4 Credit cards: profitability

4.1. In this chapter we discuss methods of measuring the profitability of the supply of credit card services, review the profitability of the banks which are the principal suppliers of credit card services, and compare their results with each other and with the profitability of their total businesses. We then consider whether their credit card profits could be divided into those derived from merchant acquisition and card issuing.

General considerations

4.2. The question of how best to measure credit card profitability was considered by the Commission in their previous inquiry. Some of the indicators that might be used are return on funds employed,[1,2] return on lending,[3] return on capital resources[1,4] and return on shareholders' funds (share capital, reserves and minority interests).[5] In addition, some banks have suggested that the return on their total investment in credit cards might be ascertained by the use of discounted cash flow (DCF) techniques.

4.3. The Commission in 1980 saw merit in the banks' arguments, as set out in paragraph 11.39 of the 1980 report,[6] that return on funds employed was not an appropriate measure to use, as the bulk of the banks' funds were obtained as deposits in the normal course of business. We agree with that view. We also agree with our predecessors that return on lending is useful when comparing the profitability of credit card businesses with the profitability of banking businesses overall; we therefore show the banks' returns on credit card lending compared with their overall and domestic returns on lending in Table 4.6. But a possible drawback of return on lending is that it cannot be used to compare the profitability of credit card services with that of other businesses which are financed in a different way from banks.

4.4. We therefore considered whether either return on capital resources or return on shareholders' funds would be a more appropriate measure of credit card profitability for us to use. Return on shareholders' funds is one of the ratios used by the banks in their annual reports but we were told that, while it was commonly used by shareholders and investors to measure the profitability of a business enterprise as a whole, it was sensitive to gearing and could therefore give the wrong signals to potential entrants to the market and be inappropriate to a monopoly inquiry. The unusually high gearing of banks, if deposits are taken into account, also means that small changes in their returns on lending can lead to substantial changes in their profitability if it is expressed in terms of either return on capital resources or return on shareholders' funds. This effect is less marked if return on capital resources is used. Return on lending is, however, unaffected by gearing. Taking all these considerations into account, we decided to use return on capital resources as the principal indicator of profitability for the purpose of this inquiry, but also to have regard to return on lending.

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[1]We have not used the term `capital employed' as it may be ambiguous when applied to banks. Instead we have used the term `capital resources' to mean shareholders' funds, plus loan capital to the extent that it is eligible (see paragraph 4.6); and the term `funds employed' to mean capital resources plus customers' deposits.

[2]Profit before interest and tax as a percentage of funds employed.

[3]Profit after interest but before tax as a percentage of funds employed. Sometimes described as `return on total assets'.

[4]Profit after interest (except interest on eligible loan capital) but before tax as a percentage of capital resources.

[5]Profit after interest but before tax as a percentage of shareholders' funds.

[6]A Report on the Supply of Credit Card Franchise Services in the United Kingdom (Cmnd 8034).

4.5. We then considered, as did our predecessors in 1980, what proportion of a bank's capital resources should be attributed to its credit card business. The banks maintained that the risks involved required a higher allocation of capital resources in support of their credit card business than was necessary for their business as a whole.

4.6. They referred to the Bank of England's capital adequacy requirements. These require each bank to calculate its total risk assets and its eligible capital resources. Total risk assets are arrived at by applying to each class of assets a risk-weighting factor laid down by the Bank of England. These weightings are intended to reflect the relative riskiness of the assets concerned. Thus, all private sector lending other than mortgages has a risk rating of 1 whereas Treasury bills, which are inherently less risky, have a risk rating of 0.1. The eligible capital resources figure is calculated by taking the bank's total capital resources and making certain adjustments. For example, loan capital may be included only if it is subordinated and is subject to a deduction if it has less than five years to maturity. The bank's risk assets ratio (RAR) is then calculated by expressing its eligible capital as a percentage of its total risk assets. The Bank of England's rules provide for the use by all banks of the same risk weightings and the same rules on the eligibility of capital in calculating their RARs.

4.7. While the Bank of England does not set a separate risk weighting for credit card lending, the banks told us that riskier loans require more capital backing than others because they are likely to result in the Bank of England imposing a higher minimum RAR. RARs are set having regard to the Bank of England's assessment of various factors, such as the quality of management and the quality of the lending portfolio. It was appropriate to apply the same principles to the separate parts of a diversified lending portfolio, so as to attribute proportionately more capital resources to credit card lending than to the generality of a bank's lending portfolio. The banks understood that the Bank of England regarded consumer finance lending, such as credit card lending, as being of above-average risk. Each bank therefore calculated the capital resources that it estimated to be necessary to support its credit card business and used this amount as a basis for calculating its credit card profitability.

4.8. We accept in principle that it may be appropriate to attribute a higher capital support (ie the ratio of capital resources to funds employed) to a bank's credit card business than to its general business, on the grounds of the higher risk involved. There were, however, considerable differences between the capital support figures of the six leading credit card issuers, as shown in Table 4.1.

TABLE 4.1 **Credit cards: capital resources in relation to average funds employed**

£ million

	1984	*1985*	*1986*	*1987*	*1988*
Lloyds					
Average funds employed	377.8	491.5	650.2	794.9	876.9
Capital resources	48.9	63.2	84.1	104.1	117.7
Per cent	12.9	12.9	12.9	13.1	13.4
Midland					
Average funds employed	409.6	472.1	544.1	651.3	681.4
Capital resources	48.6	56.7	67.5	76.9	91.9
Per cent	11.9	12.0	12.4	11.8	13.5
NatWest					
Average funds employed	557.9	662.5	789.5	913.2	1,002.2
Capital resources	57.7	69.3	83.4	97.4	109.7
Per cent	10.3	10.5	10.6	10.7	10.9
RBS					
Average funds employed	73.65	108.51	130.86	152.68	177.59
Capital resources	7.37	10.85	13.09	15.27	17.76
Per cent	10.0	10.0	10.0	10.0	10.0
Barclays					
Average funds employed*	1,133	1,408	1,719	2,000	2,195
Capital resources	113.3	167.6	204.6	238.0	261.0
Per cent	10.0	11.9	11.9	11.9	11.9
TSB					
Average funds employed	256.1	324.3	391.7	443.9	499.3
Capital resources	53	64	68	67	74
Per cent	20.7	19.7	17.4	15.1	14.8

Source: MMC study using data provided by the banks.

*According to its CRSD balance sheet.

4.9. We would be surprised if the risks of credit card lending differed significantly between one bank and another. While, therefore, we have accepted each bank's credit card profitability calculations using its own estimates of the capital support required, we have also, by way of illustration, made a gearing adjustment by showing what each bank's profitability would have been if its capital support had conformed to the average. Based on 1988 weighted figures, we calculate the average capital support to be 12.4 per cent.[1]

4.10. Lloyds, Midland, RBS and Barclays also submitted credit card profitability calculations using a form of DCF analysis, extracts from which are shown in Appendices 4.8 to 4.11. In the case of Lloyds and RBS these covered their operations until 1988. The calculations submitted by the other two banks covered their operations until 1987.

4.11. The most complete DCF analyses were provided by Midland and Barclays. Midland's was on two bases. The first, which included launch costs and placed a terminal value on the business in 1988 equivalent to the capital invested in it, showed an internal rate of return of 14.5 per cent before tax and 8 per cent after tax. In the second, launch costs were excluded and the terminal value was increased above the original cost by a premium of 25 per cent. The internal rate of return then became 19.2 per cent before tax and 10.6 per cent after tax.

[1] When we put this matter to Barclays for comment it drew our attention to the fact that additional assets relating to its credit card business were held outside its CRSD balance sheet, namely funds employed in liquidity balances and certain items of equipment. The effect of including those items would have been to reduce Barclays' capital support to 8.3 per cent in 1984, and to 9.8 per cent in the four subsequent years. It would also have reduced the 1988 average capital support for all six banks from 12.4 per cent to 11.4 per cent.

4.12. Barclays' calculations were based on discounting the after-tax profitability of its credit card business, rather than on a detailed identification of cash flows, and included residual values for the business based on price earnings ratios in the range 8 to 12. On the basis of a price earnings ratio of 10, Barclays estimated a DCF return on its credit card business of 17.6 per cent nominal and 7.1 per cent in real terms.

Special considerations

4.13. In reviewing the banks' credit card costs we identified three elements as requiring special consideration: bad debts, branch costs and cost of funds.

4.14. The need for special consideration of branch costs and cost of funds arises mainly because, as noted in the 1980 report, the banks' credit card businesses are (with the exception of the TSB Group, where there is a separate subsidiary, TSB Trustcard Ltd) carried on as departments or divisions of their general banking businesses. Income from credit cards, and some of the costs incurred in earning that income, are directly attributable to their credit card departments and therefore readily ascertainable. Other credit card costs arise in other departments of the bank and are less readily ascertainable.

Bad and doubtful debts

4.15. Table 4.2 shows for each of the big four (Lloyds, Midland, NatWest and Barclays) their credit card bad debts for the period 1984 to 1988 and expresses them as percentages of, first, their total credit card income and, secondly, the average indebtedness from cardholders during that period.

TABLE 4.2 **Credit cards: bad debts, 1984 to 1988**

	Bad debt deductions £m	*Credit card income* £m	*Bad debts as a percentage* %	*Average indebtedness* £m	*Bad debts as an annualised percentage* %
Lloyds	47.0	675.4	7.0	590.6	1.59
Midland	31.7	624.1	5.1	536.4	1.18
NatWest	60.7	830.1	7.3	706.2	1.72
Barclays	87.6	1,887.3	4.6	1,660.8	1.05

Source: MMC study using data provided by the banks.

4.16. Although NatWest's and Lloyds' bad debts were higher in relation to their credit card income and their average indebtedness than those of Midland and Barclays, we have not adjusted any of the banks' profitability computations by reason of these differences.

Branch costs

4.17. Branch costs attributed to credit cards include the making of cash advances, the processing and transmitting of sales vouchers paid in by traders, and the recruitment and processing of new cardholders. Table 4.3 shows these costs for each of the big four for the years 1984 to 1988 and expresses them as percentages of their credit card income and their total operating costs. As a percentage of total credit card income, NatWest's branch costs were highest, followed by Midland and Lloyds, with Barclays considerably lower. As a percentage of total operating costs, NatWest's were again highest, followed by Lloyds, Midland and Barclays in that order.

TABLE 4.3 **Credit cards: branch costs, 1984 to 1988**

	Branch costs *£m*	*Credit card income* *£m*	*Branch costs as a percentage* *%*	*Total operating costs* *£m*	*Branch costs as a percentage* *%*
Lloyds	54.4	675.4	8.1	8,023	0.68
Midland	59.7	624.1	9.6	10,240	0.58
NatWest	112.5	830.1	13.6	12,013	0.94
Barclays	56.0	1,887.3	3.0	12,825	0.43

Source: MMC study using data provided by the banks.

4.18. It might be expected that the relationship between a bank's credit card-related branch costs and its total operating costs would reflect the relationship between the size of its credit card business and its total business. The credit card-related branch costs of Lloyds, Midland and NatWest were, however, all higher in relation to their total operating costs than those of Barclays, although the latter's credit card business represents a larger proportion of its total business. We recognise, however, that there are differences in the way the banks organise their credit card operations and allocate their costs which make it difficult for us to draw any firm conclusions from these variations. Barclays, for example, told us that its credit card branch costs fell between 1986 and 1987 because certain procedures previously carried out at branches were centralised within the Barclaycard operation.

Cost of funds

4.19. Another matter considered by the Commission in 1980, which was again the subject of discussion between the banks and ourselves during this inquiry, was cost of funds. At an early stage of the inquiry we suggested to the banks that it should be possible to calculate an actual cost of funds rate by dividing each bank's interest payable and deposit-gathering costs by its total average borrowings. Our `public interest' letters to the banks included profitability calculations prepared on that basis.

4.20. The banks told us that it would be misleading to calculate credit card cost of funds in this way because of their non-sterling borrowing, much of which was at lower rates than those prevailing in the United Kingdom, and which would require to be hedged if it were used to finance sterling lending. They also emphasised the difficulties of separating their deposit-gathering costs from their other operating costs.

4.21. They proposed instead the use of market-based rates of interest. Details are shown in Appendix 4.1. They said they used market rates for management accounting purposes and for setting lending rates, and that as these represented the marginal or opportunity cost of funds they were in principle the right rates to use. The banks also told us that the difference between the cost of obtaining deposits and market rates of interest represented a profit on deposit gathering which should not be regarded as part of their credit card profits. Barclays said that all the funds raised through its branch network were re-lent by its branches, so that its credit card activities were in practice wholly financed by money market funds.

4.22. We told the banks that we accepted that it might be right for them to calculate their cost of funds for management accounting purposes or setting lending rates by reference to the marginal or opportunity cost of money, but our purpose was different. It was to estimate each bank's actual, as distinct from its notional, credit card profits. We doubted whether a profit could be earned on deposit gathering alone: deposits, once gathered, had to be lent before this could be done. Neither did we

think that it followed from Barclays' experience that particular funds raised by a bank were necessarily earmarked for a specific purpose.

4.23. We formed the view from some of the evidence we received that as banking was a single, integrated business all deposits taken in by a bank might be regarded as available to finance the totality of lending. Midland, for example, told us that all its funds went into a common pool, whether they came from Eurodollar funds hedged in the forward market, current account deposits or high-interest cheque accounts; and Lloyds, in referring to the difficulties of allocating branch and Head Office support costs, said that its Access Department was an integral part of the bank and that without the extensive branch network and Head Office support units it would be impossible for the department to operate as it did.

4.24. Despite the difficulties of separating deposit-gathering costs, Lloyds, NatWest, Barclays and TSB were able to provide us with their average sterling cost of funds rates for certain years, including the estimated cost of obtaining those funds. These are set out in Table 4.4. Those banks emphasised, however, that a number of assumptions and subjective judgments had been made in calculating these rates, which in their view were of limited value. We observe that the banks' calculated costs are lower than the rates they actually used, as shown in Appendix 4.1, which indicates the extent to which an element of deposit-gathering profit is included in their cost of funds deductions.

TABLE 4.4 **Credit cards: the banks' estimates of average sterling cost of funds rates**

per cent

	Lloyds	*NatWest*	*Barclays*	*TSB*
1984	N/A	8.07	N/A	8.64
1985	N/A	10.18	10.6	9.84
1986	10.14	8.94	9.9	9.94
1987	N/A	7.91	9.0	8.84

Source: MMC study using data provided by the banks.

4.25. We accept the banks' submissions that the cost of credit card funds should not be based on their total interest payable, because of the effect in most cases of non-sterling borrowings. After careful consideration, we are also prepared to accept that credit cards are a separate activity from deposit gathering, and therefore agree that credit card profitability calculations should use cost of funds figures based on money market rates. However, from comparisons of the data on the cost of obtaining sterling funds provided by some banks (Table 4.4) with the market cost of funds figures used by those banks in their credit card profitability calculations (Appendix 4.1) it appears that around 10 per cent of the banks' cost of funds deductions could represent deposit-gathering profits. We have therefore shown, by way of illustration, what their profitability would have been if a hypothetical reduction of 10 per cent had been made in their cost of funds figures (except for RBS, whose cost of funds figures were generally higher, and where we have made a reduction of 15 per cent).

The major card-issuing banks: credit card profitability

4.26. Table 4.5 shows, for each of the last five years, three sets of profitability indicators for Lloyds, Midland, NatWest, RBS, Barclays and TSB (which between them account for about 90 per cent of the market). The first is their credit card return on capital resources (ROCR) as calculated by the banks themselves. The second is their credit card ROCR adjusted to show, by way of illustration, what their profitability would have been if the ratio of their capital resources on credit cards was in all cases 12.4 per cent (the gearing adjustmentsee paragraph 4.9) and the estimated deposit-gathering profit had been eliminated from the cost of funds deductions (see paragraph 4.25). The third is the

profitability (pre-tax profits as a percentage of capital resources) of their overall businesses. Further details of their credit card profitability calculations appear in Appendices 4.2 to 4.7.[1,2]

TABLE 4.5 **Comparisons of credit card profitability (ROCR) with the banks' profitability overall**

per cent

	1984	*1985*	*1986*	*1987*	*1988*
Lloyds					
Credit cards:					
As calculated by the bank	37.2	36.2	37.6	35.4	18.9
Adjusted for gearing and cost of funds changes	45.1	45.3	46.2	43.8	26.6
Overall	19.4	19.5	20.0	(3.3)	24.3
Midland					
Credit cards:					
As calculated by the bank	30.7	30.5	33.5	26.5	23.3
Adjusted for gearing and cost of funds changes	36.6	38.5	41.0	32.4	31.7
Overall	7.9	13.5	14.7	(7.8)	18.0
NatWest					
Credit cards:					
As calculated by the bank	31.4	24.2	25.9	3.0	12.9
Adjusted for gearing and cost of funds changes	34.8	30.9	31.3	10.8	20.0
Overall	20.4	19.7	19.0	12.3	20.2
*RBS**					
Credit cards:					
As calculated by the bank	16.7	16.7	39.1	34.1	18.5
Adjusted for gearing and cost of funds changes	27.3	30.4	47.3	42.0	28.6
Overall	16.4	18.1	16.5	15.7	20.0
Barclays					
Credit cards:					
As calculated by the bank	45.5	42.2	46.7	36.5	35.1
Adjusted for gearing and cost of funds changes	44.6	48.4	52.2	41.2	40.2
Overall	18.2	20.9	19.3	8.4	21.5
*TSB***					
Credit cards:					
As calculated by the bank	5.1	1.7	10.6	12.4	15.5
Adjusted for gearing and cost of funds changes	10.1	4.7	17.7	19.1	22.5
Overall	21.3	20.3	19.6	16.4	22.8

Source: MMC study using data provided by the banks.

*Year ending 30 September.
**Year ending 31 October (1988), period ending 31 October (1987) and year ending 20 November (previous years).

Note: Except in the case of TSB, the 1987 overall profitability figures were affected by exceptional provisions against sovereign debt.

[1] In the case of the Access banks, these appendices treat MSCs as income although they are not directly received by those banks but are taken into account in calculating the amounts due to them by the JCCC under the Formula Agreement. A similar situation applies to TSB, where they are mainly received from another Visa bank acting as merchant acquirer and taken into account in calculating interchange fees.

[2] The net effect on Barclays' profitability (as adjusted for gearing and cost of funds changes) of including certain additional assets in its funds employed (see footnote to paragraph 4.9) would have been to reduce it by between three and four percentage points, eg from 40.2 to 37.1 per cent in 1988. It would also have slightly increased the profitability (as adjusted for gearing and cost of funds changes) of the other five banks. In view of the latter consideration we have not made any amendment to Table 4.5 or Appendices 4.2 to 4.7 to show the effect of including theseadditional assets.

4.27. Most of the banks achieved their highest profitability on credit cards in 1984, 1985 and 1986. Their profits were not so high in 1987 and 1988. Lloyds, however, continued to show a ROCR of around 35 per cent until 1987, but fell to just under 20 per cent in 1988. NatWest's profitability fell to 3 per cent in 1987, mainly because of significant increases in its non- interest costs, but it made a partial recovery to 13 per cent in 1988. (NatWest incurs higher credit card-related branch costs than the other banks, a point on which we comment below.) RBS did not peak until 1986. TSB showed a generally improving trend from a low point in 1985.

4.28. NatWest's results were particularly affected by the amount of branch costs it allocated to credit cards (see paragraphs 4.17 and 4.18). If in 1988 these costs had been 10 per cent of its credit card income, which would have been relatively higher than those of Lloyds and Midland as shown in Table 4.3, its return on capital resources would have been 17.6 per cent (or 24.1 per cent as adjusted for gearing and cost of funds changes). This would have brought it closer to the profitability achieved by Lloyds and Midland in that year.

4.29. In Table 4.6 we set out comparisons of the same six banks' credit card returns on lending[1] with, first, their overall returns on lending and, secondly, their returns on lending on domestic business. In the case of Midland and Barclays for all five years, Lloyds for the years 1984 to 1987 and NatWest for the years 1984 to 1986, credit card returns on lending not only exceeded overall returns on lending but also exceeded the returns on domestic lending which, unlike overall returns on lending, were not affected by problems with Third World debt. The average total domestic assets of RBS were not ascertainable and so we were unable to calculate its return on lending on domestic business, but its credit card return on lending for all years exceeded its overall return on lending, and in 1986 and 1987 did so by a substantial margin.

TABLE 4.6 **Comparisons of the banks' credit card returns on lending with their returns on their overall and domestic business**

per cent

	1984	*1985*	*1986*	*1987*	*1988*
Lloyds					
Credit cards	4.8	4.7	4.9	4.6	2.5
Overall	1.1	1.3	1.5	(0.5)	2.0
Domestic business	1.8	2.2	2.5	2.8	2.7
Midland					
Credit cards	3.6	3.7	4.2	3.1	3.1
Overall	0.2	0.6	0.8	(0.9)	1.3
Domestic business	1.5	1.5	1.6	1.8	1.2
NatWest					
Credit cards	3.2	2.5	2.7	0.3	1.4
Overall	1.0	1.1	1.3	0.8	1.5
Domestic business	1.7	1.9	2.1	2.4	2.2
*RBS**					
Credit cards	1.7	1.6	3.9	3.4	1.9
Overall	1.1	1.2	1.1	1.1	1.5
Barclays					
Credit cards	4.5	5.0	5.6	4.3	4.2
Overall	1.0	1.3	1.3	0.4	1.5
Domestic business	1.2	1.7	1.6	1.6	1.8
*TSB***					
Credit cards	1.1	0.3	1.8	1.9	2.3
Overall/domestic business	1.6	1.6	1.7	1.9	2.1

Source: MMC study.

*Year ending 30 September.
**Year ending 31 October (1988), period ending 30 October (1987) and year ending 20 November (previous years).
Notes:
1. Except in the case of TSB, the 1987 overall return on lending figures were particularly affected by exceptional provisions against sovereign debt.
2. RBS's returns on lending on domestic business were not ascertainable.
3. As TSB's business is largely domestic no distinction is drawn between its overall and domestic returns on lending.

[1] Sometimes referred to as `return on total assets'.

Division of credit card income, costs and profits between those arising from services to traders and those arising from services to cardholders

4.30. In their 1980 report the Commission took the view that there was no way in which the total costs of credit card companies could be divided into those attributable to services to traders and those attributable to services to cardholders. Their reasons for doing so relied on their view of the integrated nature of credit card transactions and were set out in paragraph 11.15 of the 1980 report, which we reproduce below:

> Barclaycard, the JCCC, American Express and Diners Club have challenged the assumption. Payment to a trader of the price of the goods sold in a credit card transaction represents, they contend, not only service to the trader but also service to the cardholder; provision of credit to the cardholder represents not only service to him but also service to traders; and the same is true of other services such as the granting of a credit card franchise, the issuing of a card, the advertising of Barclaycard, Access, American Express or Diners Club, or provision of free telephone calls when `floor limits' are exceeded. Of none of these services, therefore, can it be said that the whole cost ought to be borne by traders or by cardholders (or a class of them). The reason for this is the integral nature of the credit card business. A credit card franchise has value only because there are cardholders able to use their cards; cards have value only because there are traders willing to accept them. To attract traders is a service to cardholders, because it extends the scope for use of their cards. To facilitate the use of cards (eg by provision of credit) is a service to traders, in so far as it leads cardholders to acquire from them goods and services which without credit cards they might not acquire.

4.31. As our terms of reference in this present inquiry cover the supply of services to cardholders as well as the supply of services to traders, we gave considerable thought to whether it would nevertheless be possible to find some generally acceptable way of dividing credit card costs between those incurred in connection with each of these two types of service.

4.32. We suggested to the Access banks that virtually all their costs, except their share of the JCCC's costs, might be regarded as associated with cardholders. We also asked the JCCC how its costs might be apportioned so as to give a meaningful result. The JCCC could see no way in which this could be done. We therefore attempted our own division of the 1988 credit card income, costs and profits of Lloyds, Midland and NatWest by attributing all their directly-incurred costs to cardholder activities (except for an estimated handling charge of 15 pence per sales voucher, which on an average transaction value of £30 represents 0.5 per cent of turnover) and dividing their shares of the JCCC's costs equally between trader-related activities and cardholder-related activities. We put these calculations to the three banks for comment. They did not accept that the exercise produced, or could produce, results of any value.

4.33. We also consulted Barclays which, as well as being the largest Visa card issuer in the United Kingdom, was until recently the sole merchant acquirer for Visa in the United Kingdom except for Northern Ireland. Barclays apportioned some of its costs for us, and indicated ways in which this might possibly be done in other cases, but had serious reservations as to whether any meaningful apportionments could be made of the remainder of its credit card costs. We therefore used our own judgment in attempting a division of Barclays' 1988 income, costs and profits, and put our calculations to Barclays for comment. It, too, did not accept that the exercise produced, or could produce, results of any value.

4.34. The exercise referred to in the foregoing paragraphs included a number of apportionments that were of necessity made on an arbitrary basis and lack the agreement of the banks concerned and the JCCC. There also remained the issue of the integrated nature of credit card transactions, as identified by the Commission in 1980. As it became apparent that the exercise was unlikely to offer a useful or acceptable guide to the relative profitability of merchant acquisition and card issuing, we decided not to pursue the matter further.