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Stability in the Absence of Deposit Insurance: The Canadian Banking System, 1890–1966

THE STABILITY OF THE CANADIAN BANKING SYSTEM in the period before the introduction of formal deposit insurance in 1967, and in particular, the Canadian banks' immunity from the crisis that afflicted the U.S. banking system in the Great Depression, are well known. Between 1890 and 1966, only twelve Canadian chartered banks failed; six of these failures resulted in losses to the depositors. No bank failures occurred after the suspension of the Home Bank of Canada in 1923. Explanations for the relative stability of Canadian banking have focused on the structure of the system, particularly the economies of scale and portfolio diversification achieved by the large branch banks in Canada (Friedman and Schwartz 1963; Haubrich 1990) and the creation of a government rediscount facility in 1914. Some (Bordo 1986; Shearer, Chant, and Bond 1984; White 1983) suggest that the Canadian federal authorities and the Canadian Bankers Association (CBA) implicitly guaranteed bank deposits by arranging mergers. Most recently, Kryzanowski and Roberts (1993, p. 362) claim that all of the major Canadian banks were insolvent during the 1930s, and explain the absence of a banking crisis by the fact that the Canadian government provided "an implicit one hundred percent guarantee of bank deposits."

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We utilize new archival data from the Department of Finance and the CBA, together with evidence from equity markets and the financial press, to undertake a comprehensive examination of the political economy of Canadian banking in the period from 1890 to 1966. We show that neither the CBA nor the Canadian government arranged mergers for insolvent institutions, and that depositors in some insolvent banks did suffer substantial losses. We counter the claimed existence of implicit insurance for insolvent banks by using the working papers compiled by the auditors of the fourth-largest Canadian chartered bank in 1930, The Bank of Nova Scotia, to demonstrate that at least this institution was solvent throughout the 1930s. The history of Canadian banking provides a compelling case against the view that deposit insurance is a prerequisite for banking system stability.

1. BANK FAILURES: WERE DEPOSITS GUARANTEED?

Between 1890 and 1966 the number of chartered banks operating in Canada decreased from thirty-nine to eight but there were no binding legislative barriers to entry. Between 1900 and 1929, twenty-five new charters but only eleven new Treasury Board certificates to begin operation were issued, while from 1920 to 1966 five new bank charters were issued but only two were utilized. None of the three autonomous domestic institutions who obtained charters in the period from 1930 to 1966 raised the capital necessary to begin business. This may indicate that economies of scale limited the number of banks that could operate at the efficient size in the domestic market (Carr, Mathewson, and Quigley 1994b).

Failures account for a large portion of the reduction in the number of Canadian chartered banks between 1890 and 1966 (Table 1). Claims that Canada had implicit deposit insurance must be reconciled with the fact that six of the failures, including the last three, resulted in major losses to depositors. In addition, in all cases where the assets of the bank were insufficient to meet the liabilities to creditors, calls were made on the double liability of the shareholders.¹ Without vigorous enforcement of double liability the proportion of failures resulting in losses to depositors would have been larger.² We examine in detail the last five failures shown in Table 1.

1. Double liability of the shareholders meant that creditors of the bank were secured by both the value of the equity and retained earnings in the bank and a claim against the personal wealth of shareholders equivalent to the subscribed capital. Contrary to the claims of Kryzanowski and Roberts (1993, p. 370, footnote 17) it could not "be neutralized by having a rest fund of equal size [to the capital]." Double liability was inalienable, unassignable, and callable only in the event of the liquidation of the bank. For a discussion, see Falconbridge (1913, p. 60; Macey and Miller 1992). *La Banque du Peuple* was a company en commandite, in which the directors carried unlimited joint and several liability and the ordinary shareholders had limited liability rather than double liability. This status is unique in the history of Canadian banking. The depositors compromised with the directors for payment of a sum which provided for a return of 75.25 percent of the deposits.

2. In Table 1, losses to shareholders in excess of 100 percent of paid-up capital and reserves result from the assessment of additional shareholder liability. The data suggest that Kryzanowski and Roberts (1993, p. 370, footnote 7) are incorrect in claiming that there was "a minimal possibility of successfully collecting anything" on account of shareholder liability.

TABLE 1
 FAILURES OF CANADIAN CHARTERED BANKS, 1890-1966

	Date of Suspension	Deposits	Share of Total Deposits by the Public in Canada ^a	Loss to Depositors ^b	Book Equity ^c	Double Liability Invoked?	Loss to Shareholders ^d
		(\$ millions)	(%)	(%)	(\$ millions)		(%)
Commercial Bank of Manitoba	1893	0.77	0.45	0.0	0.60	Yes	116.7
Banque du Peuple	1895	6.87	3.80	24.8	1.80	na	105.6
Banque Ville Marie	1899	1.50	0.58	82.5	0.49	Yes	?
Bank of Yarmouth	1905	0.28	0.06	0.0	0.34	Yes	176.5
Ontario Bank	1906	12.66	2.28	0.0	2.20	Yes	127.3
Sovereign Bank of Canada	1908	11.22	2.00	0.0	3.00	Yes	172.7
Banque de St. Jean	1908	0.34	0.06	69.7	0.33	Yes	154.5
Banque de St. Hyacinthe	1908	0.92	0.17	0.0	0.40	Yes	139.0
St. Stephen's Bank	1910	0.39	0.05	0.0	0.26	No	100.0
Farmers' Bank of Canada	1910	1.31	0.16	100.0	0.57	Yes	155.3
Bank of Vancouver	1914	0.56	0.05	88.0	0.45	Yes	140.0
Home Bank of Canada	1923	15.46	0.90	52.7	2.51	Yes	146.6

NOTES: ^aValue of deposits with the bank on the suspension date divided by the total "deposits by the public in Canada" from the last published government return of the chartered banks.

^bBecause government deposits ranked above those of the public in liquidation, the percentage loss to the public may be slightly higher than stated.

^cPaid-up capital plus reserve fund as per the government return immediately preceding suspension.

^dPaid-up capital and reserve fund plus payments by shareholders for double liability or subscribed but unpaid capital, expressed as a proportion of paid-up capital and reserve fund.

SOURCES: Bechhart (1929), Macmillan (1933).

A. *The Ontario and Sovereign Banks*

The failures of the Ontario and Sovereign banks assume particular significance because of the actions of the other Canadian banks, who joined together to facilitate open-door liquidation of both institutions. The assets and liabilities of the Ontario Bank were assumed by the Bank of Montreal in October 1906, with the other members of the CBA giving it a guarantee against ultimate loss. On 31 August 1908 the bank was formally placed in liquidation to facilitate the collection of the double liability, which proved more than sufficient to cover the deficiency in the assets.³ In January 1908, the president of the Sovereign Bank sought the support of the other banks in conducting an open-door liquidation. A number of banks refused to participate because the risk that assets would not be sufficient to pay for the liabilities was considered too great. Nonetheless, twelve banks eventually signed an agreement that provided for advances to pay the demand liabilities of the Sovereign Bank, and the prospects of their having to fund a deficiency in the assets was initially thought

3. Of \$1.43 million of double liability assessed, \$1.2 million was collected. \$601,000 of this amount was eventually refunded to the shareholders. NAC RG 19 vol 482 file 616-9.

to be remote (Breckenridge 1910, p. 174). In April 1911 the banks pressed for payment of the amounts they had advanced, and threatened formal liquidation proceedings if they were not paid. The shareholders of the Sovereign Bank proposed that they purchase the remaining assets of the bank by subscribing to a holding company the amount they would otherwise have been required to pay for double liability. Formal liquidation proceedings were ultimately begun in January 1914 to facilitate collection of double liability from the shareholders who refused to subscribe to the holding company, but not all of the amounts owed to the banks who had assumed responsibility for the open-door liquidation were paid.⁴

These actions have been interpreted by Shearer et al. (1984, p. 304) as amounting to “a primitive ad hoc deposit insurance scheme.” But open-door liquidations were used because the banks anticipated that the assets would be sufficient to provide payment of depositors in full, and they were correct in the case of the Ontario Bank. The depositors of the Sovereign Bank and the Ontario Bank received payment in full because the CBA was looking for a means of reducing the costs of transferring the business of insolvent banks, but not because the other members of the banking community intended to provide a guarantee of deposits. The loss resulting from the liquidation of the Sovereign Bank was sufficient to change the views of the banking community about such arrangements: open-door liquidation was never used again.

B. The Farmers Bank

When the Farmers’ Bank of Canada suspended payment in 1910, shareholders and depositors campaigned for compensation from the government. They argued that the Minister of Finance had been negligent in allowing the promoter to obtain the Treasury Board certificate necessary to activate the charter in 1906. This became an issue in the 1911 election, and a number of Conservative candidates for electorates in Ontario where the Farmers’ Bank had branches increased their support by promising that they would compensate depositors if elected. A royal commission appointed by the incoming Conservative government found that statutory duties had been fully discharged.⁵ While the Department of Finance or the Treasury Board made an “error of judgment,” the primary and direct⁶ cause of the loss to depositors “was the recklessness and fraud of those entrusted with the management of the bank, and not the granting of the certificate” (Meredith 1913, pp. 9–10).

4. An additional \$180,500 in double liability was collected under the formal liquidation proceedings (CBAA 87–518–24). The actual losses of the twelve banks were never revealed to the public, but they were not large. In 1944 G. T. Clarkson, an accountant and bank auditor, claimed the aggregate deficiency was \$400,000–\$500,000, or between 3 and 4 percent of deposit liabilities of the Sovereign Bank (Canada, House of Commons 1945, p. 848).

5. A letter from the president of the Canadian Bankers Association requesting that the certificate be withheld because of allegations of fraudulent practices reached Ottawa after the certificate was issued and did not provide grounds on which the certificate or charter could legally be withdrawn.

6. The word “primary” is important. In the judgment cited by the depositors as a precedent justifying their claim for compensation (LRKBD (1901) *De la Bere v Pearson, Limited*), the Chief Justice stated that liability would result where the “primary and substantial cause of the damage sustained” was a result of negligence (Petition of the Farmers’ Bank Defence Committee and the Farmers’ Bank Depositors Relief Committee, NAC RG19 vol 228 file 661–1–1).

Nonetheless, in 1914 the Conservative Minister of Finance, W. T. (Thomas) White, introduced a bill that provided full compensation for depositors in the Farmers' Bank, arguing that some responsibility lay with his Liberal predecessor. Members of the Liberal opposition argued that the move was based entirely on electoral expediency: to reimburse the depositors without an explicit mandate from the royal commission would implicitly introduce deposit insurance in Canada, a concept for which there appears to have been little general support. Speeches in the House of Commons indicate that the government did not expect the bill to pass in the Senate, and Liberals in the Senate stated that they had been lobbied to kill the bill by Conservative members of both Houses. They duly obliged: the second reading of the bill in the Senate was deferred for six months, and then overtaken by the beginning of WWI; it never reappeared.

C. The Bank of Vancouver

The difficulties of the Bank of Vancouver were first discussed by the CBA Executive Committee at a meeting on January 15, 1914. Both the Bank of Montreal and the Royal Bank offered to conduct an open-door liquidation of the bank, secured by all of its assets including the double liability, provided that the directors give additional personal guarantees against loss. However, officials of the Bank of Vancouver were unwilling to suspend, and both provincial and federal politicians lobbied the CBA to make an advance to the bank to allow it to continue in operation.⁷ The CBA accepted evidence that the Bank of Vancouver was still solvent and provided it with a line of credit, secured against commercial paper and the personal wealth of the directors.

In October and November 1914 the failure of a trust company prompted a run on the Bank of Vancouver, which sought assistance from the Department of Finance. The Minister wrote to the President of the CBA explaining that the government was unable to provide assistance because the bank did "not appear to have any liquid assets which it [could] hypothecate [for a Finance Act advance] . . ." ⁸ The executive of the CBA agreed to consider renewing the line of credit set up for the bank earlier in the year, and commissioned an audit of the bank to determine the advisability of this course of action.

While the audit was being conducted, the Minister of Finance approached the Bank of Montreal for support. He was told that it would "be prepared to join with other banks in advancing money to pay off the depositors and noteholders provided the Bank of Vancouver has securities (including double liability) sufficient to justify such an advance. Unless we embark on a career of something akin to charity, I do not see how we can go further."⁹ Subsequently, the president of the CBA empha-

7. The Province of British Columbia was about to float a loan in London, and there was concern that suspension of a bank would adversely affect the prospects of placing the loan. D. R. Wilkie to T. C. Boville, Department of Finance 14 February 1914 (CBAA 87-517-03).

8. W. T. White to D. R. Wilkie, president of the CBA, 22 November 1914 (CBAA 87-517-03).

9. F. Williams Taylor to George Burn, general manager, Bank of Ottawa (vice-president of the CBA), 30 November 1914 (CBAA 87-517-03).

sized that for the Bank of Montreal to provide any credit “it is absolutely necessary that it must be the opinion of [the auditors] that there are quite sufficient assets to justify such an advance.”¹⁰ By 5 December the auditors had reported that the Bank must be liquidated. The records of the CBA provide no evidence that the Minister of Finance or the president of the CBA considered any course other than a liquidation in which depositors would bear the full brunt of their assigned losses.

D. The Home Bank

In August 1923, the Home Bank of Canada, an institution with \$21 million in deposits at seventy-one branches, failed because of large-scale fraud perpetrated by its senior executives and directors. Sir Thomas White, Minister of Finance during WWI, had in 1916 and 1918 received information that the published returns of the bank seriously misrepresented its financial position, but on both occasions he allowed himself to be satisfied with the assurances of the management that the affairs of the bank would be put in order. White acted within his discretionary powers in deciding not to commission an independent audit under section 56(a) of the 1913 Bank Act. His subsequent defense—that wartime conditions necessitated that no bank be allowed to fail¹¹—is cited by Kryzanowski and Roberts (1993, p. 366) as evidence of the existence of deposit insurance, but is of questionable validity. The president of the CBA informed the Minister of Finance that “the banks are not in agreement with the view that if the Home Bank had been allowed to fail in the middle of the War, there would have been a financial crisis in the country from which the banks would have suffered . . . [I]ts failure, while it would have been undesirable, in the opinion of the members of the Association would not have had consequences seriously affecting either the banks or the public.”¹² The credibility of this claim is enhanced by the fact that it is consistent with the actions of the CBA in respect to the Bank of Vancouver in 1914 and the subsequent absence of general panic following the suspension of that institution.

A Royal Commission appointed to consider the liability of the Department of Finance (McKeown 1924) reported that the depositors had a “moral claim in equity” for compensation. This phrase indicated that, although the depositors did not have legal grounds for suits against the department based on negligence or equity, the consensus view was that White had acted inappropriately in not commissioning a full outside audit of the Home Bank in 1916. While it avoided both a direct attack on White’s competence and any admission of formal responsibility to the depositors, it made consideration of compensation for Home Bank depositors a political necessity. Full compensation was not considered because, with losses in excess of its capital and reserves, the Home Bank would not have been purchased by any other bank—even in 1916.¹³ Subsequent investigation resulted in an estimate that 35 per-

10. D. R. Wilkie, file note, November 23, 1914 (CBAA 87–517–03).

11. Canada, House of Commons (1924, pp. 184–5; 188).

12. 29 May 1925 (CBAA 87–518–11).

13. (CBAA 87–518–11).

cent of the funds of depositors had been lost since 1916, and this was adopted as the basis for public compensation of depositors. In June 1925, the House of Commons therefore passed a bill that provided for the government to pay 35 percent of the public liabilities of the Home Bank (estimated at \$5.45 million).

But, just as in the case of the Farmers' Bank, the Senate's intervention was crucial to the outcome. Its members argued that since they had no guarantee of deposits or legal liability, payments should be based solely on demonstrated hardship.¹⁴ The final form of the Act therefore provided for payment of 35 percent of the claims of depositors with deposits less than \$500, and payments of up to 35 percent to other depositors only on demonstration of special need. The government paid \$3.46 million (Macmillan 1933), providing a return of 22.3 percent of average depositors' claims. Despite the collection of \$1.2 million in double shareholder liability, the assets of the bank proved sufficient only to meet the first claim on them: the 25 percent initial distribution to depositors funded by the CBA. In aggregate, therefore, only 47.3 percent of the deposit liabilities of the Home Bank were paid, not the 100 percent implicitly suggested by Kryzanowski and Roberts (1993, p. 365).

E. Summary of Evidence on Bank Failures

In sum, the cases of the Home Bank, the Bank of Vancouver, and the Farmers' Bank are consistent in their interpretation of the legal and practical responsibility of the Canadian government for losses incurred by depositors in failed banks. By chartering a bank the government did not assume any liability for its subsequent operations other than those expressly stated in the Bank Act. In addition, the government was not responsible for losses to depositors resulting from frauds by banking officials which deceived the government as well as the public. The government did bear responsibility for using the powers of the Bank Act to investigate allegations of fraud in banks, and it had a moral responsibility for losses to depositors if it failed to exercise these powers. None of these failures provided a precedent for deposit insurance, and all three resulted in losses to depositors that were uncompensated. After 1923, unforeseen changes in asset values, managerial incompetence, and undetected fraud could still have resulted in significant losses to depositors, and there is no reason to believe that these would have been compensated by the government of Canada.

2. BANK MERGERS: EVIDENCE OF IMPLICIT DEPOSIT INSURANCE?

Between 1890 and 1966, thirty-seven Canadian banks were absorbed or merged (Table 2).¹⁵ Public statements about mergers by contemporary politicians have pro-

14. The speech of Sir G. E. Forster, Senate Debates June 17, pp. 513–21, provides a clear statement of the majority view in the Senate.

15. Most of these occurred after 1900, when the Bank Act was amended to provide for the purchase of the shares of one bank by another bank provided that the Governor in Council (on the recommendation of the Treasury Board) approved, removing the need for a special Act of Parliament to facilitate an amal-

TABLE 2

CANADIAN CHARTERED BANKS ABSORBED OR MERGED, 1890-1966

	Date	Deposits (\$ millions)	Share of Total	Book	Loss to
			Deposits by the Public in Canada ^a		
			(%)	(\$ millions)	(%)
Banque Jacques Cartier	1899	4.53	1.51	2.00	87.5
Bank of British Columbia	1900	4.92	1.64	4.26	34.0
Summerside Bank	1901	0.18	0.06	0.07	0.0
Commercial Bank of Windsor	1902	0.96	0.27	0.38	5.4
Halifax Banking Company	1903	3.77	1.09	1.10	4.0
Exchange Bank of Yarmouth	1903	0.22	0.06	0.32	0.0
Peoples Bank of Halifax	1905	3.27	0.70	1.44	42.9
Merchants Bank of PEI	1906	0.96	0.18	0.68	12.2
Peoples Bank of New Brunswick	1907	0.45	0.08	0.36	0.0
Northern Bank	1908	3.24	0.59	1.29	0.0
Crown Bank	1908	3.03	0.55	0.96	0.0
Western Bank of Canada	1909	4.57	0.72	0.91	0.0
Union Bank of Halifax	1910	8.96	1.63	1.75	0.0
United Empire Bank	1911	1.71	0.41	0.58	0.0
Eastern Townships Bank	1912	18.96	2.06	5.40	0.0
Traders Bank	1912	39.43	3.93	7.03	0.0
Bank of New Brunswick	1913	7.98	0.80	2.79	0.0
Banque Internationale du Canada	1913	0.59	0.06	1.36	0.0
Metropolitan Bank of Toronto	1914	8.08	0.80	2.25	0.0
Quebec Bank	1917	13.55	1.04	3.74	0.0
Bank of British North America	1918	47.96	2.95	7.88	0.0
Northern Crown Bank	1918	17.49	1.15	2.15	31.7
Bank of Ottawa	1919	46.28	2.82	9.00	0.0
Merchants Bank of Canada	1922	100.53	5.85	12.00	27.6
Bank of Hamilton	1923	49.15	2.83	9.85	0.0
Sterling Bank of Canada	1924	12.93	0.71	1.74	24.0
Banque Nationale	1924	32.06	1.87	3.40	11.8
Molson's Bank	1925	53.43	2.92	7.00	18.1
Union Bank of Canada	1925	74.65	4.25	9.75	26.2
Standard Bank of Canada	1928	83.07	3.73	7.72	7.9
Weyburn Security Bank	1931	2.03	0.10	0.75	9.7 ^d
Bank of Toronto	1955	537.17	6.07	24.67	0.0
Dominion Bank	1955	1,632.66	18.46	61.48	0.0
Barclays Bank (Canada)	1956	22.24	0.23	6.39	0.0
Canadian Bank of Commerce	1960	2,239.30	18.77	184.99	0.0
Imperial Bank of Canada	1960	790.84	6.62	56.78	0.0

NOTES ^aValue of the deposits with the bank divided by the total "deposits by the public in Canada" from the last published government return in which the bank appears.

^bPaid-up capital plus reserve fund as per the government return immediately preceding suspension.

^cThe loss of equity (paid-up capital and reserves) shown in the last published government return implied by the purchase price for the bank. These figures differ from those published in Bechhart (1929, pp. 334-37) in that we have excluded losses written off capital or reserve funds before the last published government return.

^dBecause the shareholders of the Weyburn Security Bank retained the bulk of the financial assets at their book value, the extent of their loss is significantly understated. See *Financial Post*, 12 February 1931, p. 10.

SOURCES: Bechert (1929) and authors' calculations.

vided for considerable confusion about the nature of the merger movement and the role of the government and CBA in it. Successive Ministers of Finance routinely argued that bank mergers were only sanctioned where protection of the depositors

gamation. In 1913, as a concession to opponents of the merger movement in banking, this provision was amended to provide that banks were prohibited from negotiating an amalgamation without written permission from the Minister of Finance. This essentially provided that no public discussion of mergers could take place until the Minister of Finance had given permission for the executives of the respective banks to negotiate. Where banks were absorbed, only the name of the bank whose shares were purchased appears in Table 2. In the case of mergers, the names of both banks appear in the Table.

required them,¹⁶ and this has been interpreted as meaning that the government was complicit in the establishment of an oligopoly in banking that would facilitate an implicit guarantee of deposits. This interpretation suggests that even banks with strongly negative equity were merged rather than allowed to fail and that there should have been no runs by depositors and no failures caused by runs. We argue that this view is mistaken, and refuted by a full examination of the evidence.

Further confusion is provided by the fact that Sir Thomas White claimed in testimony before the McKeown Commission (1924) that he would have made the CBA take over the Home Bank if he had believed it was in danger of closing its doors during WWI. How can this claim be reconciled with the losses to bank depositors that were sustained in the failures of the Farmers' Bank, the Bank of Vancouver (which failed during the war period), and Home Bank? White admitted that he had no legal power to force the CBA to take over a bank, and that the approach would only have worked if the bank "was not too far gone" (that is, that the bankers would not have taken over an insolvent bank). Moreover (as the Royal Commission on the failure of the Home Bank concluded), if White's claim was correct, it is not clear why he was so reluctant to use the full extent of the powers provided in the Bank Act to ascertain the solvency of the Home Bank in 1916 and 1918.

We explain this apparently conflicting evidence by developing a coherent interpretation of the political economy of the merger movement in Canadian banking. Our view is that consolidation in Canadian banking is (i) best characterized as the market process of transferring valuable assets from weak to strong management, and (ii) encouraged by efficiencies of size. This hypothesis is consistent with the claim by bankers that any mergers or open-door liquidations were not attempts to subsidize depositors of insolvent banks: "the basis of the purchase by individual banks of the assets of weaker banks, and the protection of the depositors, was that the assets purchased were at least of sufficient value to meet the demands of the depositors."¹⁷

A. *Evidence on the Solvency of the Banks Absorbed*

Table 3 presents the evidence provided by share prices and absorption agreements on the solvency of merged banks in the period after the failure of the Farmers' Bank. The purchase price for the banks absorbed commonly included a premium above the market price. Under competition, this premium is a catalyst for a large-scale transfer of ownership rights and a revelation of the value created by the redistribution of the assets. In three cases, the merger negotiations were used as a means of conveying to shareholders information about new losses sustained by the banks being absorbed. Our evidence indicates that in no case did the investors in purchasing banks think that the banks absorbed were insolvent: in fact, the purchase prices suggest

16. See the summaries of the justifications given for bank mergers in the files of the Department of Finance and the Inspector General of Banks: NAC RG40 vol 83 file 1450 W456; RG19 vol 2673 file 1; RG19 vol 490 file 619-27; RG19 vol 492 file 619-30.

17. F. Williams-Taylor to T. L. Church, 18 September 1923 (CBAA 87-518-09).

TABLE 3
 MERGERS OF CANADIAN BANKS: SHARE MARKET EVIDENCE

Purchasing Bank	Share Price before Announcement	Share Price after Announcement	Bank Absorbed	Share Price before Announcement	Premium of Purchase Price over Market
Canadian Bank of Commerce	215	215	Eastern Townships Bank	175	22.9
Bank of Nova Scotia	264	264	Metropolitan Bank	205	13.2
Royal Bank of Canada	211.5	211	Quebec Bank	106	-9.9
Bank of Montreal	210	210	Bank of British North America	120	25.0
Royal Bank of Canada	208	208	Northern Crown Bank	80	25.0
Bank of Nova Scotia	256	258	Bank of Ottawa	205	24.9
Bank of Montreal	211	212	Merchant's Bank of Canada	168	-31.5
Canadian Bank of Commerce	190	190	Bank of Hamilton	150	26.7
Banque Hochelaga	144	147.8	Banque Nationale	96	-25.0
Standard Bank of Canada	160	160	Sterling Bank of Canada	94	34.8
Bank of Montreal	247.5	249.5	Molson's Bank	152	15.8
Royal Bank of Canada	235	237	Union Bank of Canada	108	8.8
Canadian Bank of Commerce	296.5	299	Standard Bank of Canada	252	17.7
Imperial Bank of Canada	225	223	Weyburn Security Bank ^c		

NOTES: The share price for the purchasing bank is the closing price for the stock at the end of the week preceding the announcement that the Minister of Finance had given permission to negotiate a merger, and at the end of the week in which the announcement was made. The nominal value of bank shares was \$100 for all institutions except the Bank of British North America. To provide for consistency, the data in the table express the share price for this bank as a percentage of the £50 face value. The premium of the purchase price over the market price was calculated using the share price to the purchasing bank before the announcement of ministerial permission to negotiate.

^aThe shares of the Weyburn Security Bank were not publicly traded.

SOURCES: *Monetary Times*; *Financial Post*, various issues.

that only in the case of the Nationale was the paid-up capital claimed by the banks in their last government returns impaired to a large extent. There is also no evidence that the purchase involved sacrifice of the type that would be associated with a forced merger of an insolvent institution. In every case the postannouncement share price of the purchasing bank was very close to the preannouncement price.

This evidence is reinforced by the private correspondence between the negotiating banks and the Ministers of Finance, which tended to stress the interests of the shareholders and the disruption resulting from liquidation (the locking up of deposits and cessation of lines of credit), rather than potential losses of capital for depositors. With respect to the merger with the Merchants' Bank, Vincent Meredith of the Bank of Montreal wrote that if there was any delay in government approval of the merger "it will undoubtedly cause distrust among depositors and may possibly result in further large withdrawals being made from the Merchants' Bank. Sooner than face such a situation, we are prepared to decline to carry through the transaction and withdraw our offer." He argued that the minister should try to avoid "the calamity

that would result should all these [388 Merchants' Bank] offices suspend payment to their depositors,"¹⁸ but never implied that losses to depositors were in prospect. The Northern Crown Bank was admitted to be "entirely solvent" on the eve of its purchase by the Royal Bank, the transaction being justified entirely on the grounds of the competitive position of the smaller bank, particularly its inability to obtain quality commercial loans. In the case of the Bank of British North America, the sale to the Bank of Montreal was authorized in part because of the professed difficulties of the Board in the United Kingdom managing the affairs of the bank in a manner competitive with local banks, and the threat of a takeover attempt by Lord Beaverbrook which the Minister of Finance considered to be contrary to the interests of the public and Canadian banking.¹⁹

The contemporary financial press was aware of the inconsistency of the data and the statements made by Ministers of Finance about the need to protect depositors. In its report on the announcement that the Bank of Montreal would absorb the Merchants' Bank the *Monetary Times* noted that "the general policy of the Department of Finance with respect to bank mergers has been stated by Sir Henry Drayton to be to withhold such consent until a bank's rest has disappeared, the capital been impaired, and the interests of the depositors is in such a position that they have to be safeguarded. [With respect to the Merchants' Bank] Sir Henry states that there is no other alternative to a merger than insolvency with consequent loss to depositors" but on its editorial page pointed out that the Bank of Montreal offer "places a valuation of \$12,075,000 on the \$10,500,000 of paid up capital stock of the Merchants' Bank. The directors of the Bank of Montreal are shrewd business men, and it may be reasonably assumed that they do not offer to buy assets which do not exist."²⁰

In the wake of the failure of Home Bank, depositors subjected many of the smaller banks to greater critical scrutiny. Some solvent banks, such as the Dominion and Imperial, experienced runs in 1924, but dealt with them by obtaining liquidity from the larger banks and the Department of Finance. In other cases, genuine weaknesses were exposed, and the shareholders were forced to sell their remaining interests to banks with stronger management, but there is again no evidence that the banks were insolvent (Table 3). For example, the price of \$118 for each share in the Union Bank was above the market quotation and indicated that all of the published capital was intact, but that its published reserve fund was impaired. The Minister of Finance approved the merger after the Inspector General of Banks confirmed that write-offs to the bank's published reserve fund in 1923 had not provided for all losses sustained. More importantly for the future prospects of the Bank, "the earning power of the bank has been seriously impaired through inability to curtail overhead expenses in proportion to reduction in revenue and also because of the substantial amount tied up in unproductive advances." Sale of the Union Bank was recommended by the Inspector as "the most satisfactory solution, in the interests of the *shareholders and*

18. Vincent Meredith to W. S. Feilding, 9 March 1922. NAC RG19 vol 488 file 619-1.

19. NAC RG19 vol 488 files 619-2 (Northern Crown) and 619-3 (British North America).

20. *Monetary Times*, 23 December 1921, p. 4.

general public . . .”²¹ (our emphasis), but there was no immediate threat to the safety of deposits in the bank.

The apparent contradiction provided by government pronouncements and the solvency of the banks absorbed may be explained by the competing pressures on Ministers of Finance. Public statements about the necessity of bank mergers to protect depositors reflected populist opposition to the reduction in the number of banks in Canada. Following the failure of the Home Bank and the absorption of the Bank of Hamilton in 1923, the Minister of Finance reacted to this opposition by attempting to prohibit mergers involving the three largest banks, and to restrict any mergers to amalgamations of some of the smaller institutions. This policy proved ineffectual because the minister did not enforce it when the only prospective purchaser of a financially weak bank was a large bank. In November 1924 it was announced that the Bank of Montreal would acquire the assets of Molson’s Bank. The president of the CBA told the other banks that the minister would approve all mergers that were justified by the interests of the depositors and shareholders in the smaller bank.²²

B. La Banque Nationale

The case of the Nationale is complex, and because it provides some evidence of direct public sector financial support for a merger, it needs to be considered in detail. During 1921 public knowledge of losses sustained by La Banque Nationale resulted in a run by its depositors. The Minister of Finance declined to extend its ability to obtain liquidity through the Finance Act, and commissioned a CBA audit of the bank. The audit completed in January 1922 found that over half of the capital and all of the reserve fund were lost, and suggested that if this condition was revealed to depositors, the bank would be forced to close.²³

The Executive Committee of the CBA considered a number of alternative means of dealing with the problems of the Nationale that they might recommend to the government: a line of credit from the members of the CBA secured against suitable assets, a merger with La Banque du Hochelaga, an open-door liquidation by a group of banks with interests in acquiring additional assets in Quebec, including the Hochelaga and La Banque Provinciale du Canada, or by these two banks alone, and a merger of all three of the francophone banks. Of these, a straightforward takeover by the Hochelaga was the preferred option because it was not clear that the members of the CBA would provide the Hochelaga with a guarantee against loss to support an open-door liquidation. However, the Hochelaga was not strong enough to take over the Nationale at any price that its shareholders would accept, and the Provinciale was opposed to a merger of the three banks. Consequently, CBA support for the continued operation of the Nationale appeared to be the only immediately viable option.

21. C. S. Tompkins, “Memorandum for Honourable Mr. Robb Re Union Bank of Canada.” NAC RG40 vol 83 file 1516–03 pt. 1.

22. W. S. Feilding to F. Williams-Taylor, 27 October 1923. NAC RG19 vol 488 file 616–23. E. C. Neill to president of CBA, 3 November 1924, and reply of 5 November 1924, CBAA 87–518–33.

23. The estimated capital of the bank remaining intact was \$785,000—CBAA 87–517–15.

By the end of January 1922, the Nationale had a new president, directors, and general manager who were attempting to rehabilitate it. The Executive Committee of the CBA and the Minister of Finance had agreed on a package which would provide La Banque Nationale with the ability to rediscount commercial paper under the Finance Act, with the CBA acting as adjudicator of the quality of the paper submitted, while the members of the CBA provided a line of credit of \$3 million against the security of government bonds deposited with them. In addition, the Executive Committee of the CBA agreed to support the new management of the bank in submitting a statement which showed its capital and \$400,000 reserve fund as being intact, but with a note appended for the information of the minister that current loans included amounts advanced to the Machine Agricole of Montmagny²⁴ totalling \$4.9 million against which reserves for loss of \$1.35 million were being carried, so long as no dividends were paid and new capital was ultimately obtained.²⁵

During the early part of 1923 the position of the bank appeared to be improving, but more intense scrutiny of the weaker banks following suspension by the Home Bank resulted in a run on La Banque Nationale which undermined the viability of the strategy of restructuring under regulatory forbearance. At the same time, public distrust of the smaller banks reduced the market for the assets of the Nationale by weakening the position of La Banque du Hochelaga and the Provinciale, making liquidation or a division of its branches among the anglophone banks operating in Quebec the most likely consequences of a suspension of payment. This prompted the government of Quebec to make takeover by the Hochelaga feasible by issuing \$15 million in bonds which were used to provide it with a forty-year loan bearing interest at 5 percent. The risk borne by the government represented a subsidy to the bank, the precise value of which is difficult to calculate. Against this must be offset the costs of the new bank paying out the \$680,000 in (worthless) Machine Agricole bonds held by the public which was a condition of the government's financial support of the merger. Any subsidy associated with the government loan was therefore not large, and accrued to the shareholders rather than the depositors: the price of Nationale shares set in the merger (\$72) may be taken to indicate that while it had sustained significant losses, the capital and double liability of shareholders would have insured depositors against any loss in liquidation.²⁶ Consequently, the desire to maintain two francophone banks and the links between the Quebec government and the Machine Agricole appear to be the most important reasons for provincial support of the merger: protection of depositors was at best a secondary concern.

24. This company had been promoted during WWI and loans associated with it represented the largest component of the losses of the Nationale. It had, in addition, been active in promoting the purchase of Machine Agricole bonds among its customers (*Montreal Gazette*, 2 January 1924). The "current" status of the Machine Agricole loans was justified by the possibility that the company might be resurrected with provincial government support.

25. H. A. Richardson to F. Williams-Taylor, 20 February 1922 (CBAA 87-517-16). The president of the CBA wrote to all general managers asking that they instruct their managers in Quebec to do nothing to increase concern about the Nationale, but to try to stabilize the situation (CBAA 87-517-15).

26. The *Toronto Telegram* (15 January 1924) claimed that the depositors would have lost 20-40 percent if the bank was liquidated, but this is clearly at odds with the audit conducted for the CBA, and we have found no other claims that the impairment of the bank's capital was so large as to have resulted in losses to depositors.

C. The Weyburn Security Bank

The last merger of the interwar period occurred in 1931, when the Weyburn Security Bank (WSB), an institution chartered in 1911 and with thirty branches spread across southern Saskatchewan, was purchased by the Imperial Bank. Poor crops in 1929 and 1930 increased the risk associated with the spatial and sectoral concentration of its loans. Public awareness of this resulted in transfers of significant amounts of its deposits to the branches of its larger competitors. In a report dated November 1930 Inspector General of Banks C. S. Tompkins wrote that while the WSB was solvent, “in view of: (a) the large reduction in the bank’s deposits by the public, (b) the facilities already obtained from the Canadian Bank of Commerce through the Weyburn Security Company, Ltd., and (c) the serious situation with respect to present and prospective earnings and the consequent necessity of discontinuing dividends which, in itself, would further disturb public confidence, I am strongly of the opinion that Mr. Powell (WSB general manager) should renew the efforts which he has already made on several occasions this year to effect a sale to one of the other banks on the best possible terms.”²⁷

Powell sought Tompkins’ advice on potential buyers, but the correspondence makes it clear that Tompkins was not actively involved in attempting to arrange a sale, and when officials of the Canadian Bank of Commerce indicated to him that they had decided against purchasing the bank he did not attempt to argue the case for purchase.²⁸ Tompkins’ files provide no evidence of any private or official correspondence with the eventual purchasers, the Imperial Bank. In fact his main role was to facilitate the merger at the political level: his inspection report and subsequent investigations gave the government the public interest mandate that it needed to override concerns about concentration in the banking industry.

D. Causes of the Merger Movement

Our evidence points to market forces as the source of the merger movement: there is no evidence that they were arranged or required by the government. The increasing payoff to superior organizational technology and economies of scale meant that the assets of most of the small banks were more valuable to the shareholders of the large banks than they were to an independent institution. The stability of the large banks meant that mergers also reduced the risk of bank failures which carried significant political costs for the government. The merger movement therefore proceeded despite concerns about the potential for monopoly practices in the industry because eventual insolvency was the likely fate of poor-quality banks if mergers were blocked by politicians. As Beckhart (1929, p. 340) argued, “the initiative for the mergers did not proceed from the large institutions but from the smaller banks aware of their approaching insolvency or inability to keep in the race.” Only in the case of La Banque Nationale is there evidence that the Executive Committee of the CBA attempted to arrange a merger, and in this case they clearly lacked the will and the

27. NAC RG40 vol 83 file 1450 W456.

28. Tompkins to Powell, 29 December 1930. NAC RG40 vol 83 file 1450 W456.

power to impose a resolution when the economic interests of individual members did not provide one.

3. ATTITUDES TOWARD (IMPLICIT AND EXPLICIT) DEPOSIT INSURANCE

The Canadian Bank Act, 1871, was explicitly designed to prevent the public from thinking that the government was responsible for either the commercial administration of the banks or the ability of individual institutions to pay their creditors. It required banks to make monthly returns to the Department of Finance, but envisaged the self-interests of the shareholders and mandatory double liability as sufficient protection for the creditors.²⁹ The Bank Act of 1913 (section 56) made independent audits mandatory and authorized the Minister of Finance to employ the auditor of a bank or some other person to conduct a special investigation of it (section 56a). The Office of Inspector General of Banks was created in 1924, following the failure of the Home Bank. This formalized the powers of inspection that already existed in the Bank Act, by establishing government audit on an ongoing basis and providing the government with the technical capability to do this. It followed the model provided by the office of the Superintendent of Insurance—a post that was created in 1875 in response to calls for a government guarantee of life insurance policies in Canada.³⁰ Both offices were designed to improve the quality of the information promulgated by financial institutions, but neither provided insurance.

Successive Canadian governments and the chartered banks themselves consistently opposed public deposit insurance until the mid-1960s, viewing it as impractical without a level of regulation that was undesirable on efficiency grounds. Any gains derived from an increase in public confidence would not justify the level of inspection and control over bank management policies required to ameliorate the incentives for risk-taking and fraud that would be provided by deposit insurance.

Precedents in the United States (Calomiris 1990; Cooke 1923; White 1983) prompted calls for Canada to establish a similar scheme, especially in the aftermath of the Home Bank collapse, when deposit insurance was considered expressly for its ability to promote the survival of the smaller banks.³¹ But at hearings in both 1913 and 1924, expert witnesses from the United States testified about the problems created by the adverse incentive effects and removal of market discipline associated with these schemes in the United States.³² Officials in the Department of Finance concluded: “[The mutual guarantee of bank deposits] has proved unworkable in the United States and is basically unsound as it means that the conservative and proper-

29. In this period, the banks undertook extensive advertising of their balance sheets in the press. In addition, newspapers reproduced the monthly financial statements that the banks provided to the government.

30. Canada, House of Commons 1924, p. 202—evidence of G. D. Finlayson.

31. See, for example the testimony of J. S. Williams, Canada, House of Commons, Standing Committee 1924, p. 170.

32. See the testimony of Chicago banker J. B. Forgan; Canada, House of Commons, Standing Committee 1913, p. 356. The Department of Finance monitored the literature on the failure of U.S. state deposit guarantee schemes in the 1920s and used this in preparing material in the aftermath of the Home Bank; NAC RG19 vol 487 file 616–23–8.

ly operated bank would be called upon to bear the losses through mismanagement, fraud, or otherwise incurred by competitors over whom it has no control. The final outcome could only be disaster as the public would not be called upon to discriminate between sound institutions, with whom their funds would be safe, and the others, and the venturesome banker would feel free to incur risks he would not take with the knowledge that confidence in his institutions rested upon the personnel of the bank."³³

The CBA was concerned to distance itself from the decision to provide relief to the Home Bank depositors in 1925 on the grounds that they did not wish to create any perception of CBA responsibility in the public mind. The president of the CBA argued: "If it were once understood that banks with prudent and conservative management were under obligation or were even likely to make good to depositors of a bank which closed its doors, all incentive to honest and careful management on the part of the executive with little sense of responsibility would be removed; capital would desert our banking institutions and the business of the country would as a result be seriously crippled."³⁴ Officials in the Department of Finance believed that neither the policies they followed before 1924 nor the introduction of government inspection provided a guaranty for depositors; to make that view unequivocal, they inserted a clause in the Bank Act disavowing liability for losses sustained by depositors, shareholders, and creditors of banks.³⁵

This clause was consistent with the precedent established by the actions of the government with respect to the Home Bank. First, it established that the presence of a government inspector of banks did not provide implicit or explicit deposit insurance. Second, it made definite that depositors had no legal claim against the government for losses resulting from a bank failure—even with government inspection. But it did not rule out the government's admitting moral responsibility to depositors for some claim on the ground of negligence. Reviewing this system, the Porter Commission (Royal Commission 1964, p. 382) concluded that "competent supervision can provide the public with a large measure of protection in its dealings with financial institutions, although there should, as now, be no warranty that federal inspection would protect depositors or shareholders against losses. Given such regulation, we do not see the need for imposing a general system of deposit insurance . . ." ³⁶

4. CANADIAN BANK SOLVENCY DURING THE 1930S

Kryzanowski and Roberts (1993, p. 362) claim that in the 1930s the Canadian banks "were insolvent at market values and remained in business only due to for-

33. Department of Finance, "Memorandum on Canadian Banking System and the Home Bank Case," 3 March 1924, p. 22, NAC RG19 file 488-61-23.

34. F. Williams-Taylor to T. L. Church, 18 September 1923, CBAA 87-518-09.

35. Revised Statutes of Canada 1927, c. 12 s. 56.15.

36. For an account of the reasons for the introduction of deposit insurance in Canada in 1967, see Carr, Mathewson, and Quigley (1993, 1994).

bearance of regulators . . . ” However, their claim that regulations put in place in September 1931 which allowed the chartered banks to report their securities at book values³⁷ demonstrates forbearance is not supported by the evidence. The regulations were only operative for six months: the banks chose not to use them, as a result of which they were not renewed on their expiry at the end of February 1932 even though securities prices did not reach their lowest point until May of that year. Moreover, since the formal change in reporting practices was public knowledge, use of the facilities conferred no advantages on the banks. In fact, with this statute in place, continuing to report at market values was no doubt regarded by financial markets as a signal about the strength of the banking system.

Kryzanowski and Roberts’ claim that the chartered banks were insolvent during the 1930s rests on their estimates of the market valuation of bank assets. For call and short-term loans, they assume a 10 percent collateral margin and deflate the reported values by an index of securities prices for each calendar year. For current loans, they deflate the new loans made each year (net of their estimate of bad debts from the preceding period) by an index of economic activity. Securities and other assets were not adjusted.

With respect to current loans, the approach of Kryzanowski and Roberts has two problems. First, it ignores the fact that bankers usually secure loans against collateral with a market value considerably in excess of the loan, and that they regularly reassess the adequacy of that collateral in a period of deflation or depression. Bankers need not wait until a loan falls due to obtain additional collateral should this be necessary to secure the capital sum at risk. Only if the banks were locked into loan contracts for long periods, had collateral margins smaller than the decline in economic activity, and were unable to obtain additional collateral from the borrower, would their approach provide any indication of the value of a commercial loan portfolio. Borrowers from well-managed banks can become insolvent without inflicting loss on the bank. Second, their calculations offer the obvious problems of double counting if the banks’ published loan returns did accurately reflect the value of performing loans net of nonperforming loans and accounts written off to (internal) bad-debts sinking funds.

The shares of the five largest Canadian banks traded at prices below their face value throughout the 1930s despite carrying double liability until 1934 (Carr, Mathewson, and Quigley 1994b, Figure 1). The presence of double liability meant that, as the expected probability of insolvency increased, the value of these shares would fall faster than the value of limited liability shares.³⁸ Because insurance for bank shareholders was never contemplated, we would expect share prices to indicate the value of each bank even if implicit insurance for depositors did exist. More direct evidence on solvency is provided by a special audit of the internal (unpublished) reserve funds of the Canadian banks conducted in 1944 in the context of concerns

37. Order in Council of 27 October 1931.

38. The value of a double liability share in an insolvent institution could in fact be negative if the expected value of calls in the event of liquidation was larger than the expected return to shareholders resulting from a liquidation or sale of the assets.

about uniformity in reporting practice and the potential for the use of these reserves as a means of avoiding taxation.³⁹ During 1944 the Inspector General of Banks acted on these concerns by requiring each bank to employ auditors to examine their books, calculate the net loss experience over the period 1928 to 1944 on a standardized basis, and report on the annual amounts held in taxable and nontaxable contingency reserves. For example, to provide this report, representatives from two auditors conducted a complete review of Bank of Nova Scotia (BNS) policy with respect to bad debts and securities valuation. The losses reported in the annual reports of the auditors were verified by checking a sample of the collateral records and market valuations of securities held against the loan status and security valuations actually used. The working papers from this examination of the Bank's affairs provide a unique source of data on its accounting practices during the Great Depression.

The 1944 audit of BNS loss experience found that the market values of all securities held, and all losses on sales, were accurately reported. The maximum depreciation in the portfolio was recorded in 1933 at 15.19 percent, a figure only 2 percent higher than for 1931 (Carr, Mathewson, and Quigley 1994b, Table 5). These levels of depreciation are small for two reasons. First, the bank's investments were concentrated in high-quality income-yielding securities that provided relatively small capital gains or losses. Second, the active management of the bank's portfolio in response to securities market prices and the demand for commercial loans provided more favorable returns than those that could have been obtained from a fixed portfolio held throughout the period of falling securities prices. As the demand for loans increased from 1927 to 1929, the bank sold general securities. It began purchasing them again at the lower prices prevailing from 1930 as the demand for commercial loans fell. During 1931 holdings of provincial government securities increased from \$5.1 million to \$16.4 million, and by 1936 they had increased to \$36.7 million, to employ funds that could not be placed in commercial loans.

A similar picture is provided by the data on BNS bank loans to securities dealers in 1932 (Carr, Mathewson, and Quigley 1994b, Table 6). It indicates that the accounts were active, and that the bank had the opportunity to renegotiate the terms applying to the loans on a regular basis. Consequently assuming that these loans were illiquid, and deflating their reported value at the end of each year by the change in the securities price index during the period, would not provide an accurate proxy for losses. The median collateral margins for the loans were 17.4 percent in April and 18.3 percent in October 1932. The collateral had a market value less than that of the loan made in only five cases in April and four cases in October, and in the worst case the bank had obtained "outside" collateral in the form of claims against

39. In the period before WWII, the annual statements of the Canadian banks did not explicitly indicate the value of the appropriations made for actual and anticipated bad debts, or the amounts held in general contingency accounts in excess of specific appropriations (which is the technical definition of internal reserves). Kryzanowski and Roberts (1993, p. 370, footnote 18) incorrectly claim that Canadian banks were legally required to carry inner reserves. The Inspector General of Banks could, however, require that the banks increase their appropriations for bad debts, and this appears to be the most likely explanation for the transaction by the Royal Bank that Kryzanowski and Roberts cite.

TABLE 4

THE BANK OF NOVA SCOTIA: NET LOSS EXPERIENCE AND ALLOCATION OF PROFITS BETWEEN PROFIT AND RESERVES, 1928-1942

Year	Net Loss Experience for		Total Net Losses		Net Appropriations from Revenue Implied by Net Losses and Changes in Contingency Reserve Account	Year-End Balances of	
	Loans and Letters of Credit (\$m)	All Investments (\$m)	(\$m)	Proportion of Published Equity and Reserve (%)		General Contingency Reserve Account (\$m)	Published Reserve Fund (\$m)
1928	.184	.122	.306	1.02		6.731	20.0
1929	.534	.466	1.000	3.33	2.295	7.926	20.0
1930	.714	.550	1.265	3.51	2.201	8.862	24.0
1931	3.009	3.247	6.256	17.38	—	2.383	24.0
1932	2.176	.946	3.122	8.67	3.629	2.890	24.0
1933	1.979	.278	2.257	6.27	2.829	3.462	24.0
1934	1.670	1.009	2.679	8.93	3.025	3.808	24.0
1935	1.363	.272	1.635	5.45	5.481	7.654	24.0
1936	.635	.665	1.300	3.61	2.404	8.758	24.0
1937	.107	.567	.674	1.87	1.393	9.477	24.0
1938	.392	.212	.604	1.68	1.346	10.219	24.0
1939	.373	.226	.599	1.66	1.205	10.825	24.0
1940	.331	.295	.626	1.74	2.023	12.222	24.0
1941	.208	.136	.344	0.96	1.383	13.261	24.0
1942	.527	.141	.668	1.86	1.193	13.786	24.0

NOTE: Net losses are defined as the amount of new write-offs, specific appropriations for losses and realized losses on the sale of securities, less recoveries and reversals of appropriations.

SOURCE: The Bank of Nova Scotia Archives RG 068/01/0001/0000/0028.

the personal wealth of two directors of the firm. Only in the latter case did any of these loans with a shortfall of collateral result in any loss to the bank, and an appropriation to cover the projected loss on that account had been made.

Table 4 summarizes BNS net losses on account of loans (including call and short-term loans and letters of credit) and securities as revealed by the special audit of 1944. In the five years from 1931 to 1935 the bank sustained net losses of \$15.95 million, or 46.7 percent of published equity and reserves. The bank was able to deal with losses of this magnitude without reducing its published reserve fund because it had substantial unpublished reserves and because it was able to provide for bad debts out of profits in most years. The worst year for the bank appears to have been 1931, when its profits were insufficient to provide for any of the net losses sustained. The bank survived this year without reducing its published reserve fund solely because of the size of its contingency reserve account, the majority of the funds for which had been transferred from the profits earned because of the sale of securities and the very strong demand for loans in 1928 and 1929. It had unpublished "inside" reserves net of appropriations for losses equal to \$8.86 million in 1930, but all of the \$6.26 million dollar net loss on securities and loans sustained in 1931, together with other extraordinary charges, were debited to this account. The profit performance in 1931 reflected a dramatic fall in the demand for commercial loans and a consequent increase in the liquid but low-yield portion of the bank's

asset portfolio combined with a reluctance to reduce deposit interest rates. Subsequently, the bank restored its earning power by placing large amounts of its surplus funds in government securities, and by reductions in both deposit interest rates and its operating costs.⁴⁰ Earnings recovered to the point where they were able to cover the losses sustained and increase the funds in the contingency reserve account in each year from 1932 onward.

5. WHAT CREATED THE PERIOD OF STABILITY FROM 1924 TO 1966?

The history of Canadian banking provides a number of examples of failures in which depositors suffered substantial losses. The banks collectively provided liquidity to solvent institutions but eschewed any responsibility for the depositors in institutions with assets worth less than the deposit liabilities, and successive Canadian governments rejected the concept of deposit insurance. The failure of the Home Bank of Canada established the precedent that the Minister of Finance was responsible for the exercise of due care in the administration of the Bank Act, and provided a system of government audit to facilitate this. But depositors still cared about the safety of their deposits—if they had not, there would have been market pressure for weak banks to merge after 1924. Mergers reassured depositors and stabilized the banking system because, as we have shown with respect to the Bank of Nova Scotia, the large Canadian banks were solvent even during the Great Depression. In summary, the surviving archival evidence is inconsistent with the claims about implicit deposit insurance and bank solvency made by Kryzanowski and Roberts (1993).

We therefore explain the stability of Canadian banking as the result of two complementary factors. First, the absence of any form of deposit insurance in Canada before 1967 provided incentives for both prudence on the part of bank management and monitoring by depositors and bank regulators. The combination of government and shareholder audits with depositor monitoring was usually effective in identifying poorly managed banks before their equity approached zero. Depositor monitoring was motivated by risk bearing, while the actions of the Inspector General and the Minister of Finance were motivated by the fact that lobbying by depositors in failed banks and the electoral consequences of depositor discontent were costly for them. The preservation of depositor risk bearing served to provide a check on the decisions of shareholders and on regulatory forbearance of the type practised with the Bank of Vancouver in 1914 and La Banque Nationale in 1922. A 100 percent guarantee of deposits would have removed a key component of the market mechanism underlying banking system stability.

Second, the absence of unit banking and other regulatory barriers to competition facilitated the emergence of a relatively small number of large efficient banks. The federal government of Canada consistently took the view that popular concerns

40. The interest rate paid on savings account deposits fell from 3 percent to 2.5 percent from 1 May 1933, and to 2 percent from 1 November 1934. Canada, House of Commons, 1945, p. 1557.

about spatial and institutional concentration of banking power did not justify impediments to efficiency-enhancing mergers. By 1929 the merger movement had facilitated the emergence of a relatively small number of well-managed banks that were successful in international markets where size and competitive prices were crucial for survival.⁴¹ Regional diversification and scale economies were feasible as a result. Critically, this process internalized much of the monitoring of banking activity within managerial hierarchies whose effectiveness had been identified by market forces, and facilitated depositor scrutiny by encouraging institutional investment in reputational capital and information provision.

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41. On the international operations of the Bank of Nova Scotia, see Quigley (1989).

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