Annual Report Analysis

Royal Bank of Canada & Bank of Nova Scotia

Joseph Siu

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Principles of Financial Accounting (BAT4ME)

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# Background Information

## Royal Bank of Canada

The Royal Bank of Canada, a global financial institution, commonly referred to as the RBC, was founded in 1864 in Halifax, 158 years ago. It is currently the largest chartered bank and financial institution of Canada and trades on the Toronto Stock Exchange (Bonham, Royal Bank of Canada (RBC), 2022). The TSX ticker symbol is TSE: RY and its name per stock quotations is Royal Bank of Canada. The head office in Canada is at Toronto, there are also some offices at Calgary, Montreal, and Vancouver (Royal Bank of Canada, n.d.-a). It has 89,000+ full- and part-time employees who serve 17 million clients in Canada, the U.S. and 27 other countries (Royal Bank of Canada, n.d.-b). And it also has 1,182 branches and 4,032 ATMs in Canada (Royal Bank of Canada, 2021, p. 32).

David I. McKay is the president and the chief executive officer of RBC (Royal Bank of Canada, 2021, p. 9)**.** The 2021 fiscal year of RBC was ended October 31, 2021, which means the fiscal period covered by the 2021 RBC’s annual report is from October 31, 2020, to October 31, 2021 (Royal Bank of Canada, 2021, p. 15).

PricewaterhouseCoopers LLP, an Independent Registered Public Accounting Firm appointed by RBC’s shareholders upon the recommendation of the Audit Committee and Board, performed an independent audit of the consolidated financial statements including the consolidated balance sheets as of October 31, 2021 and 2020; the consolidated statements of income for the years then ended; the consolidated statements of comprehensive income for the years then ended; the consolidated statements of changes in equity for the years then ended; the consolidated statements of cash flows for the years then ended; and the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). They concluded that in their opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Royal Bank of Canada and its subsidiaries (together, the Bank) as of October 31, 2021 and 2020, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS) (Royal Bank of Canada, 2021, p. 127).

There are six business segments in RBC: Personal and Commercial Banking, consisting of banking operations in 36 countries around the world; RBC Wealth Management, consisting of investment products and services for retail investors; RBC Capital Markets for international investment banking services; RBC Insurance for individual and group clients; Investor and Treasury Services, providing custody services and fund administration for international clients (Bonham, Royal Bank of Canada (RBC), 2022); and Corporate Support, consists of Technology and Operations, which provides the technological and operational foundation required to effectively deliver products and services to clients (Royal Bank of Canada, 2021, p. 17).

Figure 1 - The data are from "2021 annual report" by Royal Bank of Canada, 2021. Excluded Corporate Support

As shown in Figure 1, the first major source of revenue of RBC’s fiscal 2021 was P&CB, Personal and Commercial banking, $18.3 billion. The second major source was Wealth Management, $13.3 billion. The third major source was Capital Markets, $10.2 billion. The fourth major source was Insurance, $5.6 billion. And the last major source was I&TS, Investor and Treasury Services, $2.2 billion.

RBC determined fair value by incorporating all factors that market participants would consider in setting a price, including commonly accepted valuation approaches. RBC employed a risk-based approach to property valuation. Property valuation methods include automated valuation models (AVM) and appraisals. An AVM is a tool that estimates the value of a property by reference to market data including sales of comparable properties and price trends specific to the Metropolitan Statistical Area in which the property being valued is located. Using a risk-based approach, RBC also employ appraisals which can include drive-by or full on-site appraisals (Royal Bank of Canada, 2021, p. 66).

Depreciation or amortization was recorded principally on a straight-line basis over the estimated useful lives of the assets, which were 25 to 50 years for buildings, 3 to 10 years for computer equipment, and 5 to 10 years for furniture, fixtures, and other equipment. The amortization period for leasehold improvements is the lesser of the useful life of the leasehold improvements or the lease term plus the first renewal period, if reasonably assured of renewal, up to a minimum of 10 years. Depreciation methods, useful lives, and residual values are reassessed at each reporting period and adjusted as appropriate (Royal Bank of Canada, 2021, p. 153).

There were two extraordinary developments such as the COVID-19 pandemic and the current low interest rate environment (Royal Bank of Canada, 2021, p. 8). The condensed income statements of 2012 to 2021 contained an extraordinary item named “Net loss from discontinued operations”, only exist in 2012’s income statement but not in 2013 to 2021 statements (Royal Bank of Canada, 2021, p. 228).

There were two types of Preferred Shares: First Preferred Shares and Second Preferred Shares. Both were 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 $20 billion and $5 billion, respectively. And an unlimited number of common shares without nominal or par value may be issued (Royal Bank of Canada, 2021, pp. 207-208).

Overall RBC did have a successful fiscal 2021 according to the 2021 annual report compared to 2020 and previous years. During the year, RBC generated earnings of $16.1 billion and a return on equity (ROE) of 18.6%. The CET1 ratio stood at 13.7% at year-end, maintaining a strong capital base. Earnings per share grew by 41%, reflecting strong underlying business growth and on improving credit environment, and RBC delivered $6.2 billion in dividends to its common shareholders. In terms of Total Shareholder Return, RBC outperformed its global peer group over the three- and five-year periods (Royal Bank of Canada, 2021, p. 11).

“2021 was another year defined by the pandemic and it presented both challenges and opportunities for RBC and those we serve in ways we couldn’t have predicted as the year began.” As written by the CEO of RBC, David McKay, the pandemic influenced RBC in both positive and negative ways. The successive waves of the virus were devastating in some regions and continued to disrupt lives and livelihoods, and rising cases coupled with an uneven vaccination rollout led to significant market volatility and uncertainty for businesses and consumers, but also, the society and economies showed incredible resilience, backed by significant financial support from governments – facilitated by financial institutions, including RBC (Royal Bank of Canada, 2021, p. 9).

David McKay also outlined the “outlook” of RBC. The outlook of RBC for the future was bolstered by the combination of several strengths RBC possesses. Firstly, RBC had a strong balance sheet, capital and liquidity positions, and its risk and cost discipline as foundational pillars. Secondly, the size, scale and reach of its diversified business model and market-leading franchises had significant momentum and focused growth strategies. Its businesses were supported by more than $4 billion in annual technology spend, its great people and investments in talent, backed by its world-class brand. Thirdly, RBC had also been anticipating a more open market with disruptive technology platforms for some time and had been actively preparing for these competitive forces by continuously evolving its client value proposition and investing in talent and technology. These strengths enabled differentiation in its markets and reflected how RBC allocate capital in smart and balanced ways to manage the short-term context and build future growth horizons. RBC is also adapting for long-term success and executing by focusing on four key strategic priorities: creating a broader value equation for clients and extending RBC’s lead in Canada; accelerating growth in the U.S. – second home market of RBC; investing in talent and enhancing RBC’s brand as an employer of choice; and playing an active leadership role in accelerating the transition to net-zero emissions (Royal Bank of Canada, 2021, p. 11).

## Bank of Nova Scotia

The Bank of Nova Scotia, commonly referred to as “Scotiabank,” Canada’s third largest chartered bank, is a multinational Canadian financial and banking services company based in Toronto, Ontario. Incorporated in 1832, has existed for 190 years (Bonham, Bank of Nova Scotia (Scotiabank), 2022). The TSX ticker symbol is TSE: BNS and its name per stock quotations is Bank of Nova Scotia. Scotiabank had 89,488 employees at the fiscal 2021 end. The head office of Scotiabank is at Toronto, and there are 2,518 Scotiabank’s branches and offices over the world (Scotiabank, 2021, p. 28). Scotiabank has established itself as Canada’s most international bank through extensive operations throughout Latin America, the Caribbean, Central America, and parts of Asia. It is also known as “Canada’s gold bank” because of its dominant position in bullion trading (Bonham, Bank of Nova Scotia (Scotiabank), 2022).

Brian J. Porter is the president and the chief executive officer of Scotiabank (Scotiabank, 2021, p. 3). Same as RBC, the fiscal year of Scotiabank was also ended October 31, 2021, which means Scotiabank’s 2021 annual report has the same fiscal period as RBC’s 2021 annual report which is from October 31, 2020, to October 31, 2021 (Scotiabank, 2021, p. 22).

There were four business operating segments for fiscal 2021: Canadian Banking; International Banking; Global Wealth Management; and Global Banking and Markets (Scotiabank, 2021, p. 44).

The independent auditors under Klynveld Peat Marwick Goerdeler LLP, or KPMG LLP, a multinational professional services network, and one of the Big Four accounting organizations, were appointed by the shareholders of Scotiabank, had audited the consolidated financial position of Bank as at October 31, 2021 and October 31, 2020 and its consolidated financial performance and its consolidated cash flows for each of the years in the three-year period ended October 31, 2021 prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board in accordance with Canadian Generally Accepted Auditing Standards and the standards of the Public Company Accounting Oversight Board (United States) and the effectiveness of internal control over financial reporting and had expressed their opinions upon completion of such audits in the reports to the shareholders (Scotiabank, 2021, p. 148).

The consolidated financial statements which had audited are the consolidated statements of financial position as at October 31, 2021 and October 31, 2020; the consolidated statements of income for each of the years in the three-year period ended October 31, 2021; the consolidated statements of comprehensive income for each of the years in the three-year-period ended October 31, 2021; the consolidated statements of changes in equity for each of the years in the three-year period ended October 31, 2021; the consolidated statements of cash flows for each of the years in the three-year period ended October 31, 2021; and notes to the consolidated financial statements, including a summary of significant accounting policies (Scotiabank, 2021, p. 149).

The independent auditors under KPMG LLP concluded that the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Bank as at October 31, 2021 and October 31, 2020, and its consolidated financial performance and its consolidated cash flows for each of the years in the three-year period ended October 31, 2021 in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (Scotiabank, 2021, p. 149).

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Figure 2 - The data are from "2021 annual report" by Bank of Nova Scotia, 2021. Excludes corporate segment.

As shown in Figure 2, the first major source of earnings of Scotiabank’s fiscal 2021 was Canadian Banking 43%, second was Global Banking and Markets 21%, third was International Banking 19%, and fourth was Global Wealth Management 17%.

The best evidence of fair value for a financial instrument used by Scotiabank was the quoted price in an active market. Fair value based on unadjusted quoted market prices for identical instruments in active markets represented a Level 1 valuation. Quoted prices were not always available for over-the-counter (OTC) transactions, as well as transactions in inactive or illiquid markets. OTC transactions were valued using internal models that maximize the use of observable inputs were used to estimate fair value. The chose valuation technique incorporates all the factors that market participants would take into account in pricing a transaction. When a fair value is based on all significant market observable inputs, the valuation is classified as Level 2. Financial instruments traded in a less active market had been valued using indicative market prices, the present value of cash flows or other valuation techniques. Fair value estimates normally did not consider forced or liquidation sales. Where financial instruments trade in inactive markets or when using models where observable parameters did not exist, significant management judgement was required for valuation methodologies and model inputs. Valuation that required the significant use of unobservable inputs were considered Level 3. The calculation of estimated fair value was based on market conditions at a specific point in time and therefore may not be reflective of future fair values (Scotiabank, 2021, p. 121).

The estimated fair value of loans carried at amortized cost reflects changes in the general level of interest rates and credit worthiness of borrowers that have occurred since the leans were originated or purchased. The particular valuation methods used were as follows: Canadian fixed rate residential mortgages are fair valued by discounting the expected future contractual cash flows, taking into account expected prepayments and using management’s best estimate of average market interest rates currently offered for mortgages with similar remaining terms (Level 3); for fixed rate business and government loans, fair value is determined by discounting the expected future contractual cash flows of these loans at interest rates estimated by using the appropriate currency swap curves for the remaining term, adjusted for a credit mark of the expected losses in the portfolio (Level 3); for all other fixed rate loans, fair value is determined by discounting the expected future contractual cash flows of these loans at interest rates estimated by using the appropriate currency swap curves for the remaining term (Level 3); and for all floating rate loans fair value is assumed to equal book value (Scotiabank, 2021, p. 178).

Depreciation was calculated using the straight-line method over the estimated useful life of the related asset less any residual value as follows: buildings – 40 years, building fittings – 15 years, equipment 3 to 10 years, and leasehold improvements – lease term determined by the Bank Depreciation expense is included in the Consolidated Statement of Income under non-interest expenses – depreciation and amortization. Depreciation methods, useful lives and residual values were reassessed at each financial year-end and adjusted as appropriate (Scotiabank, 2021, p. 170).

There were some extraordinary items that appeared on the Ten-Year Consolidated Statement of Change in Equity. IFRS adjustment under Retained Earnings, accumulated other comprehensive income (loss) and non-controlling interests, and Cumulative effect of adopting new accounting policies under Accumulated other comprehensive income (loss). The Ten-year Consolidated Statement of Comprehensive Income also had 2 extraordinary items: net change in unrealized gains (losses) on available-for-sale securities (debit and equity) and other comprehensive income (Scotiabank, 2021, p. 137).

There were only one type of Preferred Shares and one type of Common Shares, both were authorized that an unlimited number without nominal or par value issued and fully paid. Preferred shares were issuable in series. There were also some other equity instruments including NVCC additional Tier 1 qualifying regulatory capital notes (Scotiabank, 2021, p. 217).

Overall Scotiabank did have a successful fiscal 2021 according to the 2021 annual report compared to 2020 and previous years. During the year, Scotiabank made $9.6 billion earnings and a return on equity (ROE) of 15.0% from 10.4%. The Common Equity Tier 1 (CET1) capital ratio increased from 11.8% to 12.3%, which indicated Scotiabank was at a strong capital position (Scotiabank, 2021).

“This year, the Bank’s earnings demonstrated the power of our repositioned, well-diversified businesses, and we exceeded our medium-term objectives, rebounding strongly in EPS growth, return on equity, operating leverage, and capital ratios. Our performance validates the benefits of the significant investments we have made in our businesses over the last few years.” As written by the CEO of Scotiabank, Brian J. Porter (Scotiabank, 2021, p. 4), all four business operating segments resulted in a positive financial performance. The Canadian Banking segment continued to deliver strong results for Scotiabank, with strong performance in business banking, a high-quality residential mortgage portfolio, and a market-leading position in automotive finance (Scotiabank, 2021, p. 4).

Canadian Banking reported adjusted earnings of $4,171 million in 2021, an increase of 60% compared to the prior year dur to lower provision for credit losses and higher revenues driven by strong asset growth, which was expected to remain strong into 2022 (Scotiabank, 2021, p. 4).

Global Wealth Management reported adjusted earnings of $1,592 million in 2021, which increased 23% compared to 2022. This was driven by strong results across its Canadian advisory and asset management businesses (Scotiabank, 2021, p. 4).

Global Banking and Markets delivered another strong year with earnings of $2,075 million, with strong performance in corporate banking and capital markets (Scotiabank, 2021, p. 4).

International Banking also reported adjusted earnings of $1,855 million, which was an increase of 62% compared to 2020 due to lower provision for credit losses and prudent expense management (Scotiabank, 2021, p. 4).

Here are some of the outlooks outlined by the CEO: Scotiabank introduced new and improved ways to connect its customers to a dedicated Scotiabank advisor through its mobile app and online banking platforms, to discuss the banking needs; introduced new products and services to support how and where our customers want to bank; launched solutions to help clients manage through the low interest rate environment; and introduced ScotiaRED – a series of state-of the-art electronic trading tools that deliver high-quality execution using advanced analytics and artificial intelligence (Scotiabank, 2021, p. 6).

# Horizontal Analysis

In Figure 3 and Figure 4 below, horizontal analysis of Condensed Balance Sheets had been done for Royal Bank of Canada and Bank of Nova Scotia for both 2021 and 2020, respectively. Further analysis will be shown at the conclusion section.



Figure 3 - The data are from "2021 annual report" by Royal Bank of Canada, 2021. Page 51 / 135.



Figure 4 - The data are from "2021 annual report" by Bank of Nova Scotia, 2021. Page 63 / 137.

In Figure 5 and Figure 6 below, horizontal analysis of Condensed Income Statements had been done for Royal Bank of Canada and Bank of Nova Scotia for both 2021 and 2020, respectively. Further analysis will be shown at the conclusion section.



Figure 5 - The data are from "2021 annual report" by Royal Bank of Canada, 2021. Page 136 / 228.



Figure 6 - The data are from "2021 annual report" by Bank of Nova Scotia, 2021. Page 137.

# Vertical Analysis

In Figure 7 and Figure 8 below, vertical analysis of Condensed Balance Sheets had been done for Royal Bank of Canada and Bank of Nova Scotia for both 2021 and 2020, respectively. Further analysis will be shown at the conclusion section.



Figure 7 - The data are from "2021 annual report" by Royal Bank of Canada, 2021. Page 51 / 135.



Figure 8 - The data are from "2021 annual report" by Bank of Nova Scotia, 2021. Page 137

In Figure 9 and Figure 10 below, vertical analysis of Condensed Income Statements had been done for Royal Bank of Canada and Bank of Nova Scotia for both 2021 and 2020, respectively. Further analysis will be shown at the conclusion section.



Figure 9 - The data are from "2021 annual report" by Royal Bank of Canada, 2021. Page 136 / 228.



Figure 10 - The data are from "2021 annual report" by Bank of Nova Scotia, 2021. Page 137.

# Financial Ratio Analysis

The following Figure 11 and Figure 12 show all ratios including Current Ratio, Receivables Turnover, Debt to Total Assets, Interest Coverage, Profit Margin, Return on Assets (ROA), Return on Equity (ROE), and Earnings per Share of both companies. Calculations of all ratios are shown below, further analysis are shown in the conclusion section.



Figure 11 – ratios combined; specific ratio calculations are provided below.



Figure 12 – ratios combined; specific ratio calculations are provided below.

Current ratio is defined by Current Assets / Current Liabilities.

For RBC, the Current Assets include Cash and due from banks, Interest-bearing deposits with banks, securities for trading and fair value through other comprehensive income up to 1 year, assets purchased under reverse repurchase agreements and securities borrowed, total loans under 1-year, segregated funds net assets, and derivative assets less than 1 year. Current Liabilities include deposits within 1 year (demand, notice, and term deposits), segregated funds net liabilities, and derivative liabilities less than 1 year.



Figure 13 - Calculation of current ratio of Royal Bank of Canada.

For Scotiabank, the Current Assets include Cash, deposits with financial institutions and precious metals, investment securities within 1 year, loans, net of allowance within 1 year. Current Liabilities include deposits within 1 year, obligations related to securities sold under repurchase agreements and securities lent, and other liabilities within 1 year.



Figure 14 - Calculation of current ratio of Bank of Nova Scotia.

Receivables Turnover is defined as Net Credit Sales / Average Accounts Receivable.

For RBC, the Net Credit Sales are the total revenue. Average Accounts Receivable is the average of beginning accounts receivable and ending accounts receivable, the data of 2019 are only using for the calculation of 2020’s average accounts receivable



Figure 15 - Calculation of receivables turnover ratio of Royal Bank of Canada

For Scotiabank, the Net Credit Sales are the total revenue. Since there is no information relating to the Interest-bearing deposits with financial institutions. Thus, we prorated 2021 average accounts receivable to 2020 by using the ending total assets balance of these two years.



Figure 16 - Calculation of receivables turnover of Bank of Nova Scotia

Profit Margin is defined as Net Income / Net Sales.

For RBC, the Net sales are the total revenue.

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Figure 17 - Calculation of profit margin ratio of Royal Bank of Canada

For Scotiabank, the Net sales are the total revenue.



Figure 18 - Calculation of profit margin ratio of Bank of Nova Scotia

Return on Assets (ROA) is defined as Net Income / Average Total Assets.

For RBC, the net income and total assets of 2019 are both shown, but only the total assets are used to calculate the average total assets of 2020.



Figure 19 - Calculation of return on assets ratio of Royal Bank of Canada

For Scotiabank, the net income and total assets of 2019 are both shown, but only the total assets are used to calculate the average total assets of 2020.



Figure 20 - Calculation of return on assets ratio of Bank of Nova Scotia

Return on Equity (ROE) is defined as Net Income / Average Shareholders’ Equity.

For RBC, the net income and total shareholders’ equity of 2019 are both shown, but only the total shareholders’ equity are used to calculate the average total shareholders’ equity of 2020.



Figure 21 - Calculation of return on equity ratio of Royal Bank of Canada

For Scotiabank, the net income and total shareholders’ equity of 2019 are both shown, but only the total shareholders’ equity are used to calculate the average total shareholders’ equity of 2020.



Figure 22 - Calculation of return on equity ratio of Bank of Nova Scotia

Earnings per Share (EPS) is defined as (Net Income – Preferred Dividends) / Number of Common Shares Outstanding.



Figure 23 - Calculation of earnings per share of Royal Bank of Canada



Figure 24 - Calculation of earnings per share of Bank of Nova Scotia

Debt to Total Assets is defined as Total Liabilities / Total Assets.



Figure 25 - Calculation of debt to total assets ratio of Royal Bank of Canada



Figure 26 - Calculation of debt to total assets ratio of Bank of Nova Scotia

Interest Coverage is defined as EBITDA / Interest Expense.

EBITDA is the income before interest, taxes, depreciation, and amortization, but the annual report of RBC’s 2021 fiscal year only provided the income before income taxes.



Figure 27 - Calculation of interest coverage of Royal Bank of Canada

EBITDA is the income before interest, taxes, depreciation, and amortization, but the annual report of Scotiabank’s 2021 fiscal year only provided the income before income taxes.



Figure 28 - Calculation of interest coverage of Bank of Nova Scotia

# Conclusion

Even though Royal Bank of Canada and Bank of Nova Scotia are both banks chartered and founded in Canada, there are still many differences and similarities between these two banks.

Firstly, the business segments of both banks are similar but focusing on different segments. RBC have 6 business segments which are Personal & Commercial Banking, Wealth Management, Insurance, Investor & Treasury Services, Capital Markets, and Corporate Support; Scotiabank have 4 business segments which are Canadian Banking, Global Wealth Management, Global Banking and Markets, and International Banking. Scotiabank is mainly focusing on Banking in worldwide, but RBC’s segments are broader like the Insurance, Investor & Treasury Services, and Corporate Support.

Secondly, the main regions of two banks are slightly different. Only 43% of assets under administration (AUA) of RBC is in Canada, but Scotiabank has 60% in Canada.

Thirdly, the date of fiscal year end of both banks is the same, both are ended October 31.

Fourthly, two banks’ 2021 annual reports followed the GAAP and or IFRS, but audited by different accounting firms, RBC’s 2021 annual report was audited by PricewaterhouseCoopers LLP, and Scotiabank’s 2021 annual report was audited by Klynveld Peat Marwick Goerdeler LLP.

Fifthly, the head offices of both banks are based in Toronto.

Sixthly, the Chair of the Board of RBC is a female, which is very rare in the corporate Canada world.

Lastly, they are also very similar because of their revenues and earnings are mainly from banking and wealth management, also because of their revenues by business lines are both mainly personal banking.

To find out which banks is in a better financial position, we need to first compare the horizontal, vertical analysis and the financial ratios of both banks.

Based on the horizontal analysis of the Balance Sheets (Figures 3 and 4) of both banks: the total assets of RBC increased $81,775 millions (5%), but the total assets of Scotiabank increased $48,378 millions (4.3%), since the growth amount and rate of the total asset of RBC is larger and faster than Scotiabank, this shows that RBC is expanding its Assets in a faster rate and larger amount compared to Scotiabank; RBC’s interest-bearing deposits with banks increased 104.1% which is a huge growth in interbank deposit comparing to Scotiabank; Scotiabank’s investment securities decreased 32.5% which is significant reduction since RBC’s investment securities increased 3.2%; and the total equity of RBC increased $11,995 millions (13.8%) which is also significant compared to Scotiabank’s $2,389 millions (3.4%).

Based on the horizontal analysis of the Income Statements (Figures 5 and 6) of both banks: The net income of RBC increased $4,613 millions (40.3%) and the net income of Scotiabank increased $3,102 millions (45.3%), the growth of net income of Scotiabank is faster compared to RBC, but the total revenue of Scotiabank decreased $84 millions (0.3%) and RBC increased $2,512 (5.3%), this also indicates the significant reduction of Scotiabank’s provision for credit loses from $6,084 to $1,808 by $4,276 (70.3%), a significant improvement of credit risk management.

Based on the vertical analysis of the Balance Sheets (Figures 7 and 8) of both banks: generally, RBC’s percentages of assets did not change significantly but cash and due from banks still dropped from 7.3% to 6.7% which a decrease in the liquidity might occur; Scotiabank’s percentages also did not change significantly but the percentage of cash, deposits with financial institutions and precious metals raised from 6.8% to 7.3% which an increase in liquidity is possible to occur.

Based on the vertical analysis of the Income Statements (Figure 9 and 10) of both banks: the percentage of net incomes to the total revenues both increased significantly which are showing the decrease of expense.

Financial ratios are also important to indicate the financial positions and the performance of the banks.

First, the current ratios (Figures 11 and 12) of RBC are 1.095:1 and 1.094:1, for 2021 and 2020 respectively. The current ratios of Scotiabank are 1.173:1 and 1.1:1 for 2021 and 2020 respectively. A lower ratio will indicate that the company may have difficulty repaying debts, so based on the current ratios of two banks, Scotiabank is better.

Second, the receivables turnovers (Figures 15 and 16) of RBC are 0.066 and 0.07 for 2021 and 2020, and the receivables turnovers of Scotiabank are 0.045 and 0.048 for 2021 and 2020. The receivable turnover ratios are used to quantify how well companies are managing the credit that they extend to their customers by evaluating how long it takes to collet the debt throughout the accounting period. So, higher ratios mean better management of credits, RBC is highly better compared to Scotiabank based on the receivables turnovers.

Third, the profit margins (Figures 17 and 18) of RBC for 2021 and 2020 are 32.3% and 24.2%, the profit margins of Scotiabank for 2021 and 2020 are 31.9% and 21.6%. High profit margin means better controlling to the selling prices and its costs, so, RBC is slightly better than Scotiabank in term of managing prices and costs.

Fourth, the return on assets (ROA) ratios (Figures 19 and 20) of RBC for fiscal 2021 and 2020 are 1.0% and 0.7%, same ratios of Scotiabank for same years are 0.9% and 0.6%, since higher ratio of return on assets, higher the ability to generate more profits, thus RBC is also better than Scotiabank relating to ROA.

Fifth, the return on equity (ROE) ratios (Figures 21 and 22) are like return on assets (ROA), but instead of estimating the ability to generate more profits, ROE more focuses on the efficiency of investors investments. Since RBC’s 17.3% and 14.0% of 2021 and 2020 are much higher than Scotiabank’s 13.9% and 9.7% of 2021 and 2020 respectively, therefore, investments in RBC is more efficient and profitable compared to Scotiabank, investors are more likely to invest in RBC.

Lastly, the earnings per share (EPS), the most widely reported measure of companies’ profitability, higher the earnings per share, the company is more able, or profitable enough to pay out dividends to its shareholders. Both 2021 and 2020 respectively, the earnings per share of RBC are higher than Scotiabank ($11.1 and $7.9 as compared to $8.0 and $5.5)

Based on the horizontal and vertical analysis of both Balance Sheets and Income Statements of the two banks, Royal Bank of Canada and Bank of Nova Scotia, and the 8 financial ratios, we can conclude that RBC is having a better financial position and performance generally compared to Scotiabank even though both banks are showing a good financial position and performance.

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