externalities and thus the viability of card networks. The point is that only a minority of merchants will surcharge, but this minority is sufficient to lead to the undermining of the viability of card networks because the surcharging is associated with abuse of market power by the surcharging firm.

The RBA claims, however, that removing the rule will lead to improved allocative efficiency.<sup>173</sup> These claims are not only inconsistent with the considerations set out above but also rely on the assumption that other forms of payment are themselves properly priced (or at least that any distortions in their pricing are such that removing the no surcharge rule will result in competitive neutrality). This assumption seems strange given that:

- there is arguably a substantial public subsidy to cash;<sup>174</sup> and
- the RBA itself thinks that debit card services are mis-priced.<sup>175</sup>

Under these circumstances, even if one found the other elements of the RBA's line of argument persuasive, there is no *a priori* reason to think that removing the no surcharge rule will improve economic efficiency.

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<sup>173</sup> For instance, at page 64 of the RBA Report, the RBA claims that:

“... by distorting the relative prices of payment services to consumers, the restrictions do not promote efficient resource allocation and maximum community welfare.”

However, at page 68 of the RBA Report, it is claimed that:

“[c]urrent price signals are therefore encouraging the use of a relatively high-cost payment instrument over lower-cost alternatives. This structure of incentives is not, in the Reserve Bank's opinion, conducive to allocative efficiency in the Australian payments system.”

<sup>174</sup> For instance, the printing costs of cash and enforcement of legal tender laws is at taxpayers' expense. The RBA would undoubtedly argue that there is good reason for this subsidy because of the benefits of having legal tender that also serves as a unit of account. However, to acknowledge this much is to acknowledge that the RBA's simplistic view of the world (that each payment instrument should come attached with its own cost-reflective price tag) is completely inappropriate.

<sup>175</sup> Refer to the RBA's Joint Study with the ACCC which discusses problems perceived in the pricing of both credit card and debit card services.

## 6 RBA Report: access rules

This section deals with:

- the RBA's continued assertions that existing Visa membership rules for issuing and acquiring are somehow disproportionate to the Visa network's prudential objectives and instead are motivated by anti-competitive considerations (refer section 6.1); and
- the RBA's misinterpretation of Visa's discussions in its submissions to the RBA on 'net issuer' rules (refer section 6.2). The RBA's misinterpretation shows that the RBA has failed to grasp the implications of Visa's arguments concerning the efficiency of 'net issuer' rules.

### 6.1 Membership rules and institutional status requirements

As noted, the RBA reasserts the claim, repeated throughout the RBA Report, that existing Visa membership rules for issuing and acquiring are somehow disproportionate to the Visa network's prudential objectives. The RBA impugns anti-competitive motives of entry restriction to Visa's membership rules.<sup>176</sup>

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<sup>176</sup> At page 83 of the RBA Report, the RBA claims that:

"[t]he Bankcard, MasterCard and Visa credit card schemes have regulations and policies, agreed to by their respective Australian members, that restrict entry to the schemes. Broadly speaking, the regulations:

- limit the types of institutions eligible to become members of the schemes as credit card issuers and acquirers; and
- restrict the range and scale of activities that card scheme members may undertake."

At page 96 of the RBA Report, the RBA states that, in its view:

Visa's principal concern with regard to access rules is that it retains the right, as a private sector joint venture arrangement, ultimately to determine its co-joint venturers (that is, how its business is operated and what is in the best interests of Visa's own growth and the interests of its participating financial institutions). As such, Visa's main concern is that any rules for eligibility are simply that and not determinative as to membership of Visa or as to the business conduct of financial institutions participating in the Visa scheme.

Additionally, Visa would be concerned were the RBA to impose rules that amounted to a compulsory licence of the Visa trademarks. There are compelling economic reasons for not requiring compulsory licensing of trademarks; these are recognised in the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement, and any such compulsory licence would be in clear breach of Australia's obligations under that Agreement. In recent discussions with Visa, the RBA has indicated that Visa's usual membership processes would still be able to be applied in an unfettered manner. However, the right for an unsuccessful applicant for membership of the Visa scheme to request that the RBA issue a direction regarding access effectively nullifies these assurances.

This concern is a particularly important one for Visa because the essence of its value-creation strategy, for Visa and its members, lies in its brand. Visa's intellectual property as embodied in its brand is a very significant asset and, consequently, driver of its business. This brand value is the result of a reputation as a provider of payment card services that has been painstakingly developed over the years.<sup>177</sup>

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“... any requirement that a credit card issuer or acquirer must be a deposit-taking institution is, on its own, very difficult to defend.”

<sup>177</sup> Research undertaken by Visa demonstrates very clearly that consumers do have different perceptions about brands. Brand perception is important, as it then flows into a wide range of different consumer behaviour, including card self-selection. In July 2000, cardholders were surveyed as to their image of Visa and its competitors - 'positive image' results were as follows: Visa (74%), MasterCard (52%), American Express (34%), Diners Club (25%) and Bankcard (48%). Respondents were also asked which was the "best card overall": Visa (56%), MasterCard (19%), American Express (18%), Diners Club (3%) and Bankcard (1%). (Source: UMR Research, "Usage and Attitude Survey Australia - July 2000 - Toplines".)

Taking these points as given, this section deals with the specifics of the RBA Report on access issues.

The RBA seems to have a particularly strong objection to the fact that existing Visa membership rules require issuers and acquirers to be deposit-taking institutions authorised by the Australian Prudential Regulation Authority (“APRA”). The RBA argues that issuing and acquiring are more specialised activities and generate risks that are much narrower and easier to monitor and control than those across the spectrum of activities of a deposit-taking institution.<sup>178</sup>

However, this argument presumes that it is costless for Visa to tailor a ‘perfect fit’ between its membership rules and the perfectly defined prudential requirements of being an issuer or acquirer. If this argument is made consistently, then it also implies that, where the optimal prudential requirements to be an issuer differ from those needed to be an acquirer, then the membership rules for issuers and acquirers should also differ perfectly to the degree needed to reflect these differences. Indeed, in its Joint Study with the ACCC, the RBA comes close to making these claims.

The problem with these claims lies in their definition of what are ‘optimal’ prudential requirements. The RBA’s definition of ‘optimal’, at least as implied by the Joint Study with the ACCC, failed to take account of: the costs of rule making and rule enforcement; principal-agent problems; and associated litigation risks flowing from such perfect ‘first best’ tailoring of prudential rules. In the real world, institutions are costly to enforce and these ‘transaction costs’, when taken into account, imply that truly optimal rules may have a ‘loose fit’ with requirements perfectly tailored to reflect a world where only the prudential factors are taken into account. ‘Optimal’ rules in the real world, to the extent that this term still makes sense, must also help minimise associated transaction costs which can be broadly defined to include the costs of rule making and enforcement.

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<sup>178</sup> At page 96 of the RBA Report, the RBA states that:

“[c]redit card issuing and acquiring are more specialised activities and generate risks, as discussed above, that are much narrower and easier to monitor and control than those across the spectrum of activities of a deposit-taking institution.”



It is encouraging to note that since the Joint Study, the RBA has come to recognise some of these other considerations. The RBA notes that the requirement for potential members to have a specified institutional status can be justified on the grounds that the prudential rules, which the payment card networks have chosen to 'piggyback' on, employ this criterion.<sup>179</sup> Given this acknowledgment, it is puzzling that the RBA would choose to impugn anti-competitive motives to Visa's decision to adopt these membership rules. The full implication of the 'piggybacking' argument - which has been recognised by the RBA - is that Visa has a stake in adhering to ready-made, time-tested APRA rules and that these rules are responsible for prescribing the institutional status requirement. (Visa notes that, if APRA were prepared to license a wider range of entities as deposit-taking institutions, then those entities would be eligible to become Visa members.)

It is worth restating in some detail the arguments for Visa's reliance on APRA rules for the purpose of clarification.

If membership rules can be readily changed (either in their substance or in their interpretation) in an entirely discretionary manner, then there is a real potential for:

- sub-optimal decisions over network rules, given that the network could be pressured to implement rule changes to reflect the bargaining position of particular participants - changes that may not be optimal for the network as a whole. This can be seen as a form of hold-up risk;
- the system being subjected to litigation claims by parties refused entry to the system or by parties within the system who disapprove of a particular new entrant; and

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<sup>179</sup> At page 96 of the RBA Report, the RBA acknowledges that:

"[m]ost submissions have focused not on the issue of institutional status but on the requirement that, in general, members must be prudentially supervised."

At page 97 of the RBA Report, however, the RBA:

"... acknowledges that there is some merit in using APRA's prudential oversight as a screening device."

- investment by participants in the network being curtailed given the uncertainty over the future structure of the network and the potential for rule changes to affect the ability to recoup sunk investment costs.

Adopting well-accepted APRA rules reduces the risk that purely discretionary rule changes and interpretation would otherwise impose on the members of the payment system. At the same time, the adoption of external rules reduces the discretionary power of Visa members, facilitating network collaboration between members who are otherwise competitors. In this case, external rule setting becomes an effective means to allocate power in the organisation. Seen in this light, the claim that the rules amount to a use of market power seems poorly founded.

The RBA's imputation that existing membership rules might be serving as a 'cover' for anti-competitive barriers to entry is also belied by Visa's response to the reforms implemented following the Wallis inquiry into the financial system. In effect, the post-Wallis reforms have made it less difficult to obtain regulatory approval to become a deposit-taking institution, and hence to become an issuer or acquirer. In other words, the Wallis reforms have lowered the barriers to entry for issuing and acquiring. If the issuer and acquirer membership rules of Visa had an anti-competitive purpose, then Visa should have responded to the Wallis Inquiry reforms by tightening its membership restrictions. Yet there is no evidence that Visa has responded in this manner. Instead, it has retained the same membership rules which 'piggyback' on existing APRA rules because the stability and efficiency of these arrangements make them appropriate to maintaining the viability of its card network.

To bolster its claims, the RBA argues that, in practice, the reliance on APRA rules has not eliminated the involvement of scheme members in assessing membership applications.<sup>180</sup> While the RBA's contention is correct, and although Visa has quite reasonably argued that it has adopted APRA rules in order to minimise the need for discretion, Visa's general arguments about the benefits of minimising discretion do not necessarily lead to the implication that the optimal level of discretion is zero. Thus, the mere fact that some final-stage vetting still forms part of the membership requirements and process after prudential requirements are met, is irrelevant. Nor is such final-stage vetting inconsistent

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<sup>180</sup> RBA Report, page 97.

with the benefits of reducing discretion that Visa enjoys under its current membership requirements.

More importantly, the RBA has provided no evidence to the effect that this final stage vetting adds any substantial additional entry barrier to whatever hurdles are already placed by the APRA requirements.<sup>181</sup> The point still remains that using the prudential rules as a screening device allows for substantial efficiency benefits. To argue against the applicability of these benefits – and, as noted above, effectively expropriate Visa’s intellectual property – on the basis that the prudential rules do not serve as automatic rules of qualification, and then to override existing arrangements on that basis, would be perverse indeed.

## 6.2 ‘Net issuer’ rules

The fact that the RBA has not accepted the implications of Visa’s efficiency arguments for its membership rules is attested to by its misinterpretation of Visa’s discussion of any ‘net issuer’ rules. The RBA rejects the need for net issuer rules on the basis that:

“... no evidence has been offered to support the claim that externalities associated with issuing are so much greater than for acquiring.”<sup>182</sup>

However, strictly speaking, the arguments for net issuer rules have little to do with the externalities generated by issuers being greater than those arising from the activities of acquirers. Rather, the key point is that issuers face higher sunk costs than acquirers.

Differential sunk costs arise as between issuers and acquirers because, *inter alia*, more specialised organisational technology is required for the purpose of being an issuer.<sup>183</sup> For example, the billing systems of issuers are likely to be substantially more complex, and therefore by implication more costly, to manage than the systems required by acquirers. In

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<sup>181</sup> This is particularly so, given that Visa would effectively be accountable to the RBA in the case of any refusal to accept as a member any entity that is eligible for membership.

<sup>182</sup> RBA Report, page 104.

<sup>183</sup> For example, issuers incurred significant systems and documentary costs when the Consumer Credit Code was introduced in November 1996.

addition, issuers need to incur substantially more sunk costs than acquirers for the purposes of brand advertising and promotion of cards.

Even in a credit card network that is well-established, it is consequently issuers that bear the brunt of the sunk costs associated with achieving efficient system size. At any time when interchange fees are being negotiated, pure acquirers could seek to expropriate those sunk investments by setting the fees at levels just sufficient to cover costs going forward.

Acquirers, on the other hand, face lower exit costs if the card network collapses because their general infrastructure can be redeployed for other commercial purposes. This follows from the fact, previously noted, that it is issuers who bear the costs of promoting the card network and customising their billing systems for more complex purposes, whereas the level of asset specificity in acquirers' investments is relatively low. Thus, even if the risk of scheme collapse is low, the differing incentives this creates as between potential acquirers and issuers matters – and these differing incentives to align private interests with the interests of the card network should be the concern of policy-makers.<sup>184</sup>

In effect, these differing positions create the risk for issuers that acquirers will use bargaining strength to secure for themselves a greater share of the system's value, but to the ultimate detriment to that value. Thus, the result of not being able to take account of hold-up risk in the design of membership rules is that there is no reason why acquirers would not take advantage of their bargaining strength to set the interchange fee too low from the perspective of the card network. That is, the acquirers' bargaining strength would result in an interchange fee that lowers – to a level less than optimal for the network as a whole – the incentives for issuers to invest in operation, technological upgrade and promotion of the card network.

It is in order to overcome this problem – by eliminating the source of hold-up risk (the acquirers' bargaining advantage) – that the members of card networks may agree to abide by

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<sup>184</sup> It is worth noting in this respect that, at pages 51-52 of the RBA Report, the RBA recognises the right of existing system members to recover costs, including past sunk costs. This raises the question of why, if the RBA is willing to recognise the relevance of sunk costs in a cost recovery methodology, it is unable to recognise their significance in affecting the respective bargaining positions of issuers and acquirers.

a rule such as a “net issuer” rule. This rule can provide a way in which acquirers can credibly commit not to engage in expropriation of issuers’ investments in the card network. This kind of credible commitment can reduce or eliminate the need for the insurance, and hence allow the interchange fee to be used for its balancing purpose. In this way, a net issuer rule can set up an efficient division of labour between various mechanisms for running the card network, whereby membership rules take this burden away from the interchange fee so that the interchange fee can more specifically address the balancing of the incentives of cardholders and merchants to join the network.

One of the implications of this analysis is that there is no single “first best” interchange fee. Rather, any such fee can involve a trade-off between insufficient issuer and acquirer membership and excessive usage. The outcome of multilateral negotiations over the interchange fee depends on the interests of the individual issuers and acquirers within the scheme and the distribution of voting rights. Thus, membership rules can have an impact on the level of the interchange fee, and this effect must be considered in the design of these rules. The presumption that the optimal membership and bargaining rules for the purpose of setting the closest to efficient interchange fee necessarily involves equally weighted votes, is unjustified.

## 7 RBA Report: competitive neutrality

The RBA does not seem to have accepted the import of, Visa's August 2001 paper entitled 'Delivering a Level Playing Field for Credit Card Payment Schemes', which was prepared at its request and dealt with a list of topics that was specifically agreed with the RBA. The RBA continues to dismiss arguments that, if open schemes are to be regulated, closed schemes should be subjected to the same (or equivalent) regulations.<sup>185</sup> It justifies its rejection of these arguments on three grounds, namely that:

- open schemes are different from closed schemes in that only open schemes involve collectively-set interchange fees;
- if, as a consequence of the RBA's proposed interventions, merchants could get lower merchant service fees from acquirers in open schemes, closed schemes would be forced to match these; and
- Visa's arguments (so the RBA claims) are reliant on the proposition that three party card schemes have completely independent pricing power.

However, as is demonstrated below, each of these grounds is deeply flawed.

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<sup>185</sup> See page 118 of the RBA Report:

"... the Reserve Bank saw no case on public interest grounds to designate the three party card schemes to deal with issues relating to collective fee setting (or restrictions on entry)."

On page 122 of the RBA Report, the RBA states that it:

"... is unpersuaded by the arguments that reform of the designated credit card schemes constitutes a regulatory bias that favours the three party card schemes ...".

## 7.1 Setting of ‘interchange fee’ equivalent by closed schemes

As noted, the RBA’s first argument is that open schemes are different from closed schemes in that only open schemes involve collectively-set interchange fees.<sup>186</sup> While this claim, taken literally, is obviously correct insofar as closed schemes do not have *collectively-set* interchange fees, it is irrelevant insofar as it puts matters of form above matters of substance and ignores the economic effects of the practices discussed.<sup>187</sup> Most notably, the RBA’s own expert, Katz, acknowledges that closed schemes set the effective equivalent of an interchange fee.<sup>188</sup> Thus, the fact that open schemes set interchange fees on a collective basis is irrelevant – what matters are the effects and role of the interchange fee.

Leaving this fundamental point to one side, the fact that the interchange fee is “collectively” set in open schemes merely lies in the four-party nature of such schemes, as opposed to closed schemes where the issuer and the acquirer are generally the same entity.

In a closed three-party card system, the single entity owning the system sets the appropriate cardholder and merchant fees. There is no need for an explicit interchange fee to give

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<sup>186</sup> At page 118 of the RBA Report, the RBA continues to assert, contrary to the evidence provided by Visa, that:

“American Express and Diners Club, on the other hand, do not have collectively determined interchange fees. Whether they have an internal transfer mechanism or “implicit” interchange fee is not relevant; the three party card schemes do not have a process under which competitors collectively agree to set a price which then affects, in a uniform way, the prices each of the competitors charges to third parties.” (footnote omitted)

<sup>187</sup> The RBA might then argue that ‘form’ matters because it has the potential to trigger liability under section 45 of the Trade Practices Act 1974 (Cth). But that is surely a matter for the ACCC and not the RBA, and is in any case not relevant to an economic consideration of the issues – that is, to a consideration, as required by the statute under which the RBA is operating, of the impacts on efficiency and competitiveness of alternative courses of action.

<sup>188</sup> See paragraph 168 of the Katz Report.

appropriate incentives to the issuing division and acquiring division that are part of the same entity. In an open four-party card system, on the other hand, there is no single entity owning the system. Cardholder fees and merchant service fees are determined by, *inter alia*, competition between members. As such, it is necessary for the system itself (that is, the members collectively) to influence the setting of the fees by providing the appropriate incentives through the interchange fee. Without such incentives, cardholder fees and merchant service fees would be set at inappropriate levels and network externalities would not be fully internalised, to the disadvantage of cardholders and merchants, as well as of issuers and acquirers.

Therefore, the need to balance incentives and ensure network-based decision-making does not arise in a closed system in the same way as it does in an open system. If the interchange fee – which is not, in any event, a “price” or like a “price” – were not “collectively” set in an open scheme, network externalities would not be fully internalised and the decision of a particular institution about the basis upon which it participated in the network would be distorted in a way harmful to the network overall.

In short, the collective setting of the fee follows naturally from the nature of open systems. However, the exact same functions are undertaken within closed systems. As such, this rationale provides no basis for imposing more onerous restrictions and burdens on one type of system than on the other.<sup>189</sup>

## 7.2 Matching of fees by closed schemes

The RBA’s second argument is that if, as a consequence of its proposed interventions, merchants could get lower merchant service fees from acquirers in open schemes, closed schemes would be forced to match these.<sup>190</sup> However, this view is based on an erroneous

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<sup>189</sup> The Trade Practices Act 1974 (Cth) recognises this when, by means of the joint venture provisions, it seeks to ensure that the mere difference in form between joint ventures and unitary firms does not lead to a difference in their exposure to the competition laws. While it may be thought that these provisions are relatively poorly drafted, the policy intention underlying them is clear, and could serve as a useful guide for the RBA.

<sup>190</sup> At page 121 of the RBA Report, the RBA claims that:



understanding of the role of the interchange fee. It also does not reflect the present reality, where lower merchant service fees charged by acquirers under the open schemes have not, in fact, led to falls in merchant service fees charged under the closed schemes so as to match the open schemes. Visa does not understand how the RBA considers the result would be any different in the context of the proposed interventions.

Generally speaking, it is true that if a firm is forced by regulation to lower its prices, then other unregulated firms in the same market that compete with the regulated firm may follow suit. Thus, for instance, suppose regulators forced the members of open schemes to lower their (average) fees for both cardholders and merchants. In this case, clearly there would be competitive pressure on the closed schemes to match the decrease, since otherwise both cardholders and merchants might jointly prefer to be part of, and make use of, the open schemes.<sup>191</sup> The closed scheme would remain free, however, to set the structure of its charges in the way it determines is best.

However, section 8.7 of this response shows that, to the extent that the RBA's proposed interventions succeed in getting open schemes to lower their merchant service fees, this is only achieved by forcing a suboptimal pricing structure, namely lower interchange fees, on the open schemes. Closed schemes, which have an effective equivalent to the interchange fee of the open schemes logically will not, despite the RBA's hopes, voluntarily disadvantage themselves by setting a lower effective interchange fee (and therefore a lower merchant service fee) just because the open schemes do so. That is, in the absence of similar public

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“[i]f merchants recover their costs from cardholders, the current gap in merchant service fees between the four and three party card schemes – and any widening in that gap – would be transparent to cardholders and, other things being equal, cardholders would continue to prefer the lower-cost option. Under these circumstances, it would be much more difficult for the three party schemes to maintain higher merchant service fees in the face of competition.”

<sup>191</sup> Visa says ‘might’ because the regulation may force the lower price open scheme to offer lower quality, while the higher price closed scheme offers higher quality. In this case, the closed scheme would obviously not ‘match’ the open scheme’s regulated price.

intervention to regulate closed schemes, there is no reason for the closed schemes to follow suit and match a suboptimal pricing structure.

The RBA seems to be equating its view that forcing open card schemes to lower their interchange fee will result in closed schemes following suit, with the view that regulating a dominant firm's price will ensure that smaller rivals, through competition, will adjust their prices in a similar way. However, this clearly does not apply to the case of regulating the interchange fee of an open card system (whether that system is dominant or not). This is because the interchange fee is not a price and, consequently, does not act like a normal price. Regulating the interchange fee does not have the same effect as regulating a normal retail price set by a dominant firm. To see this, consider what happens when the interchange fee is reduced. As discussed, a key effect of reducing the interchange fee would be to reduce the level of funding available to cover the costs of the network (including benefits to cardholders). This will encourage some cardholders to consume less and others to drop out of the network altogether. In other words, if the interchange fee is taken to be the 'price' of card services, then it seems that reducing the price leads to less consumption – this surely implies a highly perverse demand curve for card services. Lowering the price of a good does not usually lead to less consumption of that good. This suggests that either the demand for card services is indeed as perverse as this argument implies or, alternatively, that the interchange fee is not a price. The latter explanation entails fewer assumptions, is simpler and is better supported by economic analysis and by the available evidence.

Indeed, on the RBA's own terms, there is a clear inconsistency between the RBA's view that there is excessive use of cards due to the no surcharge rule and the level of interchange fees, and its view that closed schemes will match RBA regulations that would force members of open schemes to lower their interchange fee and allow merchant surcharging. If these policies (high interchange fees and the no surcharge rule) are the cause of the excessive use of cards, as claimed by the RBA, then rival schemes would not want to drop these policies just because open schemes are forced to do so.

A further inconsistency in the RBA's position is its view that both open and closed systems should be designated for the purpose of prohibiting the imposition of a no surcharge rule in both systems, but that only the interchange fees of open systems should be regulated.<sup>192</sup>

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<sup>192</sup> RBA Report, page ix (at paragraph 29).

First, this proposal suggests some acknowledgment on the RBA's part that regulating the two kinds of card systems differently is likely to lead to distortions. If the RBA accepts that this is true in the case of the no surcharge rule, why does it ignore this aspect in considering the implicit interchange fee embedded in closed systems?

Secondly, on the normative criteria proposed by the RBA's expert, Katz, the screen for whether a card system should be subject to a ban on no surcharge rules should be based on market power.<sup>193</sup> Katz argues that, if a system does not have market power, then that system acting on its own will not be able to force merchants to accept inefficient no surcharge rules, because the merchants will be able to turn to other payment mechanisms to meet consumers' payment needs. Thus it follows that, if the RBA is willing to contemplate applying the prohibition of the no surcharge rule to closed as well as open systems, then it accepts that the closed systems have a degree of market power that is at least significant enough to meet Katz's criteria. If this is so, it is puzzling that the RBA is not willing to contemplate similar interventions with respect to the internal pricing practices of closed schemes.

### 7.3 Independent pricing power

Finally, the RBA continually claims that Visa's arguments are reliant on the proposition that three party card schemes have completely independent pricing power.<sup>194</sup>

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<sup>193</sup> See page 51 of the Katz Report.

<sup>194</sup> At page 120 of the RBA Report, the RBA claims that:

“... Visa argues that the three party card schemes, even if subject to strong competitive pressures, would not be forced to match these reductions ... the analysis assumes that the three party card schemes can set their merchant service fees without any reference to the fees charged by the members of the designated credit card schemes. The proposition that three party card schemes have completely independent pricing power is difficult to reconcile with the standard observation that the price of close substitutes is a key determinant of the price of a good or service; ...”

However, as the previous sub-section has demonstrated, to the extent that the RBA's interpretation of Visa's arguments is based on the idea that closed schemes are responsive to cuts in merchant service fees forced on open schemes, this interpretation is clearly flawed, as there is no equivalence between a forced cut in interchange fees and hence merchant service fees on the one hand, and a forced cut in retail prices on the other hand.

This is quite different from saying there is no price competition between open and closed card systems, in the sense that there is pressure for the *overall* level of fees charged to cardholders and merchants to fall when a rival system lowers its *overall* level of fees. The interchange fee, however, is not a way of signalling resource costs to end-users; rather, it is a mechanism for aligning incentives *within* the card system with the costs and benefits to the system of alternative courses of action.

It seems that the RBA makes these fundamental errors because it fails to understand how competitive forces restrain the members of card schemes in setting interchange fees. This is the subject matter of the following section.

## 7.4 Scheme competition

As Rochet and Tirole discuss in their response to the RBA Report, there are three factors that ensure that competitive forces are sufficient so that it is not in the interests of the members of a card association to choose interchange fees that deviate markedly from social optima.<sup>195</sup>

First, network externalities imply that weakening one side of the business reduces the demand from the other side. Thus, assume that there is market power on the issuing side such that issuers try to set higher than optimal interchange fees. However, a high interchange fee would result in substantial merchant resistance and would induce many merchants to reject the card. Therefore, even though a very high interchange fee would result in a low marginal cost to the issuer of offering payment services to cardholders, which would seemingly be in the issuers' interests, this would do issuers little good if excessively high interchange fees induce some merchants to 'drop out'. This is because cardholders would reduce their use of the card or 'drop out' themselves, as many merchants do not

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<sup>195</sup> Rochet and Tirole, "An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems", pages 16-17.

accept the card. Thus any tendency towards setting excessively high interchange fees would tend to be self-correcting.

Secondly, competition within any particular open card scheme network implies that a reduction in the members' marginal cost of doing business is partly or fully competed away in favour of cardholders or merchants respectively. It is implausible to expect that issuers pocket all the proceeds of interchange fees. Even a monopolised issuing sector will still pass back some of the interchange revenue to cardholders, since interchange revenue represents an effective reduction in the cost of issuing. Given that some of the proceeds of interchange fee increases will go into reducing the prices charged to cardholders, this restrains issuers from setting interchange fees at excessive levels (that is, beyond the levels that would be necessary for them to ensure the correct balance between the differing incentives of cardholders and merchants to join (and remain on) the network).

Finally, there is also competition between card schemes that implies that merchants and/or cardholders can switch providers if a card scheme charges excessive interchange fees that translate into excessive merchant service fees. Even if the markets for issuing and acquiring are not effectively competitive, competition between card schemes tends to bring down the margins of both issuers and acquirers. Note that, in the case of open schemes, this competition between different card schemes is reinforced by competition between issuers and between acquirers within the same open scheme for cardholders and merchants respectively.

## 8 Response to the Katz Report

This section examines specific claims in the Katz Report that are relevant to the RBA Report. A review of these claims is an important part of determining the validity of the RBA Report, since the RBA has, in parts, relied so heavily on conclusions reached in the Katz Report. Claims are addressed in the order in which they appear in the Katz Report.<sup>196</sup>

### 8.1 Permanent increase in sales across the whole economy?

The Katz Report claims (for example, at paragraph 37) “that the public policy question is whether the use of these cards leads to a permanent increase in sales from the perspective of the economy as a whole”.<sup>197</sup> It is not clear what public policy question Katz is addressing in making this statement.<sup>198</sup> Whatever it is, it is likely to be flawed since the use of cards is not required to lead to a permanent increase in sales for the economy as a whole for such use to be desirable according to any reasonable welfare measure. In fact, almost all of the models which evaluate the welfare effects of setting interchange fees in card schemes assume that the total number of sales in the economy as a whole are unchanged as a result of card usage (see for example Schmalensee 2001, Rochet and Tirole 2001, and Wright 2001). Surely Katz means to include the utility of consumers in his public policy test.

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<sup>196</sup> In this section of Visa’s response, paragraph references are to paragraphs of the Katz Report, unless stated otherwise.

<sup>197</sup> Katz nowhere defines what he means by ‘a permanent increase in sales from the perspective of the economy as a whole’. If what he means is an increase in the volume of output, then he has fallen into the fallacy of misplaced concreteness. If conversely he means an increase in utility, then his test is surely readily met if consumer utility rises, quite regardless of whether net benefits accrue to merchants. (Of course, this assumes that gains to consumers from, for example, increased competition between merchants outweigh the losses to merchants but this seems a very reasonable assumption to make.)

<sup>198</sup> Indeed, this formulation is contradicted by Katz’s own contributions to the literature on network externalities: see footnote 91 above.

One reasonable inference from his belief that “the public policy question is whether the use of these cards leads to a permanent increase in sales from the perspective of the economy as a whole”, is that Katz either ignores the utility that consumers get from using cards, both directly and indirectly, or weights this utility as less than the utility of merchants.<sup>199</sup> How else would he have arrived at the conclusion that *the* public policy question is whether cards induce higher sales, since the primary beneficiary of higher sales are merchants? It is true that Katz does elsewhere cite the consumer utility from smoothing inter-temporal consumption that is facilitated by cards; but recognition of the importance of consumer utility in that context does not seem to have fully carried over into Katz’s framing of what he sees as the more general test.

Thus, it is probably reasonable to conclude that what Katz means to say is that the social benefits arising from the use of cards depends *in part* on whether there is any aggregate increase in sales that result from the use of cards when aggregated over the economy and over time. He claims that such benefits have been overstated since one merchant’s benefit (in terms of extra sales) is another merchant’s loss (in terms of lost sales) when merchants compete. Katz claims this matters since, if the magnitude of merchant benefits is less, then so is the size of the externality running from cardholders to merchants.

However, this does not imply that the externality does not exist, as the RBA seems to interpret the result.<sup>200</sup> Instead, the key implication of the fact that merchants accept cards in part to attract business away from rivals is that merchants will be more willing to accept cards than would otherwise be the case, making it efficient to recover from the merchant side of the network, a greater portion of the total costs of offering the joint service. This, in fact, suggests that a *higher* interchange fee is socially optimal (as is shown in Wright 2001).<sup>201</sup>

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<sup>199</sup> As pointed out in footnote 91, if this is Katz’s position, then it directly contradicts his own writings on network externalities, where he defines the concept in terms of consumer utility.

<sup>200</sup> Katz states: “[t]he fact that credit and charge card use may not increase aggregate consumption, or may do so by significantly less than some parties imply, does not mean that credit cards have no beneficial effects.” (refer paragraph 39 of the Katz Report at page 12).

Finally, it is worth noting that the claim that the aggregate effects on merchant sales of credit card acceptance will be negligible is grossly overstated, for reasons that are set out more fully above.<sup>202</sup>

## 8.2 Network effects and maturity

Katz (at paragraphs 46-47) suggests that mature networks may be less susceptible to network effects. This is an important claim since a critical step in the RBA's argument is that network externalities are no longer important in determining the appropriate interchange fee because, in the RBA's view, the card systems are already mature.<sup>203</sup> Katz notes two ways in which network effects diminish as networks mature.

First (at paragraph 46), Katz suggests that the effects of the 'chicken and egg' problem in a network diminish as the network matures. This point has no relevance to the issue at hand. The 'chicken and egg' problem is, in principle, relevant to the choice between competing networks if, say, open networks are 'mature' in the sense of being free of the 'chicken and egg' problem and closed networks are not. However, in practice it is not reasonable to argue that consumers might not consider paying the annual cost of subscribing to American Express or Diners Club because they think these systems will not exist within the period over which their subscription charge is amortised (typically, a year). Rather, in this sense of maturity, closed networks are just as mature as open networks. Moreover, Katz's maturity

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<sup>201</sup> Wright summarises the finding as: "[t]he optimal interchange fee was also found to be increasing in the extent to which merchants accept cards to attract additional customers to their stores". (Refer page 40 of *The Determinants of Optimal Interchange Fees in Payment Systems*, Department of Economics Working Paper No 220, University of Auckland, 2001).

<sup>202</sup> This is a simplistic view that, among other things, ignores the new transactions that are available because of the use of credit cards (such as through mail order, over the phone, using fax, and through the Internet), as well as various other effects discussed in section 4.2 of this response.

<sup>203</sup> The claim by the RBA that card systems are already mature is inconsistent with its view that it is the existence of network effects that gives the four party card associations an advantage over smaller three party card systems in competition (RBA Report, page 118).



argument (which is an argument about the existence of networks) is not relevant to whether network externalities are present and whether they provide a justification for setting interchange fees at levels that are not based on issuers' total costs or some specified sub-set of them.

The second suggestion by Katz (at paragraph 47) is that, at a sufficiently high level of membership, marginal changes to membership on one side will generate smaller or no benefits to users on the other side of the network. He argues that in a mature network, consumers can always substitute for merchants that are already on the network. This argument is flawed for at least two reasons. First, it ignores product differentiation between merchants. In reality, consumers do not view merchants as perfect substitutes. Thus, those consumers that prefer shopping at Woolworths to Coles, will still get a benefit when Woolworths starts accepting cards even if Coles already accepts cards. Secondly, whilst there will be some additional incidental merchants joining the system in established categories, there will also be a number of additional merchants that join the system from industry groups that previously did not accept cards, rather than from industry groups in which most, but not all, merchants accept cards.<sup>204</sup> In this case, Katz's argument does not apply. (In any case, even if card systems behaved as Katz thinks they do, an enforced reduction in interchange fees along the lines proposed by the RBA would still have substantial impacts in causing many cardholders to leave open card systems and thus undermine the viability of those systems.)

In short, Katz provides no solid arguments to suggest that network externalities are no longer relevant because networks are mature. Thus, arguments based on networks being mature, which are used by the RBA to diminish the importance of network externalities, can be dismissed.

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<sup>204</sup> Examples include: online sales (including of perishables), the fast food industry (approximately 2.7% of weekly average household expenditure), primary and secondary school education fees (generally, 1% of weekly average household expenditure), car parks, postage stamp sales and so forth.

### 8.3 Will merchant surcharging internalise network externalities?

Katz notes (at paragraph 57) that “surcharges may themselves serve as a mechanism for internalising network effects so that they are not network externalities”. This claim is important since it suggests that, by simply allowing merchants to surcharge for card purchases, network externalities can be internalised.<sup>205</sup> Katz himself recognises there are problems with the argument, noting:

“[i]n practice, frictions may prevent a merchant from engaging in surcharging even in the absence of formal restrictions. For example, there may be transactions costs associated with charging multiple prices, or merchants may fear some form of consumer backlash. Thus, the analysis in this section may overstate the extent to which removal of formal no-surcharge rules affects the market outcome.”

As is shown here, this qualification is a gross understatement. The removal of the no surcharge rules is in fact highly unlikely to have the effect of allowing externalities to be internalised. This is not a valid argument for forcing payment schemes to remove the rule.

In practice, there is little evidence that removing the no surcharge rule will lead merchants to set differential prices so that externalities will be internalised. According to the ITM and IMA studies cited by Katz and the RBA, in countries where the no surcharging rule has been lifted, thus allowing merchants to design their own pricing structures, the majority of merchants have continued charging the same price regardless of transaction method.

The claim by Katz that direct merchant pricing through differential pricing structures can adequately capture network externalities also ignores the free riding problem facing individual merchants. Wright (2000) shows that the free riding problem can result in excessive surcharging when firms do surcharge. The social inefficiency of surcharging arises because of a combination of an externality and a free-rider problem. Cardholders do not take into account the value merchants get from transactions that are made possible by customers holding and using cards (the externality). Each cardholder takes as given the number of

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<sup>205</sup> The RBA appears to use this argument as another way of diminishing the importance of network externalities. At page 27 of the RBA Report, the RBA claims “[d]ifferential pricing may therefore allow the market to internalise effects that would otherwise be externalities”.

merchants. Merchants, on the other hand, are not willing to voluntarily subsidise customers to join the card network. Each individual merchant takes as given the number of cardholders, realising that its own contribution to a system-wide subsidy will have a negligible effect on the decision of any potential customer to join the card network. Instead, merchants that are free to surcharge will surcharge too much. Thus, even merchants that face no transaction costs of surcharging will not internalise the network externality. In addition, individual issuers are also likely not to fully take externalities into account if they are left to their own devices and are not incentivised via the interchange fee to grow a cardholder base.

In summary, Katz has greatly exaggerated the ability of merchant surcharging to solve the externality problem. He notes, and then ignores, the transaction costs of internalising externalities by surcharging. The use of a single interchange fee to internalise network externalities between cardholders and merchants is likely to be far more efficient than having multiple prices at thousands of different stores. He notes and then dismisses evidence from reports commissioned by the European Commission that most merchants do not in practice surcharge even when they are allowed to do so. This is despite the fact that the European Commission was persuaded by this evidence that there was little, if any, benefit in lifting the no surcharge rule. He also ignores economic analysis (see Wright, 2000) that provides sound reasons why externalities will not be internalised by merchants that are free to surcharge, even if there are no transaction costs of surcharging.

## **8.4 Economic analysis of efficient interchange fees**

In Section VI.B of the Katz Report (page 25), Katz looks at the case of efficient interchange fees without surcharging. He surveys the existing academic literature and summarises his findings by noting (at paragraph 103) that:

“[s]ummarizing the findings on socially optimal interchange fees, there are situations in which it is optimal to use interchange fees to rebalance costs and benefits enjoyed by the two sides of a card-based transaction. The socially optimal fee level depends on the nature of merchant, issuer, and acquirer competition, as well as consumer characteristics. As a general matter, when no-surcharge rules are in effect, there is little reason to believe that it is optimal to set the interchange fee equal to either an issuer’s marginal costs of a card transaction or zero.”

Despite this finding, the RBA’s proposed interchange fee standard is based on specified elements of the costs of issuers. Katz’s conclusion, noted above, indicates there is no justification for such an approach. He notes there is little reason to think setting the

interchange fee based on the costs of issuers is desirable. Furthermore, nothing in the Katz Report provides any grounds for thinking that a cost-based approach is likely to be closer to the socially optimal outcome than the interchange fees currently set by card associations' members.

Despite the fact that the RBA have ignored Katz's conclusion in this regard (which is based on his survey of the economic literature), the RBA proceed to pick out specific conclusions reached by Katz which support its arguments that are based on the same survey of the economic literature. It does this even though, in some circumstances, these conclusions involve obvious mistakes. For instance, on page 30 of the RBA Report, it is claimed "[i]n the Rochet and Tirole model, the optimal interchange fee is zero if issuing and acquiring are perfectly competitive". This is presumably copied from Katz's conclusion (at paragraph 96) that "[w]hen issuers are perfectly competitive as well, the optimal interchange fee is zero." However, this conclusion is plainly false. As Katz himself correctly points out later in his report when going through Rochet and Tirole's model in more detail (Katz Report, footnote 175), "... as the issuer margin goes to zero, the socially optimal interchange fee goes to  $b_m - c_A$ ". In general, the socially optimal interchange fee will be different from zero, contrary to the earlier claim by Katz and contrary to the same claim repeated by the RBA.

In short, it appears the RBA has blindly copied Katz's conclusions where they suit its arguments and ignored other conclusions that do not support its arguments. A more thorough critique of Katz's survey of the economic literature on interchange fees is conducted later, in evaluating his technical appendix.

## **8.5 Current practices for setting interchange fees**

In Section VI.C of the Katz Report (page 29), Katz raises doubts as to whether the current practices of the members of card associations in setting interchange fee levels are consistent with the predictions from economic models that assume profit maximising card associations. The RBA, in section 2.5 of the RBA Report, raises similar doubts, in effect claiming that card associations do not set interchange fees in the way described by the economic models (which assume members of card associations set interchange fees to maximise their joint profit). However, it is worth noting that neither the RBA nor Katz explain how their observation that interchange fees are seldom changed implies they are set by monopolistic card schemes or in a way that is harmful to society. Clearly, according to economic theory, a monopolist as much as a social planner will adjust prices to changes in relevant parameters. Rather, what the evidence would seem to suggest is that members of card associations have left interchange fees steady for long periods since there has been little reason to change the

interchange fee given the success of the current schemes. Why would a scheme change practices that are so obviously working? To suggest that interchange fees be set in a scientific way, according to economic theory, displays a considerable degree of naivety about market processes. Firms do not typically calculate their optimal prices by estimating their own and cross elasticities, plugging these into formulaic reaction functions and constructing market equilibrium outcomes. Typically, firms set prices by trial and error, and adjust prices when conditions suggest they need to do so.<sup>206</sup>

If these claims are right, and card associations' members do not set interchange fees in the way specified by these models, then there are two obvious implications.<sup>207</sup>

First, to the extent these models are relevant, they should be used to determine the appropriate level of interchange fees (that is, the socially optimal interchange fee). The RBA, motivated by the Katz Report, is surely poorly placed to criticise card associations' members for not setting interchange fees in accordance with the predictions of economic models, when the RBA itself proposes to do exactly the same thing. The interchange fee standard advocated by the RBA takes no account of the implications of economic models for determining the socially optimal interchange fee, as noted previously.

Secondly, if card associations' members do not set interchange fees based on the privately optimal level predicted by the economic models, then the arguments about the discrepancy between the privately and socially optimal interchange fee made by Katz (paragraph 104) are

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<sup>206</sup> See the discussion in section 3 as to how economic models regarding the behaviour of firms should be interpreted.

<sup>207</sup> Katz claims that the way in which Visa sets its interchange fee is inconsistent with the predictions of economic models (paragraphs 111 and 112). He argues Visa's methodology for setting interchange fees in Australia (as characterised by the rule in Section 5 in Wright 2000), leads to the opposite implications of a higher issuer margin to the implications of the analyses of Gans and King, Rochet and Tirole, and Wright (see footnote 98 of Katz for references). This claim is wrong. As equation (53) demonstrates in Section 5 of Wright's paper, the interchange fee set by Visa will be increasing in the issuer margin. This is consistent with the implications of other models of interchange fees, and inconsistent with Katz's claims.

quite irrelevant as to whether the current interchange fees are above or below the socially optimal level. It is, in other words, simply inconsistent to (1) criticise the current fees for not being explicitly calculated from a formal economic model of the interchange fee and then (2) assume that the current fees reflect the privately optimal level of interchange, as would be calculated from a formal economic model, and hence assert that they are sub-optimal. Rather, any sensible assessment of the optimality or otherwise of the current fees should proceed by estimating the socially optimal interchange fee based on the economic models, and then comparing this to the current setting of interchange fees. This is an exercise that has not been attempted by Katz or the RBA.

## 8.6 Proposals for setting interchange fees

Katz identifies that the possibility of divergence between social and private incentives implies that “there may be scope for public intervention to improve matters” (paragraph 114). Such a statement, as a conclusion from the analysis of network effects and interchange fees in payment schemes, hardly gives the green light for the kind of heavy handed public intervention proposed by the RBA. In almost any market that an economist might analyse, he or she would likely reach the same conclusions, namely that there is the possibility of a divergence between social and private incentives and that there may be scope for public intervention to improve matters. This, in itself, hardly provides a justification for active intervention, and it does not justify the type of intrusive regulation proposed by the RBA.<sup>208</sup>

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<sup>208</sup> Once again, in his contributions to the literature on network externalities, Katz exhibits a sophistication of understanding of the sensitivities involved in government intervention that seems to be missing from his report for the RBA. Writing (with Farrell) in the context of government intervention into network markets, Katz states at page 2 of Farrell and Katz 2001, ‘Competition or predation? Schumpeterian rivalry in network markets’, University of California, Berkeley, Working paper no. E01-306:

“One school of thought holds that network effects make acts aimed at weakening competition more likely to succeed and more harmful. Proprietary network effects can indeed create a durable advantage for a predator, preventing the prey from returning to its full competitive prowess once the recoupment period begins.

Katz, himself, notes in the same paragraph that “[a]n assessment of the value of intervention must consider not only the problems with the current outcome, but also the possible adverse consequences of intervention.” There is little evidence in the RBA Report that any serious

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This view is, however, incomplete in two significant respects. First, one must examine the possibility that the prey might resist predation more vigorously and/or successfully in markets with network effects. Second, even if successful predation is likely, it does not follow that public policy should intervene in network markets to prevent predation.”

Katz’s cautious approach to government intervention in markets exhibiting network externalities is also expressed strongly in Katz and Shapiro 1994, ‘Systems competition and network effects’, *Journal of Economic Perspectives*, pages 112-113, wherein he discusses systems markets, which also include credit card networks and other payment systems which are also characterised by network externalities:

“Since market outcomes may be inefficient, it is theoretically possible for government intervention to improve market performance. But there are several issues that must be addressed before concluding that government intervention is warranted in practice.

First, the extent of the market inefficiency is unclear, once recognition is given to the many private institutions that arise to achieve coordination and internalise externalities ... there are many possible responses of systems markets to these problems that involve no government intervention whatsoever.

Second, there is the question of whether the government would have incentives to improve matters ...

Third, even if policy-makers try to maximise total surplus, they may lack the information needed to do so ...

In short, we are far from having a general theory of when government intervention is preferable to the unregulated market outcome.”



consideration has been given to the possible adverse consequences of intervention.<sup>209</sup> The one negative consequence of intervention that is considered (and then dismissed) by Katz and the RBA is considered next.

## 8.7 Distortion of competition resulting from public intervention

In Section VI.E of the Katz Report, Katz examines the distortions to competition that Visa has argued will arise if open schemes (such as Visa and MasterCard) have their interchange fee effectively capped, while closed schemes (such as American Express and Diners Club) remain free to set cardholder and merchant service fees without intervention.

It is notable that Katz does not claim, as the RBA does,<sup>210</sup> that the fact that open schemes set an interchange fee but closed schemes do not is grounds enough for regulating open schemes. This is for good reason. As Katz himself notes (at paragraph 17), American Express in effect sets an interchange fee (“[h]owever, American Express and its issuing partner, AMP, have an agreement that links AMP’s compensation to the merchant fees collected by American Express. This compensation is the economic analogue to an interchange fee.”). Indeed, even if American Express did all its own issuing, it would still have to set its merchant service fees and cardholder fees in such a way as to effect a transfer to cardholders which serves the same function as the explicit interchange fee does in an open scheme. Given this, there can surely be no grounds for the RBA to argue that it is the fact that open schemes set an interchange fee which means they are the only schemes which should be regulated, especially since, in the RBA’s draft standard for regulating interchange fees it emphasises (at

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<sup>209</sup> For instance, Visa’s response to the RBA/ACCC Joint Study found that the Australian economy would be worse off by A\$4.5 billion if the no surcharge rule were abolished, while the RBA’s selective regulation of open schemes’ interchange fees would distort competition between open schemes and closed schemes, shrinking the card networks run by open schemes and distorting competition between open and closed schemes.

<sup>210</sup> RBA Report, page 118: “American Express and Diners Club, on the other hand, do not have collectively determined interchange fees. Whether they have an internal transfer mechanism or “implicit” interchange fee is not relevant; the three party card schemes do not have a process under which competitors collectively agree to set a price which then affects, in a uniform way, the prices each of the competitors charges to third parties.” (footnote omitted)



5 on page 58 of the RBA Report) that “[t]his Standard is to be interpreted: in accordance with its objective; and by looking beyond form to substance”.

Instead, Katz argues that the regulation of open schemes is justified, since “Bankcard, MasterCard and Visa have overlapping ownership and governance and collectively dominate the credit card systems market in Australia, and thus designation can be viewed as intervention based on the extent of market power” (paragraph 123).<sup>211</sup>

Nowhere does Katz explain why he has come to the view that there is such a market as the “the credit card systems market in Australia”. But even if there were such a market, the fact that an open scheme has a large market share in that market does not necessarily indicate it has market power. Instead, a large market share may simply indicate a scheme that is large because it has promoted competition among its members. Indeed, there is an additional consideration in the case of open schemes that mitigates against any concerns regarding market share. This is the fact that in open schemes this market share is not, in reality, held by one monolithic entity, but rather by financial institutions (issuers and acquirers) which also compete among themselves as well as against members of other card schemes. This means that consumers should be sufficiently protected from any market power of card associations because of intra-scheme competition.<sup>212</sup>

Although the members of an open scheme collectively set a single interchange fee, this is simply a transfer from acquirers to issuers that has only an indirect effect on the total price they collect from the market (from cardholders and from merchants in total) and on the total number of card transactions conducted. If the members of a card association had market

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<sup>211</sup> It is also notable that neither Katz nor the RBA recognise the benefits of the joint venture organisational form of open schemes. They repeat the bias against this joint venture form (even though this form encourages competition) by using the fact that these systems require competitors to cooperate as an almost *per se* grounds for regulation (for example, Katz at paragraph 123 and footnote 115, and the RBA at pages 5, 63 and 118 of the RBA Report). The result puts a seemingly impossible onus of proof on joint ventures (open schemes) to which closed schemes are not subjected.

<sup>212</sup> The levels of competition within open card schemes is discussed in section 7.4 of this response.

power and could exercise their market power by manipulating the interchange fee, then this would involve using the interchange fee to restrict output (the number of card transactions) so as to raise the total fee revenues they collect from users (cardholders and merchants). It is not clear they can do this.

Notably, neither the Katz Report nor the RBA Report provides any evidence (or even a claim) that card associations are using the interchange fee to reduce the total number of card transactions (and thereby increasing the total retail price collected from cardholders and merchants). If anything, Katz and the RBA claim the opposite (that members of card associations set interchange fees that lead to too many card transactions).<sup>213</sup>

If regulating open but not closed card schemes cannot be justified on market power considerations, how else can it be justified? The RBA offers another rationalisation which is based on the idea that, through competition between card systems, any regulations imposed on the open schemes will also have to be met by closed schemes.<sup>214</sup> Thus, according to this argument, there is no need to regulate closed schemes anyway, since competition will ensure that any regulation imposed on one system is effectively imposed on the other.

Visa has shown this argument does not hold in its paper entitled “Delivering a Level Playing Field for Credit Card Payment Schemes”. That paper showed that closed schemes will gain

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<sup>213</sup> Consequently, as Schmalensee, Evans and Chang point out at pages 5-6 of their response to the RBA Report entitled “An Economic Critique of the Reserve Bank of Australia’s Proposal for Interchange Fee Regulation”, March 11 2002, the focus of the RBA (which is reflective of Katz’s and the RBA’s concerns that there are too many card transactions) seems to be on reducing output. This focus is antithetical to traditional competition law concerns:

“It is important to recognize the unorthodox, not to say revolutionary, regulatory objective espoused by the RBA: it seeks to use regulation to lower an industry’s output by raising prices to cardholders. Normally, competition and regulatory policies seek to raise output by lowering prices. Not only is the regulatory objective revolutionary, but it is advanced despite the lack of any clear finding of a competitive problem.”

<sup>214</sup> RBA Report, page 119.

an advantage from being able to continue to offer rebates to card users, thus attracting more card transactions from open schemes, and which open schemes will not be able to offer once their interchange fee is effectively capped at lower levels.

Katz does not show why the arguments made in Visa's paper do not hold and, further, makes a number of claims against the paper. However, as shown below, these are of no relevance to the validity of the results the paper presents.

More specifically, Katz argues (at paragraph 124) that the results presented in Visa's paper depend on "merchants' inability to surcharge". However, as noted above in section 8.3, this is a reasonable approximation to the uneven merchant surcharging that is likely to exist in actual practice (whether or not it is allowed by the card schemes). It is surely a much more plausible assumption than is that of assuming that all merchants will pass through costs to cardholders by way of merchant surcharges.

Katz argues (at paragraph 124) that the results depend on the existence of "card-user rebates". Again, this is surely a highly realistic assumption, given that many issuers offer card rebates. In particular, what matters for the results is that closed schemes will continue *to be able* to offer card rebates, which seems very likely since the proposed regulation does not prevent them from doing so. It is difficult to understand on what basis, if any, Katz could query the plausibility of assuming that this will be the case.

Katz further argues (at paragraph 124) that the results depend on "the fact that merchants garner individual increased-sales benefits of card acceptance even if there are no collective merchant benefits". However, this merely goes to show that one does not have to assume collective merchant benefits from accepting cards to derive the results that closed schemes will benefit at the expense of open schemes.

Katz also takes issue (at paragraph 126) with the approach used to characterise the objectives of card schemes. In particular, he claims it is irrelevant that regulating open schemes will "impair the association and its members' ability to maximize the number of card transactions", since it has not been established that card schemes would try to "maximize the number of card transactions absent designation and that maximizing the number of transactions would be in the public interest". He points to the possibility that unregulated card associations may set interchange fees above the level which maximises the number of card transactions (paragraph 127) and that maximising the number of card transactions may in any case promote the overuse of cards, so that the socially optimal interchange fee may be lower than that set by maximising the number of card transactions (paragraph 128). These claims show Katz has misunderstood the purpose of the exercise.

In order to analyse the effects of regulating open but not closed schemes, some assumptions must be made about how open schemes set their interchange fee absent regulation. Assuming that card schemes try to maximise the number of card transactions seems like a reasonable starting assumption (all the more so as the card associations are often accused, most notably by the RBA, of adopting policies that lead to over-usage of cards).<sup>215</sup> Katz claims a card association may want to set the interchange fee above (rather than at) the level which maximises the number of card transactions. Although Katz provides no evidence to suggest that the members of card associations set interchange fees materially above the level which maximises the number of card transactions, one could analyse the effects of regulating open but not closed schemes under this alternative assumption. However, doing so will not affect the results obtained. Provided the regulation of the card associations' interchange fee results in a reduction of card transactions below the level which would be chosen privately, the logic in Visa's August 2001 paper entitled "Delivering a Level Playing Field for Credit Card Payment Schemes" continues to prevail.<sup>216</sup> Unregulated closed schemes will be able to attract additional card transactions at the expense of open schemes, and there is no reason to expect closed schemes to match the changes in fee *structure* (between cardholders and merchants) imposed on open schemes by the regulation of their interchange fee.

A possible reason why Katz wrongly claims that the analysis in Visa's paper depends on these assumptions is that he fails to recognise the two-sided nature of a payment network, and the implications this has for competition between networks. Evidence for this is the apparent surprise he expresses that competition does not necessarily lead one firm to follow a change imposed on another (in the way it would with normal price competition between two producers of a standard product); see paragraph 124 for instance. There is no result in economics which suggests that, when two-sided networks compete and one (or more) of the

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<sup>215</sup> Since the paper was not about determining the socially optimal interchange fee, the possibility that the socially optimal interchange fee may differ from the output maximising level is irrelevant to the exercise in the paper (contrary to the suggestion of Katz implicit in paragraph 128).

<sup>216</sup> Since the RBA claims that there are (at least) grounds for concluding that existing policies and practices have the potential to promote overuse of credit cards (see for instance page 32 of the RBA Report), it is only reasonable to assume its regulations will be designed to have the effect of reducing the number of credit card transactions.

networks has a restriction imposed on the *structure* (rather than level) of fees it can set across the two sides of the network, then rival firms will also change their structure of fees in the same way to remain competitive. For example, if one auction website is forced to charge buyers and sellers the same fee, this does not imply rival auction websites will want to follow suit, if they find by charging sellers and not buyers they can maximise the usage of (or profit from) the auction service. The analysis in Visa's paper entitled "Delivering a Level Playing Field for Credit Card Payment Schemes" (August 2001) suggests this logic also applies to competing payment systems.

The inconsistencies caused by regulating open but not closed schemes is not confined to the issue of interchange fees, which was the focus of Visa's paper entitled "Delivering a Level Playing Field for Credit Card Payment Schemes". It also applies to each of the other issues raised by the RBA. Thus, if open schemes are not allowed to impose the no surcharge rule, then neither should closed schemes be allowed to do so. If open schemes are restricted in the access rules they can use, then closed schemes should also be required to provide access to their networks to other financial institutions on regulated terms.

The Katz Report (and the RBA Report) fails to offer any sound reason why the logic of Visa's paper entitled "Delivering a Level Playing Field for Credit Card Payment Schemes" does not hold. Visa's paper shows that, in the context of regulating open schemes, not regulating closed schemes will cause (page 64 of Visa's paper):

- the increased use of American Express, Diners Club and GE Capital cards, at the expense of open scheme cards;
- an increase in merchant service fees corresponding to the increase in use of these cards;
- the ability of proprietary systems to set what amounts to interchange fees and access conditions with respect to partners and issuing agents, without regulatory constraint;
- a loss in allocative, productive and dynamic efficiency;
- a regulatory bias against small merchants and small financial institutions; and
- potentially far-reaching implications for the development of future joint ventures.

Clearly, the public interest is not being taken into account by the proposed regulation of open, but not closed, schemes.

## 8.8 Adverse welfare effects of no surcharge rules?

In Section VII.A of the Katz Report, Katz makes claims about the adverse welfare effects of the no surcharge rule. The basis for these claims is extremely unclear since the conclusions reached do not correspond to the specific findings to which he refers.

In particular, Katz claims (at paragraph 132) that “in *most economic models*, removal of a no-surcharge rule leads to lower retail prices charged to non-card users under the assumption that merchants find credit and charge card transactions more costly than others” (emphasis added).

Although it is not clear what Katz means by “in most economic models”, his claim is plainly incorrect. There are two main papers that support this claim, and two that do not. Moreover, surely what matters is what happens to *overall* welfare, rather than to the welfare of ‘non-card users’. On this criterion, both of the papers that support Katz’s claim do not find that removal of the no surcharge rule is necessarily welfare-enhancing. In fact, as Katz himself notes (Katz Report, paragraph 191), the Schwartz and Vincent paper he refers to concludes that “a no-surcharge rule may raise or lower total surplus”. In the main part of their paper, Schwartz and Vincent find that, unless the level of cash transactions is very small, welfare *decreases* when the no surcharge rule is lifted (Schwartz and Vincent, proposition 5(i)). Schwartz and Vincent find opposite results for an open card scheme under linear demand by consumers, but in this case consumers (both cardholders and non-cardholders) are better off in aggregate (consumer surplus increases) as a result of the no surcharge rule being imposed.<sup>217</sup> Thus, it is hard to see how Schwartz and Vincent’s paper can be used to support abolishing the no surcharge rule.

The other paper that supports the claim by Katz that removal of a no surcharge rule leads to lower retail prices charged to non-card users, is the paper by Rochet and Tirole. However, as Wright shows in a generalisation of Rochet and Tirole’s framework to allow for

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<sup>217</sup> Note, to get the result that non-card users are worse off under the no surcharge rule, Schwartz and Vincent assume that, even if merchants paid nothing to accept credit cards, they would still obtain no benefits from accepting cards. This assumption is critical to their results. They also assume there is a single monopoly merchant that always accepts cards.

heterogeneous merchants,<sup>218</sup> in general it is quite possible for prices charged to non-card users to increase or to decrease when the no surcharge rule is removed (see the discussion following equation 17 in Wright 2001).

The other paper mentioned by Katz is that of Gans and King (Regulating Interchange Fees). As Katz notes, the Gans and King paper does not support his claim (Katz, footnote 127). Thus, there is really no basis for the claim made by Katz (at paragraph 132) that “in most economic models, removal of a no-surcharge rule leads to lower retail prices charged to non-card users under the assumption that merchants find credit and charge card transactions more costly than others”.

Katz claims (at paragraphs 133 and 134) that there can be distortions in the consumption levels across different markets or between market and non-market goods as a result of the no surcharge rule. However, there is no reason to believe there would be *fewer* distortions if the no surcharge rule were lifted. The result of allowing surcharging, as discussed in section 8.3, is likely to be only limited surcharging, with those merchants that do surcharge not necessarily doing so on a cost basis. It is hard to see how such pricing can lead to fewer distortions to consumption – which is surely the relevant test.

## **8.9 Arguments in support of no surcharge rules**

In Section VII.B of the Katz Report, Katz attempts to refute four arguments which he claims have been put forward in support of the no surcharge rule. None of the arguments he offers gives any reason to conclude that removing the no surcharge rule will, on balance, improve economic welfare.

### **8.9.1 Cross subsidy between credit card and non-credit card users**

The first argument (given in Section VII.B.1) Katz examines is that, contrary to claims in the Joint Study by the RBA and the ACCC, the no surcharge rule does not give rise to a cross subsidy between credit card users and non-credit card users. Katz appears to accept this argument (at paragraph 137), although he argues that whether there is a cross subsidy or not

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<sup>218</sup> “The Determinants of Optimal Interchange Fees in Payment Systems” (2001).



is not what is relevant. Rather, in his view, what matters is whether non-card users face higher prices as a result of merchants accepting credit cards.

As Wright shows in his generalisation of Rochet and Tirole's framework to allow for heterogeneous merchants,<sup>219</sup> in general it is quite possible for prices charged to non-card users to increase or to decrease when the no surcharge rule is removed (see the discussion following equation 17). Katz (at footnote 137) quotes this finding, but then claims that it does not apply since it depends on merchants enjoying transactions benefits that exceed merchant service fees. Katz challenges this condition as "unrealistic for many merchants" based on ARA data and the observation that some merchants try to steer consumers to other payment mechanisms. However, this reasoning is flawed in several respects.

First, the ARA data has severe problems. As noted in section 4.3 of this paper, even the RBA admits that there are severe methodological problems with the ARA study.<sup>220</sup> It is therefore surprising and troubling that the RBA and Katz are prepared to take the findings of a report from an interest group (the ARA) at face value despite obvious problems (including as to representativeness of retailers, let alone card-accepting merchants, as a whole), but are not prepared to take into account the reasonable findings of other stakeholders (such as in Visa's paper entitled "Delivering a Level Playing Field for Credit Card Payment Schemes").

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<sup>219</sup> Refer footnote 218 and accompanying text.

<sup>220</sup> At footnote 23 on page 24 of the RBA Report, the RBA writes of the ARA study that:

*"These data differ from the average transaction values derived from the Reserve Bank's Transaction Cards Statistics Collection, which give the average value of a credit card transaction at around \$110 and that of a debit card around \$60. The difference is most likely due to sampling. The ARA survey covered a group of retailers for which big ticket credit card sales are a relatively small share of sales. The Reserve Bank's data averages all credit card transactions, including big ticket purchases such as home furnishings and travel, that cannot be made on debit cards because of transaction limits imposed by issuers. The data also include cards used for business purposes which have a higher average transaction value."* (emphasis added)



Secondly, the fact that some (or even many) merchants may get transactional benefits less than the merchant service fee they pay does not prove that non-cardholders will be worse off, as equation (17) in Wright (2001) shows. That equation shows that the result depends only on some of those merchants that accept cards enjoying transactional benefits that exceed their merchant service fee.<sup>221</sup> Clearly, some merchants will receive such benefits (for instance, in industries where card customers would otherwise tend to use cheques a lot, or where employee theft of cash is a particular problem).

Thirdly, Katz does not provide any basis for his claim that “some merchants try to steer consumers to other payment mechanisms.” What evidence is available suggests there is relatively little such ‘steering’. For instance, evidence from the Netherlands and Sweden studies cited by the RBA<sup>222</sup> suggests discounts for cash are not very common in those two jurisdictions where the no surcharge rule was lifted. In the Netherlands, just 8% of people say they have ever been offered a discount for making payment with an alternative means of payment to a credit card (ITM). In this case, discounts were primarily offered by those using Eurocard/MasterCard rather than those paying by Visa. In Sweden, only 5% of merchants offer a discount for payment by other means. The main reasons given by merchants in the survey were:

“merchants do not wish to differentiate between customers due to different means of payment (29%). In addition, card payment is regarded as a well functioning, safe system, that one would rather like to encourage, thus avoiding cash handling as far as possible (23%); 11% of the merchants believe that discounting would lead to negative cardholder reactions and loss of customers, whereas 8% claim they could

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<sup>221</sup> Wright’s paper is a generalisation of Rochet and Tirole’s model to allow for heterogeneous merchant benefits, so the comments by Katz about the findings of Rochet and Tirole’s model in paragraph 138 are redundant.

<sup>222</sup> IMA Market Development AB (2000), ‘Study Regarding the Effects of the Abolition of the Non-discrimination Rule in Sweden, for European Commission Competition Directorate General’, February and ITM Research (2000), ‘The Abolition of the No-discrimination Rule’, Amsterdam, March.

not afford any such measure, and 2% think discounting would be impractical to handle.”<sup>223</sup>

None of this evidence points to a predominance of merchants trying to steer consumers away from using credit cards. Moreover, Visa understands that there is no evidence from Australia that merchants offer discounts to consumers that make payments on EFTPOS despite the fact that, in Australia, EFTPOS would seem to be a particularly cheap form of payment for merchants to accept.<sup>224</sup>

Even if Katz could verify his claim empirically, it does not contradict the possibility that a sufficient base of merchants receive transactional benefits greater than merchant service fees so as to lower the overall retail price faced by consumers. Even those merchants that receive transactional benefits greater than merchant service fees may want to steer consumers to another payment mechanism if they receive even greater benefits (relative to costs) from that alternative payment mechanism, at least at the margin. To properly interpret evidence that some merchants try to steer consumers to other payment mechanisms, if it exists, one needs to take into account that there are multiple payment mechanisms. A cash-paying customer may benefit from a merchant deciding to accept cards if, as a result, many of those people who would have previously used cheques now use credit cards for purchases and, as a result, the merchant faces greater net benefits, even if they would obtain greater benefits if the people who previously used cheques were to use debit cards for purchases.<sup>225</sup>

Another reason why non-card using customers may be better off from the existence of card-paying customers is if card-paying customers result in higher sales to merchants which, through competition, lower prices when they enjoy greater economies of scale. Katz dismisses this argument because, in his view, cards simply divert sales amongst merchants

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<sup>223</sup> IMA (2000), page 26.

<sup>224</sup> Refer pages 61-68 of the Joint Study conducted by the RBA and the ACCC, regarding both the direction of the interchange fee in debit card transactions, as well as the costs to merchants of accepting debit card transactions.

<sup>225</sup> The cash paying customer may also benefit directly when his/her queuing time is reduced by someone paying by credit card rather than cheque.

rather than creating any new economic activity. This is a simplistic view that ignores, *inter alia*, the new transactions that are available because of the use of cards (such as through mail order, over the phone, using fax and through the Internet).

Another effect of cards (or store cards) is that they allow customers to make more infrequent but larger purchases. These “bigger trolley” effects favour stores that have a full range of goods, such as large supermarkets and major shopping centres with concentrations of shops. Here, customers can secure economies of scope as they save time travelling to multiple stores, and can amortise the fixed costs of travelling a longer distance due to the scale of the outlay. This helps shift the distribution of outlays towards large stores located at central locations, such as suburban shopping centres, which achieve scale and scope economies and hence can pass on some benefits in the form of lower prices.

Though larger retailers keen on exploiting their market power may not be especially happy about this, cards also allow smaller retailers to compete on a more equal footing with larger retailers. It is doubtful that smaller retailers have any comparative advantage, much less any capacity, in bearing the risk that a consumer will fail to make good on a cheque that is written. They may have the ability to ‘spread’ some of their losses onto other buyers, but even this will be limited in a competitive market. Thus, any losses arising from dishonoured cheques are likely to fall more heavily on small businesses, which will have less ability to spread these losses when compared to the larger retailers. Consequently smaller merchants may be less likely than larger merchants to accept personal cheques (this would also limit the potential sales of small merchants). On the other hand, cards enable merchants to shift the risk of a dishonoured cheque and consumer default to financial institutions (namely, issuers) that are better able to bear these risks and the resulting losses. This ‘risk shifting’ effect means that smaller retailers are placed at a lesser disadvantage to better resourced larger retailers. The successful creation and growth of small, low-overhead Internet, computer and catalogue businesses in recent years likely owes a considerable amount to the spread of cards as a purchasing mechanism (as discussed in section 4 of this document). Thus, to say that an important proportion of retailers derive substantial transactional benefits from the use of cards is likely to be an understatement – many retailers may owe their genesis to the increased opportunities to trade created by cards.

Additionally, and not mentioned by Katz, is the fact that the existence of general purpose cards may promote greater competition between retailers, compared to a situation where retailers (or at least those large enough to do so) each offer their own store cards. Store card schemes may tend to lock in customers to the store offering them, and so may tend to reduce the ability of consumers to easily switch between different suppliers of the same good. By

increasing competition, general purpose cards may reduce retail prices, benefiting even those who do not use cards. The risk-shifting effect of cards, by allowing smaller retailers to compete on a more equal footing, also intensifies retail competition and makes it less likely that larger retailers can exploit their market power.<sup>226</sup>

Finally, Katz briefly mentions economic efficiency, noting that the no surcharge rule can harm economic efficiency by creating distortions in the use of alternative payment mechanisms and in retail purchases by consumers not using the credit or charge card at issue. Such efficiency gains assume that, in the absence of the no surcharge rule, prices will be set to reflect the underlying costs of different payment mechanisms. As noted previously, there are good reasons to doubt this will be the case. Moreover, Katz ignores the efficiency gains caused by the no surcharge rule from the reduction in distortions in the retail purchases by consumers using the credit or charge card (which will tend to offset any distortions created in the retail purchases by consumers not using the credit or charge card at issue). Most critically, Katz ignores the fact that most economic models show that the removal of a no surcharge rule has, at a general level, an ambiguous effect on welfare and, in the only quantification of the various offsetting effects, Wright (2000) finds that the impact of the removal of a no surcharge rule is to reduce welfare in Australia.

### **8.9.2 Exploitation of card users through excessive fee setting**

The second argument used to support the no surcharge rule that Katz challenges is that merchants will exploit card users by setting fees in excess of the cost of merchant service fees (see Section VII.B.2 of the Katz Report). Katz rules out the Cabcharge example given by Visa as being non-representative of the Australian economy since “Cabcharge is owned by the taxi industry and is used in 90 percent of taxis. Cabcharge is an unusual situation in which an industry has created its own payment mechanism and apparently acts on a cartelized basis to enforce an agreement to charge high prices to consumers” (paragraph 143).

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<sup>226</sup> A very recent survey conducted for Visa found that 65% of small-business respondents agreed that “credit cards make it easier for small businesses to compete against major stores with their own store cards and finance deals”: UMR Research, *Retailers Research Study*, March 2002, page 15.

Even putting aside the rather stark difference between this account of Cabcharge's behaviour and that given by the RBA in its main text (and the fact that the Cabcharge fee is a service/convenience fee, not a surcharge), Katz clearly misses the point made by Visa in its paper. In that paper, Visa is not claiming that the typical Australian merchant will surcharge excessively. Rather, many merchants will not surcharge, but of those that do, some will be excessive. These will likely be those merchants that have a substantial degree of market power, especially at the point where the customer makes the payment. Some excessive surcharges may arise from merchants who promote their own payment scheme; these vertically integrated merchants may favour their own scheme at the expense of general purpose payment schemes in ways that reduce efficiency in the market for payment services.

In short, the concern is that, if the result of relaxing the no surcharge rule is that while many merchants do not surcharge, those that do, do so by an amount which need bear little relationship to the costs and benefits the merchant faces for alternative transactions, then allowing for surcharges will likely be contrary to the interests of the card schemes and to the overall public benefit. At the same time, it will not lead to the outcomes envisaged by the RBA.

Katz dismisses the evidence from studies previously cited of surcharging in the Netherlands and Sweden showing that in fact few merchants will surcharge if allowed (see Section VII.B.3 of the Katz Report). To reiterate, the evidence from the Netherlands and Sweden shows that where the no surcharge rule has been lifted, only a small portion of merchants impose surcharges. Katz dismisses this evidence (paragraphs 147-149), focusing on the case of the Netherlands, on the basis that many merchants in the Netherlands study were not aware they were able to surcharge. This seems hard to reconcile with the finding in the ITM research report that only 10% of companies said they did not surcharge because they were not aware they were allowed to do so, compared to 60% of the companies which said they did not surcharge "as a service of the company" or because surcharging was "unfriendly to customers".<sup>227</sup> This evidence suggests that the fact that surcharging is unpopular with customers is a far more important reason for the lack of surcharging than merchant ignorance. This is consistent with the ITM's results on consumer attitudes which found 74%

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<sup>227</sup> ITM Research, The abolition of the No-discrimination Rule, Project Number R231, Amsterdam, March 2000, pages 7-8.

of cardholders think it is either 'bad' or 'very bad' that merchants are allowed to ask a fee when consumers want to pay with their credit card (and only 7% think it is 'good').

Katz simply dismisses the Swedish evidence on the basis that "[i]n Sweden, only 5 percent of all merchants surveyed surcharge. One should not read too much into this finding, however, given reports that in Sweden it is very common for acquiring banks to impose no-surcharge rules on merchants, even though the credit card networks are prohibited from having such rules." Of course the issue this raises is, if surcharging is so desired by merchants, why is it in the interests of individual acquiring banks to impose such rules on their merchants and why are they free to do so without much resistance from the merchants?

Finally, Katz notes (paragraph 149) that, even if many merchants choose not to surcharge after the lifting of the no surcharge rules in Australia, there might still be important non-price dimensions to "surcharging". It is not clear how this observation provides any support for lifting the no surcharge rule, since presumably if there are benefits to merchants in using non-price dimensions to "surcharging", merchants will already be using them.

### **8.9.3 Internalising external benefits in absence of no surcharge rule**

The third argument in favour of the no surcharge rule that Katz attacks (in Section VII.B.4 of the Katz Report) is that, in the absence of the no surcharge rule, external benefits will fail to be internalised. In his view, this argument does not hold because merchants can internalise the benefits by setting surcharges, and the magnitude of these external benefits to merchants may in any event be small. In making these arguments, Katz assumes away the significance of both the transactional costs for merchants of charging multiple prices (under surcharging) and the transactional benefits to merchants of accepting credit cards.

Katz (at paragraph 153) naïvely uses the fact that the ARA supports the removal of the no surcharge rule to claim that merchants are (collectively) worse off as a result of the no surcharge rule. However, he has not shown that the ARA's view does not simply mirror the interests of its largest members<sup>228</sup> (nor, indeed, addressed the issue that the ARA is not representative of card-accepting merchants as a whole). Large retailers may have the most to

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<sup>228</sup> As most economic models of trade associations would predict, for the reasons explained in Manur Olson (1965) *The logic of collective action*, Harvard University Press.

gain from cards being used less, since they have the economies of scale to offer their own store card schemes (as some already do), leaving smaller retailers at a competitive disadvantage and reducing competition as consumers get locked into credit arrangements and loyalty programs of particular large stores. Indeed, for this very reason, large retailers may have particular vested interests in pushing for the removal of the no surcharge rule.

Noticeably, Katz does not tackle another reason why the no surcharge rule is needed to internalise external benefits. As Wright (2000) shows, there is a free-riding problem arising from merchant surcharging and that the no surcharge rule can help solve. Wright clarifies an important reason why merchant surcharging, in which merchants set different prices that internalise externalities and enhance efficiency, will not take place. He starts by noting that in order that consumers are able to make payments with a card they first need to hold a card. Because a consumer's investment in holding a card depends on the value obtained from usage and because each individual merchant can safely ignore the effect of its decisions on a consumer's decision to hold a card in the first place, individual merchants have no incentive to set surcharges *ex post* which lead to the efficient membership by cardholders *ex ante*. Thus, Wright explains why the no surcharge rule and a correctly set interchange fee can play an important efficiency-enhancing role. The interchange fee and the no surcharge rule are thus complementary – one without the other will not be as successful as both in harnessing network externalities to the benefit of the members of card schemes. Katz ignores this analysis, instead tackling it in a later section by saying it suggests financial institutions should set lower membership fees. His argument in this respect is flawed, as is explained elsewhere.

#### **8.9.4 Car parking analogy**

The final argument in favour of the no surcharge rule that Katz takes issue with is the car park analogy (Section VII.B.5 of the Katz Report). Visa used the analogy of shopping centres providing free car parking services to consumers as a way of illustrating that, just because an organisation offers something free, that does not imply there must be some kind of market inefficiency. The cost of free car parking is passed on to all consumers regardless of whether any particular consumer utilises the service.

Katz is critical of the analogy. In particular, Katz claims there is competition between shopping centre landlords, apparently in contrast to payment schemes. However, he provides no evidence to suggest that shopping centre landlords are more competitive than the competition between payment schemes. In any case, even if Katz could show that



payment schemes were much more concentrated than shopping centres, this does not make the analogy less relevant to the point it is used to make.

Katz criticises the analogy on the ground that there are a variety of different parking and shopping arrangements, some of which charge shoppers to park. This is hardly ground to criticise the analogy since there are, in Australia, a variety of different payment schemes.

As part of the free car parking analogy, Visa noted that a no surcharge rule would be equivalent to a rule in which landlords forbade merchants from surcharging for parking. In practice, it would be difficult for merchants to engage in this surcharging. For Visa's part, it is not aware of any shopping centre that has allowed merchants to set surcharges for shoppers' parking (which they could do through a form of validation). However, this does not mean to say merchants would be free to charge for parking if they could. Rather, contrary to the claim of Katz, it is more likely that shopping centres will want a free parking policy since all merchants in the centre benefit from the free parking as it helps bring in more shoppers and so potential customers.

Katz points to additional transaction costs involved in surcharging for car parkers in shopping centres as another problem with the analogy. Again this demonstrates the strength, and not the weakness, of the analogy. Merchants also face additional transaction costs of having separate prices for card and other types of payments. Both examples illustrate that, because of such costs and the resulting inconvenience to consumers, merchants will often choose not to surcharge.

Finally, Katz suggests that the incremental cost associated with parking may be low (compared to the fixed costs), while the costs facing merchants for card transactions are mainly per transaction. This is simply not the correct comparison. The correct comparison is the extra rent charged merchants by shopping centres (so as to cover the costs of offering free parking) compared to the fees charged merchants for accepting card transactions. It is true there is a difference in the nature of the fees, but it is not clear how, if at all, this affects the validity of the analogy.

In summary, the analogy is useful because it helps to illustrate the nature of card networks and the cross subsidy issue with a familiar and easy to understand example. The analogy shows that: (1) the fact that some customers receive a service for free does not necessarily prove a cross subsidy, a market failure or a lack of competition; and (2) restrictions on the ability to recover the costs of the service through direct charging to end-users may be vital if the goals of providing the service are to be achieved.



## 8.10 Current card pricing practices

Katz suggests (Section VII.C of the Katz Report) that further evidence for the need for no surcharge rules and interchange fees to internalise network effects is that card system policies are inconsistent with them internalising these external effects. In particular, he points to the fact that card users generally face a negative usage fee and a positive membership fee as evidence that the members of open card systems are not pricing to take into account the positive externality created by membership of the network.<sup>229</sup>

His logic is seriously flawed in a number of respects.

First, he claims that economic analysis suggests that membership should be encouraged by pricing below cost. However, he provides no evidence to suggest that network membership is not indeed being priced below cost.

More fundamentally, even if membership fees are higher than predicted by economic theory, this provides no evidence that networks have not tried to take into account the externalities arising from card membership. The fact is that membership fees are set by independent and competing issuers, while the externality in question arises at the network level. Thus, each individual issuer will not capture the network benefits by promoting membership rather than usage.

Perhaps Katz expects to see members of card associations use a per-capita rather than a per-usage interchange fee, as he suggests in paragraph 163. One way to promote card membership would be for issuers to receive a payment from acquirers based on the number of cardholders the issuer brings to the system. However, arrangements not based on usage are vulnerable to abuse, with consumers obtaining multiple cards simply to earn rebates for signing up. Such a payment would create incentives for issuers to sign up cardholders, even if the cardholders made no transactions. In contrast, an ad-valorem interchange fee ensures

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<sup>229</sup> It is curious that Katz did not refer to this externality in Section VII.B.4 when discussing the external benefits that, in his view, will be internalised in the absence of the no surcharge rule. Perhaps this is because, as Wright (2000) shows, the no surcharge rule is required in order for this externality to be internalised efficiently.

that any rebates to cardholders are only proportional to how much the consumer actually spends.

Katz suggests another alternative to deal with the membership externality, namely for the card network to cap the annual fees charged by issuers. Even assuming such an approach were legal under applicable competition law principles, this approach would be difficult for the card network to enforce since issuers would find ways of charging other fees to cardholders (such as credit check fees) in order to cover their costs of signing up cardholders. Aside from these obvious enforcement issues, it has been noted that a switch from fixed fee to per-transaction recovery of costs will also have implications for different types of card users. Those who make few card transactions will be better off relative to those who use cards a lot. As a result high-spend users will tend to subsidise low-spend users. High-spend users will want to leave the system and join a new system that does not require them to subsidise low-spend spenders. Consequently, individual issuers may be able to undermine any attempt to force them to subsidise low-spend users by specialising in high-spend users. Over time this process of specialisation could unravel any cross subsidy (by leading to higher usage fees for low-spend users than high-spend users) and render any cap on annual fees ineffective.

Even assuming an effective (and legal) way of capping annual fees can be found, network externalities would remain with respect to usage (assuming merchants do not perfectly pass through costs and benefits of different means of payment). Recovering the fixed costs of issuing cards by increasing usage fees would increase the effect of this usage network externality, which runs from consumers' card usage decisions to merchant benefits. Absent an interchange fee to correct the usage externality, this will imply an even greater effect arising from the externality running from card usage to merchants. If financial institutions were prevented from recovering costs through annual cardholder fees, they would recover them through usage fees. This would, in turn, imply that a higher interchange fee would be needed to then price out the usage externalities.

### **8.11 Two inconsistencies in card scheme policies?**

Katz (Section VII.D of the Katz Report) claims there is an inconsistency because card schemes prevent merchants from surcharging their cardholders when they make payments at merchants that accept their cards, while offering rebates and rewards to cardholders. According to Katz this inconsistency is also manifest in the treatment of store cards. It is hard to understand quite to what inconsistency, if any, Katz believes he is referring. In fact, far from uncovering an inconsistency, Katz's discussion points to another reason why the no

surcharge rule may be needed. The no surcharge rule may be needed in part to prevent the (large) merchants who wish to offer their own proprietary credit scheme (store card) from surcharging customers who use general purpose card schemes (so that their customers will use only their own store card). To the extent no surcharge rules have this effect, the result is pro-competitive in the sense that it promotes competition between merchants. This is because consumers will not be as likely to be locked into buying from a particular merchant with whom they have a store-specific credit arrangement or loyalty card program.

The other apparent inconsistency suggested by Katz is that associations have different interchange fees for fully electronic (card present) transactions and all other card transactions, while at the same time not having the consumer face any cost differences to reflect these different types of card transactions. Again, it is not clear quite what inconsistency, if any, Katz has in mind. The interchange fee is set differently by the members of the card associations to reflect the different costs and benefits associated (on average) with the two different types of transactions. It is then up to issuers and acquirers to reflect any differences in costs and revenues in their pricing structures, if doing so is profitable. It is difficult to see any inconsistency arising from such a policy.

## **8.12 The use of the no surcharge rule in closed systems**

Katz appears in two minds over the use of the no surcharge rule in closed systems.

He correctly notes (paragraph 168) that Access Economics' arguments against the prohibition of the no surcharge rule in closed rather than open schemes is wrong because American Express does have what amounts to an interchange fee and "collects charges from merchants in its role as an acquirer, which then affect its incentives to price card services to consumers in its role as an issuer".

He then suggests that whether a credit or charge card system should be subject to a ban on no surcharge rules should be based on market power. His argument is that, if the system does not have market power, then that system acting on its own will not be able to force merchants to accept inefficient no surcharge rules because the merchants will be able to turn to other payment mechanisms to meet consumers' payment needs (paragraph 170). Aside from the issue of whether closed schemes have more or less market power than open

schemes,<sup>230</sup> this analysis is strikingly wrong and illustrates more generally that Katz does not understand why closed networks (even those without market power) will not follow the regulations that are being proposed for the open schemes. Since the no surcharge rule (or the use of the interchange fee) enables the card network to expand the desirability of its network to cardholders, where a network with market power is restricted from adopting the rule (or freely setting the privately optimal interchange fee), other competing networks will not also drop the no surcharge rule (or restrict their interchange fees in the same way).<sup>231</sup>

It is the two-sided nature of the payment networks which means the standard analysis of simply looking at the merchant side of the network (in isolation of what cardholders do) is wrong. If under the scenario suggested by Katz, American Express continued to use the no surcharge rule and set high merchant fees and large cardholder rebates and rewards, it would attract a lot more card usage by cardholders who not only would avoid the surcharge when using an American Express card, but would earn much higher rebates and rewards. This added customer demand would encourage merchants to continue to accept American Express cards. Under Katz's (and the RBA's) view of the world, the no surcharge rule and high (implicit) interchange fees will promote excessive usage. This will provide more transactions for American Express and less for the open schemes that are regulated.

In conclusion, there is a blatant inconsistency between Katz's (and the RBA's) view that there is excessive use of cards due to the no surcharge rule and the level of interchange fees, and

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<sup>230</sup> Katz does correctly state “[b]y itself, the finding that credit and charge cards issued on the American Express or Diners Club networks comprise small shares of total cards or support small shares of total card-based transactions does not prove that these systems lack market power ...”: Katz Report, paragraph 171 (at page 51).

<sup>231</sup> It is ironic that Katz (and the RBA) accuses the card associations of using the no surcharge rule and high interchange fees in order to promote excessive usage of their card networks, while at the same time claiming that American Express (assuming it does not have market power) will follow the open schemes if they are banned from using the no surcharge rule and have to set a much reduced interchange fee. Surely, if it is the existence of the no surcharge rule and allegedly high interchange fees that are responsible for creating the great increase in transactions that the card associations are presently enjoying then, if closed networks are allowed to continue equivalent policies, they will continue to do so.

his (and the RBA's) view that closed schemes will match RBA regulations that would force members of open schemes to lower their interchange fee and allow merchant surcharging.

### 8.13 Rochet and Tirole's paper

In Section IX.B of the Katz Report, Katz discusses the paper by Rochet and Tirole (2001). The main criticism Katz seems to make of that paper is that "consumer demands are unresponsive to prices over the relevant ranges, and there are no adverse allocative efficiency effects from this price distortion" (paragraph 181). Katz claims "[i]n more realistic settings, where consumers reduce consumption in response to higher prices, the increased margins will give rise to efficiency losses" (paragraph 181).

The trouble with this argument is that it ignores the fact that those consumers who use cards will likely have reductions in their consumption levels as a result of raising the price of using credit cards. In fact, Katz notes this in footnote 179 ("[o]f course, one would also have to take into account that a no-surcharge rule may reduce distortions in card-user consumption levels"). Given this important qualification, it is hard to see how he can make his claim in the first place.<sup>232</sup>

In footnote 179 of the Katz Report, Katz claims that the Schwartz and Vincent (2000) paper "offers an analysis of how these effects balance and establishes conditions under which the adverse effects outweigh the beneficial ones". There are two problems with the use of Schwartz and Vincent's paper in this respect. First, in the main part of Schwartz and Vincent's analysis, the conditions under which the no surcharge rule leads to lower welfare are actually less realistic than the conditions under which the no surcharge rule leads to higher welfare. In particular, in Proposition 5(i), Schwartz and Vincent show that total surplus is reduced by the no surcharge rule for some  $\alpha$  and is increased for other  $\alpha$ . Since the proportion of cash customers to card customers is in reality far greater than 1/3, the relevant

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<sup>232</sup> In fact, Rochet and Tirole (2001, page 28) conclude "[h]owever, the global impact of a higher interchange fee on final demand is ambiguous, because a greater diffusion of cards has also a positive impact on the demand for retail goods (as new cardholders buy more) which may offset the negative impact due to the retail price increase".

case is that  $\alpha > 1/3$ . In this case, Schwartz and Vincent show that total surplus increases as a result of using the no surcharge rule.<sup>233</sup>

Secondly, a further fundamental problem with using the analysis of Schwartz and Vincent's work is the large number of unrealistic yet critical assumptions their results depend upon (see the discussion of their paper below). It is surely ironic that Katz refers to "[i]n more realistic settings" to talk about what happens when demand is responsive to price, and then goes on to reference results from Schwartz and Vincent's paper to look at this case. As discussed below, Schwartz and Vincent's paper is considerably less realistic than Rochet and Tirole's paper.

Katz also claims (at paragraph 179) that "[a]lthough Rochet and Tirole do not derive this result, it can be shown that, for sufficiently competitive issuers, the privately optimal interchange fee is greater than the socially optimal one". Katz gives the 'proof' in footnote 175. He states that, "as the issuer margin goes to zero, the socially optimal interchange fee goes to  $b_m - c_A$ , which results in a merchant service fee of  $m = b_m$ , which in turn is lower than a merchant's cutoff value for accepting cards because the latter includes the private increased-sales benefits". In fact, the result is ambiguous in general.

The (unconstrained) socially optimal interchange fee can be written (using Katz's notation from Section IX.A of the Katz Report) as  $a^* = b_m - c_A + \pi_I$  where  $\pi_I$  measures the issuers' margins ( $\pi_I$  is zero if issuers are perfectly competitive). Note that, although  $\pi_I$  can get small, it must always be positive, since otherwise the privately optimal interchange fee is undefined in Rochet and Tirole's model. The critical interchange fee, the highest interchange fee such that merchants will still accept cards, is then defined as  $a = b_m - c_A + \beta(c_I - a + \pi_I)$ , where  $\beta(c_I - a + \pi_I)$  is the average cardholder benefit of using cards where the marginal cardholder has the benefit of using cards of  $c_I - a + \pi_I$ . Katz claims that for sufficiently competitive issuers (that is,  $\pi_I$  sufficiently close to zero),  $a > a^*$  so that the interchange fee which an issuer-controlled card association will set will be greater than the socially optimal level. However, clearly  $a > a^*$

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<sup>233</sup> Presumably Katz refers to the case in which Schwartz and Vincent use a specific demand function for consumers to generate the opposite result when there are perfectly competitive issuers (see paragraph 192 of the Katz Report). In this case, it is notable that consumers (cardholders and non-cardholders) are made better off by the imposition of the no surcharge rule - a result not mentioned by Katz.

if and only if  $\beta(c_r - a + \pi_i) > \pi_i$ . Implicitly, Katz assumes  $\beta > 0$ , so that there is some small enough positive  $\pi_i$  which is less than  $\beta$ . While this may be true, it does not follow from Rochet and Tirole's assumptions. In particular,  $\beta$  may be negative since, if the marginal cardholder is actually paid to use his or her card, then it is possible, in the context of Rochet and Tirole's model, that the average cardholder benefit is negative. This case is more likely to occur when  $b_m$  is sufficiently high.

Additionally, Rochet and Tirole's results are derived assuming the card association is controlled by imperfectly competitive issuers, while acquirers are assumed to be perfectly competitive. This simplifies the analysis, since the interchange fee is set to maximise only the interests of issuers. However, there is no reason to believe this assumption is appropriate for Australia - indeed, quite in contrast to the assumption Katz makes, the RBA (in its discussion of the alleged lack of competition among acquirers) itself seems to claim that the opposite holds. More reasonably, there will be some degree (but not a perfect degree) of competition for both issuers and acquirers, and interchange fees will be set to take into account the profits members earn from both issuing and acquiring. In this case, Rochet and Tirole's paper is inappropriate. Rochet and Tirole's paper is also inappropriate since it assumes all merchants have identical benefits of accepting cards, whereas in practice merchants in some industries will accept cards, while others will not do so.

Wright (2001) generalises Rochet and Tirole's framework to handle both of these considerations, as well as in other ways. Interestingly, however, Katz does not discuss Wright (2001) in his appendix, despite referring to it in a number of places in the main text where it helps to support his arguments. Although Katz gives no reason for this striking omission, the fact of the matter is that Wright (2001) shows that Katz's conclusion above does not generalise. There can be no presumption that there is excessive usage of cards at the privately set interchange fee, whether one assumes issuers are very competitive or not.

## 8.14 Wright's paper

In Section IX.C of the Katz Report, Katz discusses another paper by Wright (Wright, 2000). This is a modified version of the Rochet and Tirole model that allows for different degrees of retail competition and that allows for some credit functionality of the payment card (some probability that a consumer can make a purchase only if he or she holds a card and the merchant accepts that card).

Katz states (in paragraph 185) that "[i]n the Wright model, one assumption is particularly unrealistic and troubling. Specifically, the model assumes that consumers purchase a fixed



number of goods each period as long as the price is less than a single reservation price that is the same for all consumers". Interestingly, Katz does not make a similar statement in respect of the Rochet and Tirole model, despite the fact that that paper makes implicitly the same assumption.<sup>234</sup>

Katz (paragraphs 185-187 and 195) focuses on the result in Wright (2000) that "surcharging eliminates the use of credit cards when merchants have monopoly power" and argues that the assumption above is critical in deriving this result. However, Katz fails to appreciate the purpose of the model, the main point of which is not to show that under surcharging the card network will collapse (although this is an implication of the model), but rather that under surcharging there will be a free-riding problem in which merchants will surcharge too much. This is summarised in the introduction to the paper as:

"[p]otential cardholders do not take into account the value merchants get from transactions that are made possible by customers holding cards (the externality). Merchants, on the other hand, are not willing to voluntarily subsidise customers to join the credit card network. Each individual merchant takes as given the number of cardholders, realizing that its own contribution to a system wide subsidy will have a negligible effect on the decision of any potential customer."

Notably, the conclusion to Wright's paper does not even mention the claim that Katz treats as the central implication of the paper, namely that the existence of surcharging will cause no-one to hold or use cards. Instead, the conclusion states that:

"[t]he model highlighted a fundamental problem with allowing merchants to surcharge card transactions – merchants with market power can use surcharging to expropriate the value of credit card transactions that cardholders would otherwise enjoy. This leads to too little membership of the card network and not enough usage of cards for transactions. Although merchants value having cardholders who will be able to make purchases which they otherwise might not make, each

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<sup>234</sup> Moreover, later Katz himself states (at paragraph 197) that "[i]n what follows, observe that as in the Wright model – and in contrast to the Rochet-Tirole model – the annual fee and rebate do not collapse to a single fee." One presumes, since he uses this assumption himself, that Katz thinks this is actually a more realistic setting than that in Rochet-Tirole.



individual merchant takes as given the number of cardholders, and so ignores the effect that its own price discrimination has on a consumer's decision to join the card network."

The main conclusions of Wright's paper are robust to the "different and more realistic assumptions" that Katz proposes (paragraph 187). The simplifying assumption used by Wright that Katz attacks is a strength, not a weakness, of Wright's analysis. It allows the 'free-riding' story to be illustrated without making the analysis unnecessarily complex. Notably, as explained below in the discussion of Katz's own model, Katz obtains essentially the same results in a much more contrived model of a card system, but without using the simplifying assumption that he finds so objectionable.

Katz uses an analogy (paragraph 186) to try to undermine the simplifying assumption used by Wright. Katz argues, in an analogous set up to Wright's framework, that the existence of shopping costs would destroy shopping, since:

"[o]nce the consumer has sunk the cost of getting to the merchant, the merchant should charge a price that extracts all of the surplus of the marginal consumer. But then that consumer would regret having gone to the store and, recognizing that this is what will happen, would never have gone in the first place. Thus, if there are any costs of going to a store, there can be no shopping!"

The correct interpretation of this analogy is not to conclude that, because of the existence of shopping costs there will be no shopping, but rather that shopping costs can give rise to a free-riding problem which can mean that subsidising the shopping costs will be in the joint (but not individual) interests of merchants. For instance, where consumers have to incur a shopping cost to get to a shopping centre, but once there they can shop at a number of different monopolistic merchants, then each individual merchant will not want to compensate the consumers for their shopping costs (since the benefits of the shopping costs may be spread over the many merchants from whom consumers purchase goods). However, unless the shopping costs are covered, and because the monopolists will extract a high share of the consumer surplus from shopping, some consumers may not wish to go to the shopping centre in the first place (even though it would be in the joint interests of merchants

to have them come). This may cause the merchants (jointly) to subsidise shopping costs, which they could do, for instance, through offering free parking.<sup>235</sup>

Despite the focus of Katz on the results with monopoly merchants, Wright considers a range of cases for merchants, these being monopoly, imperfect competition and perfect competition. With imperfect competition, the effects of a no surcharge rule on welfare are ambiguous in general and depend on specific parameter values. Wright considers some numerical simulations to gain some insight into what direction the welfare results may go. Katz claims (paragraph 189) that “[o]ne problem with these simulations is that they build on models embodying the unrealistic assumptions discussed above”. This claim is unjustified. The simulations do not depend on the assumptions relating to merchant monopoly power that Katz focuses on. They also do not depend on assuming fixed charges are exogenous, an assumption with which Katz takes issue.<sup>236</sup> Moreover, it is not at all clear that the results depend critically on the assumption that demand is inelastic. Rochet and Tirole point to the fact that the various changes from introducing elastic demand may cancel out.

Katz also cites the fact that there is “almost no documentation of the sources of the various parameter values used in the simulations, and thus it is difficult to judge their validity.” However, apart from the exception discussed below, Katz does not offer any suggestions of how the parameters should be adjusted. All parameter values used were chosen to be as reasonable as possible. They were also made public in the document, and comments invited from the RBA. One can readily calculate the welfare implications of altering any of the parameters. However, neither Katz nor the RBA chose to do so, or at least did not make public the results of making any such changes with which they might have experimented.

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<sup>235</sup> In contrast, a stand-alone store may be willing to (individually) subsidise shoppers for their parking costs, since it obtains all (or at least most) of the benefits of doing so.

<sup>236</sup> In calibrating the model, the fixed charges are taken to be \$25 which is thought to be approximately the average membership fee charged to cardholders in Australia. As Katz points out, some cardholders get cards without annual fees (paragraph 188). However, these also typically involve no cardholder rebates. Moreover, some people also pay more than \$25 per year in annual fees.

The one parameter Katz takes issue with is the number of cardholders, which was assumed to be 15 million. However, this parameter is just a scaling parameter, and has no non-scaling effect on the results. For example, it has no effect at all on the results in table 1 or figure 1 in the paper, or on the conclusion from Wright that “[f]or our benchmark case using the Hotelling model, our best estimate of the welfare losses is 15 dollars per-person per-year.” Obviously, taking a somewhat smaller number of cardholders will result in a somewhat smaller aggregate welfare effect. However, it will not change the per-capita results, or reverse the qualitative finding that welfare is higher under the no surcharge rule.

Overall, Katz’s comments on the paper suggest some difficulty in understanding its main results, as well as an intention to imply weaknesses which do not, in reality, characterise the model or affect its main findings.

### **8.15 Schwartz and Vincent’s paper**

In Section IX.D of the Katz Report, Katz briefly and uncritically describes the results of Schwartz and Vincent’s paper, despite it relying on far stronger assumptions than those made by either Rochet and Tirole (2001) or Wright (2000). As already mentioned, Schwartz and Vincent find mixed results on whether the no surcharge rule improves consumer or overall welfare.

Schwartz and Vincent’s paper makes a number of very strong assumptions that are critical in obtaining their results. Some of the more critical assumptions made by Schwartz and Vincent include assuming the underlying costs and benefits of cards are identical to cash,<sup>237</sup> assuming cards provide no benefits to cardholders or merchants, assuming a fixed fraction of consumers use cards for transactions and a fixed fraction use cash, assuming a single monopolist merchant and assuming the merchant always accepts cards. Schwartz and Vincent’s paper also contains errors, including in proposition 5, which they claim shows that consumer surplus is lower with uniform merchant pricing, regardless of the proportion of cash paying customers ( $\alpha$ ). This is simply wrong as Katz himself notes (footnote 188). Instead, total consumer surplus is higher when  $\alpha < 1/3$ . Although the point is not acknowledged by Katz, this error was pointed out to the RBA by Visa in a review of Schwartz and Vincent’s paper provided to the RBA in July 2001.

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<sup>237</sup> Thus, in their model both cash and cards have zero cost to provide.

## 8.16 Katz's alternative model of consumer demand

In Section IX.F of the Katz Report, Katz considers an alternative model of a card network that is based partly on Schwartz and Vincent's model of consumer demand (since demand is elastic) and partly on Wright's model (since there is some probability consumers will need to use a card to make a purchase).

Like Schwartz and Vincent's model, Katz relies on extremely strong assumptions to get results. In particular, Katz assumes there is a single merchant that is a monopolist, that all consumers get zero transactional benefits from using cards, that the net transactional benefits of using cards (for consumers and merchants jointly) are always negative, and that issuers and acquirers are perfectly competitive. The only thing that distinguished consumers in his model is that some may be more likely than others to be in situations where they need access to a card to make a purchase. However, to derive his key conclusions he abandons even this form of heterogeneity, thus simplifying his analysis by requiring that all consumers be identical.

Despite these extreme assumptions, the only robust insights that arise from Katz's model are precisely the same as those derived in the model by Wright discussed in Section IX.C of the Katz Report. Katz criticised Wright's model on the grounds that its results relied on the assumption that consumer demand is inelastic. However, even without this assumption, his model yields the same conclusions as those derived by Wright. In particular, Katz's model implies:

1. There is a network externality arising from consumers' decisions to hold cards, which merchants experience. The monopolist benefits as more consumers hold cards, and under surcharging there will be unambiguously too few consumers holding cards. Wright's model yields the same implication.
2. Under surcharging, and allowing for multiple merchants, there is a free-riding problem in which each merchant surcharges too much for card use, even though they would be jointly better off committing to lower prices for card use.<sup>238</sup> Wright's

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<sup>238</sup> In Katz's words "[i]f the merchant could commit to a lower price for card use – and thus encourage greater cardholding – the merchant would find it profitable to do so".

model yields the same implication.

3. When surcharging is allowed, it is possible that no consumers will hold cards, despite card holding being socially desirable and in particular valued by the merchant. Wright's model yields the same implication.
4. Under frictionless surcharging, the interchange fee cannot be used to solve the market failure. Wright's model yields the same implication.
5. With a no surcharge rule Katz obtains the possibility, under parameter conditions which imply everyone holds a card, that there will be too much card use. Such a scenario is also possible in Wright's model, if equally unrealistic assumptions are imposed to ensure all consumers hold cards.
6. However, under less restrictive (and more realistic) parameter conditions, not everyone will hold a card, and in general there will be a trade-off between insufficient card holding and some over-usage of cards by those who hold cards. Wright's model yields the same implication.
7. Due to the trade-off between insufficient card holding and some over-usage of cards by those who hold cards, in general the welfare effects in this model of relaxing the no surcharge rule are ambiguous. They will depend on the specific parameter values considered. Wright's model yields the same implication.

It is puzzling that the RBA has chosen to accept the devising of a model that, while technically poorer than the existing literature, at best contrives to achieve results that have already been established. Putting that aside, since most of the implications set out above are not discussed by Katz, this section details how Katz's model gives rise to them.

### **8.16.1 Result 1**

In paragraph 202 of the Katz Report, Katz notes that under surcharging there is a difference between the condition which determines whether a consumer will choose to hold a card, and the condition which determines whether it is socially efficient for a consumer to hold a card. He notes that this difference is such that there is always too little card holding. In his words "[t]his result obtains because the cardholder ignores the positive effects of card holding on other economic agents; absent card holding, the economy forgoes sales with positive margins".

The effect Katz has described is a network externality arising from consumers' decisions to hold cards, which merchants experience. An additional cardholder results in benefits to other agents, namely an increase in sales opportunities (and profits) for merchants. Consumers do not internalise this merchant benefit. Thus, Katz's claim that "[t]his distortion is not due to the failure to internalise network effects" is plainly wrong. Clearly, if consumers internalised the benefit that merchants received, then this effect would no longer exist.

This effect is exactly the same as the effect uncovered in Wright's model where he assumes merchants have monopoly power. In Wright's introduction he states "[p]otential cardholders do not take into account the value merchants get from transactions that are made possible by customers holding cards (the externality)".

### **8.16.2 Result 2**

Katz suggests the externality can be internalised if merchants can commit to a lower price for card use, thus encouraging greater card holding. He states at paragraph 202 that "[i]t is a monopoly commitment problem. If the merchant could commit to a lower price for card use – and thus encourage greater card holding – the merchant would find it profitable to do so".

While Katz is right to note that merchants can benefit if they can encourage greater card holding, his conclusion that this is a "monopoly commitment problem" is a direct result of his assumption that there is a single monopolist. If Katz were to generalise his model to allow there to be many separate monopoly merchants (representing different cities or different industries), then even if merchants could commit not to surcharge cardholders, they would not want to do so. As Wright states in the introduction to his paper "[m]erchants, on the other hand, are not willing to voluntarily subsidise customers to join the credit card network. Each individual merchant takes as given the number of cardholders, realising that its own contribution to a system wide subsidy will have a negligible effect on the decision of any potential customer".

Katz appears to appreciate this point since, in his footnote 197, he states: "[w]ith a large number of competing merchants, there would be a free-riding problem with respect to promoting card holding". However, it is important to note that this free-riding problem does not just arise with competing merchants. If there are many *different* types of merchants (for instance, in different markets) each with market power, the free-riding problem will remain. This is the case examined by Wright.

Thus, the conclusion of Katz's model, generalised to allow for many merchants but preserving his assumption that each merchant has market power, leads to the identical

conclusion reached by Wright<sup>239</sup> – a conclusion that is sharply at odds with the claims made by the RBA.

### 8.16.3 Result 3

Maintaining the assumption that merchants are free to surcharge, Katz’s model predicts, under a range of parameter values, that no consumers will hold cards, despite card holding being socially desirable and in particular valued by merchants.

For instance, if Katz’s simplifying assumption is used (that everyone has the same probability of needing a card to make a transaction), then as long as this probability ( $\lambda$ ) is not too large<sup>240</sup>

$$\lambda S(p^\pi(c_A+c_I-b_m)) < c_F$$

and no consumers will hold cards. This is despite the fact that, at the same time, it is quite possible (and in fact likely) that

$$\lambda \{ S(p^\pi(c_A+c_I-b_m)) + [p^\pi(c_A+c_I-b_m)-c_A-c_I+b_m]D(p^\pi(c_A+c_I-b_m)) \} \geq c_F$$

Thus, while no consumers will want to hold cards, the monopoly profits that would be generated to the merchant(s) if these consumers did hold cards would be more than enough to generate positive social surplus from card holding.

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<sup>239</sup> On this matter, Wright’s conclusion states: “The model highlighted a fundamental problem with allowing merchants to surcharge card transactions – merchants with market power can use surcharging to expropriate the value of credit card transactions that cardholders would otherwise enjoy. This leads to too little membership of the card network and not enough usage of cards for transactions. Although merchants value having cardholders who will be able to make purchases which they otherwise might not make, each individual merchant takes as given the number of cardholders, and so ignores the effect that its own price discrimination has on a consumer’s decision to join the card network.”

<sup>240</sup> This is consistent with Katz’s own view that the economy-wide benefits of card holding are only small: see footnote 196 of the Katz Report.



Thus, contrary to Katz's claim, his model is capable of generating the same conclusion as the monopolist case in Wright, in which the card network breaks down due to excessive surcharging. Again, the merchant(s) would be better off if they could prevent themselves surcharging in this way, but given the free-riding problem they face, individually they will not want to do this.

Katz chooses to focus on parameter values, given by his equation (2), which lead all consumers to hold cards, ignoring the alternative case. As shown here, there is no good reason for him to do so, especially since the alternative case is more consistent with his stated view that the economy-wide benefits of card holding are only small.

#### 8.16.4 Result 4

Katz ignores several obvious implications of his framework. One implication is that under frictionless surcharging, welfare is unaffected by the particular level of the interchange fee (assuming it is positive). With frictionless surcharging a higher interchange fee cannot help the suboptimal membership of the card network. To see this, note that the condition for a consumer to join the card network

$$\lambda_i S(p^\pi(c_A + c_I - b_m)) \geq c_F$$

does not depend on the level of the interchange fee (it only assumes it is positive). Similarly, all those consumers who hold cards will use them regardless of the level of the interchange fee (again, assuming the interchange fee is positive). It is thus straightforward to show that welfare does not depend on the particular level of the positive interchange fee.

This conclusion is the same as that reached in Wright's model when there is frictionless surcharging. Wright also finds that with frictionless surcharging an interchange fee cannot be used to help internalise the network externality that card holding generates.

#### 8.16.5 Result 5

Katz briefly considers some implications of imposing the no surcharge rule in his model. To do so he first imposes the simplifying assumption that all consumers are identical. In particular, he assumes that everyone has the same probability of needing a card to make a transaction (that is,  $\lambda_i = \lambda$ ). In addition, Katz assumes that

$$\lambda S(p^\pi(c_A + c_I - b_m)) \geq c_F$$



so that all consumers will hold cards. This is despite the fact that he has argued elsewhere (see his footnote 196 for instance) that the economy-wide benefits of card holding are small.

Not surprisingly, by imposing the unrealistic condition that everyone holds a card, Katz can generate the result that there is too much card use. The same condition can be generated in the model of Wright (Section 4.3.B) in which merchants compete according to Hotelling competition and the no surcharge rule is imposed. This could arise as a corner solution, in which the probability that consumers will need cards to make transactions is sufficiently high, and the distribution of cardholder benefits sufficiently tight, that all consumers will choose to hold cards. Due to the no surcharge rule and a positive interchange fee, cardholders will then always use cards, even where this is not efficient. Of course, the assumptions necessary to make all consumers want to hold cards are unreasonable. This leads to the consideration of the next result.

#### **8.16.6 Result 6**

Generally consumers will not all be identical, and some will get more benefits using cards than others. Allowing for such heterogeneity across consumers gives rise to a trade-off between card holding and card usage. In Katz's model, assuming the merchant accepts cards and the interchange fee is positive, consumers will hold cards if and only if

$$\lambda_i \geq c_F / S(p) - [S(p-a+c_i) - S(p)] / S(p)$$

For any reasonable distribution of  $\lambda_i$  there will likely be some consumers for which this condition is satisfied and some for which it is not. This means only some consumers will hold cards. Those that hold cards will use them at all times, generating the potential for overuse of cards. In such cases, the social planner would prefer more consumers to hold cards (since they would then generate a positive externality to merchants a fraction  $\lambda_i$  of the time), but those that do hold cards to use them less. This trade-off between too little card membership and too much card usage by cardholders, is the same trade-off developed and analysed in Section 4.3.B of Wright's paper.

#### **8.16.7 Result 7**

Due to the potential trade-off between insufficient card holding and over-usage of cards by cardholders, in general the welfare effects in Katz's model of relaxing the no surcharge rule will be ambiguous. Depending on parameter values, encouraging greater card holding by imposing the no surcharge rule and using the interchange fee to internalise the network

externality arising from card holding may or may not increase welfare. The conclusion here is no different to that obtained from Wright's model.

Section 6 of Wright's paper considers plausible values of the various parameters in his model (including using an interchange fee that is around current levels), and finds that welfare falls by the equivalent of around \$15 per-capita per-year as a result of allowing surcharging. There is nothing in Katz's model which casts any doubt on this conclusion.<sup>241</sup>

### 8.16.8 Interchange fees

Katz is noticeably silent about his model's predictions concerning interchange fees. This is perhaps not surprising since Katz's model predicts that card issuers and acquirers will be indifferent over the level of the interchange fee. In particular, issuers and acquirers will have no particular reason to set interchange fees above the socially efficient level. This follows because of his simplifying assumption of perfect competition between issuers and between acquirers. All issuers and acquirers earn zero profits in equilibrium, and so by construction they will not care about any system level variables such as the level of interchange fees (or whether there is a no surcharge rule for that matter). This prediction is of course highly inconsistent with the views of the RBA, and Katz himself, which suggest members of card schemes have an incentive to set interchange fees above the socially optimal level. Certainly, Katz's model cannot be used to justify such a claim. This prediction of Katz's model is also hard to reconcile with the fact that card scheme members do seem to care about the level of the interchange fee and the ability to maintain the no surcharge rule.

Katz does not derive any implications of his model for the socially optimal interchange fee. Given there is only a single merchant, while consumers are heterogeneous ( $\lambda_i$  is not the same for all consumers), the socially optimal interchange fee will likely have similar properties to

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<sup>241</sup> Of course, if one were to try to quantify the welfare results from Katz's model in a similar way to that used by Wright, one would first want to relax some of his extremely restrictive assumptions, such as the assumption that *all* consumers get zero transactional benefits from using cards, that *all* consumers get the same transactional benefits from using cards, that for *all* transactions where cards are not needed to complete the transaction the social costs of card usage necessarily outweigh the social benefits, and that issuers and acquirers are *perfectly* competitive.

the one worked out in Section 4.3.B of Wright's model. It should not be set so high that the monopolist merchant will not want to accept cards, but subject to this constraint, it should be set to achieve the optimal trade-off between card membership and card usage. In doing so, it should take into account the positive externality merchants experience and that arises from card membership.

### **8.16.9 Summary**

Katz has used a much more restrictive model than Wright to relax the assumption that merchant demand is inelastic. Quite why it was decided to generate this model is not obvious. It does not yield any new insights, and in fact once a less restrictive version of the model is used, it merely confirms the robustness of the results from Wright's model. These results are at odds with the claims made by the RBA.

Katz does not conduct a welfare evaluation of the no surcharge rule. Nor does he say anything about the implications of his model for the optimal interchange fee. As explained here, his model, in its general form, is likely to lead to ambiguous implications concerning the welfare effects of the no surcharge rule. His model can hardly be a basis for the strong assertions made by the RBA. Notably, it provides no evidence to overturn the findings from Wright's model which shows that the no surcharge rule yields significant welfare gains to the Australian economy.

### **8.17 Schmalensee's paper**

Katz, in Section XI.G of the Katz Report, criticises Schmalensee (2001) on the grounds that he "uses a suspect and potentially misleading measure of economic welfare to determine the socially optimal interchange fee" (paragraph 206). Katz goes on to point out that "his model may be valid if every merchant that accepts cards is a monopolist in a separate market, but is very likely incorrect otherwise". It is ironic that Katz criticises Schmalensee on these grounds since his own model, reviewed above, assumes the merchant is a monopolist, as does the Schwartz and Vincent model that he does not choose to criticise. If the monopolist merchant assumption that Katz claims underlies the validity of Schmalensee's welfare results is so open to criticism, why does Katz himself use the same assumption, and why does Katz not criticise Schwartz and Vincent for making the same assumption?

Moreover, Katz is simply wrong to claim that the monopoly merchant assumption is the only way for Schmalensee's results to be correct. As Rochet and Tirole (2000) show, when consumers are not informed of which merchants accept cards and which do not before they choose which merchant to buy from (in their notation  $\alpha=0$ ), merchants' willingness to pay for

card acceptance is equal to merchants' transactions benefits, and so one can indeed use merchants' willingness to pay for card acceptance in the measure of total welfare. In reality only some consumers will be informed of which merchants accept cards and so, contrary to the assumption that Katz implicitly makes to reach his conclusions about Schmalensee's paper,  $\alpha$  does not necessarily equal one. In fact, to the extent that it is more common for consumers not to know in advance which merchants accept cards before selecting where to shop, a greater error would be made by following the suggestion of Katz (which implicitly assumes that, at all times, all consumers know in advance which merchants accept cards), than by following Schmalensee's approach.

## 8.18 Relevant markets and consumption distortions

In Section X of the Katz Report, Katz discusses briefly his definition of a "market for payment cards", and implications for the relevance of price changes to payment card fees. His main point is to argue that, even if there is relatively little consumer substitution between credit cards and other payment instruments (so that credit cards constitute a relevant product market distinct from cheques and debit cards), there may be quite large shifts between credit and debit instruments as a result of a change in the interchange fee or other policies. For instance, Katz argues that "[t]he use of interchange fees rather than consumer card-use fees thus causes a 41 percent change in the price of the card services. Interchange fees thus may induce consumer substitution among payment mechanisms even when these mechanisms are not in the same relevant market" (paragraph 218). The idea Katz puts forward is that the change in retail prices induced by changes in interchange fees (or say the dropping of loyalty programs or imposition of surcharges) may be sufficiently large in percentage terms so that, even if the elasticity of substitution across credit and debit payment instruments is small, there will be a significant shift in demand.

There is a problem with the above logic however. This is best illustrated by a simple example. Suppose, for the sake of this example, consumers currently pay 50 cents per transaction for debit cards and 1 cent per transaction for credit card transactions. Now suppose, credit card transactions are increased by one cent (to 2 cents per transaction). According to Katz's logic, this 100% increase in prices facing credit card users will cause a large substitution to debit card use. However, this is clearly wrong. A one cent increase in credit card use will not cause a large switch to debit card use if, as Katz assumes, debit cards are not a close substitute. Relying on percentage changes, as Katz does, can give a misleading conclusion, both because percentage changes are not appropriate when prices are close to zero to start with, and because small absolute amounts may have little impact once transaction costs and other frictions are taken into account (that is, a \$2 change could cause

very different impacts than a 10 cent change, even if both represented a 50% change in prices).<sup>242</sup> Katz's analysis therefore falls well short of the type of testing of substitution that is generally regarded as essential to the proper identification of relevant markets.

## **8.19 Conclusion on the Katz Report**

The Katz Report is deeply flawed in its coverage, use of data and analysis. Important findings in the literature are not, in Visa's view, discussed in a fair and balanced way, with the result that those findings are misrepresented.

No attention is paid to whether the proposals advanced by the RBA, notably in respect of interchange fees, would increase welfare. Furthermore, Katz's conclusion that there are multiple mechanisms by which the network effects arising in card schemes can be internalised is inconsistent with both empirical evidence and economic theory.

As such, the Katz Report provides little justification for the intrusive regulation the RBA proposes.

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<sup>242</sup> Moreover, where consumers face negative prices for transactions, a percentage change in price will not even be well defined.

## 9 European developments

Finally, for the record, Visa considers it necessary to clarify some important misconceptions that the RBA Report raises concerning Visa's commercial response to recent regulatory developments in Europe regarding Visa's interchange fee arrangements for intra-regional operations.

The RBA has asserted that:

"... Visa has recently abandoned its balancing approach in the case of its intra-regional interchange fees in Europe, in response to concerns expressed by the European Commission. ... Visa has subsequently proposed moving to a simple cost-based methodology that would be used as an objective benchmark against which its intra-regional interchange fees would be assessed."<sup>243</sup>

This statement is wrong. Visa expressly did *not* abandon its balanced approach to setting interchange fees. The purpose of the cost benchmark mechanism was merely to address concerns about the level of interchange, while allowing Visa scheme members to continue to set interchange fees according to established methodology, subject to the price cap represented by the sum of the specified cost categories (and the agreed reductions in the interchange fee rates).

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<sup>243</sup> RBA Report, page 45 (footnote omitted).

## 10 Conclusion

As the RBA is aware, the legislative provision from which the RBA derives its powers to conduct the present inquiry and propose public interventions based on its findings from that inquiry is the Payment Systems Regulation Act 1998 (Cth). The RBA has quite correctly recognised that the relevant touchstones for regulatory intervention prescribed by the PSRA are 'efficiency' and the concept of a 'competitive' market and that, therefore, the normative framework employed by economists is highly relevant to the approach it should be taking to examining the relevant issues.

Nonetheless, Visa is concerned that the RBA and its commissioned expert report have paid insufficient attention to these touchstones, insofar as the RBA's analysis and ultimate conclusions fails, in Visa's view:

- to give appropriate weighting to the three facets of efficiency as they are widely understood by economists;
- to satisfy the onus of proof for regulatory intervention insofar as the RBA has not carefully and compellingly made the case that the benefits of its proposed interventions outweigh the costs.

Visa is also concerned that the RBA has not articulated a clearly stated and consistent alternative economic model of how open scheme payment card systems operate, given the importance of a normative economic perspective to the issues at hand. The presence of such a model would have better allowed Visa to understand and address the RBA's specific concerns with the practices being scrutinised in the context of this inquiry.

Visa also expresses some reservations with respect to the fact that the RBA has conducted its analysis in terms of a "credit card market" (although it also refers to a "market for issuing and acquiring") instead of the wider "market for payment services" relevant for the purposes of this inquiry. This failure to clarify the market that is the starting point of the analysis has, in Visa's view, had implications for the RBA's resulting competition analysis. In particular, though the RBA repeatedly states that certain behaviour reflects the exercise of market power, it has not established that that power exists, much less that it has indeed been so exercised.

Visa has highlighted in its response how the general analytical deficiencies discussed above have ultimately manifested themselves in specific errors and inconsistencies in the RBA's

analysis and the analysis of its expert of the following business practices of open scheme payment card systems:

- the interchange fee;
- the no surcharge rule; and
- access rules.

These deficiencies have also seemingly led the RBA into a distorted view of how competition between open scheme and closed scheme payment card systems works.

In addition, Visa is concerned that these analytical deficiencies have been compounded by the RBA's use of empirical data that is at best irrelevant, and at worst, misleading and selective.

These concerns would not be as significant, were it not for the following policy recommendations that the deficiencies highlighted above have lead the RBA into:

- the imposition of a regulated interchange fee standard based on a cost methodology that is wholly inappropriate and unprecedented in its application to the workings of two-sided networks;
- the imposition of prohibitions on the freedom to contract into a no surcharge rule;
- interventions into Visa membership rules that generally intrude into Visa's highly valuable intellectual property; and
- a selective regulatory system that disadvantages open schemes like Visa relative to closed scheme payment card systems.

Although it advances these recommendations, the RBA does not attempt to fully set out and to the extent possible, quantify, their costs and benefits. In Visa's view, the reality is that if implemented, these recommendations, while yielding few benefits if any, will impose disproportionate costs on cardholders, smaller issuers and smaller retailers. Overall, they will cause substantial losses to Australian consumers, businesses and the economy generally. These losses reflect reduced allocative, productive and dynamic efficiency, quite contrary to the objectives of the legislation that the RBA invokes in its case for intervention.



In short, in Visa's view, the RBA has not discharged its burden of proof in this matter. Visa urges the RBA, in light of the material presented in this response, to reconsider its position. Visa looks forward to continuing to work closely with the RBA on these critical reform issues.

## Annexure: selected references

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