



# RESEARCH REPORT

September 17, 2018

Stock Rating **SELL**  
Price Target **\$77.44**



Ticker	BNS
Market Cap. (mm)	\$92,909
P/E	11.0x
P/B	1.5x

## 52 Week Performance



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## Bank of Nova Scotia Leaving the Bank a Loan

The Bank of Nova Scotia ("Scotia", "BNS", "the Company") was purchased on QUIC's first trading day on September 21, 2010 and has been one of the few remaining core holdings since inception. Over the past 8 years, Scotia has delivered impressive returns and made moves to adapt its business model through investments in technology and acquisitions. While FIG has always been strongly in favour of BNS, we feel that we need to re-evaluate if we believe Scotia still has room to outperform our other bank holdings.

Scotiabank stock has performed moderately over the past few years, returning 37% since inception. In comparison to the other banks in the FIG portfolio, Scotia has been outperformed by its peers. Since inception, RBC has returned 77% and TD has returned 122%. Going forward, the FIG team believes that Scotia has limited upside as many of the original investment theses have played out.

This report looks at each of the original investment theses:

- Investment Thesis I: Industry-Leading Global Banking Platform
- Investment Thesis II: Improving Credit Quality and Energy Exposure
- Investment Thesis III: Global Banking and Markets Poised for Growth

Across all investment theses, the FIG team has less conviction that Scotia will be able to outperform based on the factors that differentiate it from the other banks. This leads us to a sell recommendation for Scotia and a target sell price of \$77.

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## Company Overview

### Introduction:

Employing over 88 thousand people worldwide, Scotiabank is the third largest of the “Big 5” banks in Canada. With its strong global footprint, it is largely considered Canada’s most international bank. Its three lines of business include: Canadian Banking, International Banking, and Global Markets.

### Canadian Banking:

The Canadian Banking segment offers a range of financial products and solutions to over 10 million domestic customers. 20% of these customers are involved with Scotiabank’s subsidiary, Tangerine. It serves these customers through a system of over 963 branches and 3,600 automated banking machines. This segment also offers a portfolio of investment and wealth management services to customers.

### EXHIBIT I

Revenue (\$MM) by Business Division



Source(s): Capital IQ

### International Banking:

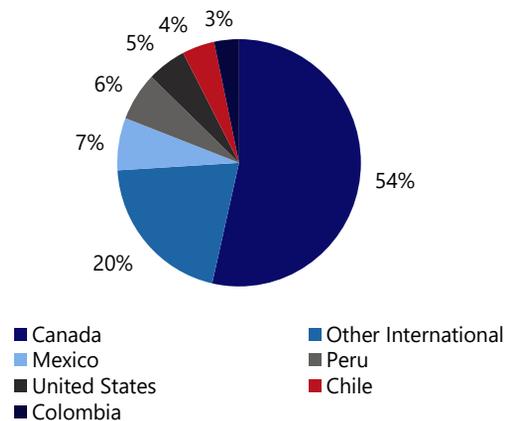
Scotiabank is unique in that the bank has more customers and branches internationally than domestically in Canada. These 15 million clients are primarily located in Latin American countries such as Mexico, Peru, Chile, and Colombia. Due to its international involvement, Scotiabank is heavily exposed to Central American economic performance. Recently, it completed the acquisition of BBVA Chile, and has announced the acquisition of Citibank Colombia.

### Global Banking and Markets:

Finally, Scotiabank’s Global Banking and Markets division engages in wholesale banking and capital markets business with customers in North America, Latin America, and certain markets in Europe and Asia. It offers services such as investment banking, fixed income and equity underwriting, sales and trading, research, and more.

### EXHIBIT II

Revenue Geographic Segmentation



Source(s): Capital IQ

## Industry Overview

Since the Great Recession, Canadian banks have experienced a long stretch of profitability. Earnings have been robust due to rising debt levels, strong housing markets, and improved economic activity. On top of that, the Canadian banking system has been considered one of the world's most secure over the past six years according to the World Economic Forum.

### The Homogenous Nature of Canadian Banks:

On the surface, many of these Canadian banks look largely homogenous. All of them offer similar products, are similarly capitalized, and offer comparable dividend yields. The FIG team is not exactly sure why this is the case, although we speculate it may be due to the oligopolistic nature of the industry. What this means for the portfolio is that the main differentiators among the Big Five now become geographic exposure and product mix.

### Disruption of Technology:

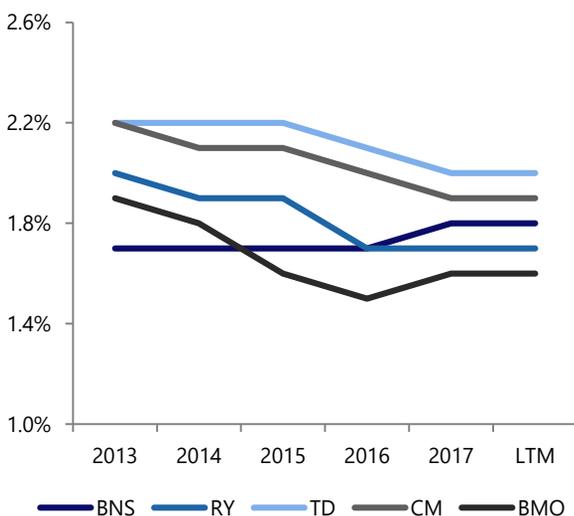
While the industry has been relatively stable throughout the past decade, we are beginning to see Canadian banks implement technology to a greater degree. RBC, for example, announced its RBC Reach program in July, an accelerator program for startups.

While this technology provides banks with a wealth of opportunity, it also brings them new challenges as well. Currently, around 78% of banking executives agree that their work is going to change considerably over the next three to five years as a result of digital trends, and 60% say that they are actively developing digital talent.

One of the ways technology is being used is in data governance. This allows banks to not only better understand their customers and trends, but also helps them cut costs in inefficient areas.

#### EXHIBIT III

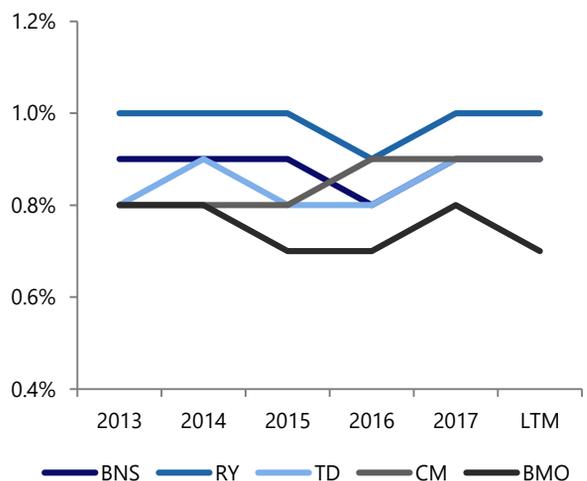
Canadian Bank NIM



Source(s): Capital IQ

#### EXHIBIT IV

Canadian Bank ROA



Source(s): Capital IQ

## Industry Overview Cont.

For example, one McKinsey article details how a failing European bank was able to reduce customer churn by 15% due to machine-learning algorithms.

However, alongside the innovations comes a degree of risk as well. For a bank, the most important currency is trust. This means that while adopting technologies may help banks manage fraud and reduce losses, there is a tight margin for failure. Each bank must decide for themselves what the right balance of risk and innovations is.

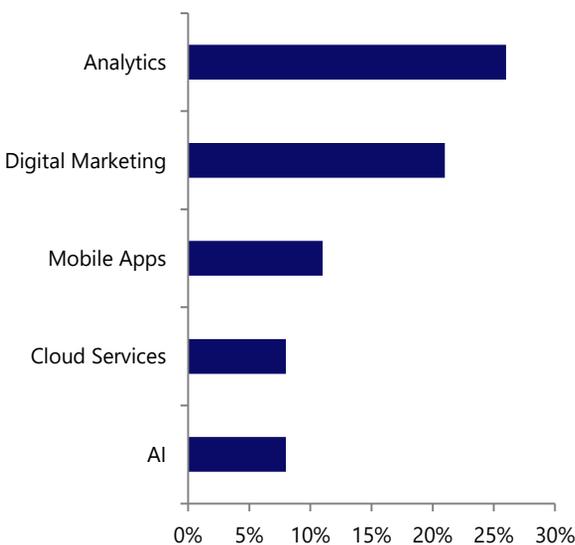
### Rising Interest Rate Environment:

With a stable economic outlook, unemployment near a 40-year low, and interest rates to trend towards 2.25% by 2020, industry fundamentals remain strong for commercial banks moving forward.

Typically, a rising interest rate environment boosts the net interest margin (NIM) and increases bank profitability. However, there are many other factors that affect this NIM including a bank's loan book, and operating efficiencies. One important factor is the yield curve which impacts the income earned from borrowing at a lower short-term rate and lending at a higher long-term rate. The current Canadian yield curve remains flat, perhaps due to the economic uncertainty with the U.S. As some studies show that the yield curve can have an equal or greater impact on NIMs than rates overall, this is a poor sign for Canadian banks and deserves further diligence.

### EXHIBIT V

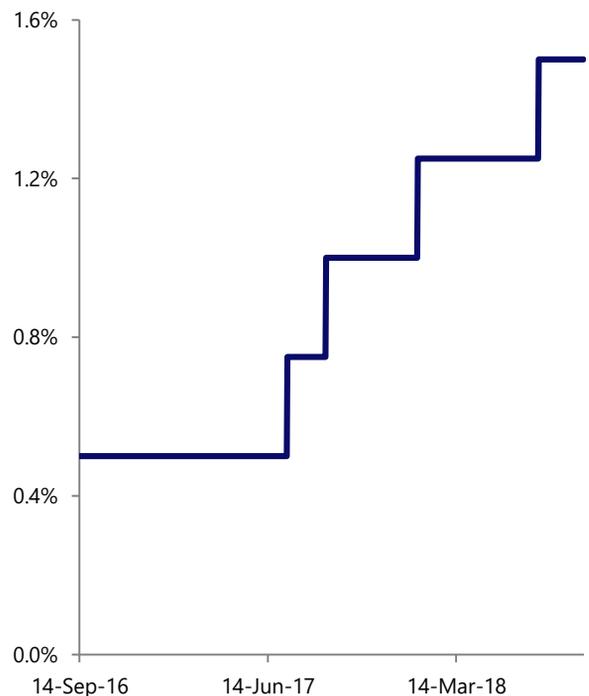
Priority Ranking of IT Areas for Bank CIOs



Source(s): Statista

### EXHIBIT VI

Canadian Overnight Rate



Source(s): Bank of Canada

## Investment Thesis I: Industry-Leading Global Banking Platform

### Original Thesis:

When FIG purchased BNS, one of the most important qualities of the bank to the portfolio was its international exposure. Compared to all other Big 5 Canadian banks, Scotiabank offers the most unique geographic profile from international operations. BNS has a global footprint in over 55 countries, with over 50,000 international employees across over 1,800 branches. It has been operating in Canada, the U.S. and the Caribbean for over 125 years, establishing a strong presence in a wide variety of international markets. Scotiabank focuses its international operations in Peru, Mexico, the U.S., Colombia, Chile and other international markets, as shown in the following segmented revenue graph.

In 2016, across Canadian and international segments, BNS outpaced its peers in growth, and its shares returned over 40%.

### Changes Since Inception:

Since 2013, BNS has been able to grow its revenues across all geographic segments, with total revenues reaching over \$25 billion at the end of 2017 compared to \$20 billion at the end of 2013. However, when analyzing the actual proportion of its revenues that are attributable to Canada compared to international markets, the percentage has barely changed. In 2013,

53% of Scotia's revenues were earned from Canadian operations with the rest being international while in 2017, 54% of Scotia's revenues were earned from Canadian operations.

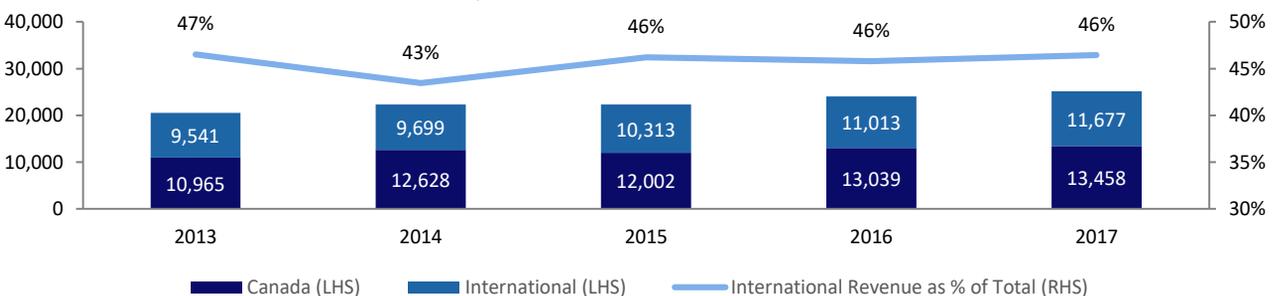
Since 2013, Scotia has acquired 9 international entities to grow their international portfolio. These range from local financial institutions to branches and subsidiaries of other North American banks. Many of these acquisitions grow Scotia's presence in South American countries, namely Peru, Chile, and Colombia. Despite these acquisitions, the proportion of international revenues has not increased, which implies that these acquisitions have not materially benefitted Scotia's revenues.

### Looking Forward:

BNS has maintained its position as an international bank over the past few years, however there is concern going forward. With intentions of a growing reliance on South America, the political and economic uncertainty of the region brings unique challenges to integrating these acquisitions. Going forward, Scotia's growth becomes increasingly reliant upon the successful integration of many of its acquisitions, representing a significant challenge. Overall, this reduces the conviction FIG previously held in Scotia's ability to outperform the other Canadian banks due to their international exposure.

### Exhibit VII

BNS Revenue in Canada and Internationally (\$MM)



Source(s): Company Reports

## Thesis II: Improving Credit Quality and Energy Exposure

### Original Thesis:

The FIG team’s original conviction in Scotiabank’s international exposure was complemented by its ability to manage its credit quality and harness a unique position within the energy sector’s commercial and corporate loan markets. Scotiabank’s global presence delivers higher net interest margins at the expense of higher provision for credit losses, as their earnings are predominantly generated from South America. The FIG team identified an opportunity in Scotiabank’s ability to de-risk its portfolio, as it lowered its provision for credit losses (PCL) ratio, boosting its operating return on equity. The FIG team also favoured Scotiabank’s leading position in the energy market. Of its energy-focused loan portfolio, 59% were investment grade, leaving 41% subject to risk-reward upside in an improving oil market. Compared to other Canadian banks, Scotiabank has the lowest gross impaired loans ratio. The FIG team believed that Scotiabank was uniquely positioned to capitalize on the recovering oil market both within Canada and internationally.

### Changes Since Inception:

Since the FIG team last revisited Scotiabank in 2016, the firm has maintained an average PCL ratio of 0.48%. This has led to a slight YoY decrease of 30 bps in ROE which registered at 14.7% as of Q3/18; this still falls well below its peer average operating ROE of 16.7%. The increase in its PCL ratio in Q3/18 was attributable

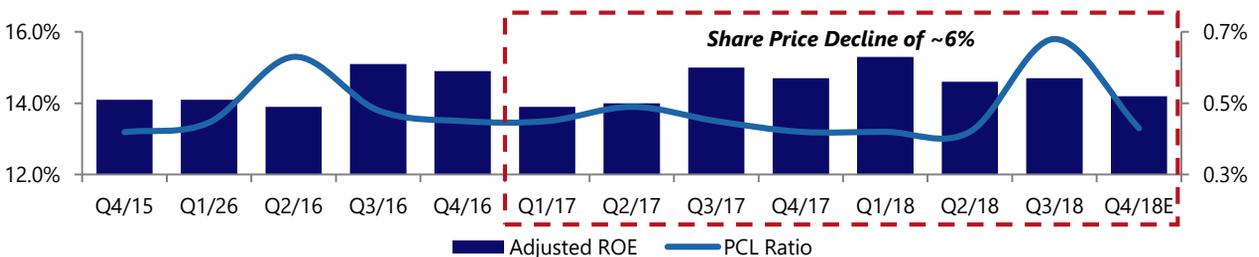
to higher provisions in a number of major categories. Within the energy sector, Scotiabank has increased its investment grade loans from 59% to 64%. The energy market saw a substantial recovery, with the price of WTI currently ranging between \$60 and \$70 per barrel. However, though the market has stabilized, continued growth within oil and gas sectors remains challenged with growing concerns of international instability and the rise of alternative energy sources.

### Looking Forward:

Given the changes in Scotiabank’s credit quality and the market dynamics of the energy sector, we remain skeptical that these two factors will continue to fuel growth. Though Scotiabank was successful at increasing its ROE and maintaining a relatively stable PCL ratio, it has underperformed, leading us to believe that improved credit quality will not differentiate it within the market and lead to outperformance. Similarly, we do not believe that Scotiabank’s presence within the energy sector creates a favorable backdrop for additional growth. Scotiabank’s energy portfolio has delivered insufficient growth when compared to expectations; between 2015 and 2017, its total energy loan portfolio decreased from \$16.5 billion to \$15.5 billion. Similarly, its increasing proportion of investment grade loans limits risk-reward upside. Taking the deterioration of these two factors into consideration, we have less conviction in Scotiabank’s ability to outperform going forward.

### EXHIBIT VIII

Underperformance Despite Improved Credit Quality and ROE



Source(s): Company Reports, CapIQ, Eight Capital

## Investment Thesis III: Global Banking and Markets Poised for Growth

### Original Thesis:

A primary area for growth that was identified for Scotiabank was in its Capital Markets division, as it held a sizable balance sheet in 2016. Consequently, the Capital Markets division's earnings grew by 23% between Q3/16 and Q2/17. Scotiabank has a minor presence within capital markets, but based on its 2016 growth, it was anticipated that its capital market deal flow would grow to rival competitors like BMO and CIBC. To support this growth, Scotiabank would be able to deploy its underutilized balance sheet, which in Q4/16 boasted a Base III CET1 ratio of 10.98%; as of Q2/17, its peer average CET1 ratio was 11.42%. This set the stage for high growth in capital-intensive areas such as trading and underwriting. Of all Canadian banks, QUIC believed that BNS had the greatest upside potential in capital markets given its underutilized balance sheet, relatively small size, and international exposure.

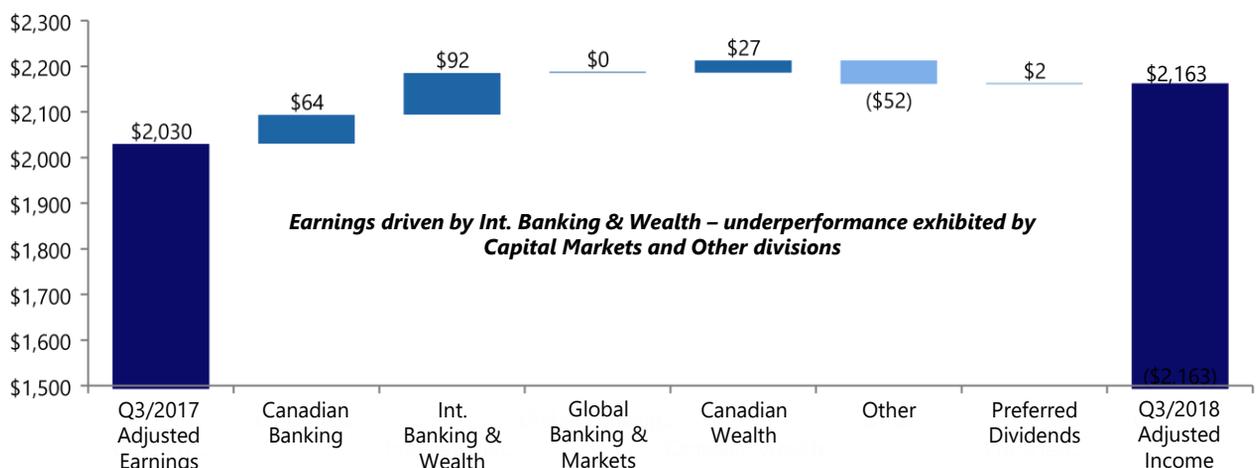
### Changes Since Inception:

Though Scotiabank may have had the opportunity to

bolster its capital markets division, it has struggled to realize any substantial growth in this area. It has specifically faced challenges in its Trading division, which reported YoY revenue decrease of 26%, as of Q3/18. The lackluster results reflect an ongoing restructuring strategy initiated in early 2018; it was designed to alter its trading business to focus on major corporate clients that have broader relationships with the bank. The restructuring included a downsizing of ScotiaMocatta, which is the largest financier of the global precious metals supply chain, providing ~15-20% of global lending in the subsector. Further decreases of 3% and 17% were realized in its Fees, Commissions, and Brokerage divisions, respectively. Overall, its Global Banking and Markets business has significantly underperformed its other core groups, with consistent declines over the last three quarters. To achieve growth, Scotiabank has looked to acquisitions, utilizing its balance sheet to engage in three takeovers since the start of 2018. As a result, its balance sheet no longer has the same excess capacity it previously had, as its CET1 ratio is expected to decrease below to 10.7% in Q4/18, its lowest level since early 2016.

### EXHIBIT IX

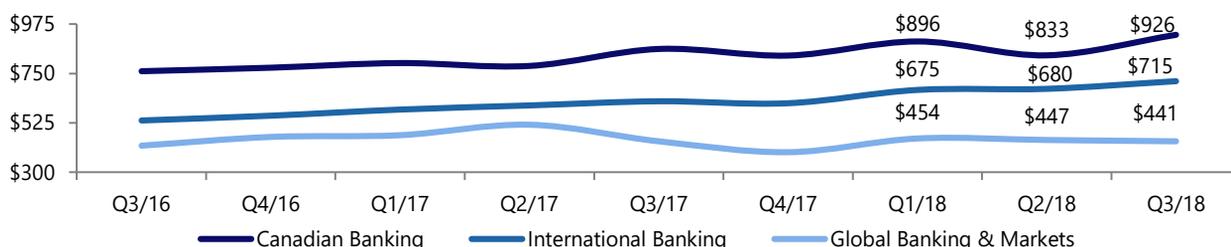
YoY Adjusted Earnings Breakdown (\$mm)



Source(s): Company Reports, Eight Capital

**EXHIBIT X**

Capital Markets Headwinds Drive Three Consecutive Declines in Global Banking & Markets (\$MM)



Source(s): Company Reports, Eight Capital

**EXHIBIT XI**

Capital Markets Earnings Breakdown Reflects Restructuring Challenges (\$MM)

	Q3/17 Earnings:	Q3/18 Earnings:	YoY % Change:
<b>Total Trading:</b>	\$448	\$331	(26%)
<b>Brokerage Fees:</b>	\$266	\$221	(3%)
<b>Other Fees:</b>	\$150	\$145	(17%)

Source(s): Company Reports, Cormark Securities Inc.

**Investment Thesis III Cont'd: Global Banking and Markets Poised for Growth**

**Looking Forward:**

Overall, Scotiabank was unable to drive any substantial organic growth in its Capital Markets group and instead decided to deploy its capital to grow through acquisitions. Scotiabank's expansion strategy together with the restructuring of its Trading division creates substantial transparency issues, which will challenge the FIG team's ability to re-evaluate the name. Scotiabank's actions to restructure its Trading business communicates that the original thesis for Capital Markets growth may not be achievable, and instead the majority of its growth in this segment will be predicated on the success of its acquisitions.

At this point in time, we see no near-term upside within Scotiabank's Capital Markets business line and believe the majority of its growth will be derived from international markets. Limited upside in the Capital Markets business diminishes the FIG team's conviction in Scotiabank, and the complexity of integrating multiple acquisitions raises a number of concerns for its ability to outperform peers.

## Valuation

### The Residual Income Model Explained:

The residual income model is based on the excess returns that banks are able to generate on a return on equity (ROE) basis in comparison to its cost of equity. This model addresses two key issues with the traditional dividend discount model used to value banks:

1. What if the bank does not issue dividends or this issuance is skewed by stock repurchases?
2. Everything depends on assumptions that are 5+ years into the future.

These issues are addressed through the residual income method by basing the majority of the value on the bank's current Book Value and then adding the present value of the residual income or "excess returns" generated in the projection and terminal period.

This method is somewhat similar mechanically to a discounted cash flow model, but instead does not base the majority of a bank's values on terminal period growth projections, but on the current book value, which we believe is a more conservative measure of a bank's value.

### Commentary on BNS:

As is shown on the right, BNS is currently quite fairly valued, as the equity upside in the bank's shares is minimal according to our estimates.

With a forward twelve months implied share price of \$77.44, we do not see a further investment or holding of the bank as a lucrative investment opportunity in comparison to other opportunities within the space.

### EXHIBIT XII

#### Residual Income Model Output

#### Residual Income Assumptions

Mid-Year Convention:	0.50
Maturity Year Begins:	2019
Minimum Tier 1 Common Ratio:	13.0%
Annual Stock Repurchases:	\$100.00
Development:	13.0%
Maturity:	12.5%
Long-Term:	7.2%

#### Risk-Weighted Assets Growth:

<b>Cost of Equity:</b>	6.18%
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#### Present Value of Equity Calculations:

Current Value of Common Equity:	\$57,597
Sum of PV of Residual Income:	22,915
Terminal NI Growth Rate:	2.0%
Estimated Year 4 NI to Common:	5,628
Residual Income Terminal Value:	18,759
PV of Res. Inc. Terminal Value:	15,208

<b>Present Value of Equity:</b>	<b>\$95,720</b>
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Diluted Shares:	1,236.1
<b>Implied Share Price:</b>	<b>\$77.44</b>
Dividend Yield:	4.50%
<b>Implied Upside:</b>	<b>7.16%</b>

## Portfolio Implications – Sell Recommendation

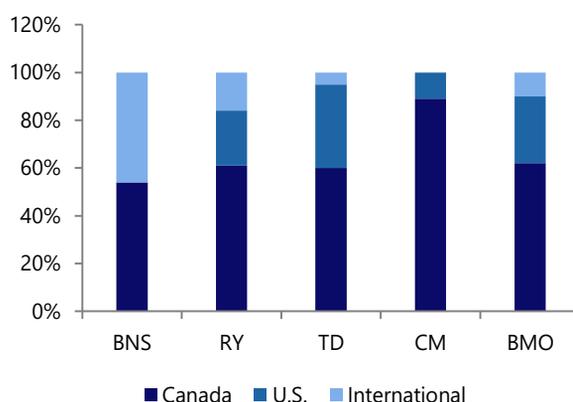
The FIG team has lost conviction in each of its initial theses on BNS. Firstly, its international revenues have not grown as a percentage of the business despite its numerous acquisitions, and its exposure to South America has become more unfavourable due to economic and political uncertainty. Secondly, BNS has failed to capitalize on the recovering energy market and the outlook for this market has also become more uncertain. Thirdly, BNS has failed to grow its capital markets business organically and its strategy of acquisitive growth has eliminated the excess capacity on its balance sheet that the team believed could be used to grow capital-intensive businesses like trading and underwriting. Therefore, the FIG team will sell out of its holdings in BNS at a target price of \$77.44.

The FIG team will reallocate the proceeds from selling out of BNS into RY and TD, as the team maintains a positive outlook on Canadian banks and their ability to capitalize on investments into technology and a rising interest rate environment. The FIG team sees RY and TD as the most favourable choices within the Canadian banking space as they have strong U.S. and international exposure, with exposure to the U.S. market being more favourable due to the economically stable rising rate environment and the

opportunity for acquisitions due to the more fragmented banking industry. RY and TD are also leaders in technology within the Canadian banking space, with a target of 30% and 40% of their technology budgets being spent on transformative projects respectively and strong investments into areas such as AI.

### EXHIBIT XIII

Revenue by Geography



### EXHIBIT XIV

Canadian Banks Public Comparables

Canadian Commercial Banks												
Company Name	Market Cap (\$MM)	P / TBV		P / B		P / E			ROE		Div. Yield (%)	CET 1 Ratio
		Current	5-yr	Current	5-yr	LTM	2017	2018E	2016	2017		
Royal Bank of Canada	\$148,416	2.7x	3.4x	2.1x	2.6x	12.8x	11.8x	12.0x	15.4%	15.7%	3.8%	11.3%
The Toronto-Dominion Bank	\$144,334	2.7x	3.4x	2.0x	2.4x	13.5x	13.0x	12.0x	12.7%	14.1%	3.4%	10.7%
The Bank of Nova Scotia	\$92,910	2.0x	2.4x	1.5x	1.8x	11.1x	11.9x	10.6x	13.2%	13.8%	4.5%	11.9%
Bank of Montreal	\$68,101	2.1x	2.5x	1.7x	1.9x	14.4x	11.7x	11.6x	11.3%	12.3%	3.6%	11.4%
Canadian Imperial Bank of Commerce	\$54,380	2.2x	2.7x	1.7x	2.3x	10.7x	10.5x	10.1x	19.0%	17.2%	4.4%	11.2%
National Bank of Canada	\$21,890	2.5x	3.1x	1.9x	2.3x	11.0x	9.6x	10.7x	10.7%	15.8%	3.8%	11.2%
Canadian Western Bank	\$3,056	1.5x	1.7x	1.3x	1.6x	12.4x	9.8x	11.3x	8.9%	9.6%	3.0%	9.5%
Laurentian Bank of Canada	\$1,782	1.0x	1.1x	0.8x	0.9x	8.0x	n/m	7.9x	8.5%	9.6%	6.0%	7.9%
<b>Mean</b>		<b>2.1x</b>	<b>2.5x</b>	<b>1.6x</b>	<b>2.0x</b>	<b>11.7x</b>	<b>11.2x</b>	<b>10.8x</b>	<b>12.5%</b>	<b>13.5%</b>	<b>4.1%</b>	<b>10.6%</b>
<b>Median</b>		<b>2.2x</b>	<b>2.6x</b>	<b>1.7x</b>	<b>2.1x</b>	<b>11.7x</b>	<b>11.7x</b>	<b>11.0x</b>	<b>12.0%</b>	<b>13.9%</b>	<b>3.8%</b>	<b>11.2%</b>

## Appendix

### EXHIBIT XV

<b>The Bank of Nova Scotia - Residual Income Model</b>					
(\$ in Millions Except Per Share Data)					
December 31,	Historical		Projected		
	2017	2018	2019	2020	2021
<b>Normalized Net Income to Common:</b>	\$ 8,777	\$ 9,652	\$ 10,402	\$ 10,951	\$ 11,385
% Growth:	23.7%	10.0%	7.8%	5.3%	4.0%
<b>Common Dividends:</b>	3,668	4,126	4,742	5,499	6,491
% Growth:	11.5%	12.5%	14.9%	16.0%	18.1%
Payout Ratio:	41.8%	42.7%	45.6%	50.2%	57.0%
<b>Ending Common Equity:</b>	\$ 57,597	\$ 61,608	\$ 66,256	\$ 71,737	\$ 78,398
Avg. Risk-Weighted Assets:	370,224	382,818	402,076	428,513	456,503
% Growth:	1.7%	6.0%	6.0%	5.0%	5.0%
Tier 1 Common Ratio:	22.1%	21.0%	20.0%	20.0%	20.3%
Return on Common Equity:	15.2%	15.7%	15.7%	15.3%	14.5%
<b>Tier 1 Common Capital Calculation:</b>					
Ending Common Equity:	\$ 57,597	\$ 61,608	\$ 66,256	\$ 71,737	\$ 78,398
Less: Disallowed Intangibles:	24,064	18,855	14,048	14,048	14,048
Plus: Other Adjustments:	-	-	-	-	-
<b>Total Tier 1 Common Capital:</b>	\$ 81,661	\$ 80,463	\$ 80,304	\$ 85,785	\$ 92,446
<b>Residual Income / Excess Returns:</b>		\$ 5,969	\$ 6,451	\$ 6,687	\$ 6,747
Discount Period:	0.0	1.0	2.0	3.0	4.0
Mid-Year Discount Period:		0.5	1.5	2.5	3.5
PV of Residual Income:		\$ 5,793	\$ 5,896	\$ 5,756	\$ 5,470



## References

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1. Bank of Canada
2. Capital IQ
3. Cormark Securities
4. Eight Capital
5. Statista