

Charting Its Own Course: Coronavirus Update

- It is now more than a month since the novel coronavirus (2019-nCoV) outbreak was first reported in late December in Wuhan, China. Confirmed cases have escalated to almost 40k since then, for the most part still in China.
- We initially leaned on the 2003 SARS outbreak to understand potential impacts of a similar global pandemic on the Canadian economy, but a refresh is warranted as events have evolved.
- While the virus is largely unfolding as science might predict, policy—and consequently market—responses have been substantially different this time around.
- China's stringent containment measures and widespread foreign travel curtailments will likely fuel a sharper slowdown in China in the near-term with effects already spreading beyond travel and retail to production and export activities.
- At the same time, aggressive measures have largely contained the outbreak to China so far. Arguably, a weakening economy *a priori* has also prompted policymakers in China to respond faster to boost confidence through stimulus and a doubling-down on tariff cuts.
- We estimate that Chinese GDP growth could drop by 1.4 ppts to 4.6% y/y in the first quarter followed by a modest rebound through the rest of the year bringing annual GDP growth to an estimated 5.4% in 2020.
- The potential impact on the Canadian economy could be in the order of 0.1% of GDP by mid-2020, largely through commodity channels, provided there is no outbreak in Canada.
- These estimates reflect initial—and admittedly scant—data early in the 2019-nCoV outbreak. Risks still remain skewed to a further deterioration in the outlook until there are convincing signs of abatement.

GLASS HALF FULL, HALF EMPTY

The coronavirus continues to spread since the outbreak was first reported in late December. Over 99% of the almost 40k confirmed cases are in China though another 27 countries have reported cases. While the pace and magnitude of its spread have by far surpassed the 2003 SARS outbreak—which ultimately affected about 8,089 people (chart 1)—early indications suggest that the mortality and secondary infection rates are lower. Though various factors weigh on up- and down-side scenarios, recent scientific modeling forecasts a peak by April in Wuhan with a lag of an additional couple of weeks for surrounding areas in its base case, as reported in [The Lancet](#). Needless to say, with no signs of an imminent peak, uncertainty will persist for now. Though the pace of virus spread appears to have decelerated (chart 2), it is too early to proclaim a peak given the resumption of work following the Lunar Year holiday break.

CONTACTS

Rebekah Young
Director, Fiscal & Provincial Economics
416.862.3876
Scotiabank Economics
rebekah.young@scotiabank.com

Tuuli McCully, Head of Asia-Pacific Economics
65.6305.8313 (Singapore)
Scotiabank Economics
tuuli.mccully@scotiabank.com

Nikita Perevalov, Senior Economist
416.866.4205
Scotiabank Economics
nikita.perevalov@scotiabank.com

Chart 1

Faster Spread but Lower Mortality For 2019-nCoV So Far

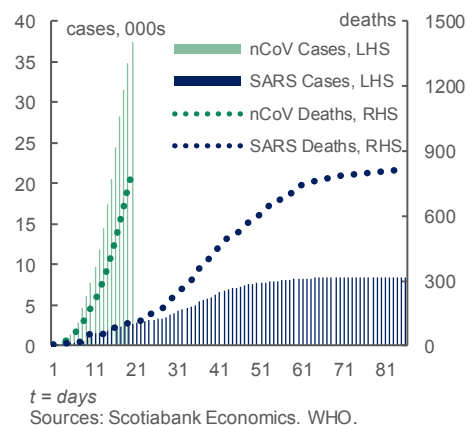
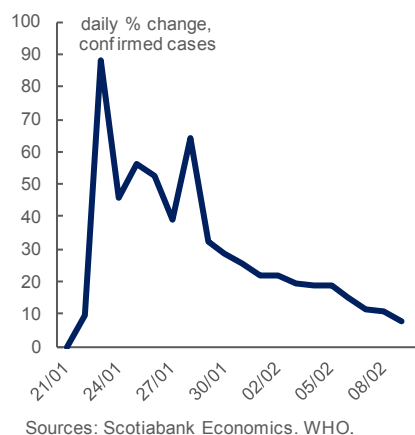


Chart 2

Rate of Confirmed Cases Slowing



CHINA BEARING THE BRUNT

The curtailment of activity across China is unprecedented. Chinese authorities have been aggressive in their efforts to contain the outbreak with an extraordinary 50 million people in 16 cities under quarantine for over three weeks now. Many businesses in the affected regions have consequently shut down. Global manufacturing leaders, particularly in the tech and auto sectors, have signaled supply chain concerns that could shutter factories abroad temporarily within weeks if domestic production does not resume. Meanwhile, other countries have imposed stringent travel restrictions to and from China, while most major airlines have cancelled all flights to the country.

Consequently China's real GDP growth this year will likely slow more substantially than anticipated. While it is still too early to predict the eventual scale or duration of the outbreak, we assume it will peak by the end of the first quarter and would be fully contained by mid-year. In this case, we estimate that China's real GDP growth would dip to 4.6% y/y in Q1 (versus our prior forecast of 6.0%). The situation would start improving in Q2, with some rebound in the second half of the year (Q2: 4.8% y/y; Q3: 5.9% y/y; Q4: 6.3% y/y) on the back of decisive policy support as well as lower oil prices (chart 3). We estimate that the Chinese economy will expand by 5.4% in 2020 as a whole, compared with our earlier projection of a 6.0% gain.

The propagation of economic impacts is broad-based. Tourism, transportation and any consumer spending-related sectors will be hit the hardest as people stay home due to fear of infection and the authorities' containment measures. The impact on tertiary sectors will be more pronounced relative to the 2003 SARS outbreak when the service sector represented 39% of China's economy versus 51% today. E-commerce may only partially cushion the adverse impact on retail sales. Unlike SARS, the stricter containment measures have also hobbled regional production as workers' activities are restricted. In particular, the now-isolated Hubei province, accounting for around 4½% of China's GDP, is a hub for the automotive, iron and steel, petrochemical, and technology industries. The industrial impact is expected to spread beyond provincial borders as Wuhan—the capital of Hubei—is also a logistics hub and a gateway to central China.

Given China's prominence in the global economy—at 19% of global GDP today versus about 9% in 2003 (IMF, ppt weighted)—there will be spillovers to the rest of the world, albeit uneven across regions and economies.

ASIA-PACIFIC NEIGHBOURS EXPOSED

Major trading partners with China will be particularly vulnerable. As we noted in an earlier [report](#), regional economies including Vietnam, Malaysia, Singapore, and South Korea are most exposed to fluctuations in Chinese demand given their proximity to the vast Chinese market and deeply integrated regional supply chains (chart 4). For half of these Asia-Pacific economies, total trade with China represents more than a quarter of their GDP. The slowdown in China is therefore expected to impact these economies substantively, including through disruptions in tightly integrated manufacturing supply chains, which are starting to come to light as some corporations start signalling concerns to markets ahead of reporting season.

Chart 3

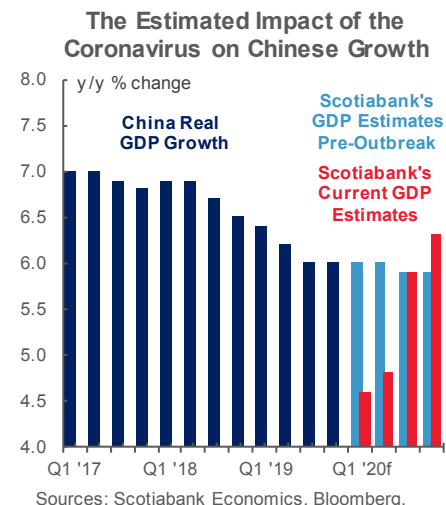
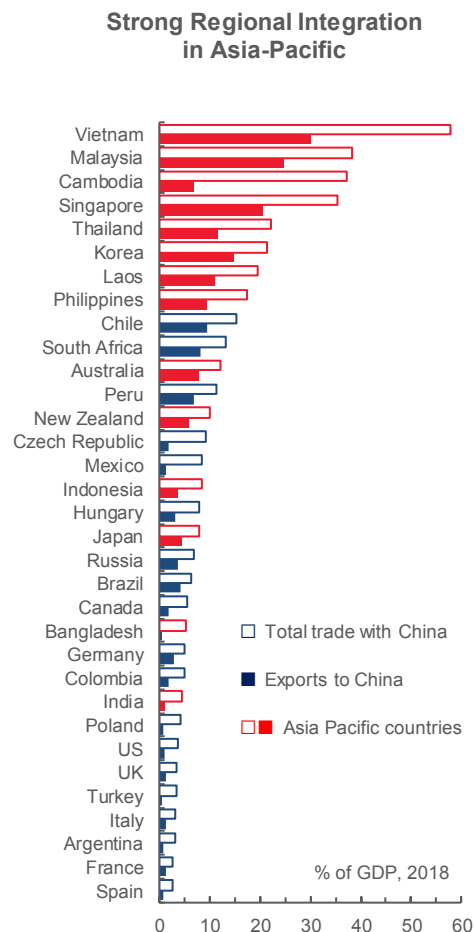


Chart 4



An abrupt curtailment in Chinese tourism abroad will also disproportionately affect Asia-Pacific countries. According to the Chinese Academy of Tourism, China is the largest outbound tourism market in the world with more than 150 million Chinese tourists travelling abroad in 2018, generating an estimated consumption-related activity in the order of \$120 bn annually. Eight of the top ten destinations for Chinese tourists are within the region (chart 5).

UNITED STATES ON ALERT

The US Federal Reserve firmly put coronavirus on its radar late last week. In its biannual report to Congress, it flagged the risk of “disruptions in China [that] spill over to the rest of the global economy” with officials calling it a “wild card”. Though recent US macro economic readings have been relatively robust—ranging from jobs to sentiment to GDP—the outbreak could introduce new headwinds. Meanwhile, China’s recent restatement of its tariff reduction commitments under the Phase 1 trade agreement should (further) assure markets that there won’t be a re-escalation of trade tensions this year, but the outbreak (further) reduces the likelihood that China can practically live up to its full commitments.

Markets nervously attempt to interpret developments. The USD has been appreciating as fears of a potentially larger outbreak propagate, while slow-growth concerns are also putting pressure on the yield curve with the benchmark 10-year Treasury yield at its lowest since October (the most recent peak in trade tensions) on Friday. And as reporting season approaches for corporations, many US firms with exposure to China are foreshadowing revenue impacts. Against that background, ongoing oil supply dynamics add to the uncertainty. This confluence of events has fueled market volatility but with a clear downside bias.

Overall, the US faces this unforeseen shock in a solid position with an economy still operating mildly above potential, but it is rightly vigilant in a rapidly evolving environment.

COMMODITY MARKETS UNDER PRESSURE

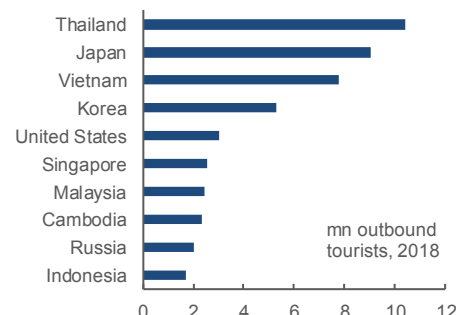
Commodity-exporting countries could face additional headwinds. The Chinese economy and the global airline industry are relatively energy-intensive. The resulting dampened demand for commodities such as oil would impact global commodity markets. Crude prices are already down 20% from early January’s peak in part reflecting the high degree of uncertainty around the outbreak (chart 6). We estimate that the coronavirus outbreak could account for 8ppts of the decline in the WTI oil price in 2020Q1 (chart 7). This could affect countries outside the Asia-Pacific region that are net oil exporters such as Canada. In this regard, the Latin American region could be disproportionately exposed in light of its commodity-oriented economies including Mexico, Colombia, Chile, and Peru (Box 1).

CANADA BRACES FOR POTENTIAL IMPACT

The Canadian economy would likely still feel the impact even if the pandemic is largely contained to China and the neighbouring countries in light of a clearly sharper slowdown faced by China. We have refreshed our estimates using the Scotiabank Global Macroeconomic Model to account for a steeper drop-off in economic activity in China and a significant fall in air transportation outside of

Chart 5

Top Chinese Tourist Destinations*

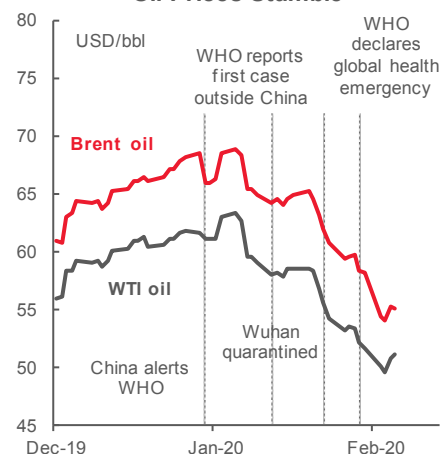


*Excludes Hong Kong, Macao, and Taiwan.

Sources: Scotiabank Economics, China Tourism Academy/Ministry of Culture and Tourism, UNWTO.

Chart 6

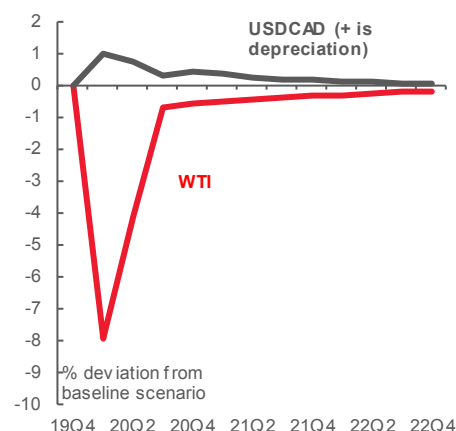
Oil Prices Stumble



Sources: Scotiabank Economics, Bloomberg.

Chart 7

WTI and USDCAD



Sources: Scotiabank Economics.

Canada. Given the demand elasticities, the WTI oil price would be expected to be 8% lower compared to the pre-outbreak baseline in 2020Q1. [Experts](#) believe that the outbreak should be contained by April, at which point the shock to oil prices is likely to begin reversing.

Given that so far Canada has not seen a significant spread of the virus, partly no doubt as a result of quarantine measures in China, the SARS-like drop-off in air travel and tourism in Canada is unlikely. Thus, we expect only a small drag on GDP growth in Canada from these sources as well as more cautious retail spending.

The combined impact could leave the level of Canadian GDP lower by about 0.1% by mid-2020, the same as in the SARS episode as the smaller impact from domestic sources is offset by a larger decline in commodity prices. By mid-2020, the virus would likely be under control and commodity prices and growth would be expected to rebound. The annualized GDP growth is expected to be weaker by about 0.2 ppts on average in 2020Q1–Q2 (chart 8), more heavily weighted towards 2020Q2. In our simulation, the policy rate is 4 bps lower compared to the baseline at the end of 2020 while the Canadian dollar relative to the US dollar would likely be weaker by about 1%. The dollar has already depreciated by about 2% since mid-January, both on a more dovish BoC statement on January 22nd, but also on concerns about the outbreak.

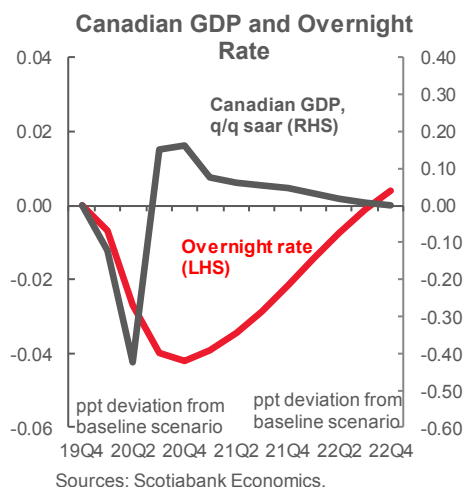
The net impact is still relatively small and transitory for Canada. The Bank of Canada would look through such a temporary shock, but it is increasingly likely to tip the balance in favour of an early rate cut given the accumulation of weakness with slack opening in the Canadian economy. This refreshed scenario reinforces—but does not change—our [rate call](#) for two cuts in the first half of the year to 1.25%.

SAME BUT DIFFERENT

Overall, weeks into this new outbreak, we still expect the potential impact on the Canadian economy to be modest. The localised spread of the virus to-date, along with aggressive policy responses within China and abroad, suggest transmission channels will differ somewhat from the 2003 SARS experience with a stronger impact through commodity channels, but less erosion in local spending.

But the situation continues to evolve rapidly with risks clearly skewed to the downside. Panic still remains a threat, as well as a prolonged disconnect between markets and data with currently exaggerated swings following the daily news cycle.

Chart 8



BOX 1. LATIN AMERICA'S POTENTIAL ECONOMIC EXPOSURE TO 2019-NCOV

At present, the overall economic impact of the 2019-nCov for the Latin American region should be muted. There has not yet been a single case in the region so there are no direct impacts provided the outbreak is limited to China. Regional economies may be temporarily affected through indirect channels such as trade and commodity prices, but under the scenario set out in this note, any impact would likely be contained to the first quarter for the most part with some rebound in subsequent quarters such that the overall level of economic activity should not be affected at year-end. However, weak growth and domestic vulnerabilities in the region represent a downside risk as they could potentially amplify effects (chart A1).

Trade with China represents one indirect channel that may temporarily impact some economies within the region. In particular, Chile and Peru are most exposed with exports to China representing more than 30% of all exports. However, these are more modest as a share of the economy, at about 7% and 9% of GDP for Peru and Chile respectively in 2018 (chart A2). Dampened consumption in China that is largely contained to the first quarter with some rebound in following quarters as laid out in this note would have at best a modest and transitory impact through trade channels in these economies.

Commodity price weakness could compound these effects. Almost 60% of exports from Chile and Peru are related to mining activity. This sector also represents about 10% of national GDP in both economies. Declines in global copper prices, for example, could induce a temporary terms of trade shock in these economies, but again it would be expected to be transitory with some rebound later in the year.

Similarly, net oil exporters would be exposed to temporary global oil price declines. In particular, Mexico and Colombia could be affected, but the magnitude and duration would likely be temporary. The overall impact on the level of GDP would be minimal. However, domestic vulnerabilities present a downside risk, particularly for Mexico, in light of the fragile financial state of its state-owned oil company PEMEX and implications for the government's fiscal position. Oil revenues represent about a third of the federal government's income. This could prompt further action by credit rating agencies, which could put some pressure on the MXN.

Volatility in financial markets is a vulnerability for the region. Risk-off sentiment has fueled a sell-off in emerging market currency markets (chart A3). This appears so far manageable but already-weak growth in the region—driven, in part, by idiosyncratic domestic uncertainties—could magnify the impact if the outbreak escalates and market risk-off sentiment is sustained.

Chart A1

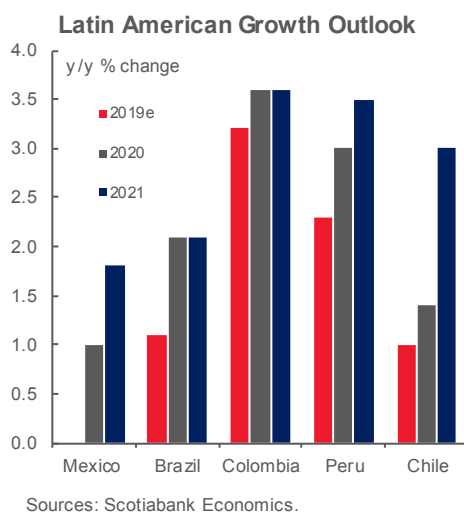


Chart A2

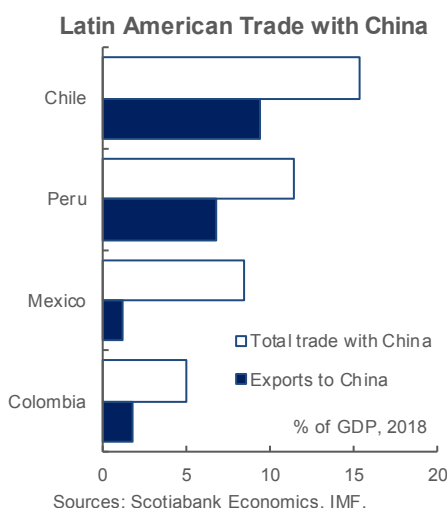
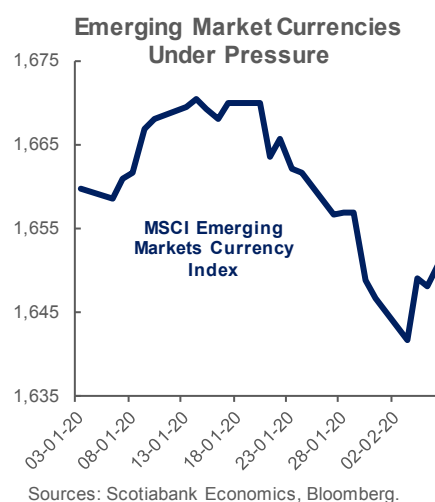


Chart A3



This report has been prepared by Scotiabank Economics as a resource for the clients of Scotiabank. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable but no representation or warranty, express or implied, is made as to their accuracy or completeness. Neither Scotiabank nor any of its officers, directors, partners, employees or affiliates accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

These reports are provided to you for informational purposes only. This report is not, and is not constructed as, an offer to sell or solicitation of any offer to buy any financial instrument, nor shall this report be construed as an opinion as to whether you should enter into any swap or trading strategy involving a swap or any other transaction. The information contained in this report is not intended to be, and does not constitute, a recommendation of a swap or trading strategy involving a swap within the meaning of U.S. Commodity Futures Trading Commission Regulation 23.434 and Appendix A thereto. This material is not intended to be individually tailored to your needs or characteristics and should not be viewed as a "call to action" or suggestion that you enter into a swap or trading strategy involving a swap or any other transaction. Scotiabank may engage in transactions in a manner inconsistent with the views discussed this report and may have positions, or be in the process of acquiring or disposing of positions, referred to in this report.

Scotiabank, its affiliates and any of their respective officers, directors and employees may from time to time take positions in currencies, act as managers, co-managers or underwriters of a public offering or act as principals or agents, deal in, own or act as market makers or advisors, brokers or commercial and/or investment bankers in relation to securities or related derivatives. As a result of these actions, Scotiabank may receive remuneration. All Scotiabank products and services are subject to the terms of applicable agreements and local regulations. Officers, directors and employees of Scotiabank and its affiliates may serve as directors of corporations.

Any securities discussed in this report may not be suitable for all investors. Scotiabank recommends that investors independently evaluate any issuer and security discussed in this report, and consult with any advisors they deem necessary prior to making any investment.

This report and all information, opinions and conclusions contained in it are protected by copyright. This information may not be reproduced without the prior express written consent of Scotiabank.

™ Trademark of The Bank of Nova Scotia. Used under license, where applicable.

Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including, Scotiabanc Inc.; Citadel Hill Advisors L.L.C.; The Bank of Nova Scotia Trust Company of New York; Scotiabank Europe plc; Scotiabank (Ireland) Limited; Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank group and authorized users of the Scotiabank mark. The Bank of Nova Scotia is incorporated in Canada with limited liability and is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. The Bank of Nova Scotia is authorised by the UK Prudential Regulation Authority and is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available from us on request. Scotiabank Europe plc is authorised by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority.

Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

Not all products and services are offered in all jurisdictions. Services described are available in jurisdictions where permitted by law.