



CONFIDENTIAL

Covid-19 and Mortgage Operations – First Thoughts

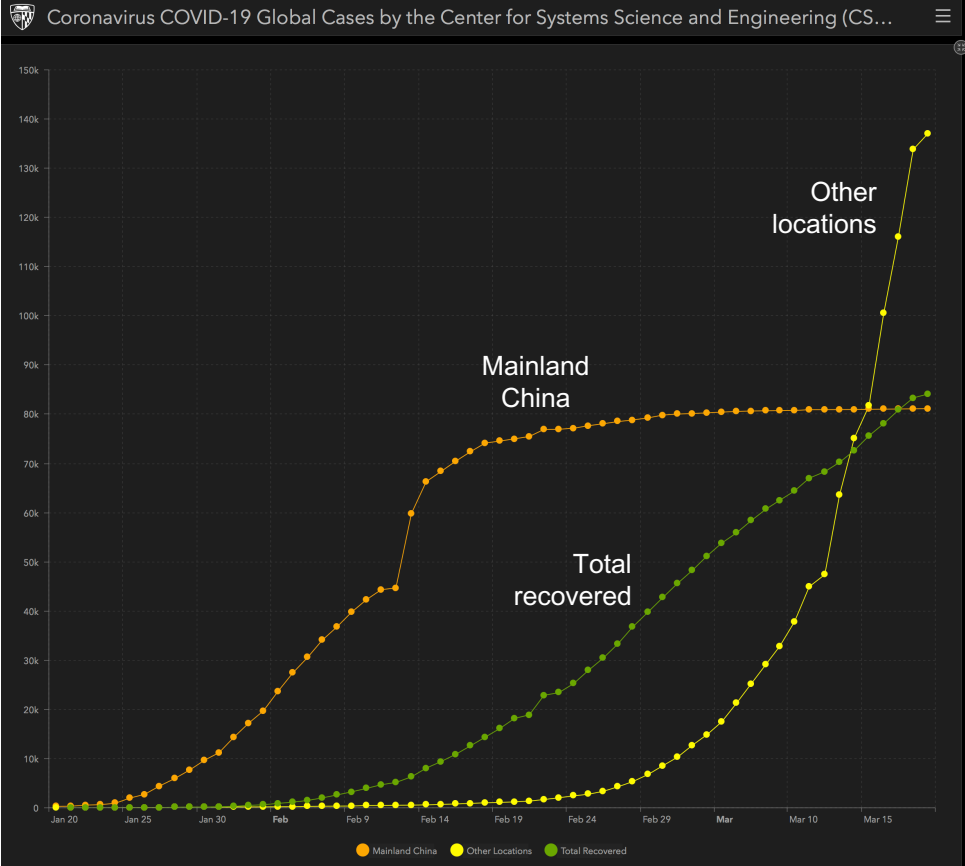
Canadian Retail Banking Mortgage Operations

Discussion Document

March 19, 2020

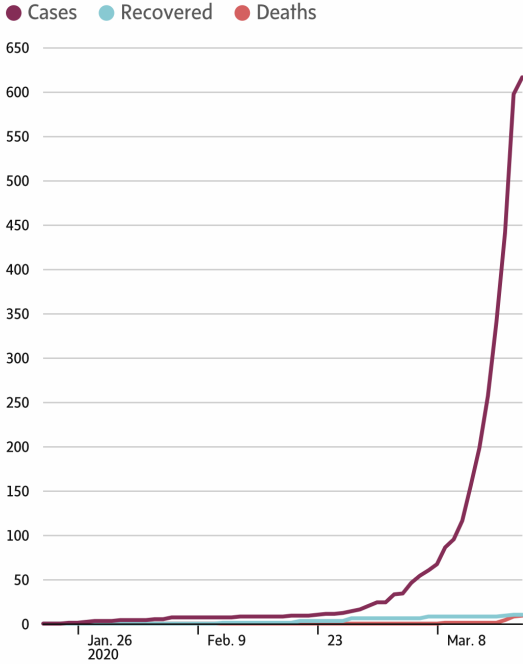
These are preliminary thoughts. Given the fluid nature of the Covid-19 situation this should not be taken as recommendations, but rather as thought starters to be further developed and tested

COVID-19: EXPONENTIAL GROWTH OUTSIDE OF CHINA, INCL. IN CANADA



In Canada, there have been at least **616** cases, **10** recoveries and **9** deaths reported.

UPDATED 7:00 P.M. ET, MARCH 18, 2020

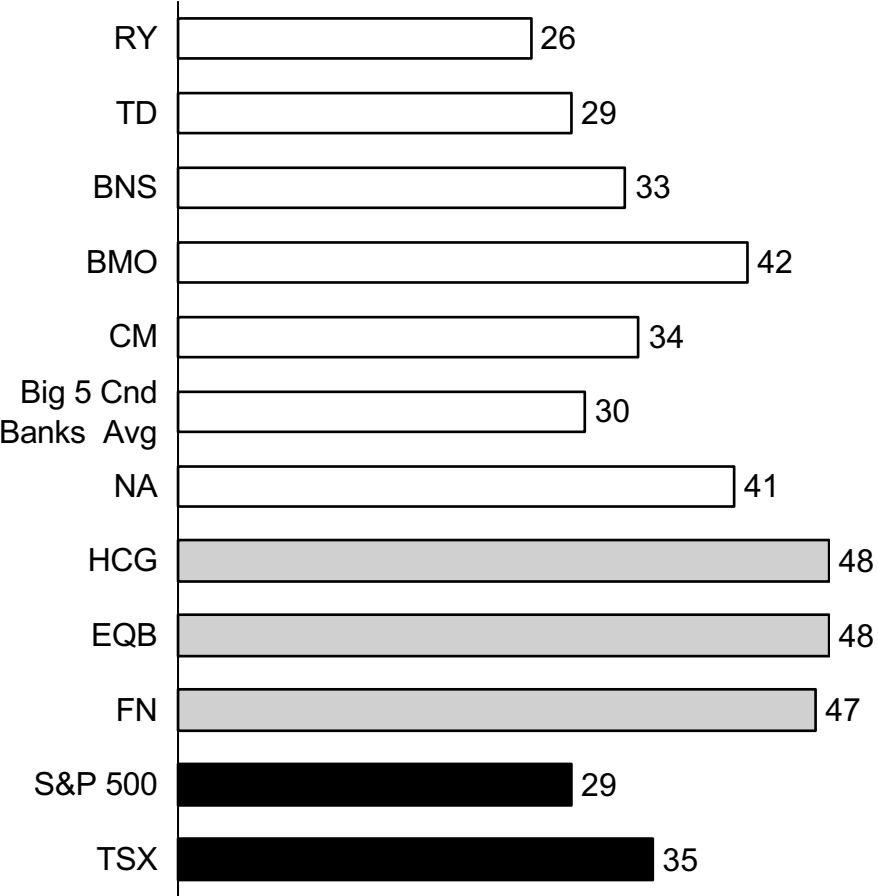


THE GLOBE AND MAIL: SOURCE GOVERNMENT WEBSITES, DALLA LANA SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF TORONTO AND JOHNS HOPKINS UNIVERSITY

CANADIAN BANK VALUATIONS SIGNIFICANTLY DOWN

Reduction in share value Feb 19 – March 18, 2020
%

- Big 6 Banks
- Alt A Banks/MFCs
- Indexes



- Big 5 Canadian Banks Average similar to S&P 500 given size and diversified business models
- BMO has higher relative commercial and capital markets exposure
- It appears prime mortgage players not punished for mortgage exposure
- Alt A Mortgage players and MFCs more exposed to Covid-19 given
 - Customers more likely to default
 - Higher exposure to Canadian real estate values esp. GTA
 - Smaller, less diversified players
- TSX higher losses due to oil exposure

Source: Yahoo Finance, Analysis Nel Inc.

FOUR CLASSES OF ACTIONS BANKS SHOULD TAKE

Hierarchy of priorities

Material in this document

| | | |
|---|---|---|
| 1 | Ensure the safety of employees and customers incl. physical business continuity plans and remote work | Not addressed |
| 2 | Take relevant immediate action to avoid unnecessary financial loss and reputational risk | Short checklist |
| 3 | Develop a clear view of future scenarios and start planning for likely outcomes | Possible future scenarios and actions to consider |
| 4 | Prepare for Post Covid-19 recovery | Initial ideas on Strategy adjustments |

SHORT CHECKLIST FOR IMMEDIATE ACTIONS TO CONSIDER – NOT EXHAUSTIVE (1/3)

| Function | Objectives | Actions to consider |
|-----------------------|---|--|
| Mortgage Originations | <ul style="list-style-type: none"> • Ensure integrity of origination channels • Build optionality | <ul style="list-style-type: none"> • Ensure ability to scale remote channels e.g. digital and phone • Communicate to Mortgage Specialist community protocols and support incl. ways to deal remotely with customers • If applicable, communicate to Broker community protocols and support incl. ways to deal remotely with customers |
| Underwriting | <ul style="list-style-type: none"> • Reduce unanticipated losses due to changed paradigm • Build loyalty with sectors who are unaffected or who will be positively affected | <ul style="list-style-type: none"> • Identify sectors or employment types where future earnings will not be the same as past earnings due to long term reduction in capacity (e.g. airline staff) • Identify sectors or employment types where earnings potential improved (e.g. nurses, e-commerce employees) |
| Pricing | <ul style="list-style-type: none"> • Price risk appropriately • Manage liquidity | <ul style="list-style-type: none"> • Consider changed risk parameters and price accordingly to manage for future losses (due to higher probability of real estate correction, increased delinquency) • Use price to optimize for available liquidity (e.g. if liquidity constrained in short term) |
| Product | <ul style="list-style-type: none"> • Reduce unanticipated losses due to product construct | <ul style="list-style-type: none"> • Review all product features with a Covid-19 recession lens, e.g. considering legal option to reduce line size for HELOC for at-risk customers in a falling real estate market • Ensure understanding of legal obligations to renew Mortgages and right to re-underwrite |

SHORT CHECKLIST FOR IMMEDIATE ACTIONS TO CONSIDER – NOT EXHAUSTIVE (2/3)

| Function | Objectives | Actions to consider |
|----------------------|---|--|
| Renewals | <ul style="list-style-type: none"> • Optimize renewals | <ul style="list-style-type: none"> • If required, re-underwrite at renewal esp. considering a real estate correction • Price appropriately at renewal to account for higher risk of real estate correction and delinquency • Consider changes to renewal procedures to account for changes in behaviour for some customer segments (e.g. at-risk professions less likely to shop) • Implement quick fixes or attrition scores in renewal procedures to ensure full advantage from higher renewals |
| Liquidity management | <ul style="list-style-type: none"> • Ensure adequate liquidity | <ul style="list-style-type: none"> • Assess all sources of liquidity for future viability (e.g. considering recent increases in credit spreads) • Ensure adequate liquidity to avoid reputational issues esp. with renewal of Mortgages • Stress-test liquidity needs e.g. considering worst case scenario if all HELOC and other lines utilize existing capacity (or an increased percentage of capacity) combined with a sharp increase in Mortgage renewals • Consider Deposit product mix and price points to generate “safer liquidity” e.g. price GICs up rather than Savings accounts |

SHORT CHECKLIST FOR IMMEDIATE ACTIONS TO CONSIDER – NOT EXHAUSTIVE (3/3)

| Function | Objectives | Actions to consider |
|----------------|--|---|
| Stress testing | <ul style="list-style-type: none"> • Ensure readiness for worst case scenarios | <ul style="list-style-type: none"> • Adjust latest stress-test for various potential Covid-19 outcomes and adjust liquidity and risk management to ensure enterprise viability for all reasonable scenarios • Build trigger-based hierarchy of actions considering input variables into stress testing model |
| Collections | <ul style="list-style-type: none"> • Reduce reputational risk • Build customer goodwill • Reduce losses | <ul style="list-style-type: none"> • Build top-down decision model to quickly triage collections cases driven by future viability of customer's profession e.g. for some customers more leniency and for others quick work-out (esp. in a falling real estate market) • Ensure plans to expand collections capacity should Canada enter an extended recession |
| Marketing | <ul style="list-style-type: none"> • Build confidence • Grow Deposits | <ul style="list-style-type: none"> • Review all marketing messages currently in market for suitability • Consider new messaging to stress stability of CDIC insured GICs offered |
| Reputation | <ul style="list-style-type: none"> • Avoid a run on the bank | <ul style="list-style-type: none"> • Manage public communications to ensure deposit base stay stable • Manage liquidity, pricing and exposure to ensure stability |

SCENARIO 1 – DELAYED RECOVERY

The virus continues to spread across the Middle East, Europe, and the United States until mid-Q2, when virus seasonality combined with a stronger public-health response drives case-load reduction

World GDP
-0.5 to -1.5%

Features

- New case counts peak by end April and decline by June with stronger public-health response and seasonality of virus
- Fall 2020 sees a resurgence of the virus but countries have better public-health preparedness globally
- In the United States and Europe, large-scale quarantines, travel restrictions, and social distancing drive drop-off in consumer spending and subsequently, business investment in 2020
- 2020 Global GDP growth falls sharply, driven by recessions in the United States and Europe and slower growth in China and other Asian countries
- In Canada, a short recession, and no meaningful reduction in real estate values

Actions to consider

- **“Stay in the game”** by
 - Managing reputation, exposure and risk
 - Supporting relationships with customers, mortgage specialists, brokers and sources of liquidity
- **Build capital** through improved renewal rates (due to uncertainty) and fees to prepare for a competitive fall season, possibly with narrower spreads
- Given relatively short-term impact, prepare for a **re-launch in the fall** – taking advantage of
 - Pent-up demand for Mortgages due to a missed spring season
 - Abundant and cheap liquidity
- Focus on improving **sales capabilities** esp. Digital
- Take advantage of support for **Small Business** by focusing on BFS

SCENARIO 2 – PROLONGED CONTRACTION

The virus spreads globally without a seasonal decline, creating a demand shock that lasts until Q2 2021. Health systems are overwhelmed in many countries, especially the poorest, with large-scale human and economic impact

World GDP
-4 to -8%

Features

- The virus does not prove to be seasonal with a mutated virus resurging in the fall of 2020, leading to a spike in cases across geographies throughout Q2
- Restrictions on travel and quarantines in the United States, Europe, China, and East Asia are tightened further in an attempt to stem the tide
- The United States and Europe experience demand-side reductions in consumer and business spending and deep recessions in 2020
- The global economic impact is severe, with significant GDP contraction in most major economies in 2020 and a slow-moving recovery beginning in only Q2 2021
- In Canada, a recession for 2020-2021, aggravated by low oil, rising unemployment, and a possible correction in real estate values

Actions to consider

- **“Stay in the game”** by
 - Managing reputation, exposure and risk
 - Supporting relationships with customers, brokers and sources of liquidity
- **Build capital** to stem future losses through improved renewal rates (due to uncertainty) and fees
- **For Alt A players**, find sources for **Liquidity** to be ready to meet demand from failing private lenders and customers declined by more conservative big banks
- Improve **Adjudication** capabilities by considering recessionary impact on professions esp. ones hit by Covid-19
- Improve **Appraisal** capabilities or build conservancy into existing system to take account of a potential real estate correction in the GTA/Canada
- Improve **Collections** capabilities to be ready for a potential real estate correction in the GTA/Canada

AT THE END OF THE TUNNEL ... LESS COMPETITION, LOTS OF LIQUIDITY, LESS CONFIDENT CONSUMERS

World GDP
>0%

Likely features of a Post Covid-19 world

Competition

- Less competition as smaller players unable to secure funding due to lack of confidence esp. Private lenders and some Fintechs
- Power with stable companies that survived the recession with access to ample liquidity

Consumers

- Less confident, more conservative consumers
- Consumer behaviour permanently changed, e.g. more likely to engage digitally, less business travel

Real estate

- Real estate value growth much slower, or negative
- Fewer real estate agents
- Fewer mortgage brokers

Regulation

- Lots of liquidity due to actions of Central Bank / CMHC, but only to reputable players who know how to manage risk
- Regulator less stringent to help recovery e.g. B-20 and stress test relaxed
- Specific aid to Small Businesses from government

Considerations for Strategy

- Focus on ways to share in available and cheap liquidity from Central Bank / CMHC
- Improve Digital channel given permanently changed consumer behaviour, fewer brokers
- Consider product or adjudication innovation given more lenient Regulator (cause of crisis wasn't lending standards)
- Consider BFS focus, given Government support to Small Business
- Consider expanding risk appetite during recovery, as Alt A market expands due to damaged credit caused by recession

APPENDIX – HELPFUL LINKS

DASHBOARD

<https://www.arcgis.com/apps/opsdashboard/index.html#/85320e2ea5424dfaaa75ae62e5c06e61>

RELEVANT ARTICLES (in sequence of recency)

<https://medium.com/@tomaspueyo/coronavirus-the-hammer-and-the-dance-be9337092b56>

<https://medium.com/@tomaspueyo/coronavirus-act-today-or-people-will-die-f4d3d9cd99ca>

<https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf>

<https://www.exponentialview.co/p/-coronavirus-on-the-latin-bridge>