/ Consolidated financial statements

Management's responsibility for financial reporting

The accompanying consolidated financial statements of Royal Bank of Canada were prepared by management, which is responsible for the integrity and fairness of the information presented, including the many amounts that must of necessity be based on estimates and judgments. These consolidated financial statements were prepared in accordance with United States generally accepted accounting principles. Financial information appearing throughout this Annual Report is consistent with these consolidated financial statements. Management has also prepared consolidated financial statements for Royal Bank of Canada in accordance with Canadian generally accepted accounting principles, including the accounting requirements of the Superintendent of Financial Institutions Canada, and these consolidated financial statements have also been provided to shareholders.

In discharging its responsibility for the integrity and fairness of the consolidated financial statements and for the accounting systems from which they are derived, management maintains the necessary system of internal controls designed to ensure that transactions are authorized, assets are safeguarded and proper records are maintained. These controls include quality standards in hiring and training of employees, policies and procedures manuals, a corporate code of conduct and accountability for performance within appropriate and well-defined areas of responsibility.

The system of internal controls is further supported by a compliance function, which ensures that the bank and its employees comply with securities legislation and conflict of interest rules, and by an internal audit staff, which conducts periodic audits of all aspects of the bank's operations.

The Board of Directors oversees management's responsibilities for financial reporting through an Audit Committee, which is composed entirely of directors who are neither officers nor employees of the bank. This Committee reviews the consolidated financial statements of the bank and recommends them to the board for approval. Other key responsibilities of the Audit Committee include reviewing the bank's existing internal control procedures and planned revisions to those procedures, and advising the directors on auditing matters and financial reporting issues. The bank's Compliance Officer and Chief Internal Auditor have full and unrestricted access to the Audit Committee.

At least once a year, the Superintendent of Financial Institutions Canada makes such examination and enquiry into the affairs of the bank as deemed necessary to ensure that the provisions of the *Bank Act*, having reference to the safety of the depositors and shareholders of the bank, are being duly observed and that the bank is in sound financial condition.

Deloitte & Touche LLP and PricewaterhouseCoopers LLP, independent auditors appointed by the shareholders of the bank upon the recommendation of the Audit Committee, have performed an independent audit of the consolidated financial statements and their report follows. The shareholders' auditors have full and unrestricted access to the Audit Committee to discuss their audit and related findings.

Gordon M. Nixon
President & Chief Executive Officer

Peter W. Currie
Vice-Chairman & Chief Financial Officer

Toronto, November 20, 2001

Auditors' report

To the shareholders of Royal Bank of Canada

We have audited the consolidated balance sheet of Royal Bank of Canada as at October 31, 2001 and 2000, and the consolidated statements of income, changes in shareholders' equity and cash flows for each of the years in the three-year period ended October 31, 2001. These consolidated financial statements are the responsibility of the bank's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the bank as at October 31, 2001 and 2000, and the results of its operations and its cash flows for each of the years in the three-year period ended October 31, 2001, in accordance with United States generally accepted accounting principles.

We also reported separately on November 20, 2001, to the shareholders of the bank on our audit, conducted in accordance with Canadian generally accepted auditing standards, where we expressed an opinion without reservation on the October 31, 2001 and 2000, consolidated financial statements, prepared in accordance with Canadian generally accepted accounting principles, including the accounting requirements of the Superintendent of Financial Institutions Canada.

Deloitte & Touche LLP
PricewaterhouseCoopers LLP
Chartered Accountants

Toronto, November 20, 2001

Consolidated balance sheet

As at October 31 (C$ millions)	2001	2000
Assets		
Cash resources		
Cash and due from banks	$ 1,792	$ 947
Interest-bearing deposits with other banks	15,724	15,461
	17,516	16,408
Securities		
Trading account (includes $3,649 pledged in 2001)	58,413	48,827
Available for sale (includes $2,559 pledged in 2001)	22,687	13,936
Held to maturity	–	698
	81,100	63,461
Assets purchased under reverse repurchase agreements	35,870	18,303
Loans		
Residential mortgage	67,444	62,984
Personal	32,511	28,019
Credit card	4,283	4,666
Business and government loans and acceptances	76,862	72,143
	181,100	167,812
Allowance for loan losses	(2,278)	(1,871)
	178,822	165,941
Other		
Derivative-related amounts	28,642	19,334
Premises and equipment	1,598	1,216
Goodwill	4,952	693
Other intangibles	619	208
Other assets	13,364	8,490
	49,175	29,941
	$ 362,483	$ 294,054
Liabilities and shareholders' equity		
Deposits		
Canada		
Non-interest-bearing	$ 22,397	$ 22,011
Interest-bearing	118,161	116,113
International		
Non-interest-bearing	2,461	863
Interest-bearing	92,668	67,250
	235,687	206,237
Other		
Acceptances	9,923	11,628
Obligations related to securities sold short	16,037	12,873
Obligations related to assets sold under repurchase agreements	20,864	9,005
Derivative-related amounts	29,448	18,574
Other liabilities	24,178	15,912
	100,450	67,992
Subordinated debentures	6,662	5,825
Non-controlling interest in subsidiaries	1,479	703
Shareholders' equity		
Capital stock		
Preferred	1,990	2,001
Common (shares issued and outstanding – 674,020,927 and 602,397,936)	6,959	3,074
Retained earnings	9,311	8,314
Accumulated other comprehensive income	(55)	(92)
	18,205	13,297
	$ 362,483	$ 294,054

Gordon M. Nixon
President & Chief Executive Officer

Robert B. Peterson
Director

Consolidated statement of income

For the year ended October 31 (C$ millions)	2001	2000	1999
Interest income			
Loans	$ 12,032	$ 11,538	$ 10,386
Trading account securities	2,143	1,519	1,197
Available for sale and held to maturity securities	1,138	1,150	998
Assets purchased under reverse repurchase agreements	1,163	1,078	893
Deposits with banks	831	824	726
	17,307	16,109	14,200
Interest expense			
Deposits	8,712	9,057	7,636
Other liabilities	1,693	1,429	1,161
Subordinated debentures	405	344	286
	10,810	10,830	9,083
Net interest income	6,497	5,279	5,117
Provision for credit losses	1,119	691	760
Net interest income after provision for credit losses	5,378	4,588	4,357
Non-interest revenue			
Capital market fees	1,870	1,810	1,209
Trading revenues	1,820	1,540	1,106
Investment management and custodial fees	895	684	547
Deposit and payment service charges	887	756	688
Mutual fund revenues	546	528	479
Foreign exchange revenue, other than trading	300	299	243
Card service revenues	290	420	362
Insurance revenues	263	151	174
Credit fees	237	212	189
Securitization revenues	125	104	220
Gain (loss) on sale of securities	(128)	(11)	28
Gain from divestitures	445	–	–
Other	605	187	246
	8,155	6,680	5,491
Non-interest expenses			
Human resources	5,696	4,695	4,096
Occupancy	716	570	564
Equipment	713	664	677
Communications	679	695	699
Professional fees	411	267	274
Amortization of goodwill and other intangibles	288	91	70
Other	1,138	646	761
	9,641	7,628	7,141
Net income before income taxes	3,892	3,640	2,707
Income taxes	1,350	1,412	974
Net income before non-controlling interest	2,542	2,228	1,733
Non-controlling interest in net income of subsidiaries	107	20	8
Net income	$ 2,435	$ 2,208	$ 1,725
Preferred share dividends	135	134	157
Net income available to common shareholders	$ 2,300	$ 2,074	$ 1,568
Average number of common shares (in thousands)	641,516	606,389	626,158
Earnings per share (in dollars)	$ 3.58	$ 3.42	$ 2.50
Average number of diluted common shares (in thousands)	647,216	609,865	632,305
Diluted earnings per share (in dollars)	$ 3.55	$ 3.40	$ 2.48

Consolidated statement of changes in shareholders' equity

For the year ended October 31 (C$ millions)	2001	2000	1999
Preferred shares			
Balance at beginning of year	**$ 2,001**	$ 1,973	$ 2,110
Issued	**250**	–	296
Redeemed for cancellation	**(295)**	–	(393)
Issuance costs, net of related income taxes	**(3)**	–	(9)
Translation adjustment on shares denominated in foreign currency	**37**	28	(31)
Balance at end of year	**1,990**	2,001	1,973
Common shares			
Balance at beginning of year	**3,074**	3,063	2,923
Issued	**4,009**	109	192
Issuance costs, net of related income taxes	**(12)**	–	–
Purchased for cancellation	**(112)**	(98)	(52)
Balance at end of year	**6,959**	3,074	3,063
Retained earnings			
Balance at beginning of year	**8,314**	7,495	6,803
Net income	**2,435**	2,208	1,725
Preferred share dividends	**(135)**	(134)	(157)
Common share dividends	**(897)**	(689)	(588)
Premium paid on common shares purchased for cancellation	**(397)**	(562)	(281)
Issuance costs, net of related income taxes	**(9)**	(4)	(7)
Balance at end of year	**9,311**	8,314	7,495
Accumulated other comprehensive income, net of related income taxes			
Unrealized gains and losses on available for sale securities	**190**	(56)	(85)
Unrealized foreign currency translation gains and losses, net of hedging activities	**(38)**	(36)	(38)
Gains and losses on derivatives designated as cash flow hedges	**(190)**	–	–
Additional pension obligation	**(17)**	–	–
	(55)	(92)	(123)
Shareholders' equity at end of year	**$ 18,205**	$ 13,297	$ 12,408

Comprehensive income, net of related income taxes			
Net income	**$ 2,435**	$ 2,208	$ 1,725
Other comprehensive income			
Change in unrealized gains and losses on available for sale securities	**246**	29	(141)
Change in unrealized foreign currency translation gains and losses	**473**	(2)	(205)
Impact of hedging unrealized foreign currency translation gains and losses	**(475)**	4	201
Cumulative effect of initial adoption of FAS 133	**60**	–	–
Change in gains and losses on derivatives designated as cash flow hedges	**(250)**	–	–
Additional pension obligation	**(17)**	–	–
Total comprehensive income	**$ 2,472**	$ 2,239	$ 1,580

Consolidated statement of cash flows

For the year ended October 31 (C$ millions)	2001	2000	1999
Cash flows from operating activities			
Net income	**$ 2,435**	$ 2,208	$ 1,725
Adjustments to determine net cash provided by (used in) operating activities			
Provision for credit losses	**1,119**	691	760
Depreciation	**387**	369	389
Restructuring	**91**	–	153
Amortization of goodwill and other intangibles	**288**	91	70
Gain on sale of premises and equipment	**(42)**	(4)	(95)
Gain from divestitures	**(445)**	–	–
Change in accrued interest receivable and payable	**(375)**	110	(81)
Net loss (gain) on sale of available for sale securities	**128**	11	(28)
Changes in operating assets and liabilities			
Deferred income taxes	**139**	(206)	(27)
Current income taxes payable	**(460)**	(434)	487
Unrealized gains and amounts receivable on derivative contracts	**(9,299)**	(4,183)	15,262
Unrealized losses and amounts payable on derivative contracts	**10,872**	3,355	(14,151)
Trading account securities	**(8,707)**	(13,539)	(5,700)
Obligations related to securities sold short	**3,009**	(5,867)	(1,748)
Other	**(4,945)**	(215)	7,877
Net cash provided by (used in) operating activities	**(5,805)**	(17,613)	4,893
Cash flows from investing activities			
Change in loans	**(950)**	(11,728)	1,077
Proceeds from the maturity of held to maturity securities	**–**	500	411
Purchases of held to maturity securities	**–**	(114)	(405)
Proceeds from sale of available for sale securities	**12,542**	11,033	5,163
Proceeds from the maturity of available for sale securities	**14,021**	16,269	10,428
Purchases of available for sale securities	**(28,059)**	(24,885)	(20,208)
Change in interest-bearing deposits with other banks	**(116)**	5,125	(6,596)
Net acquisitions of premises and equipment	**(397)**	(293)	(255)
Net proceeds from sale of real estate	**57**	–	815
Change in assets purchased under reverse repurchase agreements	**(17,474)**	1,969	(365)
Net cash used in acquisition of subsidiaries	**(3,120)**	(323)	(129)
Net proceeds on divestitures	**478**	–	–
Net cash used in investing activities	**(23,018)**	(2,447)	(10,064)
Cash flows from financing activities			
Issue of RBC Trust Capital Securities (RBC TruCS)	**750**	650	–
Increase in domestic deposits	**2,434**	8,818	5,773
Increase in international deposits	**15,690**	9,405	2,119
Issue of subordinated debentures	**1,025**	1,200	700
Subordinated debentures matured	**(42)**	(20)	(123)
Subordinated debentures redeemed	**(538)**	–	–
Issue of preferred shares	**250**	–	287
Preferred shares redeemed for cancellation	**(295)**	–	(400)
Issuance costs	**(24)**	(4)	–
Issue of common shares	**657**	59	17
Common shares redeemed for cancellation	**(509)**	(660)	(333)
Dividends paid	**(972)**	(791)	(735)
Change in securities sold under repurchase agreements	**11,629**	(391)	(1,868)
Change in liabilities of subsidiaries	**(387)**	281	(215)
Net cash provided by financing activities	**29,668**	18,547	5,222
Net change in cash and due from banks	**845**	(1,513)	51
Cash and due from banks at beginning of year	**947**	2,460	2,409
Cash and due from banks at end of year	**$ 1,792**	$ 947	$ 2,460
Supplemental disclosure of cash flow information			
Amount of interest paid in year	**$ 11,149**	$ 10,698	$ 8,989
Amount of income taxes paid in year	**$ 1,443**	$ 2,007	$ 542

NOTE 1 Significant accounting policies

The accompanying consolidated financial statements are stated in Canadian dollars, the currency of the country in which the bank is incorporated and principally operates. These consolidated financial statements are prepared in accordance with United States generally accepted accounting principles (GAAP) and prevailing practices within the banking industry in that country. The bank has also prepared consolidated financial statements in accordance with Canadian GAAP and these have been provided to shareholders.

GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements. Actual results could differ from those estimates.

Certain comparative amounts have been reclassified to conform with the current year's presentation.

The significant accounting policies followed in the preparation of these consolidated financial statements are summarized below:

Basis of consolidation

The consolidated financial statements include the assets and liabilities and results of operations of all subsidiaries after elimination of intercompany transactions and balances. The bank has accounted for the acquisition of subsidiaries using the purchase method. The equity method is used to account for investments in associated corporations or joint ventures in which the bank has significant influence or exercises joint control, respectively. These investments are reported in Other assets. The bank's share of earnings, and gains and losses realized on dispositions of these investments are included in Non-interest revenue.

Translation of foreign currencies

Assets and liabilities denominated in foreign currencies are translated into Canadian dollars at rates prevailing on the balance sheet date; income and expenses are translated at average rates of exchange for the year.

Unrealized foreign currency translation gains and losses on investments in foreign branches, subsidiaries and associated corporations where the functional currency is other than the Canadian dollar are recorded in Other comprehensive income. On disposal of such investments, the accumulated net translation gain or loss is included in Non-interest revenue. Other foreign currency translation gains and losses (net of hedging activities) are included in Non-interest revenue.

Securities

Securities are classified at the time of purchase, based on management's intentions, as Trading account, Available for sale, or Held to maturity.

Trading account securities, which are purchased for resale over a short period of time, are stated at estimated current market value. Obligations to deliver trading securities sold but not yet purchased are recorded as liabilities and carried at fair value. Realized and unrealized gains and losses on these securities are recorded as Trading revenues in Non-interest revenue. Interest income accruing on Trading account securities is recorded in Interest income from securities. Interest expense accruing on interest-bearing securities sold short is recorded in Interest expense.

Available for sale securities include securities that may be sold in response to or in anticipation of changes in interest rates and resulting prepayment risk, changes in funding sources or terms, or to meet liquidity needs. These securities are carried at estimated current market value. Unrealized gains and losses on these securities, net of income taxes, are reported in Other comprehensive income to the extent not hedged by derivatives. Available for sale securities include tax-exempt securities, which are client financings that have been structured as after-tax investments rather than conventional loans in order to provide the issuers with a borrowing rate advantage. Such securities are accorded the accounting treatment applicable to loans and, if required, are reduced by an allowance for credit losses.

Held to maturity securities include debt securities that the bank has both the intent and the ability to hold until maturity and are carried at amortized cost. Premiums and discounts on Held to maturity securities are amortized to Interest income from securities using the yield method over the period to maturity of the related securities.

Gains and losses realized on disposal of Available for sale and Held to maturity securities, which are calculated on an average cost basis, and writedowns to reflect other than temporary impairment in value are included in Gain on sale of securities in Non-interest revenue.

Loans

Loans are stated net of an allowance for loan losses and unearned income, which comprises unearned interest and unamortized loan fees.

Loans are classified as nonaccrual when there is no longer reasonable assurance of the timely collection of the full amount of principal or interest. Whenever a payment is 90 days past due, loans other than credit card balances and Canadian government guaranteed loans are classified as nonaccrual unless they are fully secured or collection efforts are reasonably expected to result in repayment of debt. Credit card balances are charged off when a payment is 180 days in arrears. Canadian government guaranteed loans are classified as impaired when the loan is contractually 365 days in arrears. When a loan is identified as nonaccrual, the accrual of interest is discontinued and any previously accrued but unpaid interest on the loan is charged to the provision for credit losses. Interest received on nonaccrual loans is credited to the allowance for loan losses on that loan. Nonaccrual loans are returned to performing status when all amounts including interest have been collected, all charges for loan impairment have been reversed and the credit quality has improved such that there is reasonable assurance of timely collection of principal and interest.

When a loan has been identified as impaired, the carrying amount of the loan is reduced to its estimated realizable amount, measured by discounting the expected future cash flows at the effective interest rate inherent in the loan. In subsequent periods, recoveries of amounts previously charged off and any increase in the carrying value of the loan is credited to the allowance for loan losses on the consolidated balance sheet. Where a portion of a loan is charged off and the remaining balance is restructured, the new loan is carried on an accrual basis when there is no longer any reasonable doubt regarding the collectibility of principal or interest, and payments are not 90 days past due.

Collateral is obtained if, based on an evaluation of the client's creditworthiness, it is considered necessary for the client's overall borrowing facility.

Assets acquired in respect of problem loans are recorded at the lower of their fair value or the carrying value of the loan at the date of transfer. Any excess of the carrying value of the loan over the fair value of the assets acquired is recognized by a charge to the allowance for loan losses.

Fees that relate to such activities as originating, restructuring or renegotiating loans are deferred and recognized as Interest income over the expected term of such loans. Where there is reasonable expectation that a loan will result, commitment and standby fees are also recognized as Interest income over the expected term of the resulting loan. Otherwise, such fees are recorded as Other liabilities and amortized to Non-interest revenue over the commitment or standby period.

Allowance for credit losses

The allowance for credit losses is maintained at a level that management considers adequate to absorb identified credit related losses in the portfolio as well as losses that have been incurred, but are not yet identifiable. The allowance relates primarily to loans but also to deposits with other banks, derivatives, tax-exempt securities and other credit instruments such as acceptances, guarantees and letters of credit. The allowance is increased by the provision for credit losses, which is charged to income, and decreased by the amount of charge-offs, net of recoveries.

The allowance is determined based on management's identification and evaluation of problem accounts; estimated probable losses that exist on the remaining portfolio; and on other factors including the composition and quality of the portfolio, and changes in economic conditions.

Allocated specific

Allocated specific allowances are maintained to absorb losses on both specifically identified borrowers and other more homogeneous loans that have been recognized as nonaccrual. The losses relating to identified large business and government debtors are estimated based on the present value of expected payments on an account-by-account basis. The losses relating to other portfolio-type products, excluding credit cards, are based on net charge-off experience over an economic cycle. For credit cards, no specific allowance is maintained as balances are charged off if no payment has been received after 180 days. Personal loans are generally charged off at 150 days past due. Charge-offs for other loans are generally recorded when there is no realistic prospect of full recovery.

Allocated country risk

Allocated country risk allowances are maintained with respect to exposures to a number of less developed countries (LDCs) based on an overall assessment of the underlying economic conditions in those countries.

Allocated general

The allocated general allowance represents the best estimate of probable losses within the portion of the portfolio that has not yet been specifically identified as nonaccrual. This amount is established through the application of expected loss factors to outstanding and undrawn facilities. The allocated general allowance for large business and government loans and acceptances is based on the application of expected default and loss factors, determined by statistical loss migration analysis, delineated by loan type and rating. For more homogeneous portfolios, such as residential mortgages, small business loans, personal loans and credit cards, the determination of the allocated general allowance is done on a product portfolio basis. The losses are determined by the application of loss ratios determined through the analysis of loss migration and charge-off trends over an economic cycle, adjusted to reflect changes in the product offerings and credit quality of the pool.

Unallocated

The unallocated allowance is based on management's assessment of probable, unidentified losses in the portfolio that have not been captured in the determination of the allocated specific, allocated country risk or allocated general allowances. This assessment includes consideration of general economic and business conditions and regulatory requirements affecting key lending operations, recent loan loss experience, and trends in credit quality and concentrations. This allowance also reflects model and estimation risks and does not represent future losses or serve as a substitute for allocated allowances.

Assets purchased under reverse repurchase agreements and sold under repurchase agreements

The bank enters into short-term purchases of securities under agreements to resell (reverse repurchase agreements) and sales of securities under agreements to repurchase (repurchase agreements). These agreements are treated as collateralized lending and borrowing transactions and are carried on the consolidated balance sheet at the amounts at which the securities were initially acquired or sold. Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements are included in Interest income and Interest expense, respectively.

Acceptances

Acceptances are short-term negotiable instruments issued by the bank's customers to third parties, which are guaranteed by the bank. The potential liability under acceptances is reported as a liability in the consolidated balance sheet. The recourse against the customer in the case of a call on these commitments is reported as a corresponding asset of the same amount under Loans. Fees earned are reported in Non-interest revenue.

Derivatives

The bank adopted Statement of Financial Accounting Standards, *Accounting for Derivative Instruments and Hedging Activities* (FAS 133), as amended by FAS 138, on November 1, 2000.

Derivatives are used in sales and trading activities to provide clients with the ability to manage their market risk exposures. Derivatives are also used to manage the bank's own exposures to interest, currency and other market risks. The most frequently used derivative products are foreign exchange forward contracts, interest rate and currency swaps, foreign currency and interest rate futures, forward rate agreements, and foreign currency and interest rate options. All derivatives, including derivatives embedded in financial instruments or contracts that are not clearly and closely related to the economic characteristics of the host financial instrument or contract, are recorded at fair value on the consolidated balance sheet.

When used in sales and trading activities, the realized and unrealized gains and losses on derivatives are recognized in Non-interest revenue. Market values are determined using pricing models that incorporate current market and contractual prices of the underlying instruments, time value of money, yield curve and volatility factors. A portion of the market value is deferred within Derivative-related amounts in Liabilities and amortized to income over the life of the instruments to cover credit risk and ongoing direct servicing costs. Unrealized gains and losses are generally reported on a gross basis as Derivative-related amounts in Assets and Liabilities, except where the bank has both the legal right and intent to settle these amounts simultaneously in which case they are presented on a net basis. Margin requirements and premiums paid are also included in Derivative-related amounts in Assets, while premiums received are shown in Derivative-related amounts in Liabilities.

When derivatives are used to manage the bank's own exposures, the bank determines for each derivative whether hedge accounting can be applied. Where the bank can apply hedge accounting, a hedge relationship is designated as a fair value hedge, a cash flow hedge, or a hedge of foreign currency exposure of net investment in a foreign operation. The hedge is documented at inception detailing the particular risk management objective and the strategy for undertaking the hedge transaction. The documentation identifies the specific asset or liability being hedged, the risk that is being hedged, the type of derivative used and how effectiveness will be measured. The derivative must be highly effective in accomplishing the objective of offsetting either changes in the fair value or cash flows attributable to the risk being hedged both at inception and over the life of the hedge. If it is determined that the derivative is not highly effective as a hedge, hedge accounting is discontinued.

Non-trading derivatives that do not qualify for hedge accounting are carried at fair value on the consolidated balance sheet, with changes in fair value recorded in Non-interest revenue.

Fair value hedge

Fair value hedge transactions predominantly use interest rate swaps to hedge the changes in the fair value of an asset, liability or firm commitment. The carrying amount of the hedged item is adjusted by gains or losses attributable to the hedged risk and recorded in Non-interest revenue. This unrealized gain or loss is offset by changes in the fair value of the derivative.

Hedge accounting is discontinued prospectively when the derivative no longer qualifies as an effective hedge, the derivative is terminated or sold, or on the sale or early termination of the hedged item. The previously hedged asset or liability is no longer adjusted for changes in fair value. Cumulative fair value adjustments to the carrying amount of the hedged item are amortized into Net interest income over the remaining term of the original hedge relationship.

NOTE 1 Significant accounting policies (continued)

Cash flow hedge
Cash flow hedge transactions predominantly use interest rate swaps to hedge the variability in cash flows related to a variable rate asset or liability. The effective portion of the changes in the fair value of the derivative is reported in Other comprehensive income. The ineffective portion is reported in Non-interest revenue. The amounts recognized as Other comprehensive income for cash flow hedges are reclassified to Net interest income in the periods in which Net interest income is affected by the variability in the cash flows of the hedged item.

Hedge accounting is discontinued prospectively when the derivative no longer qualifies as an effective hedge or the derivative is terminated or sold. The amounts previously recognized in Accumulated other comprehensive income are reclassified to Net interest income in the periods in which Net interest income is affected by the variability in the cash flows of the hedged item. On the sale or early termination of the hedged item, gains and losses are reclassified immediately to Non-interest revenue.

Hedges of net foreign currency investments in subsidiaries
Foreign exchange forward contracts and U.S. dollar liabilities are used to minimize exposures from subsidiaries, branches and associated companies having a functional currency other than the Canadian dollar. Foreign exchange gains and losses on these hedging instruments are recorded in Other comprehensive income.

Premises and equipment
Premises and equipment are stated at cost less accumulated depreciation. Depreciation is recorded principally on the straight-line basis over the estimated useful lives of the assets, which are 25 to 50 years for buildings, 3 to 10 years for hardware, 3 to 5 years for software, 7 to 10 years for furniture, fixtures and other equipment, and lease term plus first option period for leasehold improvements. Gains and losses on disposal are recorded in Non-interest revenue.

Goodwill and other intangibles
Goodwill represents the excess of the price paid for the acquisition of subsidiaries over the fair value of the net assets acquired and is amortized over appropriate periods of up to 20 years, except where a writedown is required to reflect permanent impairment. Identifiable, reliably measurable Other intangible assets, such as core deposit intangibles and client lists, resulting from acquisition of subsidiaries are also amortized over appropriate periods of up to 20 years. An impairment review on unamortized goodwill and other intangibles is performed periodically. Such evaluation is based on various analyses including undiscounted cash flow; market value is used if a sale or disposition is being considered.

Income taxes
The bank uses the asset and liability method whereby income taxes reflect the expected future tax consequences of temporary differences between the carrying amounts of assets or liabilities for book purposes compared with tax purposes. Accordingly, a deferred income tax asset or liability is determined for each temporary difference based on the tax rates that are expected to be in effect when the underlying items of income and expense are expected to be realized. Income taxes on the consolidated statement of income include the current and deferred portions of the expense. Income taxes applicable to items charged or credited to Retained earnings and Other comprehensive income are netted with such items.

Deferred income taxes accumulated as a result of temporary differences are included in Other assets. A valuation allowance is established to reduce deferred income tax assets to the amount expected to be realized. In addition, the consolidated statement of income contains items that are non-taxable or non-deductible for income tax purposes and, accordingly, cause the income tax provision to be different than what it would be if based on statutory rates.

Pensions and other postretirement benefits
The bank provides a number of benefit plans which provide pension and other benefits to qualified employees. These plans include statutory pension plans, supplemental pension plans, defined contribution plans and health, dental and life insurance plans.

The bank funds its statutory pension plans and health, dental and life insurance plans annually based on actuarially determined amounts needed to satisfy employee benefit entitlements under current pension regulations. These pension plans provide benefits based on years of service, contributions and average earnings at retirement.

Actuarial valuations are performed on a regular basis to determine the present value of the accrued pension benefits, based on projections of employees' compensation levels to the time of retirement. Investments held by the pension funds primarily comprise equity securities, bonds and debentures. Market-related values are used to value pension fund assets.

Pension expense consists of the cost of employee pension benefits for the current year's service, interest expense on the liability, expected investment return on the market value of plan assets and the amortization of both deferred past service costs and deferred actuarial gains and losses. Amortization is charged over the expected average remaining service life of employee groups covered by the plan.

The cumulative excess of pension fund contributions over the amounts recorded as expenses is reported as a prepaid expense in Other assets. Other postretirement benefits are reported in Other liabilities.

Defined contribution plan costs are recognized in income for services rendered by employees during the period.

Recognition of an additional liability is required if an unfunded accumulated benefit obligation exists and (i) an asset has been recognized as a prepaid pension cost, (ii) the projected benefit obligation is greater than the fair value of plan assets, or (iii) no accrued or prepaid pension cost has been recognized. If an additional liability is required to be recognized and it exceeds unrecognized prior service cost, the excess is reported as Additional pension obligation in Other comprehensive income.

Assets under administration and assets under management
The bank administers and manages assets owned by clients that are not reflected on the consolidated balance sheet. Asset management fees are earned for providing investment management services and mutual fund products. Asset administration fees are earned for providing trust, estate administration and custodial services. Fees are recognized and reported in Non-interest revenue as the services are provided.

Loan securitization
The bank adopted Statement of Financial Accounting Standards, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities* (FAS 140), effective April 1, 2001.

The bank periodically securitizes loans by selling loans to independent special-purpose vehicles or trusts that issue securities to investors. These transactions are accounted for as sales when the bank is deemed to have surrendered control over such assets and consideration other than beneficial interests in these transferred assets has been received by the bank in exchange. The bank often retains interests in the securitized loans, such as interest-only strips or servicing rights, and in some cases cash reserve accounts. Gains on these transactions are recognized in Non-interest revenues and are dependent in part on the previous carrying amount of the loans involved in the transfer, which is allocated between the loans sold and the retained interests, based on their relative fair value at the date of transfer. To obtain fair values, quoted market prices are used, if available. Quotes are generally not available for retained interests, so the bank generally determines fair value based on the present value of future expected cash flows using management's best estimates of key assumptions such as payment rates, excess spread, credit losses and discount rates commensurate with the risks involved.

Generally, the loans are transferred on a fully serviced basis. As a result, the bank recognizes a servicing liability on the date of transfer and amortizes this liability to income over the term of the transferred loans.

Retained interests in securitizations that can be contractually prepaid or otherwise settled in such a way that the bank would not recover substantially all of its recorded investment are classified as Available for sale securities.

Insurance operations

Earned premiums, fees, claims and changes in actuarial reserves are included in Non-interest revenue. Investments are primarily included in Available for sale securities and actuarial reserves are included in Other liabilities. Investment income is included in Interest income and administrative expenses are included in Non-interest expenses.

Premiums from long-duration contracts, primarily life insurance, are recognized as income when due, except for universal life and investment-type contracts, the premiums on which are credited to policyholder balances and included in Other liabilities. Premiums from short-duration contracts, primarily property and casualty, and fees for administrative services and investment-type contracts are recognized over the related contract period.

Reserves represent estimated liabilities for future insurance policy benefits. Reserves for life insurance contracts except universal life and investment-type contracts are determined using the net level premium method, which incorporates assumptions for mortality, morbidity, policy lapses and surrenders, investment yields, policy dividends and operating expenses. These assumptions are not revised unless it is determined that existing deferred acquisition costs cannot be recovered. For universal life and investment-type contracts, the actuarial liability is equal to the policyholder account values and includes a net level premium reserve for some contracts. Reserves for property and casualty insurance include unearned premiums, representing the unexpired portion of premiums, and estimated provisions for reported and unreported claims incurred.

Deferred acquisition costs are included in Other assets and amortized to Non-interest revenue. Amortization of such costs is in proportion to premium revenue for long-duration contracts, estimated gross profits for universal life and investment-type contracts, and is over the policy term for short-duration contracts.

Value of business acquired represents the present value of estimated net cash flows embedded in existing contracts acquired by the bank and is included in Other assets. It is amortized in the same manner as deferred acquisition costs for life insurance contracts.

Future accounting changes

The Financial Accounting Standards Board issued Statement of Financial Accounting Standards, *Business Combinations* (FAS 141), and *Goodwill and Other Intangible Assets* (FAS 142). The bank will adopt the new standards as of November 1, 2001.

The standards require that all business combinations be accounted for using the purchase method and establish specific criteria for the recognition of intangible assets separately from goodwill. Under the standards, goodwill will no longer be amortized but will be subject to impairment tests on at least an annual basis. During 2002, the bank will perform the required impairment tests on goodwill recorded as of November 1, 2001.

Goodwill amortized to income for the year ended October 31, 2001, was $250 million.

NOTE 2 Significant acquisitions and dispositions

Acquisitions

During the year, the bank acquired Liberty Life Insurance Company and Liberty Insurance Services Corporation (Liberty), Dain Rauscher Corporation (Dain Rauscher), Centura Banks, Inc. (Centura) and Tucker Anthony Sutro Corporation (Tucker Anthony Sutro). Adjustments to goodwill are permitted up to one year after the acquisition has closed in order to incorporate refinements to the initial fair value estimates of assets and liabilities acquired. The details of these acquisitions are as follows:

	Liberty	Dain Rauscher	Centura	Tucker Anthony Sutro
Acquisition date	November 1, 2000	January 10, 2001	June 5, 2001	October 31, 2001
Business segment	Insurance	Wealth Management and Corporate & Investment Banking	Personal & Commercial Banking	Wealth Management and Corporate & Investment Banking
Percentage of shares acquired	100%	100%	100%	100%
Cost	$890	$1,838	$3,331	$943
Purchase consideration	Assets were purchased with a dividend of US$70 paid from Liberty Life Insurance Company plus US$580 cash	Each Dain Rauscher common share was purchased for US$95 cash	Approximately 67 million RBC common shares were issued, valued at $49.20 each	Each Tucker Anthony Sutro common share was purchased for US$24 cash
Goodwill	$127	$1,544	$1,868	$692

NOTE 2 Significant acquisitions and dispositions (continued)

Fair values of net assets acquired

		Liberty		Dain Rauscher		Centura		Tucker Anthony Sutro		Total
Fair value of assets acquired										
Cash resources	$	7	$	111	$	518	$	54	$	690
Securities		1,849		528		4,819		385		7,581
Loans		–		2,405		12,002		–		14,407
Premises and equipment		43		74		244		48		409
Core deposit intangibles		–		–		395		–		395
Other intangibles		–		–		12		–		12
Other assets		959		601		687		344		2,591
	$	2,858	$	3,719	$	18,677	$	831	$	26,085
Fair value of liabilities assumed										
Deposits	$	–	$	127	$	11,195	$	4	$	11,326
Obligations related to assets sold under repurchase agreements		–		86		136		8		230
Other liabilities		2,095		3,212		5,883		568		11,758
	$	2,095	$	3,425	$	17,214	$	580	$	23,314
Fair value of identifiable net assets acquired	$	763	$	294	$	1,463	$	251	$	2,771
Goodwill		127		1,544		1,868		692		4,231
Total purchase consideration	$	890	$	1,838	$	3,331	$	943	$	7,002

The following unaudited supplemental pro forma information has been prepared to give effect to these acquisitions as if they had occurred at the beginning of the year.

This information is the result of a calculation that combines the bank's results of the operations for the years presented with each of the acquired companies' results of operations prior to the acquisition date, and adjusts for goodwill amortization, core deposit intangible amortization, funding costs and significant merger-related items as if these acquisitions had occurred at the beginning of the year.

The unaudited pro forma combined condensed results of operations are not intended to reflect the results of operations that would have actually resulted had these transactions occurred at the beginning of the year, or the results which may be obtained in the future.

Unaudited pro forma combined condensed results of operations

		2001		2000
Net interest income	$	6,910	$	6,128
Provision for credit losses		1,165		741
Non-interest revenue		9,471		9,478
Non-interest expenses		11,236		10,898
Income taxes		1,394		1,579
Non-controlling interest in net income of subsidiaries		107		74
Net income	$	2,479	$	2,314
Preferred share dividends		135		134
Net income available to common shareholders	$	2,344	$	2,180
Average number of diluted common shares (in thousands)		686,540		677,278
Diluted earnings per share (in dollars)	$	3.41	$	3.22

Dispositions

During the year, the bank sold its institutional asset management business operated by RT Capital Management Inc. and realized a pre-tax gain of $313 million (after-tax $251 million) recorded in Non-interest revenue. The sale agreement includes provisions based on client retention experience six months after closing, which could potentially result in a reduction of $62 million to the after-tax gain. The bank has assessed that it is unlikely that this payment will be made.

In addition, the bank divested certain other businesses and realized a pre-tax gain of $132 million (after-tax $111 million) recorded in Non-interest revenue.

NOTE 3 Results by business and geographic segment

2001	Personal & Commercial Banking	Insurance	Wealth Management	Corporate & Investment Banking	Transaction Processing	Total (1)	Canada	International (2)
Net interest income on taxable equivalent basis	$ 5,347	$ 206	$ 384	$ 429	$ 150	$ 6,529	$ 5,324	$ 1,205
Taxable equivalent adjustment	6	–	–	21	–	32	26	6
Net interest income	5,341	206	384	408	150	6,497	5,298	1,199
Provision for credit losses	732	–	2	407	(2)	1,119	757	362
Net interest income after provision for credit losses	4,609	206	382	1	152	5,378	4,541	837
Non-interest revenue	1,839	336	3,040	2,352	563	8,155	5,210	2,945
Non-interest expenses	4,216	375	2,691	1,804	476	9,641	6,355	3,286
Net income before income taxes	2,232	167	731	549	239	3,892	3,396	496
Income taxes	926	(6)	223	200	95	1,350	1,327	23
Non-controlling interest	10	–	–	–	–	107	97	10
Net income	$ 1,296	$ 173	$ 508	$ 349	$ 144	$ 2,435	$ 1,972	$ 463
Total average assets	$ 143,000	$ 6,300	$ 11,300	$ 159,500	$ 2,400	$ 331,600	$ 207,400	$ 124,200

2000	Personal & Commercial Banking	Insurance	Wealth Management	Corporate & Investment Banking	Transaction Processing	Total (1)	Canada	International (2)
Net interest income on taxable equivalent basis	$ 4,705	$ 84	$ 359	$ 43	$ 160	$ 5,307	$ 4,796	$ 511
Taxable equivalent adjustment	6	–	–	22	–	28	28	–
Net interest income	4,699	84	359	21	160	5,279	4,768	511
Provision for credit losses	649	–	(1)	91	(21)	691	703	(12)
Net interest income after provision for credit losses	4,050	84	360	(70)	181	4,588	4,065	523
Non-interest revenue	1,566	163	2,138	2,287	514	6,680	5,277	1,403
Non-interest expenses	3,684	173	1,846	1,456	459	7,628	6,470	1,158
Net income before income taxes	1,932	74	652	761	236	3,640	2,872	768
Income taxes	812	(29)	239	259	102	1,412	1,311	101
Non-controlling interest	5	–	–	–	–	20	15	5
Net income	$ 1,115	$ 103	$ 413	$ 502	$ 134	$ 2,208	$ 1,546	$ 662
Total average assets	$ 129,700	$ 2,200	$ 8,000	$ 131,900	$ 1,600	$ 284,100	$ 200,100	$ 84,000

1999	Personal & Commercial Banking	Insurance	Wealth Management	Corporate & Investment Banking	Transaction Processing	Total (1)	Canada	International (2)
Net interest income on taxable equivalent basis	$ 4,410	$ 47	$ 267	$ 402	$ 168	$ 5,152	$ 4,402	$ 750
Taxable equivalent adjustment	8	–	–	27	–	35	35	–
Net interest income	4,402	47	267	375	168	5,117	4,367	750
Provision for credit losses	575	–	–	223	6	760	672	88
Net interest income after provision for credit losses	3,827	47	267	152	162	4,357	3,695	662
Non-interest revenue	1,375	174	1,684	1,588	459	5,491	4,277	1,214
Non-interest expenses	3,765	133	1,556	1,305	436	7,141	6,054	1,087
Net income before income taxes	1,437	88	395	435	185	2,707	1,918	789
Income taxes	606	(20)	123	134	78	974	815	159
Non-controlling interest	4	–	–	–	–	8	4	4
Net income	$ 827	$ 108	$ 272	$ 301	$ 107	$ 1,725	$ 1,099	$ 626
Total average assets	$ 122,500	$ 1,400	$ 8,900	$ 127,300	$ 1,800	$ 270,000	$ 187,900	$ 82,100

(1) The difference between the total and the business segments presented represents other activities, which mainly comprise Corporate Treasury, Corporate Resources, Systems & Technology and Real Estate Operations.

(2) Includes United States gross revenues of $2,882 million (2000 – $832 million; 1999 – $715 million).

For management reporting purposes, the operations of the bank are grouped into the business segments of Personal & Commercial Banking, Insurance, Wealth Management, Corporate & Investment Banking and Transaction Processing. The difference between the total and the business segments presented represents other activities, which mainly comprise Corporate Treasury, Corporate Resources, Systems & Technology and Real Estate Operations.

The business segments operate on an arm's-length basis with respect to the purchase and sale of intra-group services. Transfer pricing of funds sold or purchased, commissions, or charges and credits for services rendered are generally at market rates.

For geographic reporting purposes, Canadian-based activities of international money market units are included in International.

NOTE 4 Securities

	Term to maturity (1) Under 1 year	1 to 5 years	Over 5 years to 10 years	Over 10 years	With no specific maturity	2001 Total	2000 Total
Trading account (2)							
Canadian government debt (3)	$ 7,396	$ 2,909	$ 1,436	$ 1,283	$ –	$13,024	$10,095
U.S. Treasury and other U.S. agencies	693	249	90	116	–	1,148	2,308
Other OECD government debt	1,121	499	607	186	–	2,413	1,140
Mortgage-backed securities	11	230	167	281	–	689	68
Asset-backed securities	–	–	220	4,208	–	4,428	929
Other debt	11,867	4,554	2,239	2,125	–	20,785	17,286
Equities	–	–	–	–	15,926	15,926	17,001
	21,088	8,441	4,759	8,199	15,926	58,413	48,827
Available for sale (2)							
Canadian government debt (3)							
Amortized cost	3,092	1,309	59	163	–	4,623	2,851
Estimated market value	3,144	1,341	60	163	–	4,708	2,843
Yield (4)	4.6%	5.0%	6.9%	7.7%	–	4.9%	6.1%
U.S. Treasury and other U.S. agencies							
Amortized cost	283	1,418	328	1	–	2,030	87
Estimated market value	284	1,480	353	1	–	2,118	87
Yield (4)	3.2%	5.1%	4.7%	6.2%	–	4.8%	6.0%
Other OECD government debt							
Amortized cost	1,225	303	33	–	–	1,561	1,313
Estimated market value	1,225	314	34	–	–	1,573	1,312
Yield (4)	0.3%	4.3%	4.7%	–	–	1.2%	1.3%
Mortgage-backed securities							
Amortized cost	220	3,370	442	499	–	4,531	4,091
Estimated market value	223	3,468	463	522	–	4,676	4,015
Yield (4)	5.6%	5.4%	6.7%	6.6%	–	5.6%	5.3%
Asset-backed securities							
Amortized cost	3	85	235	91	–	414	–
Estimated market value	4	88	246	96	–	434	–
Yield (4)	9.3%	12.4%	7.2%	7.0%	–	8.2%	–
Other debt							
Amortized cost	2,065	1,865	1,036	2,552	198	7,716	4,802
Estimated market value	2,043	1,855	1,048	2,616	198	7,760	4,711
Yield (4)	3.7%	4.7%	8.1%	6.6%	6.2%	5.6%	6.6%
Equities							
Cost	–	–	–	–	1,382	1,382	889
Estimated market value	–	–	–	–	1,418	1,418	968
Amortized cost	6,888	8,350	2,133	3,306	1,580	22,257	14,033
Estimated market value	6,923	8,546	2,204	3,398	1,616	22,687	13,936
Held to maturity (2)							
Other OECD government debt							
Amortized cost						–	261
Estimated market value						–	261
Yield (4)						–	6.3%
Other debt							
Amortized cost						–	437
Estimated market value						–	444
Yield (4)						–	6.9%
Amortized cost						–	698
Estimated market value						–	705
Total carrying value of securities (2)	$28,011	$16,987	$ 6,963	$11,597	$17,542	$81,100	$63,461
Total estimated market value of securities	$28,011	$16,987	$ 6,963	$11,597	$17,542	$81,100	$63,468

(1) Actual maturities may differ from contractual maturities shown above, since borrowers may have the right to prepay obligations with or without prepayment penalties.
(2) Trading account and Available for sale securities are carried at estimated current market value. Held to maturity securities are carried at amortized cost.
(3) Canadian government debt comprises securities issued or guaranteed by Canadian federal, provincial or municipal governments.
(4) The weighted average yield is based on the carrying value at the end of the year for the respective securities.

Unrealized gains and losses

	2001				2000			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated market value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated market value
Available for sale								
Canadian government debt (1)	$ 4,623	$ 85	$ –	$ 4,708	$ 2,851	$ 5	$ (13)	$ 2,843
U.S. Treasury and other U.S. agencies	2,030	88	–	2,118	87	–	–	87
Other OECD government debt	1,561	15	(3)	1,573	1,313	–	(1)	1,312
Mortgage-backed securities	4,531	145	–	4,676	4,091	2	(78)	4,015
Asset-backed securities	414	25	(5)	434	–	–	–	–
Other debt	7,716	169	(125)	7,760	4,802	29	(120)	4,711
Equities	1,382	104	(68)	1,418	889	102	(23)	968
	$22,257	$ 631	$ (201)	$22,687	$14,033	$ 138	$ (235)	$13,936
Held to maturity								
Other OECD government debt	$ –	$ –	$ –	$ –	$ 261	$ 1	$ (1)	$ 261
Other debt	–	–	–	–	437	7	–	444
	$ –	$ –	$ –	$ –	$ 698	$ 8	$ (1)	$ 705

(1) Canadian government debt consists of securities issued or guaranteed by Canadian federal, provincial or municipal governments.

Realized gains and losses on sales of available for sale securities

	2001	2000	1999
Realized gains	$ 106	$ 106	$ 94
Realized losses	234	117	66
Gain (loss) on sale of securities	$ (128)	$ (11)	$ 28

NOTE 5 Loans

	2001	2000
Canada (1)		
Residential mortgage	$ 64,066	$ 61,444
Personal	27,202	27,207
Credit card	4,110	4,666
Business and government loans and acceptances	42,575	47,616
	137,953	140,933
United States (1)		
Residential mortgage	2,666	845
Personal	4,621	78
Credit card	128	–
Business and government loans and acceptances	26,883	13,808
	34,298	14,731
Other international (1)		
Residential mortgage	712	695
Personal	688	734
Credit card	45	–
Business and government loans and acceptances	7,404	10,719
	8,849	12,148
Total loans (2)	181,100	167,812
Allowance for loan losses	(2,278)	(1,871)
Total loans net of allowance for loan losses	$ 178,822	$ 165,941

(1) Loans in Canada, United States and Other international include all loans booked in those locations, regardless of currency or residence of borrower.
(2) Loans are net of unearned income of $130 million (2000 – $121 million).

NOTE 5 Loans (continued)

Loan maturities 2001

	Floating	Under 3 months	3 months to 1 year	Over 1 year to 5 years	Over 5 years	Non-rate-sensitive	2001 Total
Residential mortgage	$ 6,310	$ 7,363	$ 13,250	$ 39,098	$ 1,244	$ 179	$ 67,444
Personal	17,239	8,893	2,360	3,585	109	325	32,511
Credit card	–	3,543	–	–	–	740	4,283
Business and government loans and acceptances	15,237	33,794	10,189	12,460	3,221	1,961	76,862
Total loans	$ 38,786	$ 53,593	$ 25,799	$ 55,143	$ 4,574	$ 3,205	181,100
Allowance for loan losses							(2,278)
Total loans net of allowance for loan losses							$ 178,822

Nonaccrual loans

	2001	2000
Residential mortgage	$ 179	$ 199
Personal	325	247
Business and government loans and acceptances	372	301
	876	747
Individually impaired business and government loans and acceptances	1,589	931
	$ 2,465	$ 1,678
Allowance for impaired loans	$ 615	$ 439
Average balance of impaired loans (1)	$ 1,190	$ 941

(1) For the year ended October 31, 1999, the average balance of impaired loans was $1,220 million.

Allowance for loan losses

	2001	2000	1999
Allowance for credit losses at beginning of year (1)	$ 1,975	$ 1,900	$ 2,066
Charge-offs	(1,125)	(839)	(1,072)
Recoveries	185	162	114
Net charge-offs	(940)	(677)	(958)
Provision for credit losses	1,119	691	760
Acquisition of Centura Banks, Inc.	157	–	–
Other	81	61	32
Allowance for credit losses at end of year	2,392	1,975	1,900
Allowance for off-balance sheet and other items (2)	(109)	(98)	–
Allowance for tax-exempt securities	(5)	(6)	(16)
Allowance for loan losses at end of year	$ 2,278	$ 1,871	$ 1,884

(1) Includes an allowance related to tax-exempt securities.
(2) Beginning in 2000, the allowance for off-balance sheet and other items was separated and reported under Other liabilities. Previously, the amount was included in the allowance for loan losses.

NOTE 6 Securitizations

During the year, the bank sold undivided interests in credit card loans to a trust, received cash proceeds of $1 billion and retained the rights to future excess interest of $10 million on the credit card loans. As part of the proceeds the bank assumed a servicing liability of $3 million and recognized a pre-tax gain on sale of $7 million in Securitization revenues.

During the year, the bank also securitized $800 million of government guaranteed residential mortgage loans through the creation of mortgage-backed securities, and initially sold $723 million of those securities. Mortgage-backed securities, created and unsold, remain on the consolidated balance sheet and are classified as Available for sale. The bank received net cash proceeds of $720 million and retained the rights to future excess interest of $25 million on the residential mortgages. A pre-tax gain on sale, net of transaction costs, of $22 million was recognized in Securitization revenues.

The key assumptions used to value the sold and retained interests at the date of securitization for transactions completed during the year were as follows:

Key assumptions (1)

	Credit card loans	Residential mortgage loans
Payment rate	40.17%	12.00%
Excess spread, net of credit losses	6.57	1.02
Expected credit losses	1.68	–
Discount rate	12.50	5.41
Servicing	2.00	0.25

(1) All rates are annualized except for credit card loans payment rate, which is monthly.

The actual credit loss experience of the securitized portion of the bank's credit card portfolio remains consistent with the assumption in the table above. Actual credit losses, net of recoveries on the securitized portion of the bank's credit card portfolio in 2001, were $25 million. As at October 31, 2001, 97% of the bank's credit card portfolio was current, defined as being less than 31 days past due.

At October 31, 2001, the bank had a retained interest in $2.1 billion of securitized credit card loans ($1.1 billion at October 31, 2000) and $1.4 billion of bank created and sold mortgage-backed securities ($1.0 billion at October 31, 2000). At October 31, 2001, key economic assumptions and the sensitivity of the current fair value of these retained interests to immediate 10% and 20% adverse changes in key assumptions are as follows:

Sensitivity of key assumptions to adverse changes (1)

	Assumption		Impact on fair value	
	Credit card loans	Residential mortgage loans	Credit card loans	Residential mortgage loans
Payment rate	38.28%	7.73%		
Impact on fair value of 10% adverse change	42.11	8.50	$ (1.2)	$ (0.5)
Impact on fair value of 20% adverse change	45.94	9.27	(2.4)	(1.0)
Excess spread, net of credit losses	6.02	1.11		
Impact on fair value of 10% adverse change	5.42	1.00	(2.0)	(3.3)
Impact on fair value of 20% adverse change	4.82	0.89	(3.9)	(6.6)
Expected credit losses	1.68	–		
Impact on fair value of 10% adverse change	1.85	–	(0.6)	–
Impact on fair value of 20% adverse change	2.02	–	(1.2)	–
Discount rate	12.50	4.65		
Impact on fair value of 10% adverse change	13.75	5.12	(0.1)	(0.2)
Impact on fair value of 20% adverse change	15.00	5.58	(0.1)	(0.4)

(1) All rates are annualized except for credit card loans payment rate, which is monthly.

These sensitivities are hypothetical and should be used with caution. As the figures indicate, changes in fair value based on a 10% variation in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in fair value may not be linear. Also, in the table above, the effect of a variation in a particular assumption on the fair value of the retained interests is calculated without changing any other assumption; generally, changes in one factor may result in changes in another, which may magnify or counteract the sensitivities.

The table below summarizes certain cash flows received from securitization trusts in 2001:

Cash flows from securitizations

	Credit card loans	Residential mortgage loans
Proceeds from new securitizations	$ 1,000	$ 720
Proceeds reinvested in revolving securitizations	6,972	13
Cash flows from retained interests in securitizations	60	10

NOTE 7 Premises and equipment

	2001			2000
	Cost	Accumulated depreciation	Net book value	Net book value
Land	$ 123	$ –	$ 123	$ 93
Buildings	697	283	414	251
Hardware and software	1,542	1,105	437	409
Furniture, fixtures and other equipment	858	545	313	201
Leasehold improvements	832	521	311	262
	$ 4,052	$ 2,454	$ 1,598	$ 1,216

NOTE 8 Subordinated debentures

The debentures are unsecured obligations and are subordinated in right of payment to the claims of depositors and certain other creditors. All repurchases, cancellations and exchanges of subordinated debentures are subject to the consent and approval of the Superintendent of Financial Institutions Canada.

Maturity	Earliest redemption date	Rate		Denominated in foreign currency	2001	2000
January 31, 2001		11.75%			$ –	$ 27
August 15, 2001		10.75%			–	15
January 11, 2002	January 11, 2002	11.00%			41	41
March 1, 2002	March 1, 2002	10.50%			60	60
July 29, 2005	(1)	(1)	Callable (2)	US$350	–	533
September 3, 2007	September 3, 2002	5.40% (3)	Callable (4)		400	400
September 3, 2008	September 3, 2003	5.45% (5)	Callable (4)		100	100
April 12, 2009	April 12, 2004	5.40% (6)	Callable (4)		350	350
June 11, 2009	June 11, 2004	5.10% (7)	Callable (4)		350	350
July 7, 2009	July 7, 2004	6.05% (8)	Callable (4)		175	175
October 12, 2009	October 12, 2004	6.00% (9)	Callable (4)		150	150
August 15, 2010	August 15, 2005	6.40% (10)	Callable (4)		700	700
February 13, 2011	February 13, 2006	5.50% (11)	Callable (12)		125	–
April 26, 2011	April 26, 2006	8.20% (13)	Callable (14)		100	100
September 12, 2011	September 12, 2006	6.50% (15)	Callable (4)		350	350
October 24, 2011	October 24, 2006	6.75% (16)	Callable (2)	US$300	476	457
June 4, 2012	June 4, 2007	6.75% (17)	Callable (4)		500	500
January 22, 2013	January 22, 2008	6.10% (18)	Callable (19)		500	–
November 14, 2014	November 14, 2014	10.00%			200	200
January 25, 2015	January 25, 2010	7.10% (20)	Callable (4)		500	500
April 12, 2016	April 12, 2011	6.30% (21)			400	–
June 8, 2023	June 8, 2023	9.30%			110	110
October 1, 2083	(22)	(23)	Callable (24)		250	250
June 6, 2085	(22)	(25)	Callable (2)	US$300	477	457
					6,314	5,825
Fair value adjustment (26)					348	–
					$ 6,662	$ 5,825

(1) Interest at a rate of .0625% above the U.S. dollar 1-month LIBOR. Redeemed on May 31, 2001.
(2) Callable at the principal amount.
(3) Interest at a rate of 5.40% until September 3, 2002, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(4) Callable at the greater of (i) the yield of Government of Canada bonds plus 5 basis points, or (ii) the principal amount.
(5) Interest at a rate of 5.45% until September 3, 2003, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(6) Interest at a rate of 5.40% until April 12, 2004, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(7) Interest at a rate of 5.10% until June 11, 2004, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(8) Interest at a rate of 6.05% until July 7, 2004, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(9) Interest at a rate of 6.00% until October 12, 2004, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(10) Interest at a rate of 6.40% until August 15, 2005, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(11) Interest at a rate of 5.50% until February 13, 2006, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(12) Callable at the greater of (i) the yield of Government of Canada bonds plus 8 basis points, or (ii) the principal amount.
(13) Interest at a rate of 8.20% until April 26, 2006, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(14) Callable at the greater of (i) the yield of Government of Canada bonds plus 10 basis points, or (ii) the principal amount.
(15) Interest at a rate of 6.50% until September 12, 2006, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(16) Interest at a rate of 6.75% until October 24, 2006, and thereafter at a rate of 1.00% above the U.S. dollar 6-month LIBOR.
(17) Interest at a rate of 6.75% until June 4, 2007, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(18) Interest at a rate of 6.10% until January 22, 2008, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(19) Callable at the greater of (i) the yield of Government of Canada bonds, or (ii) the principal amount.
(20) Interest at a rate of 7.10% until January 25, 2010, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(21) Interest at a rate of 6.30% until April 12, 2011, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(22) Redeemable at any interest payment date at the option of the bank.
(23) Interest at a rate of .40% above the 30-day Bankers' Acceptance rate.
(24) Callable at an amount not exceeding 100.5% of the principal amount plus accrued and unpaid interest up to the date of redemption.
(25) Interest at a rate of .25% above the U.S. dollar 3-month LIMEAN. In the event of a reduction of the annual dividend declared by the bank on its Common Shares, the interest payable on the debentures is reduced pro rata to the dividend reduction and the interest reduction is payable with the proceeds from the sale of Common Shares.
(26) The fair value adjustment reflects the adjustment to the carrying value of hedged subordinated debentures as a result of the adoption of FAS 133. The subordinated debentures specifically hedged have a maturity of October 24, 2011 to April 12, 2016.

Repayment schedule

The aggregate maturities of the debentures, based on the maturity dates under the terms of issue, are as follows:

2002	$ 101
2003	–
2004	–
2005	–
2006	–
2007 to 2011	3,328
Thereafter	3,233
	$ 6,662

Subsequent event

Subsequent to year-end, on November 8, 2001, the bank issued subordinated debentures of US$400 million. Interest is paid at a rate of 0.50% above the U.S. dollar three-month LIBOR until November 8, 2006, and thereafter at a rate of 1.50% above the U.S. dollar three-month LIBOR.

NOTE 9 Capital stock

Authorized capital stock

Preferred – An unlimited number of First Preferred Shares and Second Preferred Shares without nominal or par value, issuable in series; the aggregate consideration for which all the First Preferred Shares and all the Second Preferred Shares that may be issued may not exceed $10 billion and $5 billion, respectively.

Common – An unlimited number of shares without nominal or par value may be issued.

Issued and outstanding capital stock

	2001			2000			1999		
	Number of shares (000s)	**Amount**	**Dividends declared per share**	Number of shares (000s)	Amount	Dividends declared per share	Number of shares (000s)	Amount	Dividends declared per share
First Preferred									
Non-cumulative Series E	**1,500**	**$ 149**	**$ 5.16**	1,500	$ 149	$ 5.38	1,500	$ 149	$ 4.69
Non-cumulative Series H (1)	**–**	**–**	**1.69**	12,000	295	2.25	12,000	295	2.25
US$ Non-cumulative Series I (1)	**8,000**	**315**	**US 1.91**	8,000	301	US 1.91	8,000	291	US 1.91
Non-cumulative Series J	**12,000**	**294**	**1.78**	12,000	294	1.78	12,000	294	1.78
US$ Non-cumulative Series K	**10,000**	**392**	**US 1.58**	10,000	376	US 1.58	10,000	363	US 1.58
Non-cumulative Series N	**12,000**	**293**	**1.18**	12,000	293	1.18	12,000	293	1.18
Non-cumulative Series O	**6,000**	**145**	**1.38**	6,000	145	1.38	6,000	145	0.58
US$ Non-cumulative Series P	**4,000**	**155**	**US 1.44**	4,000	148	US 1.44	4,000	143	US 0.61
Non-cumulative Series S	**10,000**	**247**	**0.65**	–	–	–	–	–	–
		$ 1,990			$ 2,001			$ 1,973	
Common									
Balance at beginning of year	**602,398**	**$ 3,074**		617,768	$ 3,063		617,581	$ 2,923	
Issued	**12,305**	**576**		–	–		–	–	
Issued under the Stock Option Plan	**2,819**	**81**		2,700	59		953	17	
Issued on the acquisition of Centura Banks, Inc.	**67,413**	**3,317**		–	–		–	–	
Options granted on acquisition of Dain Rauscher Corporation	**–**	**33**		–	–		–	–	
Issued on the acquisition of Richardson Greenshields Limited (2)	**13**	**2**		1,667	50		9,580	170	
Issued on the acquisition of RBC Dominion Securities Limited (3)	**–**	**–**		–	–		140	5	
Issuance costs, net of related income taxes	**–**	**(12)**		–	–		–	–	
Purchased for cancellation (4)	**(10,927)**	**(112)**		(19,737)	(98)		(10,486)	(52)	
Balance at end of year	**674,021**	**$ 6,959**	**$ 1.38**	602,398	$ 3,074	$ 1.14	617,768	$ 3,063	$ 0.94

(1) On August 24, 2001, the bank redeemed First Preferred Shares **Series H**. On September 25, 2001, the bank announced its intention to redeem First Preferred Shares **Series I** on November 26, 2001.

(2) During the year the bank exchanged 36,527 (2000 – 4,701; 1999 – 4,606,341) Class B shares and 77,956 (2000 – 8,008,712; 1999 – nil) Class C shares issued by its wholly owned subsidiary, Royal Bank DS Holding Inc., on the acquisition of Richardson Greenshields Limited for 13,621 (2000 – 1,667,334; 1999 – 9,579,166) Common Shares. On November 9, 2001, the remaining balance of Class C shares was exchanged for 318,154 Common Shares.

(3) On November 1, 1998, the bank acquired all of the outstanding participating preferred shares of RBC Dominion Securities Limited in exchange for 140,000 Common Shares.

(4) In June 2001 and in May 1999 (amended in February 2000), pursuant to a normal course issuer bid, the bank announced its intention to repurchase up to 18,000,000 and 18,707,963 Common Shares, respectively, during the 12 months ended June 22, 2002, and June 23, 2000, respectively. Purchases were made in the open market at market prices through the facilities of the Toronto and Montreal Stock Exchanges, and in accordance with stock exchange requirements. The amount and timing of any such purchases were determined by the bank. Premiums paid above the average carrying value of the Common Shares were charged to retained earnings. The bank repurchased 10,927,200 Common Shares (2000 – 19,736,880; 1999 – 10,485,800) at a cost of $509 million (2000 – $660 million; 1999 – $333 million), common stock was reduced by $112 million (2000 – $98 million; 1999 – $52 million) and retained earnings was reduced by $397 million (2000 – $562 million; 1999 – $281 million).

NOTE 9 Capital stock (continued)

Terms of preferred shares

	Dividend per share (1)	Redemption date (2)	Redemption price (3)	Conversion dates: At the option of the bank (2), (4)	Conversion dates: At the option of the holder (5)
First Preferred					
Non-cumulative Series E (6)	(6)	September 2, 2002	$100.00	Not convertible	Not convertible
US$ Non-cumulative Series I	US 0.476563	November 24, 2001	US 25.00	November 24, 2001	February 24, 2002
Non-cumulative Series J	0.443750	May 24, 2003	25.00	May 24, 2003	November 24, 2003
US$ Non-cumulative Series K	US 0.393750	May 24, 2003	US 25.00	May 24, 2003	November 24, 2003
Non-cumulative Series N	0.293750	August 24, 2003	26.00	August 24, 2003	August 24, 2008
Non-cumulative Series O	0.343750	August 24, 2004	26.00	August 24, 2004	Not convertible
US$ Non-cumulative Series P	US 0.359375	August 24, 2004	US 26.00	August 24, 2004	Not convertible
Non-cumulative Series S	0.38125	August 24, 2006	26.00	August 24, 2006	Not convertible

(1) Non-cumulative preferential dividends on First Preferred Shares **Series E** are payable, as and when declared by the Board of Directors, on the 12th day of every month. Non-cumulative preferential dividends on **Series I**, **J**, **K**, **N**, **O**, **P** and **S** are payable quarterly, as and when declared by the Board of Directors, on or about the 24th day of February, May, August and November.

(2) Subject to the consent of the Superintendent of Financial Institutions Canada and the requirements of the *Bank Act*, the bank may, on or after the dates specified above, redeem First Preferred Shares. These may be redeemed (i) for cash, in the case of First Preferred Shares **Series E**, **I**, **J** and **K** equal to the redemption price as stated above, in the case of **Series N** at a price per share of $26, if redeemed during the 12-months commencing August 24, 2003, and decreasing by $0.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after August 24, 2007, and in the case of **Series O** and **P** at a price per share of $26 if redeemed during the 12 months commencing August 24, 2004, and decreasing by $0.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after August 24, 2008, and in the case of **Series S** at a price per share of $26 if redeemed during the 12 months commencing August 26, 2006, and decreasing by $0.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after August 24, 2010, or (ii) by conversion, in the case of **Series I**, **J** and **K** into that number of Common Shares determined by dividing the then-applicable redemption price by the greater of $2.50 and 95% of the weighted average trading price of Common Shares at such time.

(3) Subject to the consent of the Superintendent of Financial Institutions Canada and the requirements of the *Bank Act*, the bank may purchase First Preferred Shares for cancellation at a purchase price, in the case of the **Series E**, **I**, **J** and **K** not exceeding the then-applicable redemption price specified above plus all declared and unpaid dividends, and, in the case of the **Series N**, **O**, **P** and **S** at the lowest price or prices at which, in the opinion of the Board of Directors, such shares are obtainable.

(4) Subject to the approval of The Toronto Stock Exchange, the bank may, on or after the dates specified above, convert First Preferred Shares **Series N**, **O**, **P** and **S** into Common Shares of the bank. First Preferred Shares may be converted into that number of Common Shares determined by dividing the then-applicable redemption price by the greater of $2.50 and 95% of the weighted average trading price of Common Shares at such time.

(5) Subject to the right of the bank to redeem or to find substitute purchasers, the holder may, on or after the dates specified above, convert First Preferred Shares into Common Shares of the bank. **Series I**, **J**, **K** and **N** may be converted, quarterly, into that number of Common Shares determined by dividing the then-applicable redemption price by the greater of $2.50 and 95% of the weighted average trading price of Common Shares at such time.

(6) The rights, privileges, restrictions and conditions attaching to the First Preferred Shares **Series E** were amended in 1997. Holders are entitled to receive, as and when declared by the Board of Directors, a monthly non-cumulative cash dividend that (i) floats in relation to the bank's Canadian prime rate and (ii) is adjusted upwards or downwards based on changes in market trading value. The annual dividend rate applicable to any month will in no event be less than the sum of .25% plus 55% of the average prime rate or greater than the sum of .25% plus 75% of the average prime rate.

Restrictions on the payment of dividends

The bank is prohibited by the *Bank Act* (Canada) from declaring any dividends on its preferred or common shares when the bank is, or would be placed as a result of the declaration, in contravention of the capital adequacy and liquidity regulations or any regulatory directives issued under the act. The bank may not pay dividends on its common shares at any time unless all dividends to which preferred shareholders are then entitled have been declared and paid or set apart for payment.

The bank has agreed that if RBC Capital Trust (a closed-end trust which is a subsidiary of the bank) fails to pay any required distribution on its capital trust securities, it will not declare dividends of any kind on any of its preferred or common shares.

Currently, all of the aforementioned limitations do not restrict the payment of dividends on preferred or common shares.

Regulatory capital

The bank is subject to the regulatory capital requirements defined by the Superintendent of Financial Institutions Canada (OSFI), which includes the use of Canadian GAAP. Two measures of capital strength established by OSFI, based on standards issued by the Bank for International Settlements (BIS), are risk-adjusted capital ratios and the assets-to-capital multiple.

OSFI requires Canadian banks to maintain a minimum Tier 1 and Total capital ratio of 4% and 8%, respectively. However, OSFI has also formally established risk-based capital targets for deposit-taking institutions in Canada. These targets are a Tier 1 capital ratio of at least 7% and a Total capital ratio of at least 10%. At October 31, 2001, the bank's Tier 1 and Total capital ratios were 8.7% and 11.8%, respectively (2000 – 8.6% and 12.0%, respectively).

In the evaluation of the bank's assets-to-capital multiple, OSFI specifies that total assets, including specified off-balance sheet financial instruments, should be no greater than 23 times Total capital. At October 31, 2001, the bank's assets-to-capital multiple was 17.2 times (2000 – 15.3 times).

Using guidelines issued by the Board of Governors of the Federal Reserve System in the United States and U.S. GAAP financial information, the bank's Tier 1 and Total capital ratios at October 31, 2001, were 8.1% and 11.2%, respectively (2000 – 7.8% and 11.3%, respectively). Using the same guidelines, at October 31, 2001, the bank's leverage ratio was 4.1% (2000 – 4.2%).

During the year, the bank issued $750 million (2000 – $650 million) of Trust Capital Securities (RBC TruCS), a form of innovative Tier 1 capital under both Canadian and U.S. guidelines, which are reported as Non-controlling interest in a subsidiary on the consolidated balance sheet.

Other

On October 27, 2000, the bank entered into a five-year agreement with a AAA rated reinsurer, which requires the reinsurer to purchase up to $200 million of non-cumulative first preferred shares at the October 27, 2000 market price should the general allowance for credit losses (allocated general and unallocated) be drawn down below a certain level. If these shares had been issued they would have qualified as Tier 1 capital.

Subsequent event

On September 25, 2001, the bank announced its intention to redeem First Preferred Shares Series I on November 26, 2001.

NOTE 10 Income taxes

	2001	2000	1999
Provision for income tax in income			
Current			
Canada – Federal	**$ 845**	$ 799	$ 580
Provincial	**360**	349	234
International	**103**	258	176
	1,308	1,406	990
Deferred			
Canada – Federal	**23**	38	(3)
Provincial	**4**	9	(3)
International	**15**	(41)	(10)
	42	6	(16)
	1,350	1,412	974
Income tax expense (benefit) in shareholders' equity			
Unrealized gains and losses on available for sale securities, net of hedging activities	**221**	20	(105)
Unrealized foreign currency translation gains and losses, net of hedging activities	**(487)**	(37)	213
Gains and losses on derivatives designated as cash flow hedges	**(173)**	–	–
Additional pension obligation	**(12)**	–	–
	(451)	(17)	108
Total income taxes	**$ 899**	$ 1,395	$ 1,082

Deferred income taxes (temporary differences)

	2001	2000	1999
Deferred income tax asset (1)			
Allowance for credit losses	**$ 582**	$ 514	$ 509
Deferred compensation	**190**	78	19
Pension related	**105**	44	3
Tax loss carryforwards	**84**	72	19
Premises and equipment	**–**	83	–
Deferred income	**61**	152	142
Other	**399**	223	335
	1,421	1,166	1,027
Deferred income tax liability			
Premises and equipment	**(91)**	–	(29)
Deferred expense	**(149)**	(86)	(30)
Other	**(134)**	(77)	(171)
	(374)	(163)	(230)
Net deferred income tax asset	**$ 1,047**	$ 1,003	$ 797

(1) The bank has determined that it is more likely than not that its deferred income tax asset will be realized through a combination of future reversals of temporary differences and taxable income.

Reconciliation to statutory tax rate

	2001		2000		1999	
Income taxes at Canadian statutory tax rate	**$ 1,615**	**41.5%**	$ 1,558	42.8%	$ 1,163	43.0%
Increase (decrease) in income taxes resulting from						
Lower average tax rate applicable to subsidiaries	**(253)**	**(6.5)**	(303)	(8.3)	(199)	(7.1)
Tax-exempt income from securities	**(7)**	**(.2)**	(7)	(.2)	(10)	(.4)
Other	**(5)**	**(.1)**	164	4.5	20	.5
Income taxes reported in income/effective tax rate	**$ 1,350**	**34.7%**	$ 1,412	38.8%	$ 974	36.0%

Foreign earnings of certain subsidiaries would be taxed only upon their repatriation to Canada. The bank has not recognized a deferred tax liability for these undistributed earnings as management does not currently expect them to be repatriated. Taxes that would be payable if all foreign subsidiaries' accumulated unremitted earnings were repatriated are estimated at $772 million as at October 31, 2001 (2000 – $737 million; 1999 – $729 million).

NOTE 11 Pensions and other postretirement benefits

The bank sponsors a number of defined benefit and defined contribution plans providing pension and other postretirement benefits to eligible employees.

The following tables present information related to the bank's benefit plans, including amounts recorded on the consolidated balance sheet and the components of net periodic benefit cost:

	Pension plans		Other postretirement plans (1)	
	2001	2000	**2001**	2000
Change in fair value of plan assets (2)				
Fair value of plan assets at beginning of year	**$ 4,519**	$ 4,135	**$ 67**	$ 68
Actual return on plan assets	**123**	326	**7**	3
Company contributions	**20**	13	**1**	–
Plan participant contributions	**24**	18	**–**	–
Benefits paid	**(251)**	(197)	**(2)**	(4)
Experience gain (loss)	**(599)**	266	**–**	–
Plan settlements	**–**	–	**(72)**	–
Business acquisitions	**63**	–	**–**	–
Change in foreign currency exchange rate	**6**	(12)	**–**	–
Transfers from (to) other plans	**144**	(11)	**–**	–
Other	**–**	(19)	**–**	–
Fair value of plan assets at end of year	**$ 4,049**	$ 4,519	**$ 1**	$ 67
Change in benefit obligation				
Benefit obligation at beginning of year	**$ 3,710**	$ 3,471	**$ 609**	$ 574
Service cost	**104**	98	**64**	17
Interest cost	**268**	254	**49**	42
Plan participant contributions	**18**	18	**–**	–
Actuarial loss (gain)	**55**	70	**19**	(7)
Benefits paid	**(251)**	(197)	**(22)**	(17)
Transfers to other plans	**–**	(4)	**–**	–
Plan amendments and curtailments	**31**	15	**–**	–
Plan settlements	**–**	–	**(72)**	–
Business acquisitions	**117**	–	**35**	–
Change in foreign currency exchange rate	**(9)**	(15)	**–**	–
Changes in assumptions	**1**	–	**11**	–
Benefit obligation at end of year	**$ 4,044**	$ 3,710	**$ 693**	$ 609
Funded status				
Overfunded (underfunded) status at end of year	**$ 5**	$ 809	**$ (692)**	$ (542)
Unrecognized net actuarial loss (gain)	**32**	(756)	**42**	31
Unrecognized transition obligation	**(24)**	(1)	**207**	226
Unrecognized past service cost	**205**	258	**10**	–
Other	**(48)**	(94)	**1**	–
Prepaid (accrued) benefit expense	**$ 170**	$ 216	**$ (432)**	$ (285)
Weighted average assumptions as at October 31				
Discount rate	**7.00%**	7.25%	**7.25%**	7.25%
Assumed long-term rate of return on plan assets	**7.0%**	7.0%	**4.75%**	4.75%
Rate of increase in future compensation	**4.4%**	4.4%	**4.4%**	4.4%

Pension benefit expense (3)

	2001	2000	1999
Service cost	**$ 104**	$ 98	$ 120
Interest cost	**268**	254	238
Expected return on plan assets	**(306)**	(291)	(274)
Amortization of transition asset	**(2)**	(2)	–
Amortization of prior service cost	**17**	22	(3)
Amortization of net pension surplus	**–**	–	(1)
Recognized net actuarial loss (gain)	**(45)**	(41)	13
Change in valuation allowance	**(14)**	19	(10)
Defined benefit pension expense	**22**	59	83
Defined contribution pension expense	**30**	6	6
Pension benefit expense	**$ 52**	$ 65	$ 89

Other postretirement benefits expense (1)

	2001	2000	1999
Service cost	**$ 64**	$ 17	$ 20
Interest cost	**49**	42	40
Expected return on plan assets	**(1)**	(3)	(3)
Amortization of transition adjustment	**17**	17	17
Recognized net actuarial loss	**–**	–	1
Other	**2**	–	–
Other postretirement benefits expense	**$ 131**	$ 73	$ 75

(1) Includes postretirement health, dental and life insurance. The assumed health care cost trend rates for the next year used to measure the expected cost of benefits covered for the postretirement health and life plans were 7.25% for medical and 4.75% for dental with the ultimate trend rate of 4.5%. A one percentage point increase in assumed health care cost trend rates would have increased the service and interest costs and obligation by $18 million and $85 million, respectively. A one percentage point decrease in assumed health care cost trends would have lowered the service and interest costs and the obligation by $13 million and $67 million, respectively.
(2) Plan assets include the bank's Common Shares having a fair value of $43 million (2000 – $38 million).
(3) An assumed discount rate of 7.0% (2000 – 7.25%; 1999 – 6.5%) was used to determine pension expense.

NOTE 12 Stock-based compensation

Stock Option Plan

A Stock Option Plan is offered to certain key employees and non-employee directors of the bank. Under this plan, options are periodically granted to purchase common shares at prices not less than the market price of such shares immediately prior to the grant date. The options vest over a 4-year period for employees and immediately for directors and are exercisable for periods not exceeding 10 years.

For all options issued prior to 2000, no compensation expense was recognized since on the day of the grant the option's exercise price is not less than the market price of the underlying stock. When the options are exercised, the proceeds received are credited to common shares.

Beginning in 2000, the Stock Option Plan was amended to include Stock Appreciation Rights (SARs). The amended plan entitles a participant to elect to exercise either an option or the corresponding SAR. SARs can be exchanged for a cash amount equal to the difference between the exercise price and the closing price of the common shares on the day immediately preceding the day of exercise. Up to 100% of vested options can be exercised as SARs. The bank expects participants to exercise SARs and, as a result, accounts for this plan using the terms of the SAR rather than the option. The compensation expense recorded for the year ended October 31, 2001, in respect of this plan was $23 million (2000 – $52 million).

Stock options

	2001		2000		1999	
	Number of options (000s)	**Weighted average exercise price**	Number of options (000s)	Weighted average exercise price	Number of options (000s)	Weighted average exercise price
Outstanding at beginning of year	**25,880**	**$ 33.61**	20,966	$ 32.42	15,422	$ 28.66
Granted	**7,949**	**44.46**	8,286	33.09	6,828	39.01
Exercised – Common shares	**(2,819)**	**28.77**	(2,700)	22.05	(953)	17.83
– SARs	**(259)**	**33.55**	–	–	–	–
Cancelled	**(593)**	**37.82**	(672)	36.10	(331)	35.50
Outstanding at end of year	**30,158**	**$ 36.84**	25,880	$ 33.61	20,966	$ 32.42
Exercisable at end of year	**12,895**	**$ 32.62**	8,881	$ 30.29	5,988	$ 25.29
Available for grant	**20,289**		25,849		8,463	

Range of exercise prices

	Options outstanding			**Options exercisable**	
	Number outstanding (000s)	**Weighted average exercise price**	**Weighted average remaining contractual life**	**Number exercisable (000s)**	**Weighted average exercise price**
$14.46–$15.68	**1,392**	**$ 15.59**	**4.9**	**1,392**	**$ 15.59**
$24.80–$28.25	**3,959**	**25.93**	**7.5**	**3,200**	**25.40**
$30.00–$39.64	**18,845**	**36.81**	**8.1**	**8,213**	**38.18**
$43.59–$50.72	**5,962**	**49.17**	**10.0**	**90**	**46.49**
Total	**30,158**	**$ 36.84**	**8.3**	**12,895**	**$ 32.62**

Pro forma net income and earnings per share

FAS 123, *Accounting for Stock-Based Compensation*, permits either the fair value based method of accounting for an employee stock option plan, or the intrinsic value based method provided an entity makes pro forma disclosures of net income and earnings per share, as if the fair value method had been applied.

The bank has elected to provide pro forma disclosures, which demonstrate the effect if the bank had adopted the fair value based method of measuring outstanding stock options in 2001, 2000 and 1999 as indicated below:

	As reported			Pro forma (1)		
	2001	2000	1999	2001	2000	1999
Net income	$ 2,435	$ 2,208	$ 1,725	$ 2,415	$ 2,185	$ 1,699
Earnings per share	3.58	3.42	2.50	3.56	3.38	2.46
Diluted earnings per share	3.55	3.40	2.48	3.53	3.36	2.44

(1) Compensation expense under the fair value based method is recognized over the vesting period of the related stock options. Accordingly, the pro forma results of applying this method may not be indicative of future amounts.

In determining the pro forma disclosures above, the fair value of options granted was estimated on the date of grant using an option pricing model with the following assumptions: (i) risk-free interest rate of 5.86% (2000 – 6.04%; 1999 – 5.10%), (ii) expected option life of 10 years, (iii) expected volatility of 24% (2000 – 22%; 1999 – 23%) and (iv) expected dividends of 2.67% (2000 – 2.60%; 1999 – 2.80%). The fair value of each option granted was $14.78 (2000 – $10.26; 1999 – $10.93).

NOTE 12 Stock-based compensation (continued)

Employee Share Ownership Plans

The bank offers a Royal Employee Savings and Share Ownership Plan (RESSOP) to its employees, whereby the bank contributes 50% of employees' contributions to a maximum of 3% of the employee's salary in the form of common shares. The bank contributed $39 million (2000 – $39 million; 1999 – $40 million), under the terms of RESSOP, towards the purchase of common shares. As at October 31, 2001, an aggregate of 15,329,595 common shares were held under RESSOP.

A Restricted Share Ownership Plan is offered to certain employees of the bank. Under this plan, common shares are purchased for employees. The common shares are held in trust, and vest over two to three years. The value of the restricted shares as at October 31, 2001, was $2 million.

Deferred Share Plans

A Deferred Share Unit Plan is offered to executive officers and non-employee directors of the bank. Under this plan, each officer or director may choose to receive all or a percentage of their annual incentive bonus or fee in the form of deferred share units (DSUs). This election to participate in the plan must be made prior to the beginning of the fiscal year. The DSUs accumulate additional DSUs at the same rate as dividends on common shares. Officers and directors are not allowed to convert the DSUs until termination or retirement. The value of the DSUs, when converted to cash, will be equivalent to the market value of the common shares at the time the conversion takes place. The value of the DSUs as at October 31, 2001, was $52 million (2000 – $26 million; 1999 – $20 million). The compensation expense recorded for the year ended October 31, 2001, in respect of this plan was $8 million.

A Deferred Bonus Plan is offered to certain key employees of RBC Capital Markets. Under this plan, a percentage of each employee's annual incentive bonus is deferred and accumulates dividends at the same rate as dividends on common shares. The employee will receive the deferred bonus in equal amounts on the following three year-end dates. The value of the deferred bonus paid will be equivalent to the original deferred bonus adjusted for dividends and changes in the market value of common shares at the time the bonus is paid. The value of the deferred bonus as at October 31, 2001, was $128 million (2000 – $89 million; 1999 – $26 million). The compensation expense recovery for the year ended October 31, 2001, in respect of this plan was $5 million.

Deferred Share Plans are offered to certain key employees of RBC Investments. Under these plans, a percentage of each employee's year-end incentive bonus is deferred in the form of common shares. The shares are held in trust and vest over three years. The value of the deferred shares as at October 31, 2001, was $14 million.

Retention Plan – RBC Dain Rauscher

On the acquisition of Dain Rauscher, certain key employees of Dain Rauscher were offered retention payments totalling $318 million to be paid out evenly over expected service periods of between three and four years. Payments to participants of the plan are based on the market value of common shares on the vesting date. The compensation expense recorded for the year ended October 31, 2001, in respect of this plan was $143 million.

Other

A mid-term compensation plan is offered to certain senior executive officers of the bank. Under this plan, share units that vest evenly over three years are granted to participants of the plan. Payments under the plan will be made each year based on the market value of the common shares on the vesting date. The value of the share units as at October 31, 2001, was $21 million. The compensation expense recorded for the year ended October 31, 2001, in respect of this plan was $8 million.

NOTE 13 Restructuring charges

During the year, the bank recorded $91 million of restructuring costs in the consolidated statement of income as a result of the acquisition of Centura Banks, Inc. There were no restructuring charges in 2000.

	Balance at beginning of year	2001 Additions	Amount utilized	**Balance at end of year**
Human resources	$ 22	$ 22	$ 36	**$ 8**
Occupancy	21	–	17	**4**
Equipment	2	42	43	**1**
Other	4	27	13	**18**
	$ 49	$ 91	$ 109	**$ 31**

NOTE 14 Earnings per share

	2001	2000	1999
Basic earnings per share			
Net income	**$ 2,435**	$ 2,208	$ 1,725
Preferred share dividends	**(135)**	(134)	(157)
Net income available to common shareholders	**$ 2,300**	$ 2,074	$ 1,568
Average number of common shares outstanding	**641,516**	606,389	626,158
	$ 3.58	$ 3.42	$ 2.50
Diluted earnings per share			
Net income available to common shareholders	**$ 2,300**	$ 2,074	$ 1,568
Effect of assumed conversions (1)	**1**	2	2
Net income adjusted for diluted computation	**$ 2,301**	$ 2,076	$ 1,570
Weighted average number of shares outstanding	**641,516**	606,389	626,158
Convertible Class B and C shares (1)	**363**	736	2,708
Stock options (2)	**5,337**	2,740	3,439
Weighted average diluted number of shares outstanding	**647,216**	609,865	632,305
	$ 3.55	$ 3.40	$ 2.48

(1) The convertible shares include the Class B and C shares issued by the bank's wholly owned subsidiary Royal Bank DS Holding Inc., on the acquisition of Richardson Greenshields Limited on November 1, 1996. The Class B shares are exchangeable into Royal Bank of Canada Common Shares, while the exchange of the Class C shares is determined based on the bank's average Common Share price during the 20 days prior to the date the exchange is made. During the year the bank exchanged 36,527 (2000 – 4,701; 1999 – 4,606,341) Class B shares and 77,956 (2000 – 8,008,712; 1999 – nil) Class C shares for 13,621 (2000 – 1,667,334; 1999 – 9,579,166) Common Shares.

(2) The dilutive effect of stock options was computed using the treasury stock method. This method computes the number of incremental shares by assuming the outstanding stock options are (i) exercised and (ii) then reduced by the number of shares assumed to be repurchased from the issuance proceeds, using the average market price of our common stock for the period. Excluded from the computation of diluted earnings per share were average options outstanding of 7,862 with an exercise price of $50.72 and average options outstanding of 1,956 with an exercise price of $49.03 (2000 – 6,153,507 at $39.64; 6,589,464 at $39.01; 2,639 at $38.22; and 393 at $43.59; 1999 – 6,355,830 at $39.64 and 6,237,862 at $39.01) as the options' exercise prices were greater than the average market price of the bank's common stock.

NOTE 15 Commitments and contingencies

Financial instruments with contractual amounts representing credit risk

The primary purpose of these commitments is to ensure that funds are available to a client as required. The bank's policy for requiring collateral security with respect to these instruments and the types of collateral security held is generally the same as for loans.

Guarantees and standby letters of credit, which represent irrevocable assurances that the bank will make payments in the event that a client cannot meet its obligations to third parties, carry the same credit risk as loans. Documentary and commercial letters of credit, which are written undertakings by the bank on behalf of a client authorizing a third party to draw drafts on the bank up to a stipulated amount under specific terms and conditions, are collateralized by the underlying shipment of goods to which they relate.

In securities lending transactions, the bank acts as an agent for the owner of a security, who agrees to lend the security to a borrower for a fee, under the terms of a pre-arranged contract. The borrower must fully collateralize the security loan at all times.

Commitments to extend credit represent unused portions of authorizations to extend credit in the form of loans, bankers' acceptances, guarantees or letters of credit.

Uncommitted amounts represent an amount for which the bank retains the option to extend credit to a borrower.

A note issuance facility represents an underwriting agreement that enables a borrower to issue short-term debt securities. A revolving underwriting facility represents a note issuance facility that can be accessed for a specified period of time.

Financial instruments with contractual amounts representing credit risk

	2001	2000
Guarantees and standby letters of credit	**$ 13,391**	$ 13,658
Documentary and commercial letters of credit	**750**	456
Securities lending	**21,377**	20,333
Commitments to extend credit		
Original term to maturity of 1 year or less	**44,179**	38,853
Original term to maturity of more than 1 year	**39,960**	41,599
Uncommitted amounts	**53,750**	59,113
Note issuance/revolving underwriting facilities	**132**	155
	$ 173,539	$ 174,167

NOTE 15 Commitments and contingencies (continued)

Lease commitments

Minimum future rental commitments for premises and equipment under long-term non-cancellable leases for the next five years and thereafter are shown below.

Lease commitments

2002	$ 385
2003	350
2004	315
2005	268
2006	307
Thereafter	853
Total	$ 2,478

Litigation

Various legal proceedings are pending that challenge certain practices or actions of the bank and its subsidiaries. Many of these proceedings are loan-related and are in reaction to steps taken by the bank and its subsidiaries to collect delinquent loans and enforce rights in collateral securing such loans. Management considers that the aggregate liability resulting from these proceedings will not be material.

Pledged assets

Securities with a carrying value of $46.4 billion (2000 – $27.1 billion) have been pledged as collateral for various types of funding transactions including obligations related to assets sold under repurchase agreements and obligations related to securities sold short. Securities owned that are pledged as collateral that can be sold or repledged by the secured party are reported in Trading account securities at $3.6 billion and Available for sale securities at $2.6 billion on the consolidated balance sheet. Included in the securities pledged are assets with a carrying value of $2.6 billion (2000 – $2.4 billion) that have been deposited as collateral in order to participate in clearing and payment systems and depositories or to have access to the facilities of central banks in foreign jurisdictions.

The fair value of collateral accepted that can be sold or repledged by the bank totalled $52.9 billion. Such collateral is generally obtained under reverse repurchase and securities borrowing agreements. Of this collateral, $41.9 billion has been sold or repledged, generally as collateral under repurchase agreements or to cover short sales.

NOTE 16 Derivative financial instruments

Derivative financial instruments are financial contracts whose value is derived from an underlying interest rate, foreign exchange rate, equity or commodity instrument or index.

Derivative product types

The bank uses the following derivative financial instruments for both trading and non-trading purposes.

Swaps are transactions in which two parties exchange cash flows on a specified notional amount for a predetermined period. For interest rate swaps, fixed and floating interest payments are exchanged based on a notional amount. Cross currency swaps involve the exchange of fixed or floating interest payments in one currency for the receipt of fixed or floating interest payments in another currency. Cross currency interest rate swaps involve the exchange of both interest and principal amounts in two different currencies.

Forwards and futures are contractual obligations to buy or sell a financial instrument on a future date at a specified price. Forward contracts are effectively tailor-made agreements that are transacted between counterparties in the over-the-counter market, whereas futures are standardized contracts that are transacted on regulated exchanges.

Options are contractual agreements under which the seller (writer) grants the purchaser the right, but not the obligation, either to buy (call option) or sell (put option), by or at a set date, a specified amount of a financial instrument at a predetermined price. The seller receives a premium from the purchaser for this right.

Derivatives held or issued for trading purposes

Most of the bank's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to clients to enable them to transfer, modify or reduce current or expected risks. Trading involves market-making, positioning and arbitrage activities. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume. Positioning involves managing market risk positions with the expectation of profiting from favourable movements in prices, rates or indices. Arbitrage activities involve identifying and profiting from price differentials between markets and products. The bank does not deal, to any significant extent, in leveraged derivative transactions. These transactions contain a multiplier which, for any given change in market prices, could cause the change in the transaction's fair value to be significantly different from the change in fair value that would occur for a similar derivative without the multiplier.

Derivatives held or issued for non-trading purposes

The bank also uses derivatives in connection with its own asset/liability management activities, which include hedging and investment activities.

Interest rate swaps are used to adjust exposure to interest rate risk by modifying the repricing or maturity characteristics of existing and/or anticipated assets and liabilities. Purchased interest rate options are used to hedge redeemable deposits and other options embedded in consumer products. Written options are used in the bank's asset/liability management activities when specifically linked to a purchased option in the form of a collar.

The bank's overall interest rate risk management objective is to minimize significant unplanned fluctuations in earnings and cash flows caused by interest rate volatility. Interest rate fluctuations will either cause assets and liabilities to appreciate or depreciate in market value or cause a variability in cash flows. In a fair value hedge, gains or losses on derivatives that are linked to these assets and liabilities will substantially offset the unrealized appreciation or depreciation. In a cash flow hedge, derivatives linked to the assets and liabilities will reduce the variability of cash flows resulting from interest rate fluctuations.

The bank may also choose to enter into derivative transactions to economically hedge certain business strategies that do not otherwise qualify for hedge accounting, or where hedge accounting is not considered economically feasible to implement. In such circumstances, volatility from interest rate movements is reflected in Non-interest revenue.

Adoption of FAS 133

The bank adopted Statement of Financial Accounting Standards, *Accounting for Derivative Instruments and Hedging Activities* (FAS 133), as amended by FAS 138, on November 1, 2000, and recorded a cumulative transition adjustment gain of $20 million in Net income and $60 million in Other comprehensive income. The adjustment to Net income comprised $10 million to recognize the ineffective portions of fair value hedges and $10 million to recognize the fair value of derivatives not qualifying for hedge accounting. The adjustment to Other comprehensive income of $60 million comprises $57 million to recognize at fair value all derivatives that are designated as cash flow hedges, $4 million to recognize at fair value securities reclassified from Held to maturity to Available for sale, and a loss of $1 million for derivatives hedging the net foreign currency investments. Of the $57 million recorded in Other comprehensive income for cash flow hedges, a net gain of $24 million has been reclassified to Net income during 2001.

Fair value hedge

For the year ended October 31, 2001, the ineffective portions recognized in Non-interest revenue amounted to a net unrealized loss of $11 million, excluding the transition gain recorded on adoption of FAS 133. All components of each derivative's change in fair value have been included in the assessment of fair value hedge effectiveness.

The bank did not hedge any firm commitments for the year ended October 31, 2001.

Cash flow hedge

For the year ended October 31, 2001, a net unrealized loss of $250 million, excluding the transition gain on adoption of FAS 133, was recorded in Other comprehensive income for the effective portion of changes in fair value of derivatives designated as cash flow hedges. The amounts recognized as Other comprehensive income are reclassified to Net income in the periods in which Net income is affected by the variability in cash flows of the hedged item. Of the $250 million recognized as Other comprehensive income, a net loss of $24 million was reclassified to Net income during the year. A net loss of $81 million deferred in Accumulated other comprehensive income as at October 31, 2001, is expected to be reclassified to Net income during the next 12 months.

For the year ended October 31, 2001, a net unrealized gain of $20 million was recognized in Non-interest revenue for the ineffective portions of cash flow hedges. All components of each derivative's change in fair value have been included in the assessment of cash flow hedge effectiveness.

The bank did not hedge any forecasted transactions for the year ended October 31, 2001.

Derivatives – Notional amounts and replacement cost

The following tables provide the notional amounts and gross positive replacement cost of the bank's derivative transactions. Notional amounts, which are off-balance sheet, serve as a point of reference for calculating payments and are a common measure of business volume. The gross replacement cost of derivatives represents the total current replacement value of all outstanding transactions in a gain position, before factoring in the impact of master netting agreements.

Derivative-related credit risk

Credit risk from derivative transactions is generated by the potential for the counterparty to default on its contractual obligations when one or more transactions have a positive market value to the bank. This market value is referred to as replacement cost since it is an estimate of what it would cost to replace transactions at prevailing market rates if a default occurred.

For internal risk management purposes, the credit risk arising from a derivative transaction is defined as the sum of the replacement cost plus an add-on that is an estimate of the potential change in the market value of the transaction through to maturity. The add-on is determined by statistically based models that project the expected volatility of the variable(s) underlying the derivative, whether interest rate, foreign exchange rate, equity or commodity price. Both the replacement cost and the add-on are continually re-evaluated over the life of each transaction to ensure that sound credit risk valuations are used.

Netting is a technique that can reduce credit exposure from derivatives and is generally facilitated through the use of master netting agreements. The two main categories of netting are close-out netting and settlement netting. Under the close-out netting provision, if the counterparty defaults, the bank has the right to terminate all transactions covered by the master agreement at the then-prevailing market values and to sum the resulting market values, offsetting negative against positive values, to arrive at a single net amount owed by either the counterparty or the bank. Under the settlement netting provision, all payments and receipts in the same currency and due on the same day between specified pairs of bank and counterparty units are netted, generating a single payment in each currency, due either by the bank or the counterparty unit. The bank actively encourages counterparties to enter into master netting agreements. However, measurement of the bank's credit exposure arising out of derivative transactions is not reduced to reflect the effects of netting unless the enforceability of that netting is supported by appropriate legal analysis as documented in bank policy.

To further manage derivative-related counterparty credit exposure, the bank enters into agreements containing mark-to-market cap provisions with some counterparties. Under such provisions, the bank has the right to request that the counterparty pay down or collateralize the current market value of its derivatives position with the bank. The use of collateral does not currently represent a significant credit mitigation technique for the bank in managing derivative-related credit risk.

NOTE 16 Derivative financial instruments (continued)

The bank subjects its derivative-related credit risks to the same credit approval, limit and monitoring standards that it uses for managing other transactions that create credit exposure. This includes evaluation of counterparties as to creditworthiness, and managing the size, diversification and maturity structure of the portfolio. Credit utilization for all products is compared with established limits on a continual basis and is subject to a standard exception reporting process. The bank utilizes a single internal rating system for all credit risk exposure. In most cases, these internal ratings approximate the external risk ratings of public rating agencies. The table below shows replacement cost, both before and after the impact of netting, of the bank's derivatives by risk rating and by counterparty type. During 2001 and 2000, neither the bank's actual credit losses arising from derivative transactions nor the level of impaired derivative contracts were significant.

Replacement cost of derivative financial instruments by risk rating and by counterparty type (1)

	Risk rating (2)					Counterparty type (3)			
As at October 31, 2001	AAA, AA	A	BBB	BB or lower	Total	Banks	OECD governments	Other	Total
Gross positive replacement cost (4)	$ 15,558	$ 9,981	$ 2,541	$ 701	$ 28,781	$ 18,770	$ 1,892	$ 8,119	$ 28,781
Impact of master netting agreements	(11,975)	(5,659)	(1,026)	(172)	(18,832)	(15,118)	–	(3,714)	(18,832)
Replacement cost (after netting agreements)	$ 3,583	$ 4,322	$ 1,515	$ 529	$ 9,949	$ 3,652	$ 1,892	$ 4,405	$ 9,949
Replacement cost (after netting agreements) – 2000	$ 4,275	$ 4,110	$ 1,346	$ 334	$ 10,065	$ 4,029	$ 1,846	$ 4,190	$ 10,065

(1) As at November 1, 2000, derivatives embedded in financial instruments as well as certain warrants and loan commitments disclosed as derivatives are required to be recorded at fair value. The replacement cost of $49 million is excluded from these amounts.
(2) The bank's internal risk ratings for major counterparty types approximate those of public rating agencies. Ratings of AAA, AA, A and BBB represent investment grade ratings and ratings of BB and lower represent non-investment grade ratings.
(3) Counterparty type is defined in accordance with the capital adequacy requirements of the Superintendent of Financial Institutions Canada.
(4) Represents the total current replacement value of all outstanding contracts in a gain position, before factoring in the impact of master netting agreements.

Notional amount of derivatives by term to maturity and replacement cost (1)

	Term to maturity				2001			2000		
	Within 1 year	1 to 5 years	Over 5 years (2)	Total	Trading	Other than trading	Replacement cost (3)	Trading	Other than trading	Replacement cost (3)
Over-the-counter (OTC) contracts										
Interest rate contracts										
Forward rate agreements	$ 16,700	$ 75,053	$ 3,925	$ 95,678	$ 95,678	$ –	$ 108	$ 16,518	$ –	$ 7
Swaps	201,031	359,441	137,430	697,902	628,735	69,167	17,568	477,038	53,614	4,517
Options purchased	6,549	7,838	5,514	19,901	19,787	114	416	31,564	131	168
Options written	10,783	6,570	4,824	22,177	22,177	–	–	32,306	332	–
Foreign exchange contracts										
Forward contracts	511,102	30,982	4,352	546,436	528,467	17,969	6,839	540,790	14,077	10,878
Cross currency swaps	1,064	2,934	4,620	8,618	8,618	–	518	4,836	452	180
Cross currency interest rate swaps	17,391	28,194	20,616	66,201	63,405	2,796	1,384	49,186	8,574	2,456
Options purchased	45,984	3,168	2	49,154	48,542	612	721	47,212	188	934
Options written	50,969	3,127	37	54,133	54,133	–	–	53,275	188	–
Other contracts (4)	16,753	25,549	2,418	44,720	41,122	3,598	1,227	16,415	–	1,423
Exchange-traded contracts										
Interest rate contracts										
Futures – long positions	16,046	4,235	38	20,319	20,319	–	–	14,544	430	–
Futures – short positions	39,089	4,211	19	43,319	43,232	87	–	19,949	800	–
Options purchased	5,615	7,737	–	13,352	13,352	–	–	12,117	–	–
Options written	11,230	849	–	12,079	12,079	–	–	18,909	–	–
Foreign exchange contracts										
Futures – long positions	348	–	–	348	348	–	–	535	–	–
Futures – short positions	144	–	–	144	144	–	–	17	–	–
Other contracts (4)	47,270	10,860	–	58,130	58,130	–	–	49,025	–	–
	$ 998,068	$ 570,748	$ 183,795	$1,752,611	$1,658,268	$ 94,343	28,781	$1,384,236	$ 78,786	20,563
Impact of master netting agreements										
With intent to settle net or simultaneously (5)							(39)			(27)
Without intent to settle net or simultaneously (6)							(18,793)			(10,471)
							$ 9,949			$ 10,065

(1) As at November 1, 2000, derivatives embedded in financial instruments as well as certain warrants and loan commitments disclosed as derivatives are required to be recorded at fair value. The notional amount of $1,693 million and replacement cost of $49 million are excluded from these amounts.
(2) Includes contracts maturing in over 10 years with a notional value of $19,637 million and related gross positive replacement cost of $950 million.
(3) Represents the total current replacement value of all outstanding contracts in a gain position, before factoring in the impact of master netting agreements. Exchange-traded contracts are excluded from this presentation as the credit risk associated with these instruments is minimal since they are settled in cash on a daily basis. Written options are excluded as they represent obligations of the bank and as such do not attract credit risk.
(4) Comprises precious metals, commodity, equity-linked and credit derivative contracts.
(5) Impact of offsetting credit exposures on contracts where the bank both has a legally enforceable master netting agreement in place and intends to settle the contracts on either a net basis or simultaneously.
(6) Additional impact of offsetting credit exposures on contracts where the bank has a legally enforceable master netting agreement in place but does not intend to settle the contracts on a net basis or simultaneously.

NOTE 17 Concentrations of credit risk

Concentrations of credit risk exist if a number of clients are engaged similar activities, or are located in the same geographic region or have comparable economic characteristics such that their ability to meet contractual obligations would be similarly affected by changes in economic, political or other conditions. Concentrations of credit risk indicate the relative sensitivity of the bank's performance to developments affecting a particular industry or geographic location. Management does not believe that the concentrations described below are unusual.

	2001									2000								
	Canada	%	United States	%	Europe	%	Other countries	%	Total	Canada	%	United States	%	Europe	%	Other countries	%	Total
On-balance sheet assets																		
Total loans (1)	$141,569	78%	$ 25,944	14%	$ 7,782	4%	$ 5,805	4%	$181,100	$141,400	84%	$ 13,415	8%	$ 5,871	4%	$ 7,126	4%	$167,812
Off-balance sheet credit instruments																		
Financial instruments with contractual amounts representing credit risk																		
Committed and uncommitted amounts to extend credit (2)	$ 76,832	56%	$ 43,508	32%	$ 14,465	10%	$ 3,084	2%	$137,889	$ 68,172	49%	$ 46,539	33%	$ 15,940	11%	$ 8,914	7%	$139,565
Other financial instruments	20,990	59	9,893	28	4,436	12	331	1	35,650	20,975	61	10,505	30	2,705	8	417	1	34,602
	$ 97,822	56%	$ 53,401	31%	$ 18,901	11%	$ 3,415	2%	$173,539	$ 89,147	51%	$ 57,044	33%	$ 18,645	11%	$ 9,331	5%	$174,167
Derivatives before master netting agreements (3), (4)	$ 6,899	24%	$ 9,154	32%	$ 11,741	41%	$ 987	3%	$ 28,781	$ 4,515	22%	$ 5,798	28%	$ 8,618	42%	$ 1,632	8%	$ 20,563

(1) The largest concentrations in Canada are Ontario at 39% (2000 – 36%) and British Columbia at 12% (2000 – 15%). No industry accounts for more than 10% of total loans.
(2) Of the commitments to extend credit, the largest industry concentration relates to financial institutions at 34% (2000 – 37%), mining and energy at 15% (2000 – 13%), transportation at 10% (2000 – 11%) and manufacturing at 10% (2000 – 10%).
(3) Represents replacement cost of which the largest concentration by counterparty type is with banks at 64% (2000 – 61%).
(4) As at November 1, 2000, derivatives embedded in financial instruments as well as certain warrants and loan commitments disclosed as derivatives are required to be recorded at fair value. The replacement cost of $49 million is excluded from these amounts.

NOTE 18 Estimated fair value of financial instruments

The estimated fair values are designed to approximate values at which these instruments could be exchanged in a current transaction between willing parties. However, many of the financial instruments lack an available trading market and therefore, fair values are based on estimates using net present value and other valuation techniques, which are significantly affected by the assumptions used concerning the amount and timing of estimated future cash flows and discount rates, which reflect varying degrees of risk. Furthermore, due to the use of subjective judgment and uncertainties, the aggregate fair value amounts should not be interpreted as being realizable in an immediate settlement of the instruments.

The estimated fair values disclosed below do not reflect the value of assets and liabilities that are not considered financial instruments such as "premises and equipment." In addition, the values of other non-financial assets and liabilities, such as intangible values of client relationships, have been excluded.

Financial instruments

	2001			2000		
	Book value	Fair value	Difference	Book value	Fair value	Difference
Financial assets						
Cash resources (1)	$ 17,516	$ 17,535	$ 19	$ 16,408	$ 16,408	$ –
Securities (2)	81,100	81,100	–	63,461	63,468	7
Assets purchased under reverse repurchase agreements (1)	35,870	35,870	–	18,303	18,303	–
Loans (3)	178,822	183,186	4,364	165,941	166,846	905
Other assets (4)	40,745	40,745	–	26,581	26,689	108
Financial liabilities						
Deposits (5)	235,687	238,092	(2,405)	206,237	207,727	(1,490)
Acceptances (1)	9,923	9,923	–	11,628	11,628	–
Obligations related to securities sold short (1)	16,037	16,037	–	12,873	12,873	–
Obligations related to assets sold under repurchase agreements (1)	20,864	20,864	–	9,005	9,005	–
Other liabilities (4)	53,089	53,089	–	34,136	34,136	–
Subordinated debentures (6)	6,662	6,646	16	5,825	5,809	16

(1) Due to their short-term maturity, the carrying values of certain on-balance sheet financial instruments are assumed to approximate their fair values.
(2) The estimated fair values are provided in the Securities note to the consolidated financial statements (note 4). These are based on quoted market prices, when available. If quoted market prices are not available, fair values are estimated using quoted market prices of similar securities.
(3) For certain variable rate loans that reprice frequently, fair values are assumed to be equal to the carrying values. The fair values of other loans are estimated through a discounted cash flow calculation that applies market interest rates currently charged for similar new loans to expected maturity amounts.
(4) The carrying values of Other assets and Other liabilities approximate their fair values.
(5) The fair values of deposits with no stated maturity are assumed to be equal to their carrying values. The estimated fair values of fixed-rate deposits are determined by discounting the expected cash flows, using market interest rates currently offered for deposits of similar remaining maturities (adjusted for early redemptions where appropriate).
(6) The fair values of the debentures are based on quoted market prices for similar issues, or current rates offered to the bank for debt of the same remaining maturity.

NOTE 18 Estimated fair value of financial instruments (continued)

Derivative financial instruments (1), (2)

	2001				2000	
	Average fair value for the year ended (3)		Year-end fair value		Year-end fair value	
	Positive	Negative	Positive	Negative	Positive	Negative
Held or issued for trading purposes						
Interest rate contracts						
Forward rate agreements	$ 33	$ 24	$ 108	$ 79	$ 7	$ 4
Swaps	7,507	8,311	16,211	16,692	3,845	4,574
Options purchased	258	–	416	–	168	–
Options written	–	203	–	325	–	136
	7,798	8,538	16,735	17,096	4,020	4,714
Foreign exchange contracts						
Forward contracts	9,239	8,339	6,800	5,868	10,683	9,722
Cross currency swaps	265	222	518	315	91	125
Cross currency interest rate swaps	1,770	1,718	1,309	1,975	2,164	1,830
Options purchased	779	–	715	–	934	–
Options written	–	731	–	560	–	950
	12,053	11,010	9,342	8,718	13,872	12,627
Other contracts (4)	1,418	1,667	928	2,651	1,423	1,178
	$ 21,269	$ 21,215	27,005	28,465	19,315	18,519
Held or issued for other than trading purposes						
Interest rate contracts						
Swaps			1,357	1,104	672	256
Options written			–	–	–	7
			1,357	1,104	672	263
Foreign exchange contracts						
Forward contracts			39	313	195	310
Cross currency swaps			–	–	89	89
Cross currency interest rate swaps			75	50	292	252
Options purchased			6	–	–	–
			120	363	576	651
Other contracts (4)			299	51	–	–
			1,776	1,518	1,248	914
Total gross fair values before netting			28,781	29,983	20,563	19,433
Impact of master netting agreements						
With intent to settle net or simultaneously (5)			(39)	(39)	(27)	(27)
Without intent to settle net or simultaneously (6)			(18,793)	(18,793)	(10,471)	(10,471)
Total			$ 9,949	$ 11,151	$ 10,065	$ 8,935

(1) The fair values of derivatives are presented on a gross basis before the impact of legally enforceable master netting agreements. The fair values of derivatives are determined using various methodologies including: quoted market prices, where available; prevailing market rates for instruments with similar characteristics and maturities; net present value analysis or other pricing models as appropriate.

(2) As at November 1, 2000, derivatives embedded in financial instruments as well as certain warrants and loan commitments disclosed as derivatives are required to be recorded at fair value. The fair value of $49 million is excluded from the amounts in this table.

(3) Average fair value amounts are calculated based on monthly balances.

(4) Comprises precious metals, commodity, equity-linked and credit derivative contracts.

(5) Impact of offsetting credit exposures on contracts where the bank both has a legally enforceable master netting agreement in place and intends to settle the contracts on either a net basis or simultaneously.

(6) Additional impact of offsetting credit exposures on contracts where the bank has a legally enforceable master netting agreement in place but does not intend to settle the contracts on a net basis or simultaneously.