BankFocus Research

23 July 2019

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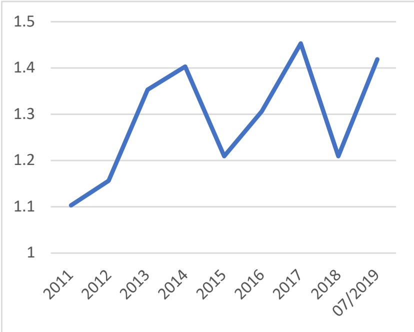
North American bank capitalization: What do markets really think?

This is second in a series of reports exploring bank capitalization based on accounting, regulatory and market metrics. The leading North American (NA) banks[1] grew their assets considerably, with more modest improvements in their regulatory and accounting capitalization since 2011. Profitability and asset quality ratios show robust performance as per end-2018. With the latest average multiple of 1.42 to book value, the market capitalization of the NA banks is close to the highest historic level.

- The NA banks **grew their assets considerably** by more than $2.5 trillion since 2011. At the same time, their shareholders' equity increased by $265 billion, keeping up with the balance sheet growth.
- Reflecting these trends, the regulatory CET1 ratios of the NA banks **improved by 100 basis points** for the same period.
- This level of improvement is modest, however, as the **growth of capital tapered off during 2015 to 2018**. The latest trend, related to buy-backs, resulted in a declining Total assets to Total equity ratio to 8.6% as at end-2018 from 9% in end-2015.
- The **profitability of the US banks was assisted by tax breaks** in 2018, after a period of decline. With the latest average ROAE ratio at 14%, the NA banks' profitability is far ahead of their European peers.
- **Asset quality is one of the strongest factors** for the NA banks and has improved over the medium-term. With the full provisioning coverage of impaired loans, the pressure on capital is minimal and unlikely to recur in the near term.
- **The market capitalization of the NA banks is at the highest level** since 2011, having recovered from the lows in end-2018. It seems that equity markets have taken a positive view of the NA banks' balance sheet strengths and have been pricing their capital consistently above the book value.
- Similar to the European peers, the trends for regulatory and balance sheet capitalization **are not correlated** with market capitalization of the NA banks.

Market capitalization / Shareholders' funds, YE 2011 to H1 2019



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[1] For the peer group list refer to "Research methodology and scope" on pg. 9

Growth in assets and equity follow different patterns

In this second report we compare NA bank capitalization trends based on several different indicators – regulatory, accounting and market-based. We selected 15 largest US and Canadian commercial banks to compare medium-term trends for these ratios since 2011.

We started looking at total asset growth rates which indicate that with the exception of 2015, the NA banks increased their balance sheets almost in a linear way adding more than $2.5 trillion (21% growth) since 2011. The stock of book equity increased by almost $265 billion (27% growth) for the same period. However, the growth trends in assets and equity diverged for later years.

The period of the highest *rate* of asset growth was reported in 2015 to 2018 led by the **Canadian** banks. During these years the leading Canadian banks grew their total assets by 21% compared to 10% for the US banks.

In contrast, the growth rates of shareholders' equity were high during 2011 to 2016 and lately tapered off due to high dividend payments and significant spike in share buy-backs (see below).

The growth patterns of NA banks suggest that the years of capital accumulation and cautions growth during 2011/2015 were followed by a period of rapid asset growth and stagnant capital 2016/18.

The banks which grew their total assets most during 2011 - 2018 include: Capital One (US) by 81%, Wells Fargo (US) by 44%, PNC (US) by 41%, TD Bank (Canada) by 38%.

The banks which improved their stock of balance sheet equity ahead of their peers include: CIBC (Canada) by 87%, Capital One (US) by 74%, Bank of Nova Scotia (Canada) by 73%.

Exhibit 1: Total assets YE 2011 to YE 2018, ($ Trillion)

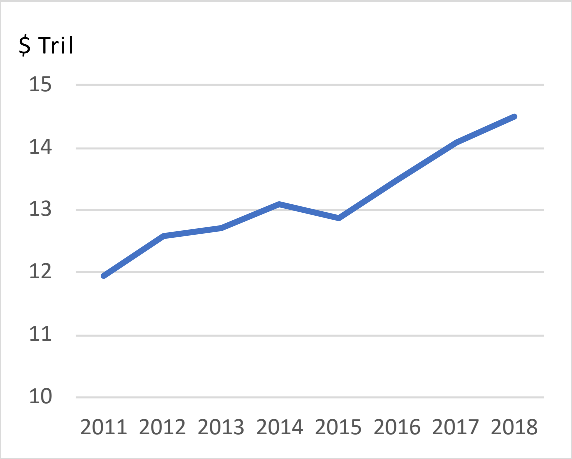
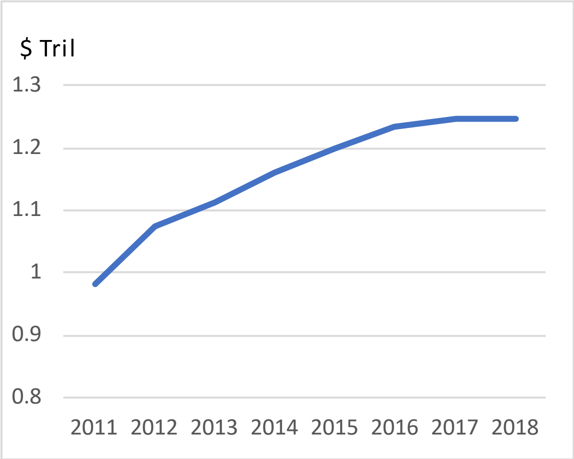


Exhibit 2: Total equity YE 2011 to YE 2018, ($ Trillion)



Pressure from RWA growth

The pattern of Risk Weighted Assets (RWAs) growth was somewhat different for the NA banks, with a period of high growth followed by a flat trend during 2014 - 2018. Overall, the rate of RWA growth at 25% was somewhat higher than that of Total assets (21%) since 2011. **This indicates a slight worsening of the asset risk in the balance sheets over the medium term.**

At the same time the average Risk weighted intensity[2] of the NA banks increased marginally to 58% as at end-2018 from 55% as at end-2011. Both these trends kept downward pressure on the regulatory capitalization ratios of the NA banks.

[2] *Risk weighted intensity is defined as Risk weighted assets divided by total assets*

Exhibit 3: Total RWAs YE 2011 to YE 2018, ($ Trillion)

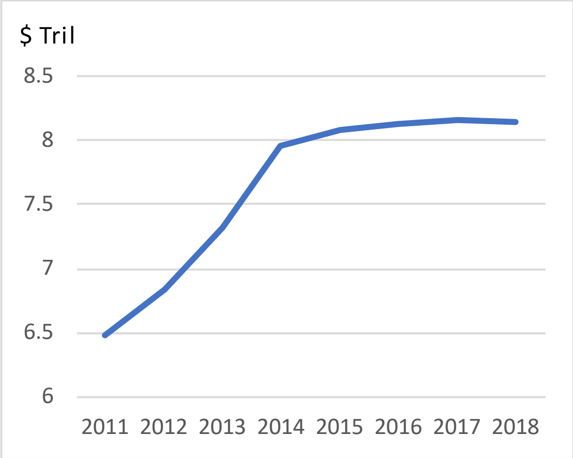
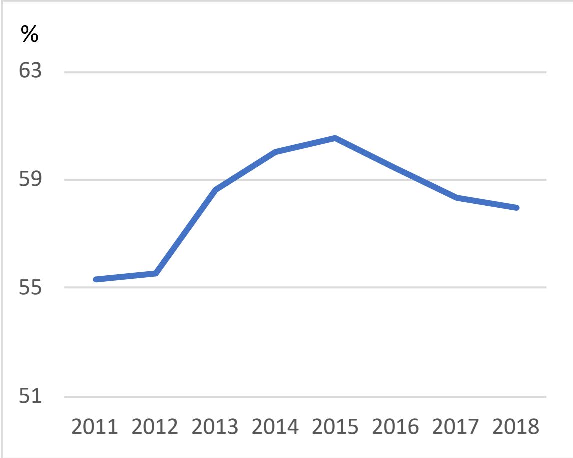


Exhibit 4: Risk weighted asset intensity (RWA / Total Assets) YE 2011 to YE 2018, (%)



Regulatory capitalization - mixed trends since 2011

Reflecting the growth in core capital, the CET 1 ratios of the NA banks improved by up to 100 basis points since 2011. This is a relatively modest increase compared to the European peers who improved the same indicator by 400 basis points for the same period.

At the same time Total capital ratio declined sharply up until 2014, with a subsequent pick-up. The latest value at 14.8% is still below the 2011/2012 period, however. The decline was principally associated with the NA banks retiring and replacing more expensive Tier 2 instruments.

The banks which improved the absolute value of CET1 capital during 2011 - 2018 were: Capital One (US), BofA (US), TD Bank (Canada).

The banks whose total capital adequacy ratio contracted were: CIBC (Canada), PNC (US), BB&T Corporation (US).

Exhibit 5: CET 1 ratio YE 2011 to YE 2018 (%)

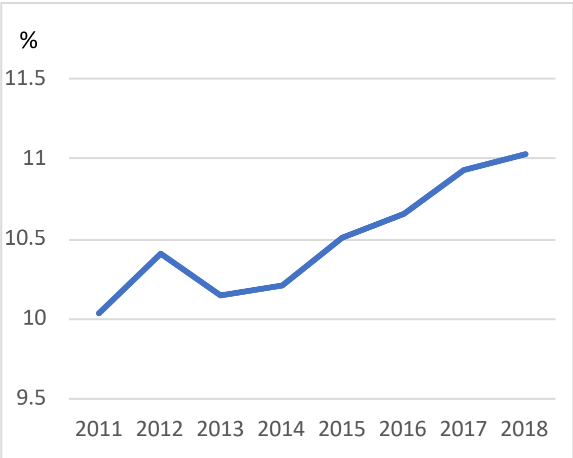
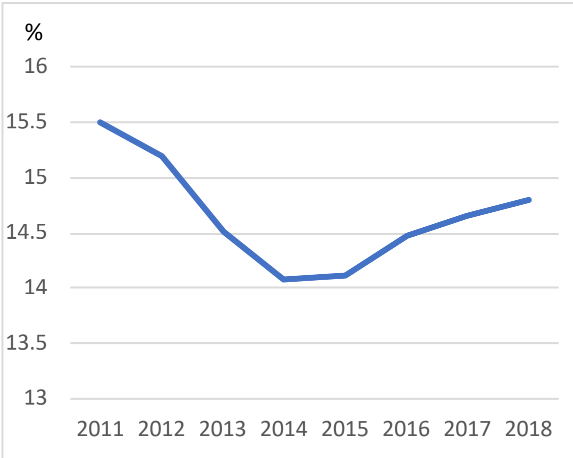


Exhibit 6: Total capital adequacy ratio (as reported) YE 2011 to YE 2018 (%)



Non-regulatory capitalization under pressure

The flat growth in equity during the last three years resulted in pressure on non-regulatory Total equity to Total assets ratio (i.e. simple leverage ratio). The simple leverage ratio for the NA banks declined to 8.6% as at end-2018 from 9% as at end-2015. However, the latest ratio is higher compared to the European bank average at 6.3% as at end-2018.

The flat growth in equity in the recent years is related to a significant increase in share buy-backs, particularly by the US banks. The leading seven US banks collectively bought back almost $200 billion equivalent of capital instruments during 2011-2018. Half of these buy-backs (c. 50%) occurred during 2017/18.

The banks which improved the simple leverage ratio most during 2011-2018 were: CIBC (Canada) by 2%, BB&T Corporation (US) by 2%, Bank of Nova Scotia (Canada) by 1.7%.

The banks whose ratio declined for the same period were: SunTrust Banks (US) by -0.9%, Wells Fargo (US) by -0.7%, PNC Financial Services (US) by -0.6%.

Exhibit 7: Total equity / Total assets YE 2011 to YE 2017 (%)

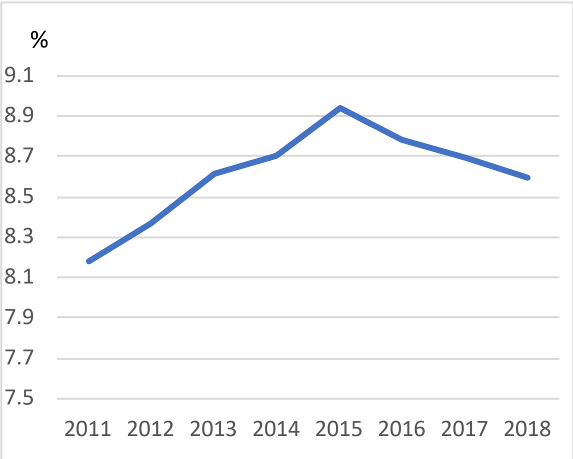
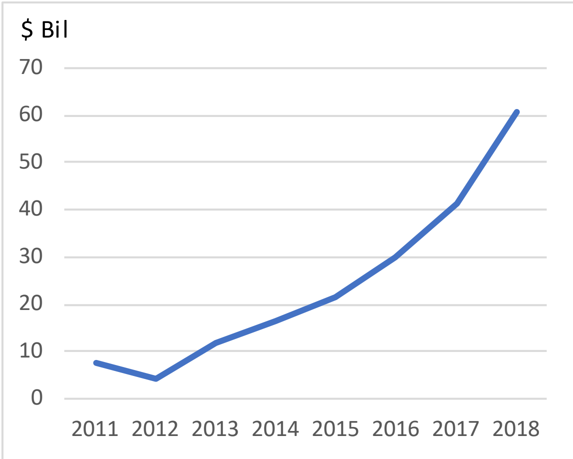


Exhibit 8: Total net purchase of stock of the US banks; YE 2011 to YE 2018 ($ Billion)



Profitability has improved driven by tax breaks

The profitability of the NA banks was under downward pressure up until 2017. It was sharply reversed by tax breaks in 2018 which resulted in more than 200 basis point improvement in their ROAEs for the US banks. With the average ROAE ratio at 14%, the NA banks' profitability is far ahead of their European peers (2018: ROAE at 8%) and is comparable to that of Emerging market banks.

The similar trend was observed in ROAAs, with a positive spike occurring in 2018, after a period of stagnation. Interestingly, the period of rapid asset growth during 2015-2017 coincided with declining profitability due to the denominator effect.

The banks which improved their ROAAs most during 2011 – 2018 were: BofA (US) by 1.14%, SunTrust Banks (US) by 0.95%, BB&T Corporation (US) by 0.7%.

The banks which underperformed on this metric (ROAA) were: Wells Fargo (US) by -0.04%, Bank of Nova Scotia - flat, TD Bank (Canada) – flat.

Exhibit 9: ROAE YE 2011 to YE 2018 (%)

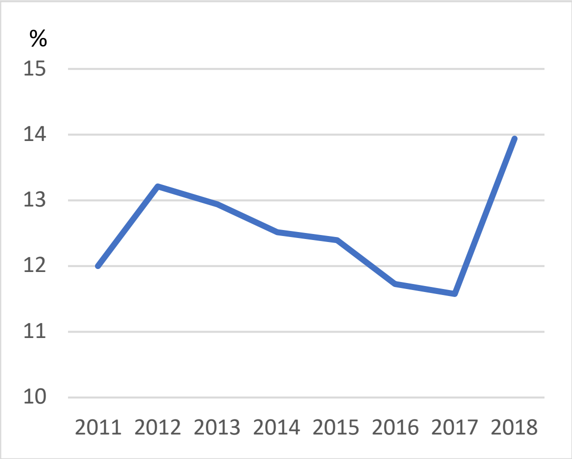
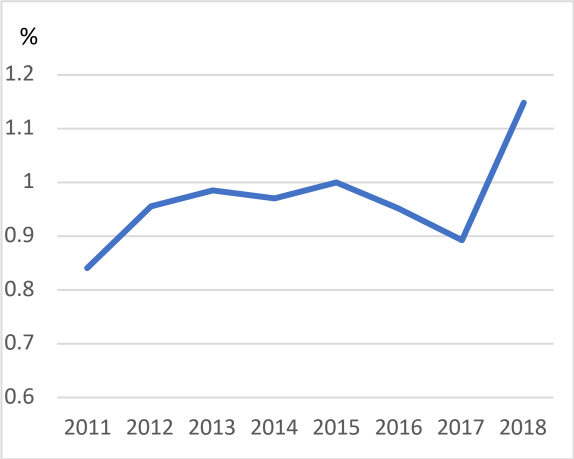


Exhibit 10: ROAA YE 2011 to YE 2018 (%)



Asset quality is the strongest factor

Positive trends were also observed at the level of asset quality. The average provisioning coverage ratio of impaired loans has been improving almost steadily since 2011, with a brief decline in 2016. The latest coverage ratio at 144% for the NA banks is at the highest historic level and more than double compared to the European bank average at 60% as at end-2018[3].

With such high provisioning coverage, the unreserved impaired loans to capital ratio remains conservative at -1.5% as at end-2018.

Both of these ratios indicate very little risk to capital from recognised impaired loans of the NA banks. Despite some expected deterioration in asset quality we do not expect significant pressure on capital to develop in the near future.

Exhibit 11: Loan loss reserves / Impaired loans YE 2011 to YE 2018 (%)

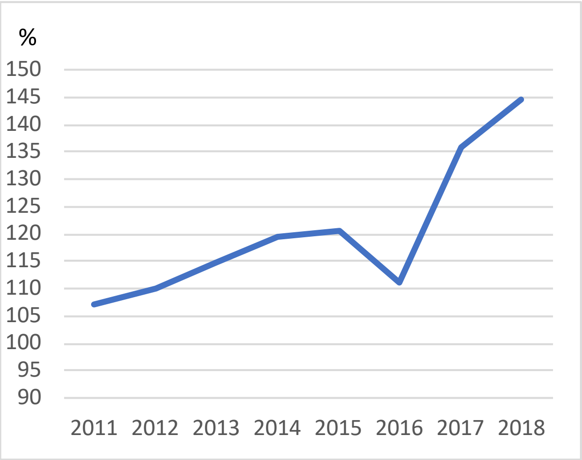
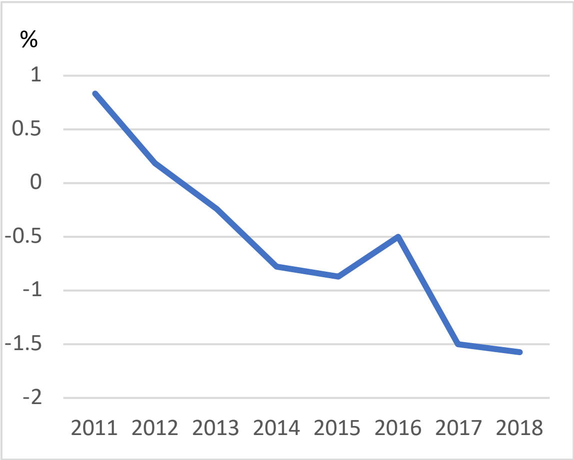


Exhibit 12: Unreserved impaired loans / Total equity YE 2011 to YE 2018 (%)



[3] *The latest figures for the European banks were prepared under IFRS 9 accounting standards*

Market capitalization reflects the strength of the balance sheet

The market capitalization of NA banks has fluctuated between 1.16 to 1.42 of the Shareholders' equity since 2012. The latest spike was associated with a rapid recovery from the global downturn experienced in end-2018. **This improvement sets the NA banks apart from the European banks whose average market capitalization multiple remains depressed at 0.66, well below the book value.**

In terms of market capitalization trends, however, there seems to be no correlation with regulatory or balance sheet capitalization ratios. In addition, the market capitalization of the NA banks improved during 2015/2017 despite declining profitability ratios for the same period.

At the same time, **the market capitalization of NA banks remained consistently above the book value since 2011, indicating that the equity markets do not have same concerns about asset quality as for their European peers.**

The banks with the highest market capitalization ratio include: RBC (Canada) at 2.03, TD Bank (Canada) at 1.84, US Bancorp (US) at 1.82, National Bank of Canada (Canada) at 1.78.

The banks with the lowest market capitalization ratio were: Capital One (US) at 0.79, Citigroup (US) at 0.92, BofA (US) at 1.14, Wells Fargo (US) at 1.2.

Exhibit 13: Market Capitalization / shareholders' funds YE 2011 to H1 2019

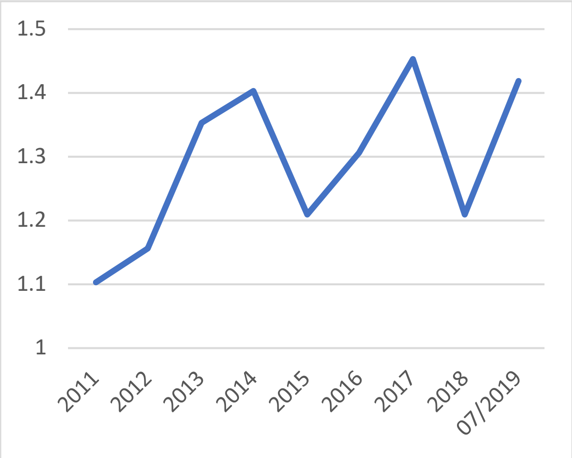
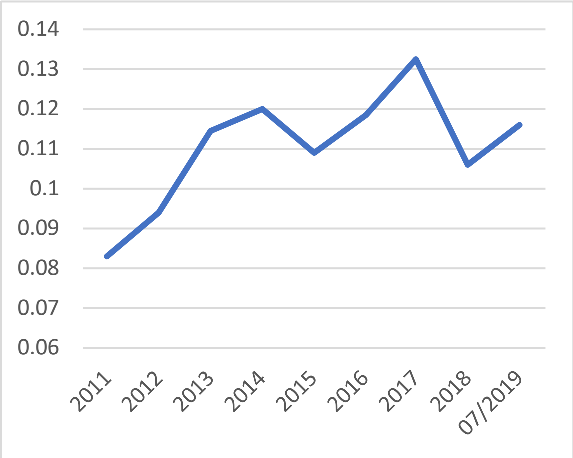


Exhibit 14: Market capitalization / Total assets (Tobin's Q) YE 2011 to H1 2019



In conclusion, it seems that equity investors have taken a positive view of the balance sheet strength of the NA banks and are consistently valuing their growth potential and limited risk to capital above their book value. This is directly opposite of the concerns indicated by the below book valuations for the leading European banks.

Appendix I: Selected ratios for North American banks

CET1 Ratio (%)

Company name	2018	2017	Change
JPMorgan Chase & Co	12.0	12.1	-0.1
Bank of America Corporation	11.6	11.5	0.1
Wells Fargo & Company	11.7	12.0	-0.3
Citigroup Inc	11.9	12.4	-0.5
Royal Bank of Canada	11.5	10.9	0.6
Toronto Dominion Bank	12.0	10.7	1.3
Capital One Financial Corporation	11.2	10.2	1.0
US Bancorp	9.1	9.3	-0.2
Bank of Nova Scotia (The) - SCOTIABANK	11.1	11.5	-0.4
PNC Financial Services Group Inc	9.6	10.4	-0.8
Bank of Montreal	11.3	11.4	-0.1
Canadian Imperial Bank of Commerce	11.4	10.6	0.8
BB&T Corporation	10.2	10.2	0.0
SunTrust Banks, Inc.	9.2	9.6	-0.4
National Bank of Canada	11.7	11.2	0.5

Total equity / Total assets (%)

Company name	2018	2017	Change
JPMorgan Chase & Co	8.8	9.1	-0.3
Bank of America Corporation	10.3	10.7	-0.4
Wells Fargo & Company	9.2	9.4	-0.2
Citigroup Inc	9.3	9.9	-0.6
Royal Bank of Canada	5.5	5.6	-0.1
Toronto Dominion Bank	5.6	5.5	0.1
Capital One Financial Corporation	13.9	13.3	0.6
US Bancorp	9.8	9.6	0.2
Bank of Nova Scotia (The) - SCOTIABANK	6.4	6.2	0.2
PNC Financial Services Group Inc	12.5	12.5	0.0
Bank of Montreal	5.4	5.7	-0.3
Canadian Imperial Bank of Commerce	5.5	5.2	0.3
BB&T Corporation	12.0	12.0	0.0
SunTrust Banks, Inc.	10.3	11.0	-0.7
National Bank of Canada	4.5	4.7	-0.2

ROAA (%)

Company name	2018	2017	Change
JPMorgan Chase & Co	1.3	1.0	0.3
Bank of America Corporation	1.2	0.8	0.4
Wells Fargo & Company	1.2	1.2	0.0
Citigroup Inc	1.0	-0.4	1.4
Royal Bank of Canada	1.0	1.0	0.0
Toronto Dominion Bank	0.9	0.9	0.0
Capital One Financial Corporation	1.6	0.6	1.0
US Bancorp	1.5	1.4	0.1
Bank of Nova Scotia (The) - SCOTIABANK	0.9	0.9	0.0
PNC Financial Services Group Inc	1.4	1.4	0.0
Bank of Montreal	0.7	0.8	-0.1
Canadian Imperial Bank of Commerce	0.9	0.9	0.0
BB&T Corporation	1.5	1.1	0.4
SunTrust Banks, Inc.	1.3	1.1	0.2
National Bank of Canada	0.9	0.9	0.0

Unreserved impaired loans / Total equity (%)

Company name	2018	2017	Change
JPMorgan Chase & Co	-3.0	-2.7	-0.3
Bank of America Corporation	-0.6	0.2	-0.8
Wells Fargo & Company	-1.3	-1.0	-0.3
Citigroup Inc	-3.4	-2.6	-0.8
Royal Bank of Canada	-1.0	0.6	-1.6
Toronto Dominion Bank	-0.5	-1.0	0.5
Capital One Financial Corporation	-8.1	-9.0	0.9
US Bancorp	-5.6	-5.0	-0.6
Bank of Nova Scotia (The) - SCOTIABANK	0.1	0.9	-0.8
PNC Financial Services Group Inc	-0.6	0.0	-0.6
Bank of Montreal	0.7	1.0	-0.3
Canadian Imperial Bank of Commerce	-0.5	-1.1	0.6
BB&T Corporation	-2.1	-1.4	-0.7
SunTrust Banks, Inc.	2.5	1.5	1.0
National Bank of Canada	-0.2	-3.0	2.8

Research methodology and scope

Using BankFocus search steps we analysed the following financial factors: Total assets, Total equity, CET 1 ratios, RWAs, Total capital adequacy ratio (as reported), Total equity / Total assets, ROAA, ROAE, Market Capitalization / shareholders' funds, Market capitalization / Total assets (Tobin's Q), RWA intensity, Loan loss reserves / Impaired loans, and Unreserved impaired loans / Total equity for the period from 2011 to 2018.

We analyzed 15 North American banks for this report:

Canada: Bank of Montreal, Bank of Nova Scotia (The) - SCOTIABANK, Canadian Imperial Bank of Commerce, National Bank of Canada, Royal Bank of Canada, Toronto Dominion Bank

US: Bank of America Corporation, BB&T Corporation, Capital One Financial Corporation, Citigroup Inc, JPMorgan Chase & Co, PNC Financial Services Group Inc, SunTrust Banks, Inc., US Bancorp, Wells Fargo & Company

The exhibits in the report are based on Moody's Analytics BankFocus, unless otherwise stated.

Please get in touch if you have any analytical questions

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