

**CANADA DEPOSIT INSURANCE CORPORATION:
DEPOSIT PROTECTION IN CANADA**

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INTRODUCTION

Deposit protection systems, some private, some public, some mixed, exist worldwide. The Canadian system is public at the federal and provincial level, compulsory, and covers banks, trust and loan companies, *caisses populaires* and credit unions. The system's operations are, however, intended to resemble those of the private sector. Why this approach was adopted and whether it is possible to go further in this direction are the questions raised in this paper. In the overview of depositor behaviour, we stress that people must trust the financial system if it is to function; we go on to examine whether deposit protection is necessary.

After comparing federal financial institutions with respect to the holding of deposits, compensation, and supervision, we describe the instruments provided by law for each type of institution. Lastly, we see how CDIC has developed from its founding in 1967 to the present by describing the legislative amendments it has undergone. This leads to a consideration of the problem of "moral hazard" associated with deposit insurance and to certain proposals for supervision and market discipline for deposit institutions.

DEPOSITS AT FINANCIAL INSTITUTIONS

Canadian financial institutions carry on activities in the fields of banking and trusts, insurance and securities. Banking is strictly under federal jurisdiction, while trusts, savings and insurance are joint federal and provincial fields; securities activities are an exclusively provincial field.

Of these institutions, only banks, savings banks, trust companies and credit unions may hold public deposits. Deposit-holding is an exceptional activity since deposits are, in a way, “lent” to the institution. The activities of deposit-holding institutions are therefore contingent on a promise of repayment and, as such, are planned very differently from those of institutions that sell a product. Insurance and securities are very different fields, and there are private markets for insurance and brokerage customer protection. In this paper, we shall address only deposit insurance, and particularly the federal system, which covers the banks, trust and loan companies that belong to it.

The map on the following page shows the distribution of deposits held by the various deposit-holding institutions in each province. The assets of deposit institutions represent roughly one half of the financial industry’s total assets, a fact that clearly indicates their importance. Though deposits are mainly concentrated in banks and in the Central Provinces, banks hold the majority of deposits in every province, and 63.2% of Canadian deposits as a whole.

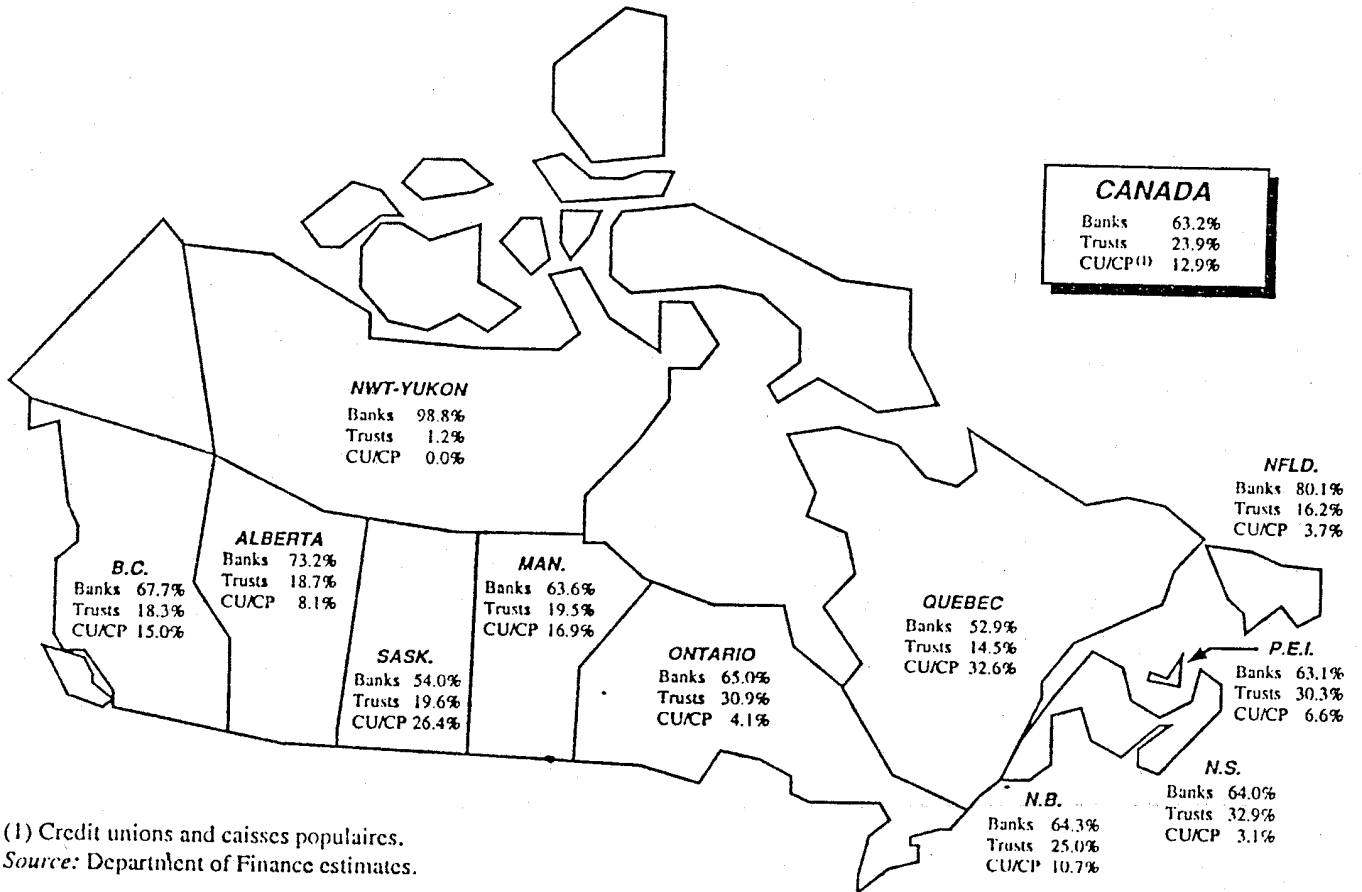
A. Depositor Trust

The trust that depositors place in the system holding their deposits is an essential factor in the system’s operation. This trust is based on the information available on the institutions. With the development of telecommunications and computerization, instruments have become more numerous and information more abundant. However, for making informed choices, depositors prefer the information on their deposits and on factors likely to affect them to be correct rather than abundant.

Information likely to be of interest to depositors may concern the internal behaviour of the institution they deal with, its external behaviour, or the economy in general. In principle, we can agree that market forces should encourage institutions to earn the trust of their depositors; otherwise, depositors may choose to withdraw their money and deposit it at another institution, or demand a premium as compensation. A “run” on a single institution may simply be the result of poor business decisions or indicative of the level of risk an institution is taking. Depositors’ concerns may then be fed by their fear of having to bear the risk assumed by their institution, and may ultimately force the institution to stop its activities. The disappearance of an institution is not a

Chart 1

Proportion of Deposits in Each Province and in Canada
Held by Financial Institutions (1989)



(1) Credit unions and caisses populaires.
Source: Department of Finance estimates.

bad thing for the economy *per se*, since agents enter and leave any efficient market. of that disappearance may, however, affect the public interest, and this is all the more significant because a number of institutions are affected at the same time. When the behaviour of institutions in general becomes a concern, there is a risk of a run on all deposit institutions. This type of phenomenon is hard to control and may have serious consequences for the financial system and economy as a whole.

It is therefore necessary to determine clearly the reasons for “runs” and to what extent they are caused by incomplete or incorrect information⁽¹⁾ about an institution. Once the cause has been identified, it is easier to take the appropriate steps.

B. Government Intervention

We have already seen the importance of depositor confidence for the stability of the financial system. In the context of deposit protection and in case of disaster, an implicit feeling of being protected has tended to discourage any formal demand for such protection. In Canada, there has never been a demand for a private deposit insurance system, so no such system has ever formed on its own. The absence of a market may at times justify government intervention (in various forms), particularly when this absence has led to substantial distortions. Government intervention in this case is designed to correct the distortion caused by runs on deposit institutions. It is for this reason that deposit insurance was established.

On balance, from an economic point of view, government intervention with respect to financial institutions tends to protect the financial system as a whole. In the same way, a public deposit insurance system must solve the problems caused by a difficult general situation. However, it must also keep depositors alert so that they can play their proper active role in a market economy such as ours. Lastly, it is important to be able to combine instruments such as supervision and regulation, for example, and to modify the role played by the private sector within the existing deposit insurance system. An examination of the federal deposit insurance system shows how these factors may vary.

(1) G.C. Kaufman, “The Truth About Bank Runs,” in *The Financial Services Revolution*, C. England and T. Huertas, Boston Kluwer Academic Publishers, 1988. Kaufman examines the validity of the reasons for a run. He emphasizes that the public often confuses a run on a savings bank with a general run on the entire system. He also stresses that government policy should focus more on the stability of the system as a whole than on that of any particular institution.

LEGISLATION

Any consideration of the deposit sector in Canada must, of course, include the legislative framework for financial institutions. Canadian legislation reforming federally chartered financial institutions passed on 1 June 1992 sets out, *inter alia*, the conditions for deposit-holding, compensation and supervision.

A. Deposit-Holding

Banks, trust companies and loan companies, which are federal and so-called “deposit” institutions, may hold deposits if they are members of the Canada Deposit Insurance Corporation (CDIC). Insurance and mutual aid companies may not accept deposits without the Minister’s approval. Lastly, credit cooperatives may hold deposits with the Minister’s permission or in cases where deposits come from local cooperatives. In Canada, cash and deposits⁽²⁾ totalled more than \$450 billion in 1991.

The Canadian Payments Association (CPA) regulates a national clearing system for deposit institutions. Chartered banks and the Bank of Canada are required to be members, and the other deposit institutions may belong if they meet eligibility criteria. In all cases, deposits are eligible for clearing only if they are made with members of a group designated by the CPA. Under the CPA’s federal constituent statute of 1980, the Association’s goals are to establish and implement a national clearing and settlement system, as well as a system for planning the development of a national payments system. As of 31 December 1991, the CPA covered 13,259 branches, slightly more than 11,000 of which belong to direct members.

B. Compensation

Banks and trust and loan companies under federal jurisdiction are required to apply to CDIC for deposit insurance. In the case of insurance and mutual companies, policy holder protection may be provided through a compensation association designated by ministerial order. Part XVII of the *Cooperative Credit Associations Act* provides for CDIC intervention with respect to compensation, even though membership is not mandatory.

(2) This is the monetary aggregate M2+ reported in the September 1992 issue of the *Bank of Canada Review*.

Prior to 1980, CDIC came to the aid of only two trust companies. In both cases, there was full recovery.⁽³⁾ Since 1980, CDIC has been required to make payments in respect of more than 20 deposit-taking institutions. Two examples are the Canadian Commercial Bank and the Northland Bank, which collapsed in the mid-1980s, although wind-up operations for the latter were not completed until the fall of 1991.

In the case of private compensation plans,⁽⁴⁾ the situation has remained calmer. The recent case of *Les Coopérants* is the first in which the Canadian Life and Health Insurance Compensation Corporation (Compcorp) has had to intervene. The compensation association created for property and casualty insurers (PACIC) has not yet been tested.

C. Supervision

The Canadian financial system has a number of organizations with responsibility for supervising financial institutions, including deposit-taking institutions.

In 1923, following the collapse of the Home Bank, Canada appointed the Inspector General of Banks, who, as the name implies, was responsible for inspecting banking institutions. The Bank of Canada was founded somewhat later, in 1934. By using the instruments at its disposal, the Bank establishes the general credit conditions under which deposit-taking institutions operate. In addition, as lender of last resort, the Bank of Canada makes loans to deposit-taking institutions to meet short-falls in liquidity.

Financial institutions (including deposit-taking institutions) now come under the authority of the Superintendent of Financial Institutions, who inspects their operations and imposes specific rules of conduct. The Office of the Superintendent of Financial Institutions (OSFI), which was created in 1987 through the merging of the Office of the Inspector General of Banks and the Office of the Superintendent of Insurance, assesses the institutions' solvency and authorizes or recommends continuation, reorganization or suspension of activities. In the case of CDIC member institutions, the Superintendent examines the operations of every member on behalf of the CDIC "once each year and at such times as the Corporation may require."⁽⁵⁾

(3) A list of institutions for which payments and/or recoveries have been made, and the estimated amount of losses, is provided in Appendix A.

(4) Under provincial jurisdiction, in the securities field there was, for example, the *Osler* case, in which the Canadian Investor Protection Fund (CIPF) intervened.

(5) *Canada Deposit Insurance Corporation Act*, s. 27(1).

This brief review of the federal legislative framework illustrates how control of the operations of deposit-taking institutions is carried out at a number of levels, ranging from self-supervision (practised by the institutions themselves) to public supervision. The legislative framework provides a number of instruments and allows some flexibility in their use.

Since the level of trust in the system and in certain specific financial institutions is related to the information available to the public, such information is the means whereby deposit-taking institutions make known their relative stability. Public policy instruments used to respond to an absence of a private deposit insurance market are mainly designed to protect depositors and the system as a whole.

DEPOSIT INSURANCE IN CANADA

When deposit insurance was introduced in Canada, financial institutions were much less developed than they are today.

It is easy to understand why there might be little confidence in very small institutions. Times have changed, as have consumer habits. The use of cheques and electronic transfers is increasingly common and generally accepted. The issue of trust continues to be crucial to the stability of the financial system, except that, because of the way the institutions have developed, it does not hinge on the same features. Trust now depends more on the behaviour of deposit-taking institutions than on the liquidity of the deposits. The risk of hoarding is no longer nearly as great as it was a few decades ago. Depositors today appear to be more mobile; that is to say, instead of keeping their money at home, they are more likely to respond to insecurity by moving their deposits from one institution to another. The signals sent by depositors are now aimed more at specific institutions than the system itself.

A. Establishment of CDIC

The absence of a private deposit insurance market and the relatively disparate sizes of deposit-taking institutions resulted in public intervention to create a certain level of trust in the institutions. This intervention led to the founding of CDIC.

The federal deposit insurance system was introduced in Canada in 1967 partly to “reassure” worried depositors. The motives underlying the Canadian system are implied in the following passage from the 1967 Senate Debates:

... Bill C-261, to establish the Canada Deposit Insurance Corporation has, ... a philosophy ... summarized by saying that the purpose of the bill is to ensure the safety of the savings of individuals who as depositors use the financial institutions of this country for that purpose. It is also intended to stimulate confidence in our deposit-taking institutions in a country where, with sound management of our affairs, the expansion and business activity and the multiplication of banking facilities and deposit-taking institution facilities are almost certain to develop as rapidly as our economy grows.⁽⁶⁾

It should be noted that it was anticipated at the time that trust and loan companies would develop into deposit-taking institutions. The Canada Deposit Insurance Corporation bill received Royal Assent on 17 February 1967. CDIC was established as a preventive measure to counter certain “disturbances” that might harm Canada’s financial system. From an operational point of view, like an insurance company, it was to manage a fund financed by premiums, but with the exception that it could be given additional authority.

The functions of the CDIC were originally set out as follows:

- CDIC was authorized to acquire assets of a member institution, to grant loans and advances and guarantee them, and to guarantee loans to or deposits with a member institution;⁽⁷⁾
- CDIC could act as receiver for a failed institution and pay depositors’ claims of up to \$20,000 per depositor by depositing cash or transferring this sum to another institution;⁽⁸⁾
- CDIC could collect an annual premium equal to at least \$500, or one-thirtieth of one per cent of the total amount of deposits, whichever was greater.

In addition, CDIC was responsible for developing standards for the activities of non-federally chartered trust and loan companies. This measure was to be applied jointly with the Quebec Deposit Insurance Board (QDIB) to improve minimum financial and management standards.⁽⁹⁾

(6) *Senate Debates*, 16 February 1967, 1st Session, 27th Parliament, p. 1447; second reading of Bill C-261, An Act to establish the CDIC.

(7) *Canada Deposit Insurance Corporation Act*, s. 11. Taken from the CDIC Annual Report, 1967.

(8) H.H. Binhammer and J.D.C. Boulakia, “Deposit Insurance in Canada,” *The Canadian Banker*, Vol. 75, No. 1, Spring 1968.

(9) *Ibid.*

The number of financial institutions has greatly increased since CDIC's inception. Some of them encountered serious difficulties in the 1980s, however, and were forced to turn to CDIC.⁽¹⁰⁾

B. Co-existence of Two Deposit Insurance Systems

The Province of Ontario enacted the first Canadian deposit insurance legislation but, with the establishment of the CDIC shortly thereafter, the provincial statute was amended to enable provincial institutions to benefit from coverage by the federal corporation. In all provinces except Quebec, legislation was amended to avoid duplication of services.

In 1968, Quebec established its own deposit insurance system (QDIB), to which any non-bank financial institution which solicits or receives deposits in Quebec must subscribe. The *Canada Deposit Insurance Corporation Act* was amended on 27 March 1968, and an agreement with QDIB was signed in December of that year. These changes allowed and still allow CDIC:

- to provide coverage for deposits outside Quebec accepted by institutions incorporated in Quebec;
- to insure deposits in Quebec of institutions incorporated in other provinces, provided there was no other agreement with the latter; and
- to provide assistance to QDIB in case of a need for liquidity.

QDIB activities began in 1970. As of 30 April 1991, deposits insured by QDIB and CDIC totalled \$58 billion and \$290 billion respectively. According to QDIB's 1991 annual report, roughly half (51%) of deposits guaranteed by that agency were with savings and credit unions. Next, but lagging far behind, came federal savings banks (27%) and trust companies incorporated under Quebec law (17%). In contrast, according to CDIC's annual report figures, the majority of insured deposits (92%) are in federal member institutions, including banks and trust and loan companies. The balance of CDIC-insured deposits is in provincially incorporated trust and loan companies.

In 1981, QDIB asked for CDIC assistance, as provided under the 1968 agreement. CDIC advanced \$55 million to enable QDIB to meet its short-term liquidity requirements. QDIB had entirely repaid the amount by June 1982.

(10) Charts illustrating the situation appear in the text below.

HISTORY OF CDIC

As stated above, CDIC was established by an Act passed in February 1967. The agency, headquartered in Ottawa, was managed by a Board of Directors consisting of a Chairman, the Governor of the Bank of Canada, the Deputy Minister of Finance, the Superintendent of Insurance, and the Inspector General of Banks. The first Chairman of the Board was Mr. Antonio Rainville. Since CDIC had a small staff in its first decade of existence (its employees could in fact have been counted on the fingers of one hand), CDIC called on the services of the Department of Finance and the Office of the Superintendent of Insurance.⁽¹¹⁾

CDIC operates basically as an insurance company. It differs from a private company in that the insurance it provides is mandatory, and the corporation has the privilege of being able to borrow from the government within authorized limits. Unlike all other insurance companies under federal jurisdiction, it is not supervised by the OSFI.⁽¹²⁾

The federal government originally subscribed \$10 million in capital funds for CDIC. In addition to premiums charged to members, the deposit insurance fund, which can be augmented through federal government borrowings, originally could not exceed \$500 million.⁽¹³⁾

By 31 December 1967, CDIC's membership included 11 banks and 18 federal loan and trust companies, as well as 41 provincial member institutions. As seen above, the CDIC Act was first amended in 1968 as part of the agreement with QDIB. Added to the Act at that time was a definition of "deposits" which had previously existed only in the Corporation's by-laws.

The Act was amended a second time in 1977 by Bill C-3. CDIC obtained the right to buy back its capital stock for \$10 million; however, this in no way changed the property rights or control of the Corporation, which remains an agent of the Crown. Furthermore, in view of the proper operation of its activities and those of its members, the Corporation was given the option, with the passage of Bill C-3, of allowing reductions on the premiums charged to its members. This amendment, which was likely motivated by a more comfortable budgetary situation, can be seen as an incentive to member institutions.

(11) Staff increased at CDIC as the corporation's activities were stepped up. From 1981 to 1989, the number of employees rose from 6 to 63, and to 92 in 1991. At the same time, CDIC managed total assets of \$39 million in 1981 along with approximately \$1 million in liabilities per employee, compared to slightly more than \$9 million and \$23 million per employee respectively in 1989. The number of member institutions per CDIC employee went from 24 in 1981 to two in 1989 and was approaching one in 1991.

(12) OSFI does, however, oversee CDIC's member institutions and reports any problem to the Corporation.

(13) CDIC, *Annual Report, 1967*.

The premium that CDIC charges its members is proportional to the insurable deposits they hold. Institutions can forecast the premium owed; however, the fact that the premium may be reduced by a specific amount on the basis of good behaviour ratings or measures leading to sound financial health provides an incentive for institutions trying to reduce costs to improve their behaviour. A fixed rate for member institutions means a non-flexible cost to the institution. However, a premium that varies with the level of risk or management rating, for example, may possibly have some influence on institutions' decisions, because it affects their cash flow.

In the United States, the CAMEL system⁽¹⁴⁾ was proposed for setting the amount of the premium. This system in fact provides two premiums: a medium and a high risk premium. In Germany, premiums may vary as required; this is also the case in the United Kingdom when reserves are exhausted. Premiums are an instrument that may be used for the purposes of financing and/or supervising assets, particularly their quality.

The charts below show how CDIC's situation has evolved over the years. As they indicate, CDIC's situation during its first decade was relatively comfortable. Toward the early 1980s, more than 100 member institutions paid CDIC premiums totalling approximately \$20 million per year, and its Deposit Insurance Fund showed a cumulative surplus of approximately 10 times that amount. Things were indeed going well, but it should not be forgotten that, since its inception, CDIC had only rarely been required to compensate depositors. The 1980s proved more difficult and raised questions.

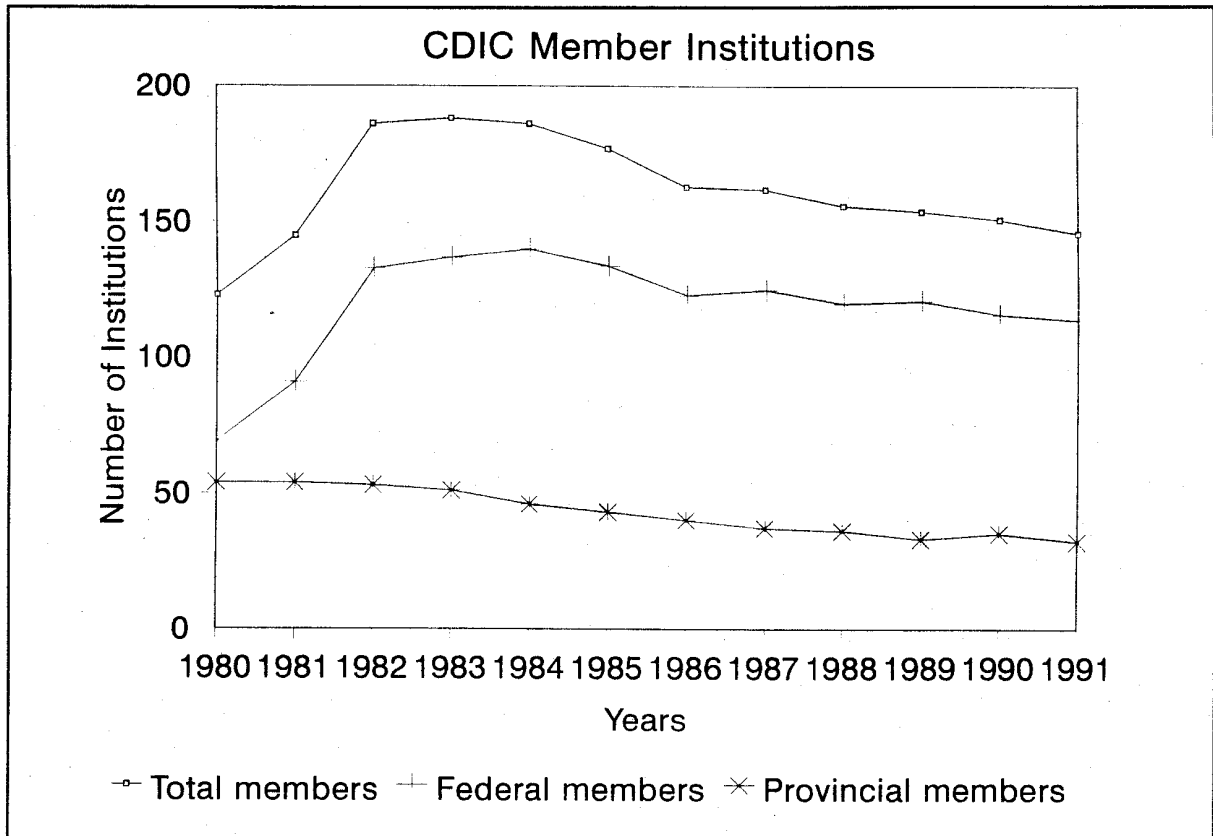
A PERIOD OF QUESTIONING AND ADJUSTMENT

As noted above, CDIC was established to insure the deposits of individuals who bank with financial institutions under federal jurisdiction and to encourage confidence in deposit-taking institutions; its establishment preceded significant developments in those institutions and the financial sector in general.

Canada's financial system has changed vastly with time. The relative weight of the financial institutions is not the same as it was, and their field of activity has generally expanded. In addition, new technologies facilitating bank transactions and the international expansion of banking activities show significant change in the competitive climate. In these circumstances, one may well wonder what will become of deposit protection.

(14) CAMEL: Capital adequacy, Asset quality, Management ability, Earning quality, and Liquidity.

CHART I



- The number of deposit-taking institutions has changed over the years. From 1975 to 1985, the number of member institutions rose from 83 to 177. This increase was due in part to the entry of trust and loan companies into the market. It has been easier for foreign banks to carry on their activities in Canada since the *Bank Act* was amended in 1980. Those banks hold only a small share of Canadian deposits, but their entry in the market nevertheless explains most of the increase in the number of member institutions starting in 1980 (there were a total of 123 members in 1980). In the past few years, however, as a result of problems encountered by financial institutions, the number of institutions appears to be returning to its level of the early 1980s. However, the decline is not mainly caused by a decrease in the number of banks, but rather by a decrease in the number of federal and provincial trust and loan companies.

CHART II
Premiums Received from Member Institutions

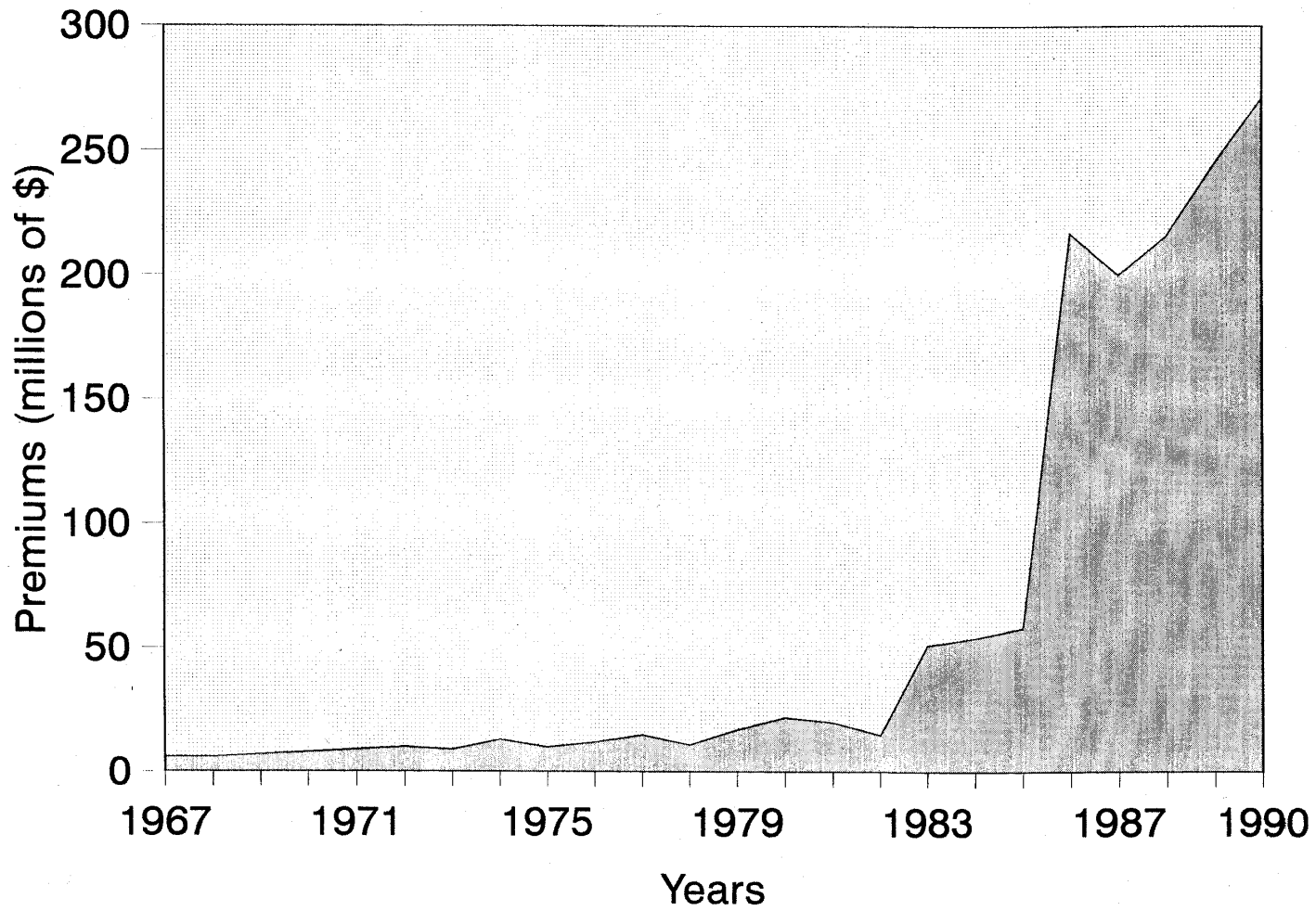
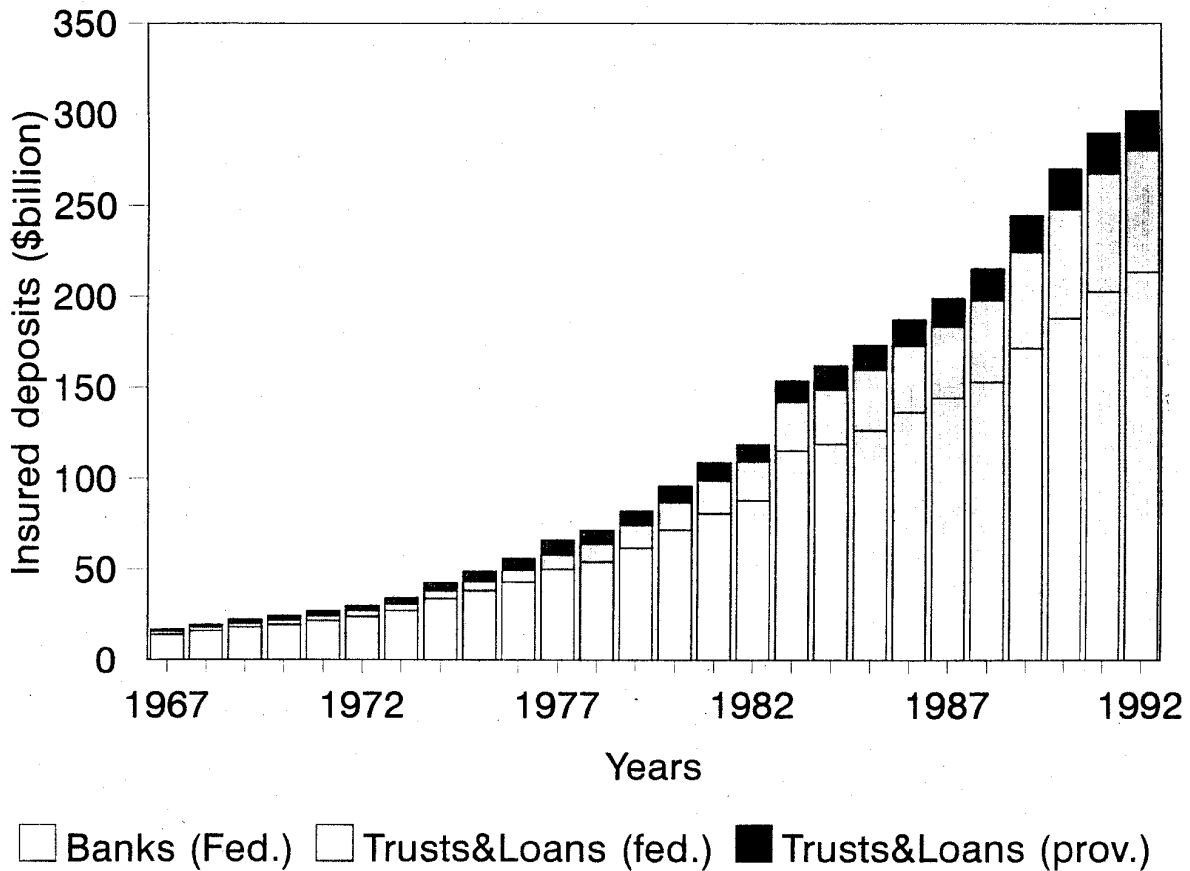
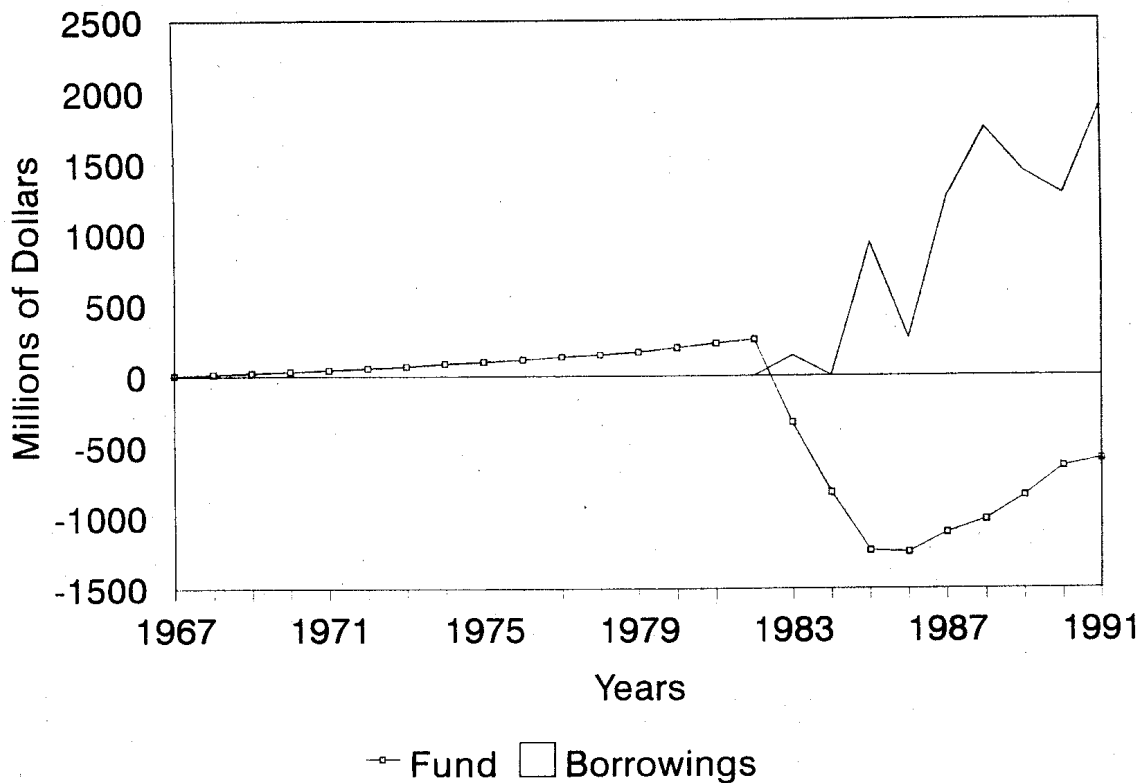


CHART III
Deposits Insured by CDIC



- The required premiums on insured deposits are CDIC's prime source of financing. The premiums received by CDIC jumped sharply in 1986 following a legislative amendment, which raised the rate, charged. Apart from that, that may explain the change in premiums in insured deposits. CDIC-insured deposits are mainly held by banks, followed by federal trust and loan companies, then provincial companies.

CHART IV
Changes in the Deposit Insurance Fund
Canada Deposit Insurance Corporation



- The fund grew steadily until the early 1980s, but, to meet its obligations, CDIC had to borrow from the government for the first time in 1983 (\$140 million). In overall terms, the balance of the CDIC Deposit Insurance Fund, which had been growing regularly since 1967, posted a deficit starting in 1983. In its most recent annual report, CDIC announced a \$590 million deficit for the Fund. CDIC expects to repay all its debts by 1996.

A. Responses

The relative equilibrium of the CDIC fund was shaken by the poor state of a number of financial institutions, particularly during the 1980s. The Trudeau and Mulroney governments each amended legislation in 1983 and 1986 respectively, to give CDIC more room to manoeuvre. Since 1967, “small” depositors had been covered for up to \$20,000 and the Corporation’s coffers had been replenished on this basis. When the CDIC Act was amended in 1983 to increase coverage to \$60,000, it became clear that the Corporation would have to be allowed to borrow more. The maximum level of borrowings from the government was increased from \$500 million to \$1.5 billion. In addition, greater premium financing was authorized under Bill C-86, passed in 1986.

This bill enabled CDIC to add private sector members to its Board of Directors. In addition, the premiums charged to members rose from one-thirtieth of 1% to one-tenth of 1% of insured deposits. Revenues were thus enhanced, and private sector members had the opportunity to influence CDIC management decisions.

Prior to 1980, there were only two cases where financial institutions got into difficulty and received CDIC assistance.⁽¹⁵⁾ Despite the changes made to the CDIC Act (in particular, tighter supervision and higher premium rate), CDIC found itself in deficit. It had to borrow from the government and spread its repayment over a number of years.

Member institutions receiving loans from the CDIC were either subject to takeover or experiencing financial difficulties. The Corporation intervened on its own but also on the advice of the Superintendent of Insurance. Settlement of cases submitted to the CDIC has generally taken several years. For example, wind-up of the Northland Bank took over seven years to complete.

In most cases, CDIC paid back all deposits, whether or not they were insured. While this CDIC decision to provide 100% compensation may be explained by the Corporation’s objective of minimizing cost and risk,⁽¹⁶⁾ the indirect effects of such a measure may raise problems. Some maintain, for example, that the political cost must be taken into account⁽¹⁷⁾ in interpreting the results of a policy affecting deposit-taking institutions.

(15) Assistance provided by CDIC to its members is described in Appendix A.

(16) CDIC annual reports, various years.

(17) D. Lang, “Reform of the Canada Deposit Insurance Corporation,” *Banking and Finance Law Review*, Vol. 5, February 1990; Lang emphasizes that political pressure may exist.

B. Moral Hazard

These events led to a general questioning of the role of the deposit insurance system, and to a realization that it may harm market discipline to have depositors assured of being entirely reimbursed. Depositors confident of being compensated (even when by law their deposits are not insured) are less likely to take care that their deposits are placed in sound institutions. This is what is meant by “moral hazard,” a term used by economists to describe a problem of asymmetrical information⁽¹⁸⁾ frequently encountered in insurance. In the words of J.E. Pesando:

Moral hazard is said to exist whenever the act of insuring an event increases the probability that the event will occur. Deposit insurance, in effect, insures against the failure of a financial institution. In so doing, it increases the likelihood that such a failure will occur.⁽¹⁹⁾

When depositors are not concerned about their insured and uninsured deposits, institutions have greater freedom of action with respect to the funds at their disposal. A number of studies have shown how risk-taking may at times become relatively excessive. In a study published in 1983, entitled *The Wyman Report: An Economist's Perspective*, Pesando mentioned certain factors that may prompt a risky approach to management. He first mentioned the case of institutions studied in 1983, where there was asymmetry between the risk borne by shareholders⁽²⁰⁾ and that borne by other creditors (depositors). This encouraged risk-taking on the part of the shareholders managing the company, and this grew if they felt less supervised. According to Pesando, a member institution can start to think that its management does not need to take the reactions of depositors into account. Furthermore, an institution may respond to regulations by automatically going as far as the limits permit.

Pesando emphasized that managers may attach less importance to portfolio diversification in the absence of insurance. He observed that deposit insurance insures against bankruptcy, but that in doing so it increases the probability that bankruptcy will take place.

(18) Another type of asymmetrical information problem frequently encountered in insurance is that of adverse selection.

(19) Cited in Lang (1990).

(20) He indicated that, in 1983, shareholder equity represented 3.82% of total liabilities of the chartered banks, compared to 5.07% for trust and loan companies.

Among the means Pesando suggested for eliminating excessive risk-taking in members institutions were:

- increased capital requirements to a high enough level that managers internalize the costs of risk-taking;
- introduction of a risk-based system;
- stricter and more rigorous supervision and regulation;
- implementation of a co-insurance system;
- requirement that each insured institution have a percentage of deposits in the form of subordinated debt in case of insolvency.

According to a study by the Economic Council of Canada,⁽²¹⁾ although external factors (the economic situation) have contributed to Canadian bankruptcies, internal factors (internal risk management: loan quality, degree of diversification, size of capital base and balance between assets and liabilities) were mainly responsible for those bankruptcies.

A number of solutions are therefore available for the problem of deposit-related moral hazard. These solutions can be combined for even greater flexibility. Generally speaking, this may involve using means that affect the decision-making criteria of deposit-taking institutions. These means may be more or less direct; that is, they may be purely regulatory and thus impose a direct constraint on institutions, or they may be indirect and take the form of incentives. For example, adoption of a risk-based premium rate structure may be a way of making an institution more cautious. Incentives designed to make depositors aware of their institution's actions may be another method of achieving this. Thus, direct or indirect regulatory power may be applied, depending on the objective. Identifying the roles of the CDIC on the one hand and public supervisory agencies on the other is necessary in order to avoid duplication and conflicting measures. Insofar as a public deposit insurance system fills the place of a private market that does not exist, we can envisage a framework of responsibility and supervision for it similar to the one that would prevail in a private system.

In practice, the *CDIC Act* was amended twice: first by Bill C-42 in 1987 and second by Bill C-48 in 1991. These amendments were made in the context of the federal government's

(21) Economic Council of Canada, *The Framework of the Financial System*, Document EC 22-137, 1987.

financial institution reform. Indeed, as Mr. Hockin noted, Bill C-42 marked the initial steps in a concrete process toward the globalization of financial markets.

C. Amended Powers

In 1987, Bill C-42⁽²²⁾ amended some of CDIC's functions and introduced measures designed to enhance market discipline and supervision. The bill provided for the merging of the Office of the Superintendent of Insurance and the Office of the Inspector General of Banks into a new entity, the Office of the Superintendent of Financial Institutions. The bill included a number of amendments concerning CDIC: a change in membership of its Board of Directors, the option of charging premiums reaching one-sixth of 1% of insured deposits, a new role in developing sound financial practices and responsibility to promote public awareness of deposit insurance, as well as an increased ceiling on its government borrowings, from \$1.5 billion to \$3 billion.

These changes were a sign of a more centralized federal approach to financial institutions. Requiring institutions insured by CDIC to pay an additional premium if they did not adopt sound practices could act as an incentive to prudent behaviour. In practice, however, this power has never been used by CDIC. Furthermore, the threat of an increase in the premium rate in the Corporation's last budget was motivated by a need for additional funds to eliminate the forecast deficit, rather than by any need to affect the conduct of member institutions; this provision was evidently strictly budgetary in nature.

Advertising designed to increase public awareness may be an important influence on how depositors feel about their institutions. It may, among other things, be used to ensure that all depositors, large and small, know that some of their deposits are insured. It is difficult, however, to determine the real impact of this measure. Nevertheless, if institutions consider that their clients (depositors) are better able (or more motivated) to keep an eye on their deposits, they have to take this into account in their decision-making.

The measures discussed above seem aimed more at institutions and depositors than at the Corporation itself. CDIC is authorized to intervene with its members, normally after consultation with OSFI, which is responsible for supervising and examining financial institutions under federal jurisdiction. When the discussions, which may be long and difficult, are concluded

(22) The bill dealt with financial institutions and amendments to the *Deposit Insurance System Act*.

between the regulatory agencies and the institutional managers, CDIC comes into play, but by then, the game is largely over.

Where the business of one institution is merged with or transferred to another and it proves difficult to obtain the agreement of shareholders and creditors, it may be necessary to pass special statutes. For example, to resolve the difficulties surrounding the transfer of business from the Bank of British Columbia to the Hong Kong Bank of Canada in 1986, a special Act was passed and CDIC was given the responsibility of seeing to the smooth transfer of business. Since then, CDIC has been promoting the view that this process should be provided for on a systematic rather than a “case-by-case” basis. Bill C-48, an Act to amend the Canada Deposit Insurance Act, adopted in 1992, concerned the time at which CDIC should intervene.

Bill C-48 is thus largely devoted to providing for a Financial Institutions Restructuring Program (FIRP) and to giving the Corporation new means of taking charge of those financial institutions under federal jurisdiction whose financial liability has been questioned by the regulatory authorities. Under the new provisions, an institution, which is the subject of a restructuring order, may be sold or merged without the approval of its shareholders or creditors.

Lastly, under this bill, the limit on the amount the Corporation may borrow from the government was raised from \$3 billion to \$6 billion. Amendments were also made to allow provisions regarding advertising for deposit insurance to be grouped together in the administrative regulations.

As a whole, then, the measures taken with respect to deposit insurance in the wake of numerous bankruptcies and solvencies in the 1980s have concentrated on financial requirements and amending the CDIC’s powers. In its most recent corporate plan, CDIC has adopted the following roles:

- to provide insurance against risk of total or partial loss of deposits;
- to participate in establishing standards for sound business and financial practices in member institutions, to promote the stability and competitiveness of the Canadian financial system, and to cooperate in promoting stability and competitiveness;
- to pursue the preceding two objectives in the interests of persons holding deposits with member institutions and in such a manner as to minimize the Corporation’s exposure to loss.

Thus the CDIC now sees its role in a much broader perspective than in its early days. Its staff is much larger, and an interest in increasing its role is even more evident in the objectives stated in its last annual report.

DISCUSSION

According to economic theory, government intervention may be justified by certain market imperfections - in this case, the absence of a market for deposit insurance. Given the types of risk and uncertainty common in the insurance sector, market imperfections are often caused by asymmetrical information resulting in moral hazard or adverse selection.

Most economists agree that risks of bankruptcy under a voluntary deposit insurance system are higher than under a compulsory system, since the weaker institutions are more likely to join a deposit insurance system. With a compulsory system like Canada's, the problem of adverse selection is not applicable, even though member institutions are characterized by various degrees of risk. The various sizes of CDIC member institutions suggest that a voluntary system would be likely to attract smaller and more fragile institutions.

Events in the history of deposit insurance in Canada have not called its mandatory nature into question. However, there is still the problem of moral hazard referred to above. The means recommended by Pesando in 1985 were restated by Lang five years later, by which time Bill C-42 had been passed (in 1987). This study points to certain problems that still require solution.

In light of a number of reports and studies on various reform proposals in the past decade,⁽²³⁾ Lang compares various scenarios, which can be summed up essentially as having two complementary approaches: active supervision and market discipline. The first approach involves detection and correction of illegal and imprudent practices and, briefly put, is designed to increase consumer protection. The second approach motivates institutions to internalize the cost of their activities. In other words, so-called risky activities are pursued only if they are justified by a market price; that is why the market discipline label is applied.

In the area of active supervision, the author examines the possibility of merging the CDIC with other regulatory organizations and the possibility of giving it additional powers. Various scenarios are based on the idea that supervision is carried out by OSFI, with the CDIC not

(23) See a list of reports examined by Lang in his study, in Appendix B.

being equipped to handle inspections; thus CDIC uses the data of OSFI or member institutions. Consolidation of OSFI and CDIC activities to create a “National Financial Administration Agency” was proposed to the House of Commons by the Blenkarn Committee in 1985. The 1986 Estey Report had also suggested a possible merging of CDIC with the bank supervisor, the Inspector General of Banks (OSFI did not then exist). The merger proposal was rejected by the government, which considered that supervision and deposit insurance are separate activities and that problems of federal and provincial jurisdiction might arise.⁽²⁴⁾ On the other hand, the Wyman Commission had recommended giving CDIC additional powers rather than a merger, observing (according to Lang) that these powers might extend to supervision, examination and wind-up. However, efficiency must be a consideration when powers are determined: the greater the cost of adhering to CDIC guidelines, the more financial institutions tend to innovate in unregulated fields where the CDIC cannot intervene. Consequently, measures should be adopted that encourage other options rather than limiting institutions to a restricted framework.

Authors of U.S. studies have advanced the same idea. In the United States, for example, politicians have at times attributed problems to fraudulent or dubious practices on the part of institutions. There are figures that show, however, that the estimated losses of U.S. savings and loans were mainly (two-thirds) due to commitments made before deregulation or in conventional real estate loans. In reality, only a small proportion of the losses were the result of fraudulent investments, junk bonds or other non-real estate investments.⁽²⁵⁾ The U.S. has recently undertaken a reform of its deposit insurance system. Some suggest that the various deposit insurance systems have never been functional over a long period because they are not in fact necessary to protect the public or to maintain the stability of the financial system.⁽²⁶⁾ It appears important that the structures proposed be open to change and able to adjust to developments in the country.

The *Federal Deposit Insurance Corporation Improvement Act* (FDICIA) put forward in the U.S. in 1991 is a reform plan based on the real risk of FDIC bankruptcy and the need for taxpayer subsidies that could arise as a result. The reform would permit:

- an additional \$70 billion in financing for the FDIC;

(24) Lang (1990), p. 182.

(25) Appendix C contains a table presenting these estimates.

(26) A.J. Meigs and J.C. Goodman, *Federal Deposit Insurance: The Case for Radical Reform*, National Center for Policy Analysis, Policy Report No. 155, December 1990.

- promotion of regulation and supervision; and
- adoption of a detection system to raise the regulatory requirements on bank capital.⁽²⁷⁾

The authors of some studies consider that transferring the risk of a bank's bankruptcy from the Deposit Insurance Fund to depositors themselves, as provided under the reform plan, is a contentious issue and that promotion of market discipline on depositors by the government and the FDICIA should be encouraged.⁽²⁸⁾ As some say, regulatory supervision is a poor substitute for market discipline in the present financial market.⁽²⁹⁾

As regards market discipline in Canada, the five proposals discussed in Lang's article are: co-insurance, risk-based premiums, requirements of capital, subordinated debt, and disclosure.⁽³⁰⁾ A comparison of these proposals leads Lang to favour setting the premium based on the notion of risk, increased reserves and the use of subordinated debentures to permit CDIC to become more effective in its operations. Lang also places some emphasis on disclosure. He suggests that the possibility of integrating CDIC with provincial and industry funds should be examined.

Of course, these proposals may involve some regulatory supervision; however, these methods, which focus on market discipline, offer the parties greater flexibility and enable them to adjust to their requirements more effectively and in the desired time.

A consensus in favour of the use of subordinate debentures appears to emerge from the studies on market discipline.⁽³¹⁾ This idea, advanced by Pesando among others, consists of obliging the institutions to issue subordinated debentures (uninsured and at a fixed rate) backing their uninsured deposits. The risk is related to the situation of the institution itself rather than to the group of institutions to which it belongs; this helps prevent systematic runs on a group of institutions deemed to be riskier, as could happen under a co-insurance system, for example.

(27) T.F. Cargill and T. Mayer, "U.S. Deposit Insurance Reform," *Contemporary Policy Issues*, Vol. X, July 1992.

(28) K.G. Mantipragada, "Depositors as a Source of Market Discipline," *The Yale Journal on Regulation*, Vol. 9, February 1990.

(29) Cargill and Mayer (1992).

(30) Appendix D contains the proposals as compared by the author.

(31) S. Handfield-Jones, *Safeguarding Depositors and Investors: The Role of Deposit Insurance and Enhanced Supervision*, Conference Board of Canada, Report 56-90-DF.

In addition, introducing this approach would be more practical than a system based on risk, such as the CAMEL system proposed in the United States, whose implementation in the Canadian context many considered would be difficult. The use of subordinated debentures could make the institution aware of the degree of risk associated with the deposits, which, in practice if not in principle, have always been insured.

Internationally, capital requirements rules developed by the Basel Committee of the Bank for International Settlements (BIS) in 1988 cannot be overlooked. Under this initiative, the world banking system would have been subject to similar regulation by the various national agencies. It was thought that an institution falling under the BIS rules would thus be considered less risky than an unregulated institution. Today, however, there is some doubt as to the effectiveness of such a standard system.

It is difficult today to foresee the introduction of standard rules. Flexibility and the ability to adjust rules to local issues are important factors. Canada has established a framework for capital requirements under its recent reform of financial institutions. The concept of regulatory capital is defined by regulation⁽³²⁾ for each type of institution and, for deposit-taking institutions, applies in particular to real estate investments, capital and the overall limit on certain transactions such as purchases and personnel improvements.

Lastly, there is the important question of information. The authors of one study⁽³³⁾ on CDIC's problem, that is the inability to prevent member institutions from taking excessive risks, also suggest enhancing market discipline and regulation. They also assume that the solution depends on the efficient introduction of procedures to improve the availability of information.

The most recent bill to amend the CDIC Act was passed in 1992.⁽³⁴⁾ Its principal measures were aimed at facilitating the transfer of an institution's activities when shareholder cooperation is uncertain. This should be an instrument of last resort, however, since, for the most part, agreements reached seem to involve parties acting in good faith; even so, that in no way alters the detection of problems which institutions sometimes face. The detection activity carried out by the agencies responsible is a thorny question, of course, but probably one amenable to solutions. The lag between an institution's understanding that it is in trouble and the regulatory authorities' confirmation of that fact may be an important sign.

(32) This regulation went into effect on 31 August 1992.

(33) B. Smith and R.W. White, "The Deposit Insurance System in Canada: Problems and Proposals for Change," *Policy Analysis*, Vol. XIV, No. 4, December 1988.

(34) Bill C-48.

Thus the problem of moral hazard examined in the framework of the Canadian deposit insurance system has led to a number of questions. Because the authors of certain U.S. studies doubt the degree to which deposit insurance is justified, we should not necessarily come to the same conclusion in Canada. Canadian deposit-taking institutions are relatively smaller and much less numerous than their U.S. neighbours. The distribution of risks is therefore relatively limited.

CONCLUSION

The Canadian deposit insurance system was able at the outset to respond to a need to reassure depositors about the safety of their deposits; however, times have changed. Cheques, electronic transfers, automatic deposits and a host of other instruments are now a part of daily life. Bank computerization has been achieved, and automatic tellers have multiplied. In 1986, for example, Canada's largest teller network, Interac was established. More than 11,300 automatic teller machines now give cardholders Canada-wide access to their accounts.⁽³⁵⁾ It was recently estimated that for every adult over the age of 18 years there were 2.3 credit cards in circulation in Canada.⁽³⁶⁾ Debit cards are increasingly being used to make purchases by debiting a bank account directly. Cheques and cash are still used, but new payment methods are becoming more popular. A few decades ago, depositors' confidence was determined by their concern about their ability to retrieve a tangible amount owed, but this is no longer the issue. While the problem of moral hazard gradually emerged after the establishment of a deposit insurance system, the intangibility of payment transfer methods has accentuated this tendency. People are less concerned about the physical location of their deposits, and are quite happy to function with promissory notes. This is good because transaction costs are certainly decreased as a result. However, while the intangible nature of deposits partially explains why depositors pay little attention to the institutions, adequate information should certainly correct this situation.

Lastly, the risk of depositor hoarding that used to exist before computerization and automation is now likely very small. Lack of confidence in an institution should lead depositors to turn to another that is in better shape. This indicates the part of supervision that can

(35) Canadian Bankers Association, *Banking Activities*, 1991.

(36) Consumer and Corporate Affairs Canada, "Costs of Using Credit Cards," July 1992.

be taken on by a depositor who has the necessary information. As regards trust in the system in general, it is up to those in positions of responsibility to assess the extent to which the cost should be borne by taxpayers as a whole through the tax system, and the extent to which it should be assumed by the more direct method, that is by the private sector itself. The absence of a private deposit insurance market in Canada can be explained by an implicit compensation insurance. Why should this implicit insurance exist? As a first step, depositors with accurate information should be able to identify institutions that make poor management decisions. Public authorities could, for example, examine the accuracy of information distributed to the public. This would involve supervision of information, as well as of the amount of information made public. CDIC currently discloses information as follows.⁽³⁷⁾ It informs the public that future investments are no longer insured when CDIC cancels or terminates an institution's membership and bolsters the requirements for disclosure to consumers in cases where a deposit is not insured. When a premium surcharge is imposed, the institution's auditors MAY disclose the fact in their report. The rest of the information disclosed may vary and depends on CDIC Board directives.

Thus the deposit insurance system no longer needs to respond to a risk of bank runs as it did when it was established. When it becomes clear that institutions might not wish to disclose information about themselves, regulatory instruments must certainly be used. Legislators should bear in mind, however, that regulatory supervision is a poor substitute for market discipline in the present financial market.

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APPENDIX

Appendix A

Table of Payments and/or Restructuring Costs and Estimated Losses

Year	Member Institution	Repayments and/or Restructuring Costs	Sums Recovered to 31 Dec. 1989	Estimated Losses to 31 Dec. 1989
			(in \$ millions)	
1970	Commonwealth Trust Company	\$5	\$5	\$0
1972	Security Trust Company Limited (The)	9	9	0
1980	Astra Trust Company	21	18	3
1982	District Trust Company	231	216	15
1983	Amic Mortgage Investment Corporation	28	5	15
1983	Crown Trust Company	930	886	5
1983	Fidelity Trust Company	791	413	359
1983	Greymac Mortgage Corporation	174	67	106
1983	Greymac Trust Company	240	76	150
1983	Seaway Trust Company	120	116	4
1983	Seaway Trust Company	300	216	73
1984	Northguard Mortgage Company	28	20	8
1985	Continental Trust Company	113	113	0
1985	Pioneer Trust Company	201	163	27
1985	Western Capital Trust Company	77	74	3
1985	Canadian Commercial Bank	352	0	243
1985	CCB Mortgage Investment Corp.	36	6	13
1985	London Loan Limited	24	17	5

Table of Payments and/or Restructuring Costs and Estimated Losses (continued)

Year	Member Institution	Repayments and/or Restructuring Costs	Sums Recovered to 31 Dec. 1989	Estimated Losses to 31 Dec. 1989
			(in \$ millions)	
1985	Northland Bank	318	0	161
1986	Bank of British Columbia	200	0	200
1986	Columbia Trust Company	99	93	0
1987	North West Trust Company	275	0	275
1987	Principal Savings and Trust Company	116	68	0
	Sub-Total* (since 1970)	\$4,688	\$2,581	\$1,665
1988	Financial Trust Company	74		
1991	Standard Trust Company	1,300	650	
1991	Bank of Credit and Commerce of Canada	22		
1991	Saskatchewan Trust Company	58		
1992	First City Trust Company	500		
1992	Shoppers Trust Company	500		
1992**	Central Guaranty Trust Company	<u>4,400</u>		
	Interim Total	\$11,542	\$3,231	\$1,665

*These estimated losses are based on the most recent data available and do not take into account interest on sums borrowed by the Corporation from the government.

** *Financial Post*, October 1992.

Source: *CDIC Annual Report*, 1989; *The Globe and Mail*, Wednesday, 14 October 1992, table.

Appendix B

Partial List of Reports and Studies on Deposit Insurance

- Canada. Working Committee on the Canada Deposit Insurance Corporation (CDIC), April 1985 (Wyman Report).
- Canada, Department of Finance. *The Regulation of Financial Institutions: Proposals for Discussion*. Supply and Services Canada, April 1985 (Green Paper).
- Canada, Standing Senate Committee on Banking and Commerce. 10th Report. *Deposit Insurance*. Supply and Services Canada, 11 December 1985.
- Ontario Task Force on Financial Institutions. *Final Report*. Queen's Printer, Toronto, December 1985.
- Canada, House of Commons Standing Committee on Finance, Trade and Economic Affairs. 11th Report. *Canadian Financial Institutions*. Supply and Services Canada, 1985 (Blenkarn Report).
- Canada, Standing Senate Committee on Banking and Commerce. 16th Report. *Towards a More Competitive Financial Environment*. Supply and Services Canada, 1 May 1986.
- Canada. *Report of the Inquiry into the Collapse of the CCB and Northland Bank*. Supply and Services Canada, August 1986 (Estey Report: Canada, Working Committee on the Canada Deposit Insurance Corporation (CDIC)).
- Canada, Minister of State for Finance. *New Directions for the Financial Sector*. Supply and Services Canada, 18 December 1986 (Blue Paper).
- Economic Council of Canada. *Competition and Solvency: A Framework for Financial Regulation*. Supply and Services Canada, 1986.

Appendix C

“Causes of Losses”

The Politician’s Search for a Scapegoat

The Economic analysis of the savings and loan crisis places the blame on Washington. Washington seeks villains elsewhere. Some favourites among politicians are: fraud, investments in junk bonds and the financial deregulation which permitted S&Ls to make non-traditional loans. Yet these explanations are not consistent with the facts.

Table IV presents one highly regarded estimate of the various causes of S&L losses. As the table shows:

- About 65 percent - the vast majority - of S&L losses were incurred either before deregulation or in conventional real estate loans.
- Only 3 percent of S&L losses can be attributed to fraud.
- Only 2 percent of S&L losses are attributable to investments in junk bonds.
- Only 2 percent of S&L losses can be attributed to other non-real estate investments.

Other estimates may produce slightly different numbers, but the overall conclusion is unlikely to change. The evidence is consistent with the economists’ explanation. It is inconsistent with the politicians’ search for scapegoats.

Source: “Federal Deposit Insurance: The Case for Radical Reform,” A.J. Meigs and J.C. Goodman, National Center for Policy Analysis, Policy Report No. 155, December 1990.

TABLE IV
S & L LOSSES:
Where the Money Went

Pre-1983 Losses	17%
Interest on Pre-1983 Losses	29%
Real Estate Losses	19%
Excess Operating Costs at Insolvent S&Ls	10%
Excess Interest Paid at Insolvent S&Ls	10%
Deteriorated Franchise Costs	5%
Fraud	3%
Excess Cost of FSLIC Deals	3%
Losses on Junk Bonds	2%
Losses on Other Non-Real Estate Investments	2%
TOTAL	100%

Source: Ely & Co., Reprinted in Paulette Thomas, “Fraud is Called Small Factor in S&L Cost,” *Wall Street Journal*, 20 July 1990.

Appendix D

Comparison of Proposals to Promote Market Discipline
in a Context of Deposit Protection

Proposition	Comments
<p>CO-INSURANCE (goal: give depositors an incentive to monitor the activities of their financial institutions)</p> <ul style="list-style-type: none"> · The insurance fund would reimburse depositors only for a set fraction of insured deposits if the financial institution were to become insolvent. <p>RISK-BASED PREMIUMS (Goal: response to the “free-rider” problem; highest cost to protect depositors in risk-seeking institutions would be paid by the institution itself, thus discouraging risk-taking; subsidies problem (cross-subsidization))</p> <ul style="list-style-type: none"> · An insurance premium should reflect the insurer’s previous claims experience and an assessment of future claims. 	<ul style="list-style-type: none"> - Wyman Commission proposals: that the CDIC insure 90% of the first \$100,000 of an individual’s deposit. - Alternative: that the first \$10,000 of deposits be fully covered and that the successive deposits be insured at a lower rate. - threat to regional policy objectives - unpopular with the public because of the sacrifice of right to 100% coverage - Wyman Commission rejected the concept (difficulty in forecasting risk) - the FCID has its CAMEL system with a five-point risk scale which considers the asset quality criterion essential and a better indicator of chance of failure - possibility of disputes and lawsuits
<p>CAPITAL REQUIREMENTS (Goals: tendency of financial industry to require more capital and larger reserves maintained in the form of capital and of revenue to cover bad loans)</p> <ul style="list-style-type: none"> · The larger the relative shareholder equity, the higher the degree of risk internalized by managers acting on behalf of the shareholders. 	<ul style="list-style-type: none"> - practical system if the number of risk categories is low, but this low number at the same time imposes a single premium for a broad risk category - the Bank of International Settlements proposed minimum levels of capital for different types of assets held by financial institutions - OSFI does not publicly disclose the specific capital requirements imposed on each Canadian bank, making it difficult for the depositor to assess risk - the Wyman Commission supported the strengthening of capital requirements; suggested increased equity requirements for new entrants; the establishment of a definition of capital for all financial institutions (banks and trust companies); a ratio which should be based on the risk profile of the institutions rather than on the type or size of institution.
<p>SUBORDINATED DEBT (may be biased against smaller institutions)</p> <ul style="list-style-type: none"> - effective economic tool (complementary to high capital requirement; forces management to internalize risk; political gains) · Obligation of issuing corporation which ranks behind the deposits of the deposit-taking institution in liquidation. 	<ul style="list-style-type: none"> - the Blenkarn Committee also supported this, and recommended better regulation of the capital requirements for subsidiary corporations
<p>DISCLOSURE (problem: difficulty in obtaining information from institutions, particularly provincial institutions)</p> <ul style="list-style-type: none"> · Public disclosure of unsound business practices should put market pressure on the institution. 	<ul style="list-style-type: none"> - strike a balance between need for confidential supervision and the public’s right to information - consider the CDIC’s need to receive information on provincial financial institutions from the provincial regulatory authority

Source: D. Lang, “Reform of the Canada Deposit Insurance Corporation,” *Banking and Finance Law Review*, 5:167-95, February 1990.