29 January 2001

Response to RBA/ACCC Study of Interchange Fees and Access

Australia and New Zealand Banking Group Limited

Table of Contents

Chapter One

Summary and Overview

Introduction

This report outlines ANZ's response to the RBA/ACCC Study of interchange fees and access. ANZ considers that the Study provides a useful contribution to the dialogue between the banking industry and government on an important subject, the efficiency of Australia's consumer electronic payment systems.

ANZ supports fully the objective of the Study to understand better the determinants of interchange fees, but considers that the Study leaves more to do. ANZ submits that the specific conclusions that the Study draws are not supported by the data and analysis it presents.

Broadly, some of the main reasons for this are as follows.

- First, it is very important to appreciate that these payment systems are networks in which network externalities are important; and that they sit within a broader array of payment systems, networks and markets. In this context, for example, promotional elements designed to maintain and grow consumer participation in each of these networks are important elements which are a valid component of their efficient operation and costs. Yet the Study arbitrarily excludes one important such cost — that of loyalty points.
- Second, some important costs whose validity is clear in principle are omitted from the single year snapshot of data available to the Study — notably the sunk costs of the major investment in building these networks and enlisting participation in them. These investments are both recent and large.
- Third, the data that were available to the Study are marred by severe problems of consistency, indicating that an accounting exercise along the lines of that being commissioned in the context of the Frontier Economics study of credit card interchange fees is needed to produce consistent data across these networks.

ANZ therefore does not agree that the Study has established firmly its specific conclusions: that profit margins on ATM services, credit card issuing, credit card acquiring and debit card services are excessive; that the relative price of credit card use to debit card use is too low *vis a vis* their relative resource costs, hence creating an inefficiently high use of credit cards and an inefficiently low use of debit cards; and that the credit card scheme requirement that merchant acquirers be supervised financial institutions is unjustified.

ANZ would be happy to discuss its views directly with the Study authors.

ATM Networks

The Study argues that an apparent lack of cost-reflection in interchange fees is evidence that the provision of ATM services is less-than-competitive and that profit margins are being expanded through the exercise of market power. While it is well known that many prices are apparently "sticky" this fact does not necessarily represent a departure from competition, or represent the exercise of market power.

The condition for efficiency in multi-product firms (like banks) is that the price of a service should be *greater* than the *incremental* cost of its provision but *less than* the *stand alone cost* of its provision. The Study has shown only that prices are greater than average incremental cost plus a share of common costs, which is entirely consistent with efficient resource allocation and competitive markets where firms produce multiple services. ANZ suggests that, in the absence of any evidence that interchange fees have been set in excess of the stand alone cost of producing interchange services, there is no mystery as to why new entrants or competition between established providers have not created any readily obvious pressure on interchange fees.

ANZ also suggests that competition for ATM services in Australia is vibrant, and that the relevant market is not simply ATM services, but rather the electronic withdrawal of cash from EFTPOS terminals, and for some functions the use of telephone and Internet banking.

Credit Card Networks

ANZ suggests that the Study concludes incorrectly that the profit margins in credit card networks are excessive because it has (i) incorrectly omitted the cost of loyalty schemes in the cost of credit card issuing (ii) considered only one year of data, instead of a time series which takes account of the losses incurred as the credit card networks were rolled out over the past two decades (i.e. the sunk investment of building the networks) and (iii) not demonstrated that the prices of credit card acquisition or issuing are greater than their respective stand alone costs. Only when costs are comprehensively and consistently accounted for could such conclusions be made.

ANZ also suggests that, although credit losses are allowed for in both the interest rate charged to cardholders and the interchange fee, there is no 'double dipping', because a not insignificant proportion of credit losses occur from cardholders who pay no interest.

In relation to the Study's conclusion that the 'no surcharge rule' leads to cross-subsidisation, ANZ submits that a service provides a cross-subsidy if that service generates more revenue than the cost of providing it on a stand alone basis. A service receives a cross subsidy if the costs saved by removing it are greater than the revenues that would be lost. Thus, the Study has not demonstrated, on this economic definition of cross-subsidy, either that non-credit card paying customers provide a cross subsidy or that credit card paying consumers receive one.

ANZ suggests that the Study's suggested specific lower interchange fee (which excludes credit losses and loyalty programs) could, if it were applied in Australia, begin a destructive dynamic process for the open schemes: with cardholders and merchants each finding the open scheme cards less attractive to use and accept, respectively. The main beneficiaries of this process would be the closed credit and charge card schemes, American Express and Diners Club.

Finally, it is ANZ's view that there exist sound prudential reasons to restrict membership of credit card schemes, including merchant acquirers, to supervised financial institutions. However, such restrictions do not preclude economic participation in the schemes by non financial institutions, substantial opportunities for which exist on both the issuing and acquisition sides.

Debit Card Networks

ANZ considers that the structure of debit card interchange fees in Australia is reasonable and that the Study has provided no compelling evidence to the contrary. The interchange fee actually paid is reasonably close to both the costs of interchange and the gap between acquirers' costs and revenues, as calculated by the Study. There is no *a priori* reason why the interchange fee in such a network should be either positive or negative, let alone arbitrarily fixed at zero. It acts as the residual needed to ensure that issuers and acquirers both receive adequate returns, so 'balancing' the network.

In relation to gateway arrangements, ANZ suggests that gateway fees simply reflect the competitive return on the initial investment in the debit card infrastructure made by financial institutions. ANZ further submits that gateway arrangements, far from inhibiting access, ensure access for institutions too small to fund the capital required to build a large network. Furthermore, ANZ considers that a duplicate debit card network would be economically inefficient and, rather, access should be negotiated for the existing network.

Choice Between Credit and Debit Cards

The Study argues that incentives to use credit and debit cards are distorted, especially by interchange fees, and this explains the growth of (high cost) credit card usage relative to (low cost) debit cards. However, ANZ considers that the apparent difference in the resource costs of credit cards and debit cards is not particularly meaningful or relevant, because (i) credit cards offer a higher quality payment service than debit cards and (ii) credit cards are not just a payment instrument; they are also a loan instrument. There is thus no necessary inefficiency if consumers choose to make payments by the more costly (but higher quality) means of credit cards, allowing for example, greater control over personal finances, lower idle balances etc.

Chapter Two

Introduction

2.1 ANZ welcomes the opportunity to respond to the RBA/ACCC Study of interchange fees and access. ANZ believes that this Study provides a useful contribution to the ongoing dialogue between the banking industry and government on an important subject, the efficiency of Australia's electronic consumer payment systems.

2.2 ANZ supports fully the objective of the Study to better understand the workings of electronic payments networks and the determinants of interchange fees. ANZ further supports the notion that all charges (including interchange fees) in these networks be set on an efficient, cost-reflective basis and through transparent processes.

Interchange Fees in Context

2.3 While the Study is about more than just credit cards, the economics of credit cards, particularly interchange fees, constitute the major part of its analysis. The economics of credit cards networks, like ATM networks and debit card networks, involve very important *network externalities* – the benefits received by participants in the networks depend in part on how many other participants there are, and what they do.

2.4 For credit cards, interchange fees were crucial to solving the so-called "chicken and egg" problem as the networks developed from scratch over recent decades. Merchants had to be persuaded to accept the cards (when there were few cardholders) and so did cardholders (when there were few merchants who accepted them). Interchange fees provided issuers with incentives to issue cards and encourage their use and allowed issuers to recover their full costs given constraints as to the level of costs that cardholders are willing to bear.

2.5 While credit cards are now widely accepted by merchants and cardholders alike, interchange fees for open system credit cards continue to play this important role, because of the competition between the open schemes themselves and between the open schemes and closed schemes (American Express and Diners Club). There are, for example, ongoing significant lapse rates from every card scheme, and in this light these networks are never 'mature' but constantly require significant promotional and other costs to maintain and grow participation and the externalities generated by it.

2.6 Competition between issuers means that if interchange fees were significantly lower for Bankcard, MasterCard and Visa (the open schemes under review in the Study), issuers would necessarily have to recoup costs from cardholders. But this would lead to cardholders migrating to the unregulated closed schemes.

2.7 Interchange fees (not just for credit cards, but also for debit cards and ATMs) thus play a crucial role in ensuring the viability and development of the open credit card schemes.

2.8 ANZ acknowledges that a transparent and justifiable foundation for the determination of interchange fees needs to be found. ANZ suggests that interchange fees must be thought of as the residual item needed to deliver an appropriate return to the issuer (and to leave the acquirer with an appropriate return), after subtracting revenues directly collected from scheme participants from costs. That is, they balance and stabilise the network.

2.9 A methodology for calculating interchange fees as the recovery of residual costs has been developed by Frontier Economics in its report, "*Report on Credit Card Interchange Fees to Review Banks*", January 2001. The Residual Cost Recovery Model involves

- Measuring total issuers' costs and total issuers' revenues from cardholders in a past period (say 5 years).
- Identifying the gap between these costs and revenues.
- Making an adjustment for any major investment that needs to occur at a Scheme level in the forthcoming period (for example, scheme-imposed requirements to upgrade technical systems, or the introduction of new technology, such as chip-based cards).
- Dividing this figure by the total value of transactions in that past period to derive an *ad valorem* interchange fee.

2.10 ANZ is concerned that one of the characteristics that the Study exhibits is that significant and implausible dispersion exists across banks in the data for the major cost categories in ATM, credit card and debit card fees. Calculating interchange fees in the above way requires a comprehensive and consistent (across banks) analysis of costs, including: costs *over time* (to capture the capitalised value of losses as systems were developed); *common costs* and *fixed costs.*

2.11 All these costs need to be measured on a consistent basis across the banks. For credit cards, an expert accounting study is being commissioned to this end as part of the Review of Credit Membership Rules and Interchange Fees. ANZ suggests that such a study could be usefully extended to review costs for all these systems.

2.12 In general, neither the *size* or *direction* of the interchange fees can be determined *a priori*. Both will depend on the relative magnitudes of the costs in the systems and the amounts that can be directly recovered from users. These in turn will depend on the state of development of the networks and the wider payment services markets in which they sit and can change over time. Hence freezing the direction or level of the interchange fees — setting them at zero, for example — could be highly arbitrary and distorting. In this regard, international comparisons may be misleading; for example Australia has a single EFTPOS network unlike the fragmented situation in North America.

The Study's Findings and Conclusions

2.13 While ANZ supports the objectives of the Study, ANZ does not agree that some of its key specific conclusions have in fact been established viz. that profit margins on ATM services, credit card issuing, credit card acquiring and debit card services are excessive; that the relative price of credit card use to debit card use is too low *vis a vis* their relative resource cost, hence creating an inefficiently high use of credit cards and an inefficiently low use of debit cards; and that the requirement that merchant acquirers be supervised financial institutions is unjustified.

2.14 ANZ submits that there have been some errors and shortcomings in the Study's methodology and data, leading to erroneous findings and conclusions

- The Study examines data for only one year, 1999, notwithstanding that the development of these payment systems has occurred only over the last 25 years or so. No account is taken of the fact that substantial investments were made early in the life of these payment systems including large losses for many years as ATMs, merchants and cardholders were enlisted and volumes built up. That is, the Study makes no attempt to distinguish accounting profits from economic profits. The capitalised value of the early-year losses represent an asset which should legitimately yield a competitive return to banks. Any analysis of whether accounting profits are above those that would be expected to prevail in a competitive industry should examine profits over a long period of time.

- The Study does not recognise that banks are multi-product firms and as such the only legitimate examination of whether profits are excessive is for each bank taken as a whole — or at least across the full range of banking products and services that share systems, with some allowance for wider sharing of common resources.

- The Study apparently assumes that payment by credit card is a perfect substitute for payment by debit card (in terms of utility conveyed to the cardholder) and hence concludes incorrectly that use of the latter to make payments is socially wasteful because debit card transactions consume fewer resources than credit card transactions. However, this basic assumption is not correct. For making payments, credit cards are far superior to debit cards from the consumer's viewpoint (even before consideration of loyalty points): they give greater control over timing, source and other aspects of the management of personal finances, avoid the need for significant idle transactions balances and allow purchases to be less constrained by immediate funds availability. It is this superiority that is driving the growth of credit cards as payments instruments.

- The Study does not take sufficient account of the fact that credit cards offer *two* services to consumers: a means of payment, and, for those who wish to avail themselves of the facility, an unsecured personal loan. Reserve Bank data strongly suggest that consumers are substituting toward credit card loans and away from other types of personal loans (with good reason). This factor also is driving the growth of credit card usage. Thus the Study's comparison of the resource cost of debit card usage and credit card usage is questioned, because the latter is not just a payment instrument; it is also a loan instrument.

- The Study also does not take sufficient account of the benefits to *merchants* of credit cards (compared to debit cards) i.e. that because credit cards relieve liquidity constraints faced by some consumers, they lead to a greater volume of sales for merchants who accept them.
- In its discussion of the role of interchange fees (especially applied to credit card networks) the Study fails to take sufficient account of the role of interchange in maintaining incentives which increase (or sustain) network participation.
- The Study claims that restrictions on what type of institution can acquire merchant transactions are unjustified. It is ANZ's view that such restrictions are necessary to maintain confidence in the schemes and that, in any case, they do not act as a barrier to *economic participation* in the schemes (as opposed to *membership*).
- The study fails to note the considerable reduction in merchant fees that appears to be unmatched in closed systems.

2.15 These points will be elaborated in the remainder of this submission which is set out as follows.

- Chapter 3, ATM networks
- Chapter 4, Credit Card Networks
- Chapter 5, Debit Card Networks
- Chapter 6, Choice Between Credit and Debit Cards

Chapter Three

ATM Networks

3.1 The Study makes the following criticisms of ATM networks in Australia:

- Interchange fees have changed little since they were introduced, in contrast to key cost components of interchange services, which have fallen.
- The markup of interchange fees over the cost of producing interchange services is very high ("double the average cost").
- Foreign ATM fees are themselves highly marked up over interchange fees, so that "ATM owners earn substantially more revenue from ATM services supplied to customers of other financial institutions than they do from transaction fees on their own customers".

Interchange Fees Not Cost–Reflective

3.2 The Study (p38) makes much of the fact that interchange ATM fees have remained largely unchanged over the past decade despite the fact that the costs of data processing equipment and telecommunications equipment have fallen. It states that

> "In short, if ATM interchange fees were initially based on costs, they have not shown any flexibility in responding to costs in recent years."

3.3 The clear implication of this statement is that the Study is asserting that this apparent lack of cost-reflection in interchange fees is evidence that the provision of ATM services is less-than-competitive and that profit margins are being expanded through the exercise of market power.

3.4 However, the evidence presented in the Study is at best inconclusive on this question. The costs identified in the Study make up only about half of the costs of ATM services (according to the data presented in the Study's Table 4.1) and it is quite possible that other costs have risen over time, offsetting the cost falls identified by the Study. Also, the data are plainly affected by severe consistency problems, as demonstrated by the wide ranges they exhibit, strongly indicating that across institutions, different definitions are being used and different approaches to allocation of shared costs etc are being employed. An accounting exercise such as that being commissioned in the context of the Frontier Economics study of credit card interchange fees would be needed across all of these networks to address this. More fundamentally, it is well known that many prices are apparently "sticky", but this fact does not necessarily represent a departure from competition, or the apparent exercise of market power.[1]

[1] Joseph Stiglitz, "Price rigidities and Market Structure", *American Economic Review*, May 1984, 350-355.

3.5 Even more fundamentally, businesses in competitive markets do not explicitly change prices to reflect changes in costs. If a market is (perfectly) competitive, then in long run equilibrium, prices will be equal to marginal costs. This well-known result from economic theory is however only a static equilibrium condition. It does not imply that changes in prices are caused by, or follow, changes in costs.[2]

3.6 Furthermore, and somewhat ironically, had interchange fees been set explicitly as markups over costs (pricing behaviour which the Study implicitly endorses) this would have been strong evidence pointing to the exercise of market power, since markup pricing is what occurs under conditions of non-collusive oligopoly.[3]

Apparent High Markup of Interchange Fees Over Costs

3.7 According to the Study, the weighted average cost of producing interchange services (cash withdrawals) is $0.49, and the weighted average interchange fee is $1.03, a markup of about 100 per cent. A similar margin exists for balance enquiries.

3.8 ANZ suggests that by examining costs just for 1999, the Study has underestimated costs and overestimated economic profits.

- The Study does not recognise that depreciation costs are currently low because the stock of ATMs is relatively old. As technology changes force investment in new ATMs, which is indeed occurring now, depreciation will grow considerably.
- Likewise, new investments in a larger and more expensive asset base will increase the required return on capital (in dollar terms).
- The Study also does not recognise that, initially, fees were set below costs (i) to encourage usage and (ii) because at that time the concept of fee for service was not as well developed as it is now.

3.9 According to the Study, these high markups (which are also present in other payments services) represent a failure of price signals to guide resource allocation, unlike a "typical" market, where purchasers exert downward pressure on prices because they can always go to alternative sellers if faced with prices they consider too high. In contrast, in markets for payments services, consumers do not "see" interchange fees and so do not exert this downward pressure on prices.

[2] Even regulators of natural monopoly utilities do not enforce a strict standard that prices should everywhere and always follow the path of costs.

[3] Harry Bloch and Michael Olive, "Cyclical and Competitive Influences on Pricing in Australian Manufacturing", *The Economic Record,* September 1998, 268-279.

3.10 Apart from the important issues of measuring markups discussed above, the analysis in the Study is incomplete. The costs reported in the Study are incremental costs (the additional costs, both fixed and variable, that ATM owners incur in the provision of ATM services) plus some allocation of shared costs.[4]

3.11 Allocation of shared costs by a fully distributed cost or similar methodology is useful for accounting purposes but has no basis as a means for determining whether prices are high relative to economic costs.

3.12 According to economic theory, the condition for efficiency in multi-product firms is *not* that prices should be equal to incremental costs. Rather, it is that price of a service should be *greater* than the incremental cost of its provision (to allow for the allocation of a proportion of shared costs) but less than the *stand alone cost* of its provision. Provided the price of a service falls within this range, it is efficient.[5]

3.13 If the price of a service is below average incremental cost, then that service is said to be not *subsidy free*. If the price is above stand alone cost, then that price is excessive and invites entry into the market by a firm that will produce the service alone at a price below that currently being charged (i.e. the new price will be at or below the stand alone cost).

3.14 Taking the cost and price data in the Study on ATM services at face value, it is clear that the Study has not demonstrated any failure of price signals to guide resource allocation. The Study has shown that prices are greater than average incremental cost plus a share of common costs, which is entirely consistent with efficient resource allocation and competitive markets where firms produce multiple services. However, the Study has not demonstrated that interchange fees exceed stand alone costs.

3.15 The Study (p39) states that

> The substantial margin between ATM interchange fees and costs could be expected to attract new entrants into the provision of ATM services. Although there have been some new entrants, neither these nor competition between the established providers have created any discernible downward pressure on interchange fees. This raises some questions about the nature of competition in the provision of ATM services in Australia.

3.16 ANZ suggests that, in the absence of any evidence that interchange fees have been set in excess of the stand alone cost of producing interchange services, there is no mystery as to why new entrants or competition between established providers have not created any discernible pressure on interchange fees. Observed behaviour, including price setting, is entirely consistent with the hypothesis that prices are being set efficiently.

---

[4] Email from Michele Bullock, Chief Manager Payments Policy Department, Reserve Bank of Australia to Jerome Fahrer, Allen Consulting Group, 30 November 2000.

[5] For a non-technical explanation of the concepts, see William Baumol and J.Gregory Sidak, *Toward Competition in Local Telephony*, MIT Press, Cambridge Mass., 1994.

Foreign ATM Fees

3.17 The Study expresses some apparent concern about the size of foreign ATM fees, in particular that some financial institutions charge their customers "substantially more" than the interchange fees that the financial institutions pay.

3.18 In effect, the Study is suggesting that competition is absent in the provision of ATM services and by implication, that the existing providers of ATM services possess and use market power. Yet, Figure 2.2 of the Study shows that market share of ATMs is not very concentrated, with the highest share at about 26 percent.

3.19 In its latest finding on competition in banking services (the merger between the Commonwealth Bank and Colonial State Bank) the ACCC stated no general concerns about the general level of competition in ATM services. Its only apparent concerns were of the effect of the merger on competition for these services in Tasmania and regional NSW. To allay these concerns the Commonwealth Bank has undertaken to provide access to its EFTPOS and ATM networks on reasonable commercial terms and conditions to new and small financial institutions entering or expanding their operations in Tasmania and regional New South Wales.

3.20 ANZ suggests that, consistent with the general tenor of the ACCC's analysis of the CBA/Colonial merger, but contrary to the Study, competition for ATM services in Australia is very vibrant.

3.21 Moreover, the Study appears to have defined the product market too narrowly. ANZ's view is that the relevant market is electronic withdrawal of cash from devices other than bank tellers in branches; and electronic information processing (such as balance inquiries).

3.22 Consumers who wish to obtain cash, but not from a bank teller, are not confined to ATMs. They can do so anytime they make a purchase with a debit card (even a low value purchase), and so receive two services at once. There are about 350,000 EFTPOS terminals in Australia, many of which could be used to make cash withdrawals. Thus, consumers who need cash but are not near one of their own bank's ATMs are not obliged to use a foreign ATM and so pay a foreign ATM fee. They can also obtain cash, very easily, from a merchant with an EFTPOS terminal.

3.23 Similarly, consumers who wish to make balance enquiries, transfer funds between accounts etc are not confined to ATMs. They can do so over the telephone, or the Internet.

3.24 ATM-type services thus do not have to be performed at ATMs. With the extensive EFTPOS network, consumers have every opportunity to avoid paying interchange *cum* foreign ATM fees. The market for ATM-type services is very competitive.

Alternatives to Interchange Fees

3.25 The Study proposes an alternative to interchange fees, whereby cardholders are charged directly when they use a 'foreign' bank.

3.26 ANZ suggests that such a regime is unnecessary. The issue is one of disclosure. The Australian Securities and Investments Commission (ASIC) is leading a Transaction Account Fee Disclosure Working Group that includes representatives from consumer groups, credit unions, building societies, banks and Federal Treasury. The aim of the Working Group is to improve disclosure to give consumers the opportunity to better understand fee regimes and make informed choices. The Working Group has recently agreed with ASIC on the principle "customers should know at the point of making the transaction whether they could be charged a foreign ATM fee because the ATM is not in their network".

3.27 Empowering consumers by reminding them that a fee will be charged for use of an ATM that is not part of their financial institution's network and giving them the option to cancel the transaction is a superior option to replacing foreign ATM fees.

Summary

3.28 ANZ suggests that competition in the provision of ATM services is intense and that there is no compelling evidence to support the proposition that price signals are not allocating resources efficiently.

3.29 The apparent fact that interchange fees have not tracked changes in some interchange costs is not convincing evidence of inefficient price setting, much less use of market power.

3.30 The Study's conclusion that

> Interchange fees for ATM services are around double the average cost of providing these services. This margin cannot readily be explained by the need of ATM owners to earn a competitive return on capital

is a not supported in the absence of (i) an analysis of a time series of fees and costs and (ii) an analysis of stand alone costs of providing ATM services.

Chapter Four

Credit Card Networks

4.1 The Study makes the following major points with respect to credit card networks in Australia:

- The profit margin for credit card acquiring is unjustifiably high (not "attributable to the need to earn a competitive return on capital").
- Likewise, the profit margin for credit card issuing is unjustifiably high.
- Interchange fees should not include any allowance for credit losses.
- The 'no surcharge rule' suppresses price signals and results in the cross-subsidisation of cardholders by consumers who do not use credit cards.
- Interchange fees should include only part of the cost of the interest free period (no more than half).
- There are good reasons to restrict card issuing to institutions that are financially sound, but this need not imply that issuers are deposit taking institutions (as required under current Scheme rules).
- The restriction that acquirers also be issuers (and hence be deposit taking institutions) is not justified.
- High membership fees for Bankcard are restricting the entry of smaller deposit taking institutions into acquiring, since merchants want to be able to accept all cards.

Apparent High Margins

4.2 The Study claims (p44) that the cost of loyalty programs ($0.46) is not a resource cost and so should not be counted in the cost of credit card issuing.

4.3 ANZ suggests that, on the contrary, loyalty schemes are a resource cost. Loyalty schemes are a means of advertising credit cards, differentiating the products and attracting and holding customers — cardholders in any one scheme being particularly open to offers to move to other schemes. Such activities are thus most important to maintaining and growing participation by both merchants and cardholders in each scheme — and thus maintaining the network externalities flowing to all participants. Real resources are paid to the partners of the card schemes, no different in principle to the resources paid to staff that administer the schemes.

4.4 The Study's conclusions that credit card issuing and acquiring generate revenues well above costs is flawed further as it is based on only one year of data (1999) and so does not take account of the losses incurred as the credit card networks were rolled out. Gaining acceptance from merchants and consumers for credit cards took some time. These early losses were an investment in the credit card networks. Apparently large profits in later years represent a return on that investment and the asset so created, but this cost of capital is not captured in accounting data and so economic profits in recent years have been significantly smaller than accounting profits.

4.5 Table 4.1 below, reproduced from Evans and Schmalensee (1999), shows economic and accounting rates of returns for the Discover Card 1985-95. It clearly shows that the Discover Card made large accounting losses early in this period (soon after it was introduced) and large accounting profits later on. However, economic rates of return, calculated by capitalising costs of new accounts, were much smoother, as well as being lower on average.

Table 4.1

ECONOMIC AND ACCOUNTING RATES OF RETURNS FOR THE DISCOVER CARD 1985-95

	Rates of Return (%)	
Year	Accounting	Capitalising costs of new accounts
1985	-96	22
1986	-79	44
1987	-42	38
1988	5	36
1989	20	34
1990	22	27
1991	24	21
1992	27	7
1993	37	16
1994	53	22
1995	37	26
1989-95 average	32	22
1985-95 internal rate of return: 22%		

Source: Evans and Schmalensee, *Paying With Plastic: The Digital Revolution in Buying and Borrowing*, Cambridge: Mass, MIT Press, 1999

4.6 Figure 4.1 shows ANZ's Economic Value Added for Australian credit cards, in real terms, for the period 1989 to 1999.[6] (Economic Value Added is equal to profit after tax adjusted for credit costs and the cost of capital). These data show that credit card operations did not become profitable until **c-i-c**. Apparently large recent profits are merely offsets to losses incurred in the first decade or more of credit card operations. (EVA data are not available before 1989. However, consistent losses on credit cards were made prior to then.)

Figure 4.1

ECONOMIC VALUE ADDED IN ANZ'S CREDIT CARD BUSINESS 1989-1999 ($MILLION, $1989)

c-i-c

4.7 Figure 4.2 shows ANZ's credit card profit (before tax) over a longer run of years, from 1981 to 1999. This shows further the losses incurred as the schemes were developed.

Figure 4.2

PROFIT BEFORE TAX ON ANZ'S CREDIT CARD BUSINESS 1981-1999 (YEAR TO SEPTEMBER, $1989)

c-i-c

4.8 There is no guarantee that current profit rates will continue into the future. The Australian economy has performed particularly well in recent years and this has been reflected in strong consumer spending, high rates of credit card usage and low bad debts.

4.9 In future years, if the economy grows more slowly, all of these contributors to profit will deteriorate. Currently, the ratio of bad debts to outstandings is under **c-i-c** per cent. In contrast, in 1991, during the last recession, this ratio was **c-i-c** per cent. A rise in the bad debt ratio to this level would reduce before-tax profits by one-third.

4.10 Further evidence of the increasingly competitive nature of the credit card industry is shown in Figure 4.3 which shows the average merchant service fee rate charged by ANZ, defined as the ratio of gross merchant service fees to merchant turnover, for the period 1989 to 1999. There is a clear downward trend in this rate, driven by competition between acquiring banks for merchant business.

Figure 4.3

AVERAGE MERCHANT SERVICE FEE 1989-1999

c-i-c

4.11 Like its analysis of ATM networks, the Study makes no attempt to estimate the stand alone costs of the credit card networks. Since the test of whether margins are excessive is whether prices exceed stand alone costs, the Study has no basis for concluding that the margins obtained in the provision of credit card services exceed those needed to earn a competitive return on capital.

[6] Year to September.

4.12 In summary, ANZ suggests that the Study should not have concluded that the profit margins in credit card networks are excessive because it has (i) incorrectly omitted the cost of loyalty programs in the cost of credit card issuing (ii) considered only one year of data, instead of a time series which takes account of the losses incurred early in the life of the credit card networks, when financial institutions invested heavily in recruiting merchants and marketing the cards to their customers and (iii) not demonstrated that the price of either credit card acquisition or issuing are greater than their respective stand alone costs.

Credit losses

4.13 The Study argues that banks are "double dipping" by allowing for credit losses in both the interest rate charged to cardholders and the interchange fee, and advocates an alternative interchange fee that does not include any provision for credit losses.

4.14 The Study implicitly assumes that the only cardholders who default on their payments are those who also use credit cards for extended loans and so pay interest. According to this logic, the probability of default is built into the interest rate on the loans (charged directly to cardholders) and so there is no justification for also making provision for credit losses in the interchange fee.

4.15 ANZ suggests that, contrary to the arguments in the Study, there is no "double dipping", because a not insignificant proportion of credit losses occur from cardholders who pay no interest e.g. those people who make purchases using their credit card and simply do not make any repayment of the debt incurred, including interest accrued. Some of these people are those who normally pay off their cards in full each month and so never pay any interest. Thus, some allowance for credit loss in interchange fees is quite legitimate.

The 'no surcharge' rule and suggested cross subsidisation of credit card users

4.16 According to the Study, the 'no surcharge' rule leads to a cross-subsidisation of credit card users by consumers who pay by other means.

4.17 The Study assumes that, in the absence of the 'no surcharge' rule, merchants would pass on the merchant service fee to credit card users, enabling them to face price signals that "reflect the costs of providing credit card services".

4.18 It is not at all obvious that merchants would pass on the merchant service fee, even if they were permitted to under the card scheme rules. If only some merchants did so, consumers would switch their purchases to merchants who did not. Few, if any, merchants would risk the near-certain hostility they would face from consumers if they attempted to charge more for credit card transactions.

4.19 Merchants would be further reluctant to pass on the merchant service fee for credit card transactions because these transactions reduce cash handling and cheque processing costs. Evidence from the Food Marketing Institute in the United States suggests that the direct cost of using cash for the average FMI member is about 1.9 per cent of each transaction.[7] This excludes theft costs.

4.20 Aside from the adverse commercial implications for merchants who charge more for credit card users, the Study seems to assume that economic efficiency would be enhanced if merchants obtained the same profit margin from sales to all classes of customers (specifically credit card users and others).

4.21 As a matter of economics, this is not correct. Optimum economic efficiency (e.g. through Ramsey pricing) is often obtained when, for identical costs, different prices are charged to different consumers, or equivalently, when the same prices are charged to different consumers with different costs.

4.22 The no surcharge rule binds merchants to pricing behaviour that creates positive spillovers for the schemes as a whole by preventing merchants from free-riding on the benefits of credit cards. A merchant who charged a surcharge would share in the benefits of accepting cards (a population of cardholders) without also sharing the associated costs of card use.

4.23 The fact that few merchants offer discounts for cash (which is allowed under card scheme rules) indicates that for most merchants, the transactions costs of doing so exceed the benefits of any extra sales that might result.

4.24 Furthermore, the no surcharge rule does not imply cross subsidisation, contrary to the claim made in the Study.

4.25 A clear definition of cross subsidy was given by Faulhaber (1975)[8] On this definition, a service provides a cross-subsidy if that service generates more revenue than the cost of providing it on a stand alone basis. A service receives a cross subsidy if the costs saved by removing it are greater than the revenues that would be lost.

4.26 The Study has not demonstrated, on this economic definition of cross-subsidy, either that non-credit card paying customers provide a cross subsidy or that credit card paying consumers receive one.

4.27 The test of whether non-credit card paying customers generate a cross subsidy would be the presence of businesses who do not accept any credit cards. Since these are uncommon in the Australian retail sector, it would appear that the revenues generated by such hypothetical businesses would be less than their stand alone costs i.e. this test is not passed.

---

[7] Food Marketing Institute, *EPS Costs: A Retailer's Guide to Electronic Payment systems Costs,* 1998.

[8] G.R Faulhaber, "Cross Subsidization: Pricing in Public Enterprise", 65, *American Economic Review,* 1975

4.28 The test of whether credit card paying customers receive a cross subsidy would be to ask what would happen to merchants who stopped accepting credit cards. In all likelihood these merchants would lose far more in revenue than they would save in costs, in which case this test would not be passed either.

4.29 ANZ suggests that no cross-subsidy from non-credit card users to credit card users has been demonstrated by the Study.

Indicative Interchange Fee

4.30 The Study calculates an indicative interchange fee by adding the cost of the interest free period ($0.00 to $0.13), fraud ($0.07), authorisation ($0.04) and processing ($0.17). By this methodology, it arrives at a total interchange fee of $0.28 to $0.41, much less than the current average interchange fee of about $1.00.

4.31 As argued above, the cost of loyalty programs is a true resource cost and needs to be recovered either in the interchange fee or directly from cardholders.

4.32 Also as argued above, there is no double dipping on credit losses and these should also be legitimately recovered in the interchange fee.

4.33 ANZ is concerned that the wide range for most cost components reported in the Study's Table 5.1 could indicate a significant flaw in the Study's generation and use of cost data — which may well (indeed appear to) be based on different definitions across the banks. It is ANZ's view that a comprehensive and consistent study of credit card issuing and acquiring costs by accounting experts is required. Such a study has been commissioned as part of the Review of Credit Membership Rules and Interchange Fees.

4.34 ANZ also suggests that the methodology used in the Study for calculating the interchange fee is not rigorous and recommends instead the methodology developed by Frontier Economics which calculates the interchange fee as a residual cost, taking into account total issuers' costs and total issuers' revenues from cardholders. This methodology was summarised in paragraph 2.9 above.

4.35 The implicit argument in the Study that interchange fees are no longer needed (or not needed at current levels) because credit card networks are now mature is not correct, because it ignores the competition that these networks face from the closed credit and charge card systems (principally American Express and Diners Club), and of course from each other. In reality all the schemes suffer constant significant lapse rates and ongoing promotional efforts are required to maintain and grow the participation levels on which the network externality benefits to all participants depend. They are never 'mature'.

4.36 The interchange fee is the mechanism that makes the open credit card networks (Bankcard, Visa, MasterCard) viable. If the interchange fees were significantly lower (as advocated in the Study) credit card issuers would be compelled to raise more revenue directly from cardholders. This would lead cardholders to substitute towards competitor closed system credit cards (e.g. American Express) whose price had not risen.

4.37 Reductions in the number of open system cardholders will reduce the attractiveness of these cards to merchants, causing some to leave the systems. This will make the open cards even less attractive to cardholders, and a dynamic process could be set in train that undermines the viability of the open credit card networks.

4.38 Lower interchange fees could also, at the margin, act as a disincentive for smaller financial institutions to issue cards, leading to less competition and a worse deal for cardholders, also causing them to switch to the closed system cards.

4.39 Conversely, if the interchange fees were significantly higher, the acquiring banks would be compelled to recoup them through higher merchant service fees. This would reduce the attractiveness of the cards to merchants and the same destructive dynamic process could well take place.

4.40 The argument in the Study (p29) that merchants, as a whole, have no choice but to accept the open credit cards that are the subject of the Study is incorrect. If the price to them of accepting these cards is too high, merchants will switch to alternatives like American Express — just as issuers can (e.g. AMP Bank).

4.41 Finally, it should be noted that interchange fees in Australia are low by international standards. This can be seen in Table 4.2, which compares credit card interchange fees for a number of countries.

Table 4.2

INTERNATIONAL COMPARISON OF INTERCHANGE FEES

Country	Visa		MasterCard	
	Standard rate	Electronic rate	Standard rate	Electronic rate
Australia	1.20%	0.80%	1.20%	0.80%
New Zealand *	1.50%	1.10%	1.50%	1.10%
Hong Kong	1.60%	1.00%	1.67%	1.16%
Singapore	1.75%	1.15%	1.5%	1.15%
Japan	1.44%	1.00%	1.44%	1.00%
Taiwan	1.50%	1.50%	1.50%	1.50%
Canada	1.75% + $0.25	1.75%	Not available	Not available
USA #	2.30% + $0.10	2.00% + $0.10	Not available	Not available
UK	1.3%	1.00%	Not available	Not available
France	1.25%	1.25%	Not available	Not available
Germany	1.25%	1.25%	Not available	Not available

Notes: NZ also has a specific supermarket rate at 0.875% # US has a number of interchange rates for specific merchant categories. MasterCard fees not available for North America and Europe, but can assume at least as high as Visa.

Sources: ANZ analysis

Access to credit card schemes

4.42 According to the Study, the requirement in the MasterCard and Visa rules that merchant acquirers must be also be issuers and hence authorised deposit-taking institutions is "objectionable" and cannot be justified, because acquirers do not introduce settlement risk for other financial institutions in the system.

4.43 The Study appears to have misinterpreted the Schemes' eligibility criteria. It is also worth noting here that some non–banks evidently do not appreciate that acquiring is not the provision of terminals, communications networks or processing services. The schemes present no barriers to participation in these. Rather acquiring is essentially a *banking* function, i.e. carriage of settlement obligations — e.g. in the event of charge–backs — *and* enforcement of merchant obligations. The latter alone requires an arm's length relationship between acquirer and merchant and presents considerable difficulty for the case of a merchant becoming an acquirer primarily with the intention of acquiring its own transactions. See below.

4.44 The Schemes do not *require* that acquirers also be issuers. The Schemes do, however, impose moderate financial loadings on those Scheme members whose volume of acquiring business exceeds a pre-determined ratio of their volume of issuing business. The rationale for this rule is to ensure balanced development of the Schemes, i.e. to help fund scheme efforts to maintain and build participation by cardholders and merchants.

4.45 MasterCard does not require its Scheme members to be authorised deposit taking institutions (DTIs). MasterCard does generally require them to be supervised financial institutions, a less onerous requirement. (GE Capital issues MasterCards in Australia and it is not a DTI.)

4.46 There exist very good reasons for acquirers to be financially sound, and to be seen to be financially sound. These reasons motivate the Scheme eligibility rules for all members, including acquirers.

- Acquirers sometimes do have to settle with issuers e.g. when merchants collapse or do not otherwise deliver goods or services for which consumers have pre-paid. The amounts can be large e.g. if an airline collapses with many pre-paid tickets. This has occurred twice in Australia in the past decade, with the collapses of Compass I and II.
- Acquirers have to pay merchants. This occurs with a lag of up to a couple of days, depending on whether the merchant banks with its acquirer. Failure of an acquirer to pay could leave merchants in significant financial distress, especially if it occurred at a time of significant retail sales (e.g. the Christmas season).
- Furthermore, failure by an acquirer would leave all of its merchants unable to make credit card sales, which in itself would cause significant merchant distress.

4.47 Failure by an acquirer could thus have extremely serious consequences for merchants and would endanger confidence in the affected credit scheme as a whole (with possible contagion effects to other credit card schemes). Acquirers must not just be financially sound in fact, but all participants — merchants, consumers, other scheme members — in the credit card schemes must be confident that they are sound.

4.48 The eligibility rules for scheme members are designed to engender this confidence. The card schemes themselves are not expert in assessing the financial soundness of their potential members. By requiring their members to be supervised (regulated) institutions, the schemes are effectively delegating the task to each country's financial regulatory authorities. This is a very efficient way of solving the problem.

4.49 The scheme eligibility rules are thus clearly justified. But in any case, it is not true, as the Study suggests, that these rules constitute a barrier to entry into the schemes.

4.50 Non-financial institutions can effectively enter as issuers by partnering with an eligible scheme member. Such partnerships e.g. Qantas and Telstra with ANZ have proliferated on the issuing side in recent years. While the scheme members take final responsibility for settlement, the credit cards are marketed by the non-FI partners.

4.51 Similarly, non-FIs can participate in merchant acquiring by providing terminals and communications services to merchants, on behalf of acquirers. In Australia, Coles Myer performs such a service provision role for itself (with CUSCAL as its acquirer) and specialist firms, such as First Data Resources, perform a similar role for other merchants. Data Corporation (the US parent) is the largest player in the world in processing of card acquisition transactions, but is not an acquirer.

4.52 In summary, scheme eligibility rules exist to maintain confidence by all relevant parties in the credit card schemes. But they are a not a barrier to *effective economic participation* in the schemes.

Chapter Five

Debit Card Networks

5.1 The Study makes the following major points with respect to debit card networks in Australia:

- The average profit margin for debit card acquiring is high, but not as high as credit card acquiring.
- There is no convincing case for the debit card interchange fee which is paid by issuers to acquirers.
- Access to the debit card network via a series of bilateral agreements can work to the competitive disadvantage of new issuers and acquirers, because they may need to use more expensive gateway arrangements.

Margins

5.2 Like its analysis of margins in ATM networks and credit card networks, the Study makes no consideration of margins over time in debit card networks.

5.3 ANZ considers that there is little that can be meaningfully inferred or concluded from the analysis of margins for just one year.

Interchange Fees

5.4 The Study concludes that there is no case for an interchange fee (in either direction), but its own analysis of costs is inconsistent with that conclusion.

5.5 According to the Study's own cost analysis, acquirers incur costs of $0.15 per transaction (justifying an interchange fee of that amount).

5.6 Alternatively, according to the Study, the gap between costs and revenues for debit card acquirers is $0.14 per transaction (justifying an interchange fee of that amount).

5.7 Average interchange fees paid are $0.20 per transaction. Given the inevitably arbitrary allocation in the Study's analysis of infrastructure costs that are shared between debit and credit card networks, and between debit cards and other aspects of transactions accounts, the interchange fee actually paid is reasonably close to both the cost of interchange and the gap between acquirers costs and revenues, as calculated by the Study.

5.8 ANZ considers that the structure of debit card interchange fees in Australia is reasonable and that the Study has provided no compelling evidence to the contrary. The fact that other countries have no interchange fees, or interchange fees which go in the other direction, could be explained by the structure of fees and costs in those countries, and is not in itself indicative that there is a problem in Australia. In this regard, there is no *a priori* reason why interchange fees in debit card networks should be positive or negative, let alone fixed arbitrarily at zero. These fees are effectively a residual needed to ensure that acquirer and issuer each receive an appropriate return when taken together with the differences between their respective direct revenues and costs.

5.9 The fact that Australia has an integrated system of debit and credit cards further complicates any comparisons with the United States where these networks are particularly fragmented.

Access and Gateway Arrangements

5.10 The Study concludes that gateway arrangements (and associated fees) can work to the competitive disadvantage of new issuers and acquirers.

5.11 ANZ considers that this conclusion ignores the sunk investment costs in the debit card network and the commensurate infrastructure investment savings that gateway users enjoy.

5.12 ANZ submits that those financial institutions that invested in the debit card infrastructure are entitled to receive a competitive return on that investment, and this return is reflected in gateway fees.

5.13 ANZ further submits that gateway arrangements, far from inhibiting access, ensure access for institutions too small to fund the capital required to build a large network.

5.14 Furthermore, ANZ considers that a duplicate debit card network would be economically inefficient and that the most efficient structure is that which is in place, where access to the existing network is granted under commercial terms.

Chapter Six

Choice Between Credit and Debit Cards

6.1 The Study, in its final part, claims that incentives to use credit and debit cards are distorted, especially by interchange fees, and this explains the growth of (high cost) credit card usage relative to (low cost) debit cards. Consequently

> "Australia … has a higher cost retail payments system than is necessary and much of this cost is borne by consumers who do not use credit cards."

6.2 Implicit in this conclusion is the assumption that payment by debit card confers on consumers the same quality of service as payment by credit card and since the former is cheaper to produce, efficiency dictates that payment by debit cards should be encouraged at the expense of credit cards.

6.3 However, this assumption is difficult to accept. For many consumers, credit cards are a superior means of making payment (quite apart from the accumulation of loyalty points).

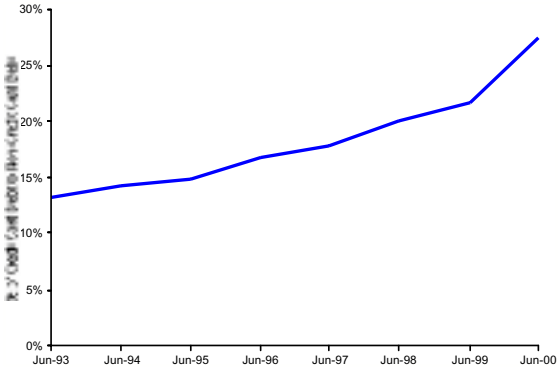
- Payment by debit card requires that sufficient funds are available in the transaction account at the time of purchase. Payment by credit card does not, so consumers do not have to align their consumption with their liquidity i.e. credit cards relieve liquidity constraints.
- Consumers gain the benefit of the interest-free period when paying by credit card. When they pay by debit card, they incur the opportunity cost of lower transaction balances.
- Some credit cards provide consumers with extended warranties for goods that they purchase.
- Some types of purchases, e.g. over the Internet, can effectively only be made with a credit card.
- All credit cards provide refunds for goods or services, which are not received after they have been paid for in advance. For example, if a consumer buys an airline ticket with a credit card in advance, and the airline ceases operations after the purchase of the ticket but before the flight, the airline's acquiring bank will refund the consumer (via the card issuer). This scenario is not hypothetical. It occurred twice in the early 1990s in Australia with the collapses of Compass (I and II). In contrast, consumers who make purchases in advance using cash, cheques or debit cards are unlikely to receive their money back if the merchant shuts down before delivering.

6.4 The Study has also misinterpreted the nature of competition in the payments industry. The main competition for open system credit cards (Bankcard, Visa, MasterCard) does not come from debit cards. It comes from closed system credit and charge cards (American Express and Diners Club). Increasing the price of open credit card use, as the Study advocates, will not primarily lead to a switch in demand toward debit cards (which are inferior payment instruments). It will lead to a switch in demand towards the closed system credit cards.

6.5 Furthermore, credit cards are not just payments instruments. They are also an easily accessible line of credit for consumers. Substantial evidence exists that consumers are switching from personal loans to credit cards. Figure 6.1 shows that the ratio of credit card outstandings to other personal loans (excluding housing) has risen steadily in recent years.

Figure 6.1

RATIO OF CREDIT CARD LOANS TO OTHER PERSONAL LOANS, 1993-2000



Source: Reserve Bank of Australia *Bulletin*

6.6 Although the interest rates on credit card loans are generally higher than on other personal loans, consumers find credit card loans attractive because

- Other than the minimum monthly repayment, consumers have complete flexibility in deciding how much of the loan they will repay and when, in contrast to the fixed payment schedules of personal loans.
- Consumers can likewise draw down as much as they like of their credit card facility (up to their credit limit) at any time of their choosing.
- Credit card loans also involve much lower transactions costs than other forms of lending, to the benefit of both borrowers and lenders. According to Brito and Hartley (1995)[9]

> "A senior bank official told us that the costs to the bank of processing a loan are so high that they cannot afford to make a loan of less than $3000 for 1 year except at interest rates above those charged on credit cards …".

6.7 The apparent difference in the resource costs of credit cards and debit cards is thus not especially meaningful or relevant, because (i) credit cards offer a higher quality payment service than debit cards and (ii) credit cards are not just a payment instrument, they are also a loan instrument.

[9] D.L. Brito and Peter R. Hartley, 1995, "Consumer Rationality and Credit Cards", *Journal of Political economy,* 103 (April), 400-403, at p.402.

6.8 There is thus no necessary inefficiency if consumers choose to make payments by the more costly (but higher quality) means of credit cards. That is simply a matter of consumer preference. Analogously, people could all drive the cheapest possible cars. The fact that some choose to drive more expensive cars is not a sign of economic inefficiency or wasted resources.

6.9 Furthermore, credit cards are often superior from the point of view of merchants, which is why they are prepared to pay the associated merchant service fee. Credit cards relieve the liquidity constraints faced by many consumers and so lead to a greater volume of sales for merchants who accept them. They give greater control over the source and timing and other aspects of the management of personal finances. For example, their use reduces the need to hold idle balances in transaction accounts.

6.10 There is no solid evidence to support the Study's view that interchange fees are distorting the relative price of credit card and debit card payments and hence the choice of payments systems by consumers. The Study's own methodology for calculating efficient credit card interchange fees shows that interchange fees, on average, are at about the right level, once all relevant costs are counted.

6.11 Given (i) an intense level of competition in issuing (evidenced by the fact that any deposit taking institution can issue cards) (ii) an intense level of competition in acquiring (evidenced by the trend decline in ANZ's average merchant service fee) and (iii) an efficient interchange fee which keeps both cardholders and merchants in the system, there exists no basis for concluding that serious price distortions exist in the payments networks under review in the Study.

6.12 Consistent with the above, risk-adjusted profit margins are no more than would be expected in a competitive industry.

6.13 The Study also notes that consumers are using credit cards rather than direct debits as payment instruments. Direct debit is not popular as a payment instrument, but the reasons have little if anything to do with distorted prices. Consumers prefer to control how and when they pay their bills and simply do not like the idea of giving access to their bank accounts to the electricity company, gas company etc, or to have to maintain idle balances etc to allow for these.

6.14 The preference expressed in the Study for payments by debit card and direct debit over payments by credit card effectively is a call for liquidity constraints to be imposed on consumers, so that they can purchase goods and services only when they have sufficient funds in their transaction accounts. ANZ respectfully suggests that such a preference is difficult to understand. Liquidity constraints are usually thought of as a sign of an inefficient financial system, because they signify an inability by those so constrained to make efficient intertemporal trades (e.g., short term borrowing to smooth consumption patterns).