

# Royal Bank of Canada Investor Presentation

Q1/2023

All amounts are in Canadian dollars unless otherwise indicated and are based on financial statements prepared in compliance with International Accounting Standard 34 Interim Financial Reporting, unless otherwise noted. Our Q1 2023 Report to Shareholders and Supplementary Financial Information are available on our website at: <http://www.rbc.com/investorrelations>.



# Caution regarding forward-looking statements

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From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the “safe harbour” provisions of the United States Private Securities Litigation Reform Act of 1995 and any applicable Canadian securities legislation. We may make forward-looking statements in this presentation, in other filings with Canadian regulators or the SEC, in 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 and the impact from rising interest rates. 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) and the Risk management section of our Q1 2023 Report to Shareholders; 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 and the Risk management section of our Q1 2023 Report to Shareholders.

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, as updated by the Economic, market and regulatory review and outlook section of our Q1 2023 Report to Shareholders. 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 and the Risk management section of our Q1 2023 Report to Shareholders.

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

# About RBC



# The RBC story

## Diversified business model with scale and market-leading franchises

- Well-diversified across businesses, geographies and client segments
- Able to capitalize on opportunities created by changing market dynamics and economic conditions
- A full suite of products, advice and services to meet our clients' financial needs and build deep, long-term relationships

## Leading presence in Canada and an established multi-platform U.S. strategy

- #1 or #2 market share in all key product categories in Canadian Banking with superior cross-sell ability
- Most branches and one of the largest mobile sales networks across Canada
- 9<sup>th</sup> largest global investment bank <sup>(1)</sup>, #1 in Canada and #1 Canadian investment bank in the U.S. <sup>(2)</sup>
- Largest retail mutual fund company in Canada based on assets under management (AUM) <sup>(3)</sup>
- 6<sup>th</sup> largest full-service wealth advisory firm in the U.S. as measured by assets under administration (AUA) <sup>(4)</sup>
- #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 <sup>(5)</sup>

## 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 <sup>(6)</sup> 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 <sup>(7)</sup> 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) Dealogic based on global investment banking fees LTM Q1/23. (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 FY22 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. For further information refer to slide 45. (7) Dividend payout ratio is calculated as common dividends as a percentage of net income available to common shareholders.

# Market leader with a focused strategy for growth

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

A market leader across all key businesses

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

One of the 10 largest global banks by market capitalization with operations in 29 countries

## 17 Million Clients

Served by 97,000+ employees worldwide

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## Purpose

Help clients thrive and communities prosper

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## Vision

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

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## Strategic Goals



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



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

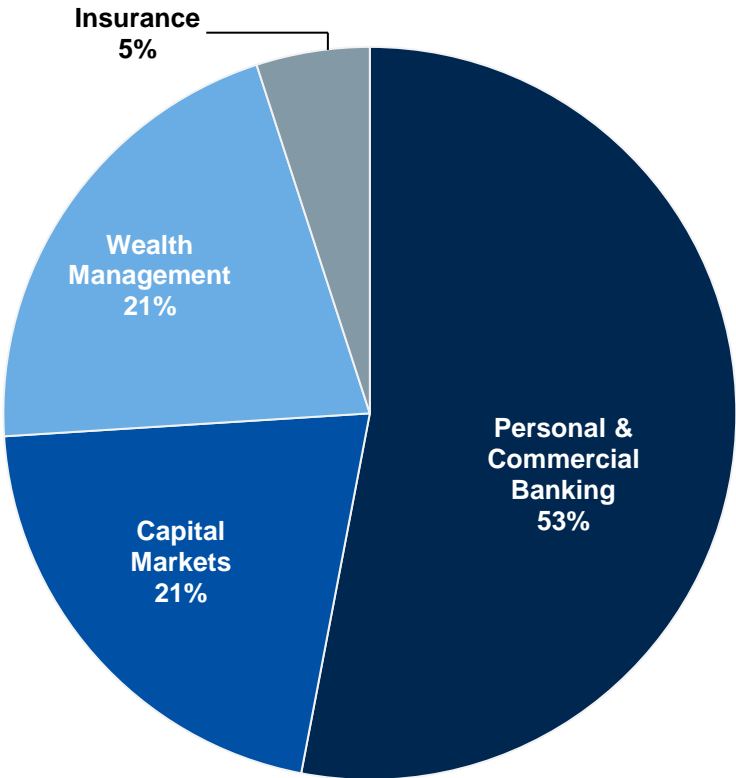


**In Select Global Financial Centres:** To be a leading financial services partner valued for our expertise

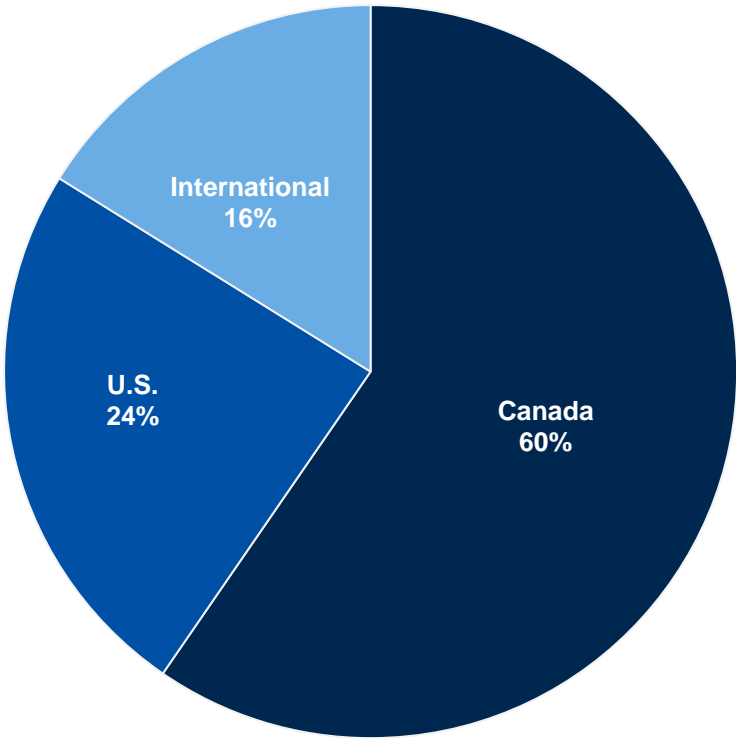
(1) Based on market capitalization as at January 31, 2023.

# Diversified business and geographic model with client-leading franchises

Earnings by Business Segment<sup>(1)(2)</sup>  
Latest twelve months ended January 31, 2023



Revenue by Geography  
Latest twelve months ended January 31, 2023



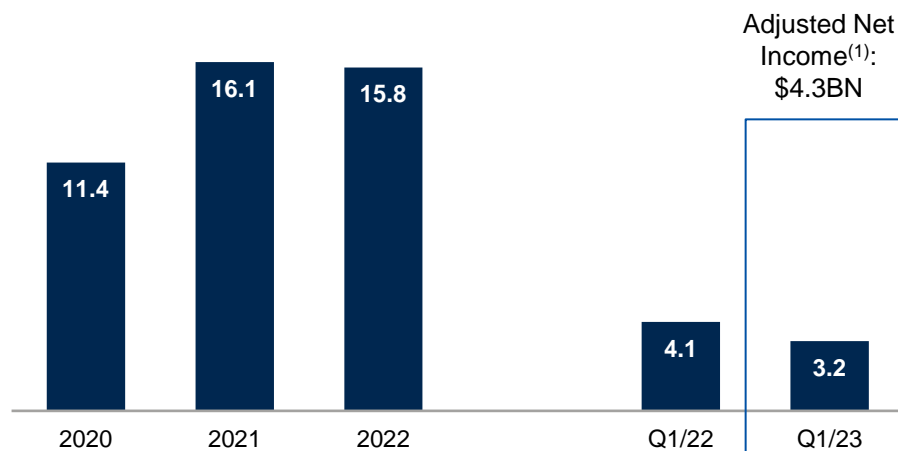
(1) Amounts exclude Corporate Support. (2) Certain amounts have been revised from those previously presented to conform to our new basis of segment presentation.

# Strong financial profile

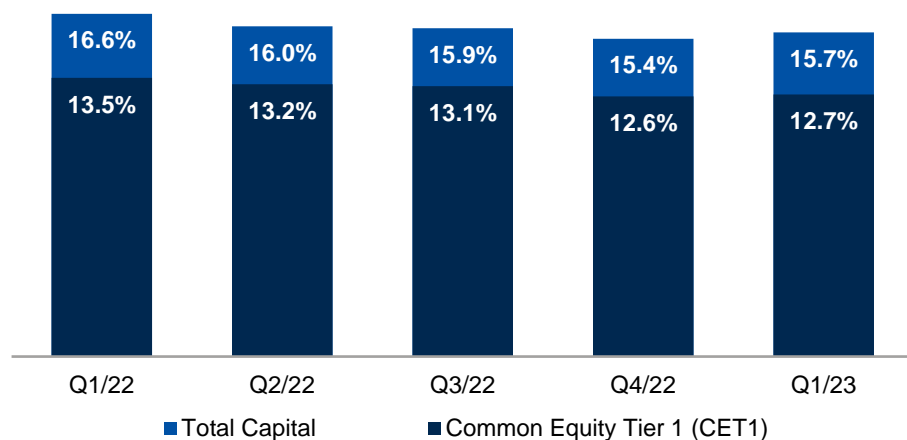
Maintaining a strong capital position with a disciplined approach to risk

## Resilient Earnings

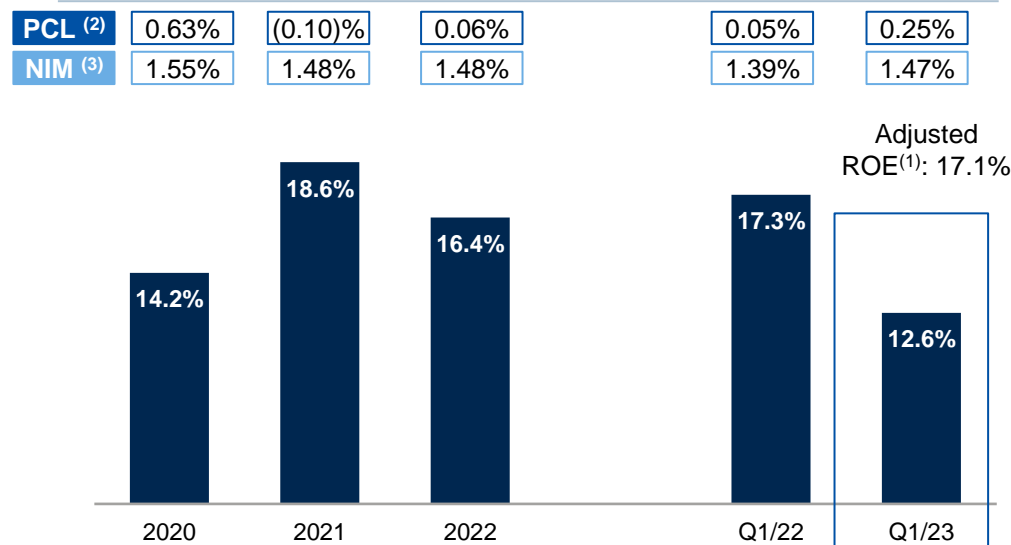
Net income (\$ billions)



## Strong Capital Position<sup>(3)</sup>



## Premium Return on Equity



## Strong Leverage and Liquidity Ratios<sup>(4)</sup>

Leverage Ratio 4.4%

Liquidity Coverage Ratio 130%

## Credit Ratings Amongst the Highest Globally

	Moody's	S&P	DBRS	Fitch
Legacy senior long-term debt <sup>(5)</sup>	Aa1	AA-	AA (high)	AA
Senior long-term debt <sup>(6)</sup>	A1	A	AA	AA-
Outlook	Stable	Stable	Stable	Stable

(1) Calculated by adding back to net income the after-tax amount of amortization of intangibles, any goodwill impairment, and other significant items that may impact a given period. This is a non-GAAP measure. Refer to slide 60 for reconciliation and slide 61 for more information. (2) Provision for credit losses (PCL) on loans as a % of average net loans and acceptances. (3) 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. (4) 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 guideline. (5) Ratings (as at February 28, 2023) 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. (6) Ratings (as at February 28, 2023) 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

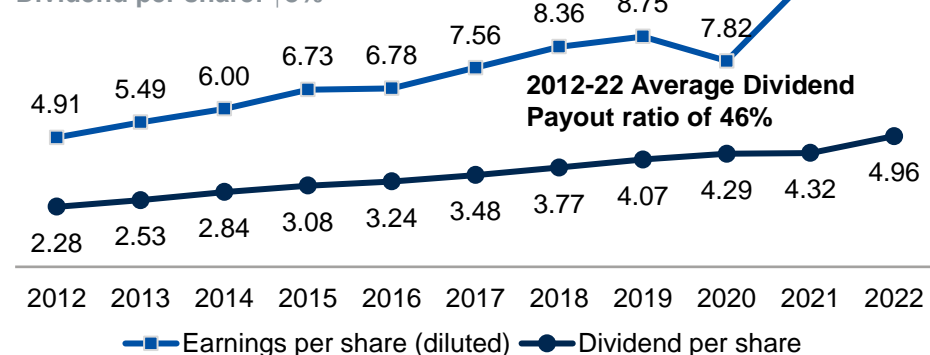
Medium-Term Objectives <sup>(1)</sup>			Average as of 2022 <sup>(2)</sup>	
			3-Year	5-Year
Profitability	Diluted EPS growth	7%+	✓	8%
	ROE	16%+	✓	16.4%
Capital Management	Capital ratios (CET1 ratio)	Strong	✓	12.9%
	Dividend payout ratio	40% – 50%	✓	46%

## Dividend<sup>(3)</sup> and Earnings per Share (\$)

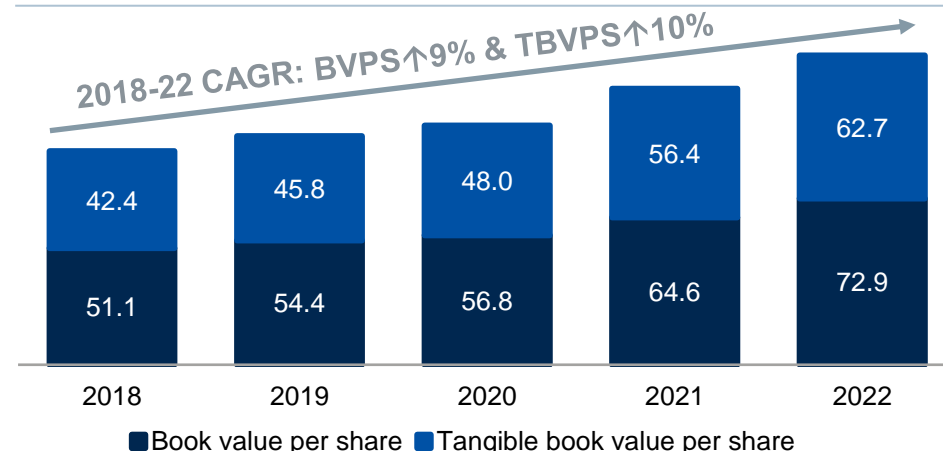
2012-22 CAGR

Earnings per share: ↑8%

Dividend per share: ↑8%



## Book Value & Tangible Book Value Per Share (\$)<sup>(4)(5)</sup>



## Achieved Solid Total Shareholder Return (TSR)<sup>(6)</sup> Performance

	3-Year	5-Year	10-Year	20-Year
RBC	14%	10%	12%	12%
Peer Average	8%	6%	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 Earnings Per Share (EPS) growth is calculated using a Compound Annual Growth Rate (CAGR). ROE, CET1 and dividend payout ratio are calculated using an average. (3) Dividends declared per common share. Our current quarterly dividend is \$1.32. (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 60 for reconciliation and slide 61 for more information. (6) Annualized TSR is calculated based on the TSX common share price appreciation plus reinvested dividend income. Source: Bloomberg, as at January 31, 2023. 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.



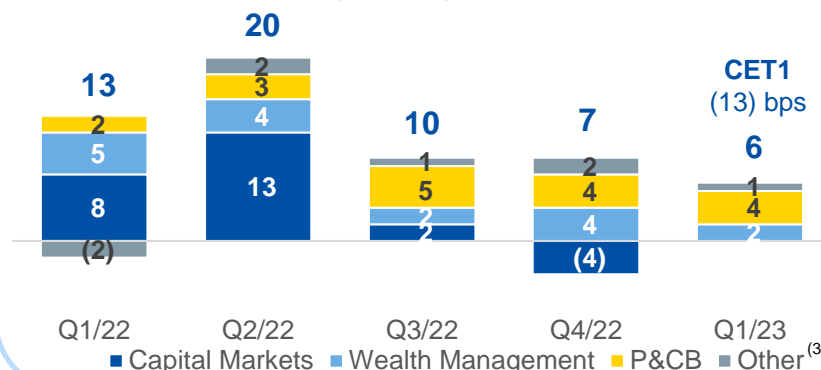
# Balanced capital deployment driving sustainable long-term shareholder value

**Strong capital ratio**

**16%+ ROE**  
Medium-term objective

**10%**  
3-Year BVPS CAGR

## Diversified **organic growth**<sup>(1) (2)</sup> (RWA \$BN)



## Committed to sustainable **dividend growth** (Q1/23)

Common share dividends

**\$1.8BN**  
+7% YoY

Dividend payout ratio

**58%** reported  
**43%** adjusted<sup>(4)</sup>

## Capital generation creates **optionality**

**RBC Brewin Dolphin**

£1.6BN  
completed acquisition

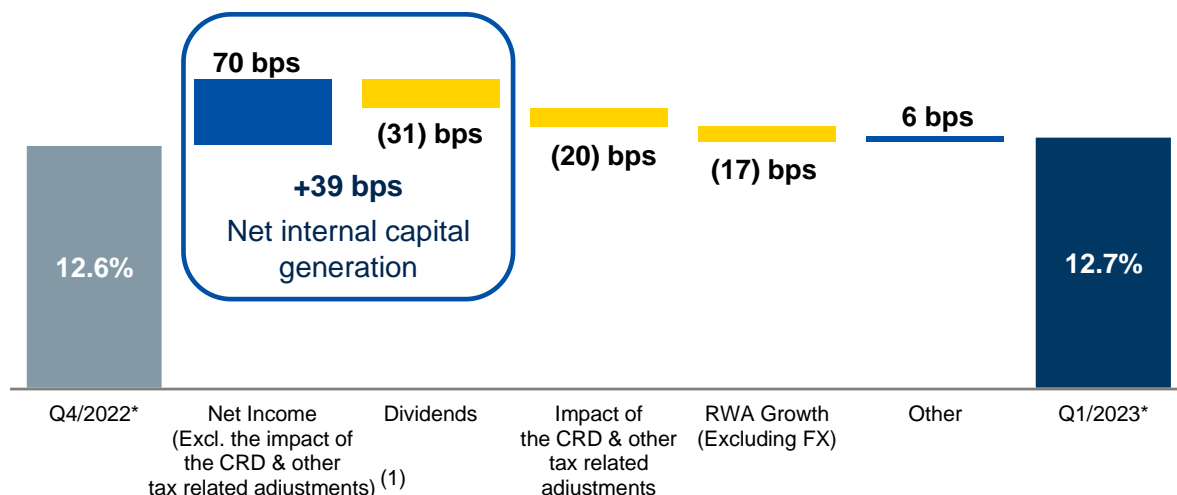
**HSBC Canada**

\$13.5BN  
announced acquisition<sup>(5)</sup>

(1) Organic growth reflects growth in RWA excluding impacts of model & methodology updates, asset quality, acquisitions & disposals and FX. (2) Totals may not add due to rounding. (3) Includes Insurance and Corporate Support. (4) This is a non-GAAP measure. Refer to slide 60 for reconciliation and slide 61 for more information. (5) Cash purchase price for acquisition of 100% of the common shares of HSBC Bank Canada (HSBC Canada).

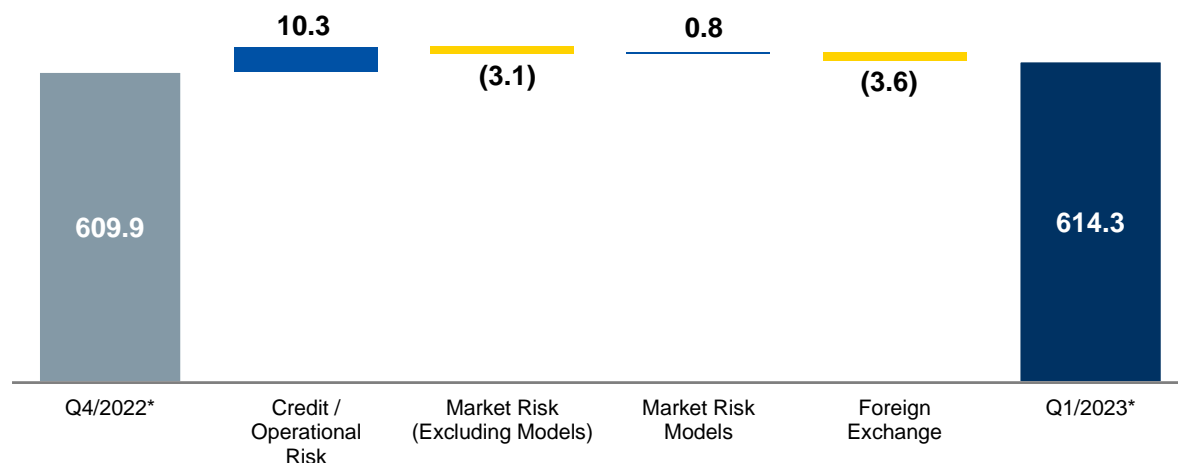
# Strong capital position supporting business growth and shareholder returns

## CET1 Movement



- CET1 ratio of 12.7%, up 10 bps QoQ, reflecting:
  - + Net internal capital generation (earnings net of dividends)
  - Impact of the Canada Recovery Dividend (CRD) and other tax related adjustments
  - Organic RWA growth supporting higher volumes
  - Other primarily includes unrealized gains on OCI securities
- Leverage ratio of 4.4%, flat QoQ
- TLAC<sup>(2)</sup> ratio of 28.2%, up 180 bps QoQ

## RWA Movement (\$ billions)



- RWA increased \$4.4BN, mainly reflecting:
  - Continued business growth, primarily in:
    - Wholesale lending, including loan underwriting commitments
    - Securities and due from banks
    - Retail lending
  - + Partially offset by lower trading exposures
  - Unfavourable impact of market risk model update
  - + Favourable FX translation

\*Represents rounded figures. For more information, refer to the Capital Management section of our Q1/2023 Report to Shareholders.

(1) This is a non-GAAP measure. Refer to slide 60 for reconciliation and slide 61 for more information. (2) Total loss absorbing capacity (TLAC); TLAC ratio: 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.

# Business Segments

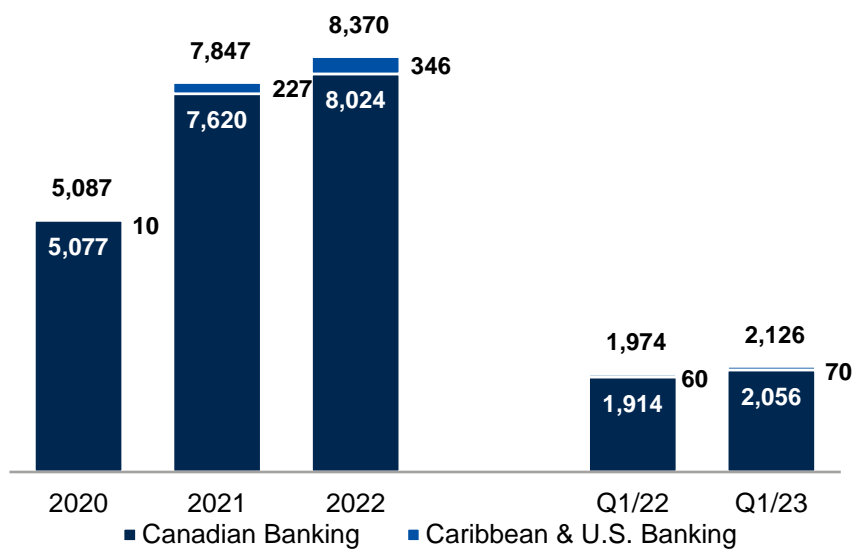
# Personal & Commercial Banking

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

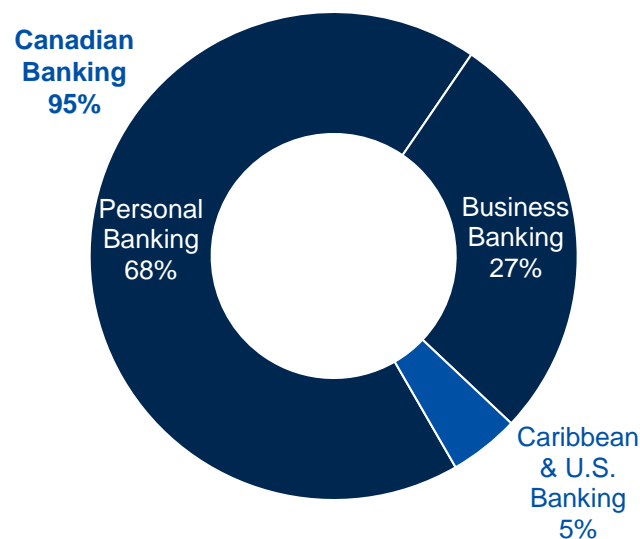
## Q1/2023 Highlights

Clients (MM)	~15
Branches	1,196
ATMs	4,292
Active Digital (Online and Mobile) Users <sup>(2)</sup> (MM)	8.6
Employees (FTE)	39,036
Net Loans & Acceptances <sup>(1)</sup> (\$BN)	581.8
Deposits <sup>(1)</sup> (\$BN)	579.8
AUA <sup>(3)</sup> (\$BN)	349.6

## Net Income (\$ millions)



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



(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 January 31, 2023 of \$15 billion and \$6 billion, respectively. (4) For quarter ended January 31, 2023.

# Personal & Commercial Banking

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

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

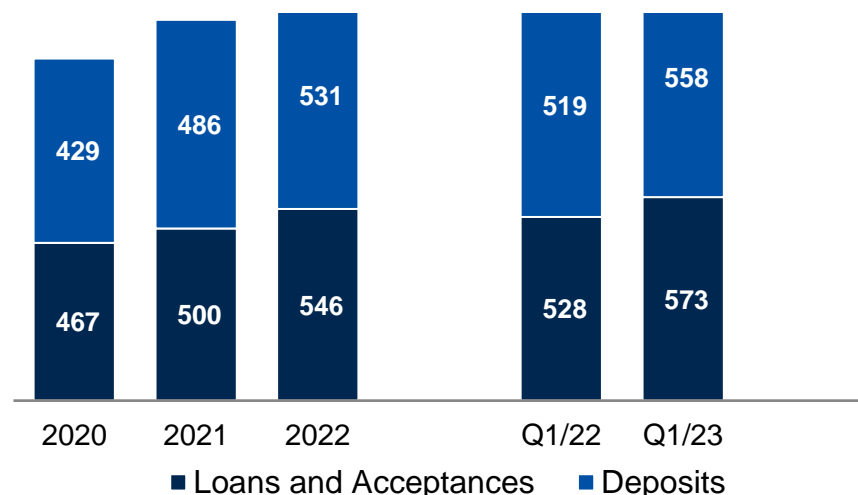
## Recent Awards

 <p>RBC received top ranks in 11 out of 11 Ipsos Financial Service Excellence Awards among the Big 5 Banks, including Customer Service Excellence <sup>(1)</sup></p>	 <p>RBC was awarded Best Global Retail Bank and Best Bank for SMEs by Retail Banker International <sup>(2)</sup></p>	 <p>Evident AI, a group of AI data scientists, researchers and analysts, ranked RBC second overall among North American and European banks at incorporating and advancing AI technology <sup>(3)</sup></p>	 <p>RBC #1 in Overall Customer Satisfaction among the Big Five Retail Banks and we received the award for "Best in Customer Satisfaction" for our mobile banking app <sup>(4)</sup></p>
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(1) Ipsos, 2022. (2) RBC, 2022. (3) Evident 2023 (4) JD Power, 2022.

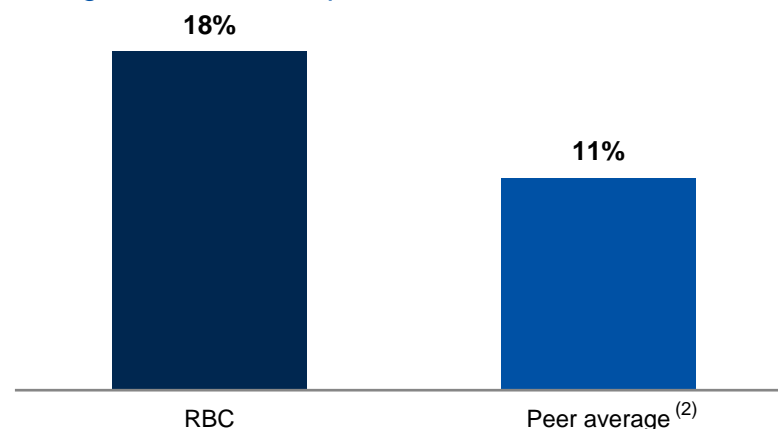
# Personal & Commercial Banking – Canadian Banking

## Solid Volume Growth (\$ millions)<sup>(1)</sup>



## Superior Cross-Sell Ability

Percentage of clients with transaction accounts, investments, borrowing and credit card products<sup>(2)</sup>

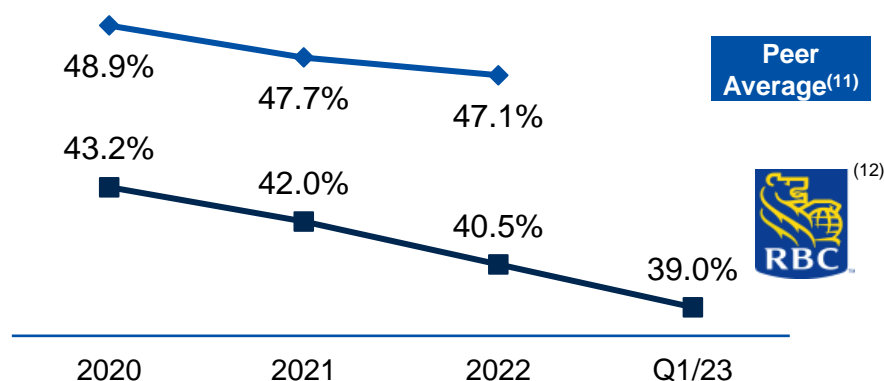


## Top Market Share in All Key Categories<sup>(3)</sup>

Product	Market share	Rank
Personal Lending <sup>(4)</sup>	24.5%	1
Personal Core Deposits + Guaranteed Investment Certificates (GICs)	21.0%	1
Credit Cards <sup>(5)</sup>	27.3%	1
Long-Term Mutual Funds <sup>(6)</sup>	32.2%	1
Business Loans (\$0-\$25MM) <sup>(7)</sup>	25.1%	1
Business Deposits <sup>(8)</sup>	24.5%	1

## Continued Efficiency Improvements While Investing For Growth

NIE CAGR <sup>(9)</sup>		FTE CAGR <sup>(10)</sup>	
RBC	Peer Average	RBC	Peer Average
3.7%	6.0%	4.1%	3.5%



(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, Desjardins 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 as at November 2022 and September 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 September 2022, excludes Credit Cards. (5) Credit cards market share is based on 6 banks (RBC, BMO, BNS, CIBC, TD and NA) as at September 2022. (6) Long-term mutual fund market share is compared to 7 banks (RBC, BMO, BNS, CIBC, TD, NA, and HSBC) and is as at November 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 November 2022. (9) Non-interest expense representing FY20 to FY22 CAGR. (10) Number of employees (full-time equivalent) representing FY20 to FY22 CAGR. (11) Peers include BMO, BNS, CIBC, TD and NA; 2020 through 2022 reflects annual numbers. (12) Efficiency ratio is calculated as non-interest expense as a percentage of total revenue.

# Canadian Banking – Supporting our clients through volatile times

## Client Acquisition

Net new  
clients added

~950k  
2018-2021

~400k  
2022

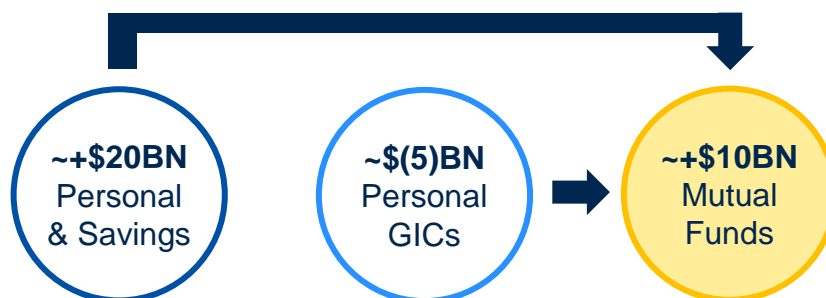
~130k  
Q1 / 23

## Personal Banking Net Money-In<sup>(1)</sup>

- Our continuum of offerings allows clients to shift liquidity between personal, savings and investment products based on the prevailing macro backdrop. Importantly, the client relationship is retained by RBC.

LTM Q1/22: Higher equity markets + low interest rates

Positive Net “Money-In” Flows



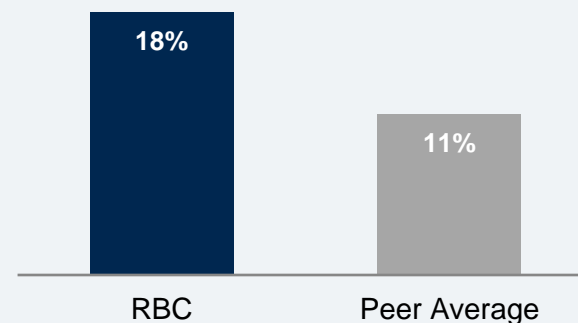
LTM Q1/23: Significantly higher interest rates

Positive Net “Money-In” Flows



## Superior Cross-Sell Ability

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



**Customer Service Award Winner** among the big 5 retail banks – Recognized in all 11 categories of the 2022 Ipsos Financial Service Excellence Awards

**Best in Customer Satisfaction** among Canada's big 5 retail banks by J.D. Power

**Best Global Retail Bank** at the RBI Global Retail Banking awards

**Outstanding Global Private Bank in North America** at the Private Banker International Global Wealth Awards

**RBC Dominion Securities ranked highest among Canadian bank-owned investment brokerage firms** in the Investment Executive Brokerage report card

14MM+

Canadian  
Banking clients

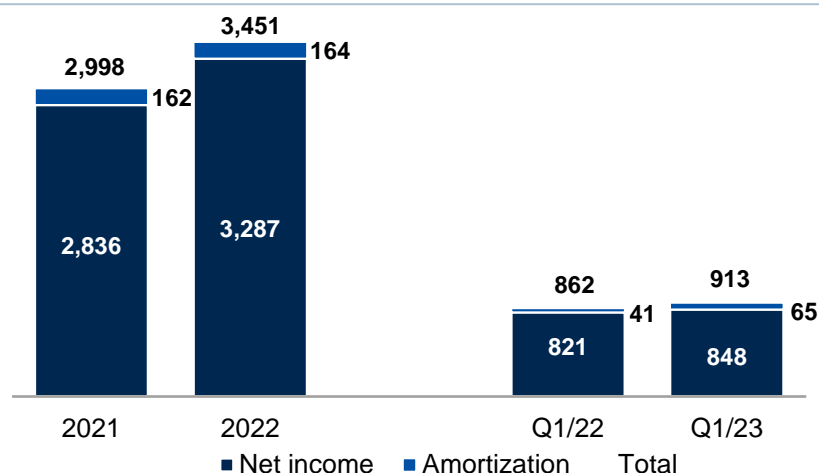
(1) Total client net flows include chequing, savings, and GIC deposits as well as net flows into Direct Investing and mutual funds. (2) Canadian Financial Monitor by Ipsos – approx. 20,700 Canadian individuals – data based on Financial Group results for the 12-month period ending October 2022. TFSA is considered an investment. Peers include BMO, BNS, CIBC, TD, National Bank, Laurentian Bank and HSBC Canada.

# 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. Continue to drive growth in Asia's global families by leveraging the global strengths and capabilities of RBC
- **Investor Services:** Grow relationships with Canadian asset managers, investment counsellors, pension funds and insurance companies deliver new products to meet growing client demand and enhance our core capabilities in Canada to improve the client experience

## Cash Earnings (\$ millions)<sup>(1) (2) (3)</sup>



<sup>(1)</sup> Cash earnings exclude the after-tax effect of amortization of intangibles. This is a non-GAAP measure. Refer to slide 60 for reconciliation and slide 61 for more information. <sup>(2)</sup> 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. <sup>(3)</sup> Certain amounts have been revised from those previously presented to conform to our new basis of segment presentation. <sup>(4)</sup> Spot Balances.

## 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)

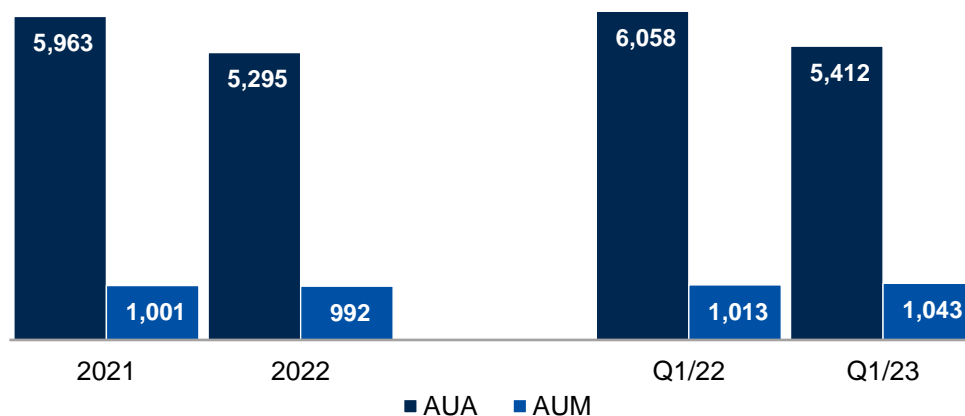
### Best Bank for Sustainability & ESG Thought Leadership with Global Reach

(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)<sup>(3) (4)</sup>



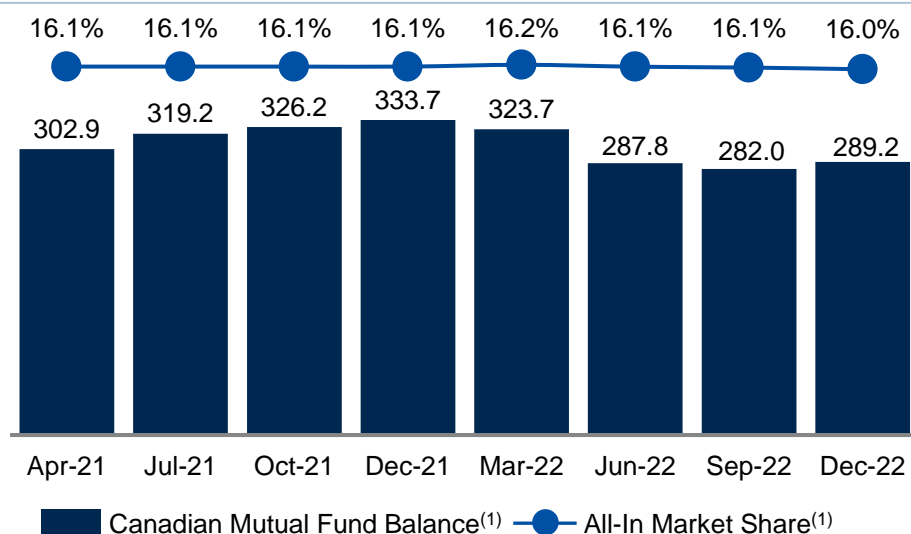


# Wealth Management – Global Asset Management

## Building a high-performing global asset management business

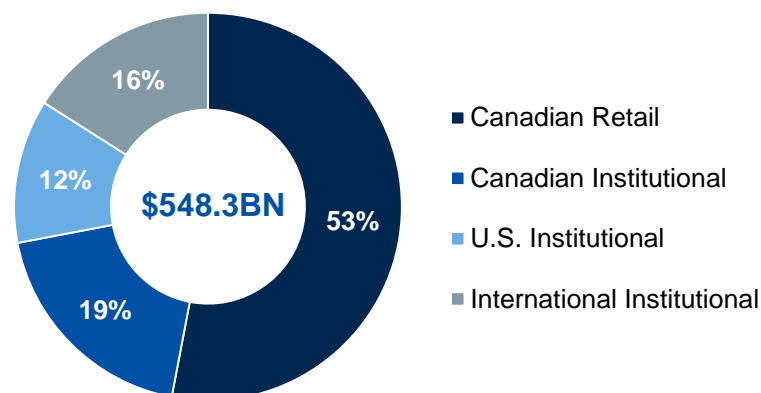
- **Driving top-tier profitability in our largest Wealth Management business**
  - \$548.3BN in client assets
  - Investor asset mix of 53% Retail / 47% Institutional client assets
- **Extending our lead in Canada**
  - Largest retail mutual fund company in Canada, ranked #1 in market share capturing 32.3% amongst banks and 16.0% all-in<sup>(1)(2)</sup>
  - Strategic alliance between RBC Global Asset Management and BlackRock Canada connects clients to the largest and broadest ETF lineup in Canada
  - 3<sup>rd</sup> largest institutional manager of Canadian pension assets<sup>(3)</sup>
- **Delivering strong investment capabilities to support growth**
  - Top performing investment firm with ~89% of AUM outperforming the benchmark on a 3-year basis<sup>(4)</sup>
  - Continued growth of investment capabilities and innovative solutions for both institutional clients and retail investors

### Canadian Retail Mutual Fund AUM (\$ billions)



### Diversified Asset Mix

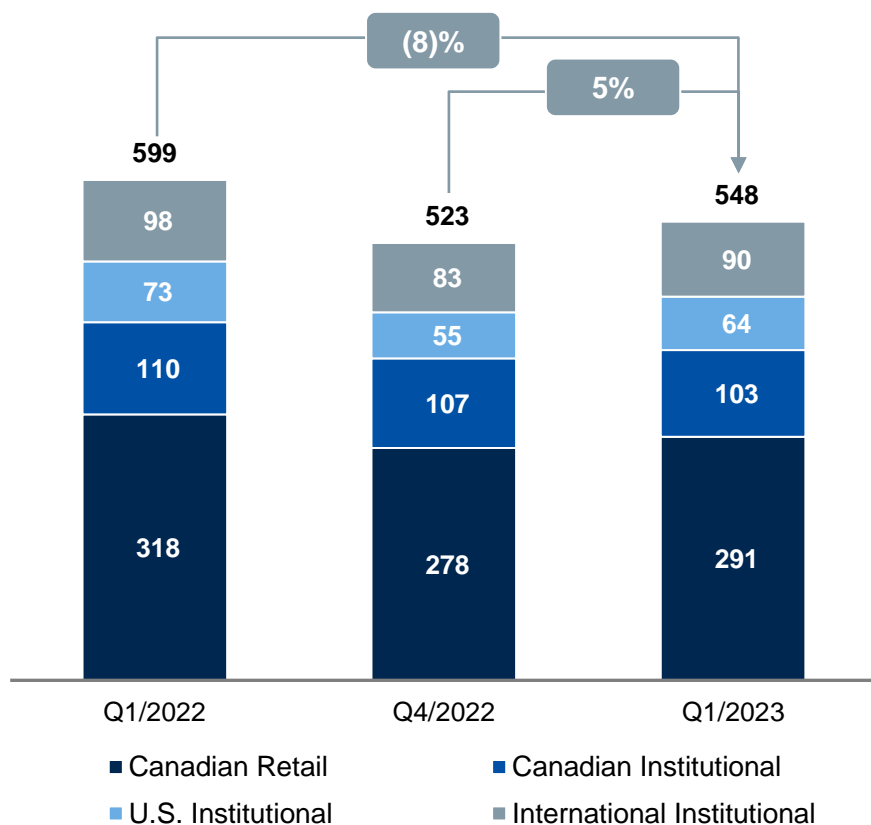
#### Q1/2023 AUM by Client Segment <sup>(5)</sup>



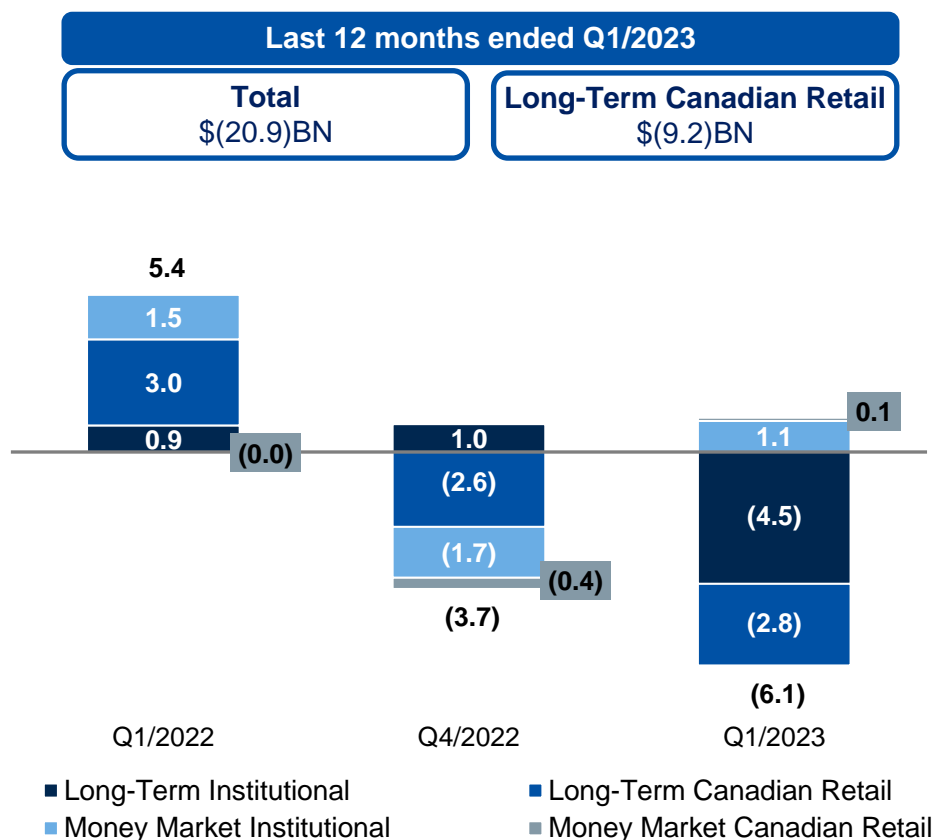
(1) Investment Funds Institute of Canada (IFIC) in December 2022 and RBC reporting. Comprised of long-term funds and money market prospectus-qualified mutual funds sold to Retail and Institutional clients. (2) Market share amongst entire industry (i.e. all fund companies in Canada that report to IFIC). (3) Benefits Canada, published in November 2022. (4) As at December 2022, gross of fees. (5) RBC GAM, based on period-end spot balances.

# Wealth Management – Lower assets impacted by unfavourable market conditions

## RBC Global Asset Management AUM<sup>(1)</sup> (\$ billions)



## RBC Global Asset Management Net Sales (\$ billions)



(1) 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<sup>(1)</sup>
- Canadian leader in fee-based assets per advisor<sup>(1)</sup>
- Consistently driving revenue per advisor of over \$1.9MM per year, 25% above Canadian industry average<sup>(1)</sup>
- 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.

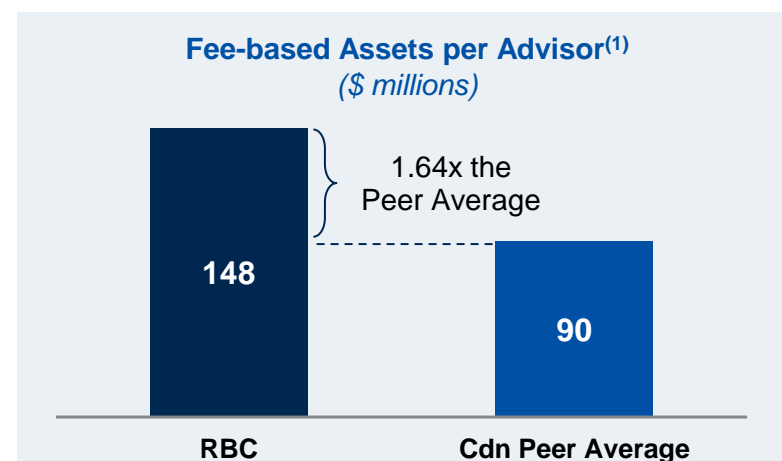
- 7<sup>th</sup> largest full-service wealth advisory firm in the U.S. as measured by number of financial advisors, and 6<sup>th</sup> largest by assets under administration<sup>(2)</sup>
- Enhancing the client-advisor experience through a digitally-enabled, goals-based planning approach, and strengthening the range of advisory solutions and product offerings
- Continuing to attract and onboard new advisors, as well as new clearing relationships for our Clearing & Custody business, while enhancing advisor 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.
- 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 RBC Brewin Dolphin



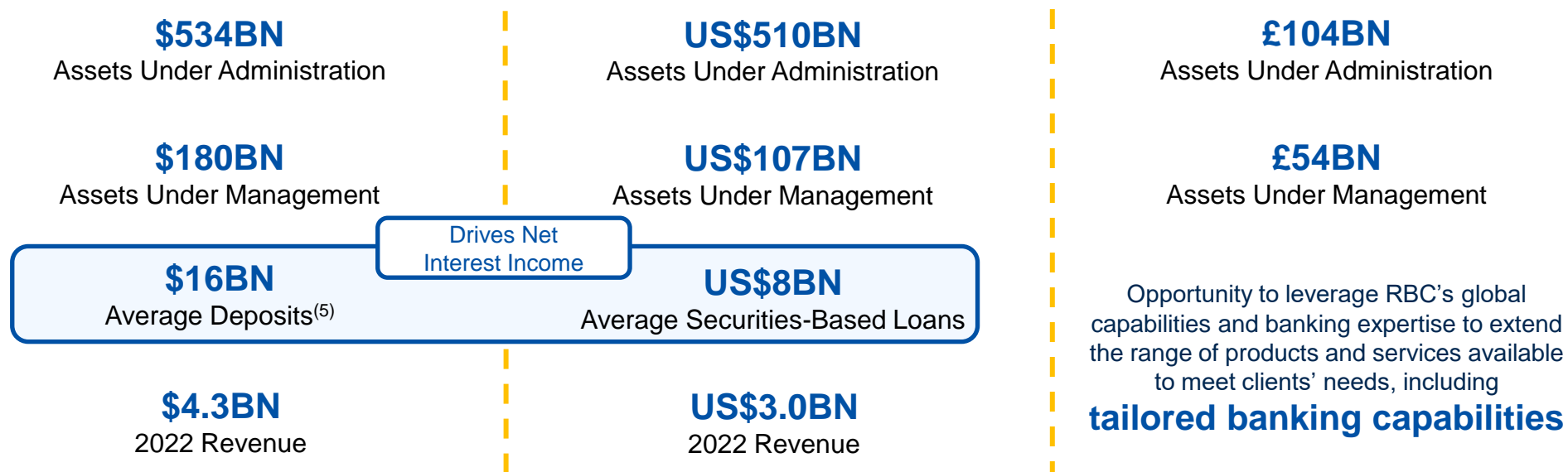
(1) Investor Economics, October 2022. (2) Source: U.S. wealth advisory firms quarterly earnings releases (10-Q).

# Wealth Management – Growing our global wealth advisory franchises

## RBC has scale in three of the world's largest asset pools



## Diversified revenue streams

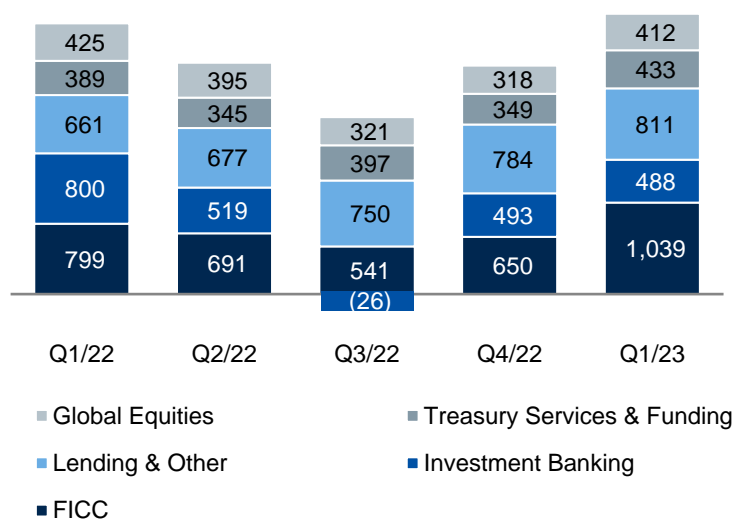


(1) Investor Economics, October 2022. (2) Source: U.S. wealth advisory firms quarterly earnings releases (10-Q). (3) Select U.K. Wealth Managers by AUM; year end 2021/2022 AUM. (4) GlobalData. Represents wealth management asset pool opportunity (2020). (5) Excludes Direct Investing deposits.

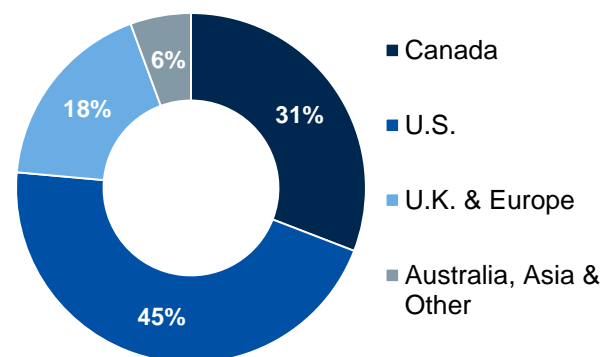
# Capital Markets

- A premier global investment bank with core operations across Canada, the U.S., the U.K., Europe and Asia-Pacific
  - 9<sup>th</sup> largest global investment bank by fees<sup>(1)</sup>
- 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<sup>(1)</sup>
- 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

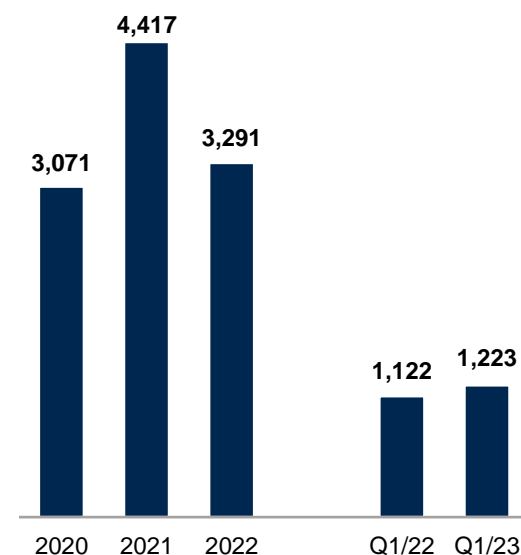
**Revenue by Business (\$ millions) <sup>(2) (4)</sup>**



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



**Net Income (\$ millions) <sup>(4)</sup>**




(1) Dealogic, based on global investment banking fees LTM Q1/23. (2) Totals may not add up due to rounding. (3) For three months ended January 31, 2023. (4) Certain amounts have been revised from those previously presented to conform to our new basis of segment presentation. For more information, refer to the About Royal Bank of Canada section of our Q1/2023 Report to Shareholders.

# Capital Markets

## Strategic Priorities

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

## Recent Awards



**Ranked 2<sup>nd</sup> overall among North American and European banks at incorporating and advancing AI technology by Evident AI Index**


## Notable Deal Highlights




**Lead Financial Advisor and Financing / Hedge Provider on US\$2.0Bn Acquisition**



**Financial Advisor on US\$1.3Bn Acquisition and Co-Lead Arranger and Joint Bookrunner on the Debt Financing**



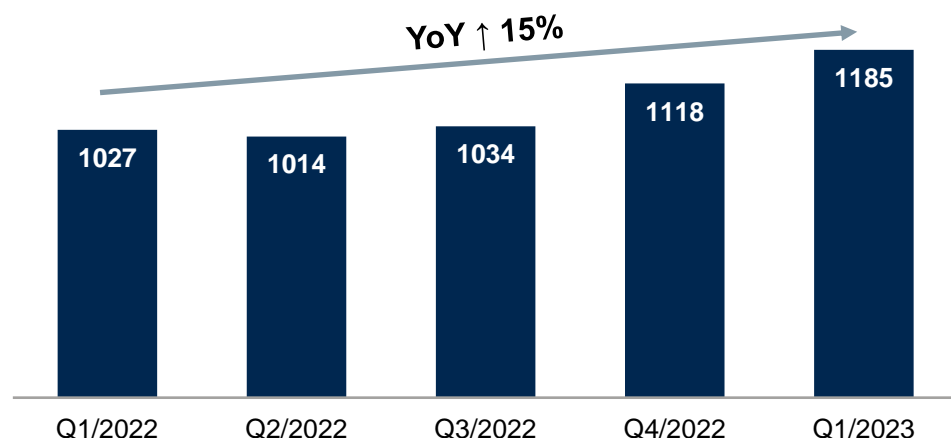
**Joint Bookrunner on C\$1.05Bn Inaugural Sustainability Bond**



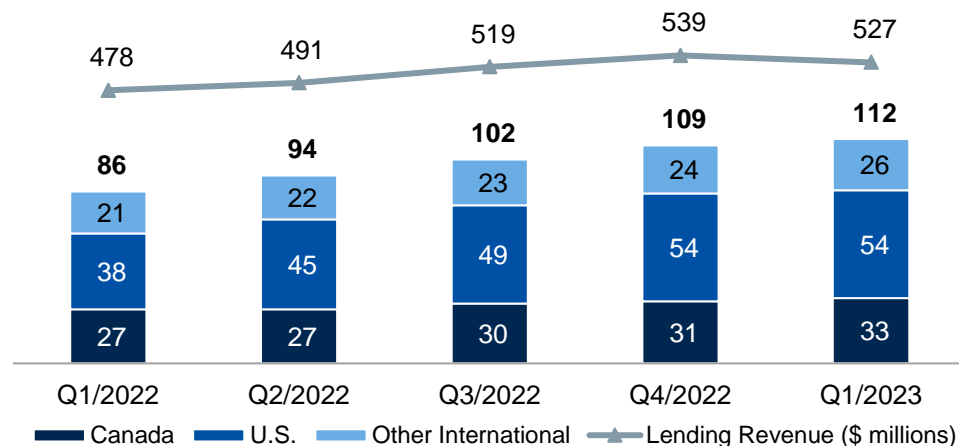
**Joint Lead Manager and Joint Bookrunner on CHF 4Bn Capital Increase**

# Capital Markets

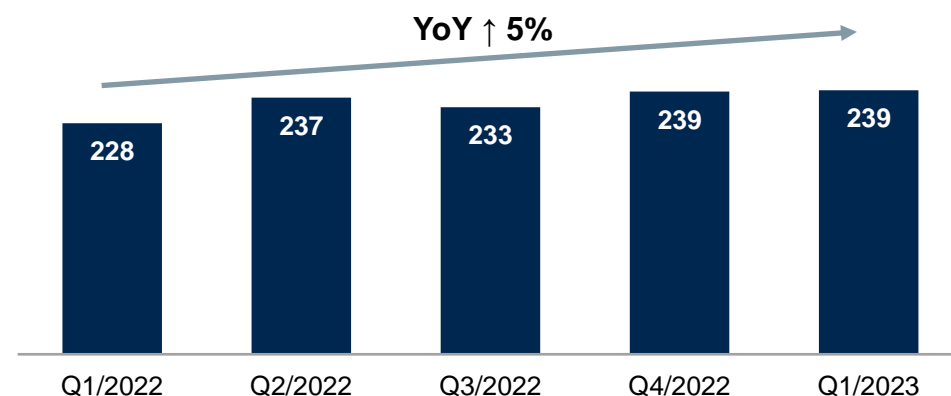
## Capital Markets Total Average Assets(\$ billions)<sup>(4)</sup>



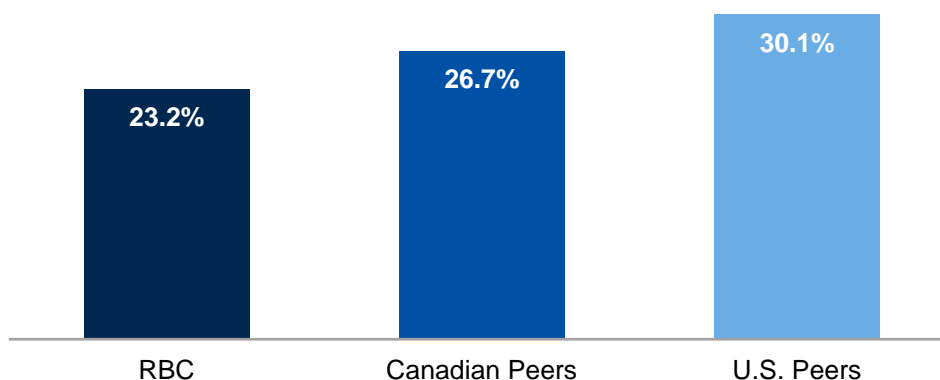
## Geographic Diversification Across Loan Book Average Loans Outstanding by Region (\$ billions)<sup>(1) (4)</sup>



## Risk-Weighted Assets, Spot (\$ billions)<sup>(2) (4)</sup>



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



(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. Canadian peers include BMO, TD, CIBC, BNS and NA, US peers include JPM, GS, BAC, Citi and MS. (4) Certain amounts have been revised from those previously presented to conform to our new basis of segment presentation. For more information, refer to the About Royal Bank of Canada section of our Q1/2023 Report to Shareholders.

# Insurance

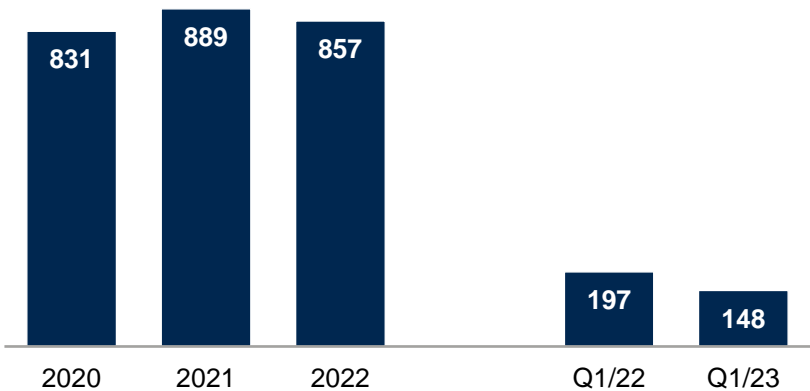
## Strategic Priorities

- 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**

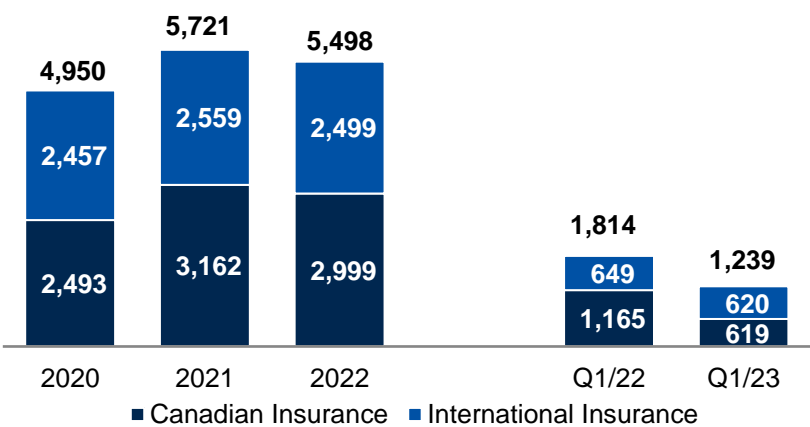
## Highlights

- One of the largest Canadian bank-owned insurance organization, serving 4.9 million clients globally<sup>(1)</sup>
- #1 in individual disability (inforce business) with 34.5%<sup>(2)</sup> market share
- #1 in individual disability net new sales with 43.6%<sup>(2)</sup> market share
- #2 in segregated fund net sales<sup>(3)</sup>
- #5 in Term business with 9% market share<sup>(2)</sup>

## Net Income (\$ millions)



## Premiums and Deposits (\$ millions)



(1) Based on FY22 Total Insurance Revenue. (2) LIMRA Canadian Insurance Survey, 3<sup>rd</sup> Quarter CY 2022. (3) Strategic Insights, Insurance Advisory Service Report, January 2023.

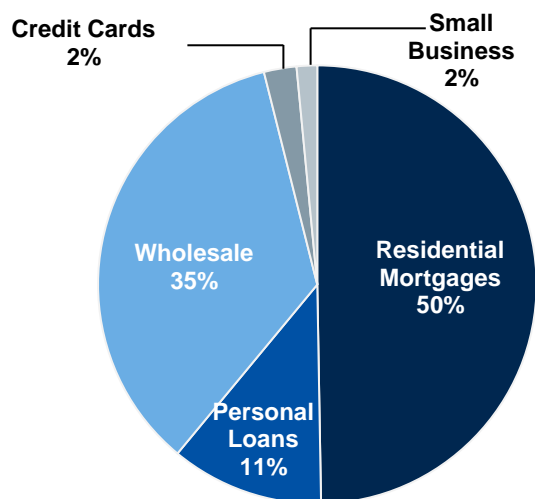


# Risk Review

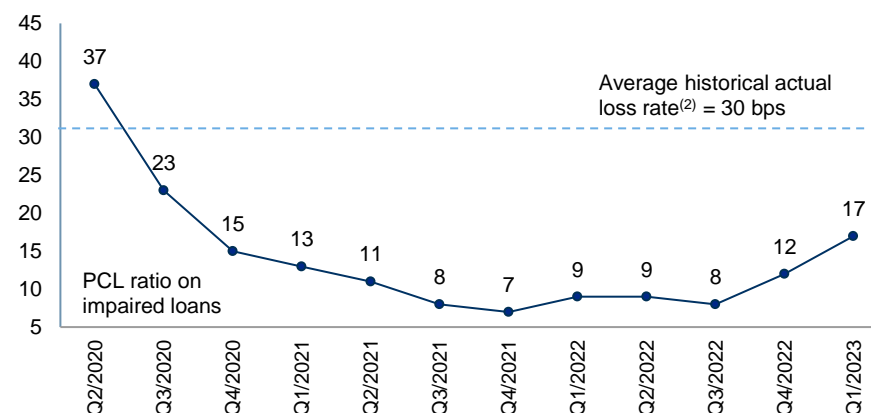
# Prudent risk management

A disciplined approach and diversification have underpinned credit quality

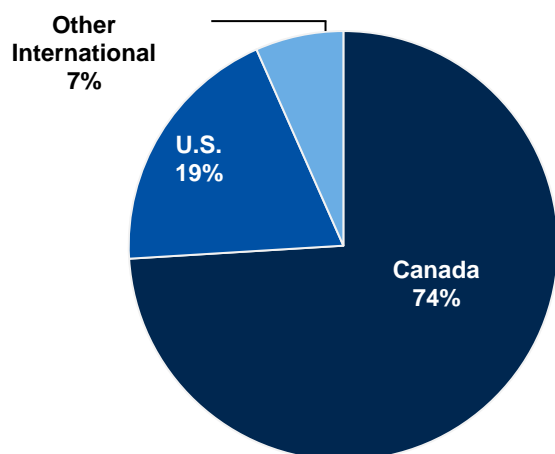
## Loan Book Diversified by Portfolio<sup>(1)</sup>



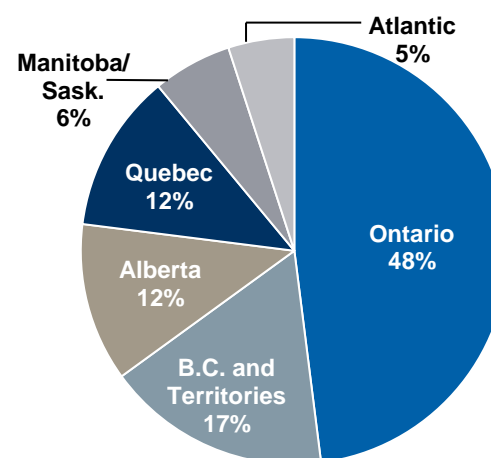
## PCL Ratio on Impaired Loans (bps)



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



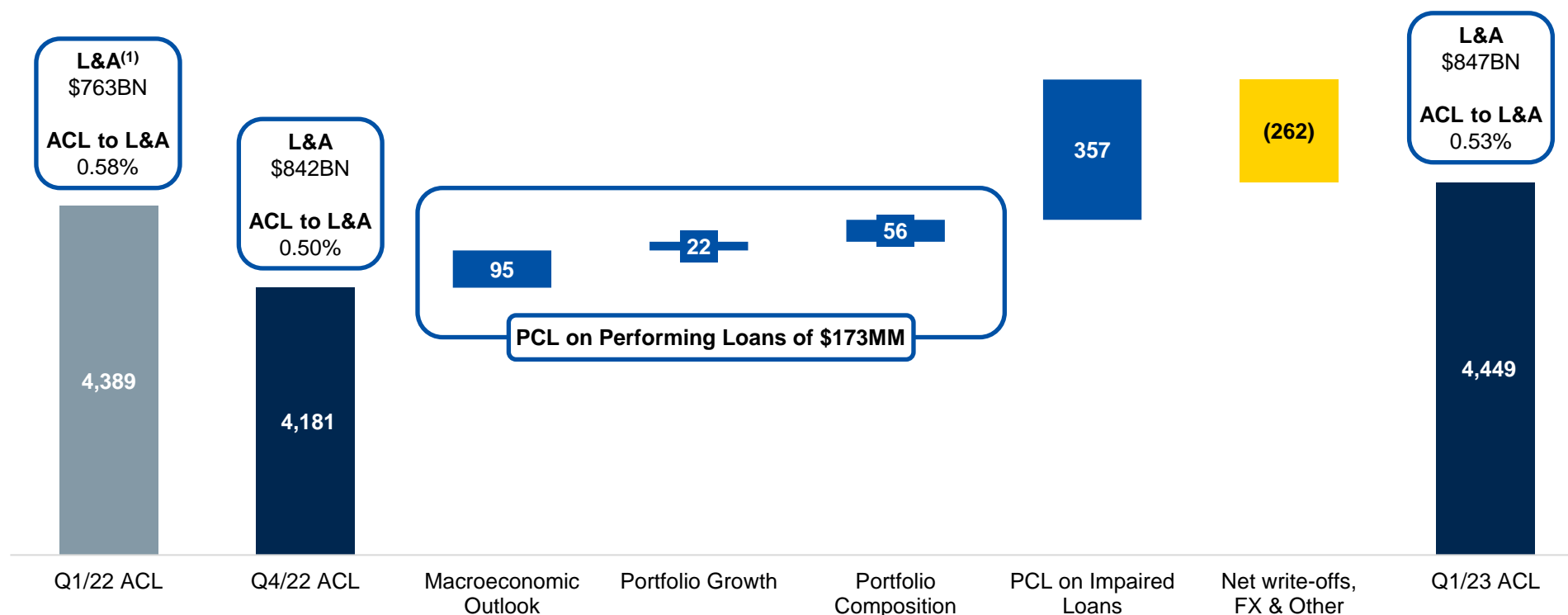
## Breakdown of Canadian Total Loans and Acceptances<sup>(1)</sup>



(1) Loans and acceptances outstanding as at January 31, 2023. 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 & Acceptances (\$ millions)

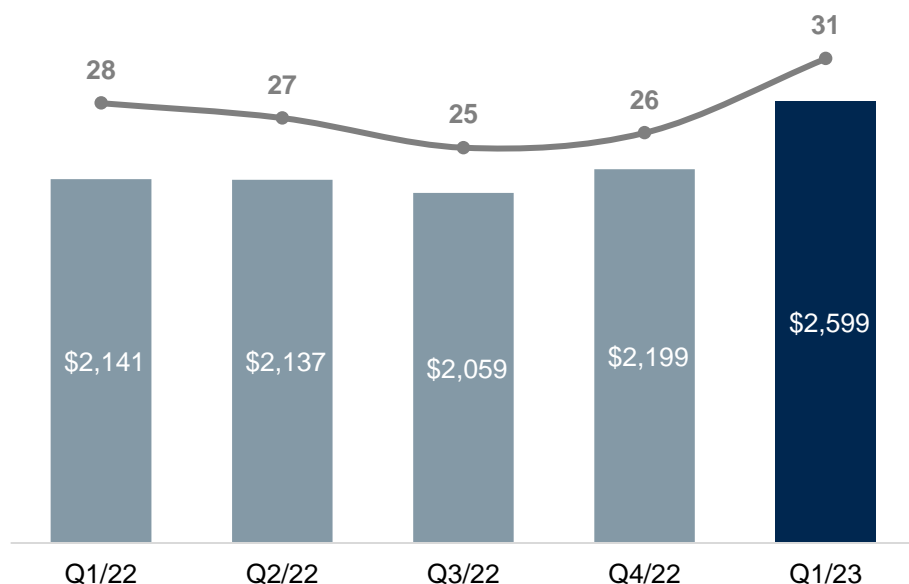


- ACL on loans and acceptances increased \$268MM QoQ
- ACL of 0.53% on loans and acceptances was up 3 bps QoQ
- We added \$173MM of provisions on performing loans this quarter
  - With the passage of time, more of our recession forecast period moved into the 12-month Stage 1 IFRS 9 window which drove an increase in Stage 1 expected credit losses during the quarter
  - This was partially offset by a modest shift in scenario weights from our downside scenario to our base case scenario, as uncertainty around more severe inflation and interest rates outcomes starts to abate
  - PCL on performing loans was primarily in Canadian Banking (largely in our retail portfolios) and City National Bank

(1) Loans and acceptances

# Gross Impaired Loans – Normalization of new formations

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



## Key Drivers of GIL (QoQ)

- Total GIL increased \$400MM (up 5 bps QoQ)

### Canadian Banking

- GIL of \$1,191MM increased \$171MM QoQ, with increases in both the retail and commercial portfolios
  - Retail:** New formations increased \$60MM QoQ, with increases across all products
  - Commercial:** New formations increased \$50MM QoQ, due primarily to two loans in the Real Estate & Related (RE&R) sector where we do not expect to incur any losses

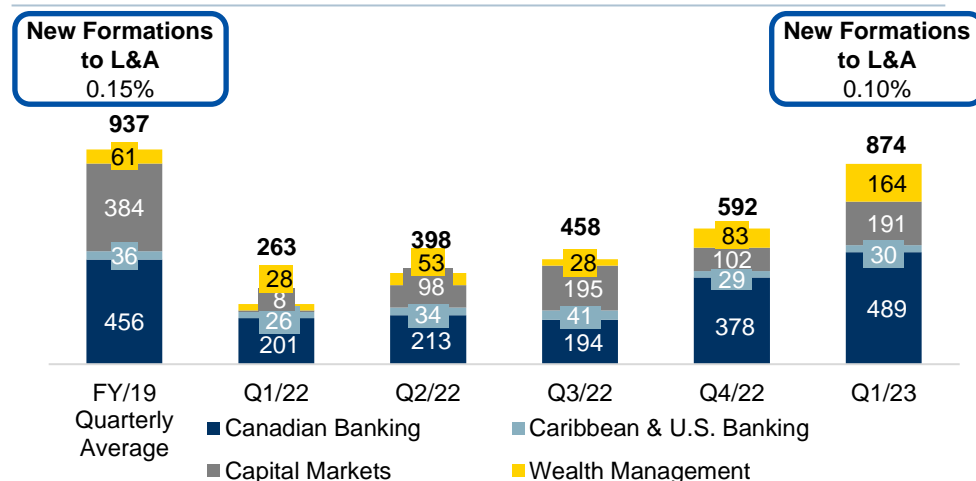
### Capital Markets

- GIL of \$686MM increased \$127MM QoQ, due primarily to higher new formations, across a number of sectors, including RE&R, Consumer Staples and Telecom and Media

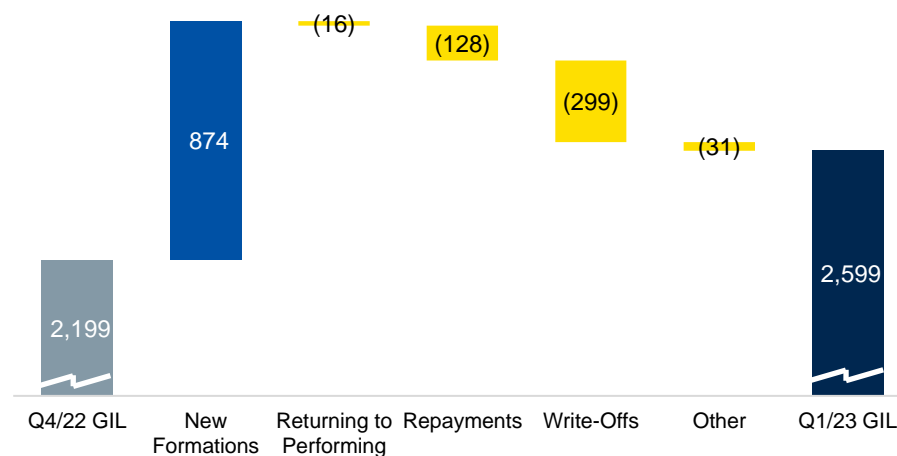
### Wealth Management (including CNB)

- GIL of \$396MM increased \$118MM QoQ, largely due to higher new formations. During the quarter, new formations were primarily in the Consumer Staples, Consumer Discretionary and Other Services sectors

## New Formations (\$ millions)<sup>(1)</sup>



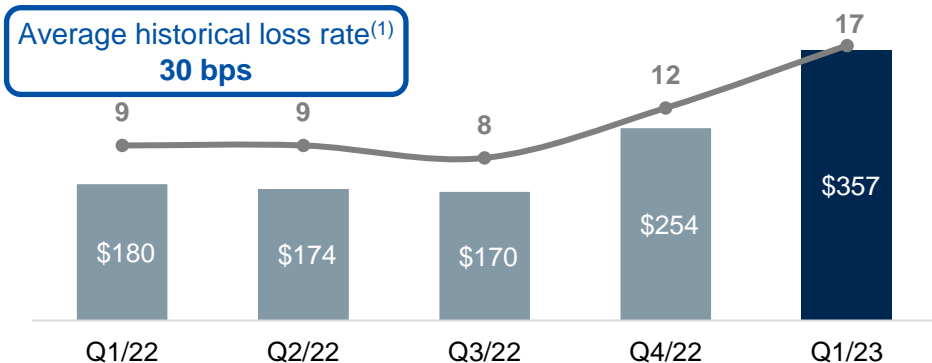
## Net Formations (\$ millions)



(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.

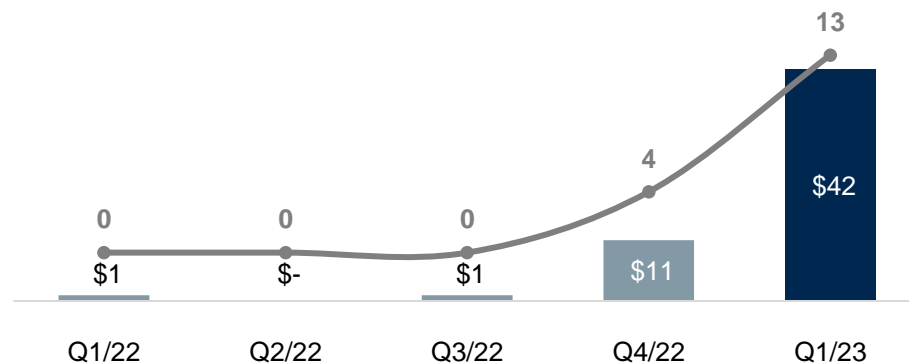
# PCL on impaired loans – Increasing, but remains below pre-pandemic levels

## Total RBC (\$ millions, bps)



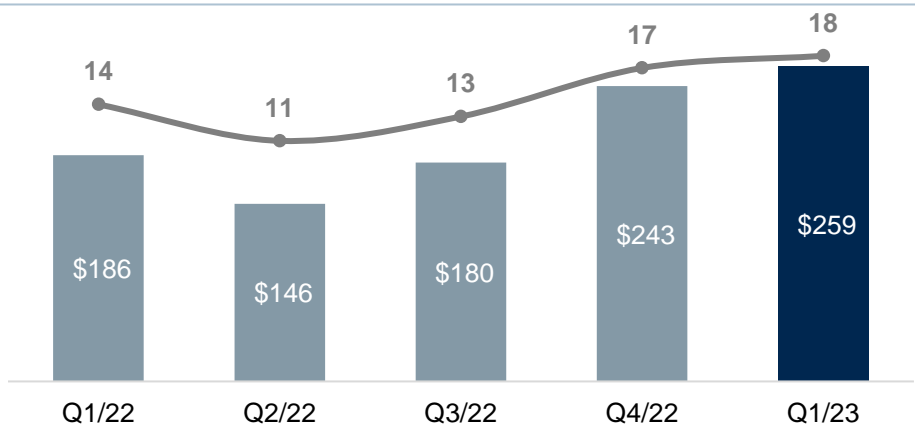
- Provisions were up \$103MM QoQ, with higher provisions in Capital Markets, Wealth Management and Canadian Banking
- PCL ratio of 17 bps remains below the pre-pandemic 2019 PCL ratio of 27 bps

## Wealth Management (\$ millions, bps)



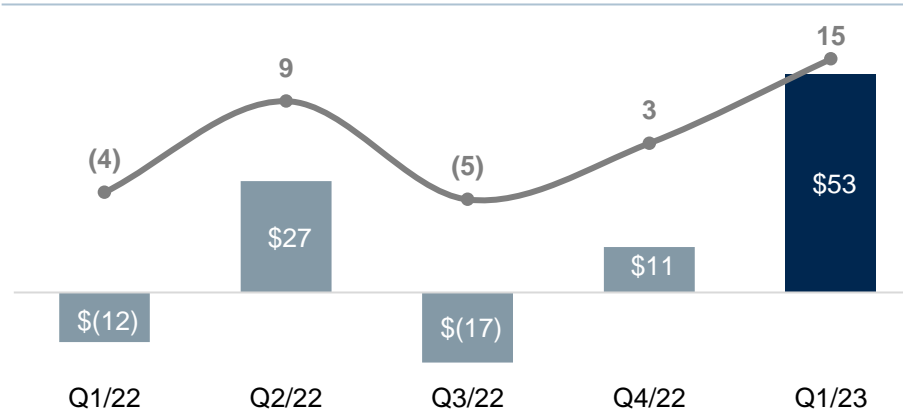
- Higher provisions QoQ, due primarily to provisions on two newly impaired loans at CNB in the Consumer Discretionary and Other Services sectors

## Canadian Banking (\$ millions, bps)



- Retail:** Provisions of \$235MM were up \$27MM QoQ, due primarily to the Personal Lending and Credit Card portfolios; provisions on residential mortgages were flat QoQ
- Commercial:** Provisions of \$24MM were down \$11MM QoQ

## Capital Markets (\$ millions, bps)



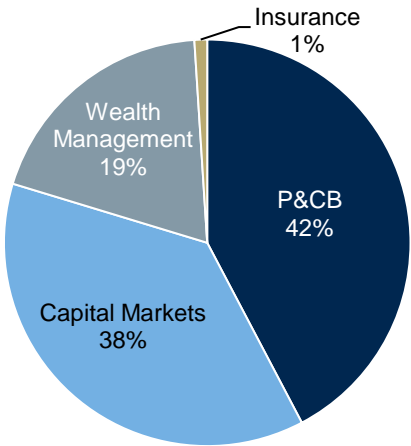
- Provisions up \$42MM QoQ
- In Q1/23, provisions were across a number of sectors, including a larger provision on a loan in the Telecom and Media sector

<sup>(1)</sup> 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%.

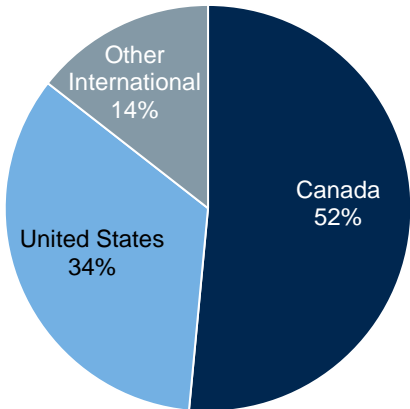
# Commercial Real Estate (CRE) portfolio summary

- CRE exposure of \$77.6 billion at Q1/2023 accounts for 9% of total Loans and Acceptances
- The portfolio was originated with sound lending standards, and remains well-diversified by geography, business and property type

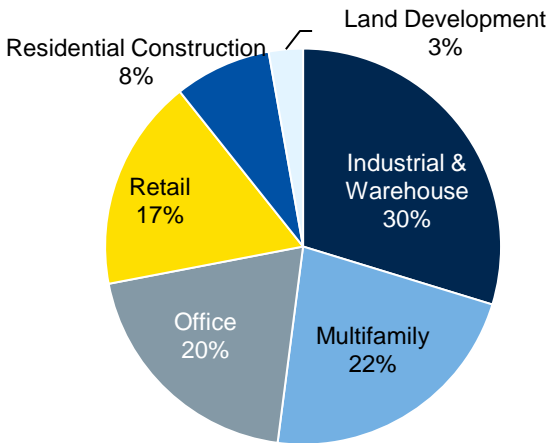
## Exposure by Business Segment



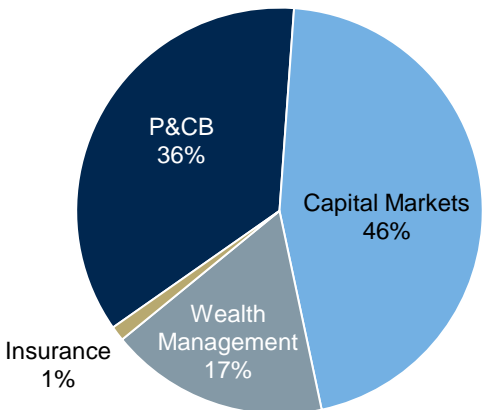
## Exposure by Geography



## Exposure by Property Type



## Spotlight on Office Property Exposure (1.9% of total L&A)



### Capital Markets

0.8% of total L&A

- Primarily Class A properties backed by strong financial sponsors
- To date, sponsors have been contributing additional equity (and providing credit enhancements) when required to right-size leverage in the face of market headwinds
- Geographically diverse (53% U.S.; 25% Canada; 22% Other International)
- 2% of outstanding exposure rated CCC+ or lower

### P&CB

0.7% of total L&A

- Primarily smaller suburban properties
- Average loan size: P&CB ~\$5MM; CNB <\$10MM
- Loans typically benefit from amortization and additional recourse outside of the asset (e.g., guarantees or other collateral)
- Late-stage delinquency rates are generally in-line with the broader portfolios

### Wealth Management

0.3% of total L&A

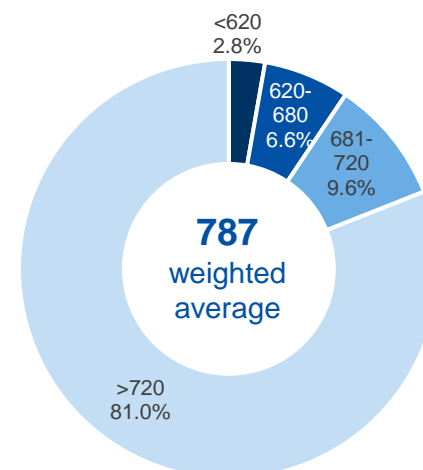
# Canadian Banking – Continuing to see signs of credit normalization

- 30-89 day delinquency rates were relatively stable QoQ across most portfolios
  - QoQ increases observed in the Cards portfolio (seasonal) and the Small Business portfolio (due to the impact of higher interest rates and government guaranteed facilities)
- PCL and GIL ratios also increased QoQ, as credit outcomes continue to return to more normal levels

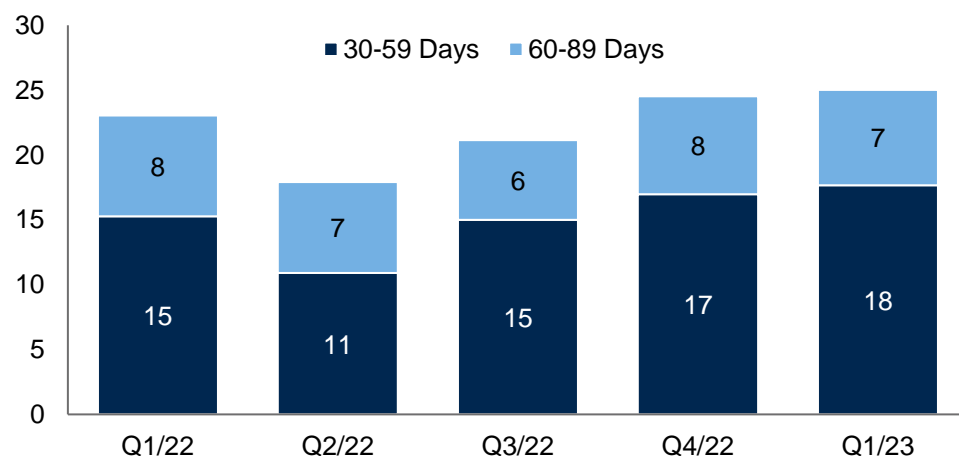
## Canadian Banking (CB) PCL on Impaired Loans and Gross Impaired Loans

	Q1/23 Avg Loan Balances (\$BN)	PCL on Impaired Loans (bps) <sup>(1)</sup>			Gross Impaired Loans (bps)			Avg FICO Score (Q1/23)
		Q1/22	Q4/22	Q1/23	Q1/22	Q4/22	Q1/23	
Residential Mortgages <sup>(2)</sup>	365.8	-	1	1	12	10	11	791
Personal Lending <sup>(6)</sup>	75.7	31	45	52	22	22	26	777
Credit Cards	19.9	158	182	199	75 <sup>(3)</sup>	72 <sup>(3)</sup>	75 <sup>(3)</sup>	740
Small Business	12.7	22	52	63	90	109	132	n.a.
Commercial	99.1	23	15	10	56	37	44	n.a.
<b>Total</b>	<b>573.2</b>	<b>14</b>	<b>17</b>	<b>18</b>	<b>22</b>	<b>18</b>	<b>21</b>	<b>787 <sup>(4)</sup></b>

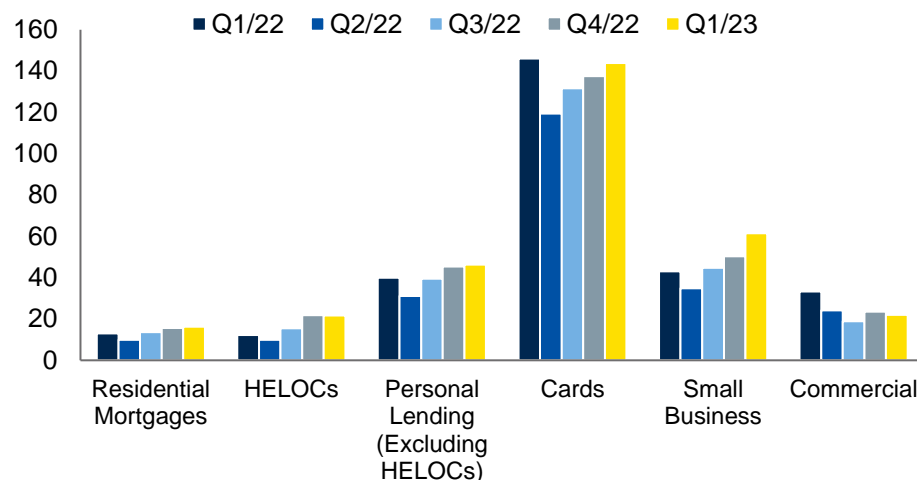
## CB Retail FICO Score Distribution (Q1/23)



## CB Delinquencies by Days Past Due (bps) <sup>(5)</sup>



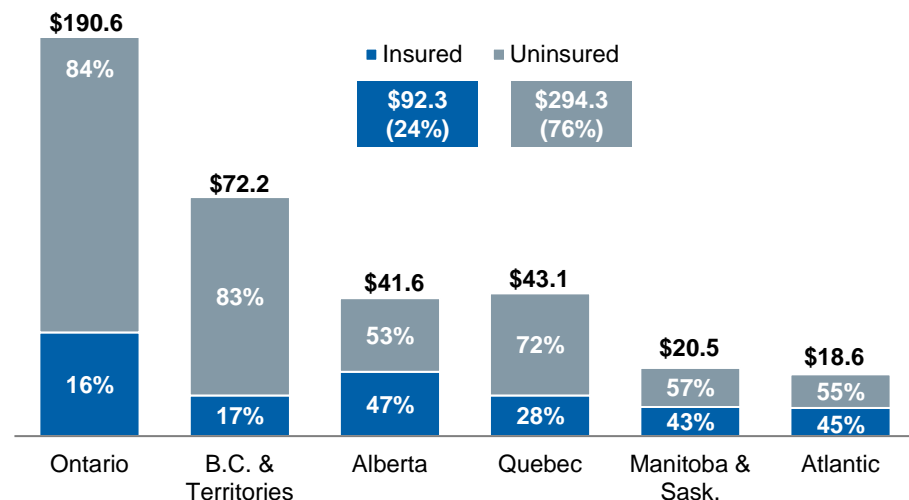
## CB 30-89 Day Delinquencies by Product (bps) <sup>(5)</sup>



(1) Calculated using average loans and acceptances, net of allowance. (2) Includes \$11.7BN 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.

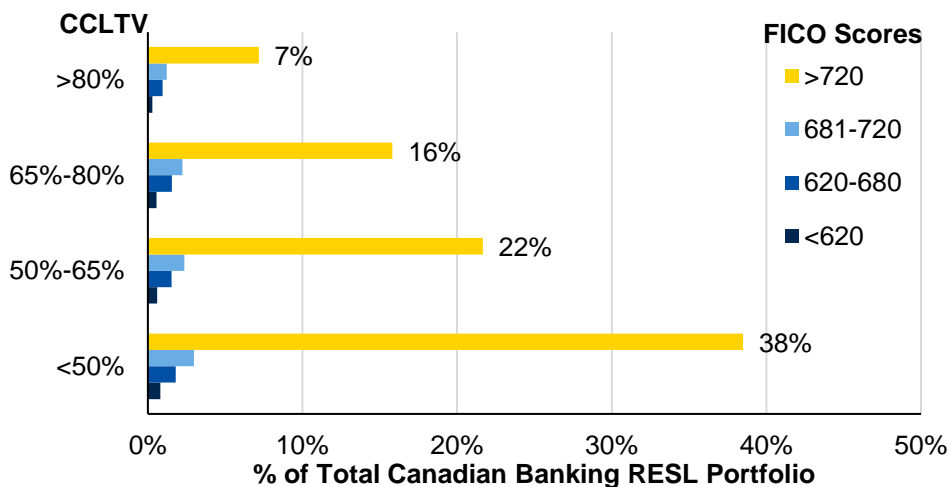
# Canadian residential portfolio – Strong underlying credit quality

## Canadian Residential Mortgage Portfolio<sup>(1)</sup> (\$ billions)



CCLTV – Canadian Banking Residential Lending Portfolio only <sup>(2)</sup>					
51%	49%	55%	52%	54%	53%

## Canadian Banking RESL Portfolio<sup>(2)</sup>



## Canadian Banking RESL Portfolio<sup>(2)</sup>

	Total \$390BN	Uninsured \$324BN
<b>Mortgage Balance</b>	<b>\$355BN</b>	<b>\$289BN</b>
HELOC Balance	\$35BN	\$35BN
<b>LTV at Origination</b>	<b>72%</b>	<b>69%</b>
<b>CCLTV</b>	<b>51%</b>	<b>50%</b>
GVA	48%	48%
GTA	51%	51%
<b>Average FICO Score</b>	<b>801</b>	<b>805</b>
FICO > 800	51%	52%
CCLTV > 80% & FICO < 680	1.24%	0.70%
<b>90+ Days Past Due<sup>(3)</sup></b>	<b>12 bps</b>	<b>9 bps</b>
GVA	7 bps	7 bps
GTA	6 bps	6 bps
<b>Average Duration</b>		
Remaining Mortgage Amortization <sup>(4)</sup>	21 years	22 years
Original Term <sup>(5)</sup>	39 months	38 months
Remaining Term	29 months	30 months
<b>Portfolio Mix</b>		
Variable Rate Mortgage	33%	37%
Fixed Rate Mortgage	67%	63%
Owner Occupied	87%	84%
Non-Owner Occupied	13%	16%
Detached	73%	73%
Condo	12%	12%

(1) Canadian residential mortgage portfolio of \$387BN comprised of \$355BN 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 \$355BN in residential mortgages with non-commercial clients and \$35BN 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 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) Excluding interest only mortgages. (5) Original term for booking during the quarter.



# Allowance for Credit Losses – Prudently reserved

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

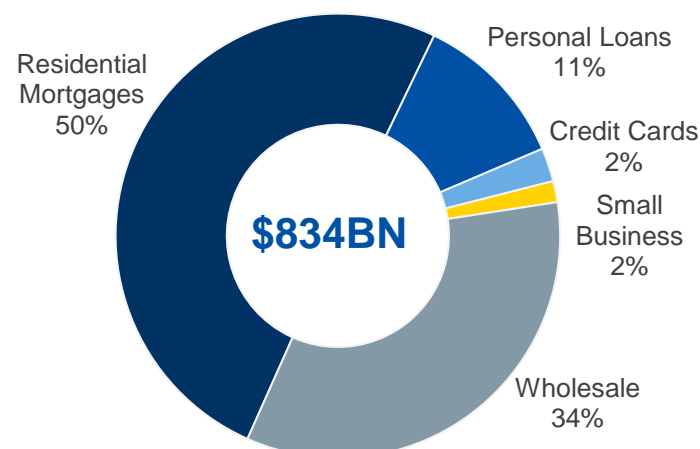
	Pre-Pandemic Q1/20		Q1/22		Q4/22		Q1/23	
Product	Stage 1 & 2	Total	Stage 1 & 2	Total	Stage 1 & 2	Total	Stage 1 & 2	Total
Residential mortgages <sup>(1)</sup>	0.07%	0.12%	0.07%	0.10%	0.07%	0.10%	0.08%	0.11%
Other Retail	1.46%	1.61%	1.59%	1.68%	1.52%	1.63%	1.62%	1.76%
Personal	0.87%	1.03%	1.01%	1.10%	0.97%	1.07%	1.06%	1.18%
Credit cards	4.35%	4.35%	5.02%	5.02%	4.34%	4.34%	4.55%	4.55%
Small business	0.73%	1.19%	1.21%	1.50%	1.17%	1.53%	1.15%	1.59%
Retail	0.44%	0.52%	0.44%	0.49%	0.42%	0.47%	0.44%	0.50%
Wholesale <sup>(1)</sup>	0.36%	0.58%	0.61%	0.80%	0.44%	0.57%	0.44%	0.61%
Total ACL	0.42%	0.53%	0.49%	0.58%	0.42%	0.50%	0.44%	0.53%

## Loans & Acceptances by Product<sup>(2)(3)</sup>

**Loan Growth**  
(Q1/20 to Q1/23, \$BN)



**Q1/23 Loan Mix**



(1) Excludes any loans held at FVTPL, which are not subject to impairment: Residential mortgages (Q1/23: \$467MM; Q4/22: \$448MM; Q1/22: \$240MM; Q1/20: \$534MM); Wholesale (Q1/23: \$12.9BN; Q4/22: \$10.1BN; Q1/22: \$13.2BN; Q1/20: \$10.7BN). (2) Excludes loans not subject to impairment (loans held at FVTPL). (3) 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

- **8.6MM** active digital users<sup>(1)</sup>
- **3.4MM** clients connected through **MyAdvisor** to a personalized plan
- **6.3MM** active mobile clients<sup>(1)</sup> on the **RBC Mobile** app

## Data & Artificial Intelligence Insights

- **4 Borealis AI** labs connected with top universities across Canada, with **40+** PhDs
- **3.3BN+** insights read by clients on **NOMI®** in the **RBC Mobile** app<sup>(2)</sup>

## Driving Efficiency & Operational Excellence

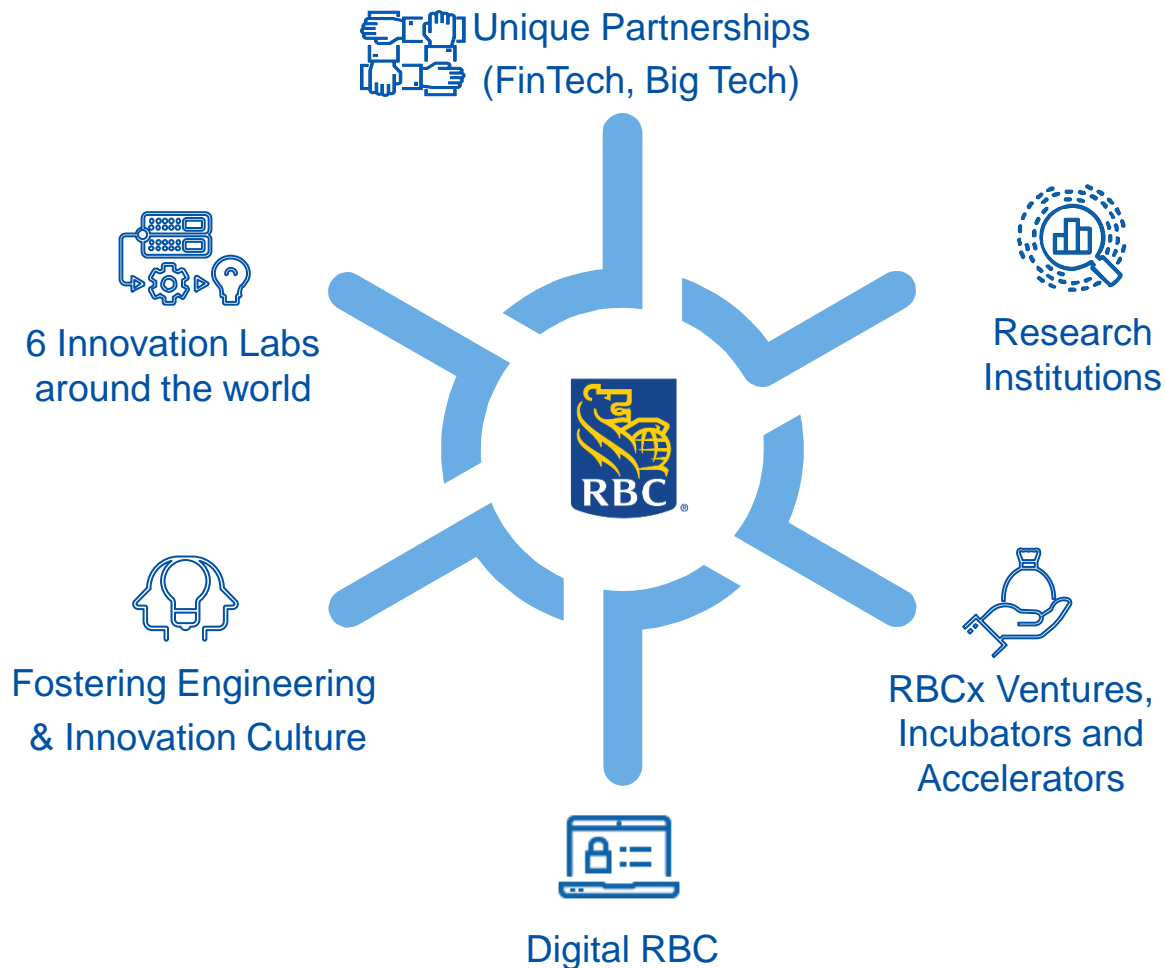
- **668MM** client transactions daily<sup>(3)</sup>

## Innovation Ecosystem & Partnerships

- **6** innovation labs globally
- **9 RBCx™ Ventures** in market
- **#1**<sup>(4)</sup> workplace in Canada to grow your career

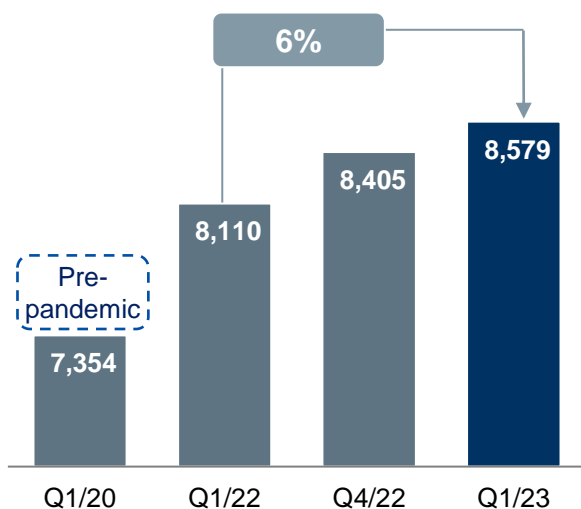
(1) These figures (in millions) represent the 90-Day Active customers in Canadian Banking only and are spot values. (2) Insights read on a launch-to-date basis. (3) Daily average number of transactions. (4) Based on LinkedIn's 2022 Top Companies in Canada list.

# We have developed a rich innovative ecosystem that attracts top talent

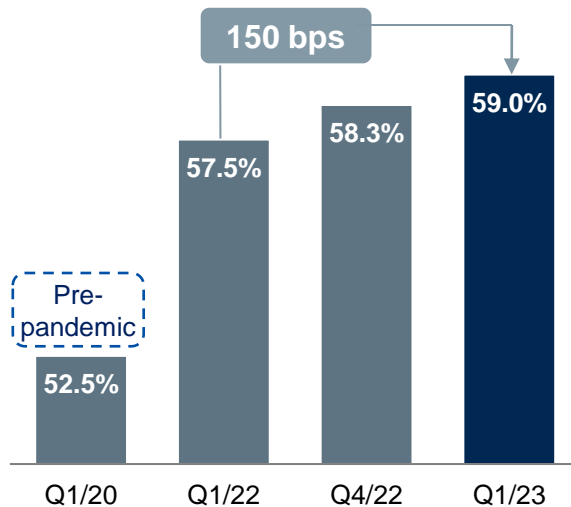


# Canadian Banking: Our 14MM+ clients continue to adopt our digital channels

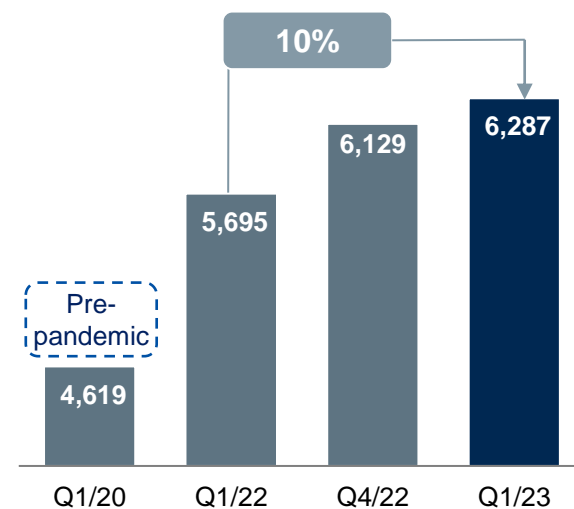
## Active Digital Users (000s)<sup>(1)</sup>



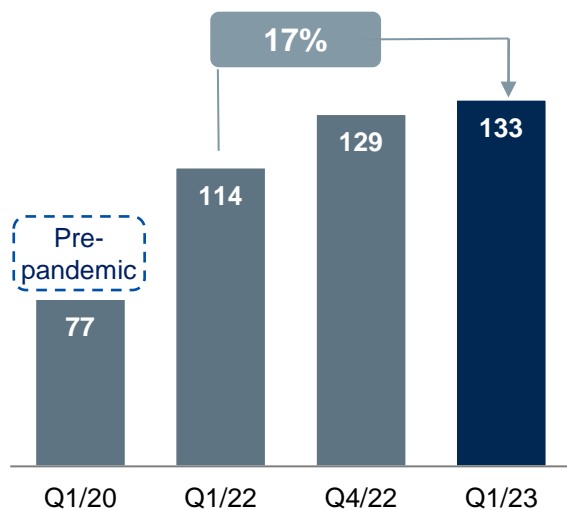
## Digital Adoption Rate<sup>(2)</sup>



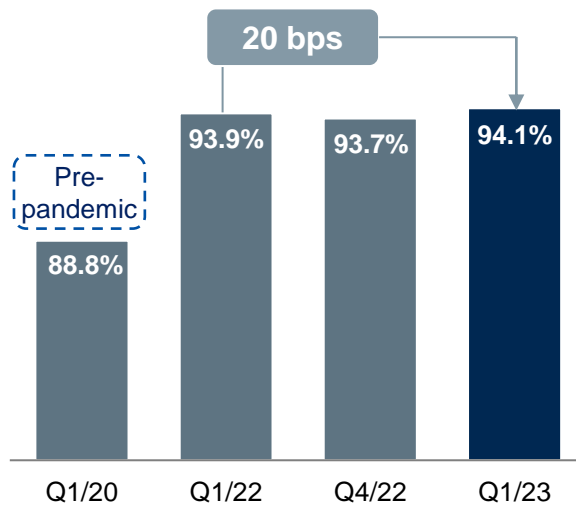
## Active Mobile Users (000s)<sup>(1)</sup>



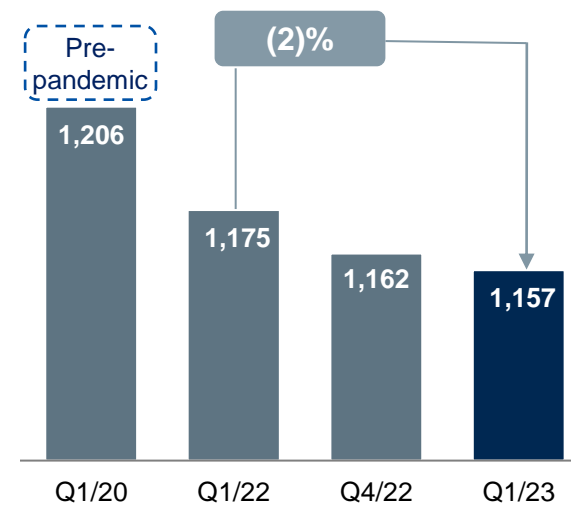
## Mobile Sessions (millions)<sup>(3)</sup>



## Self-Serve Transactions<sup>(4)</sup>



## 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



Dr.Bill®



prepped



MYDOH™



(1) OJO is a third party Ventures collaborator.

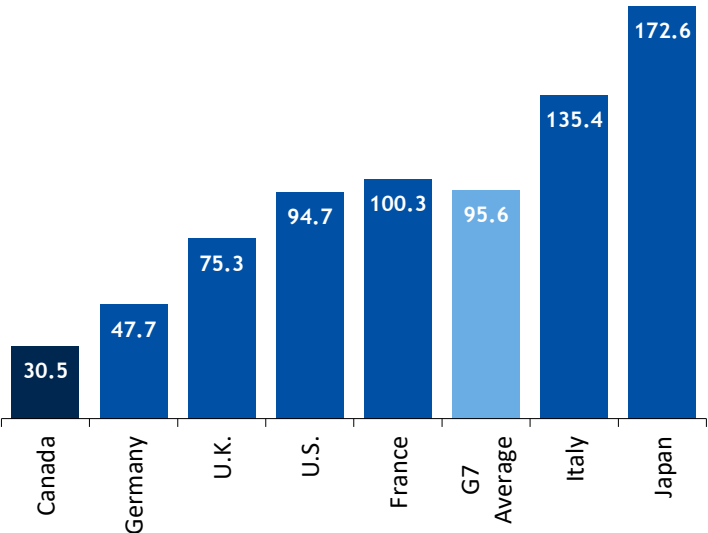
# Economic Backdrop



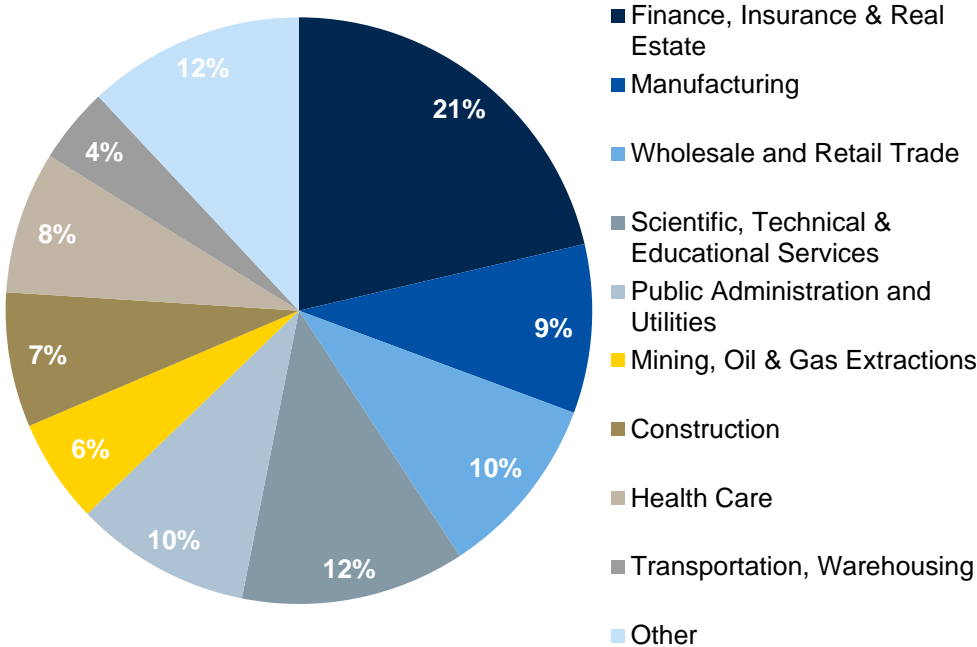
# Canada's strong fiscal position

- 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<sup>(1)</sup>

**Net Debt as % of GDP<sup>(1)</sup>**  
(October 2022)



**Canadian GDP by Industry<sup>(2)</sup>**  
(November 2022)

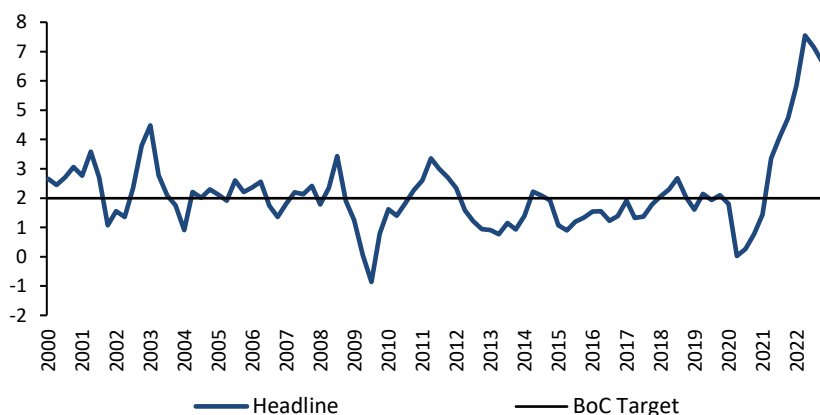


(1) Net debt refers to General Government net debt. International Monetary Fund October 2022 Fiscal Monitor. (2) Statistics Canada, RBC Economics Research.

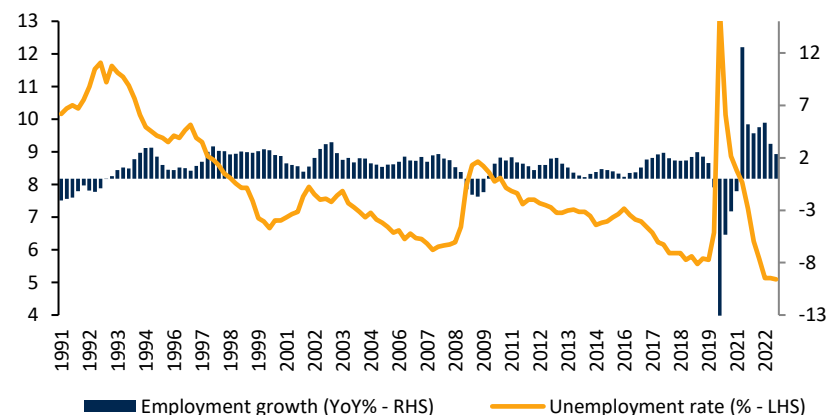
# Central bank interest rate hikes to slow consumer and business spending

- Inflation is running well above the Bank of Canada's (BoC) 2% target, but the pace has slowed and the breadth of price growth has narrowed after peaking earlier in calendar 2022. Global inflation pressures have dissipated on lower commodity prices and easing supply chain pressures. Three-month average growth in the BoC's preferred median and trim inflation measures are still running above the BoC's 1% to 3% target range, but have been increasing more slowly than earlier in the summer.
- The BoC in January announced an expected pause in interest rate increases, conditional on the outlook evolving as expected and inflation pressures continuing to ease. Labour markets have remained resilient with the unemployment rate holding close to multi-decade lows at 5.0% in December. However, the lagged impact of 425 basis points of increases to the overnight rate over the last calendar year has not yet fully passed through to household and business borrowing costs. We look for the BoC to now leave the overnight rate at the current 4.5% level for the rest of this year.
- Home resales remain well-below levels in early calendar 2022 after plunging through the spring and summer amid soaring interest rates. Home prices are expected to continue to decline modestly over the first half of 2023.
- We expect a moderate recession in Canada with GDP declining over the first half of calendar 2023 as higher consumer prices and borrowing costs reduce household demand. We expect moderate positive GDP growth to resume in the second half of calendar 2023 to leave GDP for calendar 2023 up a modest 0.6% from calendar 2022.

## Canadian Inflation (YoY)<sup>(1)</sup>



## Canadian Labour Markets (YoY)<sup>(2)</sup>



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

# 2023 Economic Outlook

## Projected Economic Indicators for 2023<sup>(1)</sup>

	GDP Growth	Inflation	Unemployment Rate	Interest Rate (3 mth T-bills)	Current Account Balance/GDP <sup>(2)</sup>	Budget Surplus/GDP <sup>(3)</sup>
Canada	0.6%	3.3%	6.1%	4.3%	(1.2)%	(1.2)%
U.S.	0.5%	3.2%	4.2%	4.1%	(3.0)%	(5.7)%
Euro Area	1.0%	6.2%	7.4%	N.A.	1.4%	(3.3)%

### Canada

- Canadian headline inflation has trended lower from a peak of 8.1% in June of 2022 alongside lower global commodity prices, easing supply chain pressures, and narrower breadth of price growth across goods and services.
- We expect the Bank of Canada's overnight rate to stay at the 4.5% level through 2023 as the lagged impact of past interest rate increases slow household spending and further ease inflation pressures.
- GDP growth is likely to slow in the first half of 2023 as inflation and higher interest rates begin to weigh on consumer purchasing power and the economy bumps up against capacity constraints. We anticipate Canada will slip into a moderate recession in the second quarter of 2023. The unemployment rate remains at very low levels but is expected to drift higher.

### U.S.

- The U.S. unemployment rate fell to a new multi-decade low of 3.4% in January. Wage growth has shown signs of slowing, but would likely re-accelerate if labour markets remain this tight. But we continue to expect labour demand to slow and for the unemployment rate to rise.
- U.S. inflation is still running well above the Federal Reserve's 2% inflation objective but the pace has slowed and the breadth of pressures has narrowed. The lagged impact of aggressive central bank interest rate increases is expected to slow the economy in 2023 and push the unemployment rate higher.
- We anticipate the U.S. economy will slip into a moderate recession over the second and third quarters of calendar 2023, and look for the Fed to pause interest rate hikes after one more 25 bp hike in March to leave the fed funds target range at 4.75% to 5.00%.

### Euro Area

- GDP in the Euro area is expected to grow but at a slow pace in calendar 2023 with higher interest rates adding to inflation and disruptions from the war in Ukraine. We expect GDP to increase 1.0% in 2023. The European Central Bank delivered a 50bp hike at its February meeting, and we anticipate the deposit rate will reach 3.25% in the second calendar quarter of 2023.

(1) RBC Economics as of February 14, 2023 and reflects forecasts for calendar 2023. (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 <sup>(1)</sup>	U.S. <sup>(1)</sup>
<b>Regulation</b>	<ul style="list-style-type: none"> <li>Government influences mortgage underwriting policies primarily through control of insurance eligibility rules</li> <li>Fully insured if loan-to-value (LTV) is over 80%                             <ul style="list-style-type: none"> <li>Must meet 5-year fixed rate mortgage standards</li> <li>Government-backed, on homes under \$1MM</li> <li>Down-payment over 20% on non-owner occupied properties</li> <li>Canada Mortgage and Housing Corporation (CMHC) last increased mortgage loan insurance premiums in 2017 by ~15% for new mortgages with LTV over 90%</li> <li>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</li> </ul> </li> <li>Re-financing cap of 80% on non-insured</li> </ul>	<ul style="list-style-type: none"> <li>Agency insured only if conforming and LTV under 80%</li> <li>No regulatory LTV limit – can be over 100%</li> <li>Not government-backed if private insurer defaults</li> </ul>
<b>Consumer Behaviour</b>	<ul style="list-style-type: none"> <li>Mortgage interest not tax deductible</li> <li>Greater incentive to pay off mortgage</li> </ul>	<ul style="list-style-type: none"> <li>Mortgage interest is tax deductible</li> <li>Less incentive to pay down mortgage</li> </ul>
<b>Lender Behaviour</b>	<ul style="list-style-type: none"> <li>Strong underwriting discipline; extensive documentation</li> <li>Most mortgages are held on balance sheet</li> <li>Conservative lending policies have historically led to low delinquency rates</li> </ul>	<ul style="list-style-type: none"> <li>Wide range of underwriting and documentation requirements</li> <li>Most mortgages securitized</li> </ul>
<b>Lenders' Recourse</b>	<ul style="list-style-type: none"> <li>Ability to foreclose on non-performing mortgages, with no stay periods</li> <li>Full recourse against borrowers<sup>(2)</sup></li> </ul>	<ul style="list-style-type: none"> <li>Stay period from 90 days to one year to foreclose on non-performing mortgages</li> <li>Limited recourse against borrowers in key states</li> </ul>

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

# Legislation and policies – promoting a healthy Canadian housing market

---

## January 2023 – Government of Canada

- Two-year ban on foreign buyers of non-recreational residential properties came into effect

## October 2022 – Government of Ontario

- Raised the non-resident speculation tax from 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

# Legislation and policies – promoting a healthy Canadian housing market

## February 2018 – Government of British Columbia

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

## January 2018 – OSFI

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

## April 2017 – Government of Ontario

- Introduced the 'Fair Housing Plan': 16 measures to address risks in the housing market including a 15% speculation tax on non-residents purchasing homes in the Greater Golden Horseshoe region

## January 2017 – City of Vancouver

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

## October 2016 – Department of Finance

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

## 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



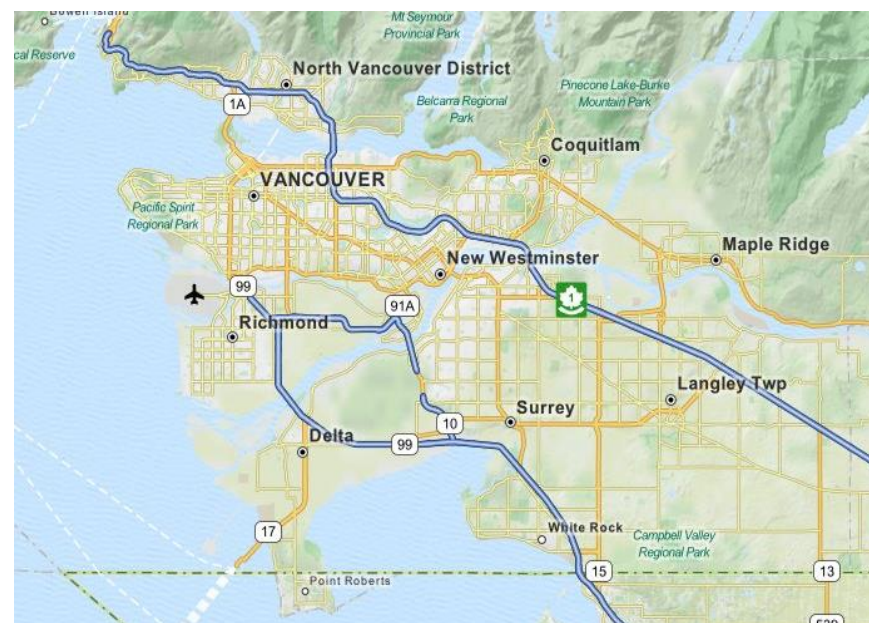
# The Toronto and Vancouver downtown condo markets

- 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<sup>(1)</sup>
  - 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<sup>(1)</sup>
  - 53.4% of recent immigrants to Canada settled in Toronto, Montreal or Vancouver<sup>(1)</sup>
- RBC’s exposure to condo development is limited – about 3.9% of our Canadian commercial loan book<sup>(2)</sup>
  - Condo exposure is 12% of Canadian residential lending portfolio<sup>(2)(3)</sup>

## “Green Belt” Surrounding Greater Toronto Area



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

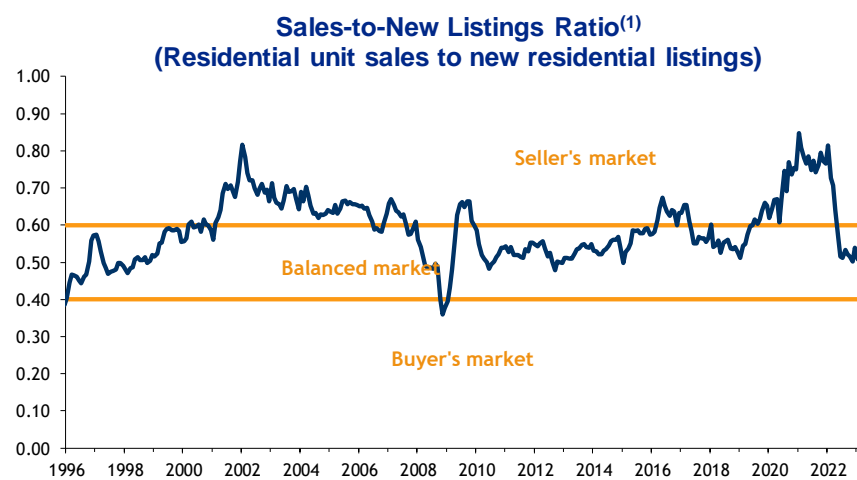


(1) Statistics Canada, 2021 Census. (2) As at January 31, 2023. (3) Based on \$355BN in residential mortgages with non-commercial clients and \$35BN in HELOC (home equity line of credit) in Canadian Banking. Based on spot balances.

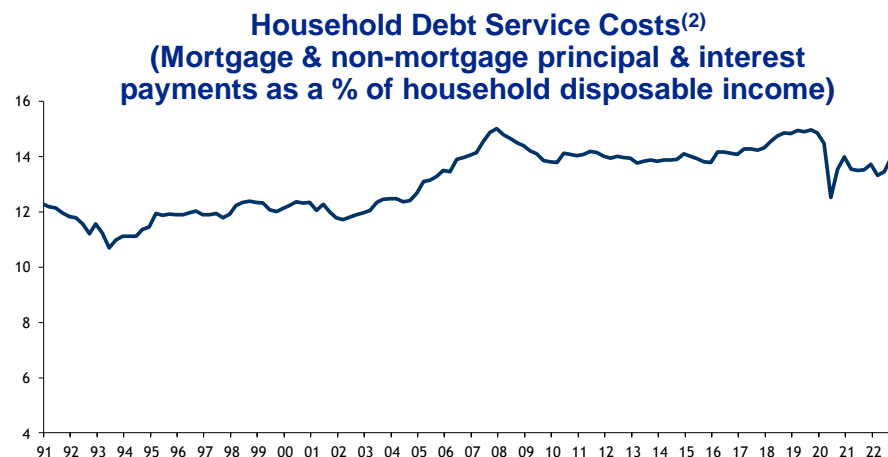
# Canada's housing market: higher interest rates significantly cooling activity

- 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 2022 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 many buyers to the sidelines and reduced the purchasing budget of others. Higher interest rates will keep activity quiet in 2023 with a bottom expected to form around spring. We expect the Bank of Canada to be on hold through the entire year. Prices are likely to continue falling until mid-year at the earliest, however, as affordability issues continue to weigh heavily on buyers.
- That said, Canada's longer-term housing market fundamentals remain solid, and should protect against an all-out market collapse. Immigration (for which targets have recently 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

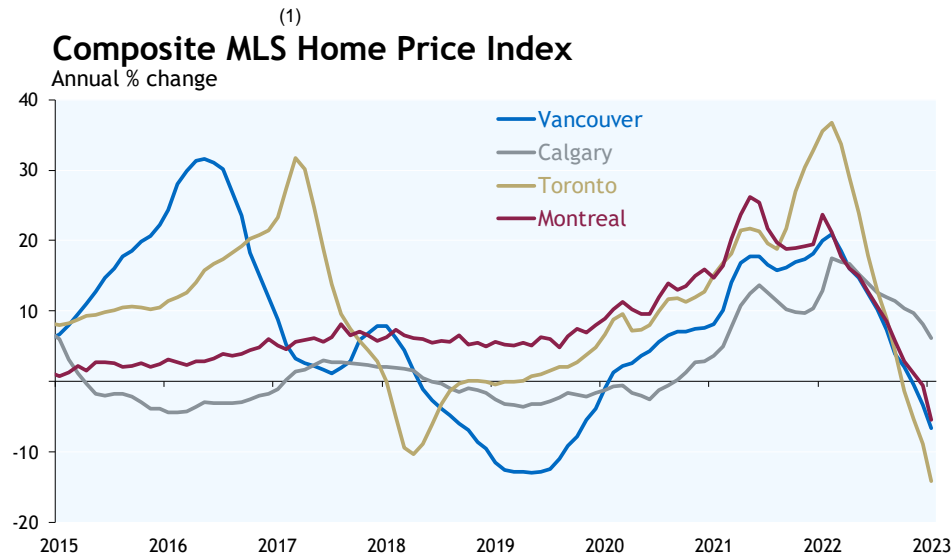


(1) Canadian Real Estate Association, RBC Economics. (2) Statistics Canada, RBC Economics.

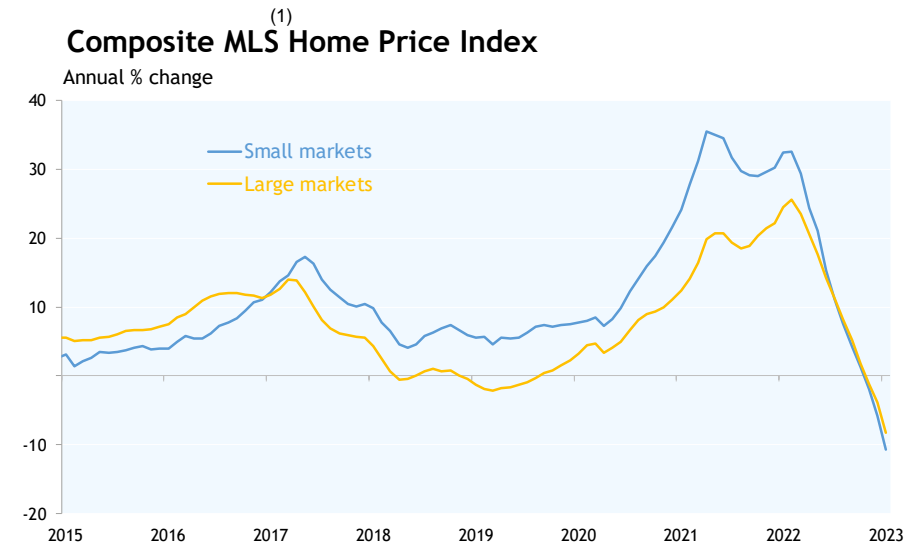
# Property values are coming down in most parts of the country

## Home prices peaked in early 2022 in most markets...

## ...including smaller areas



Source: Canadian Real Estate Association, RBC Economics



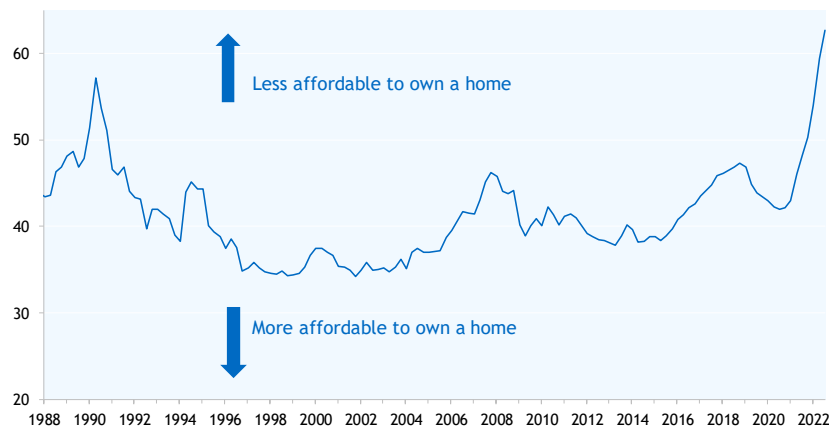
Source: Canadian Real Estate Association, RBC Economics

## A sharp deterioration in affordability has cooled demand...

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

### Housing affordability: Canada

Ownership costs of an average home as % of median household income

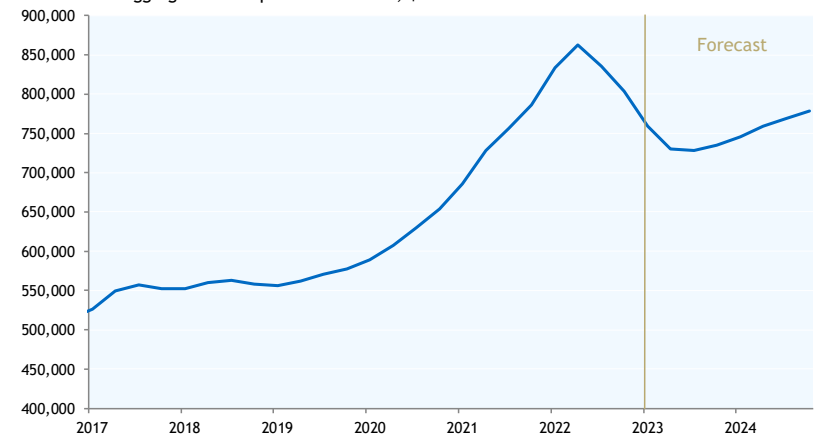


Source: RPS, Statistics Canada, Bank of Canada, RBC Economics

(1) MLS: Multiple Listing Service.

### Home price forecast: Canada

RPS aggregate home price benchmark, \$

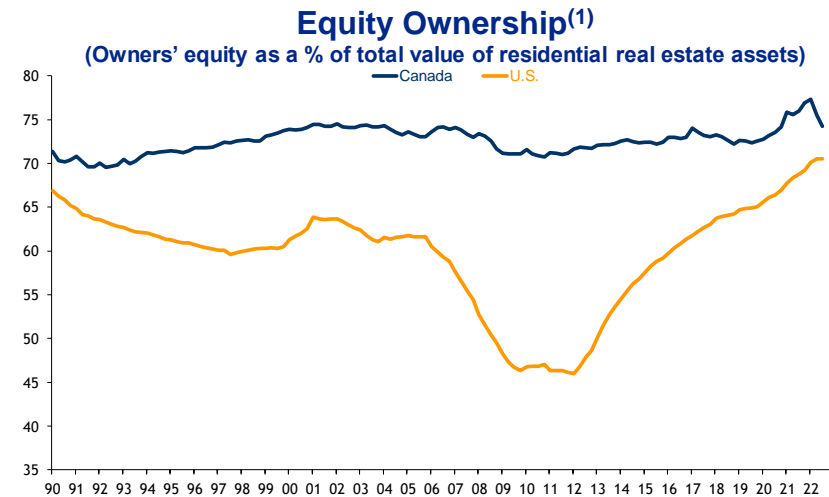


Source: RPS, RBC Economics

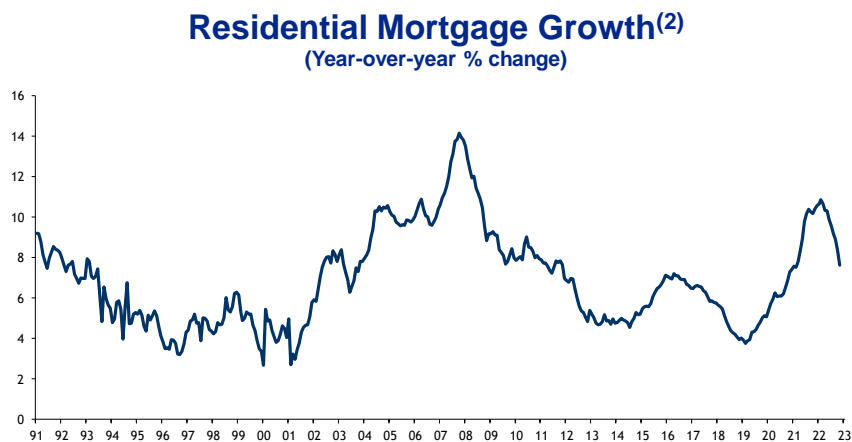
# Canadians have significant equity ownership in their homes

- Canadians carry a significant 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 significantly 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

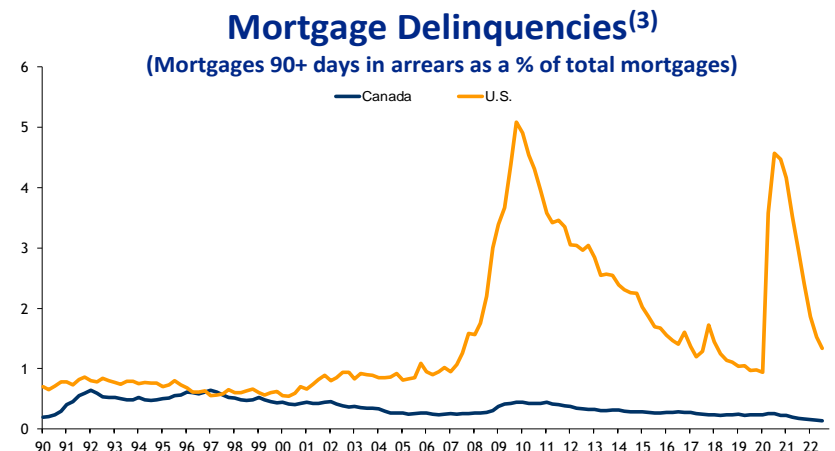
## Canadians maintain high levels of equity in their homes



## Growth in residential mortgages is slowing again



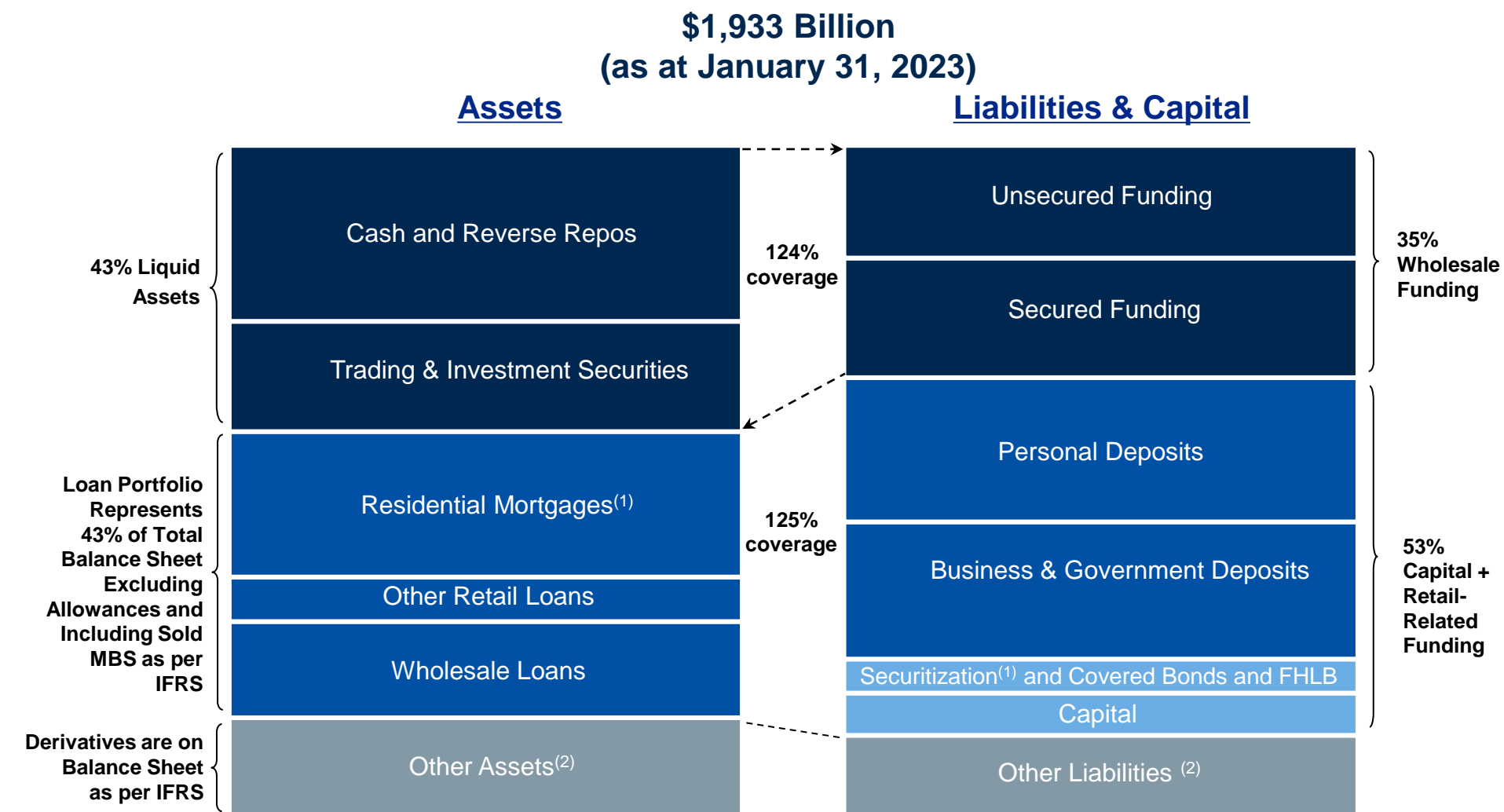
## The mortgage delinquency rate still near a 30-year low in Canada



(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

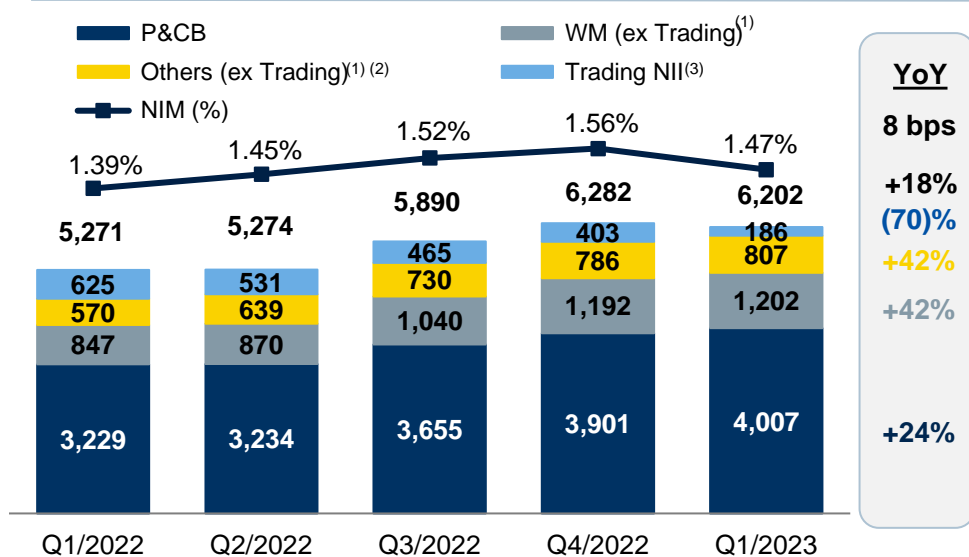
# Strength of a high-quality liquid balance sheet



(1) Securitized agency mortgage-backed securities (MBS) are on balance sheet as per IFRS. (2) Other assets include \$130BN 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.

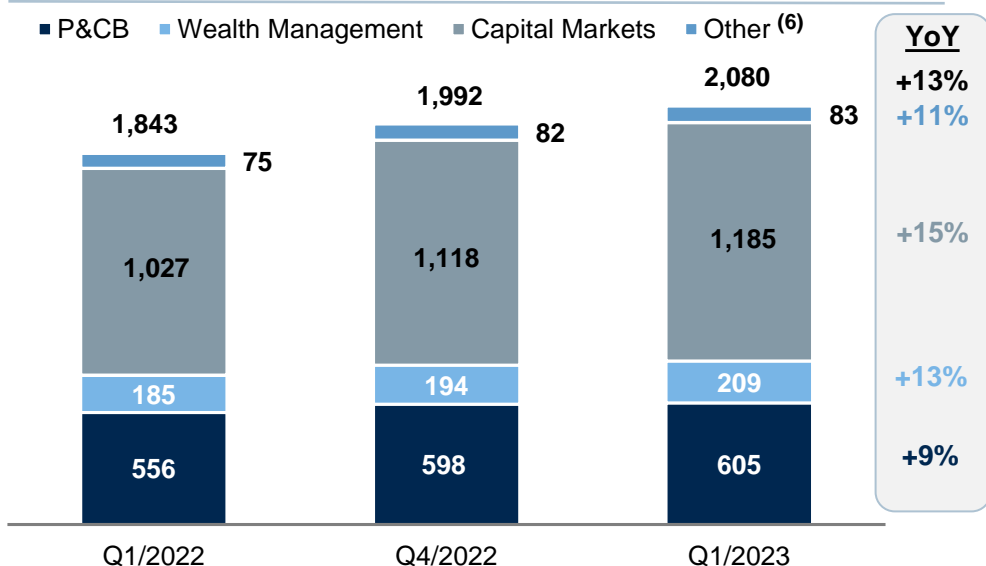
# Net interest income – Robust growth reflecting rising rates and higher volumes

## All-Bank Net Interest Income (\$ millions)



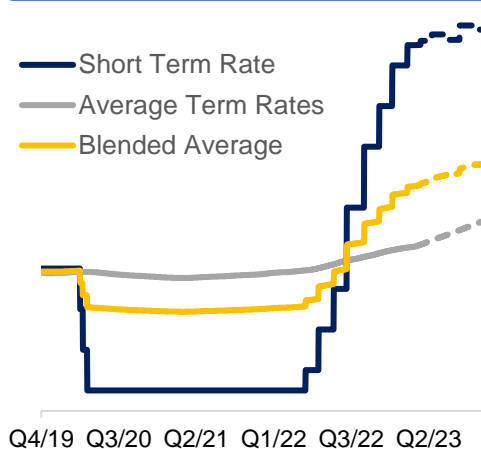
- Net interest income up 18% YoY due to higher spreads and solid loan growth in Canadian Banking and Wealth Management, partially offset by lower results in Capital Markets
  - Net interest income (ex-trading)<sup>(1)</sup> up 29% YoY
- NIM on average earning assets<sup>(3)</sup> up 8 bps YoY (down 9 bps QoQ)
  - The cost of funding of certain transactions is recorded in interest expense while related revenue is recorded in non-interest income
  - NIM (ex-Trading Assets, Trading net interest income and Insurance Assets) on total average assets<sup>(4)</sup> up 29 bps YoY (up 1 bp QoQ)
    - Canadian Banking NIM up 32 bps YoY, up 3 bps QoQ (see slides 12 and 26)
    - CNB NIM up 70 bps YoY, down 5 bps QoQ (see slide 26)

## Average Assets (\$ billions)<sup>(5)</sup>



## Drivers of Net Interest Income

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



### Tailwinds

- Higher ST interest rates
- Steepening yield curve
- Volume growth
- Higher utilization rates

### Headwinds

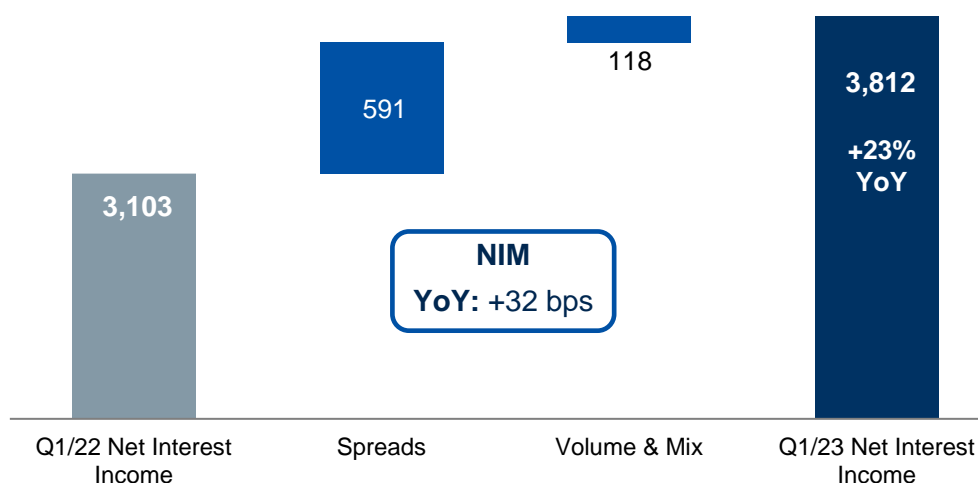
- Deposit run-off and shift to lower margin deposits
- Higher deposit betas and pricing competition

(1) Net interest income (ex-trading) is calculated as net interest income less trading net interest income. (2) Includes Capital Markets and Corporate Support. (3) Trading net interest income reflects net interest income arising from trading-related positions, including assets and liabilities that are classified or designated at fair value through profit or loss (FVTPL). (4) 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. (5) Totals may not add due to rounding. (6) Includes Insurance and Corporate Support.

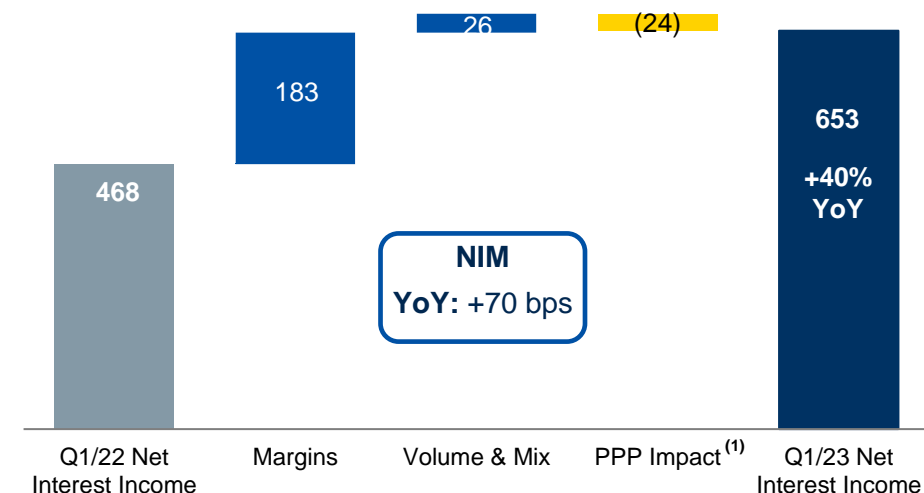


# Net Interest Income: Higher interest rates continue to benefit net interest margin

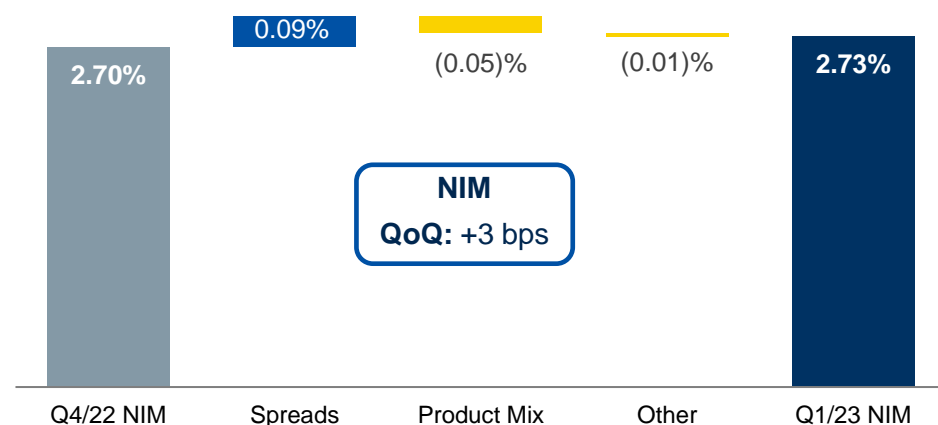
## Canadian Banking Net Interest Income (\$ millions)



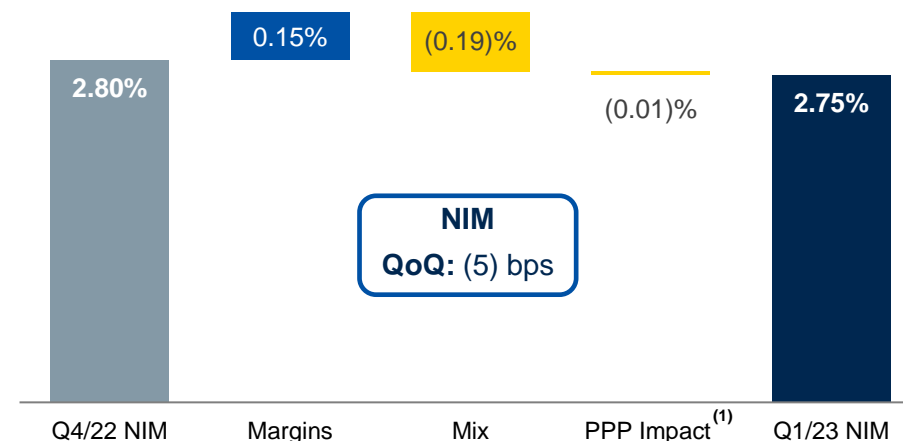
## CNB Net Interest Income (US\$ millions)



## Canadian Banking NIM on Average Earning Assets



## CNB NIM on Average Earning Assets

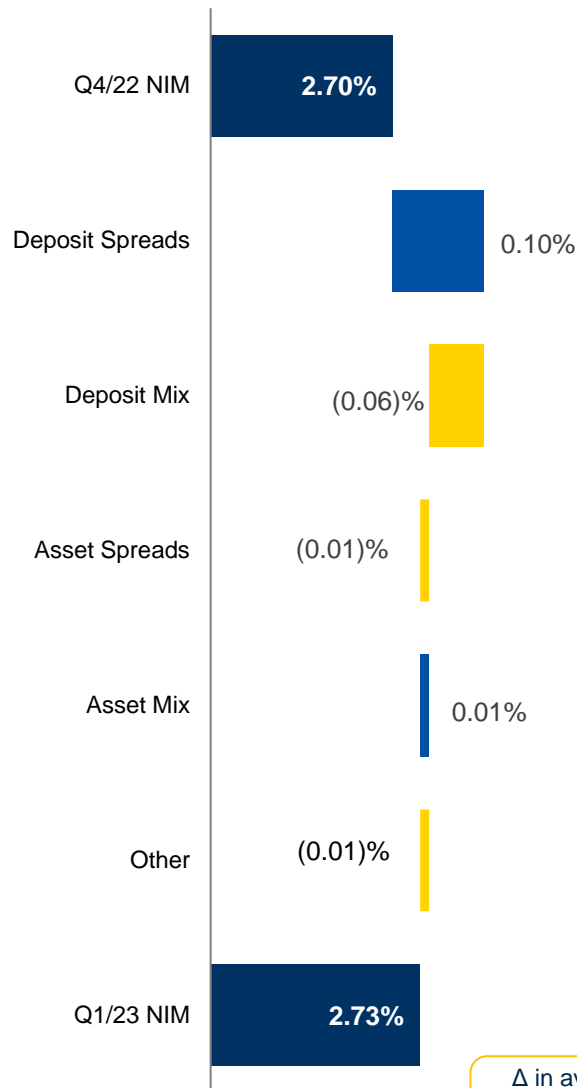


(1) Paycheck Protection Program.

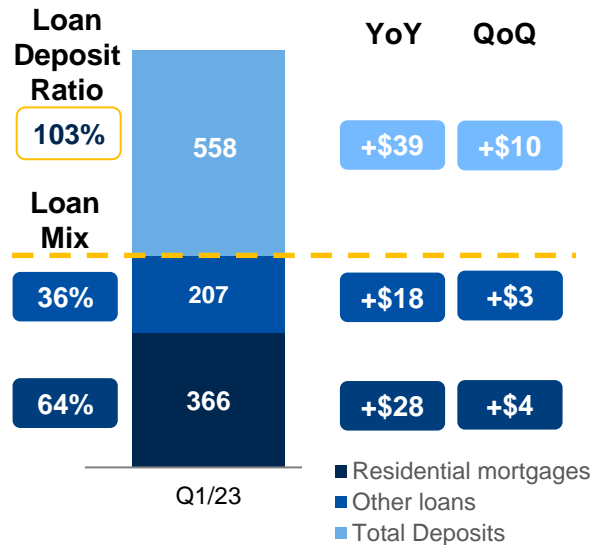


# Canadian Banking: Higher deposit margins partly offset by changing client activity

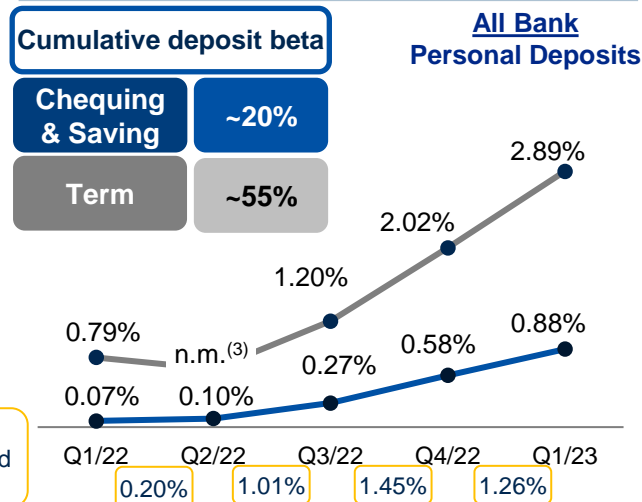
## Canadian Banking NIM on Average Earning Assets



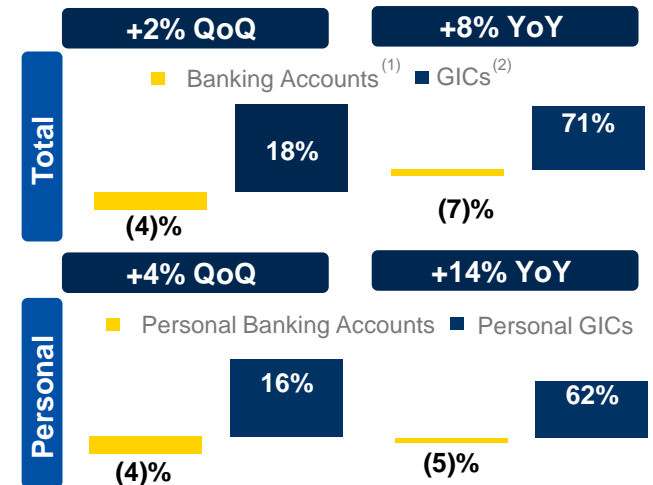
## Loan growth largely funded through lower cost client deposits



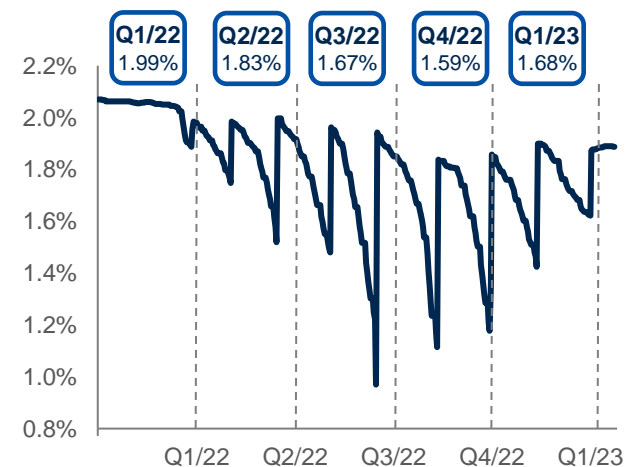
## Rising deposit costs buffered by non-interest bearing deposits



## Client behaviour is driving a change in deposit mix



## Volatility in the Prime-BA spread impacting asset spreads



(1) Reflects changes in personal banking accounts and business deposit accounts. (2) Reflects changes in personal GICs and business GICs. (3) Not meaningful.

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

All-Bank: Impact of 100 bps change across the curve <sup>(1)</sup>			Impact of 25 bps change <sup>(2)</sup>			
Net interest income (\$MM)	Increase	Decrease	Revenue (\$MM)	Increase in short-term rates <sup>(2)</sup>	Increase across the curve <sup>(2)</sup>	Decrease across the curve <sup>(2)</sup>
Canada	\$527 million	\$(593) million	Canadian Banking	\$60 million	\$135 million	\$(135) million
U.S.	\$136 million	\$(183) million	U.S. Wealth Management (including CNB)	US\$25 million	US\$31 million	US\$(36) million
Total	\$663 million	\$(776) million				

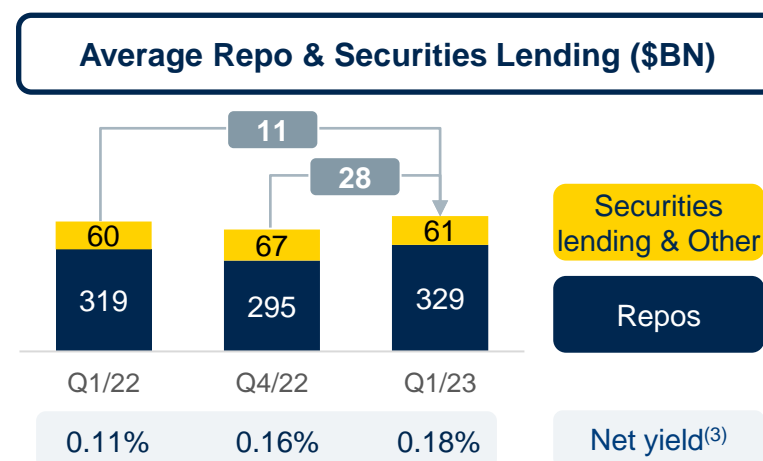
## Inter-connectedness with Non-Interest Income

### Capital Markets

- Repo gains in non-interest income is partly offset in interest expense
- The cost of funding of certain Treasury Services transactions in Capital Markets is recorded in interest expense, while related gains are recorded in Other revenue in non-interest income

### Wealth Management (including CNB)

- U.S. Wealth Management sweep revenue is largely recorded in non-interest income



(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) Represents balances and net yield in the Capital Markets core fixed income repo business.

# Well-diversified wholesale funding platform

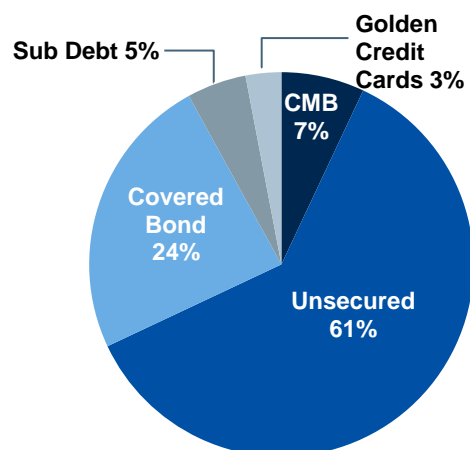
- Well-diversified across products, currencies, investor segments and geographic regions
- Raise majority of funding in international markets, preserving significant domestic capacity which can be more readily tapped in stressed market conditions
- Regular issuance in all major markets to promote investor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

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

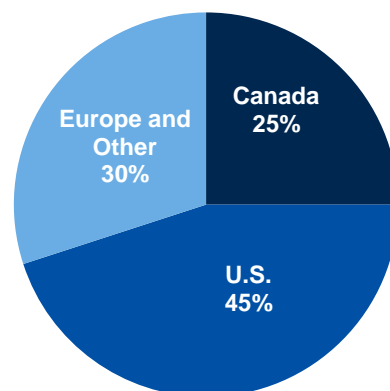
U.S.
<ul style="list-style-type: none"> <li>SEC Registered Shelf (US\$50BN)</li> </ul>

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

## Well Diversified by Product<sup>(2)</sup>



## Diversified by Geography<sup>(2)</sup>



## Recent Deals

- GBP \$650 Million 5 year unsecured at GILTS+165bps / SOFR+155bps
- CAD \$2 Billion 5 year unsecured at GOC+158bps / SOFR+157bps
- EUR \$1.75 Billion 2 year unsecured at EURIBOR+43bps / SOFR+81bps
- USD \$1 Billion 3 year unsecured at UST+95bps / SOFR+109bps
- USD \$750 Million 5 year unsecured at UST+125bps / SOFR+150bps
- USD \$1.7 Billion 10 year unsecured at UST+155bps / SOFR+182bps
- GBP \$750 Million 5 year Covered Bond at SONIA+75bps / SOFR+95bps
- CAD \$1.2 Billion 3 year Covered Bond at GOC+80bps / SOFR+87bps
- USD \$1.25 Billion 3 year Covered Bond at SOFR+85bps

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

# RBC Covered Bond Program

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## Globally Active

- Active program in six different currencies: EUR, CAD, USD, CHF, AUD and GBP
  - C\$68.9BN currently outstanding

## Strong Issuer

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

## Canadian Legislative Changes

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

## U.S. Market

- Active U.S. dollar covered bond issuer
- Several benchmark bonds outstanding
- Broad U.S. investor base
  - Issued US\$24.1BN across 12 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 <sup>(1)</sup>				
\$ millions (unless otherwise stated)	2021	2022	Q1/22	Q1/23
Net Income	2,836	3,287	821	848
Add: After-tax effect of amortization of other intangibles	162	164	41	65
Cash Earnings	2,998	3,451	862	913

Calculation of Adjusted Net Income and Diluted EPS			
\$ millions (unless otherwise stated)	Q1/22	Q4/22	Q1/23
<b>Net income available to common shareholders</b>	<b>4,039</b>	<b>3,809</b>	<b>3,168</b>
Add: Canada Recovery Dividend and other tax related adjustments (specified item)	n.a	n.a	1,050
<b>Net income available to common shareholders excluding specified item</b>	<b>n.a</b>	<b>n.a</b>	<b>4,218</b>
Diluted EPS excluding specified item	n.a	n.a	\$ 3.05
Other adjustments:			
Add: After-tax effect of amortization of other intangibles	47	52	71
Add: HSBC Canada transaction and integration costs	-	-	8
<b>Adjusted net income available to common shareholders</b>	<b>4,086</b>	<b>3,861</b>	<b>4,297</b>
Adjusted diluted EPS	\$ 2.87	\$ 2.78	\$ 3.10
Common shares outstanding (000s) - average (diluted)	1,424,602	1,388,548	1,384,536

Calculation of Adjusted ROE			
\$ millions (unless otherwise stated)	Q1/22	Q4/22	Q1/23
<b>Net income available to common shareholders</b>	<b>4,039</b>	<b>3,809</b>	<b>3,168</b>
<b>Adjusted net income available to common shareholders</b>	<b>4,086</b>	<b>3,861</b>	<b>4,297</b>
Average common equity	92,450	97,150	99,700
<b>ROE</b>	<b>17.3%</b>	<b>15.6%</b>	<b>12.6%</b>
<b>Adjusted ROE</b>	<b>17.5%</b>	<b>15.8%</b>	<b>17.1%</b>

(1) Certain amounts have been revised from those previously presented to conform to our new basis of segment presentation. For more information, refer to the About Royal Bank of Canada section of our Q1/2023 Report to Shareholders.

# 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 adjusted basis measures, 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 and Q1 2023 Report to Shareholders as well as in our Q1 2023 Supplementary Financial Information.

Definitions can be found under the “Glossary” sections in our Q1 2023 Supplementary Financial Information and our 2022 Annual Report.

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