Westpac Banking Corporation ABN 33 007 457 141

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Ms Michele Bullock
Head of Payments Policy Department
Reserve Bank of Australia
GPO Box 3947
SYDNEY NSW 2001

REVIEW OF THE REFORMS TO AUSTRALIA'S PAYMENTS SYSTEM – ASSESSMENT OF THE PRELIMINARY CONCLUSIONS

Dear Michele

We welcome the opportunity to participate in the Review of the Reforms to Australia's Payments Systems.

The view expressed in our 31 August 2007 submission in summary, was that the competitive conditions created are such that interchange regulation is no longer necessary. An environment whereby it is clear that payment systems operate in market conditions where prices are set under normal competitive pressures had been enabled through standards that reduce the restrictions on merchants accepting payments cards. While this view is unchanged, we are committed to working with the industry to achieve this deregulation.

In general, we support the proposal to move towards deregulation of interchange settings in Australia as set out in the Preliminary Conclusions of the 2007/08 Review [the "Paper"]. Our view is that market mechanisms drive the best outcomes for Australia and that they should be given the opportunity to do so wherever possible.

Executive Summary

We support the move towards deregulation of interchange and the freedom for competition to determine interchange levels and allocate resources in the payments market. The main objective of the Review appears to revolve around assessing what is required for competitive forces to work for interchange as it does for all other areas in payments.

Our assessment is that the current competitive environment does not support a strong case for ongoing interchange regulation, as is concluded in the Paper. The main basis for our different conclusion is that the structural impediments to competition identified in the Paper do not appear to survive in a strong form when applied to the payments market. While the 'prisoners' dilemma' theory outlined in the Paper may have helped describe the market prior to the abolition of the No-Surcharge Rule (NSR) and introduction of surcharging, this does not appear to be a good description of the merchant acquiring market today.

The pre-conditions proposed in the Paper that would enable deregulation appear to be feasible in the main, the exception being the proposal to further dilute the Honour-All-Cards (HAC) rule. We believe any benefits that accompany such a reform do not add significant competitive pressures when the ability to surcharge without restriction already exists. Further dilution of (HAC) appears to be a major change to the existing value proposition of international scheme cards by undermining their fundamental value proposition of universal acceptance.

We anticipate industry moves towards a commercial EFTPOS scheme will contribute to ongoing efficiency in payments by providing a source of competition for international card schemes. This development, combined with the unjustifiable difficulties in making additional modifications to the HAC rule and the absence of a strong case for ongoing interchange regulation, compel us to believe that Option 3 can be practically amended to exclude further HAC dilution.

Lastly, we discuss how industry can co-regulate, and offer some points for consideration on continuing market oversight by RBA.

Assessment of the Case for Ongoing Interchange Regulation

Overview

We note that RBA has now set out its thinking very clearly on the case for interchange regulation. Our understanding of the argument is as follows;

(i) a market failure, caused by structural impediments to competition likened to the classic 'prisoners' dilemma', means that merchants will pay more for credit card acceptance than the benefit they receive,
(ii) the broader acceptance level risks distorting payment system patterns in favour of credit cards over other payment instruments, and
(iii) EFTPOS in particular, as a close substitute, has suffered from this distortion due to the large difference in interchange levels between credit cards and EFTPOS,
(iv) the main concern of the above issues is the impact they may have on distorting payment patterns (i.e. higher usage of scheme cards relative to EFTPOS than is efficient),
(v) lastly, RBA finds that there have been positive impacts on welfare from interchange regulation.

We address each of these sequentially, although there is some inevitable cross-over.

(i) Structural Impediments in the Market for Credit Card Acceptance

RBA sets out the issue as follows: *In a sense, merchants are caught in the classic 'prisoners' dilemma'. They would be better off if they could talk to one another, collectively agreeing on the terms of credit card acceptance, paying no more than their collective benefit. Instead, they are forced to act individually and, as a result, can end up paying more than the collective benefit they receive.*[1]

RBA begins with the premise that the structure of credit card acceptance resembles the 'prisoners' dilemma' paradigm, which is used to explain the problem RBA are trying to address (i.e. that *merchants find it difficult to exert sufficient downward pressure on interchange fees, largely as a result of the structure of incentives that they face*[2]). Applying the classic 'prisoners' dilemma' to this example appears to be problematic as credit card acceptance does not exhibit the inherent features of the classic 'prisoners' dilemma' that make 'mutual defection' the inevitable outcome (i.e. unique Nash equilibrium).

The analogy does not capture the continuous and dynamic nature of credit card acceptance, or the adaptive and cooperative outcomes found in other variants of this type of modelling. Accordingly the deductive reasoning used to conclude that market failure occurs in the setting of interchange does not seem to be compelling. [More detail on this point is included in the Appendix.]

(ii) Higher Price Paid by Merchants

[1] RBA, Philip Lowe, Address to the Visa Forum 2008, 4 June 2008.
[2] RBA, Preliminary Conclusions, p15

The assumption of a market failure premised on the above has led RBA to contend that merchants pay a higher price for credit card acceptance than the benefit they receive. This inefficient allocation has the potential to distort payment system patterns and generate a loss of welfare for society as a whole. However, the removal of the NSR in January 2003 has fundamentally altered the 'payoff matrix' governing merchants' strategy in credit card acceptance.

The removal of the NSR has led to a significant increase in the prevalence of merchants surcharging, or considering surcharging in the future, indicating merchants are not acting within the constrained equilibrium found in the 'prisoners' dilemma'. Indeed it is equally likely that a combination of the existing interchange cap, the ability to surcharge and the strongly competitive merchant acquiring market means that the merchant service fees (net of surcharging) are below the benefit received as a group.

Under these circumstances, several 'Nash equilibria'[3] may exist, some of which may be Pareto optimal for merchants[4]. It follows that the premise of higher interchange levels causing a Pareto suboptimal outcome (i.e. lower collective benefit of merchants), as suggested by the use of the 'prisoners' dilemma' paradigm, is greatly diminished. [More detail on this point is included in the Appendix.]

(iii) Impact of EFTPOS

We agree that EFTPOS would benefit from a commercial governance model and that this would improve the competitive conditions in payments. As proposed in the Paper, an EFTPOS Scheme with the power to set multi-lateral interchange rates will minimise the incentives for debit card issuers to issue scheme cards and overcome the regulatory arbitrage favouring scheme debit existing under today's regime. [We discuss the development of an EFTPOS Scheme below.]

(iv) Potential to Distort Payments Patterns

Our view is that the main distortions to payment patterns arise from interchange regulations as they apply today. Removing these interchange regulation, on the pre-condition that an EFTPOS Scheme is able to set multi-lateral interchange fees, would appear to address this issue most efficiently.

(v) Welfare Impacts

We agree that the proper measure of these Reforms is the impact on welfare. To date, the only estimates of welfare enhancements have been based on estimates in the Paper[5]. We would welcome further discussion on this issue, in particular the data and assumptions behind the estimates.

Summary of Our Assessment

Our assessment is that it is difficult to conclude there is *a strong case for ongoing interchange regulation*[6]. We reach this conclusion on the following bases;

(i) the problematic link between 'one-shot' or classic 'prisoners' dilemma' with the virtually continuous process of card acceptance,
(ii) the introduction of the ability to surcharge over five and a half years ago, fundamentally resolving any market failure that was present prior to the 2003 reforms,
(iii) the risk that ongoing interchange regulation will influence prices away from an efficient level, and

[3] Nash Equilibrium – each agent is maximising her return, given the other players' strategies.
[4] Pareto Optimal for merchants – the best outcome for merchants as a class of economic agents.
[5] RBA, Preliminary Conclusions, p19
[6] RBA, Preliminary Conclusions, p39

(iv) the potential for existing interchange regulation to distort payment patterns,
(v) the movement towards a commercial EFTPOS Scheme,
(vi) the absence of guidance as to what a socially optimal set of interchange rates would be, and
(vii) the absence of evidence of the welfare enhancements of existing regulation.

Given the controversial nature of interchange globally, we do agree there is a strong case for ongoing interchange oversight (as distinct from explicit regulation). We discuss this matter later in the submission.

Honour-All-Cards (HAC) Dilution

The proposal to modify the existing HAC rules appears to be a problematical step. The cost to merchants and cardholders appears to be high, while the benefit to competitive pressures in the presence of the right to surcharge without restriction appears to be low.

Difficulties of HAC Dilution

We accept the existing standard untying acceptance of scheme debit and scheme credit, and that untying acceptance between scheme debit and scheme credit has been tested overseas without detriment. Further the value proposition between scheme debit and scheme credit are essentially different. However a fundamental promise that comes with scheme credit cards is the ability for them to be accepted wherever the sign is displayed. The proposal to untie acceptance of credit cards would be expected to have a significant impact on the value proposition of credit cards.

Regarding international cards, it is not clear whether this rule would apply to the use of these cards in Australia and if so, how? Presumably, as the HAC conditions are basically governed by merchant/acquirer contracts, HAC dilution could affect international card acceptance. If the same conditions were to apply to Australian cards used overseas (i.e. other countries adopt similar measures), it is difficult to see how this would benefit Australian welfare.

Lack of Benefits in HAC Dilution

Given the transparency of interchange rates and the ability for merchants to surcharge without restriction, it seems that the benefit to merchants of refusing a sale is low. The corollary to this was the argument made that, prior to the 2003 reforms, a merchant always had the right to refuse to accept cards altogether. This was found to be an inferior right to the ability to surcharge or steer cardholders.

Our view is that the same argument holds in this instance. That is, the ability to refuse an entire class of cards is inferior to the right to price acceptance of any card without restriction through differential surcharging.

Commercial Governance of EFTPOS

The industry has made steps towards governance and business development of EFTPOS and we support that work. Further, Westpac and several other banks are working towards replacing our existing links with Internet Protocol (IP) links for EFTPOS.

As there is already material evidence to indicate a high degree of competition in the online payments market, we do not believe the development of EFTPOS to enable online payments would contribute substantially to the competitive environment. Currently many online users report credit cards as their preferred method of payment, however PayPal is the preferred payment instrument for a quarter of online payments users and PayPal's market share is growing[7].

[7] Nielsen Online, 'The Australian Online Retail Monitor', Q4 2007.

A recent survey of the online retail segment found that over 6 million Australians make some form of online purchase each month; and that of these, 84% have used credit cards online, 62% have used PayPal online, 60% have used BPay online and 57% have used direct deposit online[8].

We support the development of a commercial EFTPOS Scheme. However our assessment is that to compete effectively with the existing schemes it needs to develop according to robust business cases rather than policy-driven agendas. This is not to say that an EFTPOS Scheme would not seek to enter the online market, rather that it would need to be done on a commercial basis in full knowledge of the market conditions.

Fee Disclosure Requirements

We support the disclosure of scheme and interchange fee benchmarks where they are consistently applied, fair, and well-defined. We also contend that commercial confidentially is an important factor in making modifications to fee disclosure requirements.

Interchange Oversight – Principles

As noted earlier, formal oversight of interchange settings appears to be a good approach given the global controversy concerning interchange rates. Our view is that this will be a complex task and that the following issues are likely to be important in considering the efficiency of the market for payments:

- the increasing propensity to surcharge and potential lag from price increases,
- the likelihood of Merchant Service Fee increases following interchange increases,
- the need to encourage competition between the various schemes,
- the likelihood of the existing cap setting prices lower than efficient levels and the need to allow the market to discover equilibrium,
- the problematic application of the market failure premise, particularly in the presence of the ability to surcharge,
- the impact of the threat of regulation and litigation in tempering interchange increases.

As a consequence, we are committed to APCA's co-regulation work, set out in its submission, that seeks to manage the deregulated environment.

Transitional Phase

If there is more information or time required to achieve the objectives of the Review, a transitional phase based on the development of an EFTPOS Scheme, modifications to improve fee disclosure requirements, and APCA's continuing work to address policy concerns, while leaving interchange rates at their current settings, should be considered as a pathway to ultimate goal of deregulation of interchange.

Conclusion

On the bases that:

- no strong case for ongoing interchange regulation (as distinct from oversight) exists,
- the significant practical difficulties and limited benefits associated with HAC dilution,
- the competition enhancing impact of an EFTPOS Scheme,
- the steps to increase transparency, and

[8] Nielsen Online, 'The Australian Online Retail Monitor', Q4 2007.

- the enhanced co-regulatory role proposed by APCA and endorsed by major participants,

our conclusion is that industry can progress to Option 3, as a means of enhancing competition, efficiency and stability in payments markets without further dilution of the Honour-All-Cards (HAC) rule.

We would be happy to discuss these views further with you.

Yours Sincerely

Alexandra Holcomb
General Manager
Working Capital & Trade Solutions

APPENDIX

Full Assessment of Structural Impediments in the Market for Credit Card Acceptance

The application of the classic 'prisoners' dilemma' implies merchant's decision-making is a 'one-shot game', namely it is both static and decisions occur simultaneously. This is an unrealistic assumption in light of the dynamic way in which credit card acceptance occurs. A number of theorists have shown the impact sequential decision-making has on the outcome of such games, showing that for any dilemma to occur in this game the simultaneous move assumption is crucial[1].

The following excerpt represents a common view of the application of the classic 'prisoners' dilemma': *Many of the situations that are alleged to have the structure of the Prisoners' Dilemma are better modelled by an iterated version of the game in which players play the Prisoners' Dilemma repeatedly, retaining access at each round to the results of all previous rounds.*[2]

Robert J. Aumann, who received the 2005 Nobel Prize in Economics for applying the fundamental equilibrium concepts to repeated games concluded: *The fundamental insight is that repetition acts like an enforcement mechanism, which enables the emergence of cooperative outcomes in equilibrium-when everybody is acting in his own best interests.*[3] Aumann's work on non-cooperative game theory provided insight into the ability of players in 'prisoners' dilemma'-like games to evolve over time, influenced by the decision-making of other players, and since the publication of his early work has prompted significant research into the propensity for players to adopt cooperative behaviour[4].

Robert Axelrod has been influential in exploring the outcomes of infinitely repeated 'prisoners' dilemma' games and the cooperative and non-cooperative strategies adopted by players. He comments: *In my view, the reason for the dominance of the rational-choice approach is not that scholars think it is realistic. Nor is game theory used solely because it offers good advice to a decision maker, because its unrealistic assumptions undermine much of its value as a basis for advice. The real advantage of the rational-choice assumption is that it often allows deduction*[5]

Similarly, the added complexity of the large and diverse number of players in credit card acceptance with a range of incentives adds a complexity that is not adequately modelled in the classic two-player 'prisoners' dilemma'. Players may be distributed spatially and temporally, producing various behaviours and outcomes beyond a unique Nash equilibrium of mutual defection. Axelrod explains: *the consequences of adaptive processes are often very hard to deduce when there are many interacting agents following rules that have non-linear effects.*[6] A significant contribution to this issue was made by Thomas C. Schelling, who shared the 2005 Nobel Prize in Economics with Aumann[7].

Summary

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[1] Nishihara, K. (1999) 'Stability of the Cooperative Equilibrium in N-Person Prisoners' Dilemma with Sequential Moves', *Economic Theory*, Vol. 3, No. 2, pp.483-494; and Ahn, T.K., Ruttan, Lore, Walker, James M. and Lee, Myungsuk, 'Asymmetric Payoffs in Simultaneous and Sequential Prisoner's Dilemma Games' (August 28, 2006). CAEPR Working Paper No. 2006-003, available at http://ssrn.com/abstract=932675.

[2] Steven Kuhn, *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/entries/prisoner-dilemma/, (updated October 2007).

[3] Robert J Aumann, *War and Peace*, Nobel Prize Lecture, 8 December 2005, p.354.

[4] David M. Kreps, Paul Milgrom, John Roberts, and Robert Wilson, 'Rational Cooperation in the Finitely Repeated Prisoners' Dilemma', *Journal of Economic Theory*, No. 27, (1982), pp.245-52; and Ichiro Nishizaki, Masatoshi Sakawa, Hideki Katagiri, 'Influence Of Environmental Changes On Cooperative Behavior In The Prisoner's Dilemma Game On An Artificial Social Model', *Applied Artificial Intelligence*, Volume 18, Issue 7 August 2004, pages 651 - 671.

[5] Robert Axelrod, *The Complexity of Cooperation: Agent-Based Models of Competition and Collaboration*, p4.

[6] Robert Axelrod, *The Complexity of Cooperation: Agent-Based Models of Competition and Collaboration*, p4.

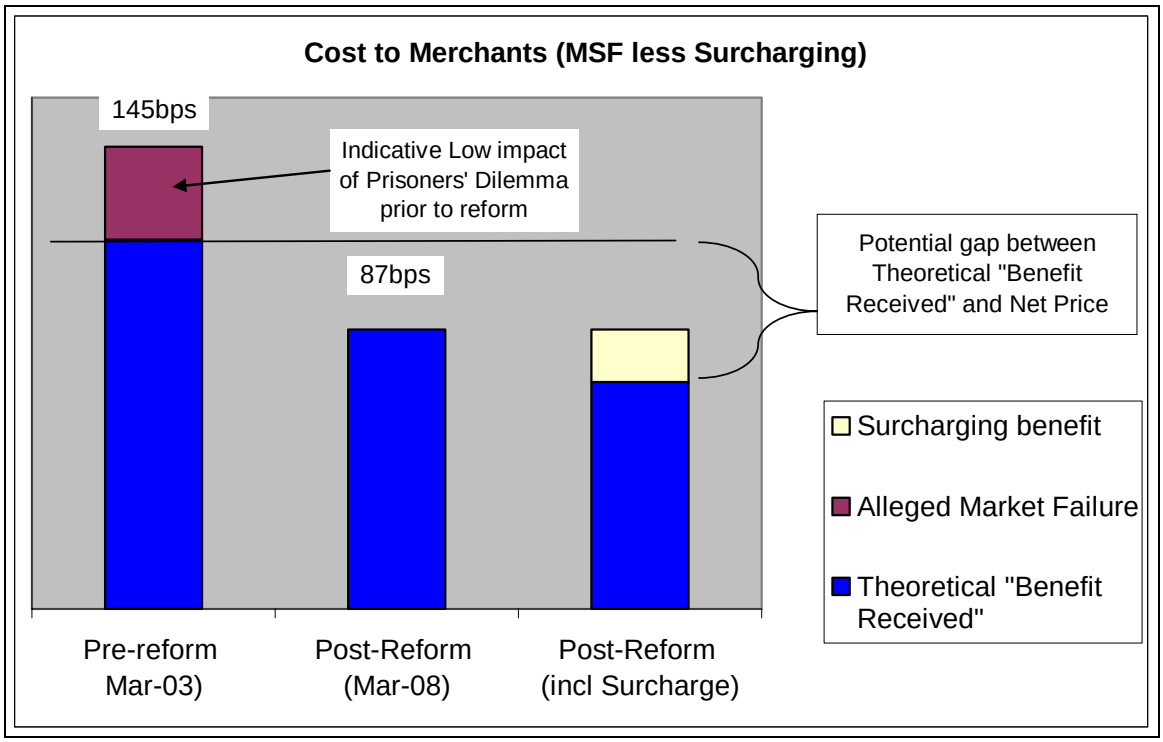
[7] Thomas C. Schelling, *Micromotives and Macrobehaviour* (Norton, New York: 1978). See also Nishihara, K. (1999) 'Stability of the Cooperative Equilibrium in N-Person Prisoners' Dilemma with Sequential Moves', *Economic Theory*, Vol. 3, No. 2, pp.483-494.

The above indicates that the RBA's application of the classic 'prisoners' dilemma' is problematic, in that it does not reflect the continuous and dynamic nature of credit card acceptance, or the adaptive and cooperative outcomes found in infinitely repeated 'prisoners' dilemma'-type games. On this basis, our conclusion is that the overall impact of the 'prisoners' dilemma' on the prices paid by merchants prior to the 2003 reforms was low.

Full Assessment of Higher Price Paid by Merchants

The incentives and choices available to merchants have changed fundamentally following the removal of the No-Surcharge Rule in January 2003. The ability of merchants to surcharge without restriction indicates that under these circumstances, several Nash equilibria may exist, some of which may be Pareto optimal.

For illustrative purposes, the following chart assumes that, based on the relatively weak application of 'prisoners' dilemma' in determining the average price paid by a merchant prior to the 2003 Reforms, 20 per cent of the price was explained by an alleged market failure. This, combined with the actual reduction in the cost to merchants of card acceptance generated by surcharging[8], means that the potential gap between the benefits received by merchants and the amount merchants pay in practice may in fact be negative. (This assessment assumes that the benefit received by merchants as a group is not affected by the Reforms.)



The conclusion of the above is as follows;

(i) the outcomes are consistent with the lower than otherwise might be expected surcharging levels and the ongoing acceptance of cards, despite actual interchange levels reportedly exceeding the caps,

[8] For the purposes of illustration we have estimated that the average surcharge is 1% of the value and that the midpoint of very small merchants (10%) and very large merchants surcharging (23%) represents the volume of transactions to which a surcharge applied.

(ii) the outcomes highlight the risk to efficiency of maintaining an interchange cap in the absence of guidance as to what a socially optimal set of interchange rates would be, and

(iii) the outcomes demonstrate that upward movement in interchange fees *themselves* do not provide evidence of system inefficiency or market failure.