Royal Bank of Canada Investor Presentation

Q4/2021

All amounts are in Canadian dollars and are based on our audited Annual and unaudited Interim Consolidated Financial Statements for the year and quarter ended October 31, 2021 and related notes prepared in accordance with International Financial Reporting Standards (IFRS). Our 2021 Annual Report (which includes our audited Annual Consolidated Financial Statements and accompanying Management's Discussion & Analysis), our 2021 Annual Information Form and our Supplementary Financial Information are available on our website at: http://www.rbc.com/investorrelations.



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 reports to shareholders, and in other communications. Forward-looking statements in this presentation include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, climate related goals, and the potential continued impacts of the coronavirus (COVID-19) pandemic on our business operations, financial results and financial condition, and on the global economy and financial market conditions, including projected economic indicators for 2021 with respect to Canada, the United States and the Euro Area. The forward-looking information contained in this presentation 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 (which could lead to us being subject to various legal and regulatory proceedings, the potential outcome of which could include regulatory restrictions, penalties and fines), strategic, reputation, competitive, legal and regulatory environment, and systemic risks and other risks discussed in the risk sections and Impact of COVID-19 pandemic section of our annual report for the fiscal year ended October 31, 2021 (the 2021 Annual Report); including business and economic conditions, information technology and cyber risks, environmental and social risk (including climate change), digital disruption and innovation, Canadian housing and household indebtedness, geopolitical uncertainty, privacy, data and third party related risks, regulatory changes, culture and conduct, 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, environmental and social risk, and the emergence of widespread health emergencies or public health crises such as pandemics and epidemics, including the COVID-19 pandemic and its impact on the global economy, financial market conditions and our business operations, and financial results, condition and objectives. In addition, as we work to advance our climate goals, external factors outside of RBC's reasonable control may act as constraints on their achievement, including varying decarbonization efforts across economies, the need for thoughtful climate policies around the world, more and better data, reasonably supported methodologies, and technological advancements, the evolution of consumer behavior, the challenges of balancing interim emissions goals with an orderly and just transition, and other significant considerations such as legal and regulatory obligations.

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 the Economic, market and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook headings in our 2021 Annual Report. 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 risk sections and Impact of COVID-19 pandemic section of our 2021 Annual Report.

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

About RBC



The RBC story

>	Diversified business model with scale and market-leading franchises	 Well-diversified across businesses, geographies and client segments Able to capitalize on opportunities created by changing market dynamics and economic conditions A full suite of products, advice and services to meet our clients' financial needs and build deep, long-term relationships
>	Leading presence in Canada and an established multi- platform U.S. strategy	 #1 or #2 market share in all key product categories in Canadian Banking with superior cross-sell ability Most branches and one of the largest mobile sales networks across Canada Largest retail fund company in Canada, ranked #1 in market share #1 High Net Worth and Ultra High Net Worth market share in Canada 7th largest full-service wealth advisory firm in the U.S. as measured by number of financial advisors and 6th largest by assets under administration City National is a premier U.S. private and commercial bank that creates a platform for long-term growth in the U.S. Capital Markets is a premier global investment bank with core operations across Canada, the U.S., the U.K./Europe, and APAC
>	Differentiated tech and innovation investments that go beyond banking	 Long history of innovation and proven ability to adapt to industry trends; ongoing investments in technology to deliver exceptional experiences and differentiated value for clients Focused on simplifying, digitizing and personalizing our products to make it easier for clients and employees to do business, and to lower costs RBC Ventures and Partnerships moves RBC beyond traditional banking to deliver unique value for all Canadians
	Premium ROE and disciplined expense management	 Track record of earnings and dividend growth while maintaining a disciplined approach to risk and cost management 16%+ ROE⁽¹⁾ medium-term objective
>	Strong balance sheet and prudent risk management	 Credit ratings amongst the highest globally Strong capital position and a high-quality liquid balance sheet A disciplined approach and diversification have underpinned credit quality Canadian residential portfolio has strong underlying credit quality 40-50% dividend payout ratio⁽²⁾ medium-term objective
>	Recognized leader in ESG and corporate citizenship	 Committed to net-zero emissions in our lending by 2050 and accelerating clean economic growth through our \$500 billion sustainable financing target by 2025 to help support clients in the net-zero transition Published The \$2 Trillion Transition, research that outlines the cost & opportunities of Canada's journey to net-zero emissions Committed to reducing our own emissions by 70% and sourcing 100% renewable and non-emitting electricity by 2025 In 2021, we refined our ESG reporting suite: RBC's 2020 Enterprise D&I Statement of Performance, second stand-alone TCFD⁽³⁾ Report, and updated our SASB⁽⁴⁾ Index Over \$140 million provided globally in 2021 through cash donations and community investments Since the launch, to date 3.6 million youth have participated in Future Launch programs. Advanced our commitment to BIPOC Youth by committing \$16 million to initiatives that support access to pathways in Healthcare, Tech and the Skills trade

(1) Return on Equity (ROE) is calculated as net income available to common shareholders divided by average common equity for the period. (2) Dividend payout ratio is calculated as common dividends as a percentage of net income available to common shareholders. (3) Task Force on Climate-related Financial Disclosures. (4) Sustainability Accounting Standards Board.

Largest in Canada⁽¹⁾

A market leader across all key businesses

Top 10 Globally⁽¹⁾

One of the 10 largest global banks by market capitalization with operations in 29 countries **17 Million Clients**

Served by 87,000+ employees worldwide

Purpose

Help clients thrive and communities prosper

Vision

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

Strategic Goals



In Canada: To be the undisputed leader in financial services



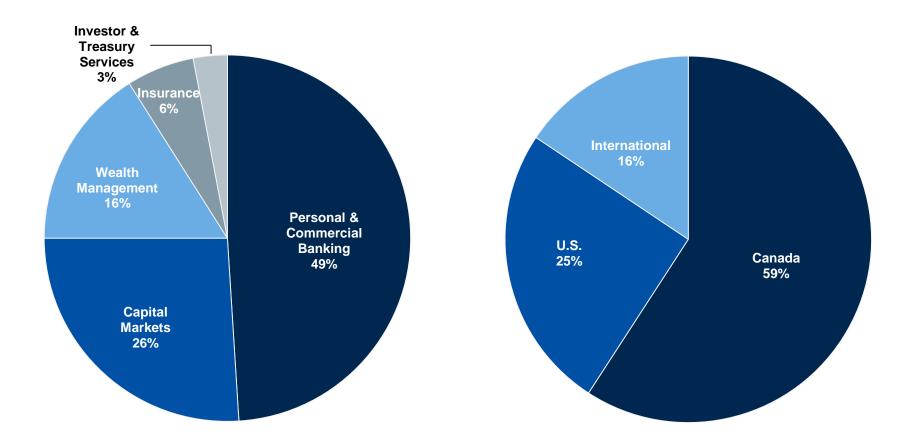
In the United States: To be the preferred partner to corporate, institutional and high net worth clients and their businesses



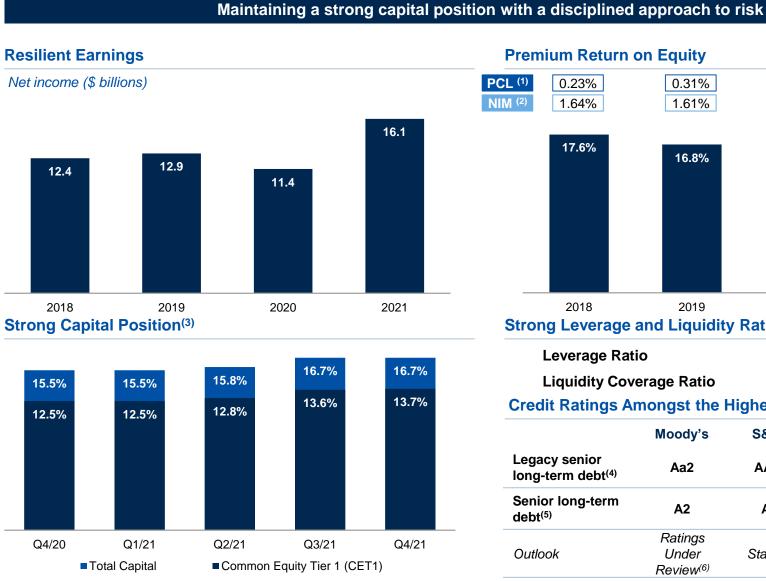
In Select Global Financial Centres: To be a leading financial services partner valued for our expertise

Diversified business and geographic model with client-leading franchises

Earnings by Business Segment⁽¹⁾ Latest twelve months ended October 31, 2021 Revenue by Geography Latest twelve months ended October 31, 2021



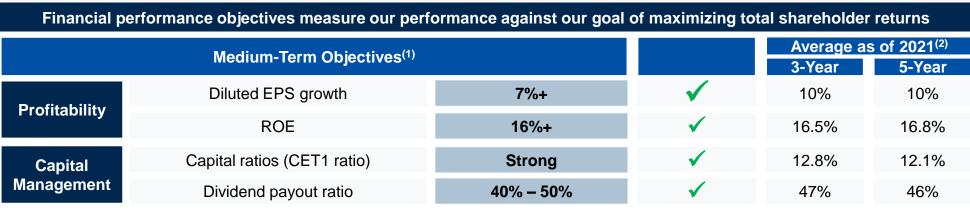
Strong financial profile



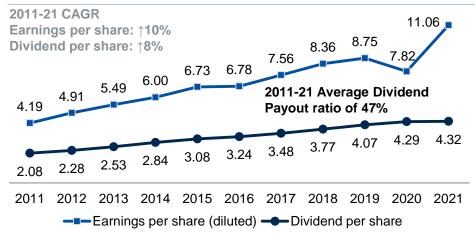
(1) 0.23% (2) 1.64%	0.31%		3% 5%	(0.10)% 1.48%
17.6%	16.8%			18.6%
		14	.2%	
2018	2019	-)20	2021
Strong Leverage	and Liquidity	-	-	2021 4.9%
Strong Leverage Leverage Rat Liquidity Cov	and Liquidity tio verage Ratio	/ Ratios ⁽³⁾		
Strong Leverage Leverage Rat Liquidity Cov	and Liquidity tio verage Ratio	/ Ratios ⁽³⁾		4.9%
Etrong Leverage Leverage Rat Liquidity Cov Credit Ratings A Legacy senior	and Liquidity tio verage Ratio mongst the H	/ Ratios ⁽³⁾ lighest Gl	obally	4.9% 123%
Strong Leverage Leverage Rat	and Liquidity io verage Ratio mongst the H Moody's	/ Ratios ⁽³⁾ Highest Gl S&P	obally DBRS	4.9% 123% Fitch

(1) Provision for credit losses (PCL) on loans as a % of average net loans and acceptances. (2) Net interest margin (NIM) (average earning assets, net) - net interest income as a percentage of total average earning assets, net. net include interest-bearing deposits with other banks, securities, net of applicable allowance, assets purchased under reverse repurchase agreements and securities borrowed, loans, net of allowance, cash collateral and margin deposits. Insurance assets, and all other assets not specified are excluded. The averages are based on the daily balances for the period. (3) Capital ratios are calculated using Office of the Superintendent of Financial Institutions' (OSFI) Capital Adequacy Requirements guideline. Leverage ratio is calculated using OSFI's Leverage Requirements guideline. Liquidity Coverage Ratio is the average for the three months ended for each respective period and is calculated in accordance with OSFI's Liquidity Adequacy Requirements guidance. (4) Ratings (as at November 30, 2021) for senior long-term debt issued prior to September 23, 2018 and senior long-term debt issued on or after September 23, 2018, which is excluded from the Canadian Bank Recapitalization (Bail-in) regime. (5) Ratings (as at November 30, 2021) for senior long-term debt issued on or after September 23, 2018 which is subject to conversion under the Bail-in regime. (6) On October 7, 2021, Moody's placed our long-term ratings and assessments on review for upgrade. Our short-term debt ratings were affirmed.

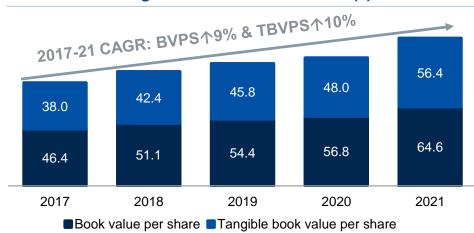
Track-record of delivering value to our shareholders



Dividend⁽³⁾ and Earnings per Share (\$)



Book Value & Tangible Book Value Per Share (\$)⁽⁴⁾⁽⁵⁾



Achieved Solid Total Shareholder Return (TSR)⁽⁶⁾ Performance

	3-Year	5-Year	10-Year	20-Year
RBC	16%	13%	14%	13%
Peer Average	14%	12%	13%	11%

(1) A medium-term (3-5 year) objective is considered to be achieved when the performance goal is met in either a 3- or 5-year period. These objectives assume a normal business environment and our ability to achieve them in a period may be adversely affected by extraordinary developments such as the COVID-19 pandemic and the current low interest rate environment. (2) Diluted EPS growth is calculated using a Compound Annual Growth Rate (CAGR). ROE, CET1 and dividend payout ratio are calculated using an average. (3) Dividends declared per common share. Our current quarterly dividend is \$1.20. (4) Book Value Per Share (BVPS) is calculated as common equity divided by common shares outstanding. (5) Tangible Book Value Per Share (TBVPS) is calculated as common equity divided by common shares outstanding. (5) Tangibles (excluding software) net of deferred tax on spot basis divided by common shares outstanding. This is a non-GAAP measure. Refer to slide 58 for reconciliation and slide 59 for more information. (6) Annualized TSR is calculated based on the TSX common share price appreciation plus reinvested dividend income. Source: Bloomberg, as at October 31, 2021. RBC is compared to our global peer group. The peer group average excludes RBC; for the list of peers, please refer to our 2021 Annual Report.

Business Segments



Personal & Commercial Banking

- The financial services leader in Canada
 - #1 or #2 market share in all key product categories
 - Most branches and one of the largest mobile sales networks across Canada
 - Superior cross-sell ability
- In 9 countries and territories in the Caribbean

6,402

6,168

2019

Canadian Banking

234

5,087

5,077

2020

- 3rd largest bank by assets⁽¹⁾ in English Caribbean
- Innovative direct banking to U.S. cross-border clients
- Ongoing investments to digitize our banking channels

Q4/2021 Highlights

Clients (MM)	14+
Branches	1,221
ATMs	4,303
Active Digital (Online and Mobile) Users ⁽²⁾ (MM)	8.0
Employees (FTE)	36,675
Net Loans & Acceptances ⁽¹⁾ (\$BN)	522.2
Deposits ⁽¹⁾ (\$BN)	524.3
AUA ⁽³⁾ (\$BN)	367.7

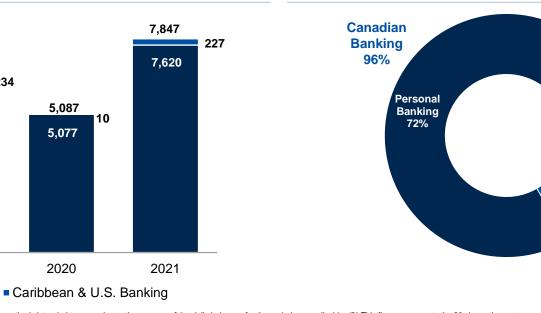
Business

Banking 24%

> Caribbean & U.S. Banking

> > 4%

Revenue by Business Line⁽⁴⁾



(1) Based on average balances which are calculated using methods intended to approximate the average of the daily balances for the period, as applicable. (2) This figure represents the 90-day active customers in Canadian Banking only. (3) AUA (Assets Under Administration) represent period-end spot balances and includes securitized residential mortgages and credit card loans as at October 31, 2021 of \$15 billion, respectively (July 31, 2021 of \$15 billion; October 31, 2020 of \$16 billion and \$7 billion). AUA include assets administered by us, which are beneficially owned by clients. Services provided in respect of assets under administration are of an administrative nature, including safekeeping, collecting investment income, settling purchase and sale transactions, and record keeping. (4) For the quarter ended October 31, 2021.

168

6,028

5,860

2018

Net Income (\$ millions)

Personal & Commercial Banking

Strategic Priorities – Building A Digitally-Enabled Relationship Bank™

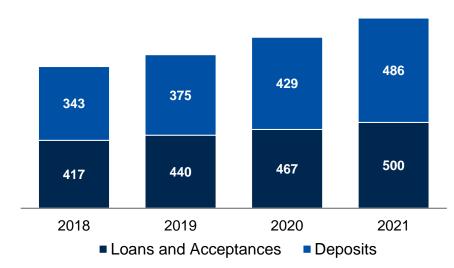
Transform how we serve our clients	 Enhance and simplify for clients to access products and services digitally Create capacity and capability to focus on advice, complex servicing and sales, and problem resolution Focus on innovating our branch network
Accelerate client growth	 Grow commercial market share through industry-specific credit strategies Target high-growth retirement segment and business succession planning Continue to increase client acquisitions including key segments: high net worth, newcomers and students and young adults while deepening existing client relationships
Rapidly deliver digital solutions	 Continue to deliver leading digital capabilities and functionality through our award-winning mobile app Create partnerships and innovate to provide additional value to our clients Invest in research and development to understand and meet rapidly changing client expectations
Innovate to become a more agile and efficient bank	 Accelerate investments to simplify, digitize and automate for clients and employees Change or eliminate products and processes that do not add economic or client value Invest in employees to enhance digital, agile and change capabilities

Recent Awards

J.D. POWER	Los and the second seco	THE DIGITAL BANKER	Aite Novarica
Highest in Customer Satisfaction Among the Big Five Retail Banks for a second consecutive year, a position RBC has now held for 5 out of the past 6 years ⁽¹⁾	RBC received top ranks in 11 out of 11 Ipsos Financial Service Excellence Awards among the Big 5 Banks, including Customer Service Excellence ⁽²⁾	RBC awarded Best Payments Innovation Award from The Digital Banker as part of the Global Retail Banking Innovation Awards 2021 ⁽³⁾	For the second year in a row, RBC was named one of the winners of Aite-Novarica Group's 2021 Impact Innovation Awards in Cash Management & Payments ⁽⁴⁾

(1) J.D. Power, 2021. (2) Ipsos, 2021. (3) The Digital Banker, 2021. (4) Aite-Novarica Group, 2021.

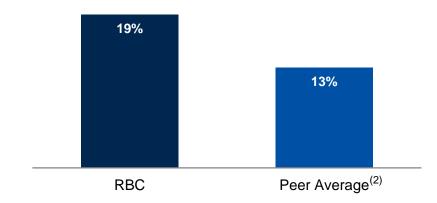
Personal & Commercial Banking – Canadian Banking



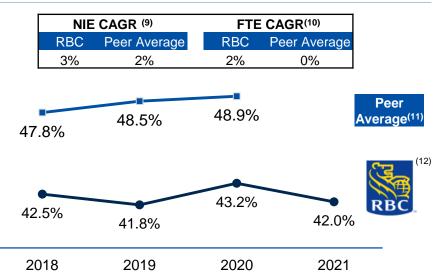
Solid Volume Growth (\$ millions)⁽¹⁾

Superior Cross-Sell Ability

Percent of clients with transaction accounts, investments, borrowing and credit card products⁽²⁾



Continued Efficiency Improvements While Investing For Growth



(1) Based on average balances. (2) Canadian Financial Monitor by Ipsos – 18,000 Canadian individuals – data based on Financial Group results for the 12-month period ending October 2021.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 July 2021 and May 2021 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 May 2021, excludes Credit Cards. (5) Credit cards market share is based on 6 banks (RBC, BMO, BNS, CIBC, TD and NA) as at May 2021, excludes Credit Cards. (5) Credit cards market share is based on 6 banks (RBC, BMO, BNS, CIBC, TD and NA) as at May 2021, (6) Long-term mutual fund market share is compared to 7 banks (RBC, BMO, BNS, CIBC, TD, NA, and HSBC) and is at July 2021. (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 2021. (8) Business Deposits market share excludes Fixed Term, Government and Deposit Taking Institution balances. (9) Non-interest expense representing 2.75 year CAGR. (10) Number of employees (full-time equivalent) representing CAGR from end of period 2018 to Q321. (11) Peers include BMO, BNS, CIBC, TD and NA; 2018 through 2020 reflects annual numbers. (12) Efficiency ratio is calculated as non-interest expense as a percentage of total revenue.

#1 or #2 Market Share in All Key Categories⁽³⁾

Product	Market share	Rank
Personal Lending ⁽⁴⁾	24.6%	1
Personal Core Deposits + GICs	20.6%	2
Credit Cards ⁽⁵⁾	28.4%	1
Long-Term Mutual Funds ⁽⁶⁾	32.1%	1
Business Loans (\$0-\$25MM) ⁽⁷⁾	25.9%	1
Business Deposits ⁽⁸⁾	24.0%	1

Wealth Management

Strategic Priorities

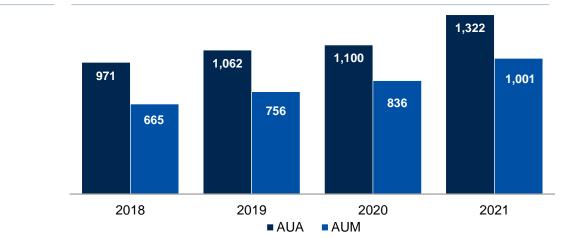
- Global Asset Management: Deliver investment performance and extend leadership position in Canada, while continuing to build and grow in the U.S. and EMEA/APAC
- Canadian Wealth Management: Continue to deepen client relationships and deliver a differentiated client experience that is increasingly digitally-enabled and supported by data-driven insights
- U.S. Wealth Management: Leverage the combined strengths of City National Bank, RBC Wealth Management U.S. and Capital Markets to accelerate growth in the U.S.
- International Wealth Management: In the British Isles, accelerate organic market share growth to be a top-tier wealth manager, providing solutions and insight to successful wealth creators. In Asia, continue to drive growth in Asia's global families by leveraging the global strengths and capabilities of RBC

Recent Awards

	Best Private Bank in Canada – 10 th consecutive year
	(PWM/The Banker Global Private Banking Awards 2021)
	Best Private Bank for Growth Strategy – Globally
	(PWM/The Banker Global Private Banking Awards, 2021)
	RBC DS was rated #1 in advisor satisfaction amongst all bank- owned full-service brokerage firms
	(Investment Executive Brokerage Report Card, 2021)
	Best Private Bank for Digital Marketing & Communications – North
	America
	(PWM's Global Wealth Tech Awards, 2021)
	Best Private Bank for Digitally Empowering Relationship Managers North America
	(PWM's Global Wealth Tech Awards, 2021)
	Innovative Client Solution
	(Family Wealth Report Awards, 2021)
	Best Private Banking Services Overall – North America & Canada

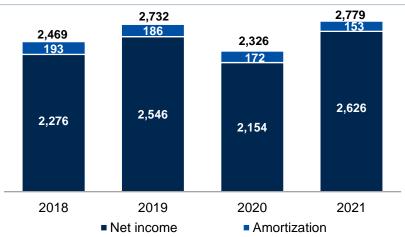
(Euromoney Private Banking and WM Survey, 2021)

AUA and AUM ⁽⁴⁾ (\$ billions) ⁽⁵⁾



(1) Cash earnings exclude the after-tax effect of amortization of intangibles. This is a non-GAAP measure. Refer to slide 58 for reconciliation and slide 59 for more information. (2) 2019 net income includes the gain on sale of the private debt business of BlueBay (\$134 million after-tax). (3) Effective Q4 2021, gains (losses) on economic hedges of our U.S. share-based compensation plans, which are reflected in revenue, and related variability in share-based compensation plans, which are reflected in revenue, and related variability in share-based compensation plans, bave been reclassified from our Wealth Management segment to Corporate Support. Comparative amounts have been reclassified form our Wealth Management): Assets managed by us, which are beeficially owned by clients. Services provided in respect of assets under management include the selection of investments and the provision of investment advice. We have assets under management that are also administered by us and included in assets under administered by us and included in assets under administration. (5) Spot Balances.

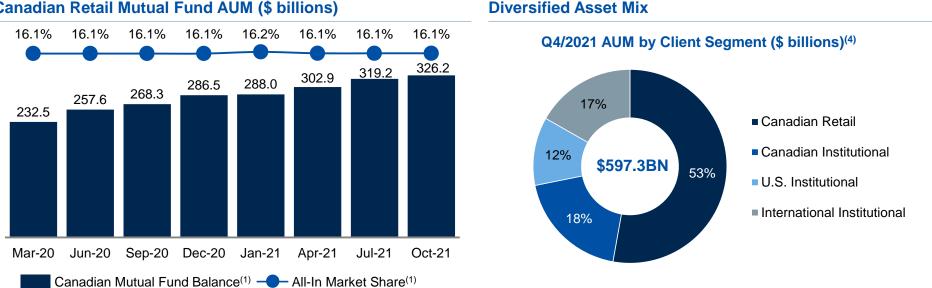
Cash Earnings (\$ millions)^{(1) (2) (3)}



Wealth Management – Global Asset Management

Building a high-performing global asset management business

- Driving top-tier profitability in our largest Wealth Management business
 - \$597.3BN in client assets
 - Investor asset mix of 53% Retail / 47% Institutional client assets
- **Extending our lead in Canada**
 - Largest retail fund company in Canada, ranked #1 in market share capturing 32.1% amongst banks and 16.1% all-in⁽¹⁾
 - Strategic alliance between RBC Global Asset Management and BlackRock Canada connects clients to the largest and broadest ETF lineup in Canada
 - 4th largest institutional manager of Canadian pension assets⁽²⁾
- Delivering strong investment capabilities to support growth
 - Top performing investment firm with ~85% of AUM outperforming the benchmark on a 3-year basis⁽³⁾
 - Continued growth of investment capabilities and innovative solutions for both institutional clients and retail investors



Canadian Retail Mutual Fund AUM (\$ billions)

(1) Investment Funds Institute of Canada (IFIC) in October 2021 and RBC reporting. Comprised of long-term funds and money market prospectus-qualified mutual funds sold to Retail and Institutional clients. (2) Benefits Canada, published in November 2021. (3) As at September 2021, gross of fees. (4) RBC GAM, based on period-end spot balances

Wealth Management

Canadian Wealth Management

- Maintain profitable growth with strong pre-tax margin
- #1 High Net Worth and Ultra High Net Worth market share in Canada⁽¹⁾
- Canadian leader in fee-based assets per advisor⁽¹⁾
- Consistently driving revenue per advisor of over \$1.7MM per year, 18% above Canadian industry average⁽¹⁾
- Strong asset growth complemented by favourable market conditions
- Leveraging enterprise linkages to extend market share gains

U.S. Wealth Management (including City National)

RBC Wealth Management-U.S.

- 7th largest full-service wealth advisory firm in the U.S. as measured by number of financial advisors, and 6th largest by assets under administration⁽²⁾
- 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

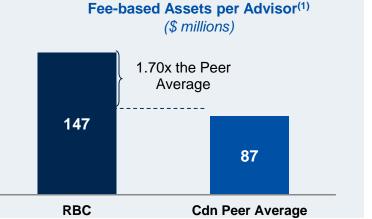
City National

- 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 select high-growth markets, including: Los Angeles, the San Francisco Bay area, Orange County, San Diego, New York, Boston, and Washington DC
- Expanding the CNB business model to select high-growth markets
- CNB recently launched a National Corporate Banking division that will specialize in meeting the complex banking and corporate finance needs of larger commercial and mid-corporate-sized companies across the country

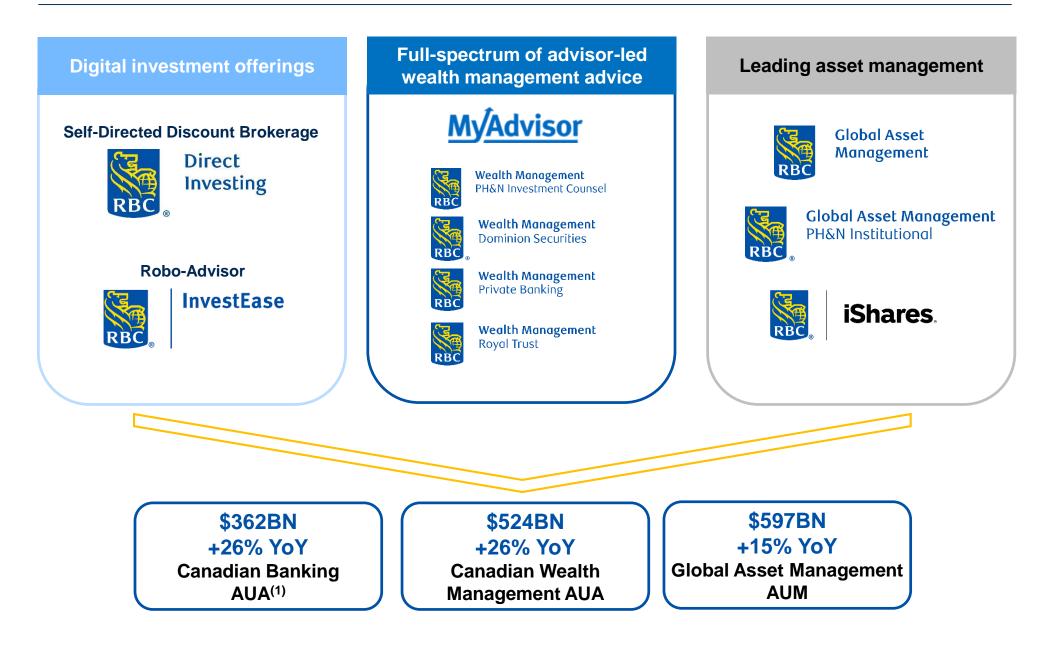
International Wealth Management

- Growing market share in target markets
- Enhancing "One RBC" cross-platform connectivity
- Focusing on client service excellence
- Increasing business effectiveness and talent capabilities

(1) Investor Economics, June 2021. (2) Source: U.S. wealth advisory firms quarterly earnings releases (10-Q).



Leading client value proposition across our Canadian wealth management platform



⁽¹⁾ Canadian Banking AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at October 31, 2021 of \$15 billion and \$3 billion, respectively (October 31, 2020: \$16 billion and \$7 billion, respectively).

(1) Based on FY20 Total Insurance Revenue. (2) LIMRA Canadian Insurance Survey, 3rd Quarter CY 2021. (3) Strategic Insights, Insurance Advisory Service Report, October 2021.

889

Net Income (\$ millions)

Insurance

Strategic Priorities

- Grow the Canadian insurance business: By focusing on providing innovative and competitive products, and leveraging partnerships to expand value added client services such as virtual health and wellness
- Grow the longevity business in Canada and the UK: By enabling client base growth, long-term investment returns, and risk diversification strategies
- Deepen client relationships across RBCI and RBC: By focusing on new client acquisition utilizing RBCI's growing channels at lower acquisition cost

Highlights

The largest Canadian bank-owned insurance organization, serving 4.8 million clients globally⁽¹⁾

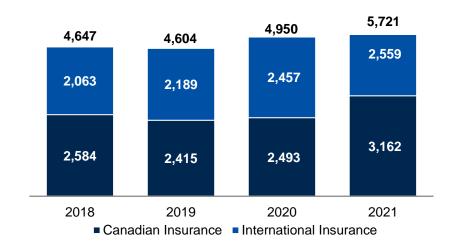
#1 in individual disability (inforce business) with 32%⁽²⁾ market share
#1 in individual disability net new sales with 40%⁽²⁾ market share

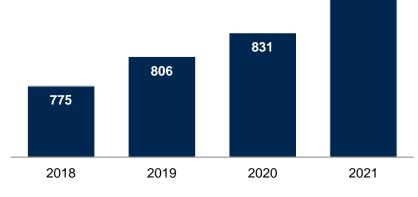
Group Sales premium grew at 51% YoY, versus that of the industry at $8\%^{(2)}$

#2 in Segregated fund net sales⁽³⁾

RBC Guaranteed Investment Funds continue to be one of the fastest growing segregated fund providers in Canada with YoY growth of $31.5\%^{(3)}$

Premiums and Deposits (\$ millions)





Investor & Treasury Services

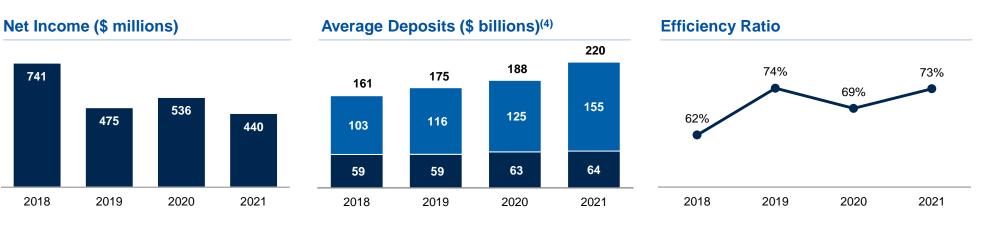
- Provider of asset services, custody, payments and treasury services to financial and other investors worldwide. We are a trusted partner with offices in 16 countries in North America, Europe, the U.K., and Asia-Pacific.
 - Awarded Transfer Agent of the Year Globally for the third consecutive year⁽¹⁾
 - Ranked #3 Asset Servicer Overall Globally⁽²⁾
 - Named Best Trade Finance Bank in Canada for the ninth consecutive year⁽³⁾

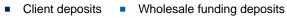
Strategic Priorities

Be the #1 asset services provider in Canada

Compete in select fast growing asset servicing segments and markets

Deliver seamless client experiences and employ technology to enable our clients' success

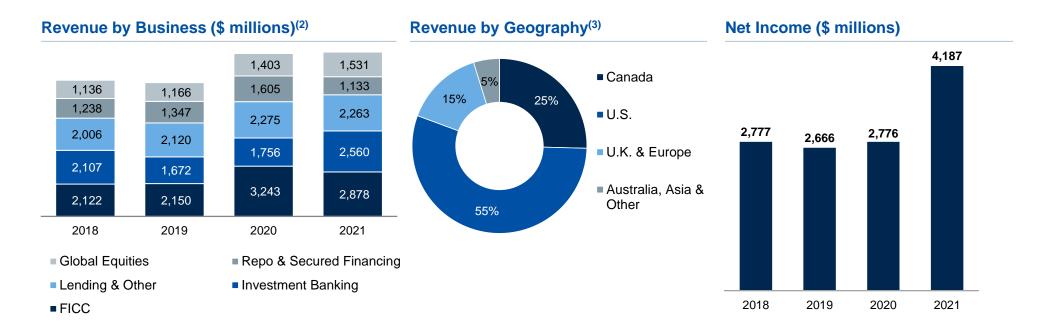




(1) Global Investor Group - Investment Excellence Awards, 2021. (2) R&M Investor Services Survey, 2021. (3) Global Finance, 2021. (4) Totals may not add up due to rounding.

Capital Markets

- A premier global investment bank with core operations across Canada, the U.S., the U.K./Europe, and APAC
 - 11th largest global investment bank by fees⁽¹⁾
- Strategically positioned in the largest financial centres, focused on the world's largest and most mature capital markets encompassing ~84% of the global investment banking fee pool⁽¹⁾
- Recognized by the most significant corporations, institutional investors, asset managers, private equity firms, and governments around the globe as an innovative, trusted partner with in-depth expertise in capital markets, banking and finance



(1) Dealogic, based on global investment banking fees, Fiscal 2021. (2) Global Markets segment revenue has been restated to align select portfolios previously disclosed in Repo and Secured Financing to FICC and Global Equities. Revenue by business only includes Corporate & Investment Banking and Global Markets, excluding CM Other. (3) For twelve months ended October 31, 2021.

Capital Markets

Strategic Priorities

Build deep, multi-product client relationships	 Gain market share across all businesses and expand number of multi-product relationships Expand client coverage in underpenetrated sectors and products
Lead with advice, solutions and innovation	 Grow Advisory & Origination and accelerate Sustainable Finance across all business areas Enhance Sales & Trading client value and insights from scaled electronic and digital strategy
Leverage cross platform collaboration	 Continue to drive cross-platform and geographic collaboration across businesses and asset classes
Invest in, engage and enable our talent	 Renew focus on talent development programs and accelerate Diversity & Inclusion strategy
Simplify, prioritize and leverage our scale	 Optimize balance sheet utilization and strategically reallocate resources
Evolve our brand as an innovative, trusted partner	 Be recognized by our clients as an innovative, trusted partner with best-in-class capabilities

Recent Awards

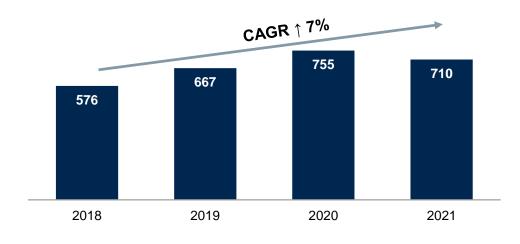


Notable Deal Highlights

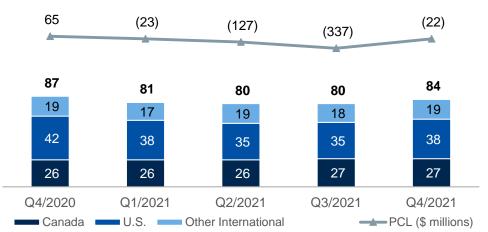
novative	WestConnex	A POLLO verizon ^v media	III TRICON RESIDENTIAL	United Kingdom Debt Management Office
or Aiden nal n Team in <i>I Investor</i> for a row	Financial Advisor to Australia's New South Wales government on the A\$11.1Bn sale of WestConnex Motorway	Financial Advisor to Apollo and Lead Arranger on the Credit Facilities to Support Acquisition of Verizon Media	Joint Lead Bookrunner on U.S. Initial Public Offering of US\$570MM	Joint Lead Manager on GBP£6Bn Green Gilt

Capital Markets

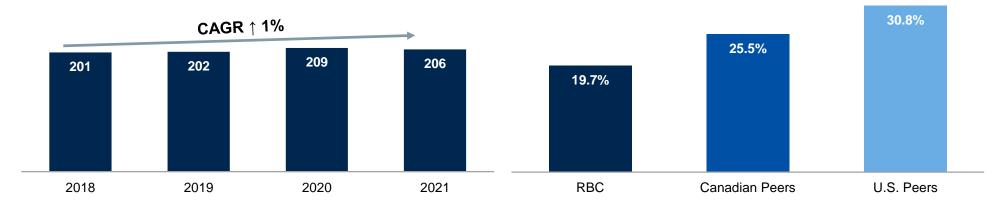
Capital Markets Total Average Assets (\$ billions)



Geographic Diversification Across Loan Book Average Loans Outstanding by Region (\$ billions)⁽¹⁾



Earnings Volatility vs. Canadian and U.S. Peers (Standard Deviation / Avg Earnings)⁽³⁾



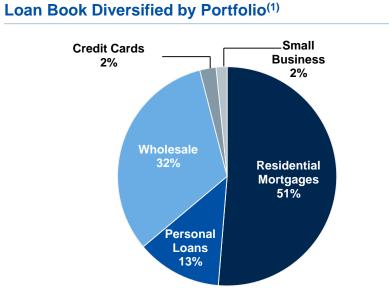
(1) Average loans outstanding includes wholesale loans, acceptances, and off balance sheet letters of credit and guarantees for our Capital Markets portfolio, on single name basis. Excludes mortgage investments, securitized mortgages and other non-core items. This chart has been restated to exclude certain intergroup exposures that are not part of the corporate lending business. (2) Risk-weighted assets (RWA) - Basel III – Used in the calculation of risk-based capital ratios as defined by the guidelines issued by OSFI. The guidelines are Basel III effective January 1, 2013 and the "Basel III." A global regulatory framework for more resilient banks and banking systems - December 2010 (rev June 2011)" issued by the Basel Committee on Banking Supervision (BCBS) and atopted by OSFI effective January 2013. A majority of our credit risk portfolios use IRB Approach and the remainder uses Standardized Approach for the calculation of RWA based on the total exposure (i.e. exposure at default, and counterparty risk weights). For market re-not part of ther products. For Operational risk, we use the Standardized Approach. In addition, Basel III requires a transitional capital floor adjustment. (3) Reflects pre-provision, pre-tax earnings, which is revenue net of PBCAE and non-interest expenses. This is a non-GAAP measure. For more information, please refer to slide 59. Canadian peers include BMO, TD, CIBC, BNS and NA, US peers include JPM, GS, BAC, Citi and MS.

Risk-Weighted Assets, Spot (\$ billions)⁽²⁾

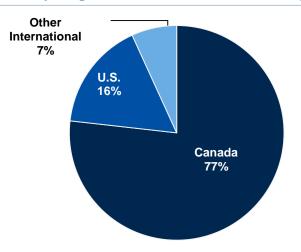
Risk Review



Prudent risk management

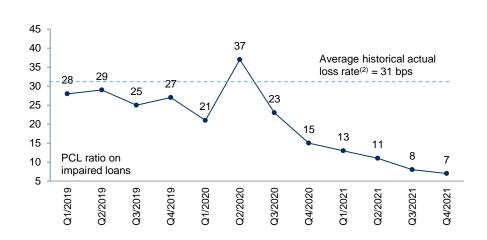


Breakdown by Region of Total Loans and Acceptances⁽¹⁾

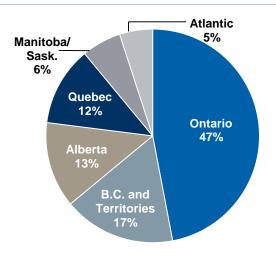


PCL Ratio on Impaired Loans (bps)

A disciplined approach and diversification have underpinned credit quality

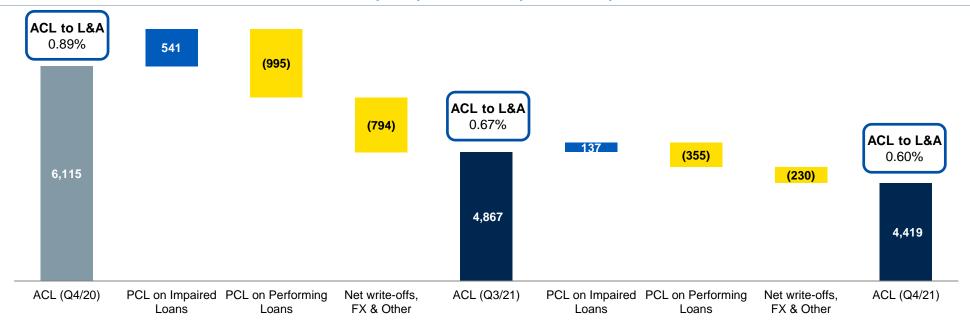


Breakdown of Canadian Total Loans and Acceptances⁽¹⁾



(1) Loans and acceptances outstanding as at October 31, 2021. Does not include letters of credit or guarantees. (2) Average annual actual loss rate from fiscal 2003 through to the most recent full year. The information is updated on an annual basis and is based on consolidated results. The Average historical actual loss rate on a continuing operations basis is 0.31%.

Allowance for Credit Losses: Trending towards pre-pandemic levels



Movement in Allowance for Credit Losses (ACL) on Loans (\$ millions)

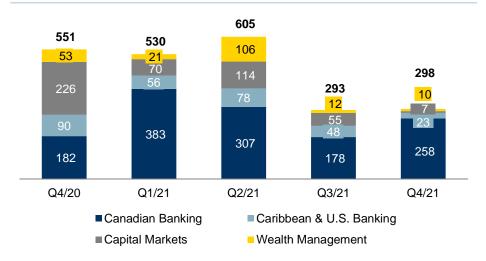
- 2021: ACL on loans decreased \$1.7 billion during the year, due primarily to our release of reserves on performing loans of \$1.35 billion and exceptionally low levels of PCL on impaired loans
 - The release of reserves on performing loans in 2021 represents 53% of the reserves built during Q2-Q4/2020
 - ACL of 0.60% of loans and acceptances has returned closer to Q4/19 pre-pandemic levels of 0.53% of loans and acceptances, reflecting the reduced uncertainty related to the COVID-19 pandemic and economic improvement over the course of the year
- Q4/21: ACL on loans decreased \$448 million QoQ
 - Our \$355 million release of reserves on performing loans in the quarter reflects continued improvements in our macroeconomic and credit quality outlook during the quarter
 - The release of reserves on performing loans was primarily driven by a \$317 million release in Canadian Banking, primarily in the Commercial, Personal Lending, and Cards portfolios
 - PCL on impaired loans remained muted as a result of favourable market conditions and government support

Gross Impaired Loans: Lower for the fifth consecutive quarter



Gross Impaired Loans (GIL) (\$ millions, bps)

New Formations (\$ millions)⁽¹⁾



Key Drivers of GIL (QoQ)

Total GIL decreased \$253 million (down 4 bps QoQ)

Canadian Banking

 GIL of \$1,239 million decreased \$19 million QoQ, as higher new formations in both the wholesale and retail portfolios were more than offset by write-offs and loans returned to performing status

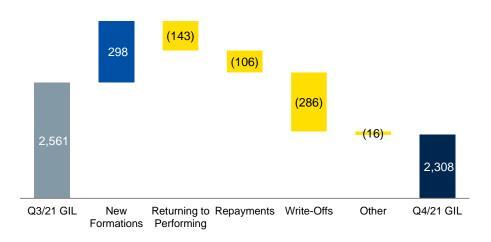
Capital Markets

 GIL of \$485 million decreased \$121 million QoQ, as muted new formations were more than offset by a loan returned to performing status in the Other Services sector, and repayments on impaired loans primarily in the Oil and Gas sector

Wealth Management (including CNB)

 GIL of \$233 million decreased \$87 million QoQ, primarily due to a loan returned to performing status in the Consumer Staples sector, and a previously impaired loan written off this quarter in the Information Technology sector

Net Formations (\$ millions)



(1) New formations for collectively assessed portfolios in Canadian Banking and Caribbean Banking are net of amounts returned to performing, repayments, sales, FX, and other movements, as amounts are not reasonably determinable.

PCL on impaired loans: Lower for the sixth consecutive quarter



Total RBC (\$ millions, bps)

Lower provisions QoQ in Canadian Banking and recoveries in the quarter in Caribbean Banking were partially offset by higher provisions QoQ in Wealth Management

Muted provisions in 2021 reflected the economic recovery underway, and the impact of government support programs

18 16 14 13 11 \$217 \$195 \$169 \$161 \$146 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Canadian Banking (\$ millions, bps)

- Retail: Lower provisions QoQ, due primarily to lower write-offs on cards
- Commercial: Provisions were relatively flat (down \$3 million QoQ), with Q4/2021 provisions primarily in the Real Estate and Related, Consumer Discretionary, and Other Services sectors

Wealth Management (\$ millions, bps)



- In Q4/2021, provisions were driven by a loan written off in the Information Technology sector at CNB
- Provisions were higher QoQ, due primarily to reversals on impaired loans in the Consumer Discretionary sector last quarter

Capital Markets (\$ millions, bps)



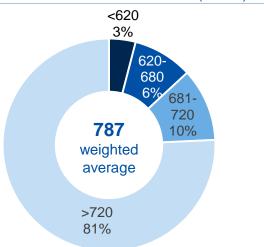
- In Q4/2021, a provision in the Telecom and Media sector was more than offset by net reversals in the Oil and Gas and Consumer **Discretionary sectors**
- Lower recoveries QoQ, given higher reversals on previously impaired loans in the Real Estate and Related sector last guarter

Canadian Banking: Strong underlying credit quality

	Q4/21 Avg Loan	PCL on Impaired Loans (bps) ⁽¹⁾		Gross Impaired Loans (bps)			Avg FICO	
	Balances (\$BN)	Q4/20	Q3/21	Q4/21	Q4/20	Q3/21	Q4/21	Score (Q4/21)
Residential Mortgages (2)	329.5	1	1	(0)	14	14	13	791
Personal Lending	76.5	22	26	26	22	23	21	780
Credit Cards	17.1	205	186	150	47 ⁽³⁾	57 ⁽³⁾	61 ⁽³⁾	744
Small Business (4)	12.0	58	14	33	156	92	91	n.a.
Commercial ⁽⁴⁾	81.1	9	12	11	72	64	64	n.a.
Total	516.2	14	13	11	26	25	24	787

Canadian Banking (CB) PCL on Impaired Loans and Gross Impaired Loans

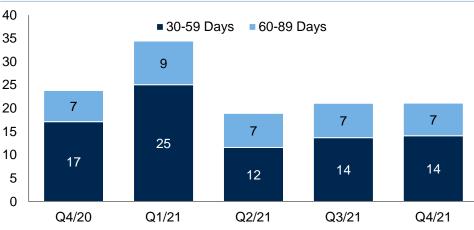
CB Retail FICO Score Distribution (Q4/21)



Credit quality remains high with just 3% of the

portfolio with a FICO score below 620

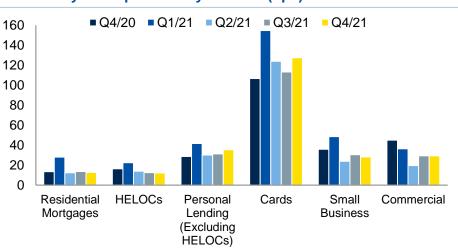
Total PCL and GIL ratios lower QoQ and remain well below pre-pandemic levels



CB Delinquencies By Days Past Due (bps) ⁽⁵⁾

 30-89 day delinquencies of 21 bps were flat QoQ, with delinquency rates stable for loans 30-59 days past due and 60-89 days past due

CB 30-89 Day Delinquencies by Product (bps) ⁽⁵⁾

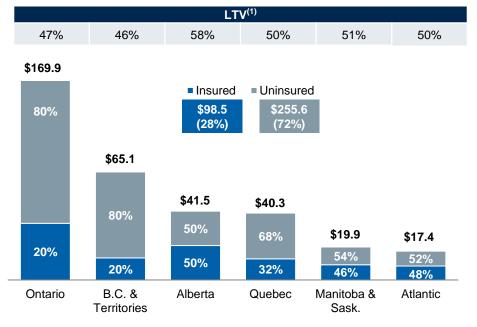


(1) Calculated using average net of allowance on impaired loans. (2) Includes \$11.2BN of mortgages on multi-unit residential buildings originated in P&CB Business Banking. (3) Represents 90+ Days Past Due, as there are no GIL balances for Credit Cards. (4) In Q2/21, following capital treatment guideline change, ~\$5BN of exposure previously classified as Commercial was reclassified as Small Business exposure. (5) Includes restrained accounts, where loans 30-59 days past due result from administrative processes, such as mortgage loans where payments have been restricted pending payout due to sale or refinancing.

Canadian residential portfolio: Strong underlying credit quality

Q4/2021 Highlights

- Strong underlying quality of uninsured residential lending portfolio⁽¹⁾
 - 53% of uninsured portfolio have a FICO score >800
- GTA and GVA average FICO scores remain above the Canadian average
- Only 1.2% of our residential lending portfolio has an LTV >80% and FICO score of 720 or lower, and is predominately all insured
- Condominium outstanding balance is 11% of residential lending portfolio

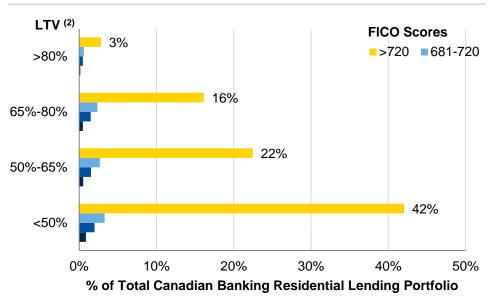


Canadian Residential Mortgage Portfolio⁽²⁾ (\$ billions)

Canadian Banking Residential Lending Portfolio⁽¹⁾

	Total \$357.6BN	Uninsured \$285.2BN
Mortgage	\$322.4BN	\$250BN
HELOC	\$35.2BN	\$35.2BN
LTV ⁽²⁾	48%	47%
GVA	45%	45%
GTA	46%	46%
Average FICO Score ⁽¹⁾	801	806
90+ Days Past Due ⁽¹⁾⁽³⁾	14 bps	10 bps
GVA	8 bps	7 bps
GTA	5 bps	5 bps

Canadian Banking Residential Lending Portfolio⁽¹⁾



(1) Based on \$322.4BN in residential mortgages with non-commercial clients and \$35.2BN in HELOC in Canadian Banking. Based on spot balances. Totals may not add due to rounding. Weighted by mortgage balances and adjusted for property values based on the Teranet – National Bank National Composite House Price Index. (2) Canadian residential mortgage portfolio of \$354BN comprised of \$322.4BN of residential mortgages in Canadian Banking, \$2.5BN in other Canadian business platforms, \$11.3BN of mortgages with commercial clients (\$7.8BN insured) and \$18.0BN of residential mortgages in Capital Markets held for securitization purposes (all insured). (3) The 90+ day past due rate includes all accounts that are either 90 days or more past due or are in impaired status.

Allocation of ACL by Product as a % of Loans & Acceptances

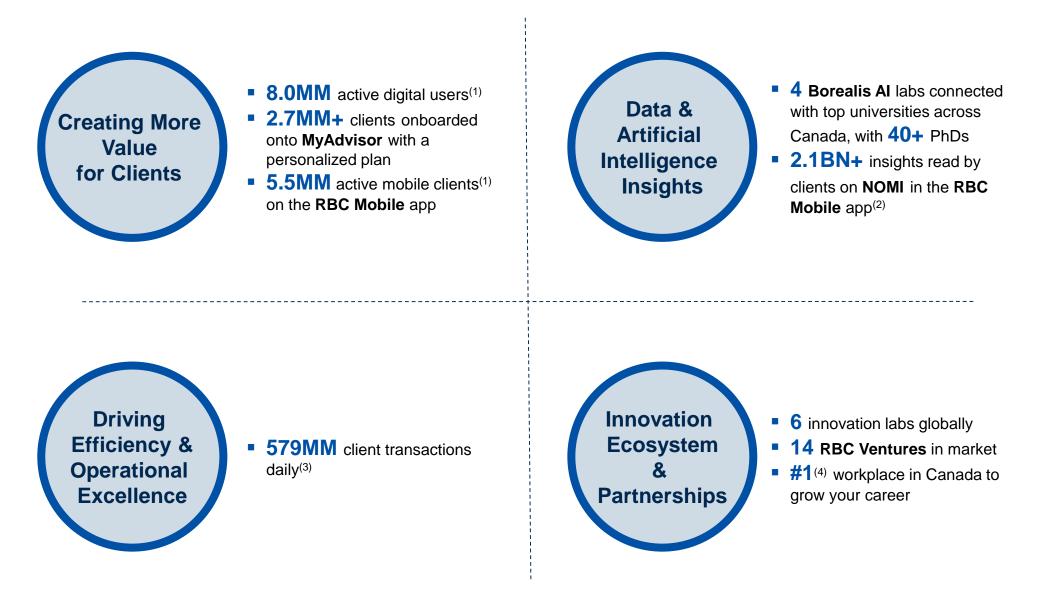
Product	Pre- Pandemic Q1/20	Q2/20	Q3/20	Peak Total ACL Ratio Q4/20	Q1/21	Q2/21	Q3/21	Q4/21
Residential mortgages ⁽¹⁾	0.12%	0.15%	0.16%	0.15%	0.15%	0.14%	0.12%	0.11%
Other Retail	1.61%	2.19%	2.34%	2.34%	2.36%	2.20%	1.92%	1.73%
Personal	1.03%	1.39%	1.44%	1.42%	1.45%	1.41%	1.28%	1.15%
Credit cards	4.35%	6.58%	7.06%	7.07%	7.33%	6.84%	5.54%	4.91%
Small business ⁽²⁾	1.19%	1.87%	1.92%	2.44%	2.48%	1.70%	1.55%	1.47%
Retail	0.52%	0.68%	0.72%	0.70%	0.68%	0.65%	0.56%	0.51%
Wholesale ^(1,2)	0.58%	1.15%	1.26%	1.33%	1.24%	1.14%	0.95%	0.83%
Total ACL	0.53%	0.84%	0.89%	0.89%	0.85%	0.79%	0.67%	0.60%

(1) Items not subject to impairment are loans held at FVTPL: Residential mortgages (Q4/21: \$241MM, Q3/21: \$252MM, Q2/21: \$255MM, Q4/20: \$253MM, Q3/20: \$256MM, Q2/20: \$405MM, Q1/20: \$534MM); Wholesale (Q4/21:\$11.2BN, Q3/21: \$10.6BN, Q2/21: \$8.6BN, Q1/21: \$10.4BN, Q4/20: \$8.6BN, Q3/20: \$8.3BN, Q2/20: \$10.1BN, Q1/20: \$10.7BN). (2) In Q2/21, \$5BN of loans previously classified as Commercial was reclassified as Small Business loans.

Technology @ RBC

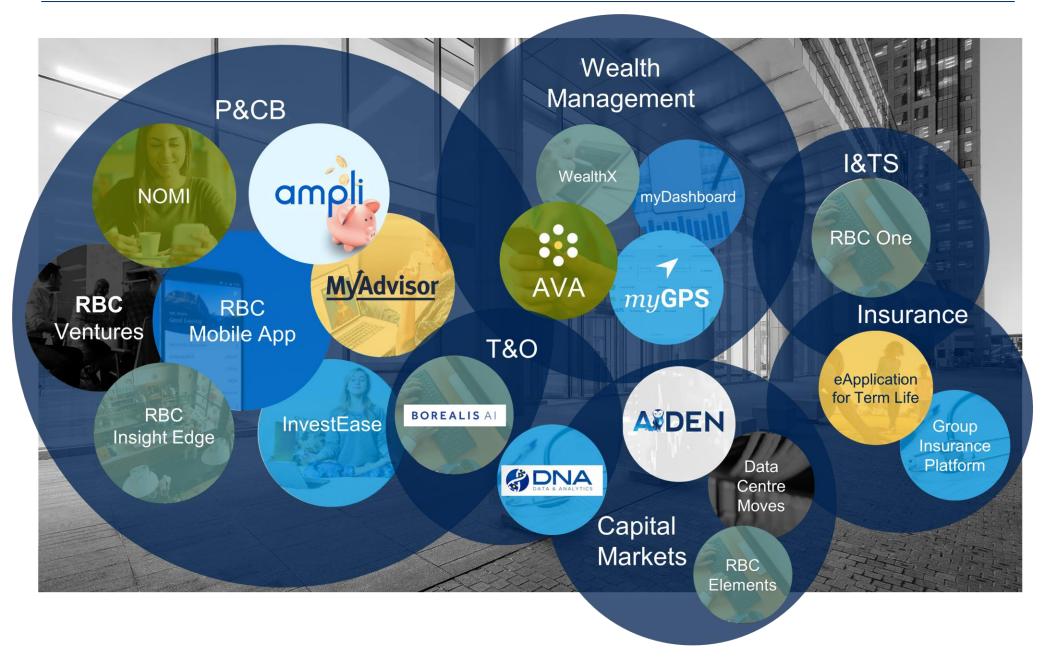


Investors value RBC for its industry-leading franchises and innovative approach

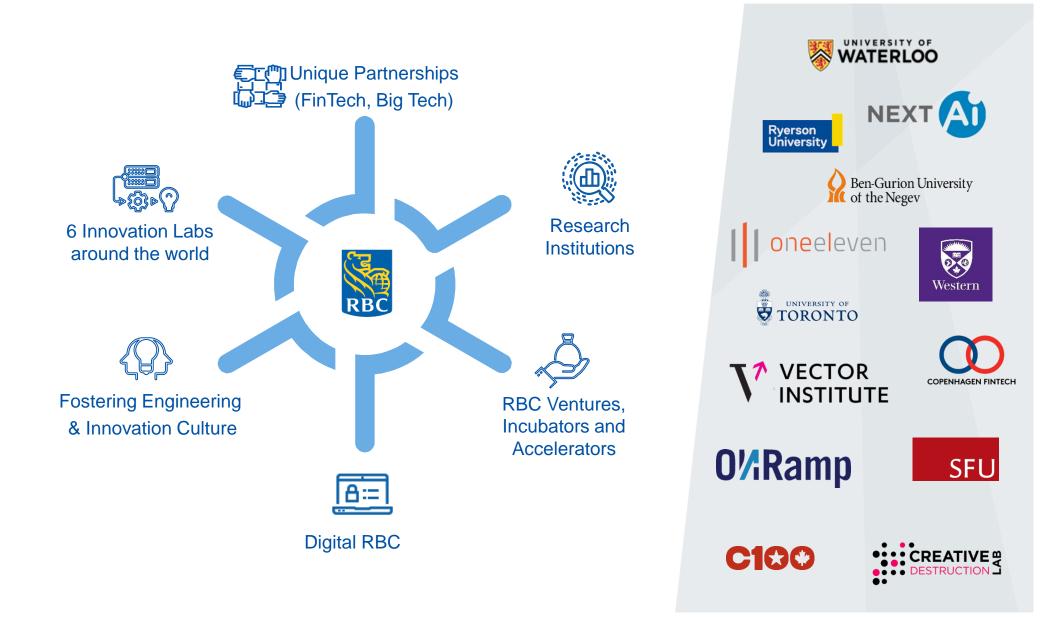


(1) These figures (in 000s) represent the 90-Day Active customers in Canadian Banking only and are spot values. (2) Insights read on a launch to date basis. (3) Daily average number of transactions. (4) Based on LinkedIn's 2021 Top Companies in Canada list.

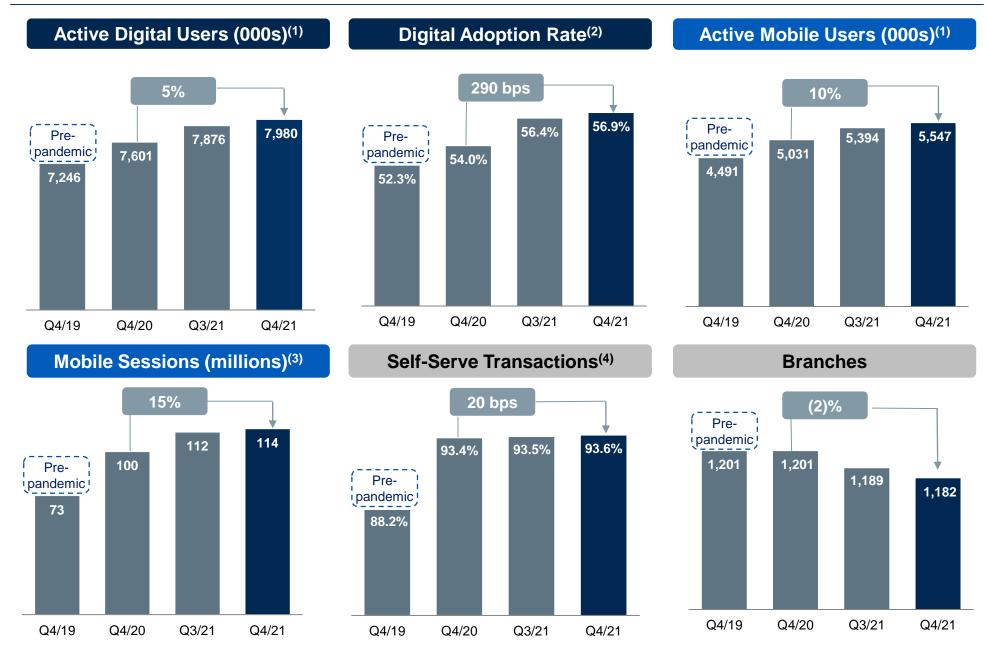
Our technology platforms are enabling all businesses to exceed client expectations



We have developed a rich innovative ecosystem that attracts top talent



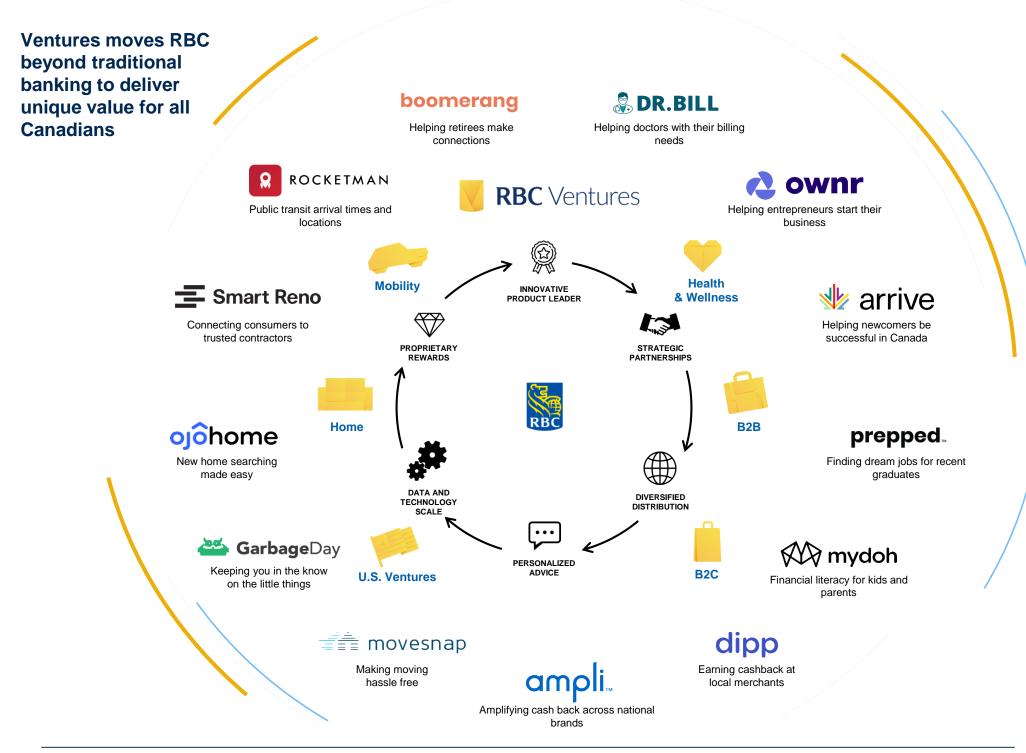
Canadian Banking: Our 14MM+ clients continue to adopt our digital channels



(1) These figures (in 000s) represent the 90-Day Active customers in Canadian Banking only and are spot values. (2) Digital Adoption rate calculated using 90-day active users. (3) These figures represent the total number of application logins using a mobile device. (4) Financial transactions only.

RBC Ventures

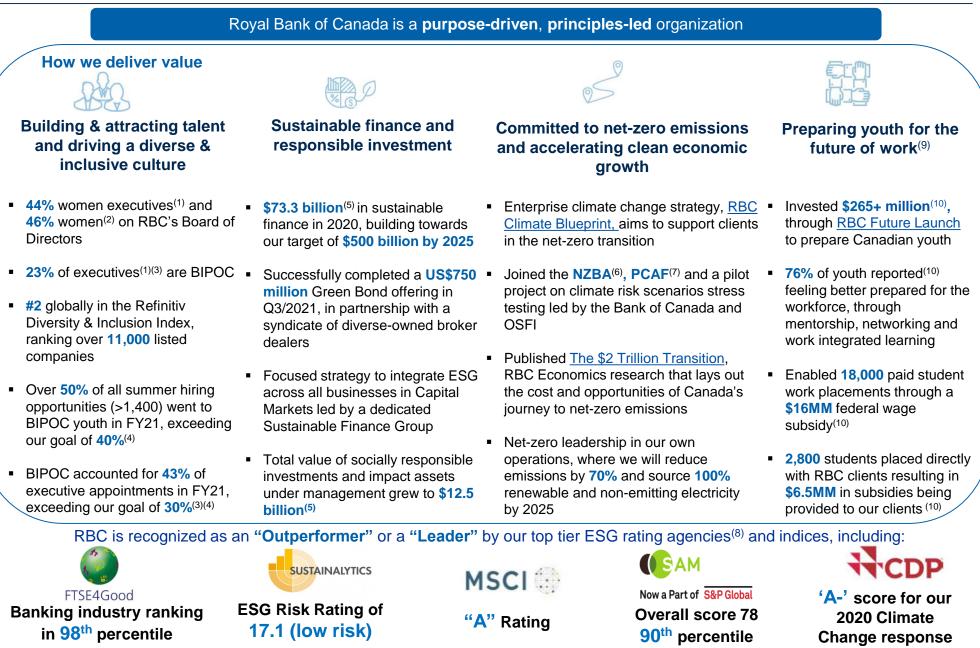




Environmental, Social & Governance (ESG)



ESG: Putting our Purpose into practice



(1) Represents data as at October 31, 2021 for our businesses in Canada governed by the Employment Equity Act (Canada). (2) Board composition is reflective as of October 31, 2021. (3) Based on employee self-identification as at October 31, 2021 and aligned to the definitions of the Employment Equity Act in Canada. (4) <u>RBC's Actions Against Systemic Racism</u>. (5) As of FY2020. (6) Net-Zero Banking Alliance (NZBA). (7) The Partnership for Carbon Accounting Financials (PCAF). (8) Includes Sustainalytics, FTSE4Good, MSCI, Vigeo EIRIS and S&P Corporate Sustainability Assessment. (9) Statistics based on internal data reported to the Governance Committee of the Board, updated October 31, 2021. (10) Since Future Launch <u>program</u> inception in 2017.

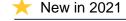
Our suite of RBC ESG disclosures

Annual voluntary and regulatory ESG performance disclosures



Position statements, frameworks and policy and program "backgrounders"





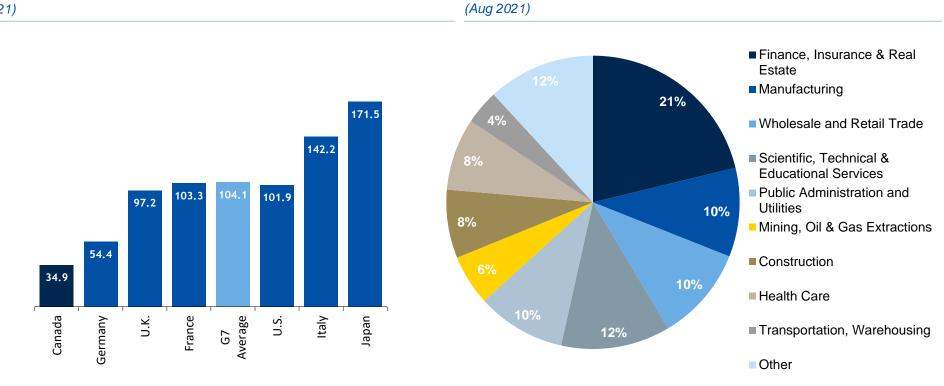
Economic Backdrop



Canada's strong fiscal position

- Strong rating as a result of fiscal prudence, conservative bank lending practices and a solid economy
- Lowest net debt-to-GDP ratio among G7 peers⁽¹⁾



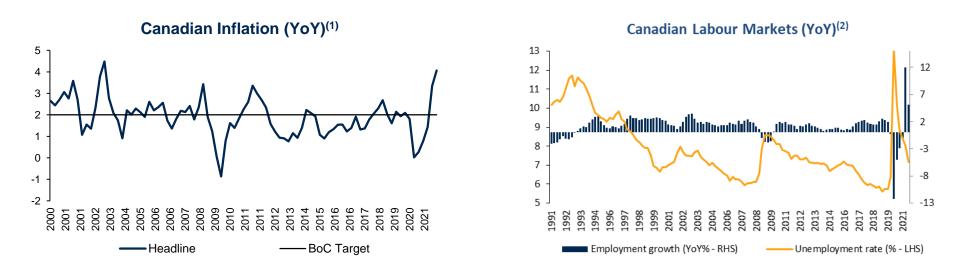


Canadian GDP by Industry⁽²⁾

(1) Net debt refers to General Government net debt. International Monetary Fund October 2021 Fiscal Monitor. (2) Statistics Canada, RBC Economics Research.

Economy's recovery continuing but limited by capacity constraints

- The Canadian economy has continued to recover with increased vaccination rates reducing the economic impact of the COVID-19
 pandemic. GDP growth has been limited by global supply chain disruptions, and government pandemic support programs have begun
 to unwind, but unemployment has continued to decline
- Output in goods-producing sectors is bumping up against capacity limits both from global supply chain disruptions and labour shortages. There remains room for recovery in the service sector with activity particularly in travel and hospitality sectors still running well below pre-pandemic levels. We expect Canadian GDP to increase 5.1% in 2021 and 4.3% in 2022 after a 5.3% drop in 2020
- Year-over-year Consumer Price Index (CPI) growth has increased sharply, in part due to very low prices a year-ago when the
 pandemic was having a larger economic impact. But inflation pressures are also building as high business input costs and global
 supply chain disruptions filter through to end product consumer prices and consumer demand for services recovers
- The recovery in the U.S. economy is expected to be boosted by large amounts of fiscal stimulus. U.S. GDP is expected to increase 5.5% in 2021 following a 3.4% drop in 2020 and unemployment is expected to continue to decline



Canadian Labour Markets (YoY)⁽²⁾

Canadian Inflation (YoY)⁽¹⁾

(1) Statistics Canada, RBC Economics Research. (2) Statistics Canada, Bureau of Labor Statistics, RBC Economics Research.

2021 Economic Outlook

Projected Economic Indicators for 2021⁽¹⁾

	GDP Growth	Inflation	Unemployment Rate	Interest Rate (3 mth T-bills)	Current Account Balance/GDP ⁽²⁾	Budget Surplus/GDP ⁽³⁾
Canada	5.1%	3.3%	7.6%	0.20%	0.7%	(7.5%)
U.S.	5.5%	4.5%	5.5%	0.05%	(3.4%)	(10.8%)
Euro Area	5.2%	2.4%	7.8%	NA	2.6%	(7.7)

The Canadian economy is forecast to rebound 5.1% in 2021 following a 5.3% drop in 2020. GDP declined modestly during the spring wave of virus spread and containment measures. The recovery over the summer was limited by ongoing global supply chain disruptions. But labour markets have improved with the unemployment rate continuing to decline

Remaining economic weakness is disproportionately concentrated in the travel and hospitality sectors, although household spending has strengthened. Government support programs have begun to unwind, but household purchasing power remains elevated due to large amounts of savings accumulated during the pandemic and improved labour markets

- Consumer price growth increased sharply as the economy re-opened, in part reflecting low prices a year ago when virus containment measures were more stringent but also higher business input costs and firming consumer demand. The Bank of Canada is expected to begin hiking interest rates in 2022
- The U.S. economy is expected to grow 5.5% in 2021 after a 3.4% decline in 2020. The pace of growth slowed in Q3 as
 global supply chain disruptions and shortages of labour in some industries limited growth. The recovery is expected to
 continue as the service-sector recovers from virus spread and containment measures, but at a slower pace than during the
 initial easing of virus containment measures

U.S.

Canada

- The unemployment rate has declined significantly and is expected to continue to drift lower in 2022. The economy's
 recovery will be boosted by further recovery in the travel and hospitality sectors and by very large fiscal stimulus supports
 that have increased household incomes and savings through the pandemic
 - Firming demand and supply chain disruptions have pushed consumer prices higher. The Federal Reserve is expected to begin hiking interest rates in 2022
- Increased vaccination rates and easing of virus containment measures have supported stronger recent GDP growth. The economy is expected to continue to recover although global supply chain disruptions will limit the near-term pace of growth

Labour markets in both the Euro Area and the UK have continued to improve with the unemployment rate in both regions drifting lower

(1) RBC Economics Research as of November 8, 2021 and reflect forecasts for calendar 2021. (2) RBC Economics Research, IMF WEO (October, 2021). (3) IMF WEO (October2021).

Canadian Housing Market



Structural backdrop to the Canadian and U.S. housing markets

	Canada ⁽¹⁾	U.S. ⁽¹⁾
Regulation	 Government influences mortgage underwriting policies primarily through control of insurance eligibility rules 	 Agency insured only if conforming and LTV under 80%
	 Fully insured if loan-to-value (LTV) is over 80% 	 No regulatory LTV limit – can be over 100%
	 Must meet 5-year fixed rate mortgage standards 	 Not government-backed if private insurer defaults
	 Government-backed, on homes under \$1MM 	
	 Down-payment over 20% on non-owner occupied properties 	
	 CMHC last increased mortgage loan insurance premiums in 2017 by ~15% for new mortgages with LTV over 90% 	
	 Minimum down payment for new government-backed insured mortgages is 10% for portion of the value of a home being purchased that is between \$500,000 – \$999,000, and 5% below \$500,000 	
	 Re-financing cap of 80% on non-insured 	
	 Mortgage interest not tax deductible 	 Mortgage interest is tax deductible
Behaviour	 Greater incentive to pay off mortgage 	 Less incentive to pay down mortgage
Behaviour	 Strong underwriting discipline; extensive documentation 	 Wide range of underwriting and documentation
	 Most mortgages are held on balance sheet 	requirements
	 Conservative lending policies have historically led to low delinquency rates 	 Most mortgages securitized
Lenders' Recourse	 Ability to foreclose on non-performing mortgages, with no stay periods 	 Stay period from 90 days to one year to foreclose on non-performing mortgages
	 Full recourse against borrowers⁽²⁾ 	 Limited recourse against borrowers in key states

(1) Current regulation and lenders recourse. (2) Alberta and Saskatchewan have some limited restrictions on full recourse.

Legislation and policies – promoting a healthy Canadian housing market

January 2022 (proposed) – Department of Finance

Tax of 1% on the value of non-resident, non-Canadian-owned real estate considered vacant or underused

June 2021 – OSFI, Department of Finance

 The stress test qualifying rate for insured and uninsured mortgages changing to the client rate plus 2 percentage points or 5.25%, whichever is greater

July 2020 – CMHC

- Minimum credit score for CMHC insured mortgages raised from 600 to 680
- Gross debt service ratio reduced to 35%; total debt service ratio reduced to 42% to qualify for CMHC insured mortgage
- CMHC tightened rules on admissible down payment sources

February 2018 – Government of British Columbia

• The B.C. government introduced a 30-point plan to address housing affordability issues. It included a new speculation tax (2% of assessed value) on homeowners who do not pay income tax in the province and increased the foreign buyer tax to 20% from 15%

January 2018 – OSFI

• 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 the 'Fair Housing Plan': 16 measures to address risks in the housing market including a 15% speculation tax on non-residents purchasing 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
- A principal residence sale must be reported in the seller's tax return, even if any capital gain is protected by the principal residence exemption

Legislation and policies – promoting a healthy Canadian housing market

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

- OSFI increased scrutiny on mortgage underwriting standards: greater emphasis on internal controls, risk management practices and market developments
- BC government introduced a property transfer tax of 15% on foreign buyers registering the purchase of a home in Metro Vancouver

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)

April 2014 – CMHC

Discontinued offering mortgage insurance on 2nd homes and to self-employed individuals without 3rd 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
- Minimum credit score requirements, new loan documentation standards, setting a maximum of 45% on borrowers total debt service ratio
- 46 | CANADIAN HOUSING MARKET

The Toronto and Vancouver downtown condo markets

- Constraints on undeveloped land around Toronto / Vancouver have contributed 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 centre
- Canada has one of the highest per capita rates of permanent immigration in the world⁽¹⁾
 - 22% of Canada's population is foreign born (7.5 MM), highest proportion among the G8 nations⁽¹⁾
 - 56% of all new immigrants to Canada move to Toronto, Vancouver or Montreal⁽¹⁾
- RBC's exposure to condo development is limited about 3.2% of our Canadian commercial loan book⁽²⁾
 - Condo exposure is 11% of Canadian residential lending portfolio⁽²⁾⁽³⁾

"Green Belt" Surrounding Greater Toronto Area





Vancouver Limited by Mountains, Sea, U.S. Border

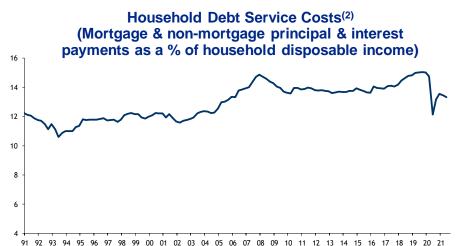
(1) Statistics Canada, 2016 Census. (2) As at October 31, 2021. (3) Based on \$322.4BN in residential mortgages with non-commercial clients and \$35.2BN in HELOC in Canadian Banking. Based on spot balances.

COVID-19 set Canada's housing market on record course

- COVID-19 impacted housing markets in unsuspected ways. Home resales plunged in the spring of 2020 but then strongly rebounded to record levels in the latter stages of 2020 and early of 2021. Pent-up demand, exceptionally low interest rates, changing housing needs and high household savings proved powerful demand drivers despite elevated unemployment and renewed restrictions in the face of the second, third and fourth waves of the pandemic
- Activity and price gains moderated through summer 2021 though strengthened again in the fall. It appears this housing cycle is not over and the persistence of bidding wars continues to drive up property values in many parts of the country. Still, the uptick this fall is possibly related to buyers rushing to land deals before interest rates rise. Bond yields (movements of which often lead to mortgage rate changes) have picked up materially since September. However, any rush to lock-in low rates is expected to be a short-lived phenomenon, as it merely represents a displacement in time (forward) of activity
- Canada's longer-term housing market fundamentals continue to be favourable. Immigration will be a major driver of housing demand once the current in-migration pullback runs its course
- Lenders maintain strong underwriting discipline and require extensive documentation
 - Most mortgages held on balance sheet and conservative lending policies have led to low delinquency rates



Demand-supply conditions are generally extremely tight



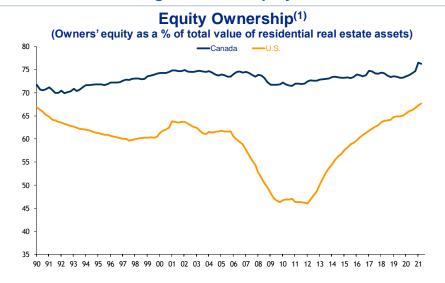
Historic government aid temporarily lightens debt service costs

(1) Canadian Real Estate Association, RBC Economics. (2) Statistics Canada, RBC Economics. PDI: Personal Disposable Income.

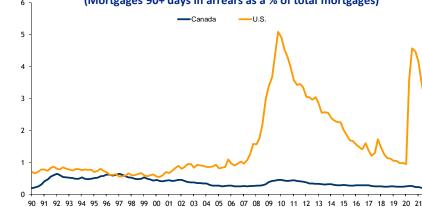
Canadians have significant equity ownership in their homes

- Canadians carry a significant and stable amount of equity in their homes
- The pace of residential mortgage accumulation re-accelerated since mid-2019 after slowing to a 17-year low
- Mortgage delinguency rates remain very 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

Canadians maintain high levels of equity in their homes



Canada **Residential Mortgage Growth**⁽²⁾ Mortgage Delinquencies⁽³⁾ (Year-over-year % change) (Mortgages 90+ days in arrears as a % of total mortgages) 6 Canada 5



The mortgage delinquency rate still near a 30-year low in

(1) Statistics Canada, Federal Reserve Board, RBC Economics. (2) Bank of Canada, RBC Economics. (3) Canadian Bankers Association, Mortgage Bankers Association, RBC Economics.

Growth in residential mortgages has re-accelerated sharply

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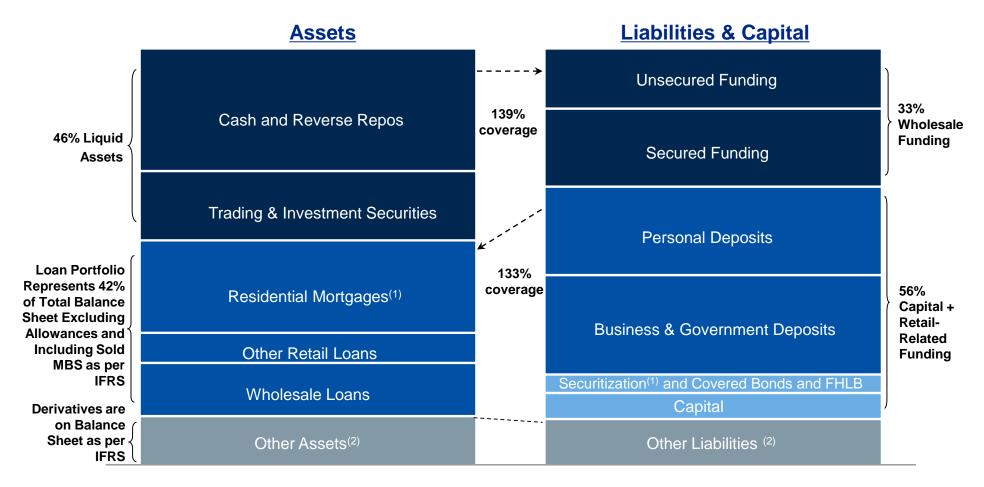
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Appendix A – Liquidity & Funding



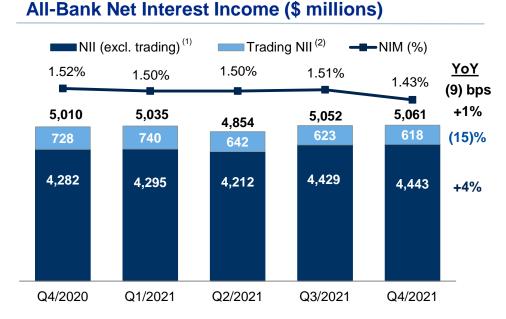
\$1,706 Billion (as at October 31, 2021)



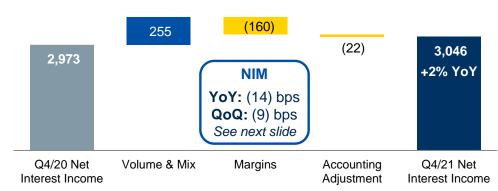
(1) Securitized agency mortgage-backed securities (MBS) are on balance sheet as per IFRS. (2) Other assets include \$96BN of derivative-related assets, largely offset by derivative-related liabilities in Other liabilities. Under IFRS derivative amounts without master netting agreements cannot be offset and the gross derivative assets and liabilities are reported on balance sheet.

Net interest income: Higher volumes offset by lower spreads and trading results

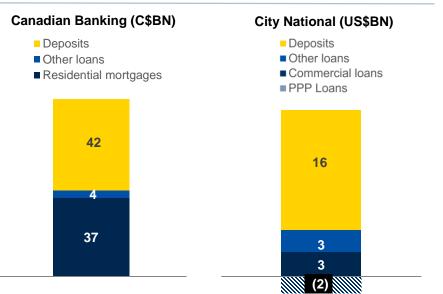
- Net interest income up 1% YoY as strong volume growth more than offset lower spreads and lower trading results in Capital Markets
 - Net interest income (ex-trading) was up 4%⁽¹⁾ due to strong volume growth in Canadian Banking and U.S. Wealth Management (including City National) which was partially offset by lower spreads
- All-bank NIM on average earning assets was down 9 bps YoY; down 8 bps QoQ



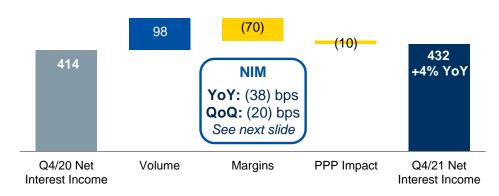
Canadian Banking Net Interest Income (\$ millions)



Average YoY Volume Growth (\$ billions)

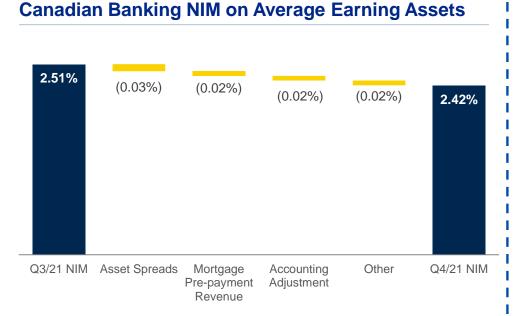


City National Net Interest Income (US\$ millions)



(1) Net interest income (ex-trading) is calculated as net interest income less trading net interest income. (2) Trading net interest income reflects net interest income arising from trading-related positions, including assets and liabilities that are classified or designated at fair value through profit or loss (FVTPL).

Net interest margin: Well-positioned for rising interest rates

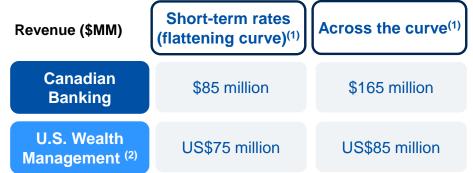


CNB NIM on Average Earning Assets



25 bps increase in interest rates

- Roughly half of the Canadian Banking and City National deposit base is non-interest bearing or low-rate deposits
- Most of U.S. Wealth Management (including City National) sensitivity to higher interest rates is from the short-end of the curve



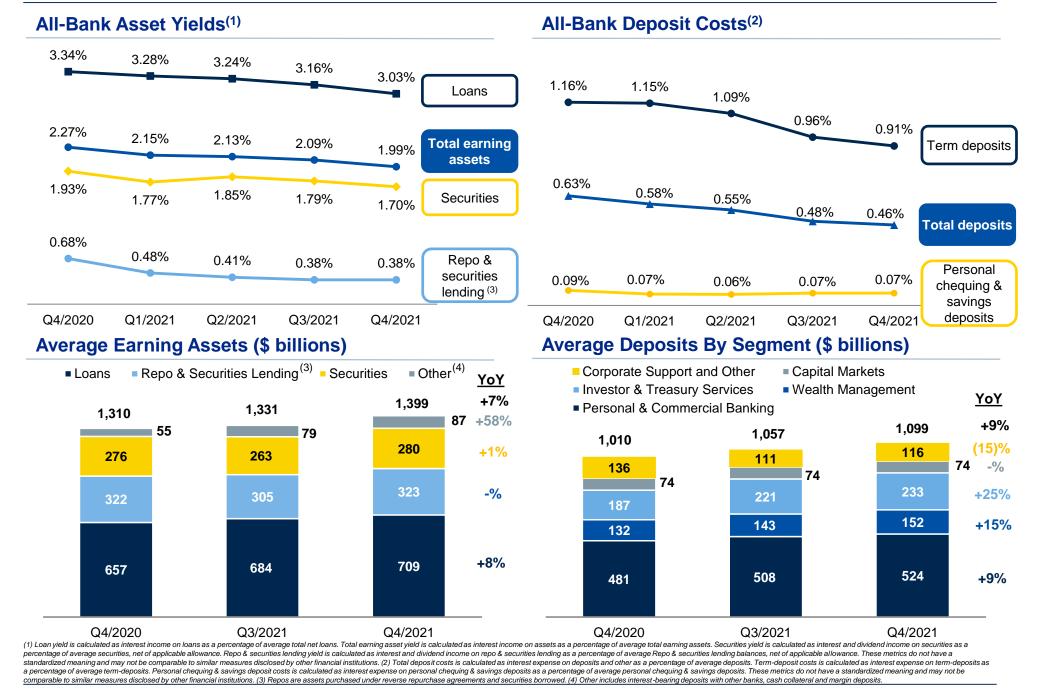
100 bps change in interest rates across the curve

 As at October 31, 2021, an immediate and sustained +100 bps would have had a positive impact to our net interest income of \$929 million over a 12-month period

Net Interest income (\$MM)	Increase ⁽¹⁾	Decrease ⁽¹⁾		
Canadian dollar impact	\$571 million	(\$603) million		
U.S. dollar impact	\$358 million	(\$318) million		
All-bank	\$929 million	(\$921) million		

(1) Represents the 12-month revenue exposure (before-tax) to an immediate and sustained shift in interest rates. (2) Includes benefits from our sweep deposits.

Net Interest Income: Average rates and balance sheet



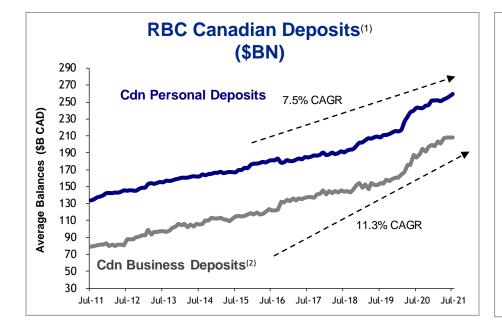
54 | APPENDIX

Strong deposit growth

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

Canadian relationship deposits

- Canadian relationship deposits continue to grow at accelerated rate
- RBC Canadian personal deposit market share is at 20.6% as of July 2021
- RBC Canadian commercial demand deposit market share is at 24.0 % as of July 2021



RBC Relationship Deposits (\$BN)					
	Q4 2021	Q4 2020			
HISA ⁽³⁾	\$49	\$42			
Advisory Channel Deposits ⁽⁴⁾	\$36	\$40			
Other Personal Deposits	\$278	\$261			
Business Deposits	\$408	\$365			
Total Deposits	\$771	\$708			

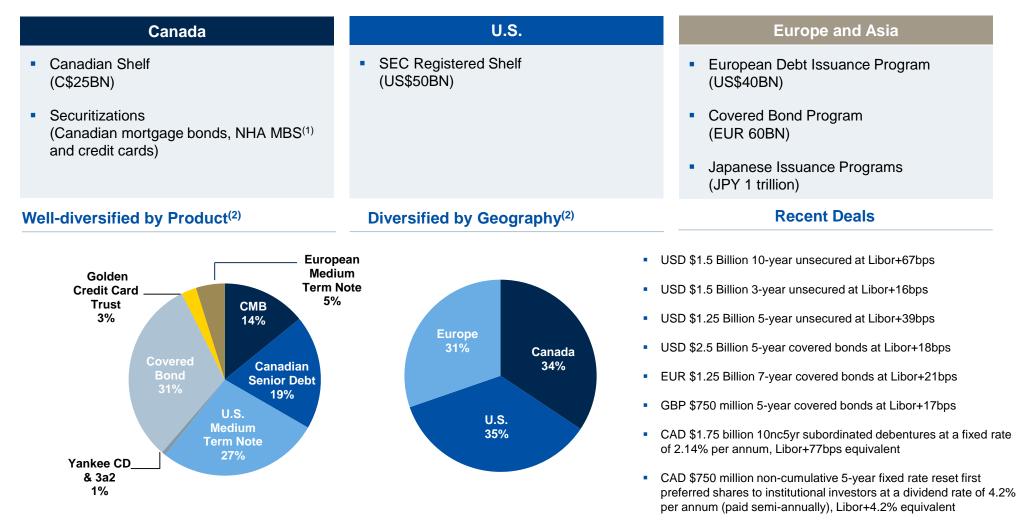
(1) Sourced from Canadian deposit market share, which is based on OSFI (M4 report). The volume change in Oct'16 was mainly due to a re-class of personal deposit to business deposits. (2) Canadian Business deposits reflect all platform demand deposits and Canadian Banking term deposit balances only. (3)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

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Well-diversified wholesale funding platform

- Well-diversified across products, currencies, investor segments, and geographic regions
- Raise majority of funding in international markets, preserving significant domestic capacity which can be more readily tapped in stressed market conditions
- Regular issuance in all major markets to promote investor engagement and secondary market liquidity



(1) National Housing Act Mortgage Backed Securities. (2) As at October 31, 2021.

RBC Covered Bond Program

Globally Active

- Active program in six different currencies: EUR, CAD, USD, CHF, AUD and GBP
 - C\$47.9BN 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\$21.2BN across eleven deals since September 2012
 - Trace eligible

Reconciliation for non-GAAP financial measures

Calculation of Tangible Book Value Per Share					
\$ millions (unless otherwise stated)	2017	2018	2019	2020	2021
Common equity - end of period	67,416	73,552	77,816	80,719	91,983
Less: Goodwill and Intangibles net of tax - end of period	12,235	12,498	12,370	12,375	11,664
Tangible common equity - end of period	55,181	61,054	65,446	68,344	80,319
Common shares outstanding (000s) - end of period	1,452,535	1,438,794	1,430,096	1,422,473	1,424,525
Tangible Book Value Per Share	\$ 37.99	\$ 42.43	\$ 45.76	\$ 48.05	\$ 56.38

Calculation of Cash Earnings for Wealth Management ⁽¹⁾						
\$ millions (unless otherwise stated)	2018	2019	2020	2021		
Net Income	2,276	2,546	2,154	2,626		
Add: After-tax effect of amortization of other intangibles	193	186	172	153		
Cash Earnings	2,469	2,732	2,326	2,779		

(1) Effective Q4 2021, gains (losses) on economic hedges of our U.S. share-based compensation plans, which are reflected in revenue, and related variability in share-based compensation expense driven by changes in the fair value of liabilities relating to our U.S. share-based compensation plans have been reclassified from our Wealth Management segment to Corporate Support. Comparative amounts have been reclassified to conform with this presentation.

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 pre-provision, pre-tax earnings, cash earnings and tangible book value per share, 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 2021 Annual Report as well as in our Q4 2021 Supplementary Financial Information.

Definitions can be found under the "Glossary" sections in our Q4 2021 Supplementary Financial Information and our 2021 Annual Report.

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<u>www.rbc.com/investorrelations</u>