CT-95/02

THE COMPETITION TRIBUNAL

IN THE MATTER OF an Application by the Director of Investigation and Research under Sections 79 and 105 of the *Competition Act*, R.S.C. 1985, c. C-34;

AND IN THE MATTER OF an abuse of dominant position in the supply of shared electronic network services for consumer-initiated shared electronic financial services.

BETWEEN:

The Director of Investigation and Research

Applicant

-and-

Bank of Montreal
The Bank of Nova Scotia
Canada Trustco Mortgage Company
Canadian Imperial Bank of Commerce
La Confederation des caisses poulaires et d'economie Desjardins du Quebec
Credit Union Central of Canada
National Bank of Canada
Royal Bank of Canada
The Toronto-Dominion Bank of Canada
Interac Inc.

Respondents

-and-

Telpay, a division of CTI-Comtel Inc.
Retail Council of Canada
Canadian Life and Health Insurance Association Inc.
Midland Walwyn Capital Inc.
Richardson Greenshieds of Canada Limited
Mackenzie Financial Corporation
Trimark Investment Management Inc.

Intervenors

AFFIDAVIT OF JACK LESLIE CARR

I, **JACK LESLIE CARR**, of the City of North York, in the Province of Ontario, make oath and say:

Introduction

1. Since 1968 I have been a member of the Department of Economics at the University of Toronto, first as an Assistant Professor, subsequently as an Associate Professor and, as of 1978, Professor of Economics. I have also been Associate Chair of the Department of Economics, Director of Graduate Studies and Acting Chair of the Department. I am a Research Associate of the Institute for Policy Analysis, at the University of Toronto. In addition to my teaching duties in the Department of Economics, I have also taught in the Faculty of Law at the University of Toronto and I am currently a member of the Law and Economics group at the Faculty of Law, University of Toronto.

2. I have authored 9 books and monographs and 28 articles in refereed academic journals. My latest book (which I co-authored) is titled, *Ensuring Failure: Financial System Stability and Deposit Insurance in Canada*. My research has primarily been in the areas of monetary economics, money and banking, and law and economics. I have also conducted research in industrial organization.

3. In my 27 years of teaching at the University of Toronto, I have taught courses in money and banking and monetary economics.

4. Now produced and shown to me and marked Exhibit "A" to this, my affidavit, is a copy of my curriculum vitae.

5. In this affidavit, I will use capitals to denote concepts as defined in the Draft Consent Order (DCO).

6. I have been asked to address the issue of whether permitting Interac to continue to require that only Financial Institutions can become Issuers is anti-competitive. In my opinion, it is not anti-competitive and, indeed, results in Interac being operated in the most economically efficient manner.

Historical Evolution of the Payment System

7. Exchange in any economic system can be carried out either by barter or by the use of a medium of exchange, money. Money is more efficient at conducting exchange since it avoids the double coincides of wants and commodity indivisibilities. (For a description of the role of money as a medium of exchange and of the evolution of the payment system, see M. Goodfriend, "Money, Credit, Banking and Payment System Policy" in *The U.S. Payment System: Efficiency, Risk and the Role of the Federal Reserve*, edited by David B. Humphrey, 1990, a copy of which is attached hereto as Exhibit "B").

8. Many different commodities have served as money. Precious metals such as gold and silver emerged as monies in the modern world. Gold and silver are durable, divisible and easily recognizable at low cost. Coinability of gold and silver has further reduced verification costs.

9. The exclusive use of commodity money in making payments avoids the need for a clearing and settlement system since there is a simultaneous transfer or exchange of goods, services or securities, and a quantity of commodity money of equal value.

10. Real resources are used to transport commodity money between its place of storage and the physical location of the transaction. Transportation costs can be reduced if warehouse receipts (*i.e.*, claims to commodity money) are exchanged instead of commodity

money. In addition, keeping commodity money in a central location results in economies of scale in storage.

11. The use of warehouse receipts results in efficiencies over pure commodity money standards. These efficiencies are purchased at a cost. This system of warehouse receipts, involves costs of monitoring and costs of enforcing promises to redeem warehouse receipts into commodity money.

12. Warehouses who always honoured their pledge to redeem their receipts into gold at fixed exchange rates had their receipts become 'as good as gold'. These warehouse receipts became generally acceptable in exchange. Warehouse receipts were one of the earliest forms of paper money.

13. Goodfriend summarized this evolution in the payment system:

> In fact, the evolution of the payment system has been, in large part, driven by efficiency gains from substituting credit (claims on particular institutions) for commodity money. The substitution of warehouse receipts for commodity money was only the first in a series of substitutions that have been found to be efficient....To reiterate, such substitution has been efficient because the costs of enforcing restrictions on and monitoring institutions that issue credit money have been less than the cost of using commodity money directly. In other words, the drive for greater efficiency, which has dictated a continuing substitution of credit for commodity money in making payments, has brought with it a need to make arrangements to protect the payment system.
>
> (Marvin Goodfriend, 1990, p.252)

14. The payment system could be run even more efficiently if part of the warehouse commodity money could be invested, leaving sufficient reserves of commodity money to honour requests for redemption for the warehouse receipts.

15. If the warehouse maintains only fractional reserves, a given amount of commodity money base can support a larger issue of warehouse receipts. This further economizes on the use of commodity money. Fractional reserves allows the warehouse to loan out part of its commodity money, to earn interest and to reduce safekeeping fees on commodity money (or even pay interest on commodity money balances).

16. When warehouses kept only fractional reserves of commodity money they became banks who issued their own paper money (warehouse receipts) which were redeemable into gold at fixed rates of exchange.

17. Many governments also entered the business of printing paper money which was redeemable into gold. When governments always honoured their pledge to redeem their currency into gold at fixed rates of exchange, their currency also became 'as good as gold'.

18. When government paper money became generally accepted in exchange, the link between paper money and commodity money could be broken and a pure fiat money standard was established.

19. The warehouses, now banks, further innovated and issued demand deposits along with bank notes. A cheque on a demand deposit, unlike a bank note, is a "double claim" since it is a claim on a specific depositor's account at a specific bank.

20. Cheques allowed individuals to make payments without the necessity of carrying currency. In addition, cheques made payment by mail more reliable. For certain transactions, cheques were superior to notes.

21. The medium of exchange, money, is defined as paper money and bank notes (currency) and bank deposits. (The term bank is used here as a generic term for Financial

Institutions). Liabilities of Financial Institutions constitute a substantial portion of the money supply in Canada.

22. Eventually, most governments eliminated the ability of banks to issue paper money. When the Bank of Canada was set up in 1935, the Bank was given the monopoly on the issuing of paper money.

23. The use of cheques drawn on demand deposits, as a means of payment, necessitated the creation of a clearing and settlement system. (It should be noted that, in principle, cheques could circulate by being endorsed, but because of the high information costs of collecting information on the drawer of the cheque, the least costly way of verifying the drawer-specific dimension of the cheque was to 'clear' the cheque as quickly as possible).

24. In the U.S., in the mid-1800's, demand deposits increased relative to bank notes, and this led to the first clearinghouse being established in the U.S. in 1853 (*i.e.*, the New York City Clearinghouse Association).

25. Prior to clearinghouses, cheques in the U.S. were cleared at many different locations on a bilateral basis. The clearinghouse provided a central place where cheques would clear. Net balances were settled in government currency or coin or in clearinghouse certificates. Clearinghouses reduced the costs of clearing. Transportation costs were reduced by the use of a central location and the cost of transporting currency was reduced by the netting out of clearing balances. Clearinghouses were an efficient way of clearing and settling cheques.

26. As clearinghouses developed in the U.S., they provided payment finality by agreeing to assess their members to cover the clearinghouse balance of a failed member.

27. Clearinghouses had to accept risk, in order to improve the efficiency of the clearing and settlement process. To limit and contain this risk, they screened entry into the

clearinghouse, regulated and monitored their members. Clearinghouses imposed minimum capital requirements, interest rate restrictions, and reserve requirements. They conducted frequent audits and collected information to ensure compliance with the rules and regulations of the clearinghouse.

28. The ultimate power of the clearinghouse was the threat of expulsion for a member that failed to comply with the rules and regulations.

29. Control of membership was the essential way that clearinghouses controlled their risk exposure.

30. Non-clearing house members could clear their cheques through a member of the clearinghouse acting as their agent but the member agent was liable for all cheques its client cleared through the clearinghouse.

31. In Canada, under an act passed in 1900, clearinghouses were established by and operated under the jurisdiction of the Canadian Bankers Association (CBA). The Canadian Bankers Association was given the authority for clearing and settlement and the authority to establish rules and regulations (subject to approval of Treasury Board) for a clearing and settlement system.

32. Prior to 1980, only chartered banks could be members of the clearing and settlement system. In the 1960's, there were ten clearinghouses (known as clearing centers) in the cities of Canada. The CBA ran the clearing system, and banks settled their daily clearing balances through their accounts at the Bank of Canada.

33. Banks were, and still are, regulated, inspected and supervised by various government agencies, such as the Bank of Canada, which has the power to set reserve requirements and loan funds to the banks, the Office of the Superintendent of Financial Institutions (OSFI,

whose functions were formerly performed by the Office of the Inspector General of Banks), which has the power to monitor and regularly examine banks, and the Canadian Deposit Insurance Corporation (CDIC), which has the power to terminate deposit insurance for non-compliance with specified standards. (It should be noted CDIC powers were upgraded in June, 1992). In Canada, these government institutions assumed the various roles that the clearinghouse association historically performed.

34. After 1945, the demand deposit business increased in non-bank Financial Institutions (*i.e.*, trust and loan companies, credit unions and caisses populaires). These institutions cleared their cheques through chartered banks.

35. These non-bank Financial Institutions could have set up their own clearing and settlement system but decided against this option. It is my opinion that, due to network economies, it would have been very costly for these non-bank Financial Institutions to run their own national clearing and settlement system.

Current Canadian Payment System

36. In 1980, the Canadian Payments Association (CPA) was created and given the mandate in s.5 of the Canadian Payments Association Act 'to establish and operate a national clearings and settlements system' and 'to plan the evolution of the national payments system'.

37. All chartered banks and the Bank of Canada must be members of the CPA. Non-bank Financial Institutions (trust and loan companies, credit unions and caisses populaires) may be members of the CPA.

38. The CPA has two classes of members: direct clearers, who must account for at least 0.5 percent of the national clearing volume, and indirect clearers, who clear through arrangements with a direct clearer.

39. The creation of the CPA allowed, for the first time, non-bank Financial Institutions to be direct clearers in the national payment system.

40. All direct clearers of the CPA have the right to hold deposits at the Bank of Canada, obtain loans and advances from the Bank of Canada, and have access to a government-controlled deposit insurance scheme, (*i.e.*, a federal deposit insurance scheme for banks and trust and loan companies and provincial schemes for credit unions and caisses populaires).

41. It is current government policy to restrict membership in the CPA to Financial Institutions. Government ensures competition in the deposit-taking market by allowing 'relatively easy' entry to this market. For example, in Ontario alone, from 1968 to 1985, 62 new trust and loan companies (either federally or provincially incorporated) entered the market. (See Carr, Mathewson, Quigley, *Ensuring Failure*, Exhibit 4 to Professor Quigley's Affidavit at pages 56-57.)

42. As in all clearing and settlement networks, direct and indirect clearing members of the CPA impose risks on one another. Therefore, the identity and financial condition of CPA members is important.

43. Risk in the clearing and settlement system has evolved, as the Canadian payment system has evolved to include electronic payment items. Paper cheques can be returned up to 1:00 p.m. on the next business day after they are cleared. Electronic payment items can not be unwound. Electronic payment items are irreversible.

44. The Affidavit of Bradley Crawford discusses the various types of risk inherent in the clearing and settlement process. The rules and regulations of the CPA are designed to limit these risks.

45. Members of the CPA incur a risk that other members will not be able to pay or settle what they owe in clearing balances (*i.e.*, counterparty risk).

46. Each direct clearer in the CPA monitors the amount it is owed by other direct clearers. Each direct clearer monitors the financial health of other members of the CPA so that it will know whether outstanding clearing balances exceed the maximum allowed (*i.e.*, determined by its own internal risk analysis) for each financial institution. Knowledge of institutional financial health is an important element in assessing and limiting counterparty risk.

47. The Bank of Canada monitors the total system-wide exposure of each direct clearer to all other direct clearers, and controls the net indebtedness of each member to all other members by the imposition of net debit caps.

48. Direct clearers of the CPA also rely on regulatory institutions to limit counterparty risk. For example, capitalization rules imposed by legislation (*e.g.*, Bank Act, Trust and Loan Company Act, etc.) and by the CDIC, monitoring and inspections by OSFI, and asset quality rules imposed by the Bank of Canada and by the Bank Act, Trust and Loan Company Act, etc. are all important counterparty risk assessment criteria.

49. In addition, direct clearers of the CPA have deposits at the Bank of Canada and these deposits are used to settle balances at the end of the day. As such, settlement occurs at the end of the day and this finality in settlement limits counterparty risk. The longer the time to settlement, the greater is the counterparty risk.

50. Direct clearers of the CPA pay or settle clearing balances at the end of the day. Members of the CPA maintain liquid ratios for regulatory and sound business practice reasons to minimize the risk of not being able to pay clearing balances as they arise.

51. If there are temporary liquidity problems, direct clearers of the CPA have the ability to borrow at the prevailing Bank of Canada rate from the Bank or to borrow in the overnight funds market from institutions with excess reserves. The line of credit from the Bank of Canada and the ability to borrow in the overnight funds market tends to minimize liquidity risk in the system.

52. Both the formal and informal rules of the CPA are designed to minimize risk and insure a safe, sound and efficient payment system. Professor Anvari in the 'The Canadian Payment System: An Evolving Structure' (in *The U.S. Payment System: Efficiency, Risk and the Role of the Federal Reserve*, 1990, ed. by David Humphrey, a copy of which is attached hereto as Exhibit "C"), has stated that:

> Canada is reputed to enjoy one of the most efficient payment systems in the Western industrialized world. It is generally thought, particularly in the United States, that the determining factor leading to this efficiency is the existence of a small number of large banks with branches across the country. The large size of these banks fosters a high degree of automation; their coast-to coast branching lends itself to the development of nationwide networks; and their small number is conducive to a streamlined process of exchange and settlement (page 93).

Risk in Payment System With Interac Compelled to Have Non-Financial Institutions as Card Issuing Members.

53. Professor Quigley has stated in his Affidavit that 'Interac is a system for the communication and clearing of financial messages in which a variety of services are currently provided and through which a broader range of services could be provided' (Paragraph 24). This description by Professor Quigley ignores the settlement risk to Interac members. Professor Quigley's description would arguably apply to Acquirers in the Shared Services, but his description of the Association's activities ignores the risk element in participating as a Issuer.

54. Clearing balances among Interac members are cleared and settled through the Automated Clearing Settlement System (ACSS) of the CPA.

55. By virtue of CPA legal framework, Shared Cash Dispensing (SCD) transactions are final. Moreover, for all Interac Direct Payment (IDP) transactions, the transfer of funds is also immediate. The effect of both the SCD and IDP transactions are to reserve the funds due to the Acquirer in a manner similar to a certified cheque. In an electronic transfer system, such as that operated by Interac, payments are irreversible. Irreversible payments pose a greater settlement risk than reversible payments.

56. With the Intervenors as Issuers in the SCD Service, there would be very little netting of clearing balances since the Intervenors have no Automated Banking Machines (ABM) and are unlikely to have significant numbers of ABM in the foreseeable future. That being so, if the Intervenors became Issuers in the SCD Service, the risks would all flow in one direction, from the Intervenors to the current Acquirers in the SCD Service. Cash withdrawals would be from the current Acquirers' ABMs. The Intervenors, who would likely seek to be Issuers, have no ABMs, and are unlikely to incur the capital investment to become SCD Acquirers. Consequently, as Issuers in the SCD Service, the Intervenors can impose substantial settlement risk on the current Acquirer members of the Service. On the other hand, current SCD Acquirers would pose a zero or negligible risk to the Intervenors.

57. With non-Financial Institutions as Issuers in the Interac Shared Services, risk in the payments system could increase significantly.

58. Banks, trust companies, credit unions and caisses populaires are in the same deposit-taking business and through their transactions with one another can easily monitor the financial health of members of the deposit-taking community. It is much more difficult and costly for deposit-taking institutions to monitor the financial stability of firms whose core activity is not deposit-taking. Financial Institutions will find it costly to acquire information

and monitor the financial condition of the myriad of retailers, insurance companies, brokerage firms and mutual funds who desire Issuer status in Interac.

59. This higher cost of obtaining information and monitoring the financial condition of non-Financial Institutions will increase counterparty risk in the payment system in which Interac Members participate. Non-Financial Institutions do not have the same capitalization rules, inspection rules and asset quality rules as Financial Institutions. CDIC can not increase the capitalization requirements for insurance companies and investment companies if their asset quality deteriorates. The different regulatory framework of non-Financial Institutions will increase counterparty risk.

60. Non-Financial Institutions, unlike direct clearers of the CPA, are neither required nor able to maintain deposit accounts at the Bank of Canada. This again increases counterparty risks, since it is more difficult to settle clearing balances at the end of the day. Although other settlement arrangements could be made, these are riskier than the riskless procedures using the Bank of Canada as a 'bank of final settlement'.

61. Non-Financial Institutions are not subject to the same regulatory rules concerning liquid asset ratios as Financial Institutions are. Non-Financial Institutions do not have the ability to borrow from the Bank of Canada. These institutional differences result in increased liquidity risk with non-Financial Institutions participating in the payment system.

62. Regulation of non-Financial Institutions is <u>different</u> from the regulation of Financial Institutions. Neither CDIC nor OSFI has the power to cause an investment firm to cease and desist from operating in order to limit risk exposure.

63. Life insurance companies are regulated with an emphasis on the long-term nature of their liabilities. Life insurance customers do not have the same ability as the customers of Financial Institutions to redeem their claims and convert them into liquid funds. Regulators

of life insurers are concerned about the ability of insurers to pay claims over the long-term and are not as concerned, as Financial Institution regulators are, about short-term liquidity.

64. Retailers are essentially unregulated institutions.

65. Mutual funds are essentially unregulated due to the fact that their liabilities are not redeemable into money at fixed rates of exchange. If a bank is badly managed, there could be a run on the bank. If a mutual fund is badly managed, the value of the mutual fund shares will fall.

66. In summary, the stability of the payment system is vitally important for the health of the Canadian economy. Money is used to finance almost all transactions in the economy and the liabilities of Financial Institutions constitute a substantial portion of the money supply. As such, Financial Institutions, participating in the payment system, attract substantial regulation. Banks alone, are regulated by the Bank of Canada , the OSFI and CDIC, as are all Financial Institutions. Non-Financial Institutions do not have the same stringent regulation. As was noted above, some non-Financial Institutions are essentially unregulated.

67. Non-Financial Institution Issuers in the Interac Shared Service will increase counterparty and liquidity risks in the CPA.

68. It is true that the risk to the CPA, with non-Financial Institutions as Issuers in the Interac Shared Service, could be eliminated if the new Interac Association established a new settlement system outside the current Canadian payment system. It should be noted that such an action will eliminate the risk to the CPA but this action will not eliminate the risk to Interac Members.

69. Since a perfectly adequate Canadian settlement system already exists (ACSS), the establishment of a new settlement system will duplicate and waste resources. This clearly will pose added costs to the Members of Interac.

Economic Functions of Interac

70. To appropriately assess Interac's restrictions on Issuer status, it is necessary to examine the nature of the services for which the Members use Interac.

71. Historically, Financial Institution customers have accessed their demand deposit accounts either through a teller or through transferring funds by cheque.

72. The development of the ABM allowed customers 24-hour access to their deposit accounts. ABMs are the electronic equivalent of tellers, except that they perform Financial Institution functions at greater speed and lower cost. These machines, operating as part of proprietary FI networks, allowed customers to obtain cash withdrawals from their accounts, transfer balances between accounts, pay bills from accounts, and obtain cash advances from credit cards.

73. Interac currently allows Financial Institutions to network to provide Shared Services, those being presently SCD and IDP. Customers of current Members, through card access, can obtain a cash withdrawal from a deposit account or direct payment at the point of sale. As well, and this is only a very small part of Interac's total transactions, customers can obtain credit card cash advances.

74. The important point to note is that the SCD and IDP Services of Interac are essentially Financial Institution services that customers traditionally accessed through tellers or writing cheques. Interac currently allows these two Shared Services to be provided for all customers of Financial Institutions who are Members.

75. In my opinion, one cannot credibly argue that it is anti-competitive to have tellers provide services only for their own institution, or that it is anti-competitive to have a Financial Institution's own ABMs provide services only for its own customers. Similarly, one cannot credibly argue that it is necessary in the interests of competition that Financial Institutions be compelled to have a network of their own ABMs perform transaction services for non-Financial Institutions like insurance companies or investment companies. From a competition policy perspective, the issues of duty-to-deal should be the same for single firms as joint-ventures. Firms should only be required to share their assets or otherwise facilitate potential competition when membership in or access to a joint venture is indispensable for competition.

76. If different rules were applied to joint ventures than single firms, then there would be an incentive for firms to form less efficient forms of organizations (with more market power). For example, mergers would increase in desirability relative to joint-ventures, since different criteria would be applied to the single merged firm than to the joint venture.

77. Given the economic rationale for Interac, it is clear why Interac's Issuers have been Financial Institutions. Given the economic functions performed by Interac and the need to limit risk, there are good economic reasons why Interac should be allowed to restrict its Issuers to Financial Institutions.

Access to Payment System Through Sweep, Zero-Balance and Pass-Through Accounts

78. The DCO eliminates Interac rules against sweep, zero-balance and pass-through accounts.

79. The two experts hired by the Intervenors claim that sweep, zero-balance and pass-through accounts are neither practical nor cost-effective.

80. The Affidavit of Kenneth Morrison attempts a theoretical calculation on the cost of using these accounts. Mr. Morrison concludes that:

> Virtually any system can be forced to work from a technological perspective. However, the sweep, pass-through, and zero-balance account process adds costs to transactions, will be inefficient, could violate the privacy and confidentiality right of consumers, negatively impact the ability of Alternative Entities to build and manage relationships with their customers and adds unnecessary confusion. (Page 38)

81. Professor Quigley argues that these:

> accounts creates a principal-agent problem which will be costly to resolve.....
>
> The fact that the Financial Institution and the non-Financial Institution are direct competitors to the customers for the supply of a wide range of financial services will make it difficult and costly for them to write a contract which will provide a satisfactory basis for this relationship. This is because the moral hazard (hidden action) and hidden information problems normally associated with the principal-agent relationships are compounded when the contractual parties are competitors. (pp. 18-19)

82. Both the Morrison and Quigley arguments are theoretical. Theoretically, costs with these accounts could be so high as to make them an ineffective avenue for the Intervenors. Theoretically, principal-agent problems and moral hazard problems could be so severe as to make such arrangements impossible to negotiate.

83. It should be noted that principal-agent and moral hazard problems abound in almost every financial contract. Further, sweep accounts, zero-balance accounts and pass-through accounts have thrived in the U.S. banking system.

84. Interest payments on demand deposits were prohibited in the U.S. in the Banking Acts of 1933 and 1935. Potential reasons for this prohibition may be as a reward to large banks

for accepting a deposit insurance scheme which they opposed and/or as a means of limiting moral hazard in such a deposit-insurance scheme (*i.e.*, high risk banks could not attract deposits by offering high rates on demand deposits).

85. As long as interest rates were low, the prohibition of interest rates on demand deposits was not economically very significant. However, in the 70's and 80's with high and variable inflation rates and high and variable interest rates, the prohibition of interest on demand deposits became a very binding economic constraint.

86. There was a major economic incentive to find a way around the prohibition of interest on demand deposits. Investment firms set up a new financial product. This was the chequable money market mutual fund. The money market mutual fund paid market interest rates through the use of various sweep accounts, zero-balance accounts or pass-through accounts at participating deposit-taking financial institutions.

87. The Affidavit of Mr. Liam Carmody documents the current successful use of sweep, zero-balance and pass-through accounts in the U.S.

88. There is no reason to believe the U.S. experience is not relevant to Canada. The U.S. experience indicates that sweep accounts, zero-balance accounts and pass-through accounts are a practical, cost-effective way of giving non-Financial Institutions effective access to the payments system.

Access to Payment System Through Subsidiaries

89. Non-Financial Institutions can participate as Issuers through subsidiary trust or banking firms. Some of the Intervenors currently own trust and banking subsidiaries. For example, Mackenzie Financial owns M.R.S. Trust Company, Sun Life Assurance owns Sun Life Trust, and Manufacturers Life owns Manulife Bank.

90. The significant entry of trust and loan companies, in the Ontario market in the 1960's and 1970's, indicate that such entry is relatively free of barriers.

91. The 1992 Federal Government reform of the financial system essentially allowed increased competition between the traditional four pillars of the financial system: banks, trust and loan companies, insurance companies and investment firms. These reforms preserved the distinctions between these institutions so as to allow prudential management of the different types of risks. The increased competition essentially took the form of allowing each pillar to set up subsidiaries to compete with the other pillars.

92. Liberalised cross-ownership rules and networking powers allowed financial institutions to move outside their core activity. Banks could set up subsidiary trust companies to perform a trust and agency function. Banks could set up insurance subsidiaries and train insurance agents to sell insurance. (However, insurance could not be sold in bank branches.)

93. It appears to be implicit Federal Government policy to allow competition through the subsidiary route. The advantage of this method of increasing competition is that it maintains a level playing field. All players in the insurance market will be regulated as insurance companies. All players in the deposit-taking market will be regulated as deposit-takers.

94. Canada has a flexible regulatory system. The Bank Act has a sunset provision which requires review every ten years. Financial services regulation was reformed in 1992 and it is due to be changed again in 1997. In response to financial innovation and changing technology, the Federal government has increased the frequency of changes in financial services regulation.

95. The Intervenors appear to want access to the deposit-taking business but do not want to be regulated as Financial Institutions. The Intervenors appear to want a free ride on the

regulatory system. They want to be in the deposit-taking market but do not want to pay the price of deposit-taking regulation.

Interac's Ability To Decide on Card Issuing Members

96. There are good economic reasons why competition policy does not, in general, force single firms or joint ventures to share their property with rivals.

97. Interac has excluded non-Financial Institutions from being Issuers because they would bring increased risk. In addition, the essential economic function of Interac is to provide what are essentially deposit-taking financial services. Non-Financial Institutions, as Issuers, offer little to enhance the value of the existing Interac network. Since none of the Intervenors have their own ABMs and none have a clearing/settlement business now, these non-Financial Institutions only impose costs to Interac and bring little in the way of benefits. (*i.e.*, increased network economies)

98. It is not surprising that Interac Members want to use their property in the most efficient manner and as a consequence have excluded non-Financial Institutions from being Issuers.

99. The Intervenors, however, may want to engage in free-riding. Free-riding can occur in many different ways. In the Interac context, free-riding would occur if certain firms could gain from the innovations and investments of others without having incurred the costs or risk of developing the new technology.

100. David Evans and Richard Schmalensee have argued in 'Economic Aspects of Payment Card Systems and Antitrust Policy Toward Joint Ventures' (Antitrust Law Journal, vol 63), a copy of which is attached hereto as Exhibit "D", that:

> New industries present many serious free-riding problems. Some firms bear the cost and risks of identifying the demand for a new product and learning about the costs and technology for providing the product. Other firms wait to see whether the initial firms are successful before entering and then free ride on the learning and innovation accomplished by the initial firms. (Page 878)

101. If free-riding is not prevented, and is even encouraged, by compelling innovative firms to share their investments and technology with rivals, then innovators will not capture the full returns of their innovation and, as a result, investment in new technologies will diminish.

102. It is certainly the case that, because the Intervenors are non-Financial Institutions, they were precluded from joining Interac, when it was founded. However, the Intervenors could have at any time invested in the new technology. It would appear that (except for retailers), the Intervenors have not invested any funds in the new technology of ABM and POS networks. The Intervenors have seen Interac develop new technology, invest heavily in an ABM network, and succeed in this new venture and now want the Competition Tribunal to force Interac to allow the Intervenors access to the new technology and networks through Issuer status.

103. If Interac were compelled to accept the Intervenors as Issuers, current Members of Interac would be compelled to accept clearing risks they otherwise would find unacceptable, and clearing risks for which they would not be compensated. By forcing current Members of Interac to accept uncompensated risk, the Intervenors want to free ride on Interac.

104. In clearing house arrangements, clearing partners were very carefully selected. Careful choice of clearing partners was a key to a successful clearinghouse arrangement. In my opinion, the Members of Interac should have the ability to decide from whom they will accept clearing risk. To do so, Interac needs the ability to select which Members may be Issuers.

105. There is another economic consequence of allowing firms to demand access to successful joint ventures. Such actions can in fact diminish competition. If firms know they can demand access to successful joint ventures, they will never enter the market when the joint venture is started. They will want to see if the joint venture is successful. If the joint venture is successful, then they will demand access. If the joint venture fails, the firm does nothing. In either case it refrains from entering the market at the time of the formation of the joint venture. In this way, intersystem competition is reduced. Compelling access to the joint venture may have the effect of reducing the overall level of competition.

106. The only economic case for compelling access to the joint venture of Interac would be the situation where Interac was an 'essential facility'. By essential facility I mean a facility indispensable for competing firms to effectively participate in the market for shared electronic financial services. Without being an Issuer, the Intervenors can fully function in their respective core lines of financial service business. The Intervenors can fully function as insurers, investment dealers or retailers without being able to issue cards which access Interac Shared Services.

107. The Intervenors always had the ability to set up their own ABMs and to network these machines. Through their own ABM machines the intervenors could have provided electronic financial services. None of the Intervenors chose to do so.

108. The Intervenors can obtain access to the payment system through the use of a subsidiary which would qualify as a Financial Institution.

109. The Intervenors can obtain access to the payment system through the use of sweep, zero-balance and pass-through accounts.

110. Given the number of alternative routes to offering card issuing or deposit account services available to the Intervenors, Issuer membership in Interac is not an 'essential facility'.

Conclusion

111. In my opinion, the DCO, which allows Interac to restrict Issuer status to Financial Institutions is not anti-competitive.

112. Historically, only Financial Institutions have been members of clearing and settlement systems. Historically, clearinghouses carefully selected and monitored their members.

113. If Interac were compelled to accept the Intervenors as Issuers, existing Interac Members would be subject to increased risk, and risk in the Canadian payment system would increase.

114. The government has maintained competition through relatively open entry into the financial markets. Government policy has been that financial institutions providing the same service should be subject to the same regulation.

115. Competition is not maintained by forcing Interac to share its technology and innovations with non-Financial Institution Issuers. Such action is inefficient and can ultimately reduce the level of competition in the system.

SWORN BEFORE ME at the City of Toronto, in the Municipality of Metropolitan Toronto, this 1st day of April, 1996.

JACK LESLIE CARR

A Commissioner, etc.