

# Royal Bank of Canada Investor Presentation

Q4/2017

All amounts are in Canadian dollars unless otherwise stated and are based on financial statements prepared in compliance with International Financial Reporting Standards (IFRS), unless otherwise noted. Our 2017 Annual Report and Q4/2017 Supplementary Financial Information are available on our website at [rbc.com/investorrelations](http://rbc.com/investorrelations).





## Caution regarding forward-looking statements

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From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the “safe harbour” provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in this presentation, in other filings with Canadian regulators or the SEC, in other reports to shareholders and in other communications. Forward-looking statements in this document include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the economic and market review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the outlook and priorities for each of our business segments, the risk environment including our liquidity and funding risk, and includes our President and Chief Executive Officer’s statements. The forward-looking information contained in this document is presented for the purpose of assisting the holders of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision and strategic goals, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as “believe”, “expect”, “foresee”, “forecast”, “anticipate”, “intend”, “estimate”, “goal”, “plan” and “project” and similar expressions of future or conditional verbs such as “will”, “may”, “should”, “could” or “would”.

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved. We caution readers not to place undue reliance on these statements as a number of risk factors could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors – many of which are beyond our control and the effects of which can be difficult to predict – include: credit, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risks sections of our 2017 Annual Report; including global uncertainty and volatility, elevated Canadian housing prices and household indebtedness, information technology and cyber risk, regulatory change, technological innovation and new entrants, global environmental policy and climate change, changes in consumer behavior, the end of quantitative easing, the business and economic conditions in the geographic regions in which we operate, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency and environmental and social risk.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this presentation are set out in our 2017 Management Discussion and Analysis under the heading Economic, market and regulatory review and outlook and for each business segment under the headings 2017 Operating Environment, Strategic Priorities and Outlook. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the risks sections of our 2017 Annual Report.

Information contained in or otherwise accessible through the websites mentioned does not form part of this Q4 presentation. All references in this Q4 presentation to websites are inactive textual references and are for your information only.

# About RBC



# The RBC story

- 
- **Market leader with a focused growth strategy**
    - Market leader in Canada and one of the largest financial institutions globally<sup>(1)</sup>
    - Clear strategy for continued long-term growth in Canada, the U.S. and select global markets
- 
- **Diversified business model with client leading franchises**
    - Well-diversified across businesses, geographies and client segments
    - Ability to capitalize on opportunities created by changing market dynamics and economic conditions
    - Wide breadth of products and capabilities allows us to meet all of our clients' financial needs and build deep, long-term relationships
- 
- **Financial strength underpinned by prudent risk and cost management**
    - Track record of earnings and dividend growth while maintaining a disciplined approach to risk and cost management
    - Credit ratings amongst the highest globally
    - Strong capital position and a high quality liquid balance sheet
- 
- **Innovation is in our DNA**
    - Long history of innovation and proven ability to adapt to industry trends
    - Investments in technology allow us to drive efficiencies and deliver an exceptional client experience
    - Focused on simplifying, digitizing and personalizing our products to make it easier for clients and employees to do business and lower costs
- 
- **Leading corporate citizen**
    - Over \$100MM in donations, sponsorships and community investments in 2016, including the RBC Kids Pledge and RBC Blue Water Project
    - Globally recognized as a financial services thought leader
    - Made largest-ever commitment of \$500MM to RBC Future Launch in 2017 – Helping youth prepare for the future world of work



# Market leader with a focused strategy for growth

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## Largest in Canada<sup>(1)</sup>

A market leader across all key businesses

## Top 10 Globally<sup>(1)</sup>

One of the 10 largest global banks by market capitalization with operations in 37 countries

## 16 Million+ Clients

Served by 80,000+ employees worldwide

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## Purpose

Help clients thrive and communities prosper

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## Vision

To be among the world's most trusted and successful financial institutions

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## Strategic Goals



**In Canada:** To be the undisputed leader in financial services



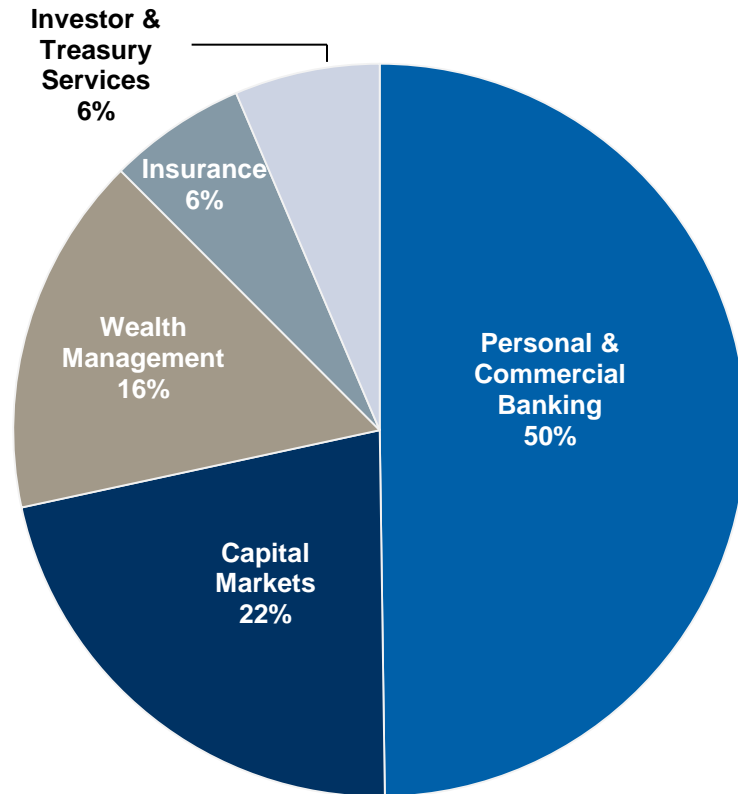
**In the United States:** To be the preferred partner to corporate, institutional and high net worth clients and their businesses



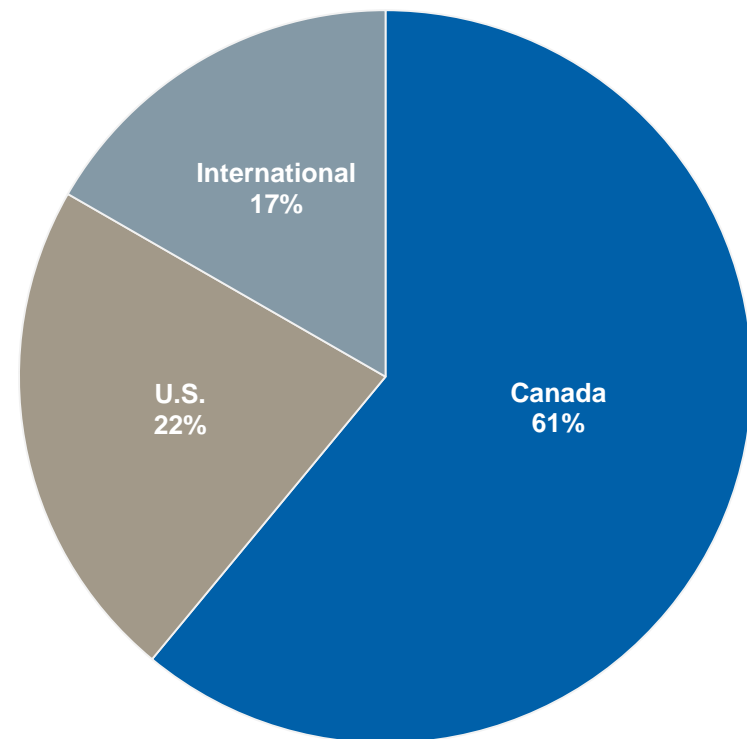
**In Select Global Financial Centres:** To be a leading financial services partner valued for our expertise

# Diversified business model with client leading franchises

**Earnings by Business Segment<sup>(1)</sup>**  
*Latest twelve months ended October 31, 2017*



**Revenue by Geography<sup>(1)</sup>**  
*Latest twelve months ended October 31, 2017*



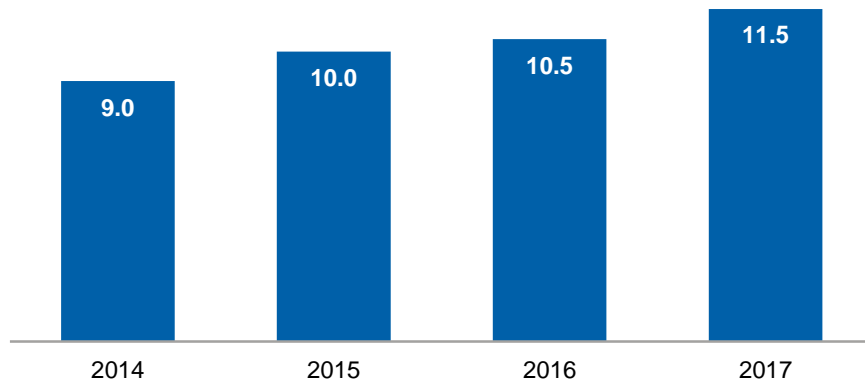


# Strong financial profile

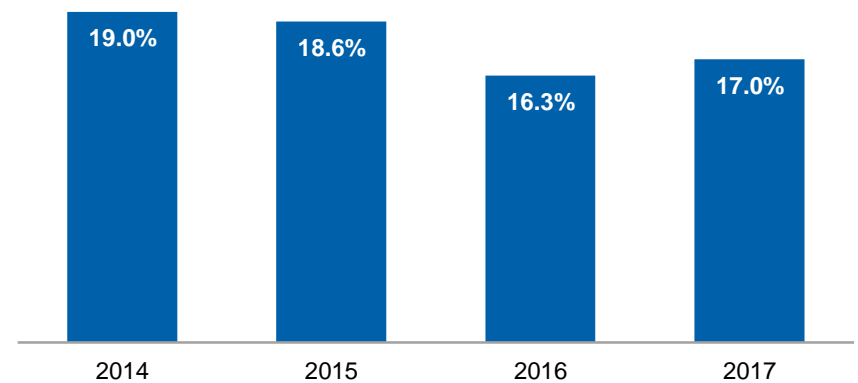
**Consistent earnings growth and solid ROE while maintaining a strong capital position with a disciplined approach to risk**

## Consistent Earnings Growth

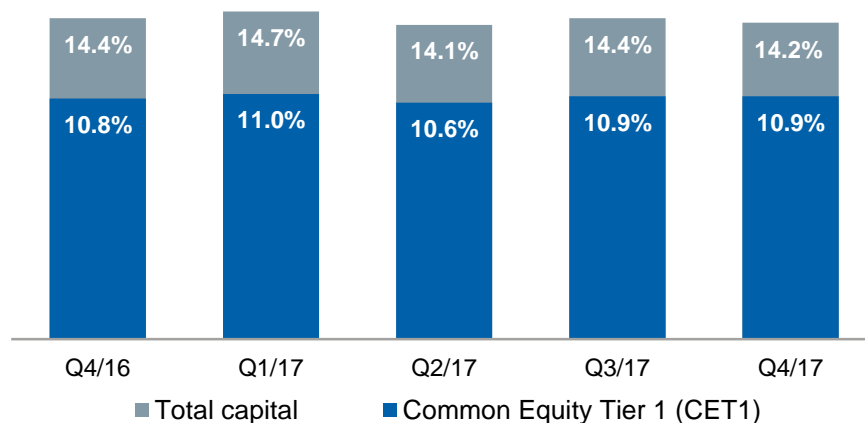
Net income (\$ billions)



## Strong Return on Equity<sup>(1)</sup>



## Strong Capital Position<sup>(2)</sup>



## Strong Leverage and Liquidity Ratios<sup>(2)</sup>

- **Leverage Ratio** 4.4%
- **Liquidity Coverage Ratio** 122%

## Credit Ratings<sup>(3)</sup> Amongst the Highest Globally

| Moody's  | S&P      | DBRS   | Fitch  |
|----------|----------|--------|--------|
| A1       | AA-      | AA     | AA     |
| Negative | Negative | Stable | Stable |

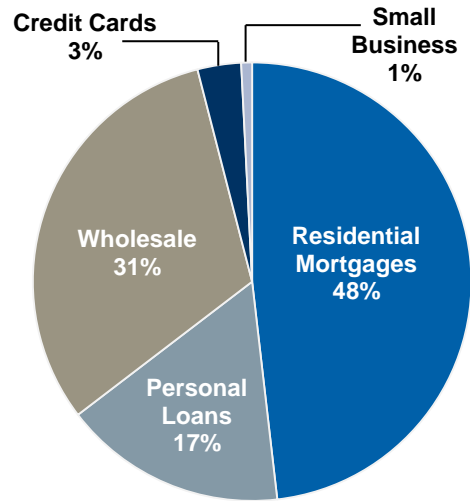
### About RBC

(1) ROE does not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions. For more information see slide 38.  
 (2) Capital calculated to include all regulatory adjustments that will be required by 2019 but retaining the phase-out rules for non-qualifying capital. Refer to the Capital Management section of our 2017 Annual Report for details on all ratios excluding Liquidity Coverage Ratio calculated on a "All-in" Basel III basis and Basel III requirements. (3) Based on long-term senior debt ratings as of October 31, 2017.

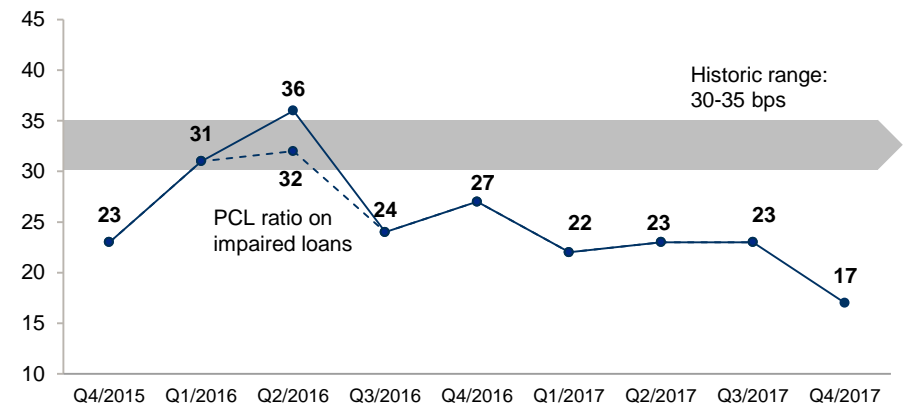
# Prudent risk management

**A disciplined approach and diversification have driven stable credit trends**

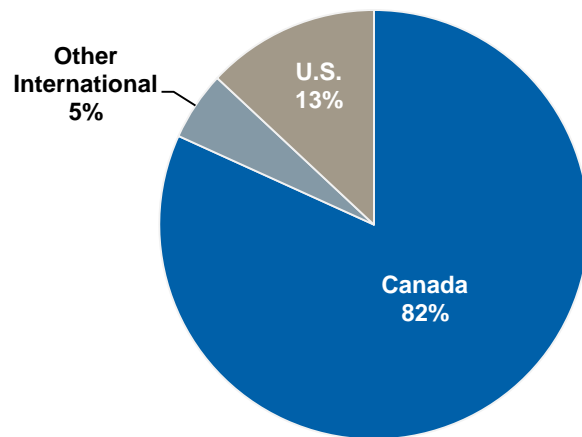
**Loan Book Diversified by Portfolio<sup>(1)</sup>**



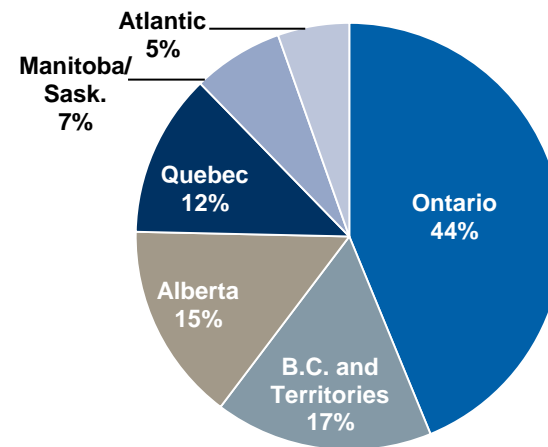
**Relatively Stable PCL Ratio<sup>(2)</sup> Over the Cycle (bps)**



**Breakdown by Region of Total Loans and Acceptances<sup>(1)</sup>**



**Breakdown of Canadian Total Loans and Acceptances<sup>(1)</sup>**







# History of delivering value to our shareholders

Financial performance objectives measure our progress against our goal of maximizing total shareholder returns

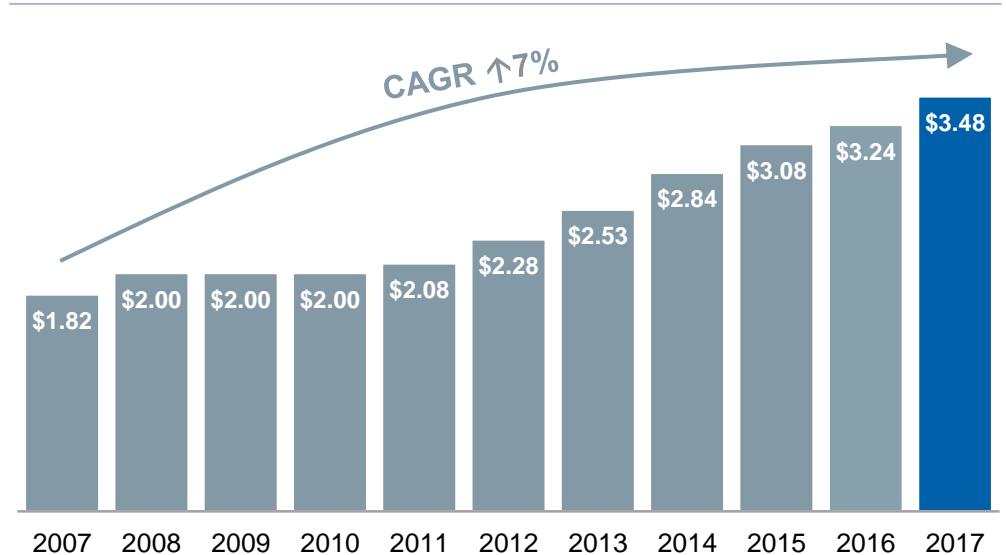
## Medium-term Financial Performance Objectives

|                       |           |
|-----------------------|-----------|
| Diluted EPS Growth    | 7%+       |
| Return on Equity      | 16%+      |
| Capital Ratios (CET1) | Strong    |
| Dividend Payout Ratio | 40% - 50% |

## Achieved Solid TSR<sup>(1)</sup> Performance

|                | RBC | Peer Average |
|----------------|-----|--------------|
| <b>3 Year</b>  | 12% | 10%          |
| <b>5 Year</b>  | 17% | 15%          |
| <b>10 Year</b> | 10% | 8%           |

## Strong Dividend Growth<sup>(2)</sup>



# Business Segments





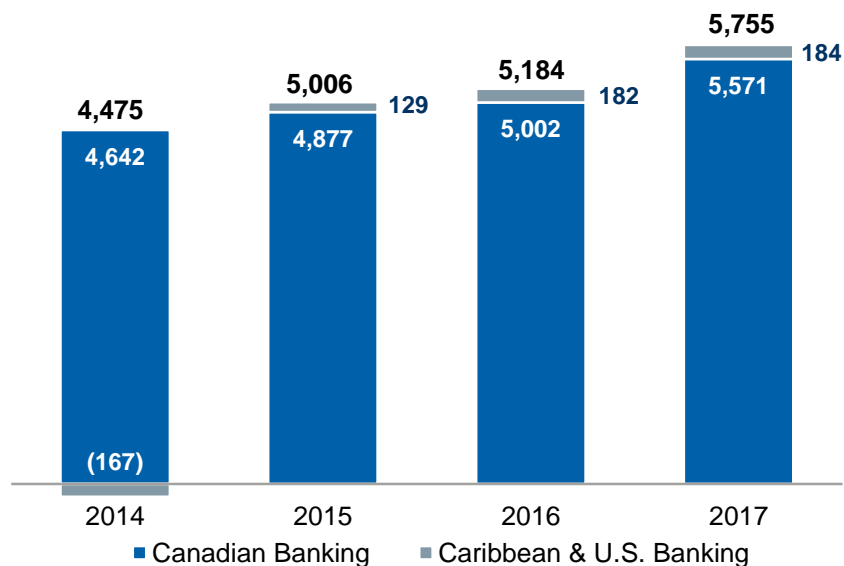
# Personal & Commercial Banking

- The financial services leader in Canada
  - #1 or #2 market share in all key product categories
  - Most branches and largest sales force in Canada
  - Superior cross-sell ability
- In 16 countries and territories in the Caribbean
  - 2<sup>nd</sup> largest bank by assets<sup>(1)</sup> in English Caribbean
- Provide innovative direct banking to U.S. cross-border clients
- Ongoing investment in digitizing our banking channels

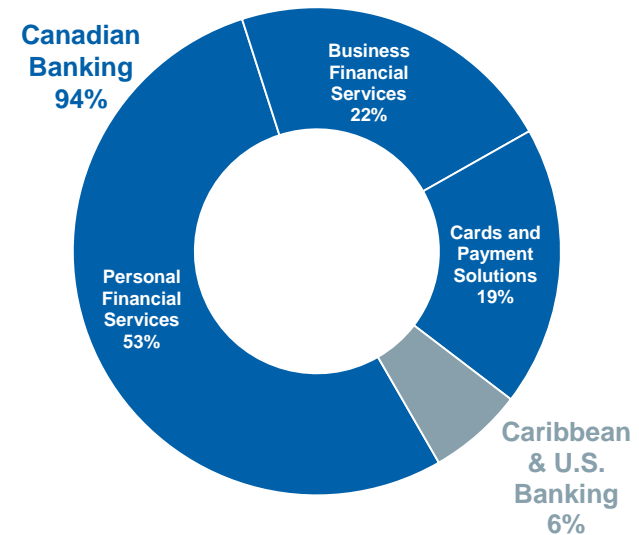
## Q4/2017 Highlights

|  |          |
|--|----------|
| Clients (MM)   | > 13.0   |
| Branches   | > 1,300  |
| ATMs   | 4,556    |
| Active digital (Online and Mobile) users <sup>(2)</sup> (MM) | 6.2      |
| Employees (FTE)  | > 34,000 |
| Loans & acceptances <sup>(1)</sup> (\$BN)                    | 412.0    |
| Deposits <sup>(1)</sup> (\$BN)                               | 352.1    |
| AUA <sup>(3)</sup> (\$BN)                                    | 264.8    |

## Net Income (\$ millions)



## Revenue by Business Line<sup>(4)</sup>



# Personal & Commercial Banking – Canadian Banking

## Strategic Priorities *Building A Digitally-Enabled Relationship Bank™*

- |   |  |
|---|--|
| <b>Transform how we serve our clients</b>                 | <ul style="list-style-type: none"> <li>▪ Make it easier for clients to access products and services digitally</li> <li>▪ Create capacity and capability to focus on advice, complex servicing and sales, and problem resolution</li> <li>▪ Focus on innovating our branch network</li> </ul>   |
| <b>Accelerate growth in key segments</b>                  | <ul style="list-style-type: none"> <li>▪ Grow commercial market share through industry-specific credit strategies</li> <li>▪ Target high-growth retirement segment and business succession planning</li> <li>▪ Continue to increase client acquisitions in key segments including high net worth, newcomers and students and young adults while expanding existing client relationships</li> </ul> |
| <b>Rapidly deliver digital solutions</b>                  | <ul style="list-style-type: none"> <li>▪ Continue to deliver leading digital capabilities and functionality through our mobile app</li> <li>▪ Create partnerships in the marketplace to innovate, making it easier to bank with RBC</li> <li>▪ Invest in research and development to understand and meet rapidly changing client expectations</li> </ul>   |
| <b>Innovate to become a more agile and efficient bank</b> | <ul style="list-style-type: none"> <li>▪ Accelerate investments to simplify, digitize and automate for clients and employees</li> <li>▪ Change or eliminate products and processes that do not add economic or client value</li> <li>▪ Invest in employees to enhance digital, agile and change capabilities</li> </ul>  |

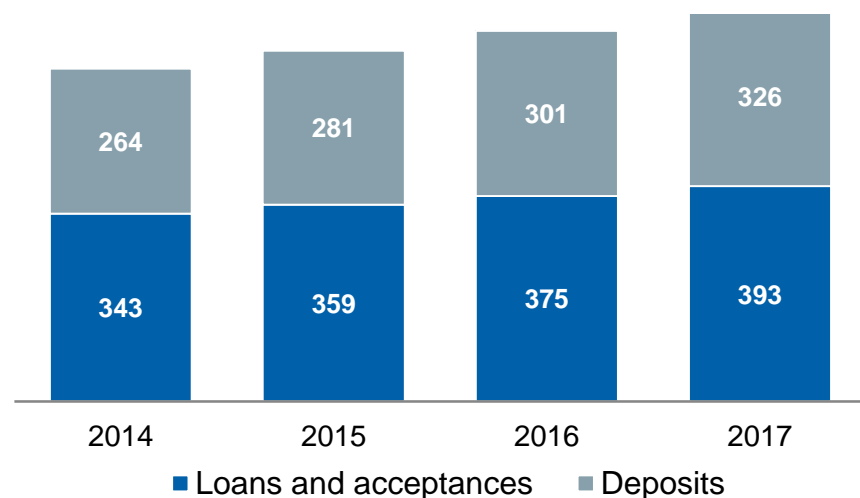
## Recent Awards



# Personal & Commercial Banking – Canadian Banking

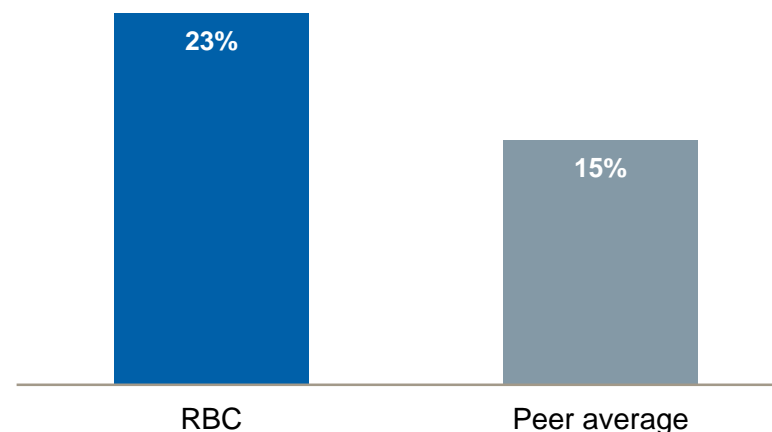


## Solid Volume Growth<sup>(1)</sup>



## Superior Cross-Sell Ability

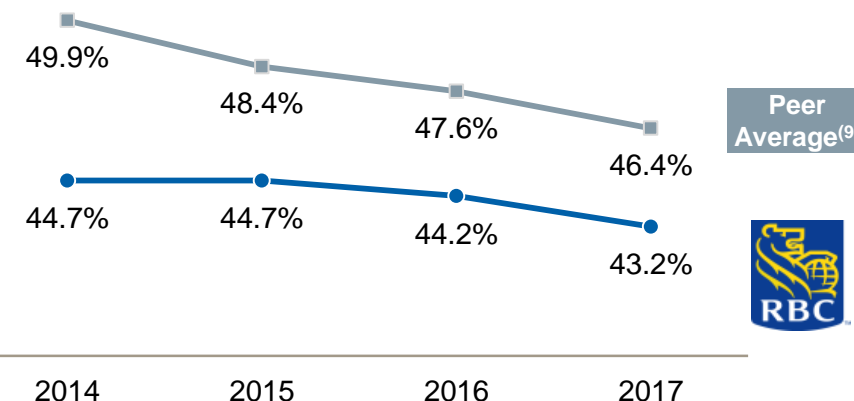
Percent of households with transaction accounts, investments and borrowing products<sup>(2)</sup>



## #1 or #2 Market Share in All Categories<sup>(3)</sup>

| Product                                    | Market share | Rank |
|--|--------------|------|
| Personal lending <sup>(4)</sup>            | 23.6%        | 1    |
| Personal core deposits + GICs              | 19.6%        | 2    |
| Credit cards <sup>(5)</sup>                | 27.1%        | 2    |
| Long-term mutual funds <sup>(6)</sup>      | 14.9%        | 1    |
| Business loans (\$0-\$25MM) <sup>(7)</sup> | 25.8%        | 1    |
| Business deposits <sup>(8)</sup>           | 25.8%        | 1    |

## Continue To Improve Our Efficiency Ratio<sup>(10)</sup>



### Business Segments

(1) Based on average balances. (2) Canadian Financial Monitor by Ipsos – 12,000 Canadian households – data based on Financial Group results for the 12-month period ending July 2017; TFSA is considered an Investment. Peers include BMO, BNS, CIBC and TD. (3) Market share is calculated using most current data available from OSFI (M4), Investment Funds Institute of Canada (IFIC) and Canadian Bankers Association (CBA), and is at June 2017 except where noted. Market share is of total Chartered Banks except where noted. (4) Personal Lending market share of 6 banks (RBC, BMO, BNS, CIBC, TD and NA) and includes residential mortgages (excl. acquired portfolios) and personal loans as at April 2017. (5) Credit cards market share is based on 6 banks (RBC, BMO, BNS, CIBC, TD and NA) as at April 2017. (6) Long-term mutual fund market share is compared to total industry. (7) Business Loans market share is of 6 Chartered Banks (RBC, BMO, BNS, CIBC, TD and NA) on a quarterly basis and is as of March 2017. (8) Business Deposits market share excludes Fixed Term, Government and Deposit Taking Institution balances. (9) Peers include BMO, BNS, CIBC and TD; 2013 through 2016 reflects annual, while the peer average efficiency ratio for YTD 2017 represents the nine months ending Q3 2017 (FY 2017 peer data not available). (10) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

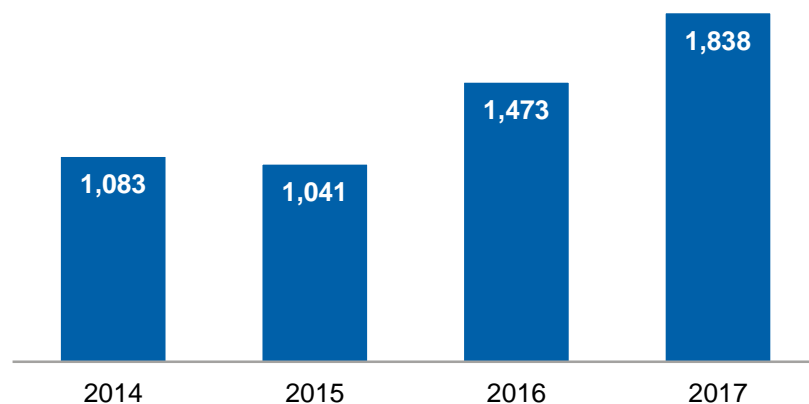


# Wealth Management

## Strategic Priorities

- **Global Asset Management:** Strengthen partnership with Personal & Commercial Banking, other Wealth Management businesses and third-party distributors to defend and grow our distribution reach, and continue to grow our institutional asset management business in key global markets
- **Canadian Wealth Management:** Continue to deepen client relationships and deliver a differentiated client experience that is increasingly digitally-enabled and supported by data-driven insights
- **U.S. Wealth Management:** Leverage the combined strengths of City National, RBC U.S. Wealth Management and Capital Markets to accelerate growth in the U.S.
- **International Wealth Management:** Continue to leverage the strengths and capabilities of RBC to drive growth in HNW and UHNW client segments<sup>(1)</sup>

## Net Income (\$ millions)



## Recent Awards

**Top 5 Global Wealth Manager by Assets**  
*(Scorpio, 2017)*

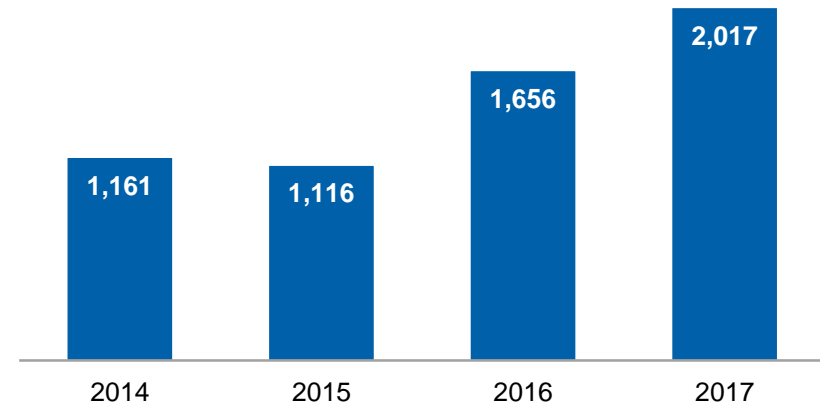
**Best Performing Private Bank**  
*(PWM and The Banker, Global Private Banking Awards 2017)*

**Best Private Bank in Canada**  
*(PWM and The Banker, Global Private Banking Awards 2017)*

**Outstanding Global Private Bank – North America**  
*(Private Banker International Global Wealth Awards, 2017)*

**Outstanding Relationship Manager (RM) Training and Development Programme**  
*(Private Banker International Global Wealth Awards, 2017)*

## Cash Earnings (\$ millions)<sup>(2)</sup>

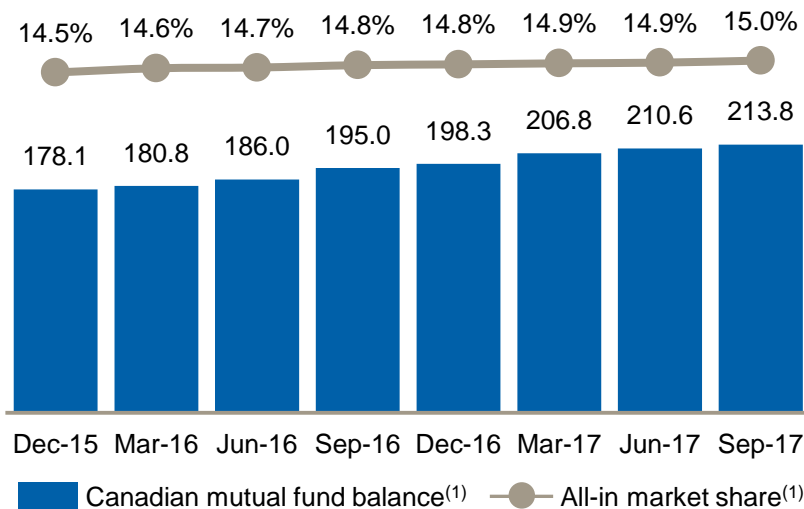


# Wealth Management – Global Asset Management

## Building a high-performing global asset management business

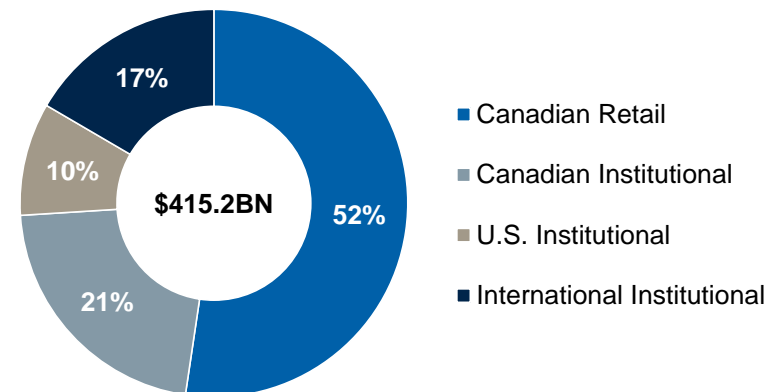
- **Driving top-tier profitability in our largest Wealth Management business**
  - \$415BN in client assets
  - Investor asset mix of 52% Retail / 48% Institutional client assets
- **Extending our lead in Canada**
  - Largest fund company in Canada, ranked #1 in market share capturing 32.5% amongst banks and 15.0% all-in<sup>(1)</sup>
  - 3<sup>rd</sup> largest institutional pension asset manager in Canada<sup>(2)</sup>
- **Delivering strong investment capabilities to support growth**
  - Top performing investment firm with ~83% of AUM outperforming the benchmark on a 3-year basis<sup>(3)</sup>
  - Continued growth of investment capabilities and innovative solutions for both institutional clients and retail investors

### Canadian Retail AUM (\$ billions)



### Diversified Asset Mix

Q4/17 AUM by Client Segment (\$ billions)<sup>(4)</sup>



#### Business Segments

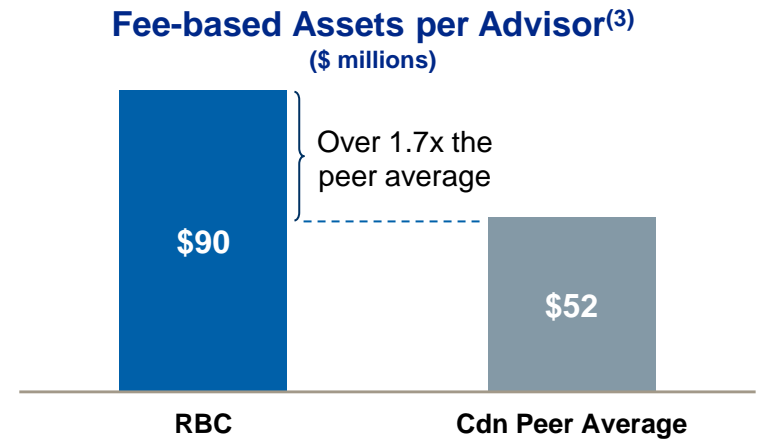
(1) Investment Funds Institute of Canada (IFIC) as at September 2017 and RBC reporting. Comprised of long-term funds and money market funds. (2) Benefits Canada as at May 2017. (3) As at September 2017, gross of fees. (4) RBC GAM, based on period-end spot balances.



# Wealth Management

## Canadian Wealth Management

- **Extending our #1 position**
  - Grew HNW<sup>(1)</sup> market share by ~500 bps to 20% over the last five years<sup>(2)</sup> and anticipate reaching 22% market share by 2020
- **Maintaining profitable growth**
  - Generating 26% of RBC Wealth Management earnings with strong pre-tax margin
- **Driving strong advisor productivity**
  - Canadian leader in fee-based assets per advisor<sup>(2)</sup>
  - Consistently driving revenue per advisor of over \$1.4MM per year, 33% above Canadian industry average<sup>(2)</sup>
  - Strong new asset growth complimented by favourable market conditions
  - Leveraging Enterprise linkages to continue to extend market share gains



## U.S. Wealth Management (including City National)

### U.S. Wealth Management

- 7th largest full-service brokerage in the U.S. among peers as measured by number of financial advisors and 6th largest among peers by assets under administration<sup>(4)</sup>
- Enhancing the client-advisor experience through a digitally-enabled, goals-based planning approach and strengthening the range of advisory solutions and product offerings
- Continuing to attract and onboard new advisors and clearing relationships while improving advisory productivity and operational efficiency

### City National

- A premier U.S. private and commercial bank that creates a platform for long-term growth in the U.S.
- Operates with a high touch, branch light client service model in selected high growth markets including Los Angeles, the San Francisco Bay area, Orange County, San Diego and New York
- Expanding the CNB business model to selected high growth markets

## International Wealth Management

- Delivering an unrivalled Wealth Management client experience through an enhanced sales and relationship management process and more integrated delivery of multiple solutions
- Focusing on key client segments, including HNW and UHNW<sup>(1)</sup> clients in select target markets where we have scale
- Leveraging RBC's global capabilities to bring the best of RBC to our clients (e.g., RBC innovation labs)



# Insurance

## Strategic Priorities

### Improve distribution efficiency

- Delivering multi-line “insurance advice for your life” through an integrated product portfolio
- Strengthening profitability in all channels by increasing sales and managing expenses

### Deepen client relationships

- Providing a comprehensive suite of RBC Insurance products and services through targeted strategies to continue to meet our clients’ unique insurance needs
- Providing a wide range of life, health, home, auto, travel and wealth accumulation solutions to individual and group clients across Canada, and offer reinsurance solutions for clients globally

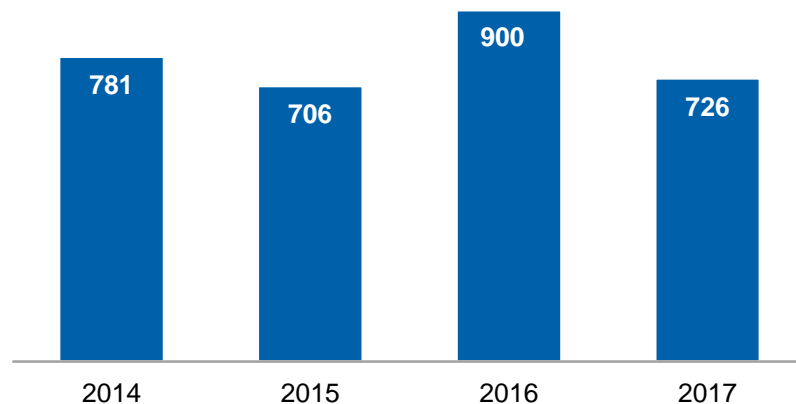
### Simplify. Agile. Innovate.

- Enhancing and streamlining all processes to ensure clients find it easy to do business with us

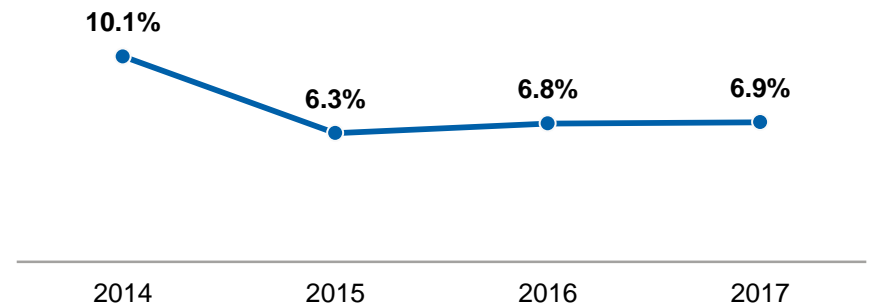
### Pursue select international opportunities to grow our reinsurance business

- Pursuing niche opportunities, diversifying risks and growing our reinsurance business to generate stable and diversified earnings

## Net Income (\$ millions)<sup>(1)</sup>



## Acquisition Expense Ratio<sup>(2)</sup>



# Investor & Treasury Services

- Specialist provider of asset services, custody, payments and treasury services for financial and other institutional investors worldwide
  - Rated by clients as the #1 Global Custodian for the seventh consecutive year<sup>(1)</sup>
  - Named #1 Canadian Sub-Custodian for the second consecutive year<sup>(2)</sup>
  - Ranked the #1 Fund Administrator overall for the fifth consecutive year<sup>(3)</sup>
  - Named Best Trade Finance Bank in Canada for the fifth consecutive year<sup>(4)</sup>
- Leading provider of Canadian dollar cash management and payment solutions to brokers, exchanges and other financial institutions
- Short-term funding and liquidity management for RBC

## Strategic Priorities

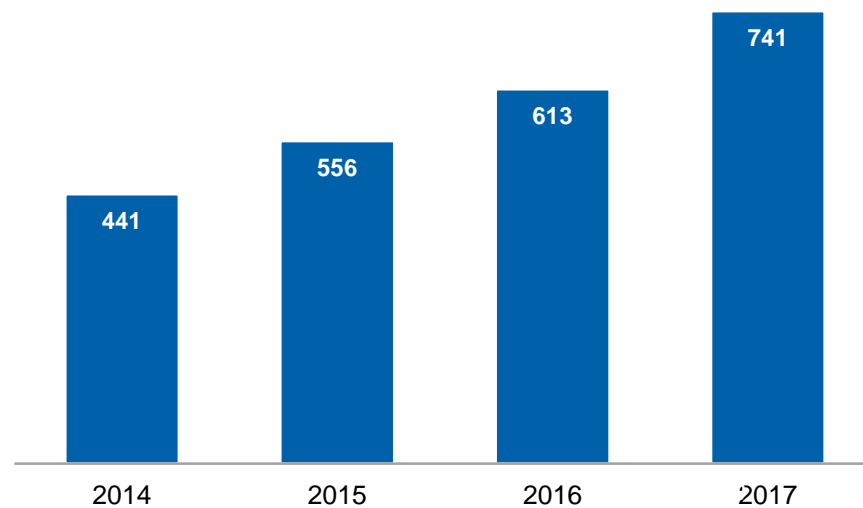
In Canada, maintain position as the #1 provider of domestic custody, asset services and cash management

Compete as a leading provider of asset services in the major offshore fund domicile markets of Luxembourg and Ireland

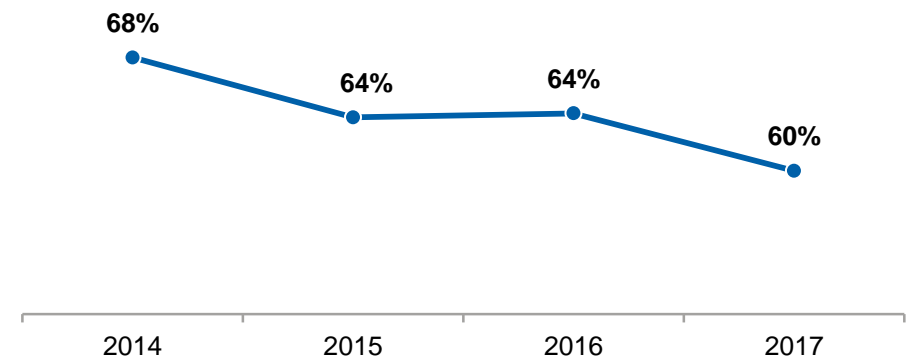
Continue to deliver a high-level of investment in client-focused technology solutions

Enhance our client centric service offering and improve efficiency

## Net Income (\$ millions)



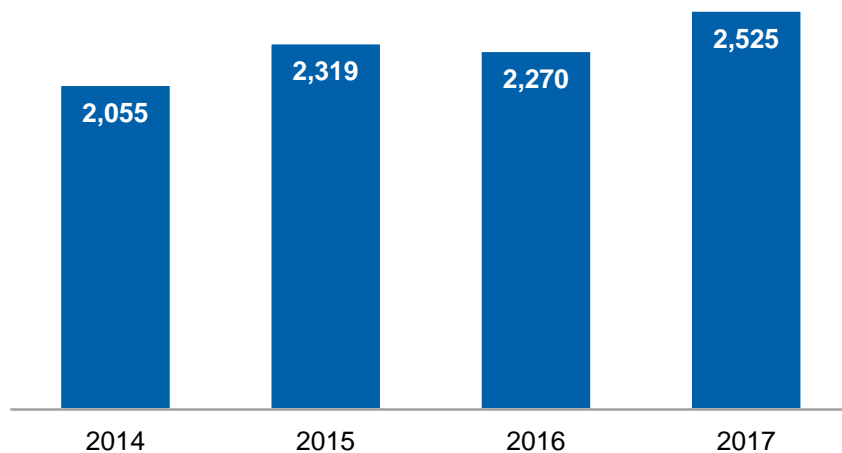
## Efficiency Ratio



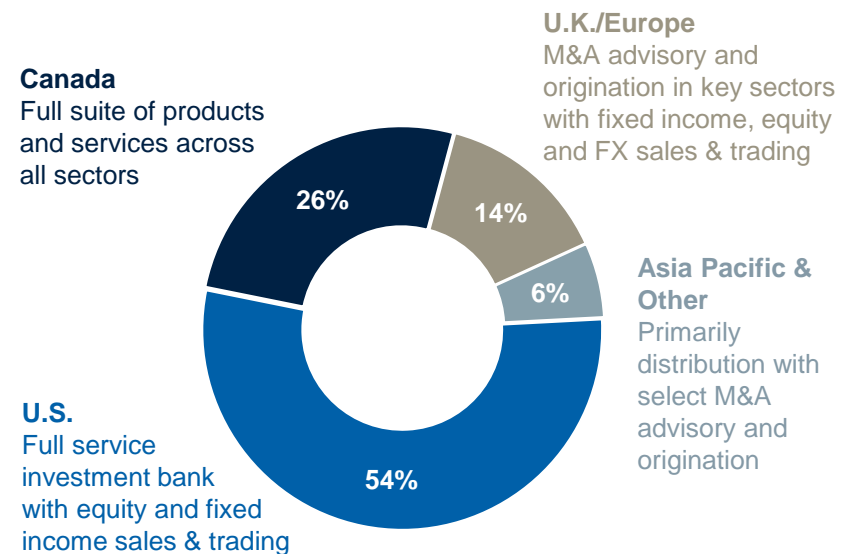
# Capital Markets

- A premier North American investment bank with select global reach
  - 9<sup>th</sup> largest global investment bank by fees<sup>(1)</sup>
- Full suite of integrated Corporate & Investment Banking and Global Markets services
- Strategically positioned in the largest financial centers, focused on the world’s largest and most mature capital markets encompassing ~75% of the global investment banking fee pool<sup>(2)</sup>
- Top talent with expertise and track record of excellence

## Net Income (\$ millions)



## Revenue by Geography<sup>(3)</sup>



### Business Segments

(1) Dealogic – Fiscal 2017 Global Fees. (2) Thomson Reuters, full year 2016. (3) For the quarter ended October 31, 2017.

# Capital Markets

## Strategic Priorities

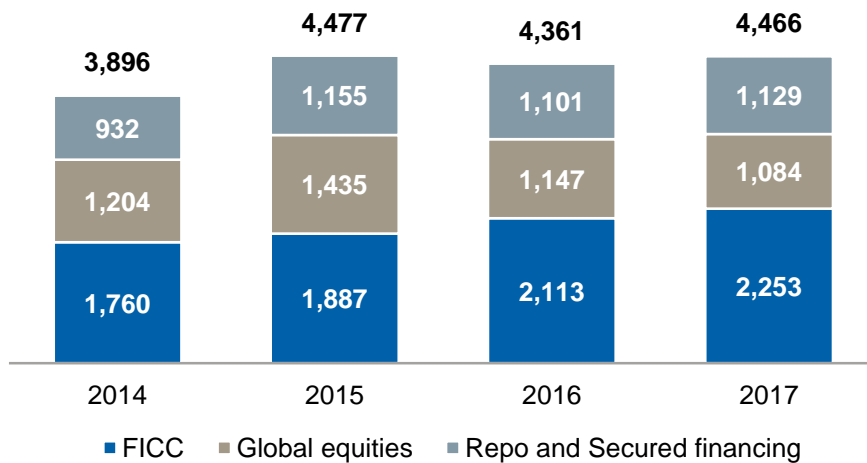
|  |  |
|--|--|
| <p><b>Maintain our leadership position in Canada</b></p>   | <ul style="list-style-type: none"> <li>Focus on long-term client relationships and leverage our global capabilities</li> <li>Increase focus on product and service cross-sell, and continue to improve collaborative efforts</li> </ul>                      |
| <p><b>Expand and strengthen client relationships in the U.S.</b></p>   | <ul style="list-style-type: none"> <li>Build on our momentum and leverage broader relationships and client investments to expand origination, advisory, and distribution</li> <li>Continue to strengthen client relationships to drive cross-sell</li> </ul> |
| <p><b>Build on core strengths and capabilities in U.K./Europe and optimize performance in Asia Pacific</b></p> | <ul style="list-style-type: none"> <li>Continue to grow prudently, deepen client relationships, and selectively expand geographic and sector coverage</li> </ul>   |
| <p><b>Optimize capital use to earn high risk-adjusted returns on assets and equity</b></p>                     | <ul style="list-style-type: none"> <li>Maintain mix between investment banking and lending revenue and trading revenue</li> <li>Maintain disciplined diligence on the risks and costs of our business</li> </ul>   |

## Recent Awards

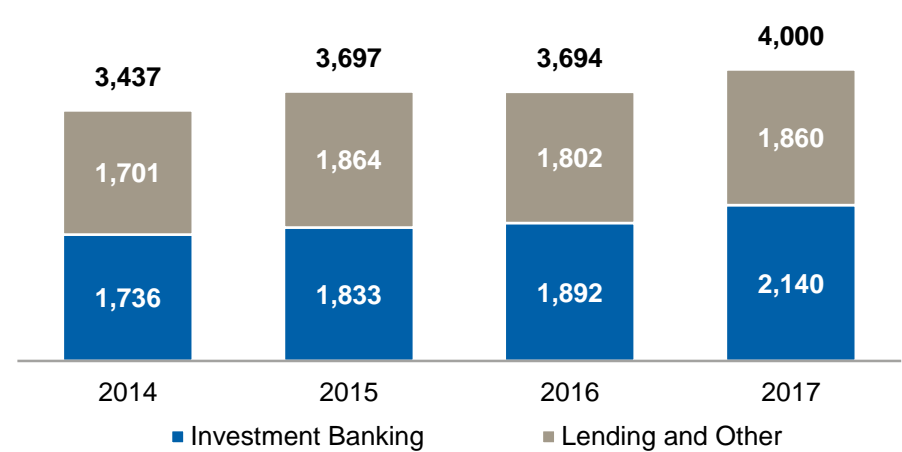
|  |   |   |   |  |
|--|---|---|---|--|
|  <p><b>Best Investment Bank in Canada 10 years in a row<sup>(1)</sup></b></p> |  <p><b>Best FX Provider <sup>(2)</sup></b></p> |  <p><b>Best Bank for Multi-Asset Research<sup>(3)</sup></b></p> |  <p><b>#1 for Canadian Equity Research/Advisory Market Share<sup>(4)</sup></b></p> |  <p><b>Sole Quality Leader in Canadian Equity Sales Trading and Execution Service<sup>(4)</sup></b></p> |
|--|---|---|---|--|

# Capital Markets

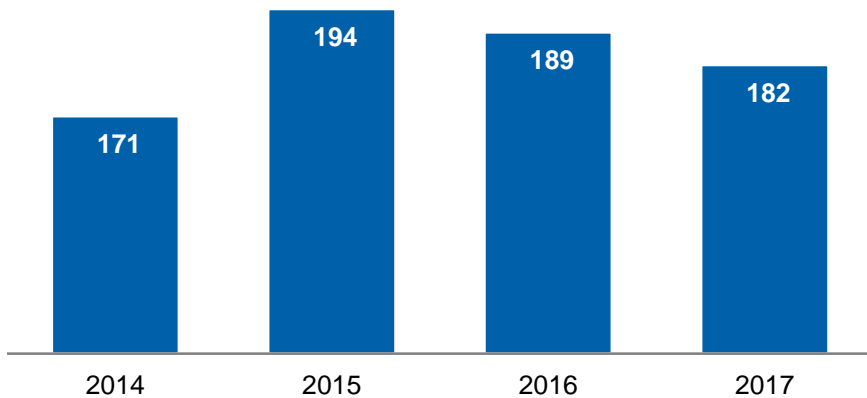
### Diversified Global Markets Revenue<sup>(1)</sup> (\$ millions)



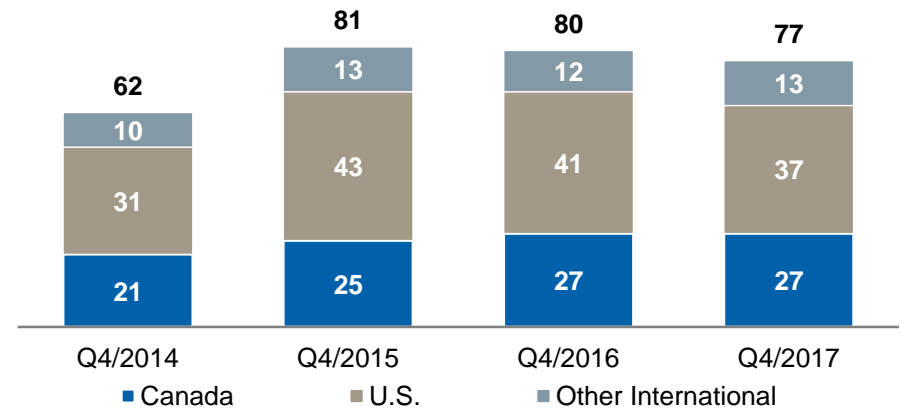
### Corporate & Investment Banking Revenue (\$ millions)



### Risk-Weighted Assets (\$ billions)



### Geographic Diversification Across Loan Book Average loans outstanding by region (\$ billions)<sup>(2)</sup>



#### Business Segments

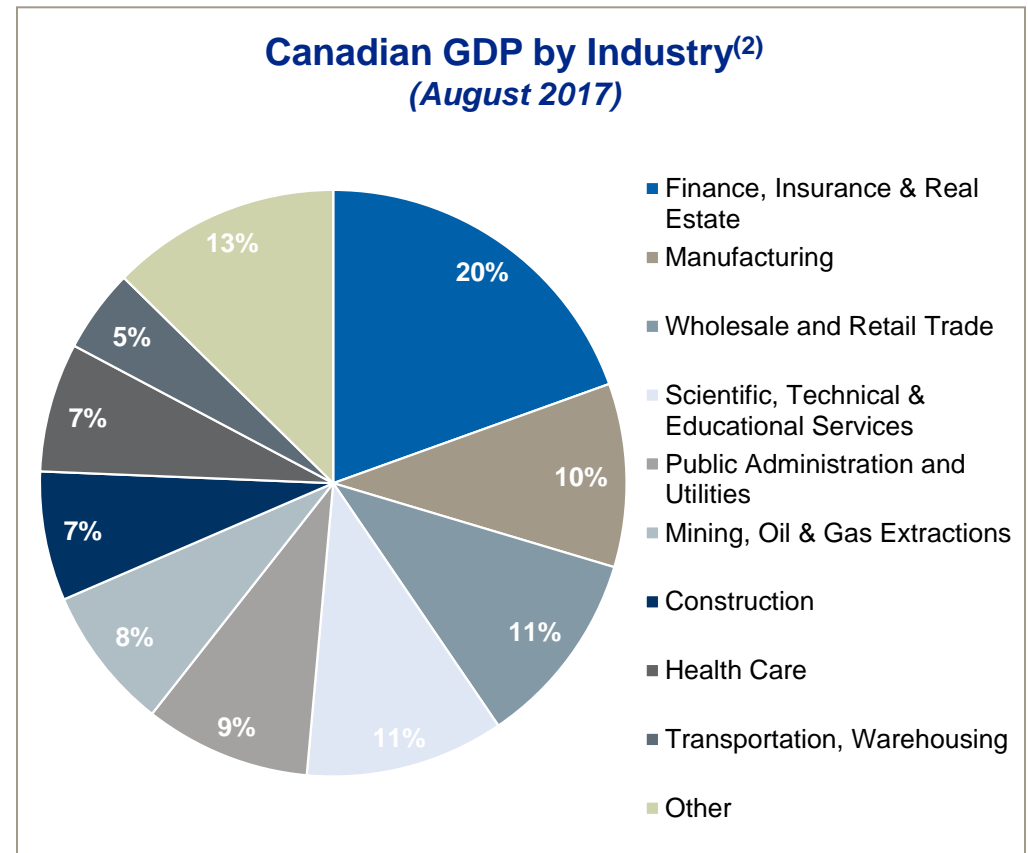
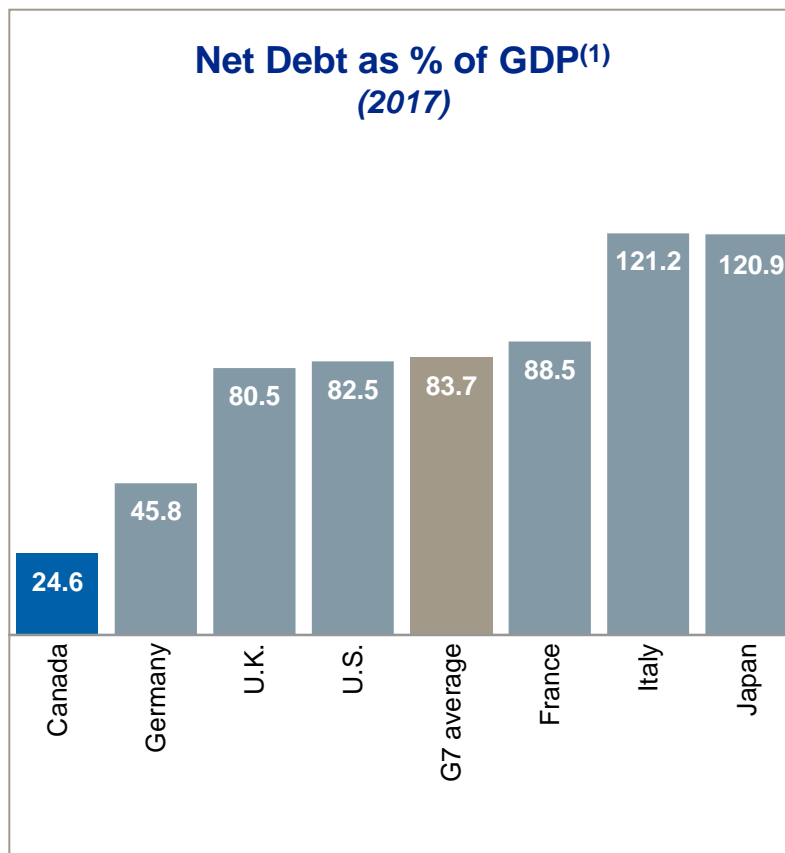
(1) Global Markets segment revenue has been restated to align select portfolios previously disclosed in Repo and Secured Financing to FICC and Global Equities. (2) Average loans & acceptances include letters of credit and guarantees for our Capital Markets portfolio on single name basis. Exclude mortgage investments, securitized mortgages and other non-core items.

# Economic Backdrop



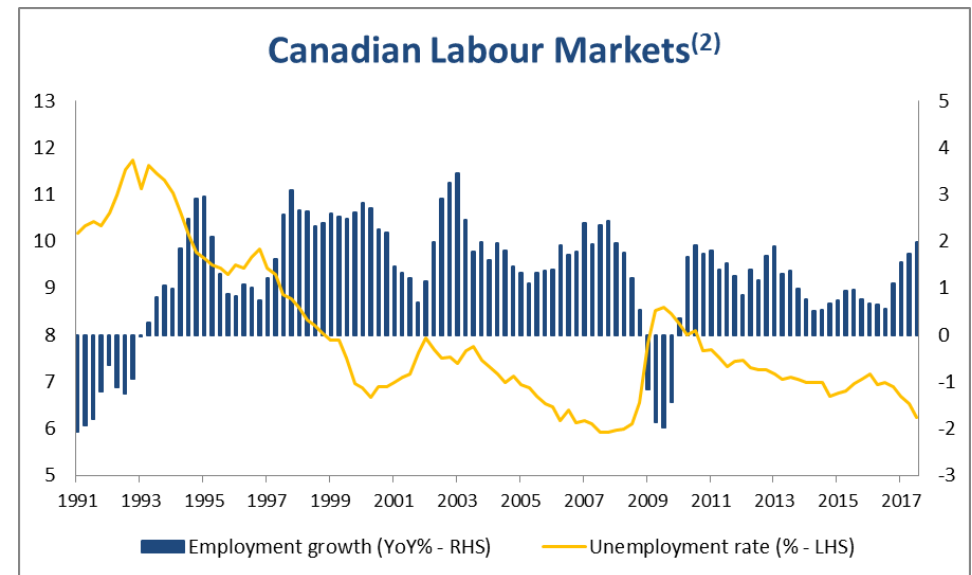
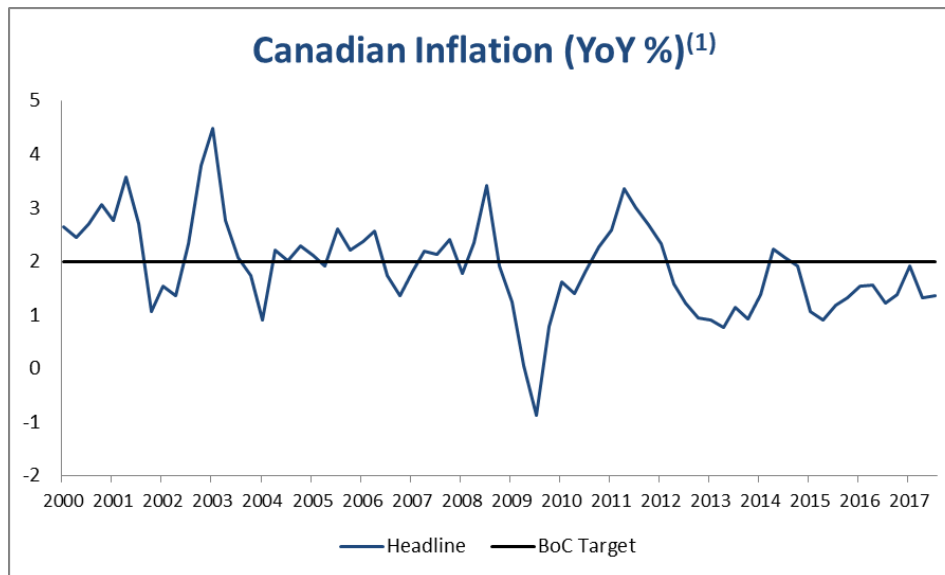
# Canada's fiscal position

- Strong rating as a result of fiscal prudence, conservative bank lending practices and solid economy
- Lowest net debt to GDP ratio among G7 peers<sup>(1)</sup>
- Canadian economy has seen strong, broadly-based growth over the last year



# Economy to strengthen and disinflationary pressures to subside

- Headline inflation has remained below 2% in recent months, partly due to transitory factors such as lower food prices and electricity price rebates. Inflation is expected to gradually rise as transitory factors fade and limited slack in the economy puts upward pressure on prices. Inflation is expected to remain with the Bank of Canada's 1-3% target range through the forecast horizon.
- A solid economic backdrop is expected to drive further employment gains, though with labour markets near full capacity, we expect the unemployment rate will decline only modestly through the forecast horizon.
  - Labour markets have broadly improved, including in some energy-producing provinces such as Alberta and Saskatchewan that saw unemployment rise in recent years amid a slowdown in the energy sector.
- The economy grew at a rapid pace over the first half of 2017 due to strong consumer spending and rising business investment. We expect less support from consumers and housing will result in a more modest, but still above-trend pace of growth heading into 2018.





# 2018 Economic Outlook



|           | Projected Economic Indicators for 2018 <sup>(1)</sup> |           |                                  |                               |  |                                   |
|-----------|---|-----------|----------------------------------|-------------------------------|--|-----------------------------------|
|           | GDP Growth  | Inflation | Unemployment Rate <sup>(2)</sup> | Interest Rate (3 mth T-bills) | Current Account Balance/GDP <sup>(2)</sup> | Budget Surplus/GDP <sup>(3)</sup> |
| Canada    | 2.1%  | 1.7%      | 6.2%                             | 1.8%                          | -2.0%                                      | -0.9%                             |
| U.S.      | 2.5%  | 1.7%      | 4.2%                             | 2.3%                          | -2.5%                                      | -2.8%                             |
| Euro Area | 1.9 %   | 1.2%      | 8.5%                             | NA                            | 3.0%                                       | -0.9%                             |

## Canada

- The Canadian economy is forecast to grow by 2.1% in 2018, down from an impressive 3.0% pace in 2017. Housing activity is expected to continue slowing next year due to policy changes and rising interest rates. Consumer spending is also expected to increase at a more moderate pace. Further growth in business investment and exports will provide some offset. Overall, a more trend-like pace of growth is consistent with the economy reaching its longer run capacity limit.
- The Bank of Canada raised its key interest rate twice over the summer against a backdrop of broadly-based growth and limited economic slack. The central bank has sounded more cautious recently given concerns about US trade policy as well as uncertainty regarding the impact of rising interest rates on highly indebted households. We expect the central bank will hold off on further rate hikes until April 2018.

## U.S.

- The US economy is forecast to grow by 2.5% in 2018, up from 2.2% in 2017. Continued strength in consumer spending, fueled by solid job gains and elevated consumer confidence, and a pickup in business investment are expected to be the main drivers of growth once again next year.
- The US Federal Reserve raised interest rates twice over the first half of the year then announced they would begin shrinking their balance sheet in September. With the economy near full employment, limited economic slack is expected to push inflation toward the Fed's 2% objective. We expect the central bank will raise rates again in December and continue removing accommodation next year as strong GDP growth persists.

## Euro area

- The Euro area's broadly-based economic recovery is continuing though GDP growth is forecast to edge down to 1.9% in 2018 from 2.3% in 2017. Stronger consumer spending and business investment, both reflecting improving sentiment, have fueled growth across the currency bloc's major economies.
- With inflation remaining low, the European Central Bank is committed to providing significant monetary policy stimulus. Asset purchases and negative rates are set to continue at least through September 2018.
- Political risks, particularly Brexit, remain but have had a limited economic impact thus far.

# Canadian Housing Market



# Structural backdrop to the Canadian housing market

|                           | Canada <sup>(1)</sup>   | U.S. <sup>(1)</sup>  |
|---------------------------|---|--|
| <b>Regulation</b>         | <ul style="list-style-type: none"> <li>Government influences mortgage underwriting policies primarily through control of insurance eligibility rules</li> <li>Fully insured if loan-to-value (LTV) is over 80%               <ul style="list-style-type: none"> <li>Must meet 5-year fixed rate mortgage standards</li> <li>Government-backed, on homes under \$1MM</li> <li>Down-payment over 20% on non-owner occupied properties</li> <li>CMHC this year increased mortgage loan insurance premiums by ~15% for new mortgages with LTV over 90%</li> <li>Minimum down payment for new government-backed insured mortgages increased to 10% for portion of the value of a home being purchased that is between \$500,000 – \$999,000</li> </ul> </li> <li>Re-financing cap of 80% on non-insured</li> </ul> | <ul style="list-style-type: none"> <li>Agency insured only if conforming and LTV under 80%</li> <li>No regulatory LTV limit – can be over 100%</li> <li>Not government-backed if private insurer defaults</li> </ul> |
| <b>Consumer Behaviour</b> | <ul style="list-style-type: none"> <li>Mortgage interest not tax deductible</li> <li>Greater incentive to pay off mortgage</li> </ul>   | <ul style="list-style-type: none"> <li>Mortgage interest is tax deductible</li> <li>Less incentive to pay down mortgage</li> </ul>   |
| <b>Lender Behaviour</b>   | <ul style="list-style-type: none"> <li>Strong underwriting discipline; extensive documentation</li> <li>Most mortgages are held on balance sheet</li> <li>Conservative lending policies have historically led to low delinquency rates</li> </ul>   | <ul style="list-style-type: none"> <li>Wide range of underwriting and documentation requirements</li> <li>Most mortgages securitized</li> </ul>  |
| <b>Lenders Recourse</b>   | <ul style="list-style-type: none"> <li>Ability to foreclose on non-performing mortgages, with no stay periods</li> <li>Full recourse against borrowers<sup>(2)</sup></li> </ul>   | <ul style="list-style-type: none"> <li>Stay period from 90 days to one year to foreclose on non-performing mortgages</li> <li>Limited recourse against borrowers in key states</li> </ul>                            |

# Legislation and policies – promoting a healthy housing market

## January 2018 – OSFI Upcoming

- Qualifying rate for uninsured mortgages raised to 2 percentage points above the contract rate or the five-year posted rate, whichever is higher

## April 2017 – Government of Ontario

- Introduced 16 measures in a 'Fair Housing Plan' to address mounting risks in the housing market including a 15% Non-Resident Speculation Tax on the purchase price of homes in the Greater Golden Horseshoe region

## January 2017 – City of Vancouver

- Vancouver introduced a tax of 1% of the assessed value of each home which is vacant (principal residence is exempt)

## October 2016 – Department of Finance

- Qualifying rate for high-ratio mortgages with a term of five years or more is changed to the 5-year posted rate
- Portfolio-insured low-ratio mortgage loans must meet the eligibility criteria of high-ratio insured mortgage
- Any sale of a principal residence must be reported in the seller's tax return for the year of sale, even if the entire gain is fully protected by the principal residence exemption

## July-August 2016 – OSFI & the Government of British Columbia

- OSFI increased scrutiny on mortgage underwriting standards and indicated it will place a greater emphasis on confirming internal controls and risk management practices are sound, and take into account market developments
- Foreign buyers registering the purchase of residential homes in Metro Vancouver become subject to an additional property transfer tax of 15% under legislation introduced by the British Columbia government

## December 2015 – Department of Finance

- Minimum down payment for new government-backed insured mortgages increased from 5% to 10% for portion of the value of a home being purchased that is between \$500,000 and \$999,999 (came into effect February 2016)

# Legislation and policies – promoting a healthy housing market



## April 2014 – CMHC

- CMHC discontinued offering mortgage insurance on 2<sup>nd</sup> homes and to self-employed individuals without 3<sup>rd</sup> party income validation

## July 2012 – CMHC

- Maximum amortization on government-backed insured mortgages reduced to 25 years from 30 years
- Maximum amount that can be borrowed on a mortgage refinancing lowered to 80% from 85%
- CMHC insurance availability is limited to homes with a purchase price of <\$1 million lowered from \$3.5 million
- Set the borrower's maximum gross debt service ratio at 39% and maximum total debt service ratio at 44%

## March 2011 – CMHC

- Maximum amortization on government-backed insured mortgages reduced to 30 years from 35 years
- Maximum amount that can be borrowed on a mortgage refinancing lowered to 85% from 90%

## February 2010 – Department of Finance

- Borrowers with insured mortgage terms of less than five years must meet the standards for a five-year fixed rate mortgage
- Maximum amount that can be borrowed on a mortgage refinancing lowered to 90% from 95%
- Minimum 20% down payment is required in order to qualify for government-backed mortgage insurance on non-owner-occupied properties

## July 2008 – Department of Finance

- Maximum amortization on government-backed insured mortgages reduced to 35 years from 40 years
- A minimum 5% down payment is required in order to qualify for government-backed insured mortgages
- Additional – minimum credit score requirements, new loan documentation standards, setting a maximum of 45% on borrowers total debt service ratio

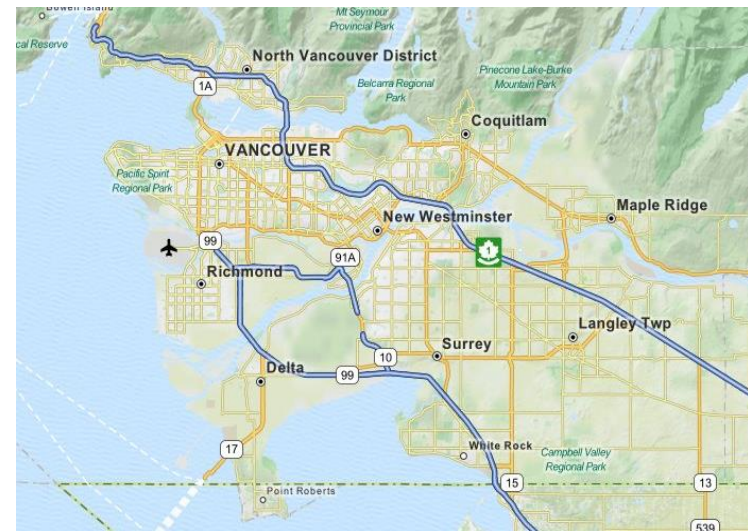
# The Toronto and Vancouver downtown condo markets

- Constraints on undeveloped land around Toronto / Vancouver contribute to a shift to higher-density condo housing
  - Provincial growth plan, including ‘Green belt’ surrounding Toronto, contains urban sprawl and favours condo development
  - Vancouver is restricted in its ability for urban sprawl due to land constraints away from the city center
- Canada has one of the highest per capita rates of permanent immigration in the world<sup>(1)</sup>
  - 22% of Canada’s population is foreign born (7.5 MM), highest proportion among the G8 nations<sup>(1)</sup>
  - 56% of all new immigrants to Canada move to Toronto, Vancouver or Montreal<sup>(1)</sup>
- RBC’s exposure to condo development is limited – ~2% of our Canadian commercial loan book<sup>(2)</sup>
  - Condo exposure is ~10% of our Canadian residential mortgage portfolio<sup>(2)(3)</sup>

“Green belt” surrounding Greater Toronto area

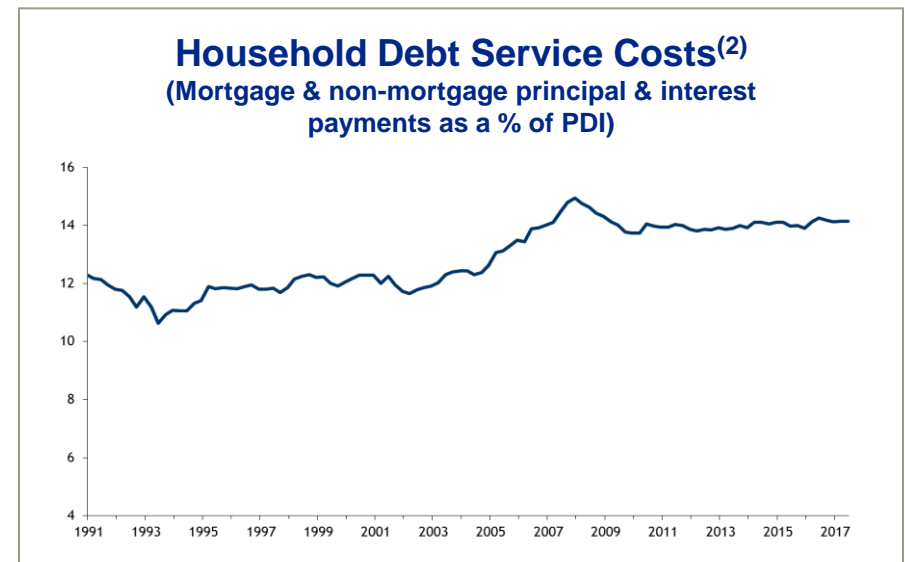


Vancouver limited by mountains, sea, U.S. border



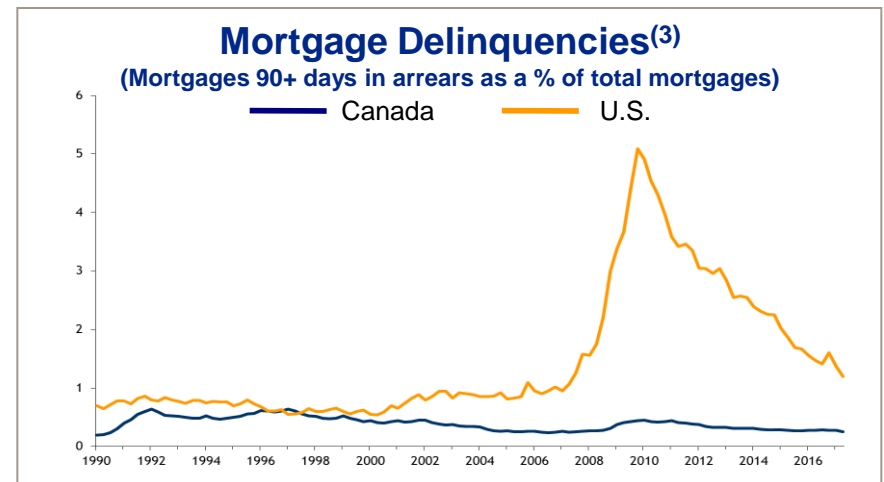
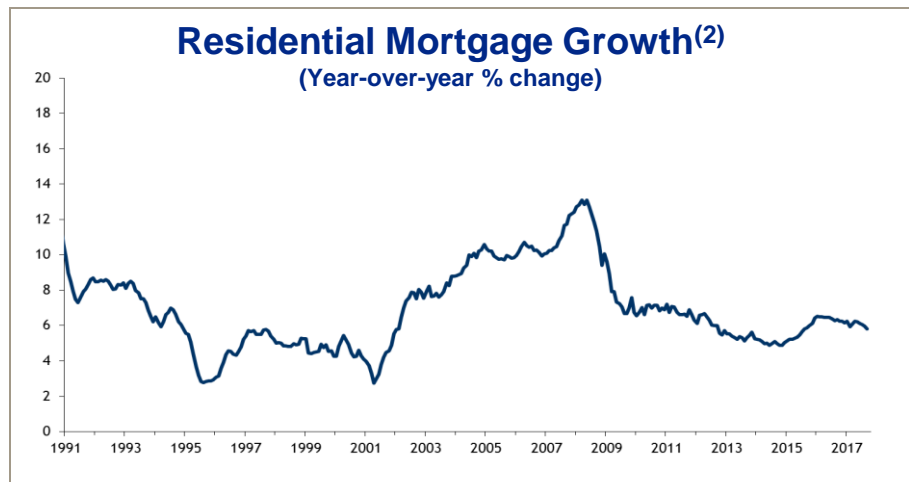
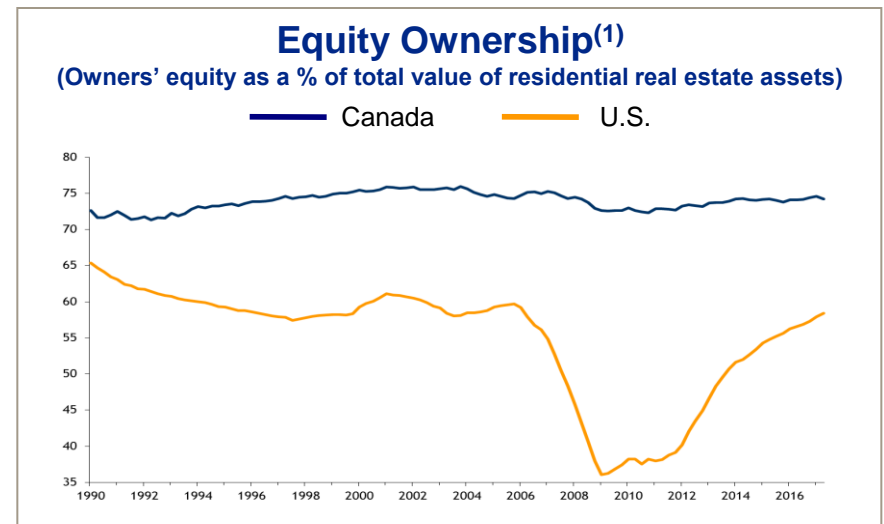
# Canadian housing market risks remain localized

- Balanced demand-supply conditions continue to prevail nationally and in most local markets. Conditions generally favour sellers in British Columbia. In Ontario, a surge in new listings this spring and sharp drop in sales since April in the Greater Toronto area eased the earlier tight market conditions significantly
- Housing affordability is being skewed at the national level by stretched conditions in Vancouver, Toronto and their surrounding areas. Affordability is in line with historical norms in most other markets across Canada
- Steady population growth, household income gains and low unemployment rates are expected to continue to support housing market activity nationally, although a gradual increase in borrowing rates should temper homebuyer demand
- Regulatory changes at the federal level and a foreign-buyer tax in British Columbia contributed to correction over the second half of 2016. Activity has since rebounded. The introduction of housing measures in Ontario, including a foreign-buyer tax, has contributed to a sharp slowdown in sales recently in the Greater Toronto region
- Household debt service cost ratios remain relatively stable
- Lenders maintaining strong underwriting discipline and require extensive documentation
  - Most mortgages held on balance sheet and conservative lending policies have led to low delinquency rates



# Canadians have significant equity ownership in their homes

- Canadians carry a significant and stable amount of equity in their homes
- The pace of residential mortgage accumulation slowed since early-2016 and continued to trend within a range well below the double-digit rates of growth recorded in the mid-2000s
- Mortgage delinquency rates remain low in Canada and have been stable through recent credit cycles
- RBC monitors its residential mortgage and broader retail portfolios closely and performs stress tests for dramatic movements in house prices, GDP, interest rates and unemployment rates



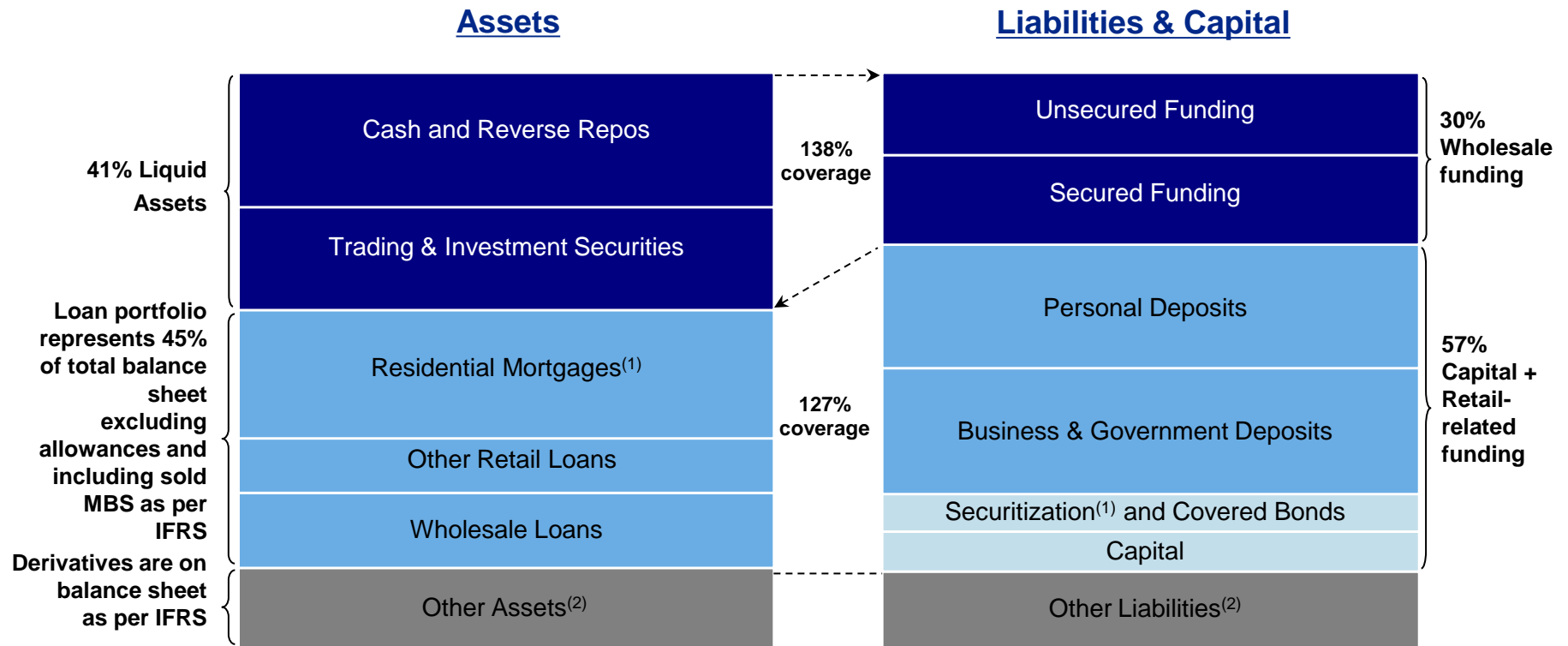


# Appendix A – Liquidity & Funding



# Strength of a high quality liquid balance sheet

**\$1,213 Billion**  
(as at October 31, 2017)

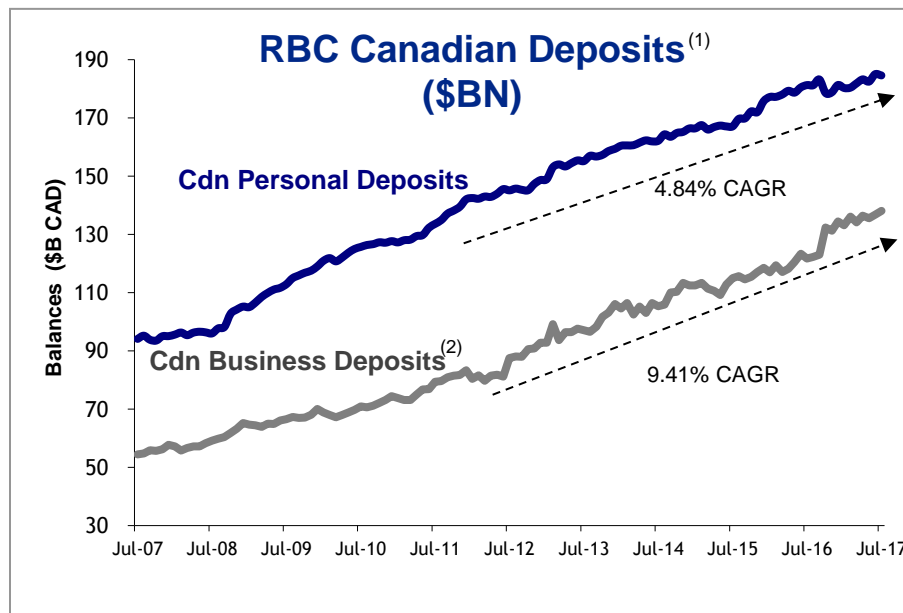


# Strong deposit growth

**Leveraging the strength of our distribution channels and successful deposit initiatives to drive growth**

## Gaining Canadian market share

- Initiated successful strategies to grow relationship deposit base
- Leveraging our Wealth Management network with targeted strategies and product development
- Canadian relationship deposits continue to grow
- Between August 2012 and July 2017, our share of the Canadian personal deposit market has grown from 19.3% to 19.6%



|  | Q4 2017      | Q4 2016      |
|--|--------------|--------------|
| HISA <sup>(3)</sup>                      | \$33         | \$30         |
| Advisory Channel Deposits <sup>(4)</sup> | \$32         | \$33         |
| Other Personal Deposits                  | \$181        | \$172        |
| Business Deposits                        | \$279        | \$271        |
| <b>Total Deposits</b>                    | <b>\$525</b> | <b>\$506</b> |

### Appendix

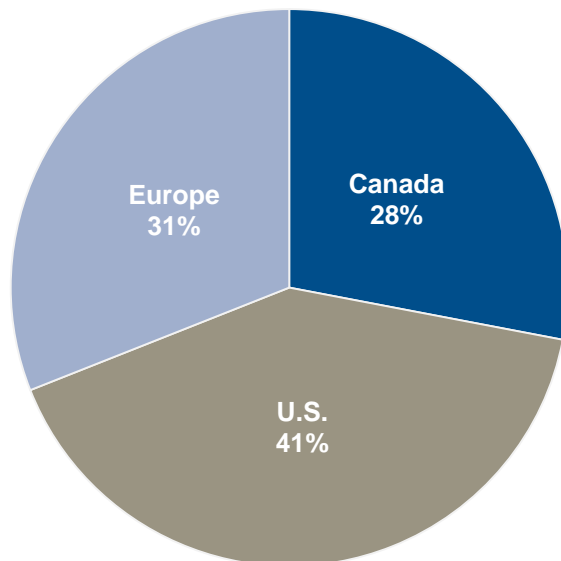
(1) Sourced Canadian deposit market share, which is based on OSFI (M4 report). The volume change in Oct'16 was mainly due to a re-class of personal deposit to business deposits.  
 (2) Canadian Business deposits reflect all platform demand deposits and Canadian Banking term deposit balances only. (3) High Interest Savings Account; Includes CAD and USD deposits. (4) Sourced largely from RBC Wealth Management network.

# Wholesale funding strategy

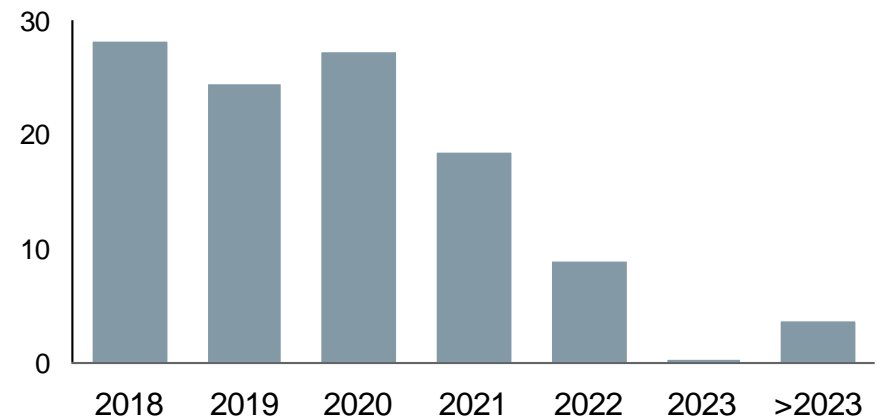
## Large retail deposit base complemented by well diversified wholesale funding mix

- Well diversified across products, currencies, investor segments and geographic regions
- Raise majority of funding in international markets to preserve significant domestic capacity which can be tapped in stressed market conditions
- Regular issuance in all major markets to promote investor engagement and secondary market liquidity
- Well balanced maturity profile that is reflective of the maturity profile of our asset base

### Diversified by Geography<sup>(1)</sup>



### Well Balanced Maturity Profile (\$ billions)<sup>(1)</sup>

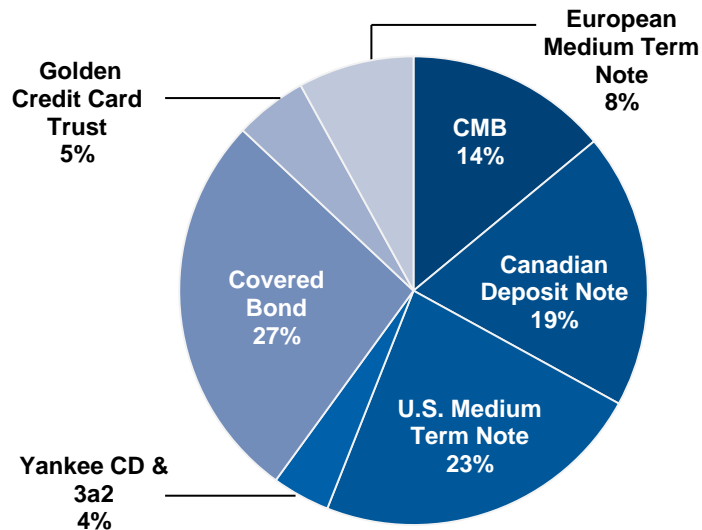


# Well diversified wholesale funding platform

- Variety of programs allows for greater diversification and cost effectiveness

| Canada  | U.S.   | Europe and Asia   |
|---|--|---|
| <ul style="list-style-type: none"> <li>Canadian Shelf (C\$25BN)</li> <li>Securitizations (Canadian mortgage bonds, NHA MBS<sup>(1)</sup> and credit cards)</li> </ul> | <ul style="list-style-type: none"> <li>SEC Registered Shelf (US\$40BN)</li> <li>Covered Bond Shelf (US\$15BN)<sup>(2)</sup></li> </ul> | <ul style="list-style-type: none"> <li>European Debt Issuance Program (US\$40BN)</li> <li>Covered Bond Program (EUR 32BN)</li> <li>Japanese Issuance Programs (JPY 1 trillion)</li> </ul> |

## Well Diversified by Product<sup>(3)</sup>



## Recent Deals

- US\$2.5BN 3-year unsecured at Libor+24bps
- US\$500MM 2-year unsecured at Libor+24bps
- US\$525MM 5-year Golden Credit Card Trust at Libor+43bps

# RBC Covered Bond Program

## Globally Active

- Active program in six different currencies: EUR, CAD, USD, CHF, AUD and GBP
  - C\$36BN currently outstanding

## Strong Issuer

- Largest Canadian bank by market capitalization
- Strong credit ratings
- Well capitalized and consistent historical profitability
- Well diversified business mix

## Canadian Legislative Changes



- Canadian legislation protects claims of covered bond investors and overrides any other conflicting law related to bankruptcy and insolvency
  - Extensive regulatory oversight and pool audit requirements
  - Mandatory property value indexation

## U.S. Market



- Active U.S. dollar covered bond issuer
- Several benchmark bonds outstanding
- Broad U.S. investor base
  - Issued US\$15.5BN across seven deals since September 2012
  - Trace eligible



## Note to users

We use a variety of financial measures to evaluate our performance. In addition to generally accepted accounting principles (GAAP) prescribed measures, we use certain key performance and non-GAAP measures we believe provide useful information to investors regarding our financial condition and result of operations. Readers are cautioned that key performance measures, such as ROE and non-GAAP measures, including amounts excluding Corporate Support, revenue net of Insurance fair value change of investments backing our policyholder liabilities, adjusted City National results, Capital Markets trading and geographic revenue excluding certain items, GIL ratio excluding acquired credit-impaired loans and NIM excluding acquired credit-impaired loans do not have any standardized meanings prescribed by GAAP, and therefore are unlikely to be comparable to similar measures disclosed by other financial institutions.

Additional information about our ROE and non-GAAP measures can be found under the “Key performance and non-GAAP measures” sections of our 2017 Annual Report.

Definitions can be found under the “Glossary” sections in our Q4 2017 Supplementary Financial Information and our 2017 Annual Report.

### Investor Relations Contacts

|                                  |                |
|----------------------------------|----------------|
| Dave Mun, SVP & Head             | (416) 974-4924 |
| Asim Imran, Senior Director      | (416) 955-7804 |
| Jennifer Nugent, Senior Director | (416) 974-0973 |

 [www.rbc.com/investorrelations](http://www.rbc.com/investorrelations)