

Royal Bank of Canada Investor Presentation

Q4/2022

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, 2022 and related notes prepared in accordance with International Financial Reporting Standards (IFRS). Our 2022 Annual Report (which includes our audited Annual Consolidated Financial Statements and accompanying Management's Discussion & Analysis), our 2022 Annual Information Form and our Supplementary Financial Information are available on our website at: <http://www.rbc.com/investorrelations>.



Caution regarding forward-looking statements

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, the economic, market, and regulatory review and outlook for Canadian, U.S. and European economies, the impact from rising interest rates, climate- and sustainability-related beliefs, targets and goals (including our net-zero and sustainable finance commitments), and the expected closing of the transaction involving HSBC Bank Canada. 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”, “commit”, “target”, “objective”, “plan” and “project” and similar expressions of future or conditional verbs such as “will”, “may”, “might”, “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, that our financial performance, environmental & social or other objectives, vision and strategic goals will not be achieved, and that our actual results may differ materially from such predictions, forecasts, projections, expectations or conclusions.

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, model, legal and regulatory environment, systemic risks, and other risks discussed in the risk sections of our annual report for the fiscal year ended October 31, 2022 (the 2022 Annual Report); including business and economic conditions in the geographic regions in which we operate, Canadian housing and household indebtedness, information technology and cyber risks, geopolitical uncertainty, environmental and social risk (including climate change), digital disruption and innovation, privacy, data and third party related risks, regulatory changes, culture and conduct risks, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency, 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. Additional factors that could cause actual results to differ materially from the expectations in such forward-looking statements can be found in the risk section of our 2022 Annual Report.

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 sections in our 2022 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 of our 2022 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 (1/2)

➤ 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
- 9th largest global investment bank ⁽¹⁾, #1 in Canada and #1 Canadian investment bank in the U.S.⁽²⁾
- Largest retail mutual fund company in Canada based on assets under management (AUM) ⁽³⁾
- 6th largest full-service wealth advisory firm in the U.S. as measured by assets under administration (AUA)⁽⁴⁾
- #1 High Net Worth and Ultra High Net Worth market share in Canada
- City National is a premier U.S. private and commercial bank
- Largest Canadian bank-owned insurance organization⁽⁵⁾

➤ 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
- RBCx supports 4,000 tech and innovation clients and in-house ventures like Mydoh (used by 100,000+ Canadians), Ownr (trusted by 85,000+ Canadian businesses) and Dr. Bill (serving 8,000 physicians)

➤ 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⁽⁶⁾ medium-term objective

➤ Strong balance sheet and prudent risk management

- Strong capital position and a high-quality liquid balance sheet; 40-50% dividend payout ratio⁽⁷⁾ medium-term objective
- Credit ratings amongst the highest globally
- A disciplined approach and diversification have underpinned credit quality
- Leading Canadian core deposit franchise that serves as a stable source of funding

(1) Based on global investment banking fees (fiscal 2022), Dealogic. (2) Based on market share (fiscal 2022), Dealogic. (3) AUM includes assets managed by us, which are beneficially 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 administration. (4) AUA includes 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. (5) Based on FY21 Total Insurance Revenue. (6) Return on Equity (ROE) is calculated as net income available to common shareholders divided by average common equity for the period. (7) Dividend payout ratio is calculated as common dividends as a percentage of net income available to common shareholders.

The RBC story (2/2)

Strong performance in ESG rankings and ratings⁽¹⁾

- Delivered a key milestone in 2022 with the release of [our 2030 initial interim emissions reduction targets](#) for three key sectors: oil & gas, power generation, and automotive. In addition, the bank published its [Sustainable Finance Framework](#) which measures progress against its commitment to provide \$500 billion in sustainable financing by 2025⁽²⁾, which provides clients with products and services that contribute to key ESG objectives
- Acted as a financial advisor to 23 Indigenous communities buying an ownership stake in 7 Enbridge pipelines in Northern Alberta – the largest Indigenous energy partnership transaction in North America, to-date⁽³⁾
- [RBC Tech for Nature™](#): Since 2019, 550+ organizations have benefitted from \$39+ million in community investments towards a \$100 million commitment by 2025
- Announced a \$200 million investment in our employees, including a mid-year 3% salary increase for certain employees, enhanced defined pension contributions and family benefits in Canada, and more support for career development
- Advancing Diversity & Inclusion: 43% and 51% of hires⁽⁴⁾ are BIPOC⁽⁵⁾ and women respectively⁽⁶⁾
- Launched the RBC Black Entrepreneur Business Loan, supporting Black entrepreneurs in Canada as they start, manage or grow their business with loans of up to \$250,000
- Over \$154 million given globally through donations and community investments, including \$1.9 million to support humanitarian relief efforts in Ukraine, Pakistan, natural disaster response efforts in Canada and the U.S., and in response to local tragedies⁽⁶⁾⁽⁷⁾

(1) Based on our 80.25 average percentile ranking and rating compiled from our priority ESG rating agencies and indices: Sustainalytics, MSCI ESG Rating, FTSE4Good and S&P Global's Corporate Sustainability Assessment (informing the DJSI) – FTSE4Good and MSCI ratings reflect 2021 scores. The ESG rankings and ratings market is evolving and is not currently regulated in Canada or the U.S. ESG rating agencies and indices may use different data, metrics, models and/or methodologies. ESG ranking and ratings are not necessarily comparable, and those given to RBC are for information only. Investors and other stakeholders should carefully consider the foregoing factors and other uncertainties when reviewing these rankings and ratings. (2) Sustainable financing refers to financial activities that take into account environmental, social and governance factors. (3) [Indigenous Communities and Enbridge Announce Landmark Equity Partnership](#). (4) Hires includes new external hires and rehires excluding City National Bank, BlueBay Asset Management and Brewin Dolphin; based on self-identification; excludes summer interns, students and co-ops. BIPOC hires includes Canada and U.S. only. Women hires is global. (5) Black, Indigenous and People of Colour. (6) For FY2022. (7) Includes employee volunteer grants and gifts in kind, as well as contributions to non-profits and non-registered charities. Figure includes sponsorships.

Market leader with a focused strategy for growth

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 95,000+ 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

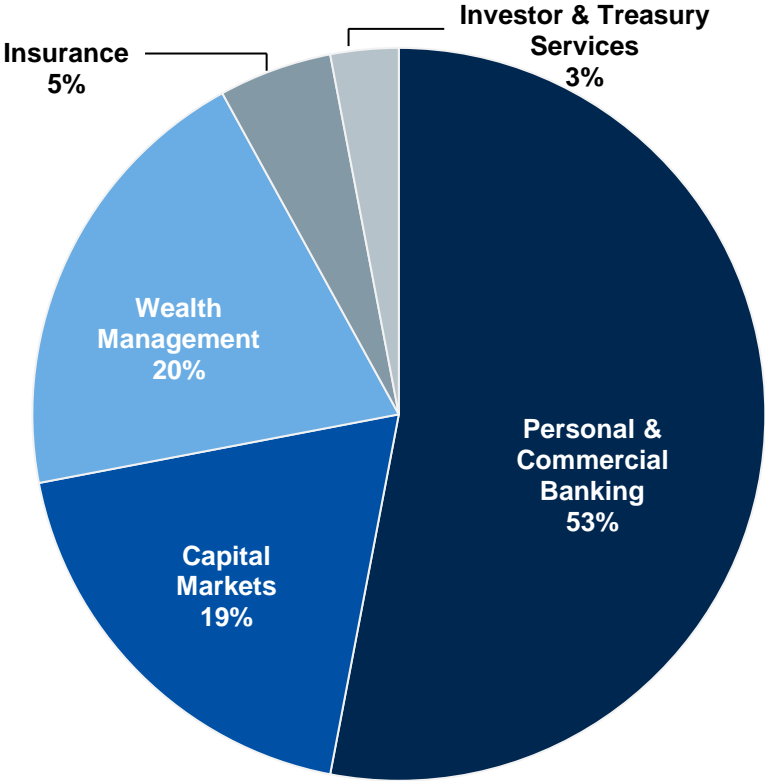


In Select Global Financial Centres: To be a leading financial services partner valued for our expertise

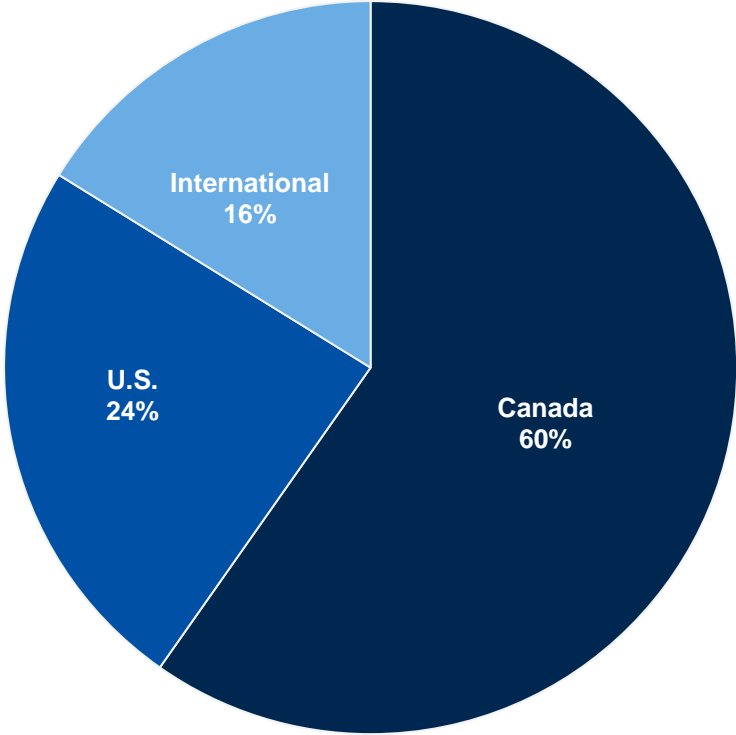
(1) Based on market capitalization as at October 31, 2022.

Diversified business and geographic model with client-leading franchises

Earnings by Business Segment⁽¹⁾
Latest twelve months ended October 31, 2022



Revenue by Geography
Latest twelve months ended October 31, 2022



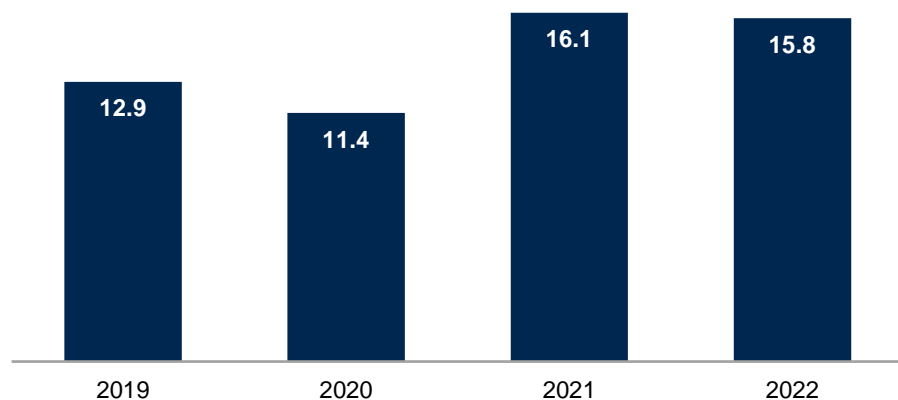
(1) Amounts exclude Corporate Support.

Strong financial profile

Maintaining a strong capital position with a disciplined approach to risk

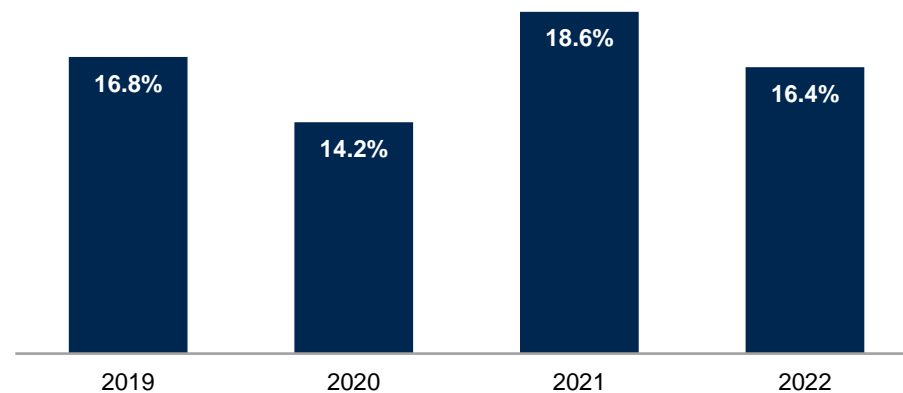
Resilient Earnings

Net income (\$ billions)

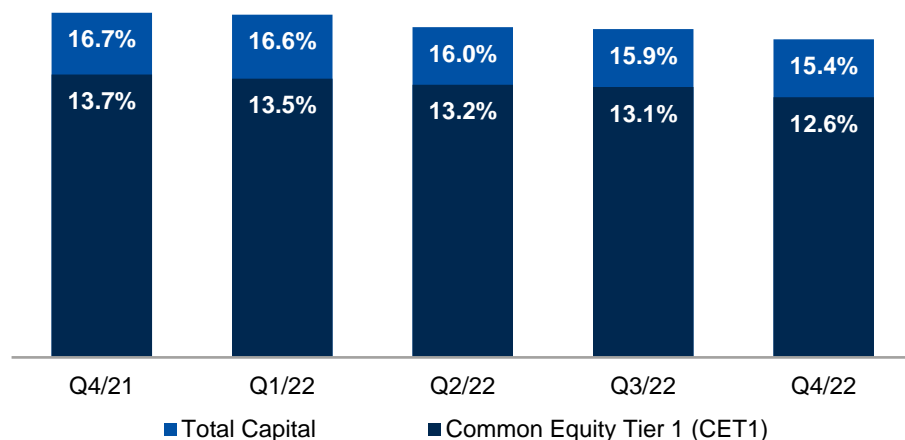


Premium Return on Equity

PCL ⁽¹⁾	0.31%	0.63%	(0.10)%	0.06%
NIM ⁽²⁾	1.61%	1.55%	1.48%	1.48%



Strong Capital Position⁽³⁾



Strong Leverage and Liquidity Ratios⁽³⁾

Leverage Ratio 4.4%

Liquidity Coverage Ratio 125%

Credit Ratings Amongst the Highest Globally

	Moody's	S&P	DBRS	Fitch
Legacy senior long-term debt ⁽⁴⁾	Aa1	AA-	AA (high)	AA
Senior long-term debt ⁽⁵⁾	A1	A	AA	AA-
Outlook	Stable	Stable	Stable	Stable

(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. Average earning assets, 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 the 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 29, 2022) 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 29, 2022) for senior long-term debt issued on or after September 23, 2018 which is subject to conversion under the Bail-in regime.

Track record of delivering value to our shareholders

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

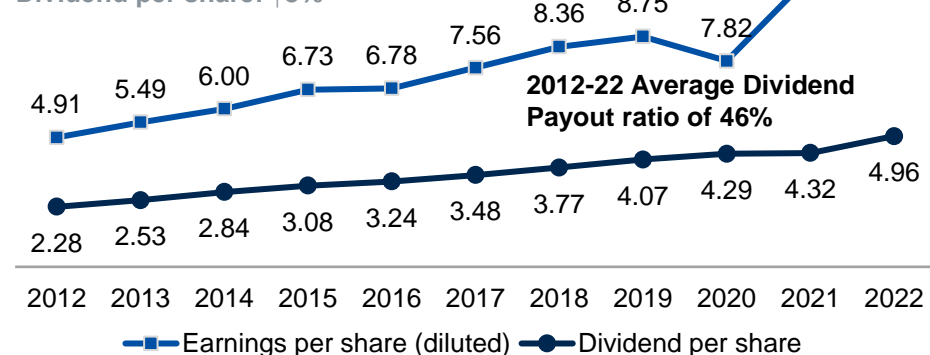
Medium-Term Objectives ⁽¹⁾			Average as of 2022 ⁽²⁾	
			3-Year	5-Year
Profitability	Diluted EPS growth	7%+	✓	8%
	ROE	16%+	✓	16.4%
Capital Management	Capital ratios (CET1 ratio)	Strong	✓	12.9%
	Dividend payout ratio	40% – 50%	✓	46%

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

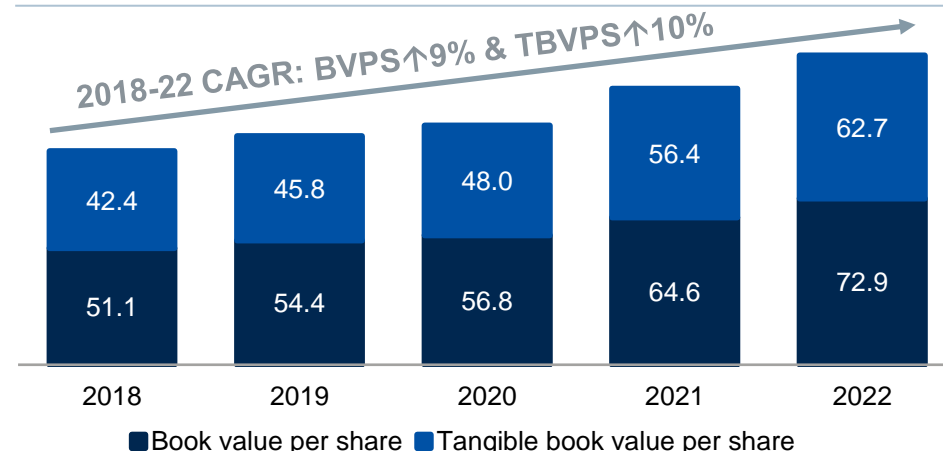
2012-22 CAGR

Earnings per share: ↑8%

Dividend per share: ↑8%



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	10%	9%	13%	12%
Peer Average	6%	5%	10%	10%

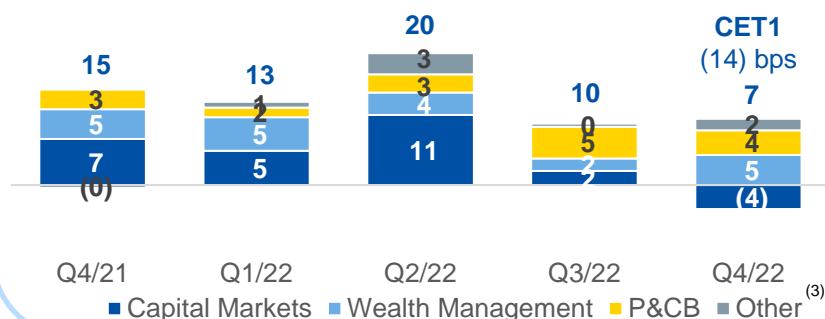
(1) A medium-term (3-5 year) objective is considered to be achieved when the performance goal is met in either a 3- or 5-year period. These objectives assume a normal business environment and our ability to achieve them in a period may be adversely affected by the macroeconomic backdrop. (2) Diluted EPS growth is calculated using a Compound Annual Growth Rate (CAGR). ROE, CET1 and dividend payout ratio are calculated using an average. (3) Our quarterly dividend declared per common share is \$1.32. Quarterly dividend payment on November 24, 2022 was \$1.28. (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 excluding goodwill and other intangibles (excluding software) net of deferred tax on spot basis divided by common shares outstanding. This is a non-GAAP measure. Refer to slide 63 for reconciliation and slide 64 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, 2022. RBC is compared to our global peer group. The peer group average excludes RBC; for the list of peers, please refer to our 2022 Annual Report.

Balanced capital deployment driving sustainable long-term shareholder value

16%+ ROE
Medium-term objective

Strong capital ratio

Diversified **organic growth**^{(1) (2)} (RWA \$BN)



Committed to sustainable **dividend growth** (Q4/22)

\$1.8BN
Common share
dividends
+15% YoY

47%
Dividend payout
ratio
Medium-term objective
40-50%

Q4/22

72% total payout ratio⁽⁴⁾
\$2.8BN total shareholder distribution⁽⁴⁾

Executing on **share repurchases**

7.9 million or \$1.0BN
shares bought back in Q4/22

41 million or \$5.4BN
shares bought back in 2022

Excess capital creates **optionality**

Brewin Dolphin
£1.6BN
acquisition

HSBC Canada
\$13.5BN
announced acquisition

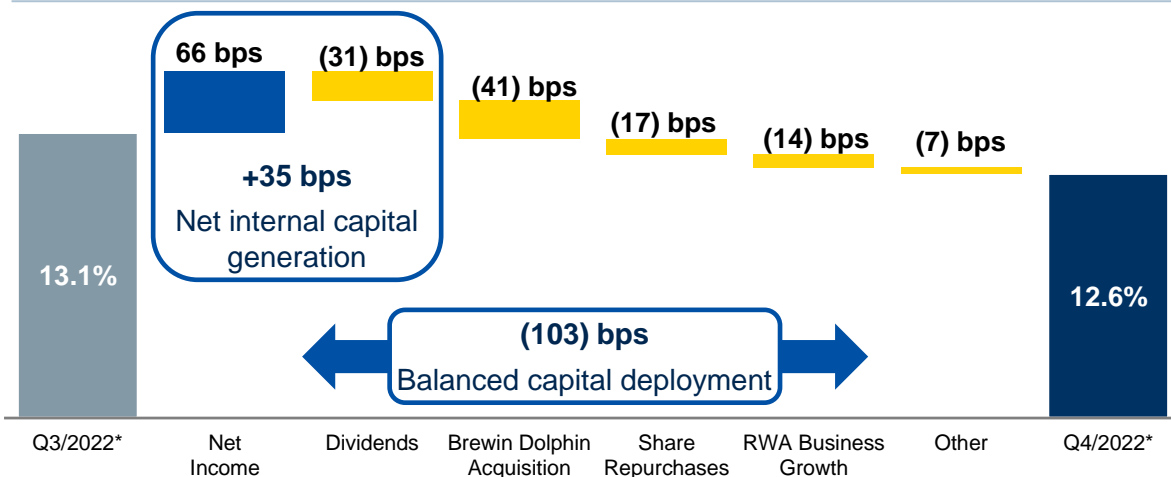
10%
3-Year BVPS⁽⁴⁾ CAGR

10%
3-year annualized TSR⁽⁴⁾

(1) Organic growth reflects growth in RWA excluding impacts of models & methodology updates, asset quality, acquisitions & disposals and FX. (2) Totals may not add due to rounding. (3) Includes I&TS, Insurance and Corporate Support. (4) Total payout ratio: Total shareholder distributions (common dividends + share repurchases) as a percentage of net income available to common shareholders. Total shareholder distribution: Calculated as the total dollar value of common dividends plus total shares repurchased.

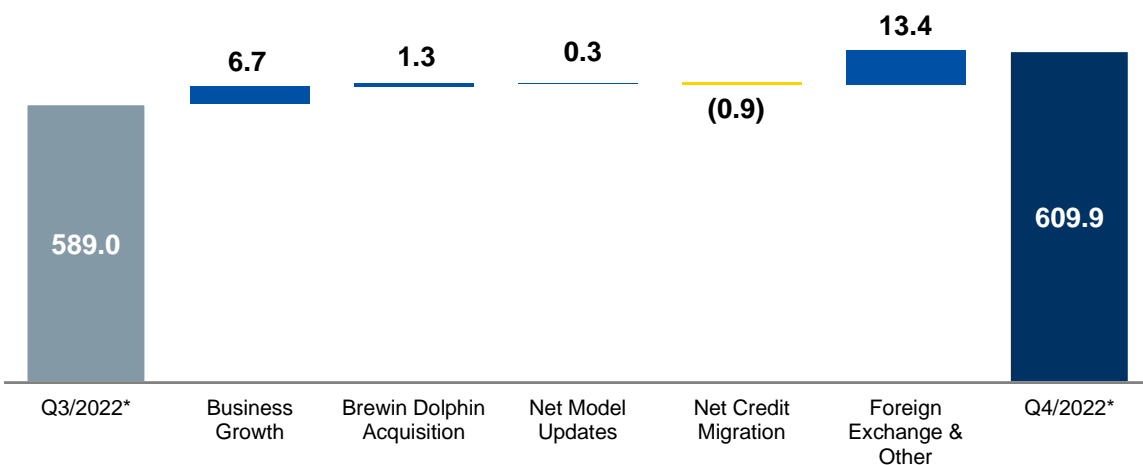
Strong capital position supporting business growth and shareholder returns

CET1 Movement



- CET1 ratio of 12.6%, down 50 bps QoQ, reflecting:
 - Closing of Brewin Dolphin acquisition
 - Repurchase of 7.9MM shares for \$1.0BN
 - Organic RWA growth supporting higher volumes
 - Unrealized mark-to-market losses on OCI securities
 - + Partly offset by net internal capital generation of 35 bps (earnings net of dividends)
- Leverage ratio of 4.4%, down 20 bps QoQ
- TLAC ratio⁽¹⁾ of 26.4%, down 120 bps QoQ
- Announced a \$0.04 or 3% dividend increase to \$1.32 per common share

RWA Movement (\$ billions)



- RWA increased \$20.8BN QoQ, mainly reflecting:
 - Continued business growth, primarily in commercial and personal lending, and retail mortgages, partly offset by a reduction in loan underwriting commitment balances
 - Acquisition of Brewin Dolphin
 - Unfavourable FX translation
 - + Net credit migration, mainly in wholesale portfolios
 - The remaining RWA impact from net credit downgrades in our vulnerable sectors is \$4.8BN post-Q1/2020

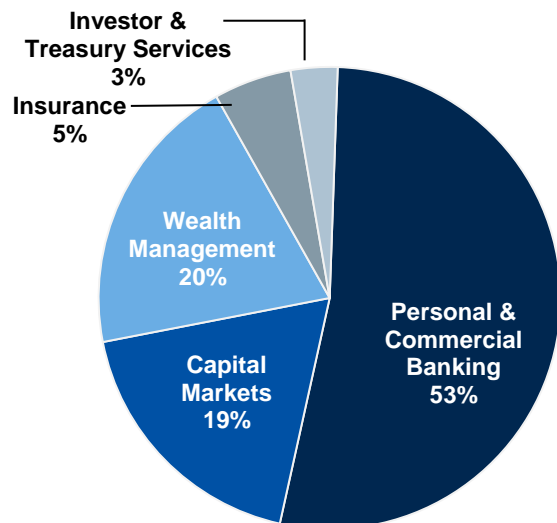
*Represents rounded figures. For more information, refer to the Capital Management section of our Q4/2022 Report to Shareholders.

(1) Total loss absorbing capacity (TLAC): The aggregate of Tier 1 capital, Tier 2 capital, and external TLAC instruments, allow conversion in whole or in part into common shares under the Canada Deposit Insurance Corporation Act and meet all of the eligibility criteria under the guideline. The risk-based TLAC ratio is defined as TLAC divided by total risk-weighted assets.

2022 NIAT⁽¹⁾: Benefit of higher rates offset impact of challenging market conditions

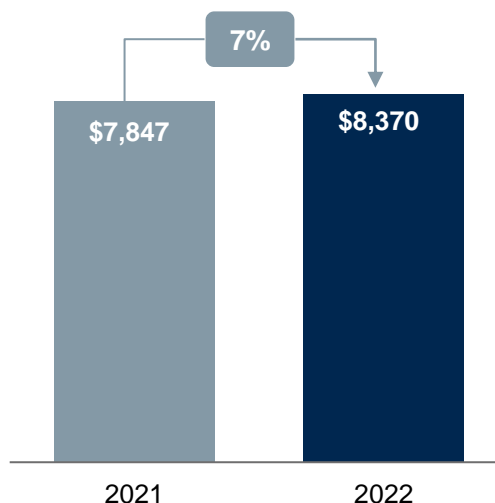
2022 Net Income⁽²⁾

Diversified business model



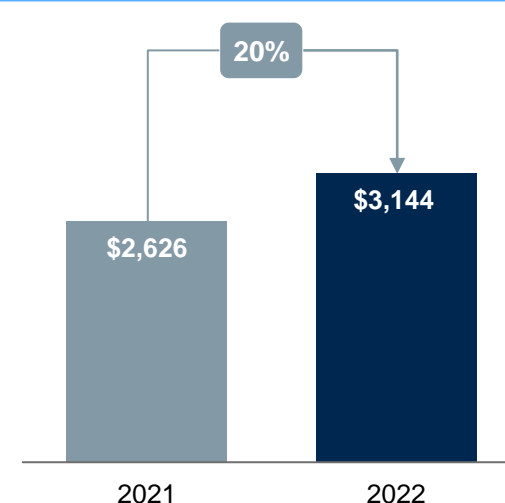
Personal & Commercial Banking

- Market share gains in Canadian personal and business deposits, and credit cards⁽³⁾
- ~400k net new clients in Canadian Banking



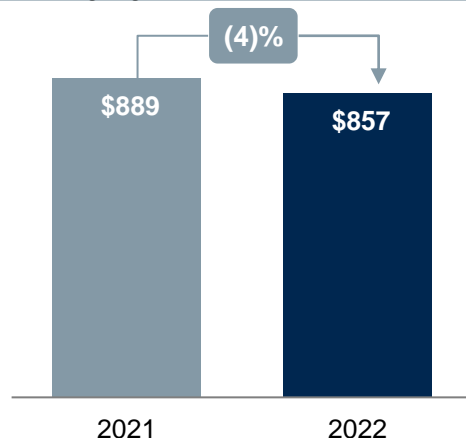
Wealth Management

- Largest retail mutual fund company in Canada capturing 32% market share amongst banks⁽⁴⁾



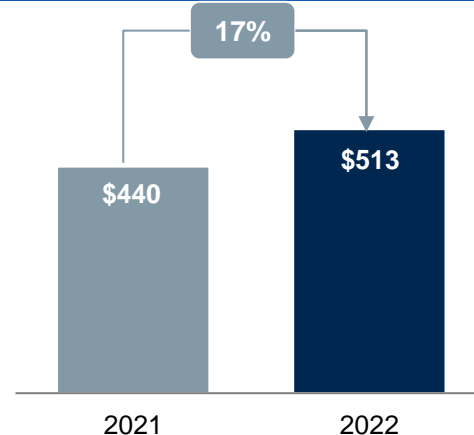
Insurance

- #1 in individual disability (sales and inforce business)⁽⁵⁾
- #2 in segregated fund net sales⁽⁶⁾



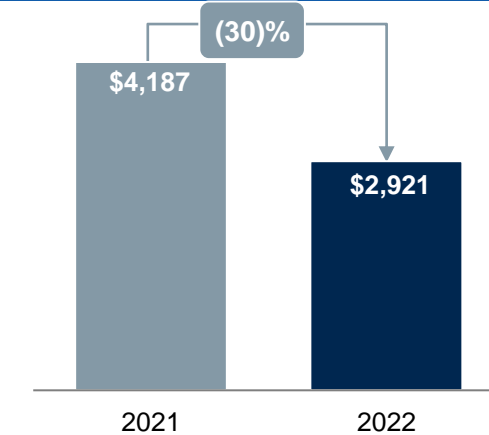
Investor & Treasury Services

- Higher net interest income on expanding margins from rising rates



Capital Markets

- 9th largest global investment bank by fees, up from 11th last year⁽⁷⁾



(1) Net Income After Taxes (NIAT). (2) Amounts exclude Corporate Support. (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 August 2022 and June 2022 except where noted. Market share is of total Chartered Banks except where noted. Credit cards market share is based on Big-6 banks as at June 2022. (4) Investment Funds Institute of Canada (IFIC) in September 2022 and RBC reporting. (5) LIMRA Canadian Insurance Survey, 2nd Quarter CY 2022. (6) Strategic Insights, Insurance Advisory Service Report. (7) Dealogic market share.

Business Segments

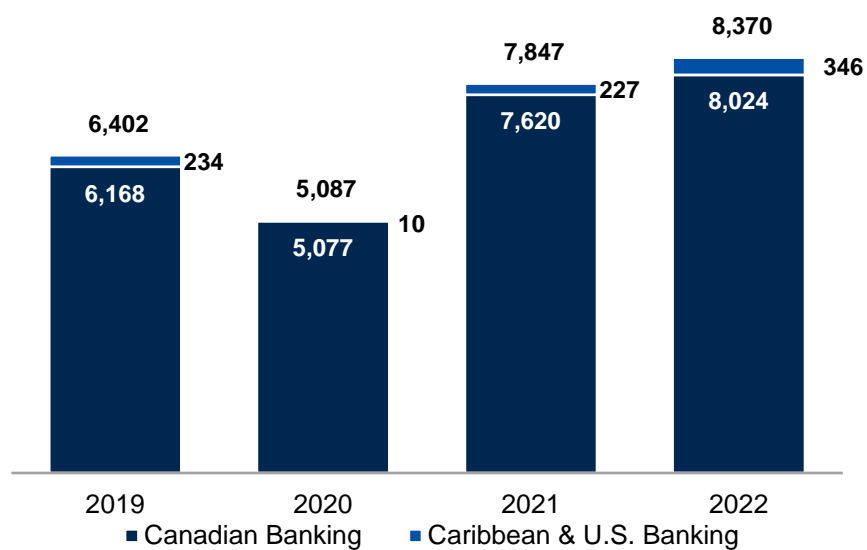
Personal & Commercial Banking

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

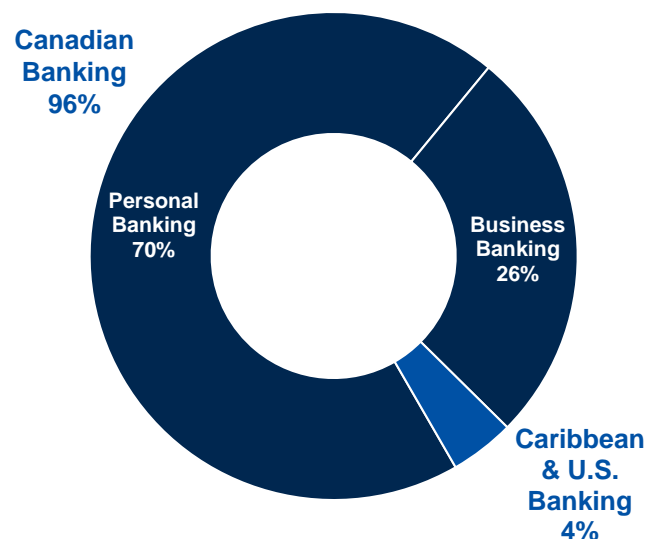
Q4/2022 Highlights

Clients (MM)	~15
Branches	1,201
ATMs	4,297
Active Digital (Online and Mobile) Users ⁽²⁾ (MM)	8.4
Employees (FTE)	38,450
Net Loans & Acceptances ⁽¹⁾ (\$BN)	574.3
Deposits ⁽¹⁾ (\$BN)	570.2
AUA ⁽³⁾ (\$BN)	336.4

Net Income (\$ millions)



Revenue by Business Line⁽⁴⁾



(1) Based on average balances. (2) This figure represents the 90-day active customers in Canadian Banking only. (3) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at October 31, 2022 of \$15 billion and \$6 billion, respectively. (4) For twelve months ended October 31, 2022.

Personal & Commercial Banking

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

Transform How We Serve Our Clients	<ul style="list-style-type: none"> Make it easier 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Continue to deliver leading digital capabilities and functionality through our award-winning mobile app Create partnerships to innovate, making it easier to bank with RBC Invest in research and development to understand and meet rapidly changing client expectations
Innovate to Become a More Agile and Efficient Bank	<ul style="list-style-type: none"> 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

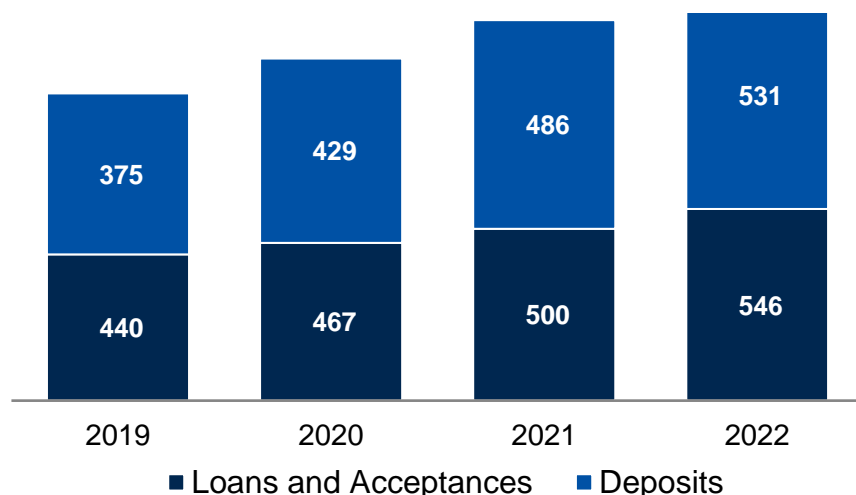
Recent Awards

 <p>RBC received top ranks in 11 out of 11 Ipsos Financial Service Excellence Awards among the Big 5 Banks, including Customer Service Excellence ⁽¹⁾</p>	 <p>RBC was awarded Best Global Retail Bank and Best Bank for SMEs by Retail Banker International ⁽²⁾</p>	 <p>RBC recognized by Celent for excellence in Digitally Onboarding Clients and Transforming Business Payments ⁽³⁾</p>	 <p>RBC ranks #1 in Banking Mobile App customer satisfaction among Canadian banks ⁽⁴⁾</p>
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(1) Ipsos, 2022. (2) RBI, 2022. (3) , Celent, 2021. (4) JD Power, 2022.

Personal & Commercial Banking – Canadian Banking

Solid Volume Growth (\$ millions)⁽¹⁾

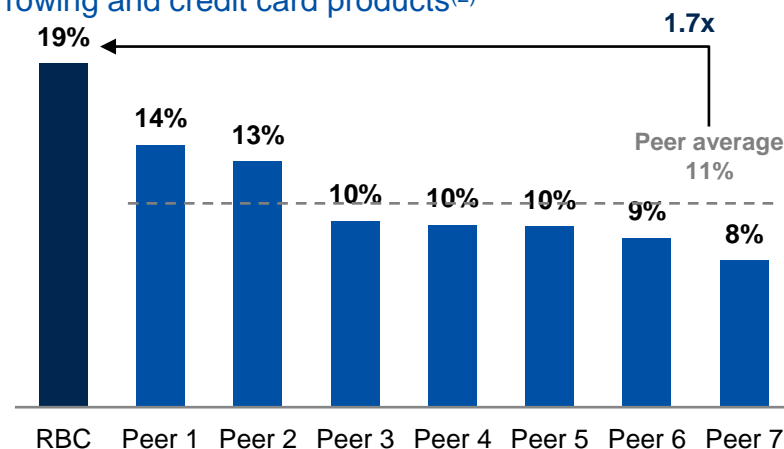


#1 or #2 Market Share in All Key Categories⁽³⁾

Product	Market share	Rank
Personal Lending ⁽⁴⁾	24.4%	1
Personal Core Deposits + GICs	21.0%	2
Credit Cards ⁽⁵⁾	27.6%	1
Long-Term Mutual Funds ⁽⁶⁾	32.1%	1
Business Loans (\$0-\$25MM) ⁽⁷⁾	25.1%	1
Business Deposits ⁽⁸⁾	24.6%	1

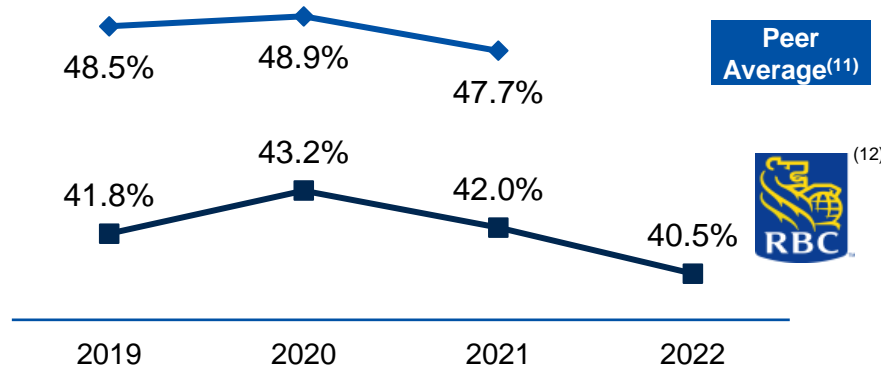
Superior Cross-Sell Ability

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



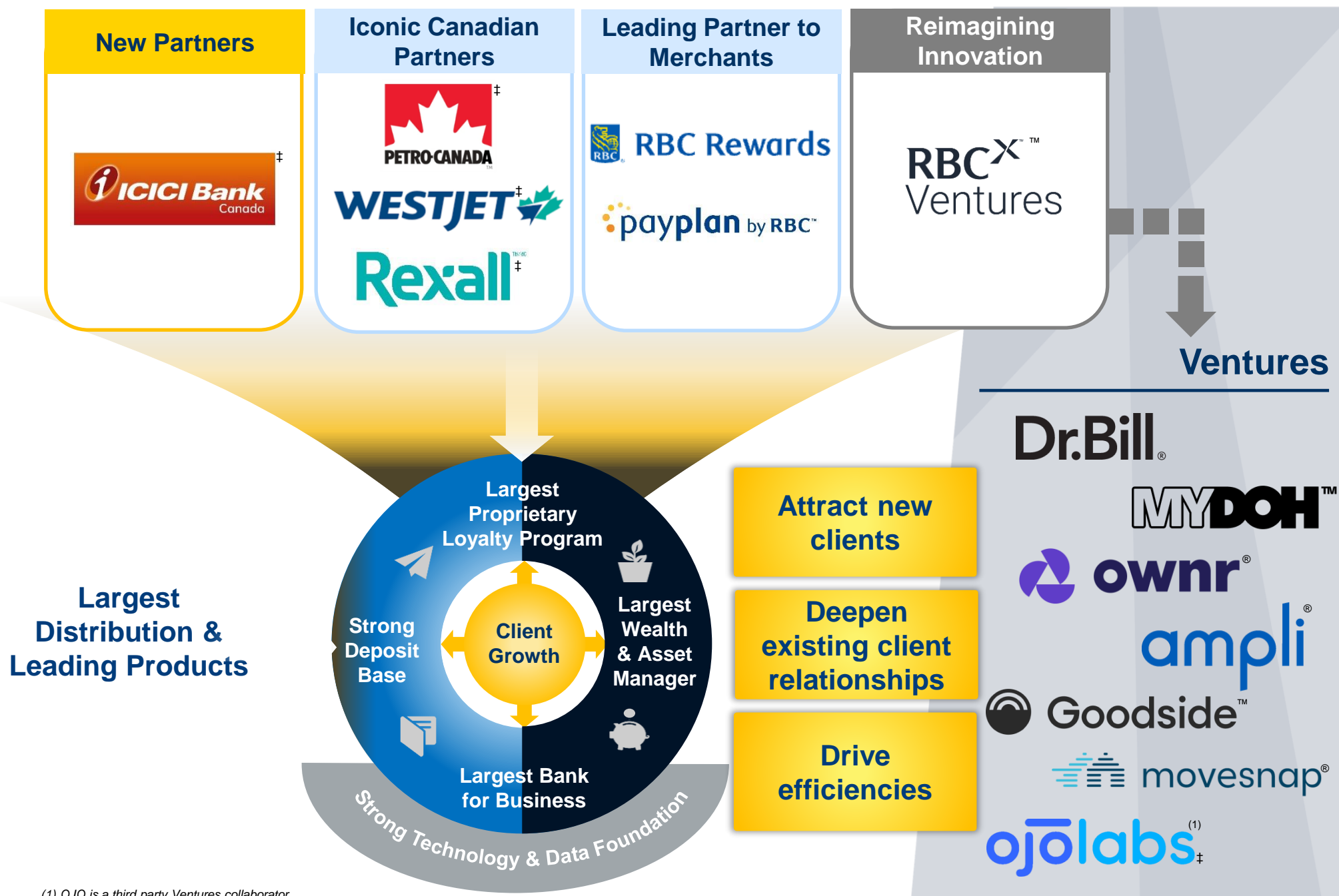
Continued Efficiency Improvements While Investing For Growth

NIE CAGR ⁽⁹⁾		FTE CAGR ⁽¹⁰⁾	
RBC	Peer Average	RBC	Peer Average
3.0%	3.2%	2.8%	1.7%



(1) Based on average balances. (2) Canadian Financial Monitor by Ipsos – approx. 20,700 Canadian individuals – data based on Financial Group results for the 12-month period ending October 2022. TFSA is considered an investment. Peers include BMO, BNS, CIBC, TD, National Bank, Laurentian Bank and HSBC Canada. (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 August 2022 and June 2022 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 June 2022, excludes Credit Cards. (5) Credit cards market share is based on 6 banks (RBC, BMO, BNS, CIBC, TD and NA) as at June 2022. (6) Long-term mutual fund market share is compared to 7 banks (RBC, BMO, BNS, CIBC, TD, NA, and HSBC) and is at August 2022. (7) Business Loans market share is of 6 Chartered Banks (RBC, BMO, BNS, CIBC, TD and NA) on a quarterly basis and is as at June 2022. (8) Business Deposits market share excludes Fixed Term, Government and Deposit Taking Institution balances and is as at August 2022. (9) Non-interest expense representing 2.75 year CAGR (2019 to last twelve months as of Q3/22). (10) Number of employees (full-time equivalent) representing 2.75 year CAGR (2019 to Q3/22). (11) Peers include BMO, BNS, CIBC, TD and NA; 2019 through 2021 reflects annual numbers. (12) Efficiency ratio is calculated as non-interest expense as a percentage of total revenue.

Canadian Banking: Enhancing the client acquisition funnel by creating more value



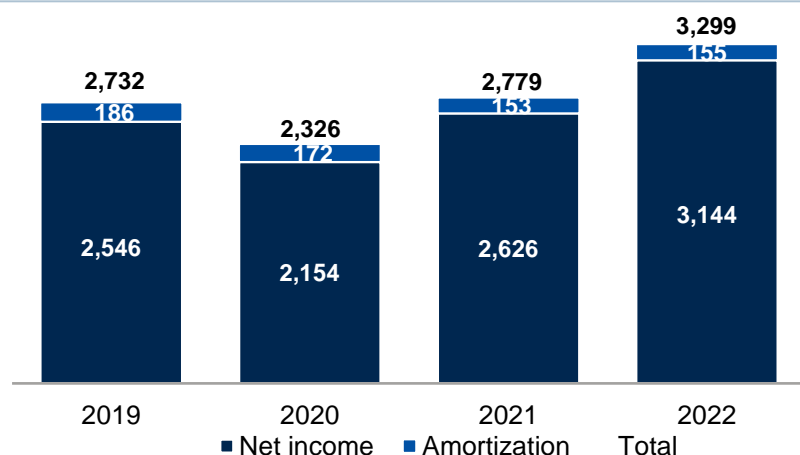
(1) OJO is a third party Ventures collaborator.

Wealth Management

Strategic Priorities

- **Global Asset Management:** Deliver investment performance and extend leadership position in Canada, while continuing to build and grow internationally
- **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
- **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. Successful integration of RBC Brewin Dolphin to enhance client value proposition and consolidate position in local market. In Asia, continue to drive growth in Asia's global families by leveraging the global strengths and capabilities of RBC

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



Recent Awards

Outstanding Global Private Bank

(PBI Global Wealth Awards, 2022)

Best Private Bank in Canada – 11th consecutive year

(PWM/The Banker Global Private Banking Awards, 2022)

Best Private Bank for Digital Marketing & Communications – North America

(PWM's Global Wealth Tech Awards, 2022)

RBC DS was rated #1 in advisor satisfaction amongst all bank-owned full-service brokerage firms

(Investment Executive Brokerage Report Card, 2022)

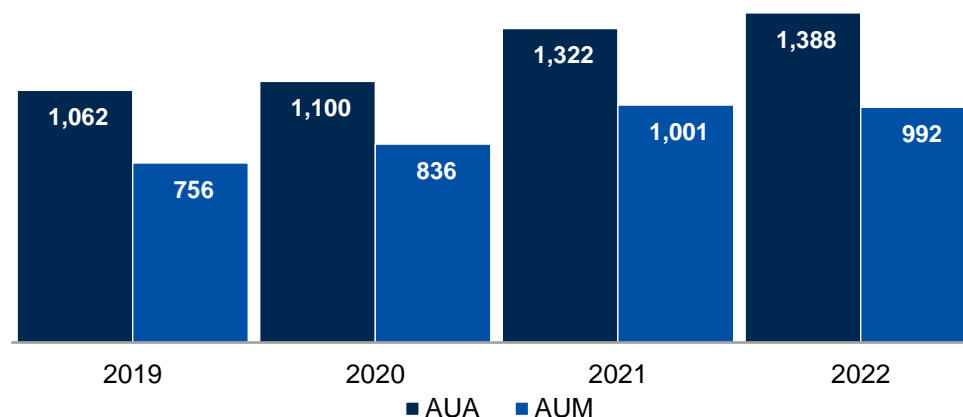
Best Bank for Sustainability & ESG Thought Leadership with Global Reach

(Wealth For Good Awards by WealthBriefing, 2022)

Best for Wealth Transfer / Succession Planning in Asia

(Asia Private Banking Awards by Asiamoney, 2022)

AUA and AUM (\$ billions)⁽⁴⁾



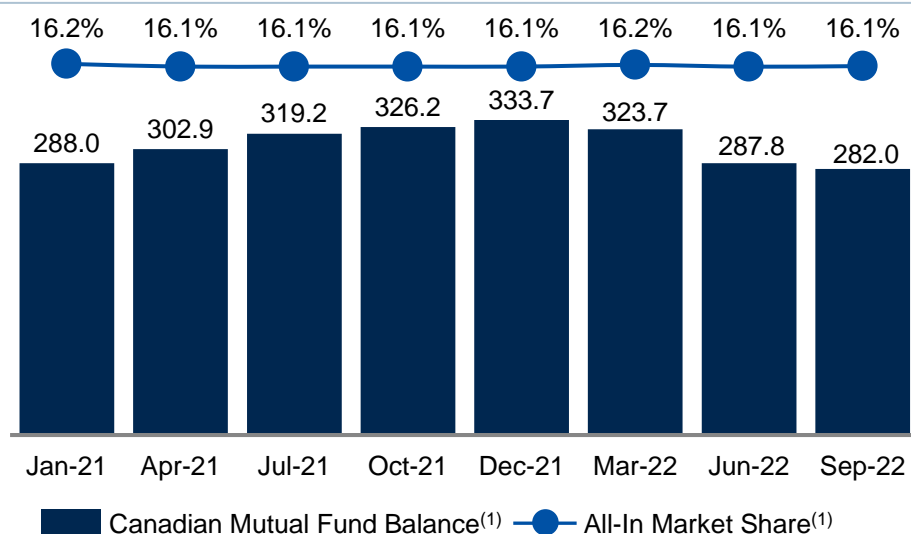
(1) Cash earnings exclude the after-tax effect of amortization of intangibles. This is a non-GAAP measure. Refer to slide 63 for reconciliation and slide 64 for more information. (2) 2019 net income includes the gain on sale of the private debt business of BlueBay (\$134 million after-tax). (3) Effective 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 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. (4) Spot Balances.

Wealth Management – Global Asset Management

Building a high-performing global asset management business

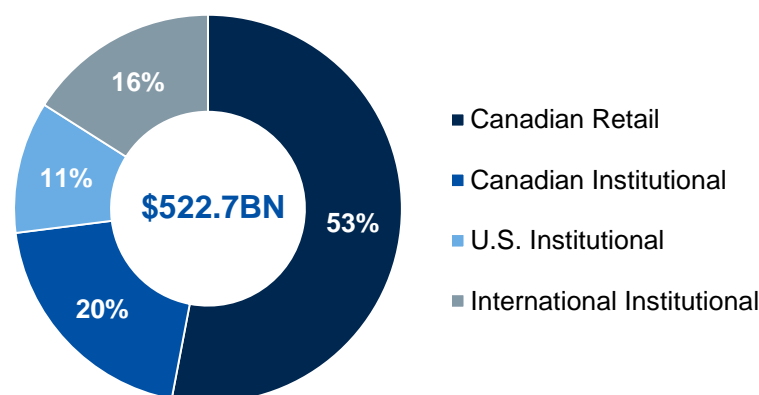
- **Driving top-tier profitability in our largest Wealth Management business**
 - \$522.7BN in client assets
 - Investor asset mix of 53% Retail / 47% Institutional client assets
- **Extending our lead in Canada**
 - Largest retail mutual fund company in Canada, ranked #1 in market share capturing 32.2% 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
 - 3rd largest institutional manager of Canadian pension assets⁽²⁾
- **Delivering strong investment capabilities to support growth**
 - Top performing investment firm with ~90% 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)



Diversified Asset Mix

Q4/2022 AUM by Client Segment ⁽⁴⁾



(1) Investment Funds Institute of Canada (IFIC) in September 2022 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 May 2022. (3) As at September 2022, 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 \$1.9MM per year, 24% 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.

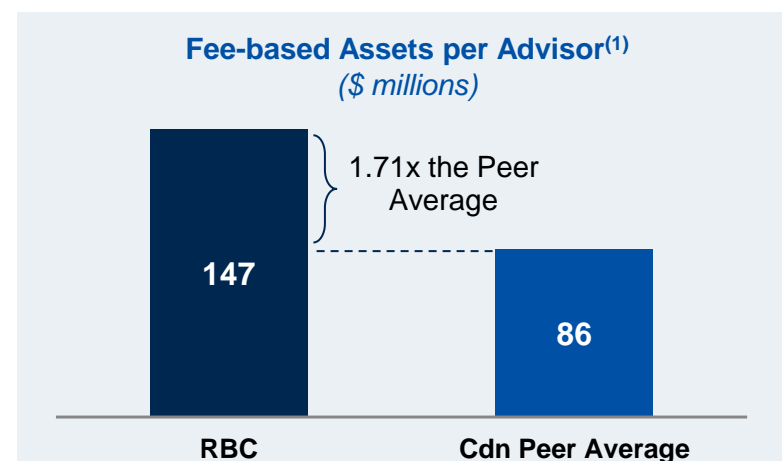
- 7th largest full-service wealth advisory firm in the U.S. as measured by number of financial advisors, and 6th largest by assets under administration⁽²⁾
- Enhancing the client-advisor experience through a digitally-enabled, goals-based planning approach, and strengthening the range of advisory solutions and product offerings
- Continuing to attract and onboard new advisors, and clearing relationships while enhancing advisory productivity and operational efficiency

City National

- A premier U.S. private and commercial bank
- Operates with a high-touch, branch-light client service model in select markets, including: Los Angeles, the San Francisco Bay area, Orange County, San Diego, New York, Boston, and Washington D.C.
- CNB launched a National Corporate Banking division in 2021 that specializes 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
- Integration roll out following the acquisition of Brewin Dolphin



(1) Investor Economics, July 2022. (2) Source: U.S. wealth advisory firms quarterly earnings releases (10-Q).

Insurance

Strategic Priorities

- Grow our **Insurance Business** in Canada, and Internationally
- Develop and sustain **excellence in distribution**
- Accelerate investments in **product innovation, digitization, and data**
- Evolve our **risk culture**
- Attract and retain **top talent**

Highlights

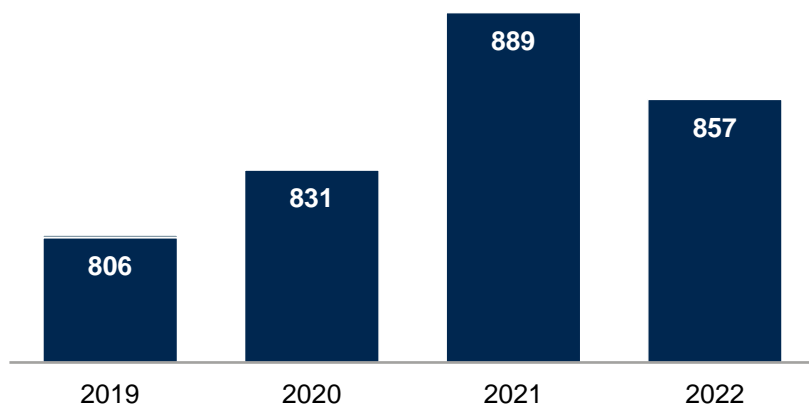
The largest Canadian bank-owned insurance organization, serving 4.9 million clients globally⁽¹⁾

#1 in individual disability (inforce business) with 34%⁽²⁾ market share
#1 in individual disability net new sales with 43%⁽²⁾ market share

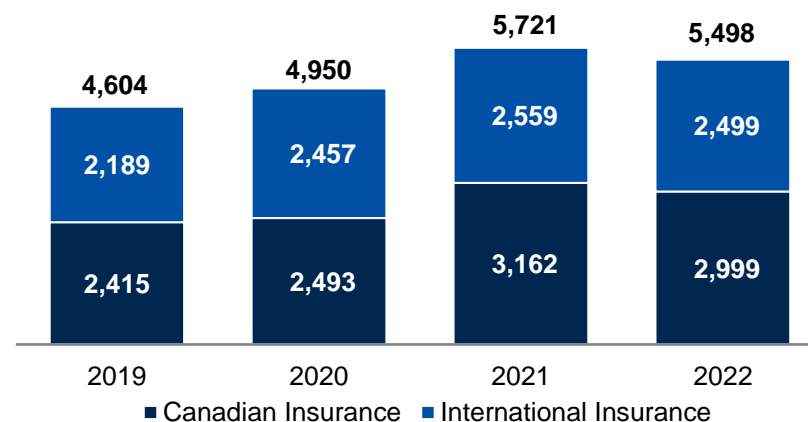
#4 in group annuity business with 8% market share⁽²⁾

#2 in segregated fund net sales⁽³⁾

Net Income (\$ millions)



Premiums and Deposits (\$ millions)



(1) Based on FY21 Total Insurance Revenue. (2) LIMRA Canadian Insurance Survey, 2nd Quarter CY 2022. (3) Strategic Insights, Insurance Advisory Service Report, October 2022.

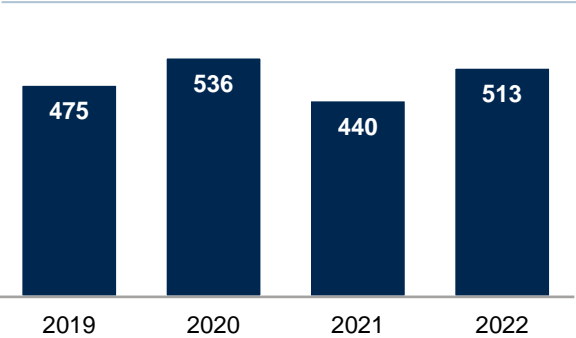
Investor & Treasury Services

- Provider of asset, payment and treasury services to financial and asset owners worldwide. A leader in Canadian cash management and transaction banking services. Trusted with over \$3.9 trillion in assets under administration, our focus is on safeguarding client assets and supporting our clients’ growth.
 - Named Best Trade Finance Bank in Canada for the 10th consecutive year⁽¹⁾
 - Named Best Treasury and Cash Management Provider⁽¹⁾ in Canada
 - Named #1 Overall Custodian - Globally⁽²⁾
 - Ranked #1 Asset Servicer - Overall Globally⁽³⁾
 - Ranked #1 Fund Administrator - Overall Globally⁽⁴⁾

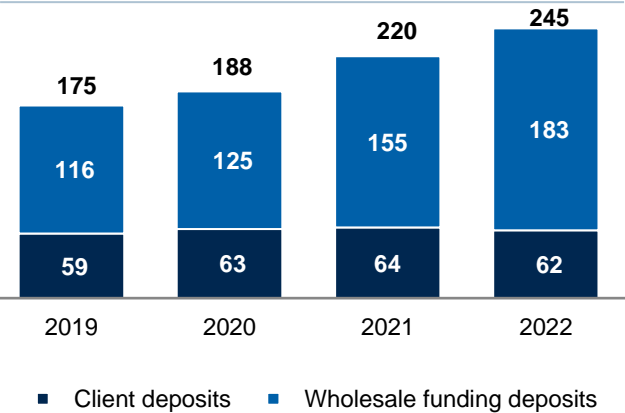
Strategic Priorities

- Grow the Canadian franchise
- Compete in select asset servicing segments and markets
- Deliver seamless client experiences and employ technology to enable our clients’ success

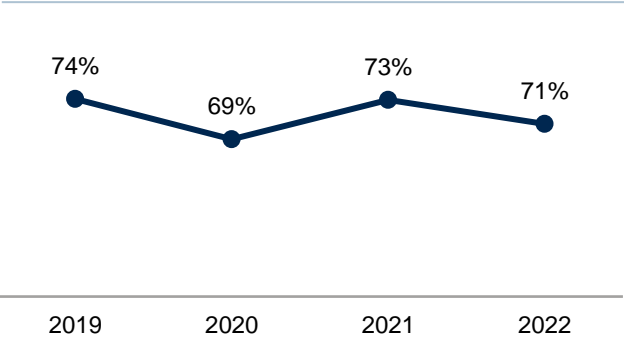
Net Income (\$ millions)



Average Deposits (\$ billions)⁽⁵⁾



Efficiency Ratio

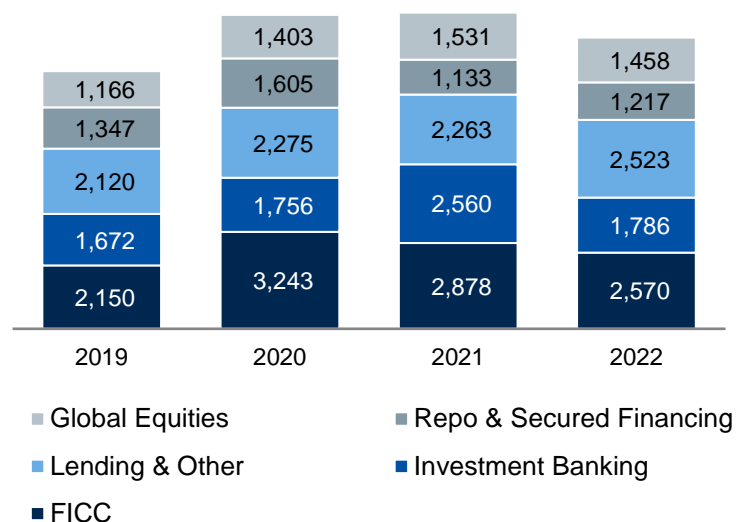


(1) Global Finance, 2022. (2) With the Highest Global Average (Unweighted), Global Custody Survey, 2022. (3) R&M Investor Services Survey, 2022. (4) R&M Fund Accounting & Administration Survey, 2022. (5) Totals may not add up due to rounding.

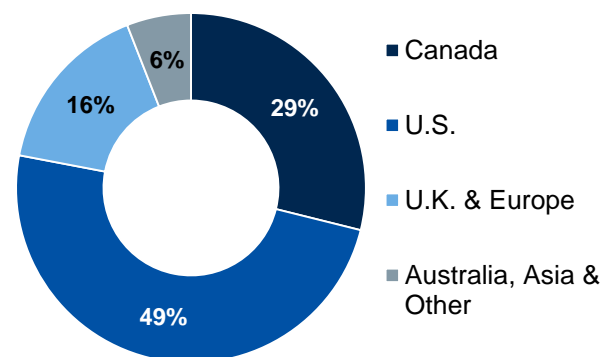
Capital Markets

- A premier global investment bank with core operations across Canada, the U.S., the U.K., Europe, and Asia-Pacific
 - 9th 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 ~83% 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

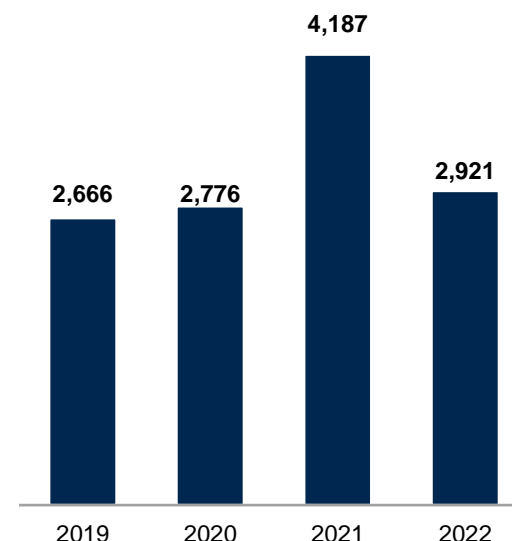
Revenue by Business (\$ millions)



Revenue by Geography ⁽²⁾



Net Income (\$ millions)




(1) Dealogic, based on global investment banking fees 2022. (2) For year ended October 31, 2022.

Capital Markets





Strategic Priorities

Grow and deepen client relationships	<ul style="list-style-type: none"> ▪ Deliver holistic coverage to clients and drive multi-product client relationships ▪ Expand client coverage in underpenetrated sectors and products
Lead with advice and extend capabilities	<ul style="list-style-type: none"> ▪ Grow Advisory & Origination capabilities inclusive of structured solutions ▪ Lead on Sustainable Finance, Energy Transition and Private Capital solutions
Leverage digital and data to deliver innovative solutions	<ul style="list-style-type: none"> ▪ Enhance Sales and Trading client value from scaled electronic and digital strategy ▪ Generate differentiated insights and thought leadership leveraging data and analytics
Prioritize and align for impact	<ul style="list-style-type: none"> ▪ Strategically deploy talent, technology and financial resources to areas of greatest opportunity ▪ Align business and functional strategies to build scale and maximize impact
Drive agility and ease of doing business	<ul style="list-style-type: none"> ▪ Improve processes, leveraging an end-to-end approach to enhance client outcomes ▪ Accelerate execution and simplify procedures to improve employee experience
Engage, enable and empower our talent	<ul style="list-style-type: none"> ▪ Invest in talent through scaled development programs, increased mobility, senior hiring and promotions ▪ Deliver on Diversity & Inclusion strategy and build on our inclusive culture

Recent Awards

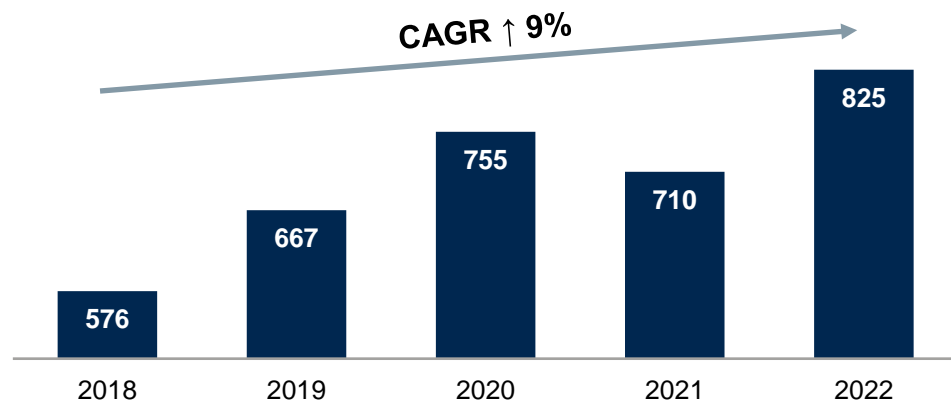
 <p>Moved up 2 Spots to #10 in All American Research Ranking</p> <p>Moved up 1 Spot to #8 in US Generalist Sales Ranking</p> <p>Remained #1 in All-Canada Research and Canadian Equity Sales</p>

Notable Deal Highlights

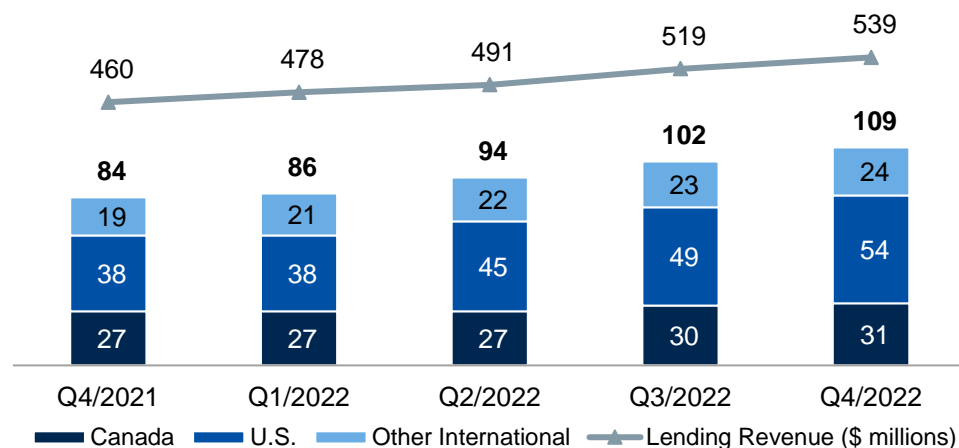
 <p>Financial Advisor and Joint Lead Arranger to Bain Capital on its ~€1.8Bn Acquisition of ITP Aero</p>	 <p>Financial Advisor to Truist on the Acquisition of BankDirect Capital Finance for ~US\$3.4Bn</p>	 <p>Joint Active Bookrunner on \$3.25Bn Senior Unsecured Notes Offering</p>	 <p>Joint Lead Manager on C\$1.0Bn Green Bond</p>
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Capital Markets

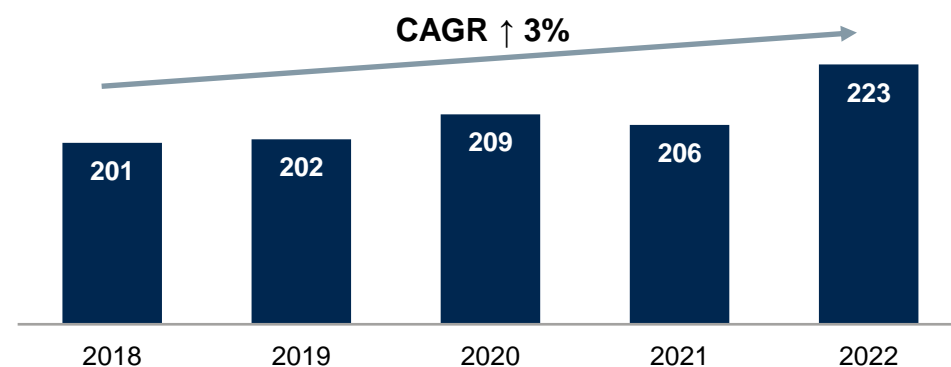
Capital Markets Total Average Assets (\$ billions)



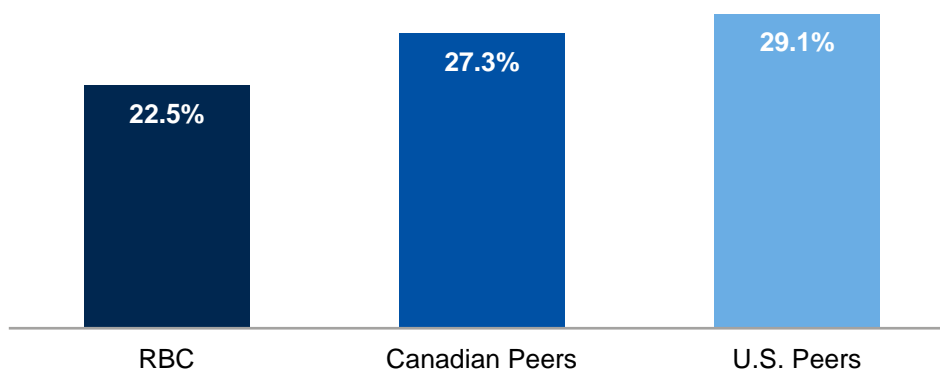
Geographic Diversification Across Loan Book Average Loans Outstanding by Region (\$ billions)⁽¹⁾



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



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



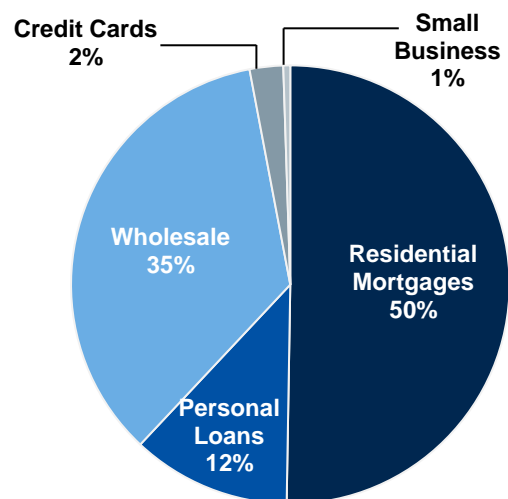
⁽¹⁾ Average loans outstanding includes wholesale loans, acceptances, and off balance sheet letters of credit and guarantees for our Capital Markets portfolio, on single name basis. Excludes mortgage investments, securitized mortgages and other non-core items. This chart has been restated to exclude certain 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 adopted 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 risk measurement, we use the internal models approach for products with regulatory approval and a standardized approach for all other 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 64. Canadian peers include BMO, TD, CIBC, BNS and NA, US peers include JPM, GS, BAC, Citi and MS.

Risk Review

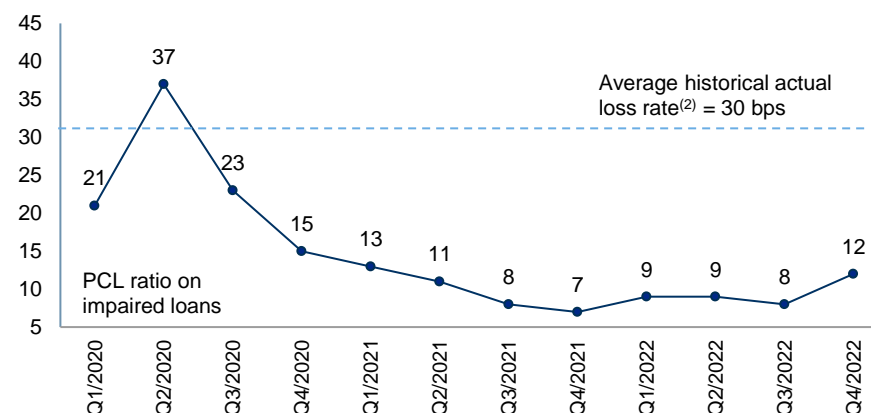
Prudent risk management

A disciplined approach and diversification have underpinned credit quality

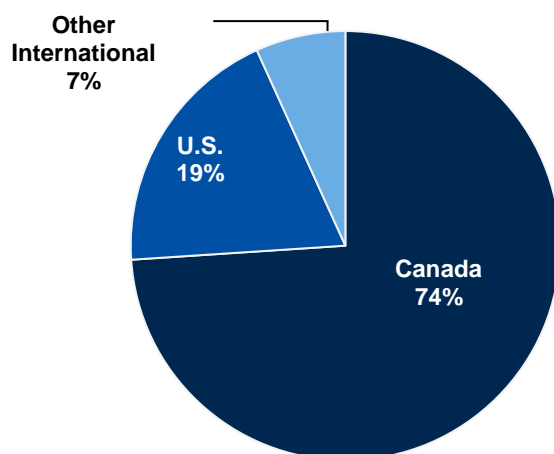
Loan Book Diversified by Portfolio⁽¹⁾



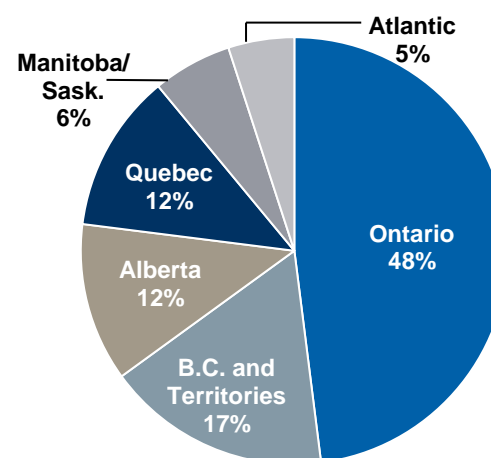
PCL Ratio on Impaired Loans (bps)



Breakdown by Region of Total Loans and Acceptances⁽¹⁾



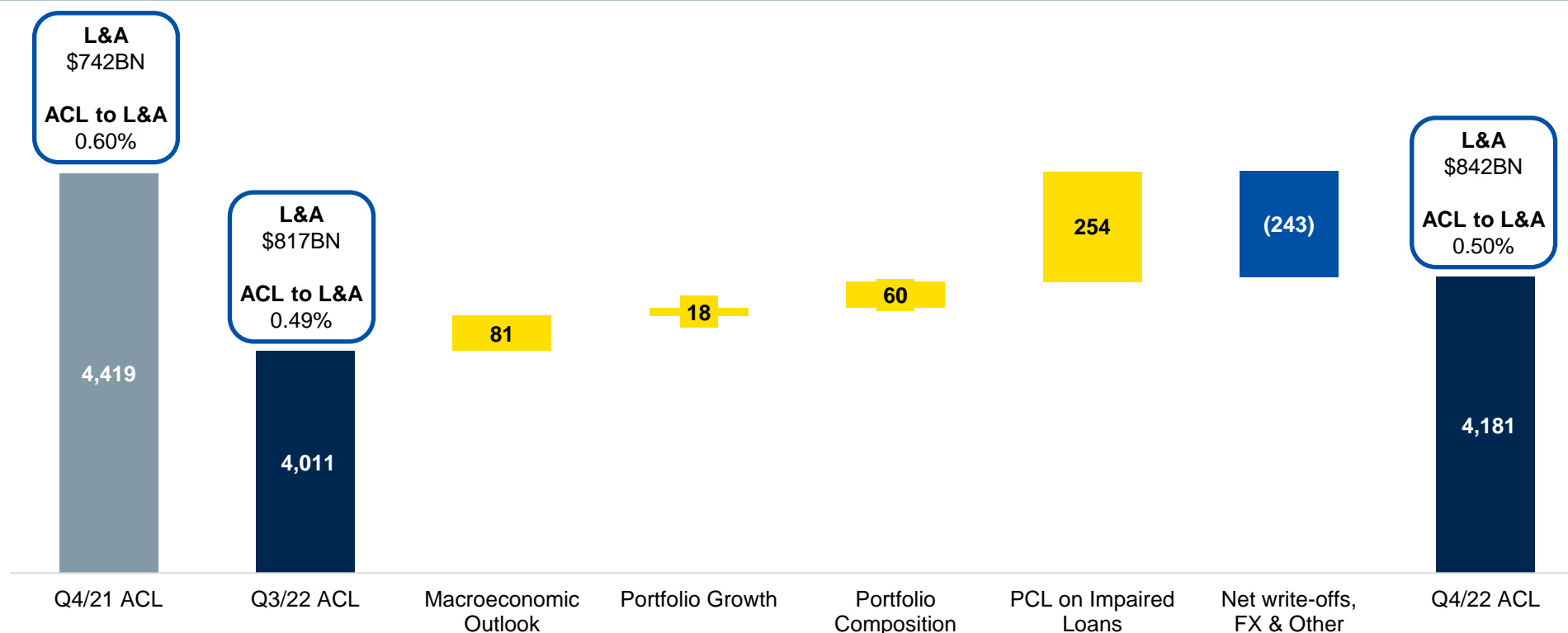
Breakdown of Canadian Total Loans and Acceptances⁽¹⁾



(1) Loans and acceptances outstanding as at October 31, 2022. 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 0.30%.

Allowance for Credit Losses: Prudent reserve increases on performing loans

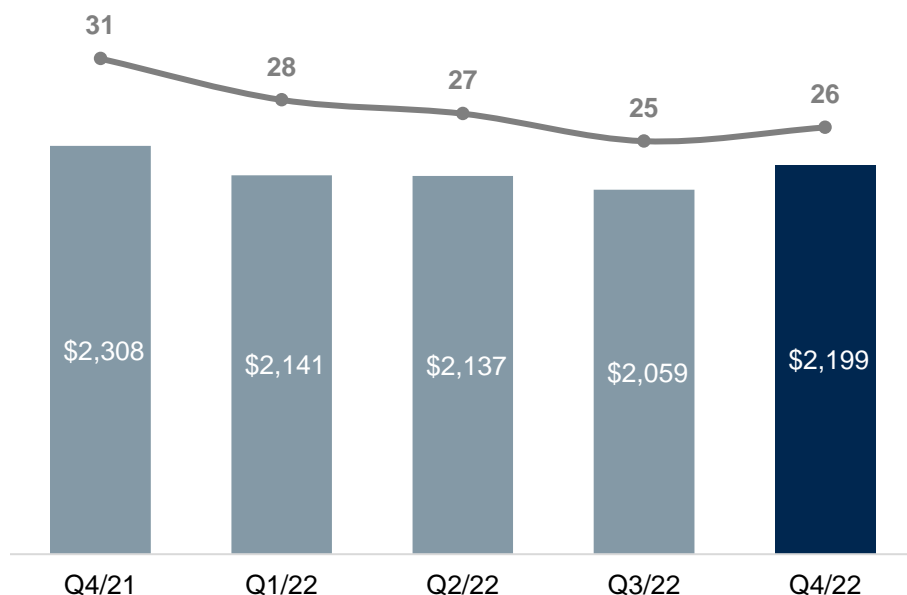
Movement in Allowance for Credit Losses (ACL) on Loans (\$ millions)



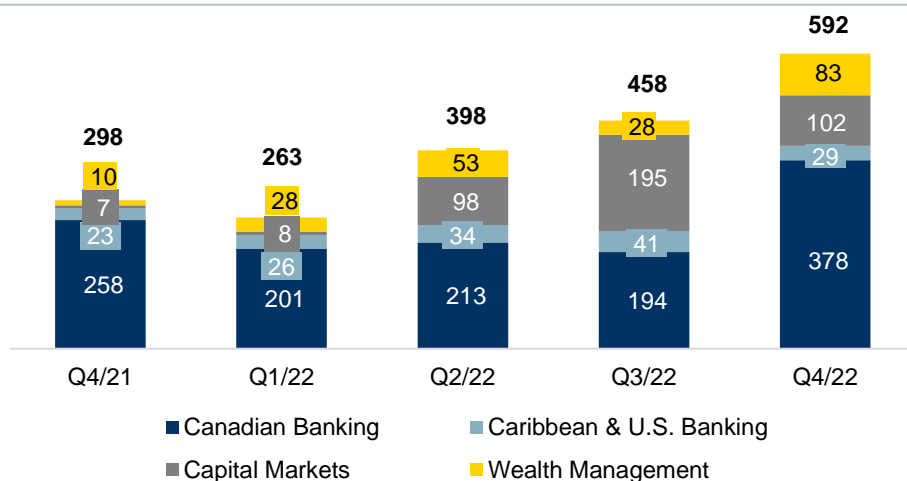
- **2022:** ACL on loans decreased \$238MM during the year, reflecting the recovery from the COVID-19 pandemic, partially offset by unfavorable changes in our macroeconomic outlook
- **Q4/22:** ACL on loans increased \$170MM QoQ
 - ACL of 0.50% on loans and acceptances was up 1 bp QoQ
 - We prudently added reserves on performing loans this quarter to reflect: changes to our base case scenario to incorporate an earlier and more severe recession than previously expected; increases in delinquencies and credit downgrades; and ongoing portfolio growth
 - PCL on performing loans of \$126MM was primarily in Canadian Banking and City National Bank, partially offset by reserve releases in Caribbean Banking

Gross Impaired Loans: Modest increase but well below pre-pandemic levels

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



New Formations (\$ millions)⁽¹⁾



Key Drivers of GIL (QoQ)

- Total GIL increased \$140MM (up 1 bp QoQ)

Canadian Banking

- GIL of \$1,020MM increased \$18MM QoQ, with increases in the retail portfolio partially offset by a reduction in the commercial portfolio
 - New formations increased across all portfolios, but remain below pre-pandemic levels
 - Write-offs increased QoQ, primarily in the commercial portfolio, driven by a previously impaired loan in the Other Services sector

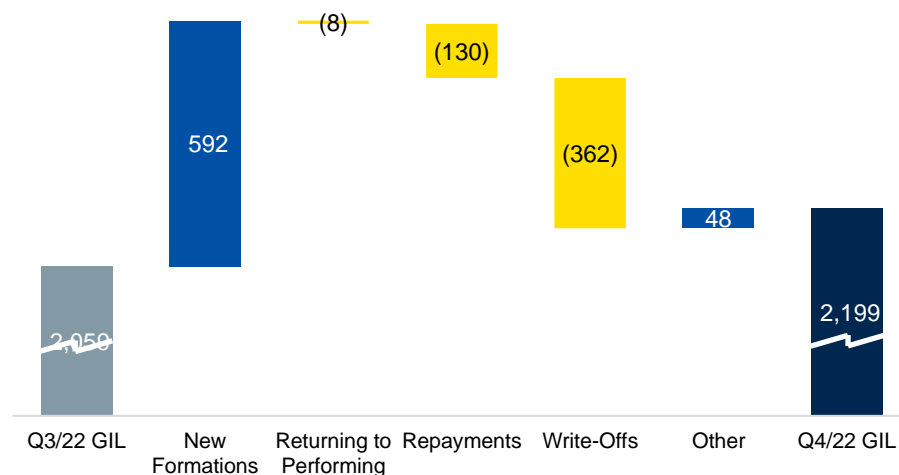
Capital Markets

- GIL of \$559MM increased \$74MM QoQ. During the quarter, new formations (primarily in the Other Services and Consumer Discretionary sectors) and the impact of FX translation were partially offset by repayments and loan sales (mostly in the Other Services sector)

Wealth Management (including CNB)

- GIL of \$278MM increased \$56MM QoQ. Higher new formations in the Consumer Discretionary sector and the impact of FX translation was partially offset by higher repayments

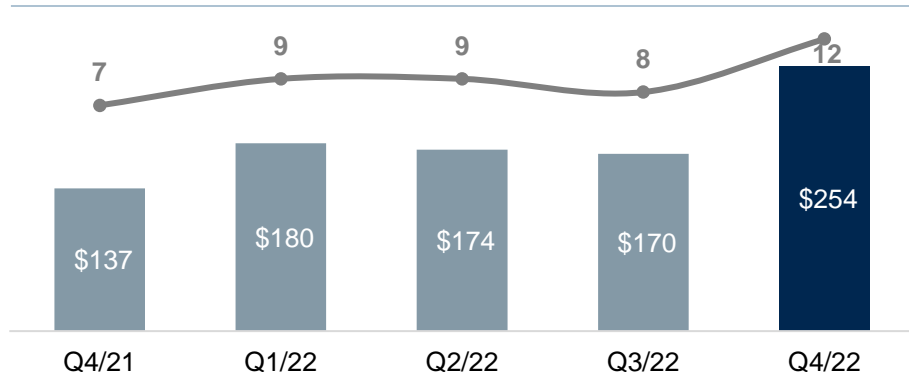
Net Formations (\$ millions)



⁽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.

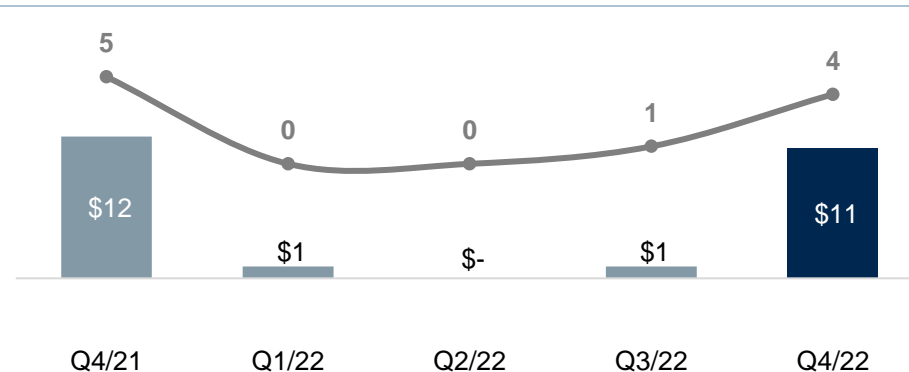
PCL on impaired loans: Remain below pre-pandemic and long-term averages

Total RBC (\$ millions, bps)



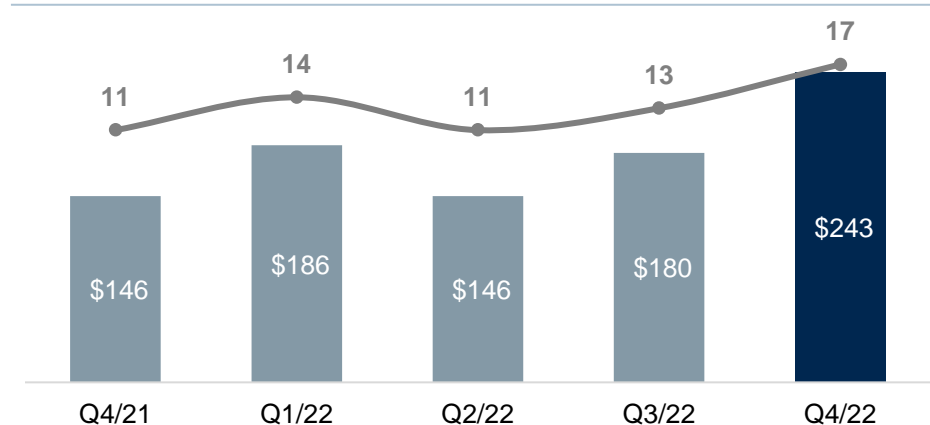
- Provisions were up \$84MM QoQ, with higher provisions in Canadian Banking, Capital Markets and Wealth Management
- PCL ratio of 12 bps remains less than half of the pre-pandemic 2019 PCL ratio of 27 bps

Wealth Management (\$ millions, bps)



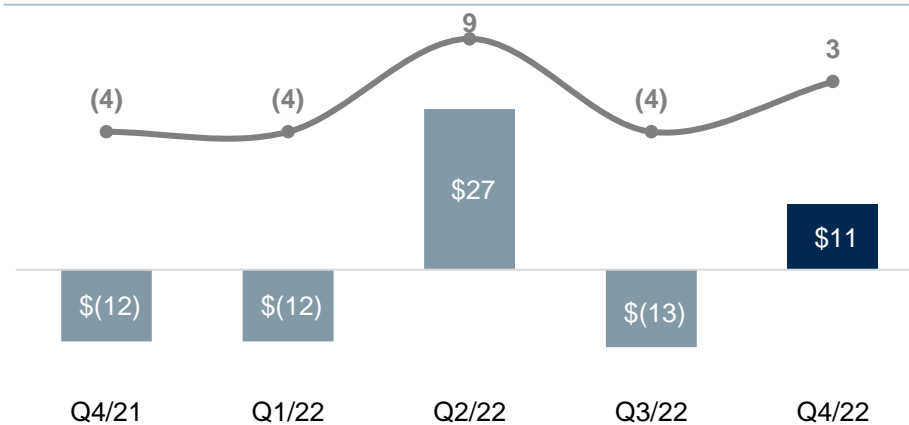
- Higher provisions QoQ, due to provisions on a number of loans in the Consumer Discretionary sector at CNB this quarter

Canadian Banking (\$ millions, bps)



- Retail:** Provisions of \$208MM were up \$44MM QoQ, due primarily to the Personal Lending and Residential Mortgage portfolios
- Commercial:** Provisions of \$35MM were up \$19MM QoQ with modest increases across a number of sectors

Capital Markets (\$ millions, bps)



- Provisions up \$24MM QoQ, due in part to net recoveries in Q3/22
- In Q4/22, a majority of provisions were taken on two loans in the Other Services sector, partially offset by net recoveries on a loan in the industrial products sector

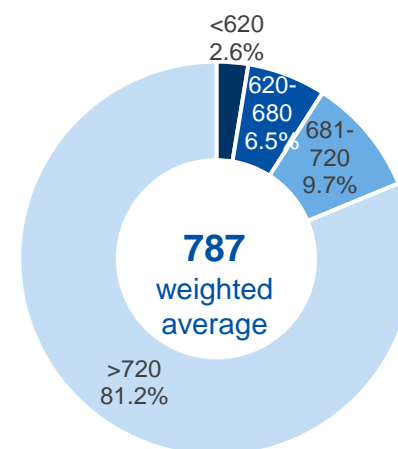
Canadian Banking: Seeing signs of credit normalization

- 30-89 day delinquency rates increased QoQ across all portfolios; delinquency rates remain below pre-pandemic levels, with the exception of the Small Business portfolio, where delinquencies are being driven in part by government guaranteed facilities originated during COVID-19
- PCL and GIL ratios also increased QoQ, but remain below pre-pandemic and historical averages
- Credit quality remains high with 2.6% of the portfolio with a FICO score below 620

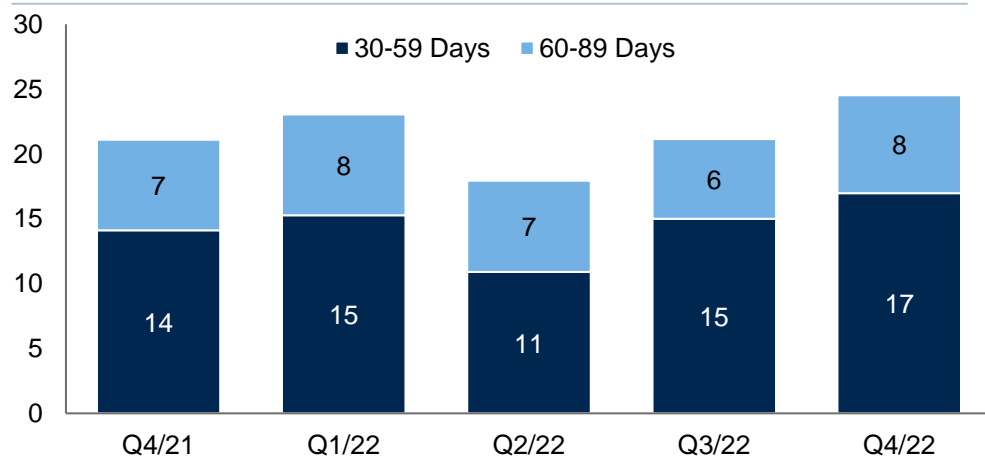
Canadian Banking (CB) PCL on Impaired Loans and Gross Impaired Loans

	Q4/22 Avg Loan Balances (\$BN)	PCL on Impaired Loans (bps) ⁽¹⁾			Gross Impaired Loans (bps)			Avg FICO Score (Q4/22)
		Q4/21	Q3/22	Q4/22	Q4/21	Q3/22	Q4/22	
Residential Mortgages ⁽²⁾	361.8	-	-	1	13	10	10	791
Personal Lending ⁽⁶⁾	76.1	26	32	45	21	18	22	778
Credit Cards	19.3	150	185	182	61 ⁽³⁾	68 ⁽³⁾	72 ⁽³⁾	745
Small Business	12.6	33	39	52	91	95	109	n.a.
Commercial	96.1	11	7	15	64	43	37	n.a.
Total	565.9	11	13	17	24	18	18	787 ⁽⁴⁾

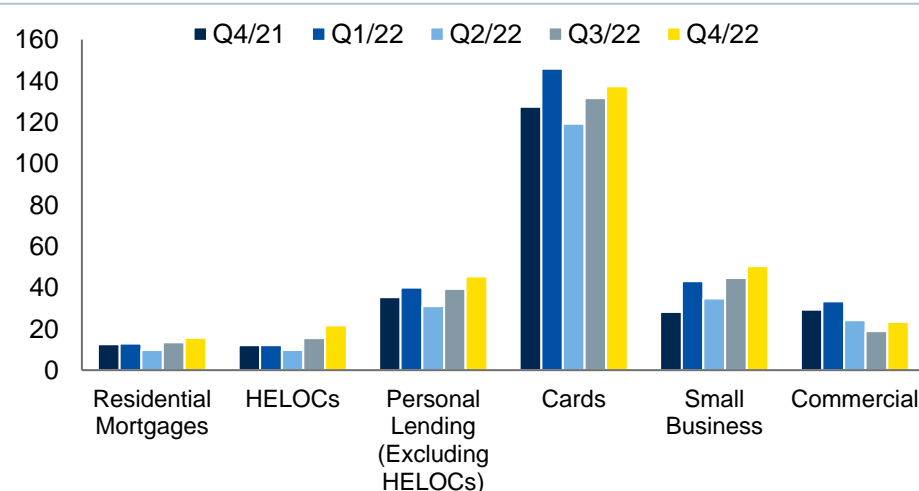
CB Retail FICO Score Distribution (Q4/22)



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



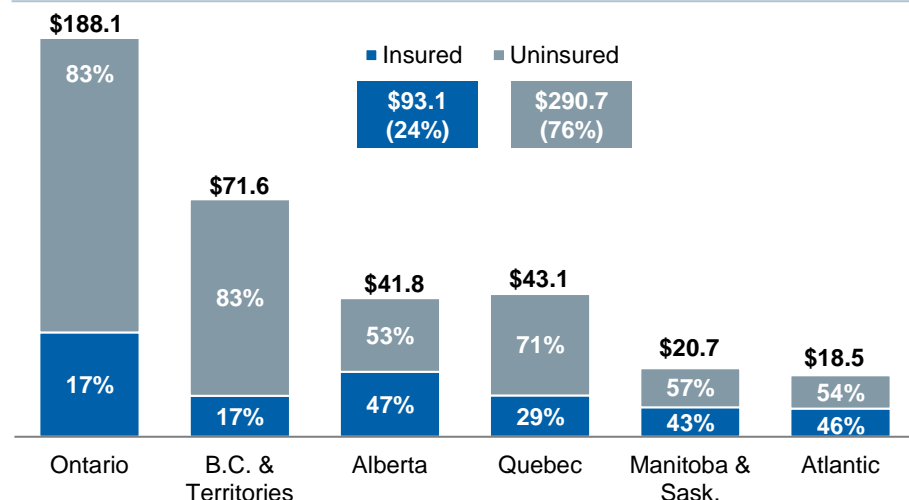
CB 30-89 Day Delinquencies by Product (bps) ⁽⁵⁾



(1) Calculated using average loans and acceptances, net of allowance. (2) Includes \$11.6BN 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) Average FICO is balance weighted for all retail products. (5) Includes restrained accounts, where loans 30-59 days past due resulting from administrative processes, such as mortgage loans, where payments have been restricted pending payout due to sale or refinancing. (6) Personal Lending includes Indirect Lending, Overdraft, Personal Loans and HELOC.

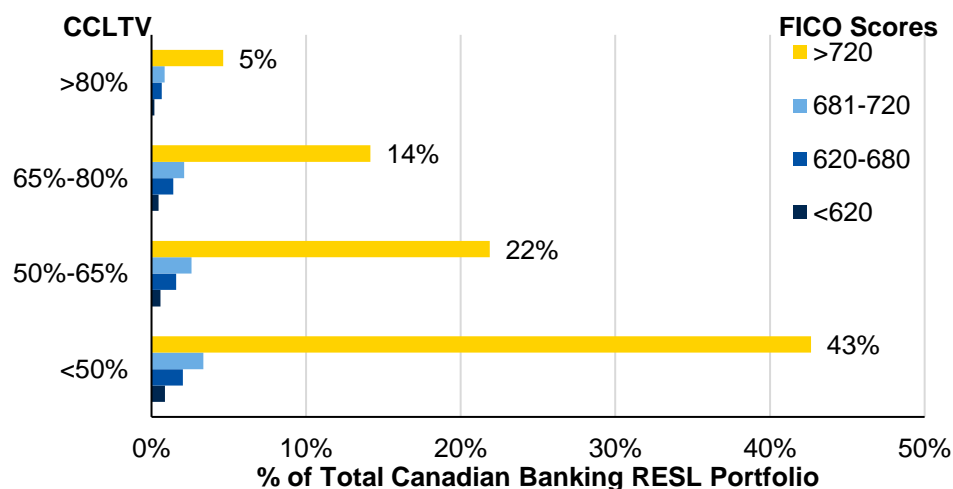
Canadian residential portfolio: Strong underlying credit quality

Canadian Residential Mortgage Portfolio⁽¹⁾ (\$ billions)



CCLTV – Canadian Banking Residential Lending Portfolio only ⁽²⁾					
47%	46%	54%	49%	51%	50%

Canadian Banking RESL Portfolio⁽²⁾



Canadian Banking RESL Portfolio⁽²⁾

	Total \$388BN	Uninsured \$321BN
Mortgage Balance	\$352BN	\$285BN
HELOC Balance	\$36BN	\$36BN
LTV at Origination	72%	69%
CCLTV	48%	48%
GVA	46%	45%
GTA	47%	48%
Average FICO Score	801	805
FICO > 800	51%	52%
CCLTV > 80% & FICO < 680	0.83%	0.31%
90+ Days Past Due⁽³⁾	11 bps	8 bps
GVA	7 bps	6 bps
GTA	5 bps	4 bps
Average Duration		
Remaining Mortgage Amortization	20 years	21 years
Original Term	45 months	44 months
Remaining Term	31 months	32 months
Portfolio Mix		
Variable Rate Mortgage	34%	38%
Fixed Rate Mortgage	66%	62%
Owner Occupied ⁽⁴⁾	87%	84%
Non-Owner Occupied ⁽⁴⁾	13%	16%
Detached	73%	74%
Condo	12%	12%

(1) Canadian residential mortgage portfolio of \$384BN comprised of \$352BN of residential mortgages in Canadian Banking, \$3BN in other Canadian business platforms, \$12BN of mortgages with commercial clients (\$9BN insured) and \$17BN of residential mortgages in Capital Markets held for securitization purposes (all insured). (2) Real estate secured lending includes residential mortgages and HELOCs. Based on \$352BN in residential mortgages with non-commercial clients and \$36BN 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. (3) The 90+ day past due rate includes all accounts that are either 90 days or more past due or are in impaired status. (4) Denominator excluding balance with missing occupancy information.

Allowance for Credit Losses: Prudently reserved

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

Product	Pre-Pandemic Q1/20	Peak Total ACL Ratio Q4/20	Q4/21	Q1/22	Q2/22	Q3/22	Q4/22
Residential mortgages ⁽¹⁾	0.12%	0.15%	0.11%	0.10%	0.10%	0.10%	0.10%
Other Retail	1.61%	2.34%	1.73%	1.68%	1.51%	1.57%	1.63%
Personal	1.03%	1.42%	1.15%	1.10%	0.98%	1.03%	1.07%
Credit cards	4.35%	7.07%	4.91%	5.02%	4.26%	4.28%	4.34%
Small business ⁽²⁾	1.19%	2.44%	1.47%	1.50%	1.48%	1.51%	1.53%
Retail	0.52%	0.70%	0.51%	0.49%	0.44%	0.45%	0.47%
Wholesale ^(1,2)	0.58%	1.33%	0.83%	0.80%	0.61%	0.59%	0.57%
Total ACL	0.53%	0.89%	0.60%	0.58%	0.49%	0.49%	0.50%

Loans & Acceptances by Product^(3,4)



(1) Excludes any loans held at FVTPL, which are not subject to impairment: Residential mortgages (Q4/22:\$448MM; Q3/22:\$340MM; Q2/22:\$298MM; Q1/22:\$240MM, Q4/21:\$241MM, Q4/20:\$253MM, Q1/20:\$534MM); Wholesale (Q4/22:\$10.1BN; Q3/22:\$10.9BN, Q2/22:\$11.4BN, Q1/22:\$13.2BN, Q4/21:\$11.2BN, Q4/20:\$8.6BN, Q1/20:\$10.7BN). (2) In Q2/21, ~\$5BN of loans previously classified as Commercial was reclassified as Small Business loans. (3) Excludes loans not subject to impairment (loans held at FVTPL). (4) Totals may not add due to rounding.

Technology @ RBC



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

Creating More Value for Clients

- **8.4MM** active digital users⁽¹⁾
- **3.3MM+** clients connected through **MyAdvisor** to a personalized plan
- **6.1MM** active mobile clients⁽¹⁾ on the **RBC Mobile** app

Data & Artificial Intelligence Insights

- **4 Borealis AI** labs connected with top universities across Canada, with **40+** PhDs
- **3.0BN+** insights read by clients on **NOMI** in the **RBC Mobile** app⁽²⁾

Driving Efficiency & Operational Excellence

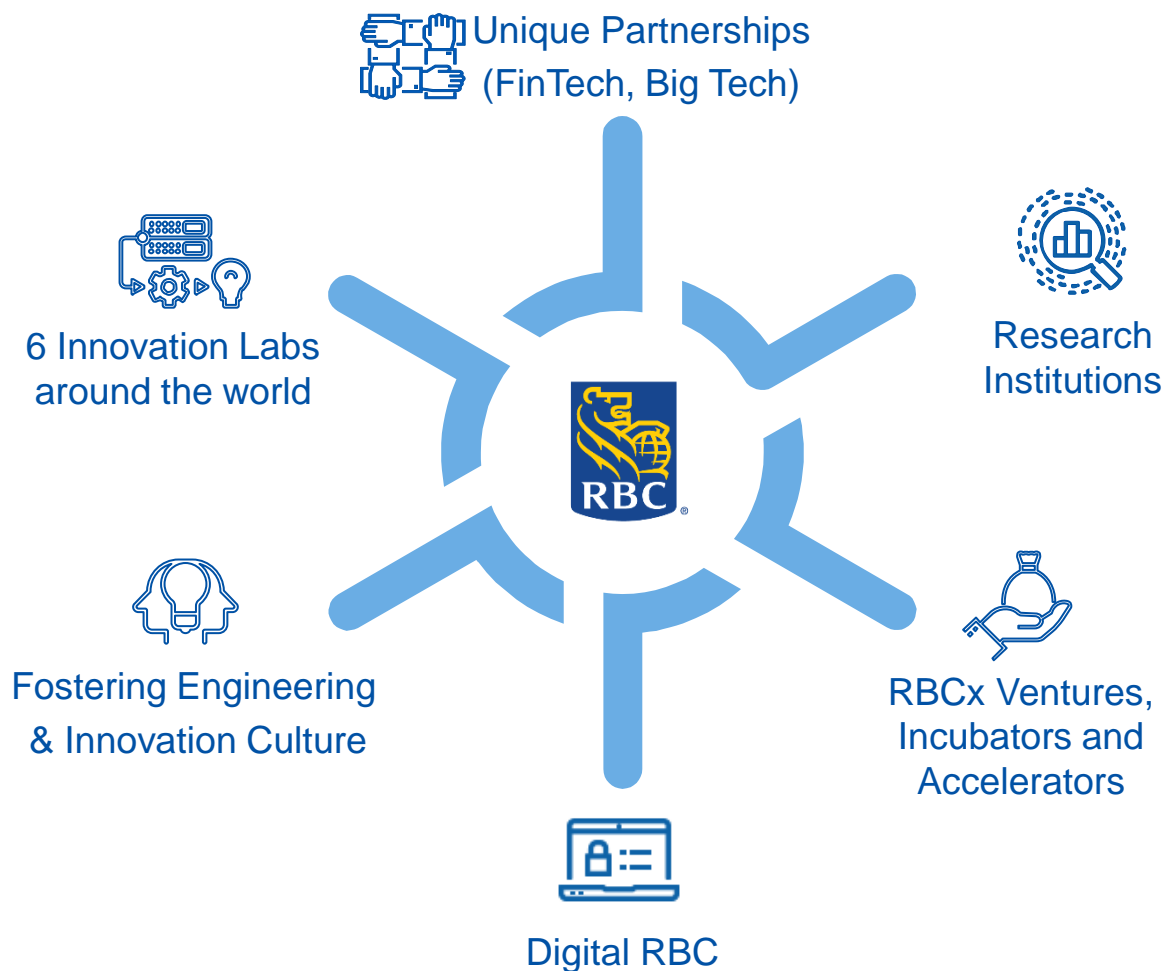
- **632MM** client transactions daily⁽³⁾

Innovation Ecosystem & Partnerships

- **6** innovation labs globally
- **11 RBCx Ventures** in market
- **#1**⁽⁴⁾ workplace in Canada to grow your career

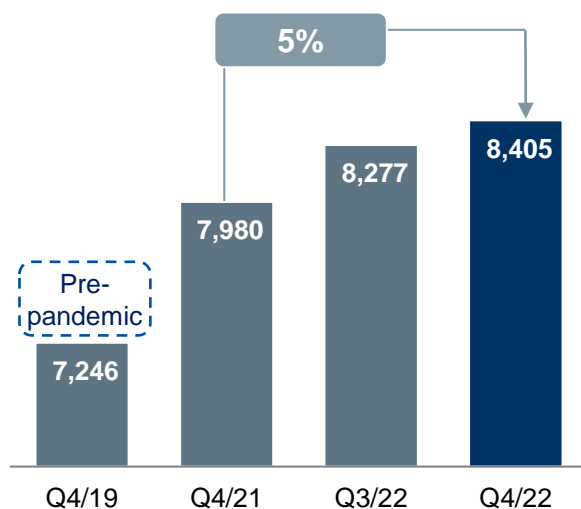
(1) These figures (in millions) represent the 90-Day Active customers in Canadian Banking only and are spot values. (2) Insights read on a launch-to-date basis. (3) Daily average number of transactions. (4) Based on LinkedIn's 2022 Top Companies in Canada list.

We have developed a rich innovative ecosystem that attracts top talent

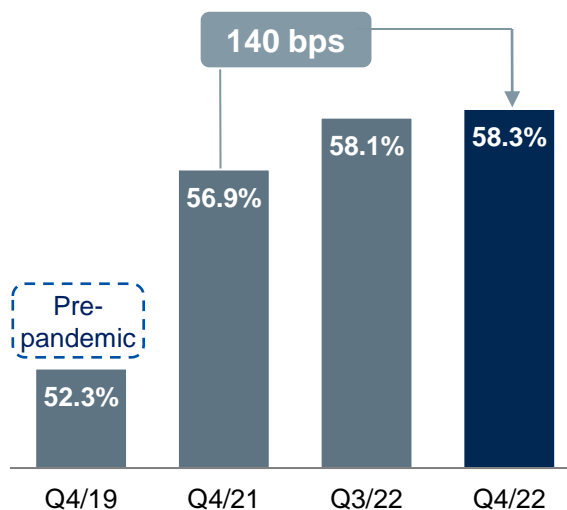


Canadian Banking: Our 14MM+ clients continue to adopt our digital channels

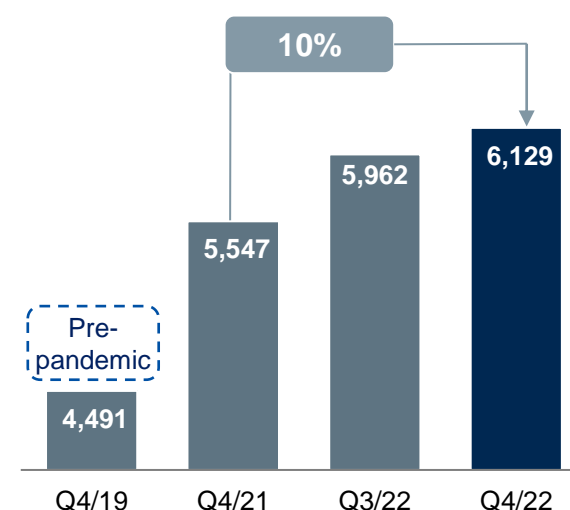
Active Digital Users (000s)⁽¹⁾



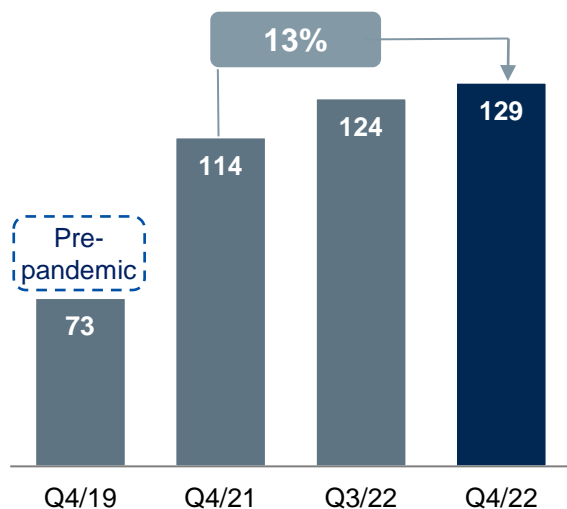
Digital Adoption Rate⁽²⁾



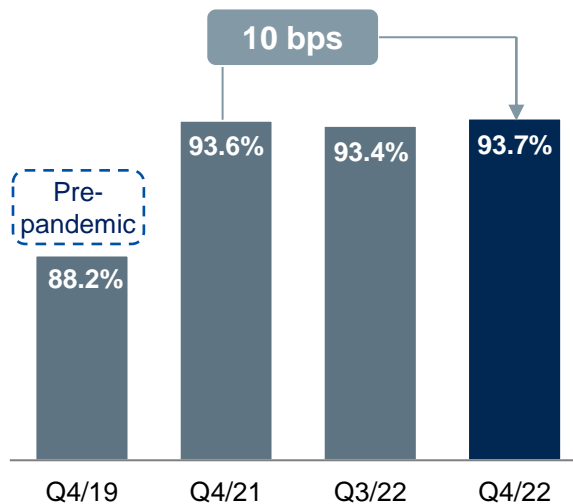
Active Mobile Users (000s)⁽¹⁾



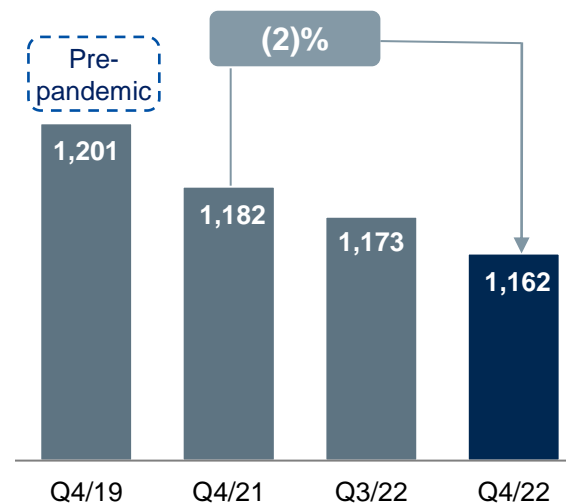
Mobile Sessions (millions)⁽³⁾



Self-Serve Transactions⁽⁴⁾



Branches



(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.

RBCx

RBCx pursues big, bold ideas to empower tech trailblazers to compete & grow

Our four RBCx pillars work together to be the go-to backer of Canadian innovation

Banking

We support tech companies of all sizes, across all stages, with innovative products and services.

Capital

We offer a comprehensive suite of banking and financing solutions for venture capital and growth equity firms.

Platform

Our team of specialists and technologists help our portfolio companies scale and support banking clients in all things marketing, operations, design, and technology.

Ventures

We scale startups and high-growth companies that solve real-world problems and make lives better. The goal – redefine the role of a bank.

Our portfolio of innovative ventures

 arrive[®]
+
prepped

Dr.Bill[®]

 GarbageDay

 Goodside[™]

 MoveSnap[®]

MYDOH[™]

 ojo home^{(1)‡}

 ownr[®]

 Smart Reno

(1) OJO is a third party Ventures collaborator.

Environmental, Social & Governance (ESG)

ESG: Putting our Purpose into practice

Royal Bank of Canada is a purpose-driven, principles-led organization

How we deliver value



Building & attracting talent and driving a diverse & inclusive culture

- Women represented: **51%** of hires⁽¹⁾; **43%** of new executive appointments⁽²⁾
- Black, Indigenous and People of Colour (BIPOC) represented: **43%** of hires⁽¹⁾; **31%** of new executive appointments, surpassing our goal of 30% for the year⁽²⁾
- Employees under 30 globally: **20%** young people⁽³⁾
- Welcomed **1,500+** summer students across the globe, **52%** were BIPOC⁽⁴⁾
- Among Canada's **Top 100** Employers, Canada's Best Diversity Employers and Best Workplaces in 2022⁽⁵⁾⁽⁶⁾



Sustainable finance⁽⁷⁾ and responsible investment

- RBC published its Sustainable Finance Framework⁽⁸⁾, which outlines the approach the bank takes to measure progress against its commitment to provide **\$500 billion** in sustainable financing by **2025**
- Through a risk-sharing, pilot solution with Export Development Canada, RBC will provide up to **US\$1 billion** in financing over the next three years to support Canadian businesses in their transition towards greener business operations



Committed to net-zero emissions and accelerating clean economic growth

- In October 2022, we published our initial interim emissions reduction targets for key sectors: oil & gas, power generation and automotive⁽⁹⁾⁽¹⁰⁾
- Signed our second long-term renewable energy Power Purchase Agreement, advancing our goals to reduce emissions from our global operations by **70%** and to source **100%** of our electricity from renewable and non-emitting sources, both by **2025**
- RBC GAM is a founding signatory to the **Canadian Investor Statement on Climate Change**, which demonstrates the collective ambition and action of Canadian investors in recognizing the need to accelerate the transition towards a net-zero economy⁽¹¹⁾



Preparing youth for the future of work

- \$331+ million** provided through RBC Future Launch®, reaching **5.3 million** Canadian youth through **840+** partner programs since **2017**
- Through our **\$1.6 million** investment in RBC Future Launch® scholarships this year, **500+** young Canadians will have the opportunity to pursue their business and academic passions
- In 2022, **37,000+** participants in the annual RBC Race for the Kids raised **\$9+ million** for **22** youth focused charities across **10** countries

Strong performance in ESG rankings and ratings⁽¹²⁾



Banking industry
ranking in **80th**
percentile



"AA" Rating



Now a Part of **S&P Global**

Overall score **71**
94th percentile

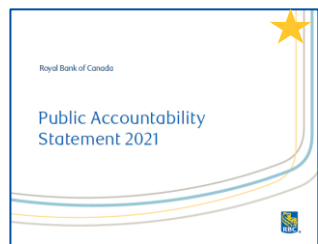
(1) Hires includes new external hires and rehires excluding City National Bank, BlueBay Asset Management and Brewin Dolphin; based on self-identification; excludes summer interns, students and co-ops. BIPOC hires includes Canada and U.S. only. Women hires is global. (2) Represents data for our businesses in Canada governed by the Employment Equity Act. A new executive appointment is the appointment of an internal employee or external hire as a first-time Vice President, Senior Vice President or Executive Vice President. (3) Employees under 30 globally, excluding City National, BlueBay Asset Management and Brewin Dolphin employees. (4) Based on self-identification. (5) MediaCorp Canada Inc. (6) Great Place to Work Institute. (7) Sustainable finance refers to financial activities that take into account environmental, social and governance factors. (8) The Sustainable Finance Framework excludes the practices of RBC GAM, RBC Wealth Management, City National Bank and Brewin Dolphin Holdings PLC and its subsidiaries, are also not included in scope, but may be included in future versions of the Framework. (9) Please refer to our 2022 Net-Zero Report for more information. (10) Our 2030 interim emissions reduction target methodology excludes the practices of: (a) RBC Global Asset Management (RBC GAM), the asset management division of Royal Bank of Canada (the "Bank"), and RBC Wealth Management (RBC WM). RBC GAM includes the following wholly owned indirect subsidiaries of the Bank: RBC Global Asset Management Inc. (including Phillips, Hager & North Investment Management), RBC Global Asset Management (U.S.) Inc., RBC Global Asset Management (UK) Limited, RBC Global Asset Management (Asia) Limited and BlueBay Asset Management LLP. RBC WM includes the following affiliates: RBC Dominion Securities Inc. (Member-Canadian Investor Protection Fund), RBC Direct Investing Inc. (Member-Canadian Investor Protection Fund), Royal Mutual Funds Inc., RBC Wealth Management Financial Services Inc., Royal Trust Corporation of Canada and The Royal Trust Company, which are separate but affiliated subsidiaries of the Bank; and (b) Brewin Dolphin Holdings PLC and its subsidiaries. (11) Joined in 2021. (12) Based on our 80.25 average percentile ranking and rating compiled from our priority ESG rating agencies and indices: Sustainalytics, MSCI ESG Rating, FTSE4Good and S&P Global's Corporate Sustainability Assessment (informing the DJSI) – FTSE4Good and MSCI ratings reflect 2021 scores. The ESG rankings and ratings market is evolving and is not currently regulated in Canada or the U.S. ESG rating agencies and indices may use different data, metrics, models and/or methodologies. ESG ranking and ratings are not necessarily comparable, and those given to RBC are for information only. Investors and other stakeholders should carefully consider the foregoing factors and other uncertainties when reviewing these rankings and ratings.

Our suite of ESG disclosures

Annual voluntary and regulatory ESG performance disclosures



ESG Performance Report



Public Accountability Statement



TCFD Report



RBC I&TS Luxembourg CSR Report



City National CSR Report



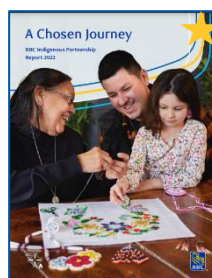
Corporate Governance and Responsible Investment Annual Report



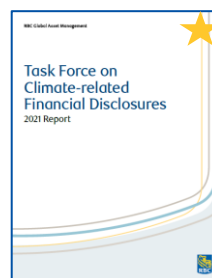
RBC Green Bond Report



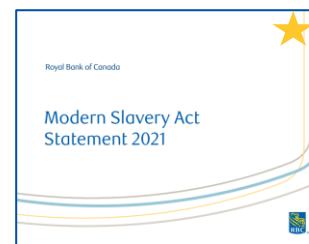
RBC Diversity & Inclusion Report



A Chosen Journey Report



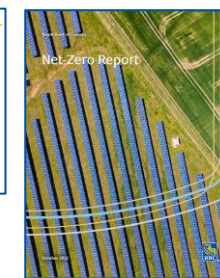
RBC GAM TCFD Report



Modern Slavery Act Statement

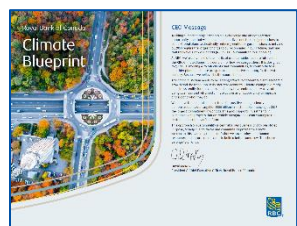


CDP Response

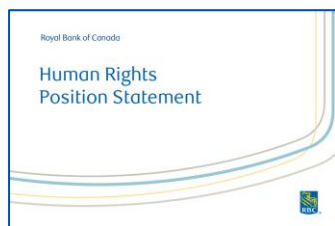


RBC Net-Zero Report

Position statements, frameworks and policy and program “backgrounders”



RBC Climate Blueprint



RBC Human Rights Position Statement



About Corporate Citizenship suite of policy and program “backgrounders”



Policy Guidelines for Sensitive Sectors and Activities



Sustainable Finance Framework



RBC Impact Measurement Framework

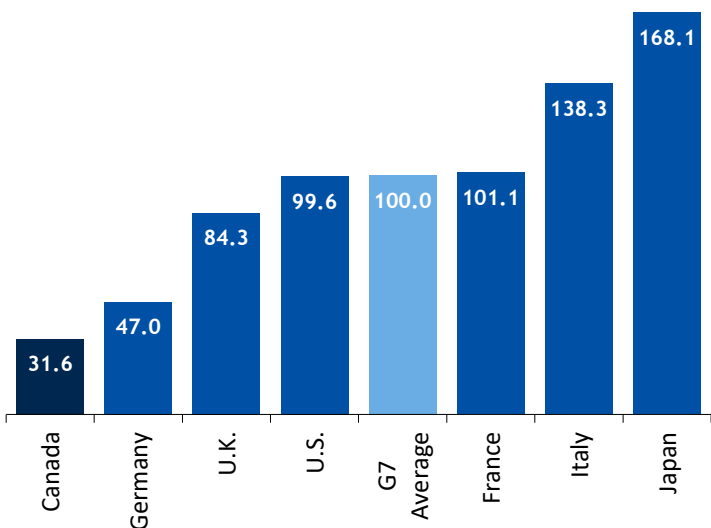
★ Updated annually, FY21 released in CY2022 to date

Economic Backdrop

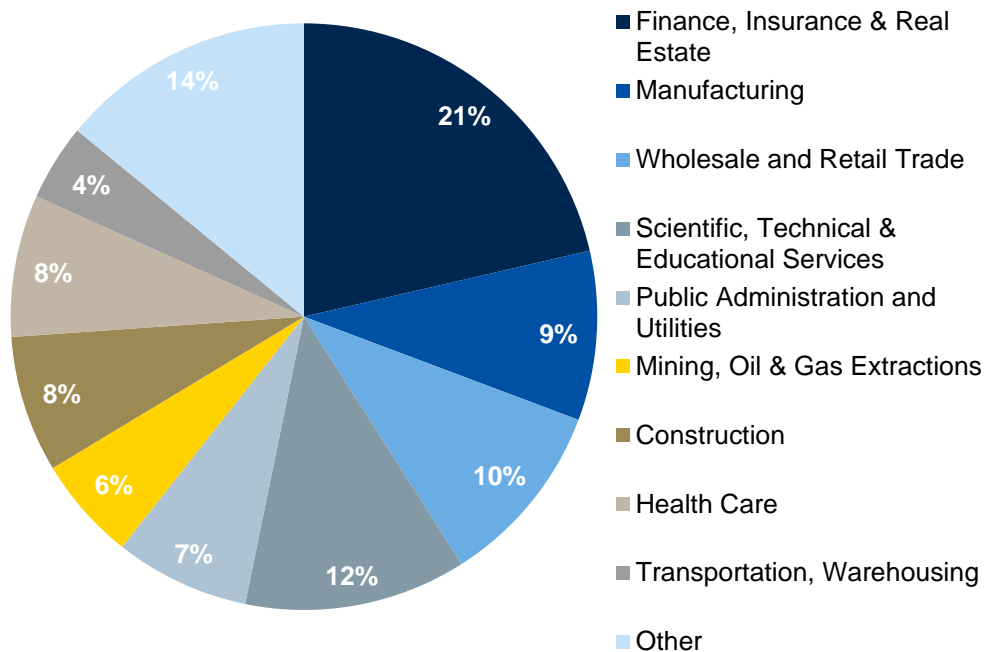
Canada's strong fiscal position

- 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⁾

Net Debt as % of GDP⁽¹⁾
(2021)



Canadian GDP by Industry⁽²⁾
(August 2022)

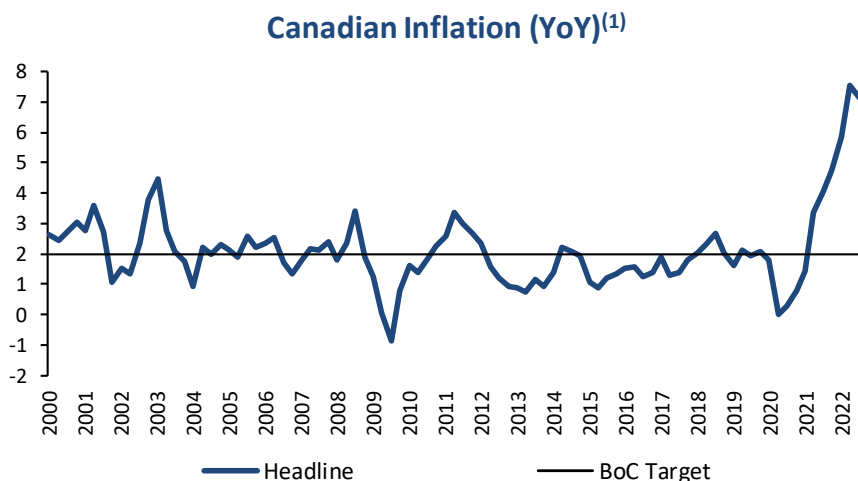


(1) Net debt refers to General Government net debt. International Monetary Fund October 2022 Fiscal Monitor. (2) Statistics Canada, RBC Economics Research.

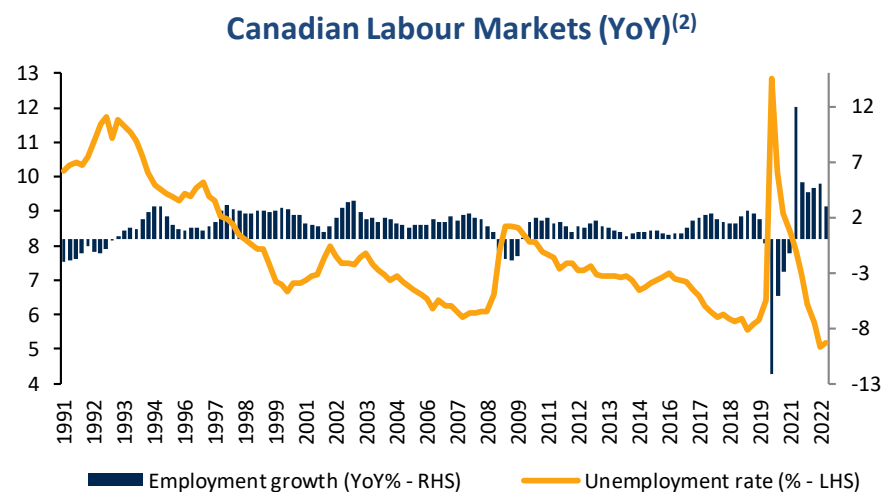
Central Banks continue front-loaded hiking cycle to combat inflation

- Decades-high inflation and tight labour markets have pushed central banks to aggressively hike interest rates. The Bank of Canada has hiked their policy rate by 350 basis points since March, including a 50 basis point increase in their last policy decision in October. We anticipate the overnight rate will reach 4.0% by the end of calendar 2022.
- Global inflationary pressures have been easing but price pressures are still too high and broad to prevent further central bank interest rate hikes. The initial surge in some commodity prices following the Russian invasion of Ukraine has reversed and lower gasoline prices are helping to cool soaring inflation. Shipping times and costs are falling from pandemic highs and consumer spending is plateauing. However, rising inflation in domestically-produced services is offsetting easing in inflation for goods, pushing central banks to continue raising interest rates.
- A continued rebound in the hospitality and tourism sector alongside elevated commodity prices will support Canadian economic growth in the near-term. However, widespread labour shortages are capping production and higher interest rates (and rising debt servicing costs) will dampen consumer purchasing power further. Eroding wealth from falling home prices (expected to decline 14% from peak to trough) and worsening equity market performance will weigh on consumer spending as well in the year ahead.
- We expect Canadian GDP growth to slow to 0.2% in 2023 following a 3.7% increase in 2022 and 4.5% increase in 2021. We expect a moderate recession for Canada in the first half of 2023 as higher interest rates and inflation weigh on economic growth.

Canadian Inflation (YoY)⁽¹⁾



Canadian Labour Markets (YoY)⁽²⁾



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

2022 Economic Outlook

Projected Economic Indicators for 2022⁽¹⁾

	GDP Growth	Inflation	Unemployment Rate	Interest Rate (3 mth T-bills)	Current Account Balance/GDP ⁽²⁾	Budget Surplus/GDP ⁽³⁾
Canada	3.2%	6.8%	5.4%	3.9%	0.5%	(2.2)%
U.S.	1.8%	8.1%	3.7%	4.7%	(3.9)%	(4.0)%
Euro Area	3.0%	8.0%	6.9%	N.A.	1.0%	(3.8)%

Canada

- Canadian headline inflation peaked alongside global commodity prices at 8.1% in June and has since trended lower as gasoline prices fell and global shipment backlogs eased. Inflation is still close to multi-decade highs.
- There have been very early signs that the breadth of inflation pressures may be easing. But consumer price growth is still too high and broad to prevent further interest rate increases. We expect the Bank of Canada's overnight rate to reach 4% in December and stay at that level through 2023.
- GDP growth is likely to slow in the back half of calendar 2022 and into 2023 as inflation and higher interest rates begin to weigh on consumer purchasing power (consumer spending is already plateauing) and the economy bumps up against capacity constraints. We anticipate Canada will slip into a moderate recession in the second quarter of 2023. Labour markets remain extremely tight but the unemployment rate is expected to drift higher from very low levels currently.

U.S.

- The U.S. economy continues to bump up against capacity limits. The unemployment rate remains very low at 3.7% as of October after falling to pre-pandemic levels at 3.5% as of July. Payroll employment has increased by over 4 million jobs year-to-date through October. The pace of employment growth has slowed but has remained strong in recent months.
- Although the current labour market backdrop is strong, the U.S. Federal Reserve continues to respond to surging inflation with aggressive interest rate hikes. We expect the federal funds rate target range to reach 4.75%-5.0% in the first calendar quarter of 2023. The U.S. economy is expected to grow 1.8% in 2022, but higher interest rates and elevated price growth are expected to reduce household purchasing power and add to growth headwinds. We anticipate the U.S. economy will slip into a moderate recession in the first half of 2023.

Euro Area

- The Euro area has been more significantly impacted by the Russian invasion of Ukraine due to close ties with that region. The conflict continues to drive concerns surrounding supply chains and energy supply, and inflation has begun to weigh on consumption. The European Central Bank has also adopted the tactic of "front-loading" its hiking cycle, having hiked rates by 250 basis points since the beginning of the year. We anticipate the deposit rate will reach 2.5% by the first quarter of 2023. We expect Euro area GDP to increase 3.0% in 2022 but slip into a moderate recession in the fourth quarter of this year and contributing to a 0.3% contraction in output in 2023.

(1) RBC Economics as of November 10, 2022 and reflects forecasts for calendar 2022. (2) RBC Economics Research, IMF WEO (November, 2022). (3) IMF Fiscal Monitor (October, 2022).

Canadian Housing Market

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

	Canada ⁽¹⁾	U.S. ⁽¹⁾
Regulation	<ul style="list-style-type: none"> Government influences mortgage underwriting policies primarily through control of insurance eligibility rules Fully insured if loan-to-value (LTV) is over 80% <ul style="list-style-type: none"> Must meet 5-year fixed rate mortgage standards Government-backed, on homes under \$1MM Down-payment over 20% on non-owner occupied properties Canada Mortgage and Housing Corporation (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 	<ul style="list-style-type: none"> Agency insured only if conforming and LTV under 80% No regulatory LTV limit – can be over 100% Not government-backed if private insurer defaults
Consumer Behaviour	<ul style="list-style-type: none"> Mortgage interest not tax deductible Greater incentive to pay off mortgage 	<ul style="list-style-type: none"> Mortgage interest is tax deductible Less incentive to pay down mortgage
Lender Behaviour	<ul style="list-style-type: none"> Strong underwriting discipline; extensive documentation Most mortgages are held on balance sheet Conservative lending policies have historically led to low delinquency rates 	<ul style="list-style-type: none"> Wide range of underwriting and documentation requirements Most mortgages securitized
Lenders' Recourse	<ul style="list-style-type: none"> Ability to foreclose on non-performing mortgages, with no stay periods Full recourse against borrowers⁽²⁾ 	<ul style="list-style-type: none"> Stay period from 90 days to one year to foreclose on non-performing mortgages 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

October 2022 – Government of Ontario

- Raised the non-resident speculation tax 20% to 25%

April 2022 – Government of Canada

- 2022 federal budget announced a two-year ban on foreign buyers of non-recreational residential properties
- Anti-flipping tax (effective January 1, 2023) applying to capital gains made on principal residences bought and sold within less than 12 months
- All assignment sales of newly constructed homes to become fully taxable for GST/HST purposes on May 7, 2022
- Federal government will engage with provinces and territories to develop and implement a buyer's bill of rights

March 2022 – Government of Ontario

- Expanded the non-resident speculation tax to the entire province and raised the rate from 15% to 20%

March 2022 – Government of Nova Scotia

- Introduced a 5% non-resident provincial deed transfer tax (effective April 1, 2022)

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%

Legislation and policies – promoting a healthy Canadian housing market

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

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)

Legislation and policies – promoting a healthy Canadian housing market

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

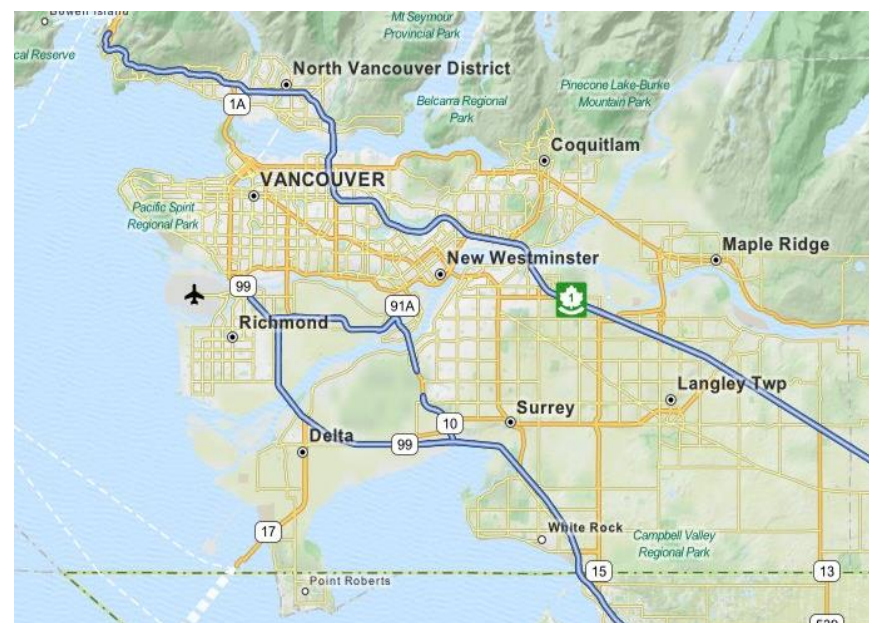
The Toronto and Vancouver downtown condo markets

- 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⁾
 - In 2021, 8.3+ million people, or almost one-quarter (23.0%) of the population, were, or had ever been, a landed immigrant or permanent resident in Canada – the highest among the G7⁽¹⁾
 - 53.4% of recent immigrants to Canada settled in Toronto, Montreal or Vancouver⁽¹⁾
- RBC’s exposure to condo development is limited – about 3.8% of our Canadian commercial loan book⁽²⁾
 - Condo exposure is 12% of Canadian residential lending portfolio⁽²⁾⁽³⁾

“Green Belt” Surrounding Greater Toronto Area



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

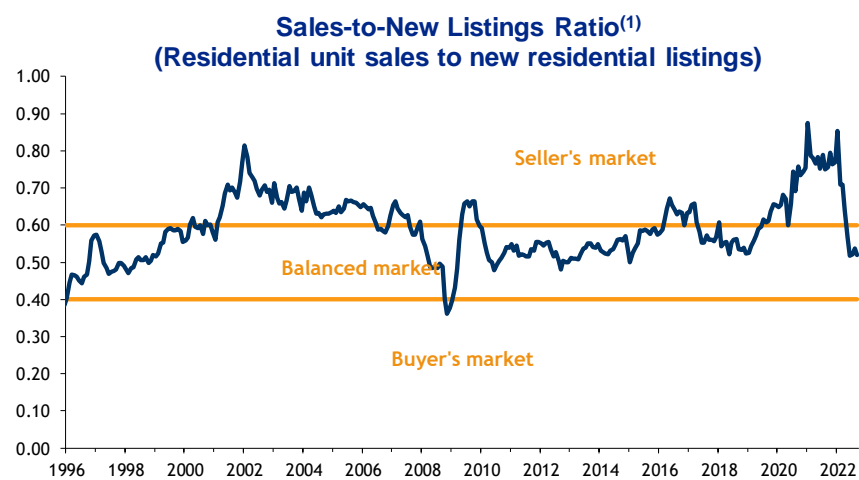


(1) Statistics Canada, 2021 Census. (2) As at October 31, 2022. (3) Based on \$352BN in residential mortgages with non-commercial clients and \$36BN in HELOC in Canadian Banking. Based on spot balances.

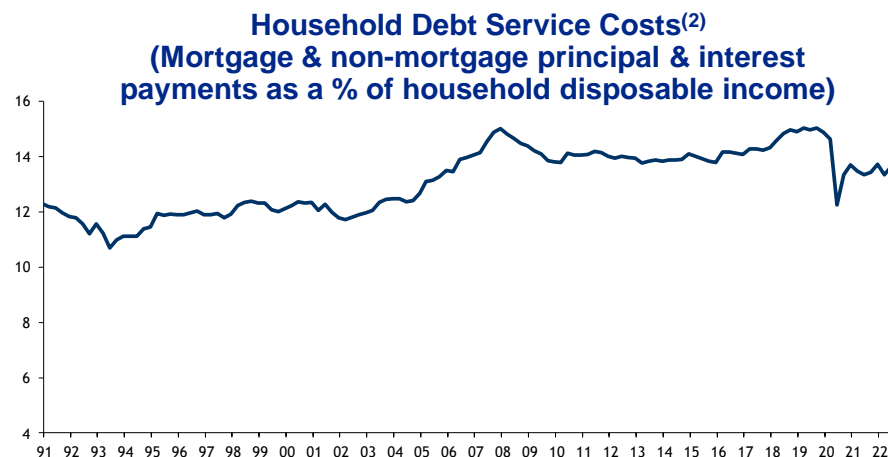
Canada's housing market: higher interest rates significantly cooling activity

- Pent-up demand, exceptionally low interest rates, changing housing needs, and high household savings powered Canada's housing market to unsustainable highs during the pandemic. Very strong activity and scarce inventories have kept prices on a steep upward trajectory up to the opening months of 2022.
- The spike in interest rates since March has however drastically changed the landscape for the market, causing steep corrections in Ontario and British Columbia, and dampening the outlook elsewhere in the country. Extremely poor affordability in Vancouver and Toronto, and increasingly challenging levels in Montreal, Ottawa, Halifax and other markets have sent buyers to the sidelines. Our expectation for a further rise in interest rates — we anticipate that the Bank of Canada will hike its policy rate to 4.0% by year-end from 0.25% at the beginning of March — will keep activity quiet in the near-term. More buyers will no longer be able to qualify for a mortgage, while others will see their purchasing budget reduced further. We expect the market downturn to continue into early-2023.
- Nonetheless, Canada's longer-term housing market fundamentals continue to be solid, and should protect against an all-out market collapse. Immigration (for which targets have just been raised further to 500,000 annually by 2025) will be a major driver of housing demand for years to come.
- 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.

Previously tight demand-supply conditions have eased



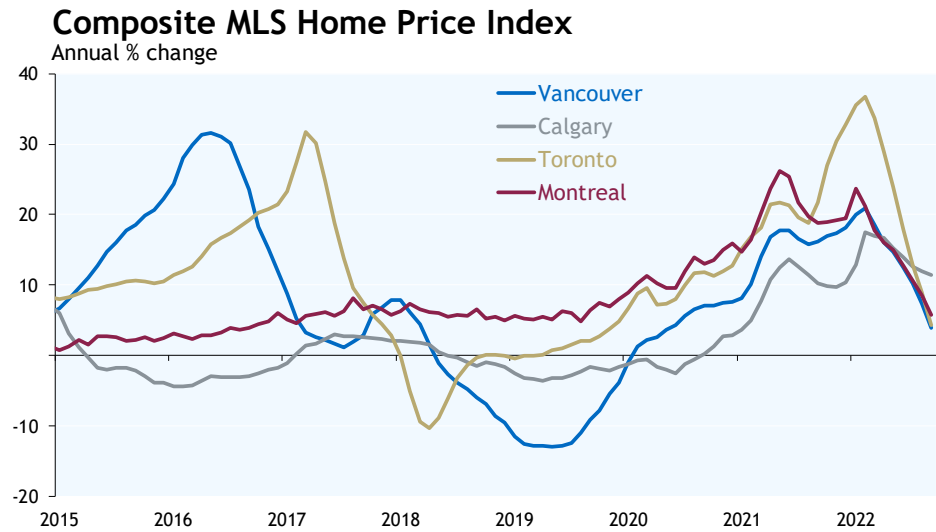
Higher interest rates have yet to upend debt service costs



(1) Canadian Real Estate Association, RBC Economics. (2) Statistics Canada, RBC Economics.

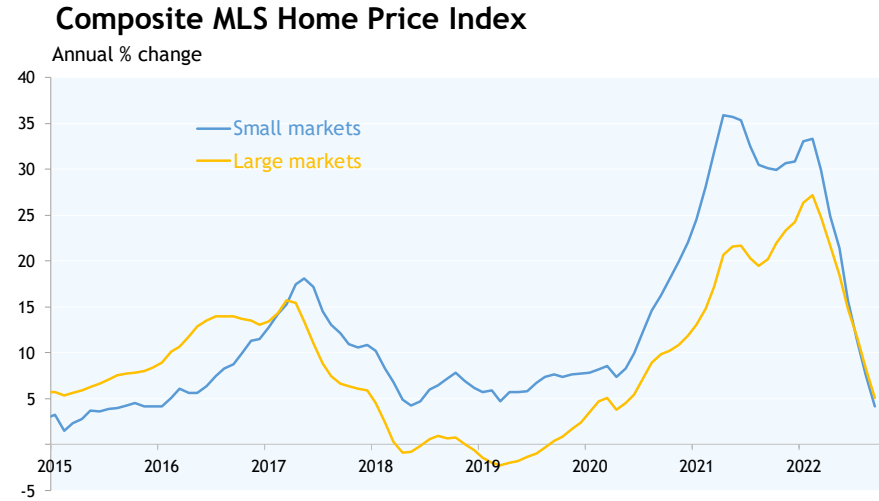
Property values are coming down in many parts of the country

Home prices peaked earlier this year in most markets...



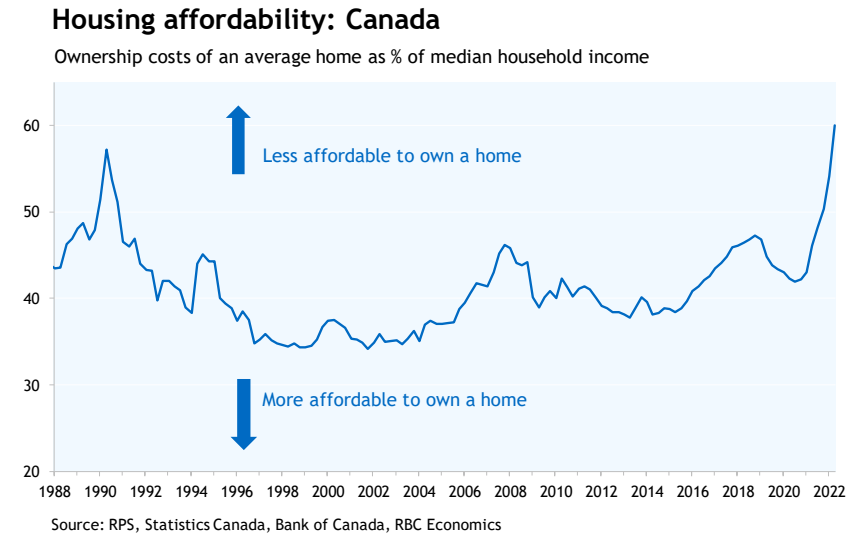
Source: Canadian Real Estate Association, RBC Economics

...including smaller areas



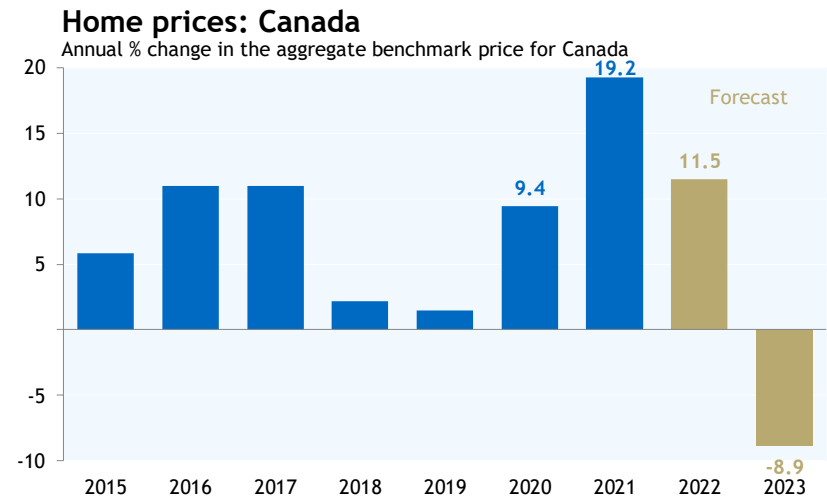
Source: Canadian Real Estate Association, RBC Economics

A sharp deterioration in affordability has cooled demand...



Source: RPS, Statistics Canada, Bank of Canada, RBC Economics

...and will keep driving prices down in the near term

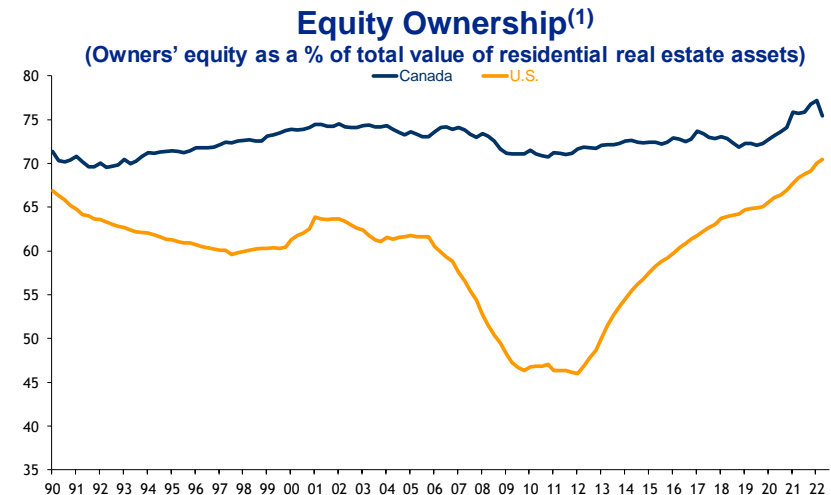


Source: RPS, RBC Economics

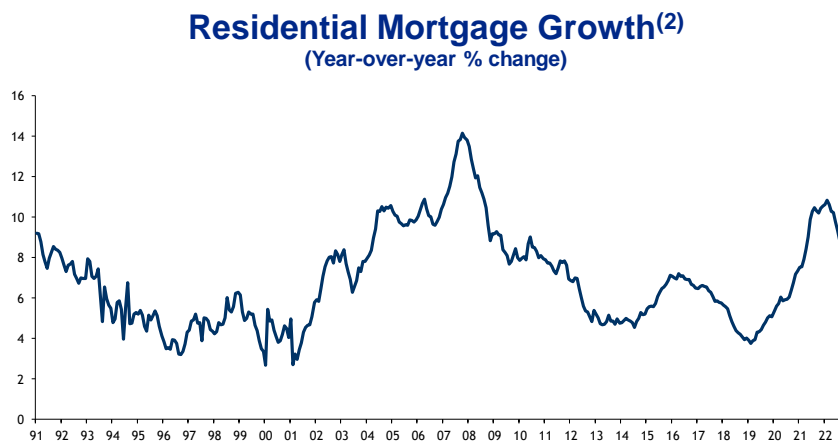
Canadians have significant equity ownership in their homes

- Canadians carry a significant and growing share of equity in their homes
- The pace of residential mortgage accumulation reached a 14-year high in the early months of 2022, but has since moderated amid the housing market downturn
- Mortgage delinquency rates remain exceptionally 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

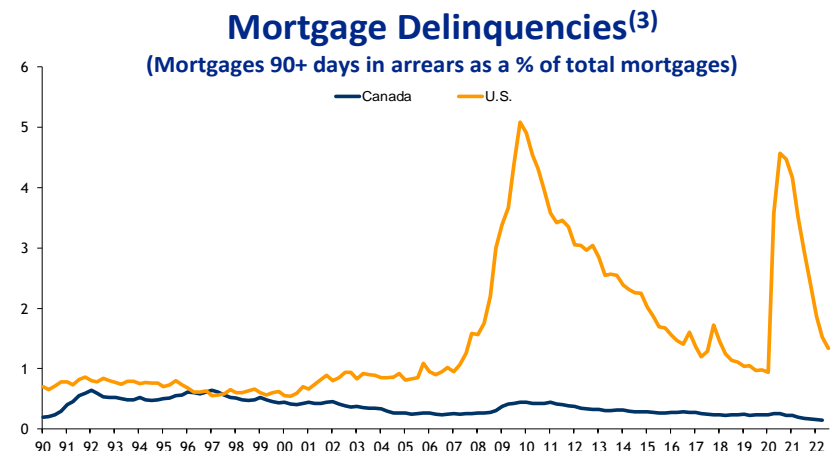
Canadians maintain high levels of equity in their homes



Growth in residential mortgages is slowing again



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

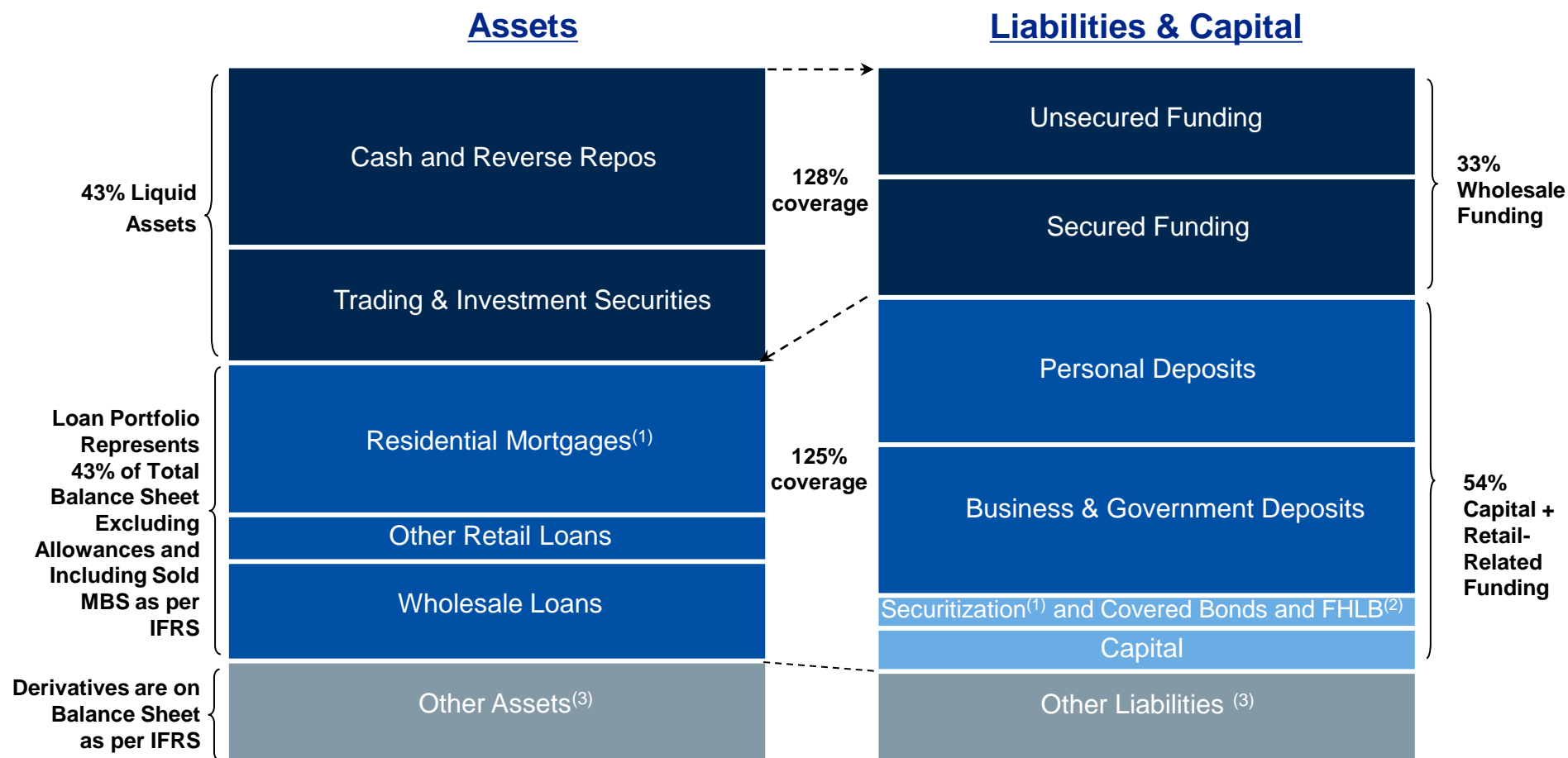


(1) Statistics Canada, Federal Reserve Board, RBC Economics. (2) Bank of Canada, RBC Economics. (3) Canadian Bankers Association, Mortgage Bankers Association, RBC Economics.

Appendix A – Liquidity & Funding

Strength of a high-quality liquid balance sheet

\$1,917 Billion
(as at October 31, 2022)



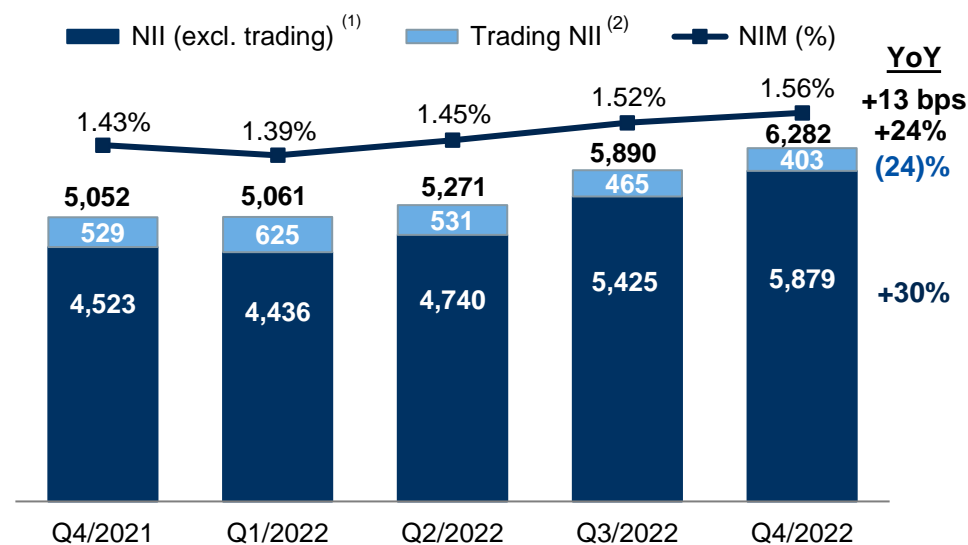
(1) Securitized agency mortgage-backed securities (MBS) are on balance sheet as per IFRS. (2) Federal Home Loan Banks (FHLB). (3) Other assets include \$154BN of derivative-related assets, largely offset by derivative-related liabilities in Other liabilities. Under IFRS derivative amounts without master netting agreements cannot be offset and the gross derivative assets and liabilities are reported on balance sheet.

Net interest income: Margins continue to expand as benchmark rates rise

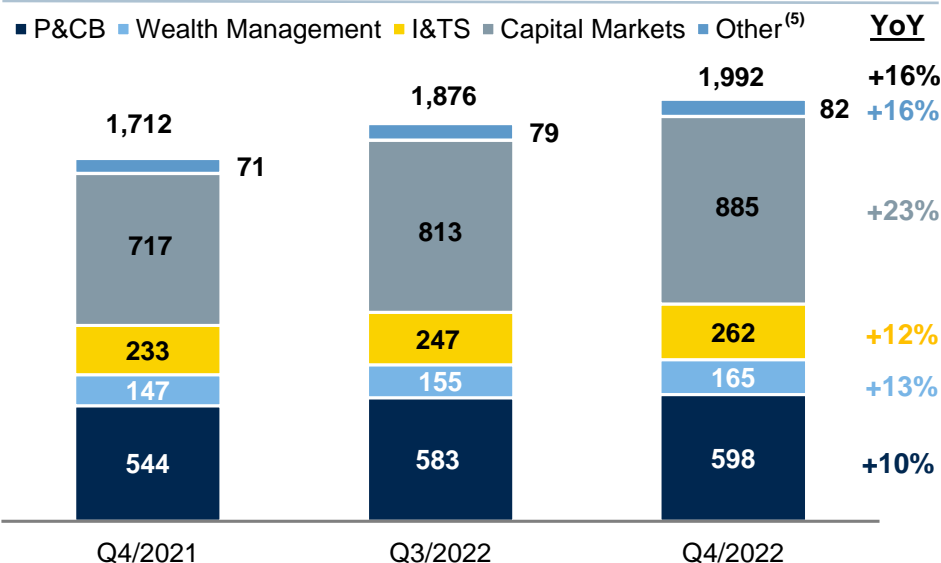
Summary

- Net interest income up 24% YoY due to higher spreads and strong volume growth in Canadian Banking and Wealth Management
 - Net interest income (ex-trading)⁽¹⁾ up 30% YoY
- All-bank NIM on average earning assets⁽²⁾ was up 13 bps YoY (up 4 bps QoQ)
 - NIM (ex-Trading Assets, Trading net interest income and Insurance Assets) on total average assets⁽³⁾ was up 25 bps YoY (up 8 bps QoQ)
 - Canadian Banking NIM up 28 bps YoY, up 10 bps QoQ
 - CNB NIM up 81 bps YoY, up 30 bps QoQ
 - The cost of funding of certain I&TS transactions is recorded in interest expense while related gains are recorded in Other revenue

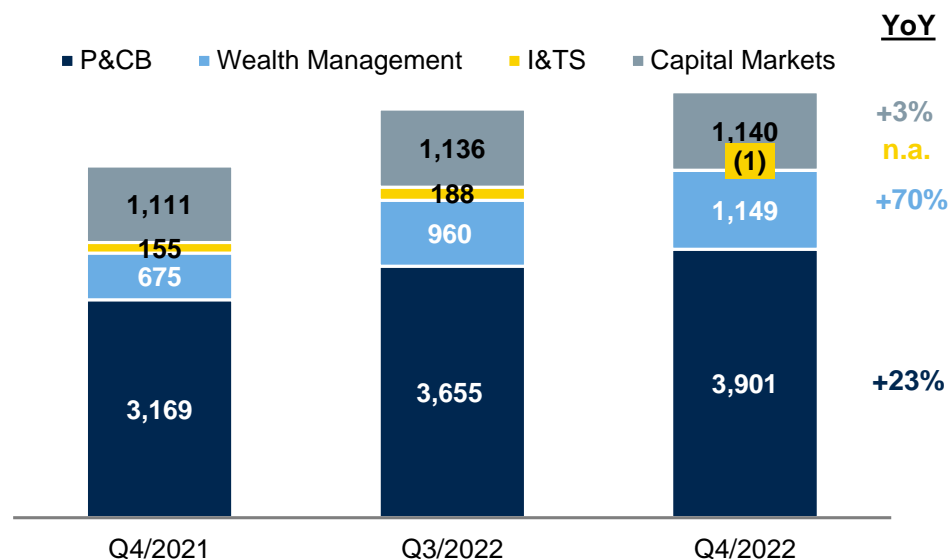
All-Bank Net Interest Income (\$ millions)



Average Assets by Business Segments (\$ billions)⁽⁴⁾



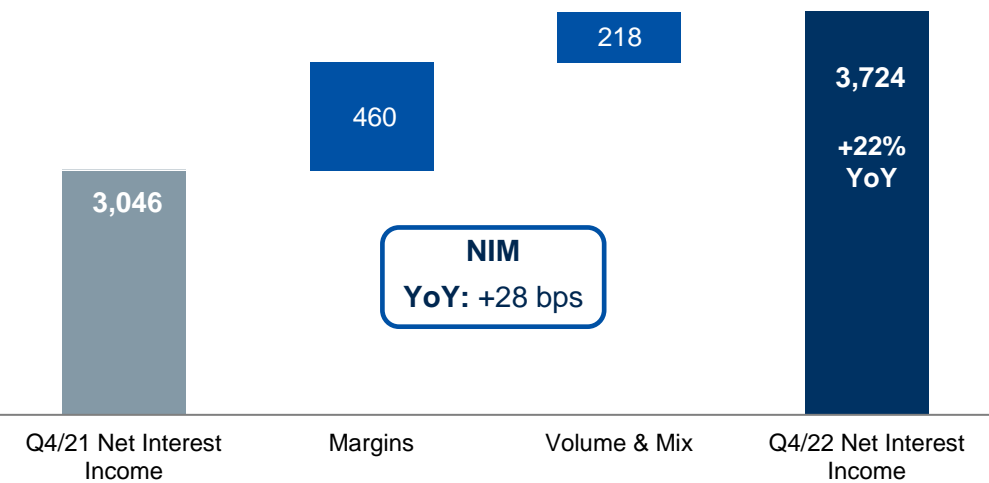
Net Interest Income by Business Segments (\$ millions)⁽⁴⁾



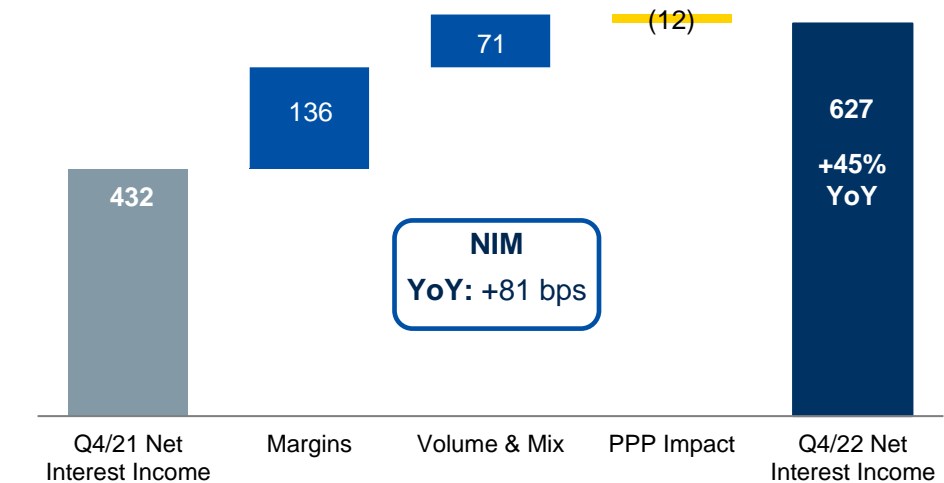
(1) Net interest income (ex-trading) is calculated as net interest income less trading net interest income. (2) Net interest margin (NIM) (average earning assets, net) is calculated as net interest income divided by average earning assets, net. (3) NIM (ex-Trading Assets, Trading net interest income and Insurance Assets) on total average assets is calculated as net interest income ex trading divided by total average assets less trading assets and insurance assets. (4) Totals may not add due to rounding. (5) Includes Insurance and Corporate Support.

Net Interest Income: Higher interest rates continue to benefit net interest margin

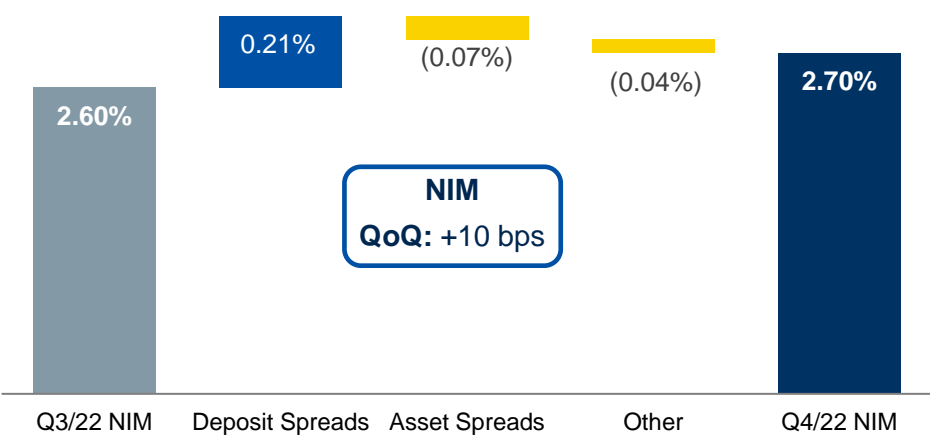
Canadian Banking Net Interest Income (\$ millions)



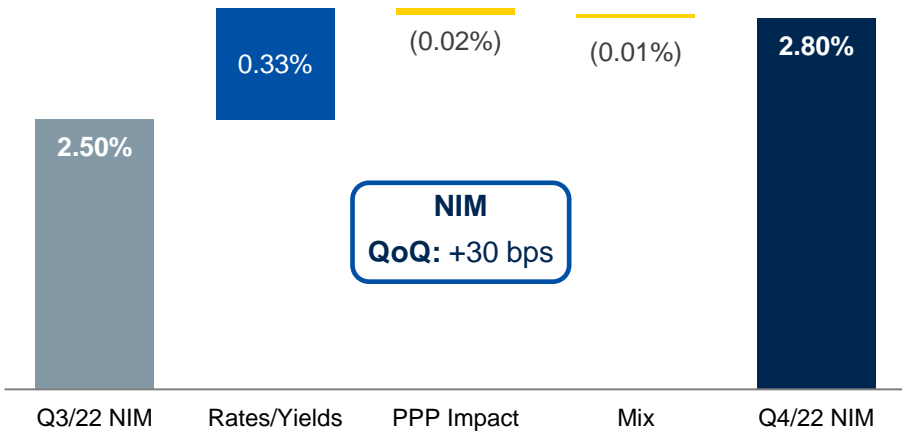
CNB Net Interest Income (US\$ millions)



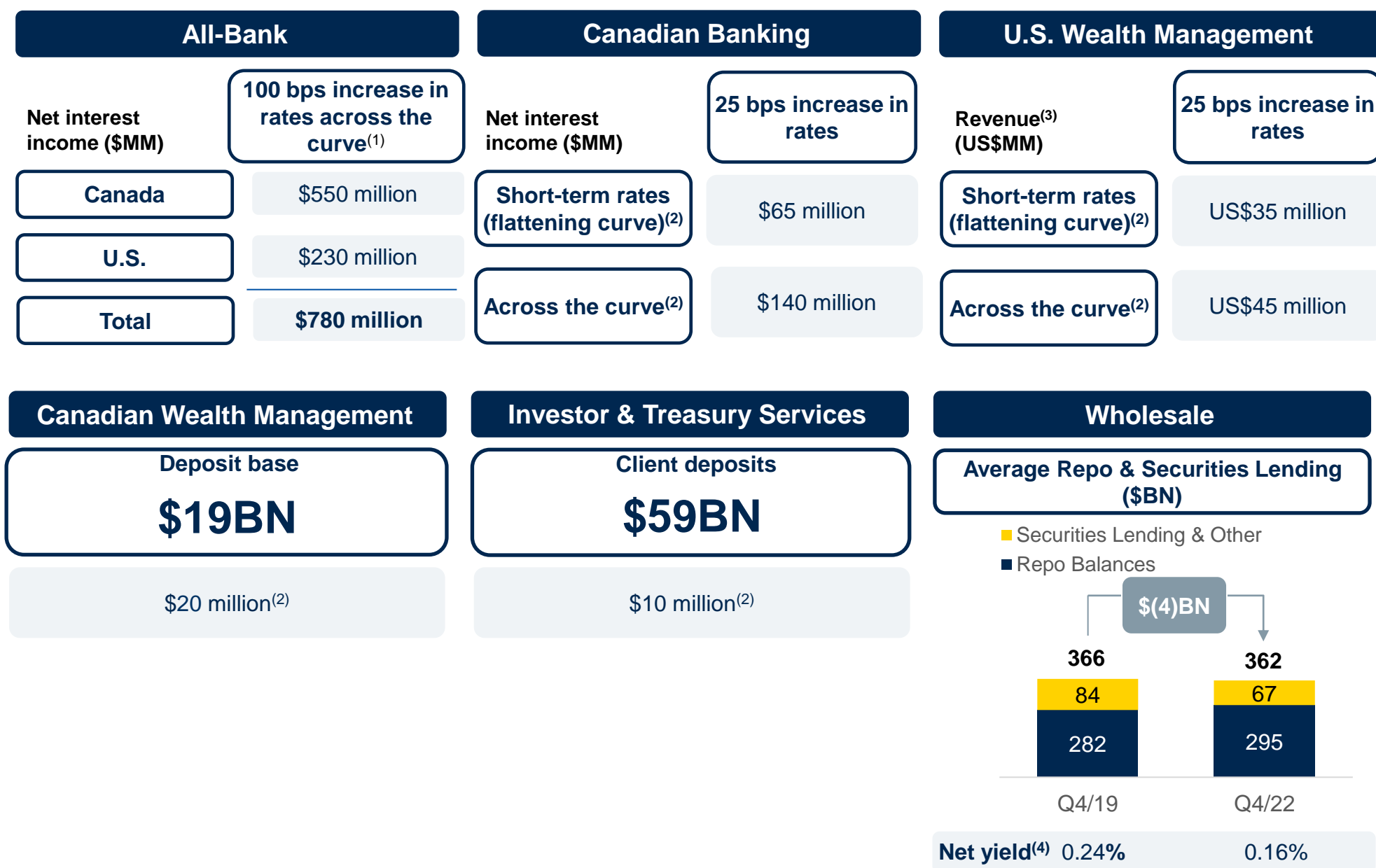
Canadian Banking NIM on Average Earning Assets



CNB NIM on Average Earning Assets



Interest rate sensitivity: Remain well-positioned for rising interest rates



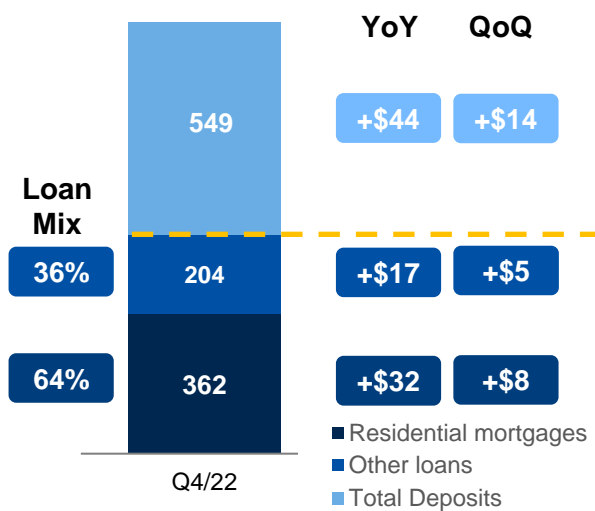
(1) Represents the 12-month revenue exposure (before-tax) to a 100bps immediate and sustained shift in interest rates. (2) Represents the 12-month revenue exposure (before-tax) to a 25bps immediate and sustained shift in interest rates. (3) Includes benefits from our sweep deposits. (4) Represents balances and net yield in the Capital Markets core fixed income repo business.

Canadian Banking NIM: Higher deposit margins offsetting lower asset yields

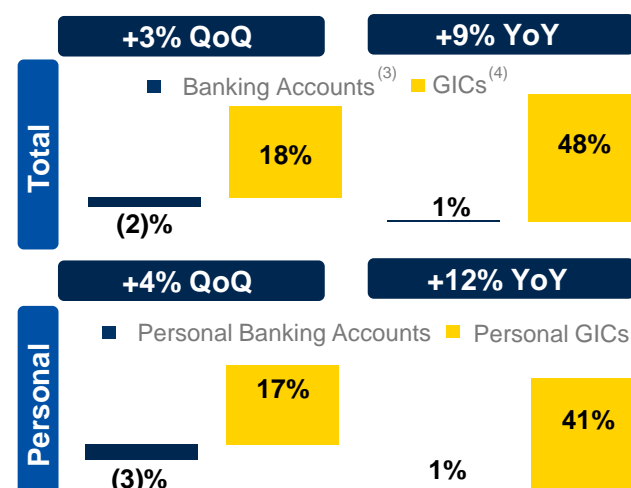
We are well-positioned for rising interest rates

- Well-positioned:
 - for rising interest rates given **~40%** of the deposit base is non-interest bearing or low-rate deposits⁽¹⁾
 - to fund organic loan growth given a **103%** loan-to-deposit ratio⁽²⁾
- Actual results are also impacted by several other factors, including movements in interest rates and credit spreads, competitive pressures, balance sheet mix and volumes, management strategies and client behaviour

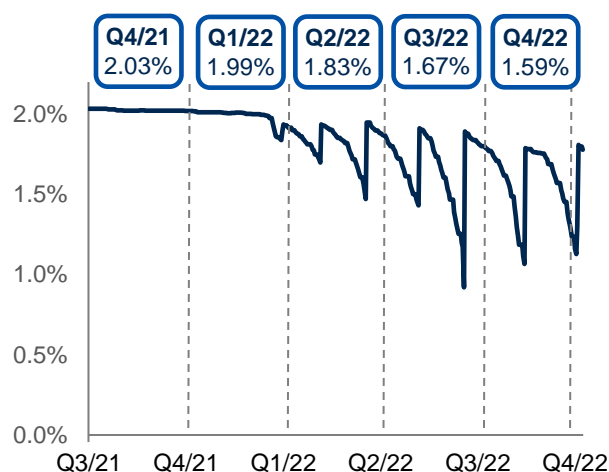
Loan growth largely funded through lower cost client deposits



Client behaviour is driving a change in deposit mix

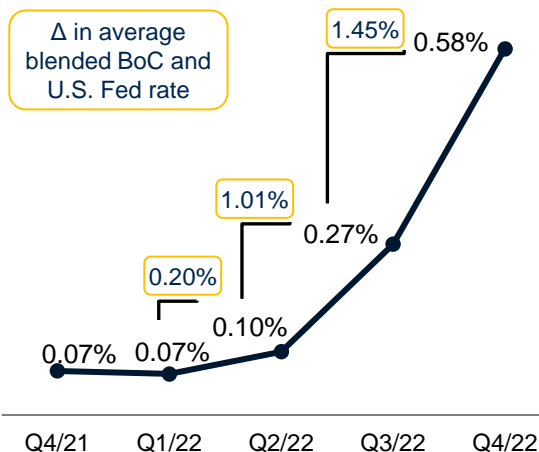


Volatility in the Prime-BA spread impacting asset spreads

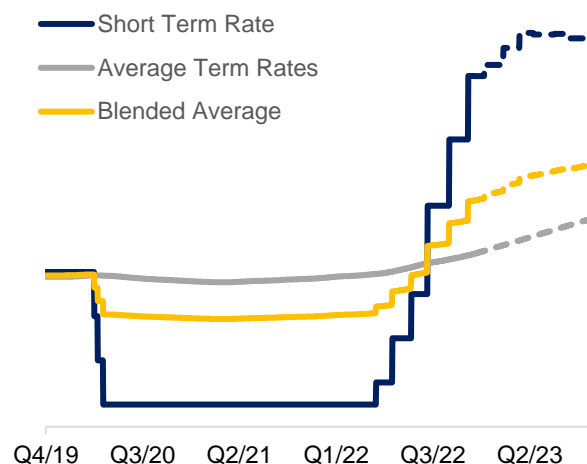


Rising deposit costs buffered by non-interest bearing deposits

All Bank Personal Chequing & Savings



Tractors: An illustrative example of the latent benefit of rate hikes



(1) Reflects non-interest bearing deposits that are presented in Note 14 of our 2022 Annual Report to Shareholders, in addition to personal deposits with an interest rate between 0.1 basis point and 100 basis points. (2) Average Canadian Banking loans as a percentage of average Canadian Banking deposits. (3) Reflects changes in personal banking accounts and business deposit accounts. (4) Reflects changes in personal GICs and business GICs.

Well-diversified wholesale funding platform

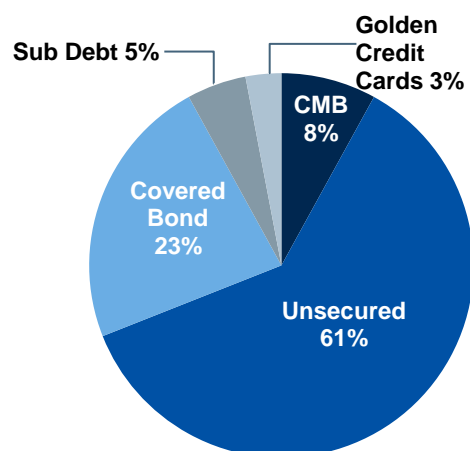
- Well-diversified across products, currencies, investor segments and geographic regions
- Raise majority of funding in international markets, preserving significant domestic capacity which can be more readily tapped in stressed market conditions
- Regular issuance in all major markets to promote investor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

Canada
<ul style="list-style-type: none"> Canadian Shelf (C\$25BN) Securitizations (Canadian mortgage bonds, NHA MBS⁽¹⁾ and credit cards)

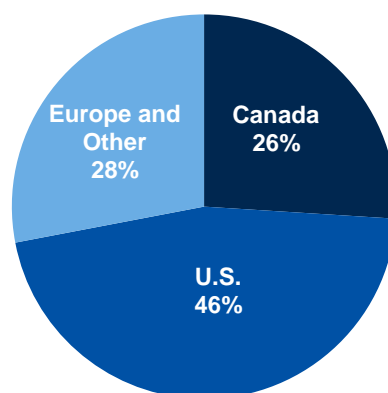
U.S.
<ul style="list-style-type: none"> SEC Registered Shelf (US\$50BN)

Europe and Asia
<ul style="list-style-type: none"> European Debt Issuance Program (US\$40BN) Covered Bond Program (EUR 75BN) Japanese Issuance Programs (JPY 1 trillion)

Well Diversified by Product⁽²⁾



Diversified by Geography⁽²⁾



Recent Deals

- CAD \$1.75 Billion 4 year unsecured at GOC+170bps / SOFR+177bps
- USD \$1.15 Billion 2 year unsecured at UST+105bps / SOFR+95bps
- USD \$1.35 Billion 5 year unsecured at UST+160bps / SOFR+184bps
- USD \$800 Million 3 year Golden Credit Card at UST+80bps / SOFR+95bps
- EUR \$1.5 Billion 5 year Covered Bond at EUR Mid-swap + 17bps / SOFR+80bps

(1) National Housing Act Mortgage Backed Securities. (2) As at October 31, 2022.

RBC Covered Bond Program

Globally Active

- Active program in six different currencies: EUR, CAD, USD, CHF, AUD and GBP
 - C\$58.9BN currently outstanding

Strong Issuer

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

Canadian Legislation



- 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\$22.8BN across twelve deals since September 2012
 - Trace eligible

Reconciliation for non-GAAP financial measures

Calculation of Tangible Book Value Per Share					
\$ millions (unless otherwise stated)	2018	2019	2020	2021	2022
Common equity - end of period	73,552	77,816	80,719	91,983	100,746
Less: Goodwill and Intangibles net of tax - end of period	12,498	12,370	12,375	11,664	14,019
Tangible common equity - end of period	61,054	65,446	68,344	80,319	86,727
Common shares outstanding (000s) - end of period	1,438,794	1,430,096	1,422,473	1,424,525	1,382,911
Tangible Book Value Per Share	\$ 42.43	\$ 45.76	\$ 48.05	\$ 56.38	\$ 62.71

Calculation of Cash Earnings for Wealth Management ⁽¹⁾				
\$ millions (unless otherwise stated)	2019	2020	2021	2022
Net Income	2,546	2,154	2,626	3,144
Add: After-tax effect of amortization of other intangibles	186	172	153	155
Cash Earnings	2,732	2,326	2,779	3,299

(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.

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 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 2022 Annual Report.

Definitions can be found under the “Glossary” sections in our 2022 Annual Report.

Investor Relations Contacts

Asim Imran, Vice President, Head of Investor Relations

(416) 955-7804

Marco Giurleo, Senior Director, Investor Relations

(437) 239-5374

 www.rbc.com/investorrelations

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