NOTE 1 Significant accounting policies

The accompanying consolidated financial statements are stated in Canadian dollars, the currency of the country in which we are incorporated and principally operate. 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. We have 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. We have 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 we have significant influence or exercise joint control, respectively. These investments are reported in Other assets. We have included in Non-interest revenue our share of earnings, and gains and losses realized on dispositions of these investments.

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, based on management's intentions, as Trading account or Available for sale.

Trading account securities, which are purchased for sale in the near term, are reported at estimated fair value. Obligations to deliver trading account 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. Dividend and interest income accruing on Trading account securities is recorded in Interest income. 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 foreign currency risk, changes in funding sources or terms, or to meet liquidity needs. These securities are carried at estimated fair 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. Dividend and interest income is recorded in Interest income. 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.

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

Assets purchased under reverse repurchase agreements and sold under repurchase agreements

We purchase securities under agreements to resell (reverse repurchase agreements) and sell securities under agreements to repurchase (repurchase agreements). Reverse repurchase agreements are treated as collateralized lending transactions and are carried on the Consolidated balance sheet at the amounts at which the securities were initially acquired. Repurchase agreements are treated as collateralized borrowing transactions and are carried on the Consolidated balance sheet at the amounts at which the securities were initially sold, plus accrued interest on interest-bearing securities. Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements are included in Interest income and Interest expense, respectively.

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 nonaccrual 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 nonaccrual, 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 banks, derivatives 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 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 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.

Acceptances
Acceptances are short-term negotiable instruments issued by our customers to third parties, which we guarantee. 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 in Other assets. Fees earned are reported in Non-interest revenue.

Derivatives
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 our 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, foreign currency and interest rate options, and credit derivatives. 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 we have 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 our own exposures, we determine for each derivative whether hedge accounting can be applied. Where hedge accounting can be applied, 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.

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.

NOTE 1 Significant accounting policies (continued)

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 manage 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 computer equipment, 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.

Business combinations, goodwill and other intangibles
Effective November 1, 2001, we adopted Statement of Financial Accounting Standards, *Goodwill and Other Intangible Assets* (FAS 142) and Statement of Financial Accounting Standards, *Business Combinations* (FAS 141).

The *Business Combinations* standard requires that all business combinations be accounted for using the purchase method. Identifiable intangible assets are recognized separately from Goodwill and included in Other intangibles. Goodwill represents the excess of the price paid for the acquisition of subsidiaries over the fair value of the net assets acquired. Under the *Goodwill and Other Intangible Assets* standard, goodwill and indefinite life intangibles are no longer amortized but are subject to fair value impairment tests on at least an annual basis. Any impairment of goodwill or intangibles will be recognized as Non-interest expense in the period of impairment. Other intangibles with a finite life are amortized over their estimated useful lives and also tested for impairment.

Income taxes
We use 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 Shareholders' equity are netted with such items.

Net 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
We offer 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.

We fund our 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 of equity securities, bonds and debentures. Pension fund assets are valued at fair value.

Pension benefit expense consists of the cost of employee pension benefits for the current year's service, interest cost on the liability, expected investment return on the market-related value of plan assets and the amortization of both unrecognized prior service costs and unrecognized net actuarial gains or 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 pension benefit cost in Other assets. The cumulative excess of pension expense over pension fund contributions is reported as accrued pension benefit expense in Other liabilities. In addition, other postretirement benefits are also reported in Other liabilities.

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

Recognition of an additional minimum liability is required if an unfunded accumulated benefit obligation exists and (i) an asset has been recognized as prepaid pension benefit cost, (ii) the liability already recognized as unfunded accrued pension benefit expense is less than the unfunded accumulated benefit obligation, or (iii) no accrued pension benefit expense or prepaid pension benefit 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
We administer and manage 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, custodial services and administration of assets securitized. Fees are recognized and reported in Non-interest revenue as the services are provided.

Loan securitization
We periodically securitize loans by selling loans to independent special purpose entities or trusts that issue securities to investors. These transactions are accounted for as sales when we are deemed to have surrendered control over such assets and have received in exchange consideration other than beneficial interests in these transferred assets. We often retain 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. When quotes are not available for retained interests, we generally determine fair value based on the present value of expected future 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, we recognize a servicing liability on the date of transfer and amortize 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 we would not recover substantially all of our recorded investment, are classified as Available for sale securities.

Insurance operations

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

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.

Claims and policy benefit liabilities represent estimates for future insurance policy benefits. Liabilities 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 liability is equal to the policyholder account values and includes a net level premium reserve for some contracts. Liabilities 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 and Non-interest expense. 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 us and is included in Other assets. It is amortized in the same manner as deferred acquisition costs for life insurance contracts.

Significant future accounting changes

Stock-based compensation

The Financial Accounting Standards Board issued a proposed statement *Accounting for Stock-Based Compensation – Transition and Disclosure*. This proposal is an amendment to FAS 123 *Accounting for Stock-Based Compensation* and outlines alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation. In addition to the prospective application of the fair value recognition provision, retroactive restatement and recognition of stock-based compensation costs as if the fair value provision had been applied to all awards granted, modified or settled after fiscal years beginning after December 15, 1994, is also permitted.

Consolidation of special purpose entities

The Financial Accounting Standards Board issued an Exposure Draft, *Consolidation of Certain Special-Purpose Entities*, on June 28, 2002. The Exposure Draft is an interpretation of Accounting Research Bulletin 51, *Consolidated Financial Statements*, and provides new guidance on determining who is a primary beneficiary of the special purpose entities and will therefore be required to consolidate the special purpose entities. The effect of this Exposure Draft cannot be determined as this time.

NOTE 2 Significant acquisitions and dispositions

2002

Acquisitions

During 2002, we completed the acquisitions of the private banking business of Barclays PLC in the Americas (Barclays) and Eagle Bancshares, Inc. (Eagle Bancshares). Goodwill has been estimated using the best available information as at the date of these financial statements and may be adjusted for up to one year after the closing date of the acquisition in order to incorporate refinements to the initial fair value estimates of assets and liabilities acquired. The details of these acquisitions are as follows:

	Barclays	Eagle Bancshares
Acquisition date	June 28, 2002	July 22, 2002
Business segment	RBC Investments	RBC Banking
Percentage of shares acquired	–	100%
Purchase consideration	Assets were purchased with an initial cash payment of approximately US$111 million. Additional consideration that is contingent upon the amount of business retained is expected to be paid next year and will be recorded as an intangible asset.	Each Eagle Bancshares common share was purchased for US$26 cash
Fair value of tangible assets acquired	$ 741	$ 1,844
Fair value of liabilities assumed	(640)	(1,764)
Fair value of identifiable net tangible assets acquired	101	80
Core deposit intangibles (1)	–	22
Customer lists and relationships (1)	68	–
Goodwill	–	133
Total purchase consideration	$ 169	$ 235

(1) Core deposit intangibles and customer lists and relationships are amortized on a straight-line basis over an estimated average useful life of 10 and 15 years, respectively.

NOTE 2 Significant acquisitions and dispositions (continued)

Pending acquisitions

Acquisition of certain U.S. operations of Generali Group

On April 30, 2002, RBC Insurance announced an agreement to acquire certain assets of Generali Group, the Trieste, Italy-based insurer. These assets consist of the operations of Business Men's Assurance Company of America (BMA) and include an inforce block of approximately 150,000 traditional life insurance policies and annuities as well as the infrastructure for manufacturing variable insurance products. In a related transaction, RBC Dain Rauscher plans to acquire BMA's mutual fund company, Jones & Babson Inc.

The purchase price for these businesses is estimated at approximately US$220 million. The acquisitions are subject to regulatory approvals, approval by shareholders of advisory clients of Jones & Babson Inc., and other customary closing conditions.

Acquisition of Admiralty Bancorp, Inc.

On August 29, 2002, RBC Centura Banks, Inc. (Centura), a wholly owned subsidiary of Royal Bank of Canada, and Admiralty Bancorp, Inc. (Admiralty) announced that they have signed a definitive merger agreement by which Centura will acquire Admiralty. The cash consideration expected to be paid with respect to the acquisition is approximately US$150 million. The excess of approximately US$100 million of the purchase price over the estimated fair value of the net tangible assets acquired will first be allocated to identifiable intangible assets, with the residual allocated to Goodwill. The acquisition is subject to regulatory approvals, approval by shareholders of Admiralty, and other customary closing conditions.

2001

Acquisitions

During 2001, we completed the acquisitions of 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). We accounted for all of these acquisitions using the purchase method. 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	RBC Insurance	RBC Investments & RBC Capital Markets	RBC Banking	RBC Investments & RBC Capital Markets
Percentage of shares acquired	100%	100%	100%	100%
Purchase consideration	Assets were purchased with a dividend of US$70 million paid from Liberty Life Insurance Company plus US$580 million cash	Each Dain Rauscher common share was purchased for US$95 cash	Approximately 67 million Royal Bank common shares were issued, valued at $49.20 each	Each Tucker Anthony Sutro common share was purchased for US$24 cash
Fair value of tangible assets acquired	$ 2,858	$ 3,719	$ 18,270	$ 831
Fair value of liabilities assumed	(2,095)	(3,425)	(17,214)	(580)
Fair value of identifiable net tangible assets acquired	763	294	1,056	251
Core deposit intangibles (1)	–	–	395	–
Mortgage servicing rights (1)	–	–	12	–
Goodwill	127	1,544	1,868	692
Total purchase consideration	$ 890	$ 1,838	$ 3,331	$ 943

(1) Core deposit intangibles and mortgage servicing rights are amortized on a straight-line basis over an estimated average useful life of 10 and 5 years, respectively.

Dispositions

During 2001, we sold our 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.

In addition, we 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

2002	**RBC Banking**	**RBC Insurance**	**RBC Investments**	**RBC Capital Markets**	**RBC Global Services**	**Other**	**Total**	**Canada**	**United States**	**Other International**
Net interest income on taxable equivalent basis	**$ 5,576**	**$ 223**	**$ 371**	**$ 553**	**$ 136**	**$ 332**	**$ 7,191**	**$ 5,550**	**$ 1,262**	**$ 379**
Taxable equivalent adjustment	**19**	**–**		**21**	**–**	**–**	**40**	**24**	**16**	**–**
Net interest income	**5,557**	**223**	**371**	**532**	**136**	**332**	**7,151**	**5,526**	**1,246**	**379**
Provision for credit losses	**626**	**–**	**(1)**	**465**	**10**	**(35)**	**1,065**	**529**	**440**	**96**
	4,931	**223**	**372**	**67**	**126**	**367**	**6,086**	**4,997**	**806**	**283**
Non-interest revenue	**2,090**	**357**	**3,276**	**2,142**	**672**	**42**	**8,579**	**4,318**	**3,125**	**1,136**
Non-interest expense	**4,520**	**399**	**3,144**	**1,627**	**548**	**6**	**10,244**	**5,747**	**3,670**	**827**
Net income before income taxes	**2,501**	**181**	**504**	**582**	**250**	**403**	**4,421**	**3,568**	**261**	**592**
Income taxes	**947**	**(9)**	**158**	**143**	**77**	**99**	**1,415**	**1,318**	**49**	**48**
Non-controlling interest	**8**	**–**	**–**	**–**	**–**	**100**	**108**	**100**	**2**	**6**
Net income (loss)	**$ 1,546**	**$ 190**	**$ 346**	**$ 439**	**$ 173**	**$ 204**	**$ 2,898**	**$ 2,150**	**$ 210**	**$ 538**
Total average assets	**$ 156,500**	**$ 6,900**	**$ 15,100**	**$ 180,700**	**$ 2,400**	**$ 10,100**	**$ 371,700**	**$ 226,800**	**$ 75,800**	**$ 69,100**

2001	RBC Banking	RBC Insurance	RBC Investments	RBC Capital Markets	RBC Global Services	Other	Total	Canada	United States	Other International
Net interest income on taxable equivalent basis	$ 5,349	$ 206	$ 384	$ 429	$ 148	$ 13	$ 6,529	$ 5,595	$ 485	$ 449
Taxable equivalent adjustment	6	–	–	21	–	5	32	30	2	–
Net interest income	5,343	206	384	408	148	8	6,497	5,565	483	449
Provision for credit losses	732	–	2	407	(2)	(20)	1,119	757	379	(17)
	4,611	206	382	1	150	28	5,378	4,808	104	466
Non-interest revenue	1,873	336	2,859	2,352	710	25	8,155	4,862	2,404	889
Non-interest expense	4,388	375	2,510	1,804	485	79	9,641	6,214	2,712	715
Net income before income taxes	2,096	167	731	549	375	(26)	3,892	3,456	(204)	640
Income taxes	912	(6)	223	200	109	(88)	1,350	1,402	(68)	16
Non-controlling interest	10	–	–	–	–	97	107	97	2	8
Net income (loss)	$ 1,174	$ 173	$ 508	$ 349	$ 266	$ (35)	$ 2,435	$ 1,957	$ (138)	$ 616
Total average assets	$ 143,000	$ 6,300	$ 11,300	$ 159,500	$ 2,400	$ 9,100	$ 331,600	$ 212,700	$ 50,900	$ 68,000

2000	RBC Banking	RBC Insurance	RBC Investments	RBC Capital Markets	RBC Global Services	Other	Total	Canada	United States	Other International
Net interest income on taxable equivalent basis	$ 4,705	$ 84	$ 359	$ 43	$ 160	$ (44)	$ 5,307	$ 5,029	$ (17)	$ 295
Taxable equivalent adjustment	6	–	–	22	–	–	28	28	–	–
Net interest income	4,699	84	359	21	160	(44)	5,279	5,001	(17)	295
Provision for credit losses	649	–	(1)	91	(21)	(27)	691	646	99	(54)
	4,050	84	360	(70)	181	(17)	4,588	4,355	(116)	349
Non-interest revenue	1,569	163	1,958	2,287	691	12	6,680	4,962	856	862
Non-interest expense	3,776	173	1,666	1,456	547	10	7,628	6,245	640	743
Net income before income taxes	1,843	74	652	761	325	(15)	3,640	3,072	100	468
Income taxes	774	(29)	239	259	140	29	1,412	1,434	29	(51)
Non-controlling interest	5	–	–	–	–	15	20	15	–	5
Net income (loss)	$ 1,064	$ 103	$ 413	$ 502	$ 185	$ (59)	$ 2,208	$ 1,623	$ 71	$ 514
Total average assets	$ 129,700	$ 2,200	$ 8,000	$ 131,900	$ 1,600	$ 10,700	$ 284,100	$ 198,800	$ 34,800	$ 50,500

For management reporting purposes, our operations are grouped into the business segments of RBC Banking, RBC Insurance, RBC Investments, RBC Capital Markets and RBC Global Services. The Other segment mainly comprises 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 our operations are grouped into Canada, United States and Other International. Canadian-based activities of international money market units are included in United States and Other International.

NOTE 4 Goodwill and Other intangibles

Effective November 1, 2001, we adopted Statement of Financial Accounting Standards, *Goodwill and Other Intangible Assets* (FAS 142). Under this standard, goodwill impairment is assessed at the reporting unit level on at least an annual basis. Reporting units comprise business operations with similar economic characteristics and strategies and may represent either a business or a business unit within a business segment.

We have completed both the transitional and annual test for goodwill impairment in all reporting units and have determined that goodwill is not impaired.

The projected amortization of Other intangibles for each of the years ending October 31, 2003 to October 31, 2007 is approximately $76 million.

Goodwill

	RBC Banking	RBC Insurance	RBC Investments	RBC Capital Markets	RBC Global Services	Total
Balance at October 31, 2000	$ 200	$ 4	$ 273	$ 93	$ 123	$ 693
Goodwill acquired during the year	1,868	183	1,618	618	10	4,297
Amortization of goodwill during the year	(61)	(15)	(81)	(43)	(14)	(214)
Goodwill impairment	–	–	(38)	–	–	(38)
Other adjustments (1)	98	24	39	55	(2)	214
Balance at October 31, 2001	2,105	196	1,811	723	117	4,952
Goodwill acquired during the year	143	–	–	–	2	145
Other adjustments (1)	(19)	(9)	(19)	(12)	2	(57)
Balance at October 31, 2002	$ 2,229	$ 187	$ 1,792	$ 711	$ 121	$ 5,040

(1) Other adjustments include foreign exchange translations on non-Canadian dollar denominated goodwill and certain other adjustments.

Other intangibles

	2002			2001		
	Gross carrying amount	**Accumulated amortization**	**Net carrying amount**	Gross carrying amount	Accumulated amortization	Net carrying amount
Core deposit intangibles	**$ 423**	**$ (50)**	**$ 373**	$ 412	$ (17)	$ 395
Customer lists and relationships	**318**	**(52)**	**266**	233	(30)	203
Mortgage servicing rights	**41**	**(18)**	**23**	17	(1)	16
Other intangibles	**5**	**(2)**	**3**	7	(2)	5
Total	**$ 787**	**$ (122)**	**$ 665**	$ 669	$ (50)	$ 619

The following table discloses a reconciliation of reported net income, earnings per share and diluted earnings per share to the amounts adjusted for the exclusion of Amortization of goodwill, net of related income taxes.

	2002	2001	2000
Net income:			
Reported net income	**$ 2,898**	$ 2,435	$ 2,208
Amortization of goodwill, net of related income taxes	**–**	250	77
Adjusted net income	**$ 2,898**	$ 2,685	$ 2,285
Earnings per share:			
Reported earnings per share	**$ 4.16**	$ 3.58	$ 3.42
Amortization of goodwill, net of related income taxes	**–**	.39	.13
Adjusted earnings per share	**$ 4.16**	$ 3.97	$ 3.55
Diluted earnings per share:			
Reported diluted earnings per share	**$ 4.12**	$ 3.55	$ 3.40
Amortization of goodwill, net of related income taxes	**–**	.39	.13
Adjusted diluted earnings per share	**$ 4.12**	$ 3.94	$ 3.53

NOTE 5 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	2002 Total	2001 Total
Trading account (2)							
Canadian government debt	$ 5,226	$ 4,344	$ 1,533	$ 1,572	$ –	$12,675	$13,024
U.S. Treasury and other U.S. agencies	278	720	593	24	–	1,615	1,148
Other OECD government debt	618	1,223	1,254	738	–	3,833	2,413
Mortgage-backed securities	74	125	86	327	–	612	689
Asset-backed securities	65	248	2,704	3,522	–	6,539	4,428
Other debt	9,253	4,265	2,001	2,906	579	19,004	20,785
Equities	–	–	–	–	25,179	25,179	15,926
	15,514	10,925	8,171	9,089	25,758	69,457	58,413
Available for sale (2)							
Canadian government debt							
Amortized cost	1,943	2,826	503	247	–	5,519	4,623
Estimated fair value	1,945	2,883	510	275	–	5,613	4,708
Yield (3)	4.0%	4.5%	5.3%	6.6%	–	4.5%	4.9%
U.S. Treasury and other U.S. agencies							
Amortized cost	544	1,204	319	1	–	2,068	2,030
Estimated fair value	552	1,280	355	1	–	2,188	2,118
Yield (3)	4.0%	5.0%	3.9%	6.0%	–	4.6%	4.8%
Other OECD government debt							
Amortized cost	2,308	291	6	–	–	2,605	1,561
Estimated fair value	2,324	303	6	–	–	2,633	1,573
Yield (3)	.3%	3.7%	4.7%	–	–	.7%	1.2%
Mortgage-backed securities							
Amortized cost	1,126	2,730	294	435	–	4,585	4,531
Estimated fair value	1,136	2,782	312	457	–	4,687	4,676
Yield (3)	5.0%	5.0%	7.2%	6.5%	–	5.3%	5.6%
Asset-backed securities							
Amortized cost	–	98	154	75	–	327	414
Estimated fair value	–	98	163	83	–	344	434
Yield (3)	–	8.3%	6.8%	6.6%	–	7.2%	8.2%
Other debt							
Amortized cost	2,304	1,815	593	4,198	159	9,069	7,716
Estimated fair value	2,300	1,853	612	4,267	159	9,191	7,760
Yield (3)	2.3%	4.1%	6.1%	5.4%	5.1%	4.4%	5.6%
Equities							
Cost	–	–	–	–	1,272	1,272	1,382
Estimated fair value	–	–	–	–	1,240	1,240	1,418
Amortized cost	8,225	8,964	1,869	4,956	1,431	25,445	22,257
Estimated fair value	8,257	9,199	1,958	5,083	1,399	25,896	22,687
Total carrying value of securities (2)	$23,771	$20,124	$10,129	$14,172	$27,157	$95,353	$81,100

(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 fair value.
(3) The weighted average yield is based on the carrying value at the end of the year for the respective securities.

Unrealized gains and losses on Available for sale securities

	2002 Amortized cost	2002 Gross unrealized gains	2002 Gross unrealized losses	2002 Estimated fair value	2001 Amortized cost	2001 Gross unrealized gains	2001 Gross unrealized losses	2001 Estimated fair value
Canadian government debt	$ 5,519	$ 97	$ (3)	$ 5,613	$ 4,623	$ 85	$ –	$ 4,708
U.S. Treasury and other U.S. agencies	2,068	120	–	2,188	2,030	88	–	2,118
Other OECD government debt	2,605	28	–	2,633	1,561	15	(3)	1,573
Mortgage-backed securities	4,585	102	–	4,687	4,531	145	–	4,676
Asset-backed securities	327	28	(11)	344	414	25	(5)	434
Other debt	9,069	201	(79)	9,191	7,716	169	(125)	7,760
Equities	1,272	28	(60)	1,240	1,382	104	(68)	1,418
	$25,445	$ 604	$ (153)	$25,896	$22,257	$ 631	$ (201)	$22,687

Realized gains and losses on sale of Available for sale securities

	2002	2001	2000
Realized gains	$ 102	$ 106	$ 106
Realized losses	(197)	(234)	(117)
Loss on sale of securities	$ (95)	$ (128)	$ (11)

NOTE 6 Loans

	2002	2001
Canada (1)		
Residential mortgage	$ 67,700	$ 64,066
Personal	25,918	27,202
Credit card	4,740	4,110
Business and government	29,832	32,739
	128,190	128,117
United States (1)		
Residential mortgage	4,353	2,666
Personal	5,269	4,621
Credit card	125	128
Business and government	21,418	22,145
	31,165	29,560
Other International (1)		
Residential mortgage	789	712
Personal	769	688
Credit card	49	45
Business and government	10,561	12,055
	12,168	13,500
Total loans (2)	171,523	171,177
Allowance for loan losses	(2,203)	(2,278)
Total loans net of allowance for loan losses	$ 169,320	$ 168,899

(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 $131 million (2001 – $130 million).

Loan maturities and rate sensitivity 2002

	Maturity term				Rate sensitivity			
	Under 1 year	1 to 5 years	Over 5 years	Total	Floating	Fixed term	Non-rate-sensitive	Total
Residential mortgage	$ 27,491	$ 44,057	$ 1,294	$ 72,842	$ 8,128	$ 64,583	$ 131	$ 72,842
Personal	30,363	1,486	107	31,956	21,934	9,716	306	31,956
Credit card	4,914	–	–	4,914	–	3,326	1,588	4,914
Business and government	45,046	13,242	3,523	61,811	14,054	45,906	1,851	61,811
Total loans	$ 107,814	$ 58,785	$ 4,924	171,523	$ 44,116	$ 123,531	$ 3,876	171,523
Allowance for loan losses				(2,203)				(2,203)
Total loans net of allowance for loan losses				$ 169,320				$ 169,320

Nonaccrual loans

	2002	2001
Residential mortgage	$ 131	$ 179
Personal	306	325
Business and government	346	372
	783	876
Individually impaired business and government	1,505	1,589
	$ 2,288	$ 2,465
Allowance for impaired loans	$ 555	$ 614
Average balance of impaired loans (1)	$ 1,607	$ 1,190

(1) For the year ended October 31, 2000, the average balance of impaired loans was $941 million.

Allowance for loan losses

	2002	2001	2000
Allowance for credit losses at beginning of year	**$ 2,392**	$ 1,975	$ 1,900
Charge-offs	**(1,457)**	(1,125)	(839)
Recoveries	**198**	185	162
Net charge-offs	**(1,259)**	(940)	(677)
Provision for credit losses	**1,065**	1,119	691
Acquisition of Centura Banks, Inc.	**–**	157	–
Acquisition of Eagle Bancshares, Inc.	**18**	–	–
Other	**98**	81	61
Allowance for credit losses at end of year	**2,314**	2,392	1,975
Allowance for off-balance sheet and other items (1)	**(109)**	(109)	(98)
Allowance for securities	**(2)**	(5)	(6)
Allowance for loan losses at end of year	**$ 2,203**	$ 2,278	$ 1,871

(1) The allowance for off-balance sheet and other items is included in Other liabilities.

NOTE 7 Securitizations

During the year, we securitized $3,734 million (2001 – $800 million) of government guaranteed residential mortgage loans through the creation of mortgage-backed securities, and sold $1,708 million (2001 – $723 million) of those securities. We received net cash proceeds of $1,691 million (2001 – $720 million) and retained the rights to future excess interest of $71 million (2001 – $25 million) on the residential mortgages. A pre-tax gain on sale, net of transaction costs, of $54 million (2001 – $22 million) was recognized in Securitization revenues. Mortgage-backed securities, created and unsold, remain on the Consolidated balance sheet and are classified as Available for sale.

We did not sell any undivided interests in credit card loans during the year (2001 – $1,000 million).

The key assumptions used to value the retained interests in residential mortgage loans at the date of securitization for transactions completed during the year were an annualized payment rate of 12.00%, excess spread of 1.20%, and discount rate of 4.75%.

Static pool credit losses include actual incurred and projected credit losses divided by the original balance of the loans securitized. The expected static pool credit loss ratio for securitized credit card loans at October 31, 2002 was .41%.

The following table summarizes the loan principal, nonaccrual and net charge-offs for total loans reported on our balance sheet and securitized loans that we manage as at October 31, 2002 and 2001:

Loans reported and securitized

	2002			2001		
	Loan principal	**Nonaccrual** (1)	**Net charge-offs**	Loan principal	Nonaccrual (1)	Net charge-offs
Residential mortgage	**$ 78,323**	**$ 228**	**$ 12**	$ 71,884	$ 283	$ 24
Personal	**31,956**	**371**	**328**	32,511	387	334
Credit card	**6,589**	**41**	**172**	6,383	49	152
Business and government	**61,811**	**1,865**	**779**	66,939	1,991	455
Total loans managed (2)	**178,679**	**2,505**	**1,291**	177,717	2,710	965
Less: Loans securitized (3)	**7,156**	**–**	**32**	6,540	–	25
Total loans reported on the Consolidated balance sheet	**$ 171,523**	**$ 2,505**	**$ 1,259**	$ 171,177	$ 2,710	$ 940

(1) Includes past due loans greater than 90 days not classified as nonaccrual.

(2) Represents net loans outstanding and loans that have been securitized, which we continue to service, and excludes any assets we have temporarily acquired with the intent at acquisition to sell them to special purpose entities.

(3) Loan principal includes credit card loans of $1,675 million (2001 – $2,100 million), mortgage-backed securities created and sold of $2,416 million (2001 – $1,361 million) and mortgage-backed securities created and unsold of $3,065 million (2001 – $3,079 million).

NOTE 7 Securitizations (continued)

At October 31, 2002, 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 shown in the first table below.

These sensitivities are hypothetical and should be used with caution. As the figures indicate, changes in fair value based on a 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, 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 second table below summarizes certain cash flows received from securitizations in 2002 and 2001.

Sensitivity of key assumptions to adverse changes (1)

	Impact on fair value	
	Credit card loans	Residential mortgage loans
Fair value of retained interests	$ 15.1	$ 94.6
Weighted average remaining service life (in years)	.2	3.9
Payment rate	39.07%	13.62%
Impact on fair value of 10% adverse change	$ (1.0)	$ (2.7)
Impact on fair value of 20% adverse change	(1.9)	(5.3)
Excess spread, net of credit losses	5.92%	1.19%
Impact on fair value of 10% adverse change	$ (1.5)	$ (9.5)
Impact on fair value of 20% adverse change	(3.1)	(18.9)
Expected credit losses	1.68%	–
Impact on fair value of 10% adverse change	$ (.5)	–
Impact on fair value of 20% adverse change	(.9)	–
Discount rate	12.50%	4.55%
Impact on fair value of 10% adverse change	$ (.1)	$ (.3)
Impact on fair value of 20% adverse change	(.1)	(.6)

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

Cash flows from securitizations

	2002		2001	
	Credit card loans	**Residential mortgage loans**	Credit card loans	Residential mortgage loans
Proceeds from new securitizations	**$ –**	**$ 1,691**	$ 1,000	$ 720
Proceeds reinvested in revolving securitizations	**8,512**	**303**	6,972	13
Cash flows from retained interests in securitizations	**64**	**15**	60	10

NOTE 8 Premises and equipment

	2002			2001
	Cost	Accumulated depreciation	Net book value	Net book value
Land	$ 172	$ –	$ 172	$ 123
Buildings	606	287	319	335
Computer equipment	1,605	1,163	442	437
Furniture, fixtures and other equipment	976	650	326	313
Leasehold improvements	901	521	380	390
	$ 4,260	$ 2,621	$ 1,639	$ 1,598

The depreciation and amortization expense for premises and equipment amounted to $388 million and $387 million in 2002 and 2001, respectively.

NOTE 9 Other assets

	2002	2001
Receivable from brokers, dealers and clients	$ 3,229	$ 3,505
Insurance-related assets (1)	2,987	2,043
Accrued interest receivable	1,287	1,733
Net deferred income tax asset	1,003	1,047
Investment in associated corporations	224	152
Prepaid pension benefit cost (2)	109	366
Other	4,651	4,518
	$ 13,490	$ 13,364

(1) Insurance-related assets include, among other items, policy loan balances, premiums outstanding, amounts due from other insurers in respect of reinsurance contracts and pooling arrangements, deferred acquisition costs and value of business acquired.

(2) Prepaid pension benefit cost represents the cumulative excess of pension fund contributions over the amounts recorded as pension benefit expense.

NOTE 10 Deposits

	2002				2001
	Demand (1)	Notice (2)	Term (3)	Total	Total
Personal	$ 10,735	$ 30,065	$ 61,092	$ 101,892	$ 101,381
Business and government	39,004	8,864	71,898	119,766	107,485
Bank	3,084	85	20,213	23,382	26,821
	$ 52,823	$ 39,014	$ 153,203	$ 245,040	$ 235,687
Non-interest-bearing					
Canada				$ 23,222	$ 22,397
United States				2,078	1,918
Other International				891	543
Interest-bearing					
Canada				119,737	118,161
United States				35,495	25,169
Other International				63,617	67,499
				$ 245,040	$ 235,687

(1) Deposits payable on demand include all deposits for which we do not have the right to notice of withdrawal. These deposits are for the most part, chequing accounts.

(2) Deposits payable after notice include all deposits for which we can legally require notice of withdrawal. These deposits are for the most part, savings accounts.

(3) Term deposits include deposits payable on a fixed date. These deposits include term deposits, guaranteed investment certificates and similar instruments. At October 31, 2002, the balance of term deposits also includes senior deposit notes we have issued to provide long-term funding of $11.3 billion (2001 – $10.7 billion) and other notes and similar instruments in bearer form we have issued of $21.7 billion (2001 – $18.5 billion).

NOTE 11 Other liabilities

	2002	2001
Short-term borrowings of subsidiaries	$ 10,173	$ 6,838
Insurance claims and policy benefit liabilities	5,302	4,256
Payable to brokers, dealers and clients	3,630	3,202
Accrued interest payable	1,263	1,887
Accrued pension and other postretirement benefit expense (1)	919	714
Dividends payable	289	273
Other	8,245	6,809
	$ 29,821	$ 23,979

(1) Accrued pension and other postretirement benefit expense represents the cumulative excess of pension and other postretirement benefit expense over pension fund contributions.

NOTE 12 Subordinated debentures

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

Maturity	Earliest par value redemption date	Interest rate	Denominated in foreign currency	2002	2001
January 11, 2002		11.00%		$ –	$ 41
March 1, 2002		10.50%		–	60
September 3, 2007	(1)	5.40%		–	400
September 3, 2008	September 3, 2003 (2)	5.45% (3)		100	100
March 15, 2009		6.50%	US$125	195	199
April 12, 2009	April 12, 2004 (2)	5.40% (3)		350	350
June 11, 2009	June 11, 2004 (2)	5.10% (3)		350	350
July 7, 2009	July 7, 2004 (2)	6.05% (3)		175	175
October 12, 2009	October 12, 2004 (2)	6.00% (3)		150	150
August 15, 2010	August 15, 2005 (2)	6.40% (3)		700	700
February 13, 2011	February 13, 2006 (4)	5.50% (3)		125	125
April 26, 2011	April 26, 2006 (5)	8.20% (3)		100	100
September 12, 2011	September 12, 2006 (2)	6.50% (3)		350	350
October 24, 2011	October 24, 2006 (6)	6.75% (7)	US$300	467	476
November 8, 2011	November 8, 2006 (8)	(9)	US$400	625	–
June 4, 2012	June 4, 2007 (2)	6.75% (3)		500	500
January 22, 2013	January 22, 2008 (10)	6.10% (3)		500	500
November 14, 2014		10.00%		200	200
January 25, 2015	January 25, 2010 (11)	7.10% (3)		500	500
April 12, 2016	April 12, 2011 (12)	6.30% (3)		400	400
June 8, 2023		9.30%		110	110
October 1, 2083	(13)	(14)		250	250
June 6, 2085	(13)	(15)	US$300	467	477
				6,614	6,513
Fair value adjustment (16)				346	348
				$ 6,960	$ 6,861

(1) Redeemed on September 3,2002 at par value.
(2) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 5 basis points and (ii) par value, and thereafter at any time at par value.
(3) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(4) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 8 basis points and (ii) par value, and thereafter at any time at par value.
(5) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 10 basis points and (ii) par value, and thereafter at any time at par value.
(6) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on U.S. Treasury notes plus 10 basis points and (ii) par value, and thereafter at any time at par value.
(7) Interest at a rate of 6.75% until earliest par value redemption date, and thereafter at a rate of 1.00% above the U.S. dollar 6-month LIBOR.
(8) Redeemable on the earliest par value redemption date at par value.
(9) Interest at a rate of .50% above the U.S. dollar 3-month LIBOR until earliest par value redemption date, and thereafter at a rate of 1.50% above the U.S. dollar 3-month LIBOR.
(10) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 18 basis points and (ii) par value, and thereafter at any time at par value.
(11) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 12.5 basis points and (ii) par value, and thereafter at any time at par value.
(12) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 22 basis points and (ii) par value, and thereafter at any time at par value.
(13) Redeemable on any interest payment date at par value.
(14) Interest at a rate of .40% above the 30-day Bankers' Acceptance rate.
(15) Interest at a rate of .25% above the U.S. dollar 3-month LIMEAN. In the event of a reduction of the annual dividend we declare on our 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 newly issued common shares.
(16) The fair value adjustment reflects the adjustment to the carrying value of hedged subordinated debentures as a result of FAS 133. The subordinated debentures specifically hedged have maturity dates ranging from October 24, 2011 to April 12, 2016.

NOTE 12 Subordinated debentures (continued)

Maturity schedule

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

2003 – 2007	$ –
2008 to 2012	4,310
Thereafter	2,650
	$ 6,960

NOTE 13 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

	2002			2001			2000		
	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)	**–**	**$ –**	**$ 3.06**	1,500	$ 149	$ 5.16	1,500	$ 149	$ 5.38
Non-cumulative Series H (1)	**–**	**–**	**–**	–	–	1.69	12,000	295	2.25
US$ Non-cumulative Series I (1)	**–**	**–**	**US .02**	8,000	315	US 1.91	8,000	301	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**	**384**	**US 1.58**	10,000	392	US 1.58	10,000	376	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	1.38
US$ Non-cumulative Series P	**4,000**	**152**	**US 1.44**	4,000	155	US 1.44	4,000	148	US 1.44
Non-cumulative Series S	**10,000**	**247**	**1.53**	10,000	247	.65	–	–	–
		$ 1,515			$ 1,990			$ 2,001	
Common									
Balance at beginning of year	**674,021**	**$ 6,959**		602,398	$ 3,074		617,768	$ 3,063	
Issued	**–**	**–**		12,305	576		–	–	
Issued under the stock option plan (2)	**5,211**	**175**		2,819	81		2,700	59	
Issued on the acquisition of Centura Banks, Inc.	**–**	**–**		67,413	3,317		–	–	
Options granted on acquisition of Dain Rauscher Corporation	**–**	**14**		–	33		–	–	
Issued on the acquisition of Richardson Greenshields Limited (3)	**318**	**15**		13	2		1,667	50	
Renounced stock appreciation rights, net of related income taxes	**–**	**29**		–	–		–	–	
Issuance costs, net of related income taxes	**–**	**(1)**		–	(12)		–	–	
Purchased for cancellation (4)	**(14,293)**	**(152)**		(10,927)	(112)		(19,737)	(98)	
Balance at end of year	**665,257**	**$ 7,039**	**$ 1.51**	674,021	$ 6,959	$ 1.38	602,398	$ 3,074	$ 1.14

(1) On November 26, 2001 and October 11, 2002, we redeemed First Preferred Shares Series I and E respectively. On August 24, 2001 we redeemed First Preferred Shares Series H.

(2) Includes the exercise of stock options from tandem stock appreciation rights awards, resulting in a reversal of the accrued liability, net of related income taxes, of $8 million.

(3) During the year we exchanged nil (2001 – 36,527; 2000 – 4,701) Class B shares and 1,846,897 (2001 – 77,956; 2000 – 8,008,712) Class C shares issued by our wholly owned subsidiary, Royal Bank DS Holding Inc., on the acquisition of Richardson Greenshields Limited for 318,154 (2001 – 13,621; 2000 – 1,667,334) common shares.

(4) Commencing in June 2001, pursuant to a one-year normal course issuer bid, we repurchased through the facilities of the Toronto and Montreal Stock Exchanges 15,401,100 common shares at an average price of $49.32 per share. Under this bid, 10,927,200 common shares were repurchased during fiscal 2001 at a cost of $509 million and 4,473,900 common shares were repurchased during fiscal 2002 at a cost of $251 million. On June 24, 2002, we renewed our one-year normal course issuer bid to purchase for cancellation, up to 20 million of our common shares, representing approximately 3% of our outstanding common shares. Under this renewed bid, 9,818,900 common shares were purchased, at an average cost of $52.27 per share, for $513 million. During fiscal 2002, a total of 14,292,800 common shares were repurchased for $764 million at an average cost of $53.45 per share.

NOTE 13 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 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 Series 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*, we 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 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 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*, we may purchase First Preferred Shares for cancellation at a purchase price, in the case of the Series 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, we may, on or after the dates specified above, convert First Preferred Shares Series N, O, P and S into our common shares. 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 our right to redeem or to find substitute purchasers, the holder may, on or after the dates specified above, convert First Preferred Shares into our common shares. Series 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.

Restrictions on the payment of dividends

We are prohibited by the *Bank Act* (Canada) from declaring any dividends on our preferred or common shares when we are, 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. We may not pay dividends on our 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.

In addition, we may not declare or pay a dividend without the approval of the Superintendent of Financial Institutions Canada (OSFI) if, on the day the dividend is declared, the total of all dividends in that year would exceed the aggregate of our net income up to that day and of our retained net income for the preceding two years.

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

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

Regulatory capital

We are subject to the regulatory capital requirements defined by 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, 2002, our Tier 1 and Total capital ratios were 9.3% and 12.7%, respectively (2001 – 8.7% and 11.8%, respectively).

In the evaluation of our 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, 2002, our assets-to-capital multiple was 17.3 times (2001 – 17.2 times).

Using guidelines issued by the Board of Governors of the Federal Reserve System in the United States and U.S. GAAP financial information, our Tier 1 and Total capital ratios at October 31, 2002, were 8.5% and 11.9%, respectively (2001 – 8.1% and 11.2%, respectively).

Other

In 2000, we entered into an 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. During the year, the reinsurer was downgraded from AAA. Based on this development and an internal review by management, the agreement was not renewed.

NOTE 14 Income taxes

	2002	2001	2000
Provision for income tax in income			
Current			
Canada – Federal	**$ 681**	$ 827	$ 799
Provincial	**265**	354	349
International	**155**	103	258
	1,101	1,284	1,406
Deferred			
Canada – Federal	**205**	22	38
Provincial	**70**	3	9
International	**39**	41	(41)
	314	66	6
	1,415	1,350	1,412
Income tax expense (benefit) in shareholders' equity			
Unrealized gains and losses on available for sale securities, net of hedging activities	**(4)**	221	20
Unrealized foreign currency translation gains and losses, net of hedging activities	**100**	(487)	(37)
Gains and losses on derivatives designated as cash flow hedges	**30**	(173)	–
Stock appreciation rights	**22**	–	–
Additional pension obligation	**(155)**	(12)	–
	(7)	(451)	(17)
Total income taxes	**$ 1,408**	$ 899	$ 1,395

Deferred income taxes (temporary differences)

	2002	2001	2000
Deferred income tax asset (1)			
Allowance for credit losses	**$ 512**	$ 582	$ 514
Deferred compensation	**339**	190	78
Pension related	**210**	105	44
Tax loss carryforwards	**22**	84	72
Premises and equipment	**–**	–	83
Deferred income	**60**	61	152
Other	**259**	399	223
	1,402	1,421	1,166
Deferred income tax liability			
Premises and equipment	**(9)**	(91)	–
Deferred expense	**(240)**	(149)	(86)
Other	**(150)**	(134)	(77)
	(399)	(374)	(163)
Net deferred income tax asset	**$ 1,003**	$ 1,047	$ 1,003

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

Reconciliation to statutory tax rate

	2002		2001		2000	
Income taxes at Canadian statutory tax rate	**$ 1,702**	**38.5%**	$ 1,615	41.5%	$ 1,558	42.8%
Increase (decrease) in income taxes resulting from						
Lower average tax rate applicable to subsidiaries	**(276)**	**(6.2)**	(253)	(6.5)	(303)	(8.3)
Tax-exempt income from securities	**(7)**	**(.2)**	(7)	(.2)	(7)	(.2)
Tax rate change	**33**	**.7**	79	2.0	20	.5
Other	**(37)**	**(.8)**	(84)	(2.1)	144	4.0
Income taxes reported in income/effective tax rate	**$ 1,415**	**32.0%**	$ 1,350	34.7%	$ 1,412	38.8%

International earnings of certain subsidiaries would be taxed only upon their repatriation to Canada. We have not recognized a deferred tax liability for these undistributed earnings as we do not currently expect them to be repatriated. Taxes that would be payable if all foreign subsidiaries' accumulated unremitted earnings were repatriated are estimated at $841 million as at October 31, 2002 (2001 – $772 million; 2000 – $737 million).

NOTE 15 Pensions and other postretirement benefits

We sponsor 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 our benefit plans, including amounts recorded on the Consolidated balance sheet and the components of net benefit expense:

Plan assets, benefit obligation and funded status

	Pension plans (1)		Other postretirement plans (2)	
	2002	2001	**2002**	2001
Change in fair value of plan assets (3)				
Fair value of plan assets, October 1	**$ 4,049**	$ 4,519	**$ 1**	$ 67
Actual return on plan assets	**(133)**	(476)	**–**	7
Company contributions	**99**	20	**23**	21
Plan participant contributions	**19**	18	**1**	–
Benefits paid	**(258)**	(251)	**(25)**	(22)
Plan settlements	**(52)**	–	**–**	(72)
Business acquisitions	**–**	63	**–**	–
Change in foreign currency exchange rate	**17**	12	**–**	–
Transfers from other plans	**6**	144	**–**	–
Fair value of plan assets, September 30	**$ 3,747**	$ 4,049	**$ –**	$ 1
Change in benefit obligation				
Benefit obligation, October 1	**$ 4,044**	$ 3,710	**$ 693**	$ 609
Service cost	**113**	104	**22**	64
Interest cost	**297**	268	**51**	49
Plan participant contributions	**19**	18	**1**	–
Actuarial loss	**280**	55	**318**	19
Benefits paid	**(258)**	(251)	**(25)**	(22)
Transfers from other plans	**3**	–	**–**	–
Plan amendments and curtailments	**59**	31	**7**	–
Plan settlements	**–**	–	**–**	(72)
Business acquisitions	**2**	117	**–**	35
Change in foreign currency exchange rate	**31**	(9)	**–**	–
Changes in assumptions	**–**	1	**–**	11
Benefit obligation, September 30	**$ 4,590**	$ 4,044	**$ 1,067**	$ 693
Funded status				
(Deficit) excess of plan assets over benefit obligation	**$ (843)**	$ 5	**$ (1,067)**	$ (692)
Unrecognized net actuarial loss	**792**	32	**360**	42
Unrecognized transition (asset) obligation	**(26)**	(24)	**190**	207
Unrecognized prior service cost	**211**	205	**13**	10
Contributions between September 30 and October 31	**222**	–	**3**	–
Other	**(1)**	(48)	**1**	1
Net amount recognized as at October 31	**$ 355**	$ 170	**$ (500)**	$ (432)
Amounts recognized in the Consolidated balance sheet consist of:				
Prepaid pension benefit cost	**$ 109**	$ 366		
Accrued pension benefit expense	**(419)**	(282)		
Intangible asset	**205**	57		
Accumulated other comprehensive income	**460**	29		
Net amount recognized as at October 31	**$ 355**	$ 170		
Weighted average assumptions				
Discount rate	**6.75%**	7.00%	**7.00%**	7.25%
Assumed long-term rate of return on plan assets	**7.00%**	7.00%	**4.75%**	4.75%
Rate of increase in future compensation	**4.00%**	4.40%	**4.40%**	4.40%

Pension benefit expense (4)

	2002	2001	2000
Service cost	**$ 113**	$ 104	$ 98
Interest cost	**297**	268	254
Expected return on plan assets	**(300)**	(306)	(291)
Amortization of transition asset	**(2)**	(2)	(2)
Amortization of prior service cost	**32**	17	22
Recognized net actuarial gain	**(27)**	(45)	(41)
Settlement loss	**52**	–	–
Other	**(45)**	(14)	19
Defined benefit pension expense	**120**	22	59
Defined contribution pension expense	**61**	30	6
Pension benefit expense	**$ 181**	$ 52	$ 65

Other postretirement benefit expense (2)

	2002	2001	2000
Service cost	**$ 22**	$ 64	$ 17
Interest cost	**51**	49	42
Expected return on plan assets	**–**	(1)	(3)
Amortization of transition obligation	**17**	17	17
Other	**2**	2	–
Other postretirement benefit expense	**$ 92**	$ 131	$ 73

2002 sensitivity of key assumptions

Pensions	**Change in obligation**	**Change in expense**
Impact of .25% change in discount rate assumption	**$ 126**	**$ 16**
Impact of .25% change in rate of increase in future compensation assumption	**29**	**2**
Impact of .25% change in the long-term rate of return on plan assets assumption		**10**
Postretirement	**Change in obligation**	**Change in expense**
Impact of .25% change in discount rate assumption	**$ 48**	**$ 3**
Impact of .25% change in rate of increase in future compensation assumption	**4**	**1**

(1) Included in these amounts are $3,239 million (2001 – $266 million) of plan assets and $4,131 million (2001 – $567 million) of benefit obligations for plans that are not fully funded.
(2) 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 8% for medical and 5% for dental, decreasing to an ultimate rate of 4% in 2009. A one percentage point increase in assumed health care cost trend rates would have increased the service and interest costs and obligation by $12 million and $142 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 $8 million and $112 million, respectively.
(3) Plan assets includes 818,597 (2001 – 886,384) of Royal Bank common shares having a fair value of $43 million (2001 – $43 million). In addition, dividends amounting to $1 million (2001 – $1 million) were received on Royal Bank common shares held in the plan assets during the year.
(4) Discount rate assumption of 7.00% (2001 – 7.00%; 2000 – 7.25%) was used to determine pension benefit expense.

NOTE 16 Stock-based compensation

Stock option plans

We have two stock option plans – one for certain key employees and one for non-employee directors. Under these plans, options are periodically granted to purchase common shares at prices not less than the market price of such shares on the day of grant. The options vest over a 4-year period for employees and immediately for directors and are exercisable for a period not exceeding 10 years from the grant date.

For options issued prior to October 31, 2002 that were not accompanied by tandem stock appreciation rights (SARs), no compensation expense was recognized as the option's exercise price was not less than the market price of the underlying stock on the day of grant. When the options are exercised, the proceeds received are credited to common shares.

Between November 29, 1999 and June 5, 2001, grants of options under the employee stock option plan were accompanied by tandem SARs. With SARs, participants could choose to exercise a SAR instead of the corresponding option. In such cases, the participants received a cash payment equal to the difference between the closing price of common shares on the day immediately preceding the day of exercise and the exercise price of the option.

Compensation expense for SARs is recognized using estimates based on past experience, of participants exercising SARs rather than the corresponding options. The compensation expense for these grants, which is amortized over the associated option's vesting period, was $27 million for the year ended October 31, 2002 (2001 – $23 million; 2000 – $52 million).

During the last quarter of 2002, certain executive participants voluntarily renounced their SARs while retaining the corresponding options. At the time of renouncement, the compensation cost was fixed and the accrued liability of $47 million was transferred to equity.

Stock options

	2002		2001		2000	
	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	**30,158**	**$ 36.84**	25,880	$ 33.61	20,966	$ 32.42
Granted	**4,215**	**49.12**	7,949	44.46	8,286	33.09
Exercised – Common shares	**(5,211)**	**32.07**	(2,819)	28.77	(2,700)	22.05
– SARs	**(291)**	**34.01**	(259)	33.55	–	–
Cancelled	**(392)**	**38.37**	(593)	37.82	(672)	36.10
Outstanding at end of year	**28,479**	**$ 39.54**	30,158	$ 36.84	25,880	$ 33.61
Exercisable at end of year	**14,050**	**$ 36.07**	12,895	$ 32.62	8,881	$ 30.29
Available for grant	**16,105**		20,289		25,849	

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–$15.68	**587**	**$ 15.57**	**3.9**	**587**	**$ 15.57**
$24.80–$28.25	**2,816**	**26.19**	**6.9**	**2,401**	**25.85**
$30.00–$39.64	**15,175**	**36.68**	**7.1**	**9,595**	**37.90**
$43.59–$52.19	**9,901**	**49.15**	**9.4**	**1,467**	**49.04**
Total	**28,479**	**$ 39.54**	**7.8**	**14,050**	**$ 36.07**

Fair value method

FAS 123, *Accounting for Stock-Based Compensation*, recommends the recognition of an expense for option awards using the fair value method of accounting. It permits the use of the intrinsic value based method (APB 25, *Accounting for Stock Issued to Employees*), provided pro forma disclosures of net income and earnings per share applying the fair value method are made. For options with SARs attached, FAS 123 recommends the recognition of an intrinsic value based expense for the entire award. We will be adopting the recommendations of FAS 123 prospectively for new awards granted after November 1, 2002. The impact is an estimated charge to earnings of $6 million for the year ended October 31, 2003.

We have provided pro forma disclosures, which demonstrate the effect as if we had adopted the recommended recognition provisions of FAS 123 in 2002, 2001 and 2000 as indicated below:

Pro forma net income and earnings per share

	As reported			Pro forma (1)		
	2002	2001	2000	2002	2001	2000
Net income	**$ 2,898**	$ 2,435	$ 2,208	$ 2,856	$ 2,399	$ 2,164
Earnings per share	**4.16**	3.58	3.42	4.10	3.53	3.35
Diluted earnings per share	**4.12**	3.55	3.40	4.07	3.50	3.34

(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 during 2002 was estimated on the date of grant using an option pricing model with the following assumptions: (i) risk-free interest rate of 4.89% (2001 – 5.86%; 2000 – 6.04%), (ii) expected option life of 6 years (2001, 2000 – 10 years), (iii) expected volatility of 20% (2001 – 24%; 2000 – 22%) and (iv) expected dividends of 2.9% (2001 – 2.67%; 2000 – 2.60%). The fair value of each option granted was $10.02 (2001 – $14.78; 2000 – $10.26).

NOTE 16 Stock-based compensation (continued)

Employee share ownership plans

We offer many employees an opportunity to own stock through RBC savings and share ownership plans. Under these plans, the employee can generally contribute between 1% and 10% of their annual salary or benefit base for commissioned employees. For each contribution between 1% and 6%, we will match 50% of the employee contributions in common shares. For the RBC Dominion Securities Savings Plan our maximum annual contribution is $4,500 per employee. For the RBC UK Share Incentive Plan our maximum annual contribution is £1,500 per employee. We contributed $49 million (2001 – $47 million; 2000 – $45 million), under the terms of these plans, towards the purchase of common shares. As at October 31, 2002, an aggregate of 17,397,119 common shares were held under these plans.

Deferred share and other plans

We offer deferred share unit plans to executives and non-employee directors. Under these plans, each executive or director may choose to receive all or a percentage of their annual incentive bonus or directors fee in the form of deferred share units (DSUs). The executives or directors must elect to participate in the plan prior to the beginning of the fiscal year. DSUs earn dividend equivalents in the form of additional DSUs at the same rate as dividends on common shares. The participant is not allowed to convert the DSUs until retirement, permanent disability or termination of employment/directorship. The cash value of the DSUs is equivalent to the market value of common shares when conversion takes place. The value of the DSUs as at October 31, 2002, was $73 million (2001 – $52 million; 2000 – $26 million). The share appreciation and dividend-related compensation expense recorded for the year ended October 31, 2002, in respect of these plans was $16 million (2001 – $8 million; 2000 – $7 million).

We have a deferred bonus plan for certain key employees within RBC Capital Markets. Under this plan, a percentage of each employee's annual incentive bonus is deferred and accumulates dividend equivalents at the same rate as dividends on common shares. The employee will receive the deferred bonus in equal amounts paid within 90 days of the following 3 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, 2002, was $187 million (2001 – $128 million; 2000 – $89 million). The share appreciation and dividend-related compensation expense for the year ended October 31, 2002 in respect of this plan was $20 million (2001 – $5 million recovery; 2000 – $10 million).

We offer deferred share plans to certain key employees within RBC Investments with various vesting periods up to a maximum of five years. Awards under some of these plans may be deferred in the form of common shares, which are held in trust, or DSUs. The participant is not allowed to convert the DSU until retirement, permanent disability, or termination of employment. The cash value of DSUs is equivalent to the market value of common shares when conversion takes place. Certain plans award share units that track the value of common shares with payout in cash at the end of a maximum five-year term. The value of deferred shares held in trust as at October 31, 2002, was $34 million (2001 – $14 million). The value of the various share units as at October 31, 2002, was $10 million (2001 – $4 million). The stock-based compensation expense recorded for the year ended October 31, 2002, in respect of these plans, was $32 million (2001 – $16 million; 2000 – $14 million).

We offer a performance deferred share plan to certain key employees. The performance deferred share award is made up of 50% regular shares and 50% performance shares all of which vest at the end of 3 years. At the time the shares vest, the performance shares can be increased or decreased by 50% depending on our total shareholder return compared to 15 North American financial institutions. Compensation expense of $11 million was recognized for the year ended October 31, 2002 in respect of this award. The value of common shares held in trust as at October 31, 2002 was $34 million.

We offer a mid-term compensation plan to certain senior executive officers. Awards under this program are converted into share units equivalent to common shares. The share units vest over a three-year period in equal installments of one-third per year. The units have a value equal to the market value of common shares on each vesting date and are paid in either cash or common shares at our option. The value of the share units as at October 31, 2002 was $16 million (2001 – $21 million). The compensation expense recorded for the year ended October 31, 2002 in respect of this plan was $12 million (2001 – $8 million).

Dain Rauscher maintains a non-qualified deferred compensation plan for key employees under an arrangement called the wealth accumulation plan. This plan allows eligible employees to make deferrals of their annual income and allocate the deferrals among various fund choices, which include an RBC share unit fund that tracks the value of our common shares. Certain deferrals may also be eligible for matching contributions from us. All matching contributions are allocated to the RBC share unit fund. The compensation expense recorded for the year ended October 31, 2002, in respect of the matching contributions, was $12 million (2001 – $7 million). The value of the RBC share units held under the plan as at October 31, 2002 was $70 million (2001 – $7 million).

For other stock-based plans, compensation expense of $19 million was recognized for the year ended October 31, 2002 (2001 – $14 million; 2000 – $1 million). The value of the share units and shares held under these plans as at October 31, 2002 was $10 million (2001 – $3 million; 2000 – $1 million).

Retention plan

On the acquisition of Dain Rauscher, certain key employees of Dain Rauscher were offered retention units awards totalling $318 million in award value 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, 2002 in respect of this plan was $92 million (2001 – $143 million). The liability under this plan was $151 million as at October 31, 2002 (2001 – $135 million).

NOTE 17 Earnings per share

	2002	2001	2000
Earnings per share			
Net income	$ 2,898	$ 2,435	$ 2,208
Preferred share dividends	(98)	(135)	(134)
Net income available to common shareholders	$ 2,800	$ 2,300	$ 2,074
Average number of common shares (in thousands)	672,571	641,516	606,389
	$ 4.16	$ 3.58	$ 3.42
Diluted earnings per share			
Net income available to common shareholders	$ 2,800	$ 2,300	$ 2,074
Effect of assumed conversions (1)	–	1	2
Net income adjusted for diluted computation	$ 2,800	$ 2,301	$ 2,076
Average number of common shares (in thousands)	672,571	641,516	606,389
Convertible Class B and C shares (1)	14	363	736
Stock options (2)	6,568	5,337	2,740
Average number of diluted common shares (in thousands)	679,153	647,216	609,865
	$ 4.12	$ 3.55	$ 3.40

(1) The convertible shares included the Class B and C shares issued by our wholly owned subsidiary Royal Bank DS Holding Inc., on the acquisition of Richardson Greenshields Limited on November 1, 1996. The outstanding Class B shares were all exchanged into Royal Bank of Canada common shares in 2001 and the remaining Class C shares were exchanged for common shares on November 9, 2001. The price of the Class C shares was determined based on our average common share price during the 20 days prior to the date the exchange was made. During the year we exchanged nil (2001 – 36,527; 2000 – 4,701) Class B shares and 1,846,897 (2001 – 77,956; 2000 – 8,008,712) Class C shares for 318,154 (2001 – 13,621; 2000 – 1,667,334) common shares.

(2) The dilutive effect of stock options was calculated using the treasury stock method. This method calculates 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 shares for the period. Excluded from the calculation of diluted earnings per share were average options outstanding of 9,761 with an exercise price of $53.76 (2001 – 7,862 at $50.72; 1,956 at $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) as the options' exercise price was greater than the average market price of our common shares.

NOTE 18 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. Our 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 we 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 us on behalf of a client authorizing a third party to draw drafts on us 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, we act 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 we retain 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 renewable note issuance facility that can be accessed for a specified period of time.

Financial instruments with contractual amounts representing credit risk

	2002	2001
Guarantees and standby letters of credit	$ 13,610	$ 13,391
Documentary and commercial letters of credit	772	750
Securities lending	23,967	21,377
Commitments to extend credit		
Original term to maturity of 1 year or less	40,931	44,179
Original term to maturity of more than 1 year	34,115	39,960
Uncommitted amounts	45,978	53,750
Note issuance/revolving underwriting facilities	23	132
	$ 159,396	$ 173,539

NOTE 18 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

2003	$ 364
2004	330
2005	300
2006	267
2007	203
Thereafter	754
Total	$ 2,218

Litigation
On June 21, 2002, a week before it was due to pay Royal Bank of Canada US$517 million plus interest under the terms of a total return swap, which is recorded in Other assets, Cooperatieve Centrale Raiffeisen-Boerenleenbank B.A. (Rabobank) initiated an action against us in New York state court in an effort to nullify its obligation under the swap. On June 24, 2002, we instituted proceedings against Rabobank in the High Court in London, alleging that Rabobank had repudiated its obligation under the swap. On July 31, 2002, we filed a motion to dismiss or stay Rabobank's New York lawsuit. Rabobank filed, on September 27, 2002, an application to stay our claim with the High Court in London. Both our motion to stay or dismiss and Rabobank's application to stay are proceeding and the matter of forum is expected to be considered by both courts in the near future. Management expects to recover this amount in its entirety and accordingly a provision for loss has not been recorded.

Various other legal proceedings are pending that challenge certain of our practices or actions. Many of these proceedings are loan-related and are in reaction to steps taken by us and our 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
In the ordinary course of business we accept collateral, generally under reverse repurchase and securities borrowing agreements. The fair value of collateral accepted that can be sold or repledged by us totalled $55.9 billion (2001 – $52.9 billion). Of this collateral, $36.4 billion (2001 – $41.9 billion) has been sold or repledged, generally as collateral under repurchase agreements or to cover short sales. Details of assets pledged against liabilities, including amounts that cannot be sold or repledged by the secured party, are shown below:

Pledged assets

	2002	2001
Assets pledged to:	$	$
Foreign governments and central banks	**1,418**	113
Clearing systems, payment systems and depositories	**1,075**	2,470
Assets pledged in relation to:		
Derivative transactions	**1,828**	830
Securities borrowing and lending	**19,720**	16,007
Obligations related to securities sold under repurchase agreements	**21,109**	20,855
Other	**3,389**	6,095
Total	**$ 48,539**	$ 46,370

NOTE 19 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
We use 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.

Credit derivatives are contracts whose redemption value is linked to specified credit related events, such as bankruptcy, credit downgrade, non-payment or default. Examples of credit derivatives include credit default swaps, total return swaps and credit default baskets.

Derivatives held or issued for trading purposes
Most of our 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. We do 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

We also use derivatives in connection with our 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 our asset/liability management activities when specifically linked to a purchased option in the form of a collar. We use credit derivatives to manage our credit exposures and for risk diversification in our lending portfolio.

Our 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.

We 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.

Fair value hedge

For the year ended October 31, 2002, the ineffective portions recognized in Non-interest revenue amounted to a net unrealized gain of $10 million (2001 – $11 million loss). All components of each derivative's change in fair value have been included in the assessment of fair value hedge effectiveness.

We did not hedge any firm commitments for the year ended October 31, 2002.

Cash flow hedge

For the year ended October 31, 2002, a net unrealized loss of $50 million (2001 – $190 million, net of FAS 133 transition adjustment), 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. A net loss of $113 million (2001 – nil) was reclassified to Net income during the year. A net loss of $59 million (2001 – $81 million) deferred in Accumulated other comprehensive income as at October 31, 2002, is expected to be reclassified to Net income during the next 12 months.

For the year ended October 31, 2002, a net unrealized gain of $9 million (2001 – $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.

We did not hedge any forecasted transactions for the year ended October 31, 2002.

Derivatives – Notional amounts

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 following table provides the notional amounts of our derivative transactions by term to maturity.

Notional amount of derivatives by term to maturity (1)

	Term to maturity				2002		2001	
	Within 1 year	1 to 5 years	Over 5 years (2)	Total	Trading	Other than trading	Trading	Other than trading
Over-the-counter (OTC) contracts								
Interest rate contracts								
Forward rate agreements	$ 184,487	$ 14,358	$ –	$ 198,845	$ 194,537	$ 4,308	$ 95,678	$ –
Swaps	264,829	418,082	179,353	862,264	794,961	67,303	628,735	69,167
Options purchased	8,193	35,623	11,477	55,293	55,289	4	19,787	114
Options written	9,306	34,564	12,304	56,174	56,080	94	22,177	–
Foreign exchange contracts								
Forward contracts	507,410	33,673	3,636	544,719	522,035	22,684	528,467	17,969
Cross currency swaps	893	3,405	5,609	9,907	9,907	–	8,618	–
Cross currency interest rate swaps	10,286	37,315	26,547	74,148	71,050	3,098	63,405	2,796
Options purchased	53,200	3,004	–	56,204	56,160	44	48,542	612
Options written	58,594	3,242	–	61,836	61,209	627	54,133	–
Credit derivatives (3)	3,625	37,333	11,193	52,151	50,928	1,223	20,952	955
Other contracts (4)	9,514	5,221	7,884	22,619	22,085	534	20,170	2,643
Exchange-traded contracts								
Interest rate contracts								
Futures – long positions	19,207	7,535	19	26,761	26,761	–	20,319	–
Futures – short positions	31,583	5,185	25	36,793	36,500	293	43,232	87
Options purchased	1,418	1	–	1,419	640	779	13,352	–
Options written	2,368	2	–	2,370	2,059	311	12,079	–
Foreign exchange contracts								
Futures – long positions	27	–	–	27	27	–	348	–
Futures – short positions	321	–	–	321	321	–	144	–
Other contracts (4)	18,356	455	–	18,811	18,811	–	58,130	–
	$1,183,617	$ 638,998	$ 258,047	$2,080,662	$1,979,360	$ 101,302	$1,658,268	$ 94,343

(1) The notional amount of $5,593 million (2001 – $1,693 million) of derivatives embedded in financial instruments, certain warrants and loan commitments considered as derivatives are excluded from the amounts in this table.
(2) Includes contracts maturing in over 10 years with a notional value of $37,322 million (2001 – $19,637 million). The related gross positive replacement cost is $1,291 million (2001 – $950 million).
(3) Comprises credit default swaps, total return swaps and credit default baskets.
(4) Comprises precious metals, commodity and equity-linked derivative contracts.

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 us. 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 equivalent amount 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

NOTE 19 Derivative financial instruments (continued)

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. The risk-adjusted amount is determined by applying standard measures of counterparty risk to the credit equivalent amount.

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, we have 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 us. Under the settlement netting provision, all payments and receipts in the same currency and due on the same day between specified pairs including us and the counterparty units are netted, generating a single payment in each currency, due either by us or the counterparty unit. We actively encourage counterparties to enter into master netting agreements. However, measurement of our 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 our policy.

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

We subject our derivative-related credit risks to the same credit approval, limit and monitoring standards that we use 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. We utilize 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 tables below show replacement cost, credit equivalent and risk-adjusted amounts of our derivatives both before and after the impact of netting. During 2002 and 2001, neither our 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, 2002	AAA, AA	A	BBB	BB or lower	Total	Banks	OECD governments	Other	Total
Gross positive replacement cost (4)	$ 15,442	$ 11,008	$ 3,421	$ 1,580	$ 31,451	$ 21,427	$ 2,068	$ 7,956	$ 31,451
Impact of master netting agreements	(10,638)	(7,208)	(2,142)	(873)	(20,861)	(16,343)	–	(4,518)	(20,861)
Replacement cost (after netting agreements)	$ 4,804	$ 3,800	$ 1,279	$ 707	$ 10,590	$ 5,084	$ 2,068	$ 3,438	$ 10,590
Replacement cost (after netting agreements) – 2001	$ 3,583	$ 4,322	$ 1,515	$ 529	$ 9,949	$ 3,652	$ 1,892	$ 4,405	$ 9,949

(1) The replacement cost of $93 million (2001 – $49 million) of derivatives embedded in financial instruments, certain warrants and loan commitments considered as derivatives are excluded from the amounts in this table.
(2) Our 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 or 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. Exchange-traded instruments are subject to daily margin requirements and are excluded as they are deemed to have no additional credit risk. The fair value of $194 million (2001 – $194 million) is excluded at October 31, 2002. Written options are excluded as they represent our obligations and as such do not attract credit risk.

Derivative-related credit risk (1)

	2002			2001		
	Replacement cost (2)	**Credit equivalent amount** (3)	**Risk-adjusted balance** (4)	Replacement cost (2)	Credit equivalent amount (3)	Risk-adjusted balance (4)
Interest rate contracts						
Forward rate agreements	**$ 178**	**$ 299**	**$ 64**	$ 108	$ 543	$ 114
Swaps	**19,608**	**24,357**	**6,323**	17,568	21,390	5,617
Options purchased	**563**	**914**	**258**	416	538	123
	20,349	**25,570**	**6,645**	18,092	22,471	5,854
Foreign exchange contracts						
Forward contracts	**6,802**	**13,049**	**3,685**	6,839	12,977	3,881
Swaps	**1,781**	**6,341**	**1,445**	1,902	5,536	1,261
Options purchased	**809**	**1,491**	**439**	721	1,339	441
	9,392	**20,881**	**5,569**	9,462	19,852	5,583
Credit derivatives (5)	**861**	**2,963**	**858**	87	1,249	369
Other contracts (6)	**849**	**1,701**	**529**	1,140	2,015	617
Derivatives before master netting agreements	**31,451**	**51,115**	**13,601**	28,781	45,587	12,423
Impact of master netting agreements	**(20,861)**	**(26,930)**	**(7,132)**	(18,832)	(24,450)	(6,339)
Total derivatives after master netting agreements	**$ 10,590**	**$ 24,185**	**$ 6,469**	$ 9,949	$ 21,137	$ 6,084

(1) The replacement cost of $93 million (2001 – $49 million) of derivatives embedded in financial instruments, certain warrants and loan commitments considered as derivatives are excluded from the amounts in this table.
(2) 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 instruments are subject to daily margin requirements and are excluded as they are deemed to have no additional credit risk. The fair value of $194 million (2001 – $194 million) is excluded at October 31, 2002. Written options are excluded as they represent our obligations and as such do not attract credit risk.
(3) Consists of (i) the total positive replacement value of all outstanding contracts, and (ii) an amount for potential future credit exposure.
(4) Using guidelines issued by the Superintendent of Financial Institutions Canada.
(5) Comprises credit default swaps, total return swaps and credit default baskets.
(6) Comprises precious metals, commodity and equity-linked derivative contracts.

NOTE 20 Concentrations of credit risk

Concentrations of credit risk exist if a number of clients are engaged in 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 our performance to developments affecting a particular industry or geographic location. The concentrations described below are within limits as established by management.

	2002										2001									
	Canada	%	United States	%	Europe	%	Other International	%	Total		Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets (1)	$158,059	73%	$ 32,450	15%	$ 18,917	9%	$ 5,979	3%	$215,405		$164,429	76%	$ 29,612	14%	$ 17,124	8%	$ 5,805	2%	$216,970
Off-balance sheet credit instruments (2)																			
Committed and uncommitted (3)	$ 60,397	50%	$ 45,573	38%	$ 13,863	11%	$ 1,191	1%	$121,024		$ 76,832	56%	$ 43,508	32%	$ 14,465	10%	$ 3,084	2%	$137,889
Other	23,266	61	10,723	28	4,235	11	148	–	38,372		20,990	59	9,893	28	4,436	12	331	1	35,650
	$ 83,663	53%	$ 56,296	35%	$ 18,098	11%	$ 1,339	1%	$159,396		$ 97,822	56%	$ 53,401	31%	$ 18,901	11%	$ 3,415	2%	$173,539
Derivatives before master netting agreements (4), (5), (6)	$ 7,734	25%	$ 9,887	31%	$ 12,232	39%	$ 1,598	5%	$ 31,451		$ 6,899	24%	$ 9,154	32%	$ 11,741	41%	$ 987	3%	$ 28,781

(1) Includes assets purchased under reverse repurchase agreements, loans and customers' liability under acceptances. The largest concentrations in Canada are Ontario at 38% (2001 – 39%) and British Columbia at 11% (2001 – 12%). No industry accounts for more than 10% of total on-balance sheet credit instruments.
(2) Represents financial instruments with contractual amounts representing credit risk.
(3) Of the commitments to extend credit, the largest industry concentration relates to financial institutions at 35% (2001 – 34%), mining and energy at 15% (2001 – 15%), transportation at 8% (2001 – 10%) and manufacturing at 8% (2001 – 10%).
(4) The largest concentration by counterparty type of this credit exposure is with banks at 68% (2001 – 64%).
(5) The replacement cost of $93 million (2001 – $49 million) of derivatives embedded in financial instruments, certain warrants and loan commitments considered as derivatives are excluded from the amounts in this table.
(6) 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 instruments are subject to daily margin requirements and are excluded as they are deemed to have no additional credit risk. The fair value of $194 million (2001 – $194 million) is excluded at October 31, 2002. Written options are excluded as they represent our obligations and as such do not attract credit risk.

NOTE 21 Estimated fair value of financial instruments

The estimated fair values disclosed below 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.

Financial assets and liabilities

	2002			2001		
	Book value	Fair value	Difference	Book value	Fair value	Difference
Financial assets						
Cash resources	$ 21,293	$ 21,293	$ –	$ 17,516	$ 17,535	$ 19
Securities	95,353	95,353	–	81,100	81,100	–
Assets purchased under reverse repurchase agreements	35,831	35,831	–	35,870	35,870	–
Loans	169,320	171,546	2,226	168,899	173,263	4,364
Other assets	51,679	51,679	–	50,668	50,668	–
Financial liabilities						
Deposits	245,040	246,515	(1,475)	235,687	238,092	(2,405)
Acceptances	8,051	8,051	–	9,923	9,923	–
Obligations related to securities sold short	17,990	17,990	–	16,037	16,037	–
Obligations related to assets sold under repurchase agreements	21,109	21,109	–	20,864	20,864	–
Other liabilities	61,639	61,639	–	52,890	52,890	–
Subordinated debentures	6,960	6,935	25	6,861	6,845	16

NOTE 21 Estimated fair value of financial instruments (continued)

Derivatives (1)

	2002				2001	
	Average fair value for the year ended (2)		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	$ 96	$ 82	$ 178	$ 177	$ 108	$ 79
Swaps	13,650	14,323	18,468	18,930	16,211	16,692
Options purchased	385	–	564	–	442	–
Options written	–	325	–	474	–	352
	14,131	14,730	19,210	19,581	16,761	17,123
Foreign exchange contracts						
Forward contracts	7,539	6,934	6,568	6,260	6,800	5,868
Cross currency swaps	501	294	504	340	518	315
Cross currency interest rate swaps	1,462	1,853	1,109	1,678	1,309	1,975
Options purchased	827	–	809	–	715	–
Options written	–	729	–	586	–	560
	10,329	9,810	8,990	8,864	9,342	8,718
Credit derivatives (3)	273	259	822	483	84	79
Other contracts (4)	1,077	2,853	1,028	3,093	1,012	2,650
	$ 25,810	$ 27,652	30,050	32,021	27,199	28,570
Held or issued for other than trading purposes						
Interest rate contracts						
Forward rate agreements			–	49	–	–
Swaps			1,140	842	1,357	1,104
Options purchased			1	–	–	–
Options written			–	13	–	–
			1,141	904	1,357	1,104
Foreign exchange contracts						
Forward contracts			234	94	39	313
Cross currency interest rate swaps			168	24	75	50
Options purchased			–	–	6	–
Options written			–	3	–	–
			402	121	120	363
Credit derivatives (3)			39	8	3	3
Other contracts (4)			13	–	296	48
			1,595	1,033	1,776	1,518
Total gross fair values before netting			31,645	33,054	28,975	30,088
Impact of master netting agreements						
With intent to settle net or simultaneously (5)			(12)	(12)	(39)	(39)
Without intent to settle net or simultaneously (6)			(20,849)	(20,849)	(18,793)	(18,793)
Total			$ 10,784	$ 12,193	$ 10,143	$ 11,256

(1) The fair value amount of $93 million (2001 – $49 million) of derivatives embedded in financial instruments, certain warrants and loan commitments considered as derivatives are excluded from the amounts in this table.
(2) Average fair value amounts are calculated based on monthly balances.
(3) Comprises credit default swaps, total return swaps and credit default baskets.
(4) Comprises precious metals, commodity and equity-linked derivative contracts.
(5) Impact of offsetting credit exposures on contracts where we have both a legally enforceable master netting agreement in place and we intend to settle the contracts on either a net basis or simultaneously.
(6) Additional impact of offsetting credit exposures on contracts where we have a legally enforceable master netting agreement in place but do not intend to settle the contracts on a net basis or simultaneously.

Methodologies and assumptions used to estimate fair values of financial instruments

Loans The fair value of the business and government loans portfolio is based on an assessment of two key risks as appropriate; interest rate risk and credit risk. Fair value is determined under a discounted cash flow methodology using a discount rate based on interest rates currently charged for new loans with similar terms and remaining maturities, adjusted for a credit risk factor, which is reviewed at least annually. Fair value of the consumer loan portfolio is based on a discounted cash flow methodology adjusted principally for prepayment risk. For certain variable rate loans that reprice frequently and loans without a stated maturity, fair values are assumed to be equal to carrying values.

Securities The fair values of securities are provided in the Securities note to the consolidated financial statements (note 5). 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.

Deposits The fair values of fixed rate deposits with a fixed maturity are determined by discounting the expected future cash flows, using market interest rates currently offered for deposits of similar terms and remaining maturities (adjusted for early redemptions where appropriate). The fair values of deposits with no stated maturity or deposits with floating rates are assumed to be equal to their carrying values.

Other assets/liabilities The carrying values of Other assets and Other liabilities approximate their fair values with the exception of amounts relating to derivative financial instruments held or issued for other than trading purposes. The net fair value over book value for these instruments is shown in Other assets.

Subordinated debentures The fair values of subordinated debentures are based on quoted market prices for similar issues, or current rates offered to us for debt of the same remaining maturity.

Financial instruments valued at carrying value Due to their short term nature, the fair value of cash resources, assets purchased under reverse repurchase agreements, customers' liability under acceptances, our liability under acceptances, obligations related to securities sold short and obligations related to assets sold under repurchase agreements is assumed to approximate carrying value.

Derivative financial instruments The fair values of derivative financial instruments are determined using various methodologies. For exchange-traded instruments, fair value is based on quoted market prices, where available. For non-exchange-traded instruments or where no quoted market prices are available, fair value is based on prevailing market rates for instruments with similar characteristics and maturities, net present value analysis or other pricing models as appropriate.