# The Contagion of Fear

- **Fears of a possible coronavirus pandemic are sweeping the world. Markets are jittery with little hard data to go on.**
- **With the first case now reported in Canada, many are recalling the 2003 SARS where Canada was one of the epicenters. Arguably the biggest (economic) lesson from that experience is that fear is the biggest risk to the outlook.**
- **The impact of the SARS pandemic on the Canadian economy is difficult to estimate, confounded as it was by the slowing US economy, the invasion of Iraq and other events, but the Bank of Canada estimated -0.6ppt hit to annualized growth in Q2-2003, or just over 0.1% on the level of GDP.**
- **While it is premature to predict the path of today's coronavirus outbreak, we estimate that a SARS-equivalent pandemic today could have a similar impact on the Canadian economy with an estimated hit of just over 0.1% on the level of GDP by mid-2020, at which point a pandemic should be contained. This estimate is subject to a significant degree of uncertainty with risks skewed to a potentially larger impact.**
- **The effect should not be significant enough to trigger a broader economic malaise, but could this finally push Governor Poloz over the line to proactively stimulate the economy in his next rate call?**

## THEN AND NOW

**Recall, the Severe Acute Respiratory Syndrome (SARS) gripped the world in fear in early 2003.** The first acute cases appeared in China's Guangdong province in November 2002. It spread to Hong Kong by February 2003, with infected travelers quickly transmitting the virus that led to outbreaks in Vietnam, Singapore, and Canada, and touching off a world-wide pandemic that ultimately affected some 32 countries and territories. The last case was closed in May 2003. The World Health Organisation's final tally was 8,096 probable cases worldwide, resulting in 774 deaths including 43 in Canada.

**The Canadian economy shows some salient parallels today.** In early 2003, growth was already moderating in light of a slowing US expansion. Excess capacity was building in the Canadian economy (chart 1), while core inflation pulled back. According to the Bank of Canada in its July 2003 Monetary Policy Report (MPR), drivers included a decline in exports as travel to Canada decreased sharply as a result of SARS and cattle and beef exports halted resulting from a BSE outbreak. International travel to and from Canada, for example, declined sharply by 5.8% in April as the WHO maintained a travel advisory warning for Canada (chart 2). Meanwhile, global markets were also digesting the US invasion of Iraq. These factors combined sparked an easing cycle by the Bank of Canada beginning in July 2003.

**Ultimately, the aggregate impact on the Canadian economy was modest and short-lived.** The travel advisory for Canada was lifted by July 2003. Even so,

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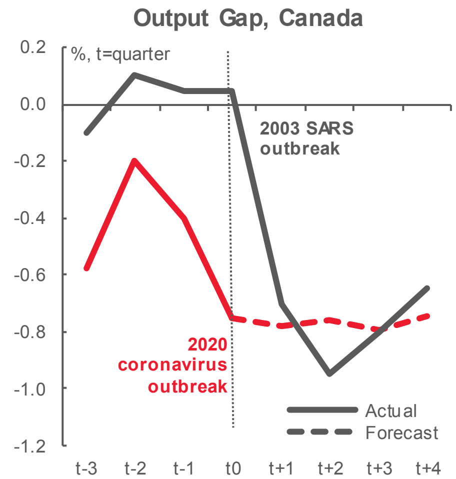
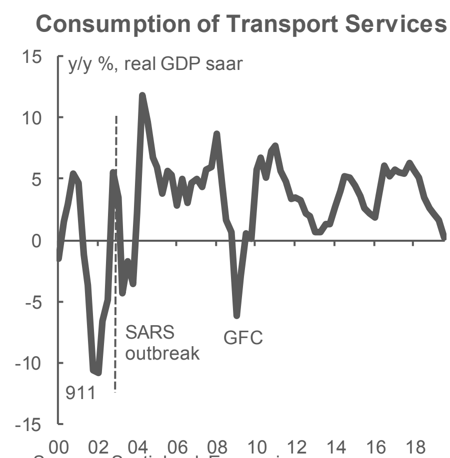
**Chart 1**




Sources: Scotiabank Economics.

**Chart 2**




Sources: Scotiabank Economics, Statistics Canada.

air travel and accommodation were severely affected in the second quarter of 2003, declining by 41.4% and 7.4% (Q/Q SAAR) respectively. But at its peak, overall GDP growth declined by only 0.6% (Q/Q SAAR in 2003Q2) owing to the small share of these industries. Furthermore, the Bank of Canada reported SARS-related rebounds of 0.15% and 0.25% (Q/Q SAAR) in Q3 and Q4 respectively in its October MPR that year. Notably, there was no discernable change in Canadian consumer confidence levels during this period as reported by the Conference Board.

## LESS TO CELEBRATE IN CHINA: IMPACT OF A POSSIBLE PANDEMIC

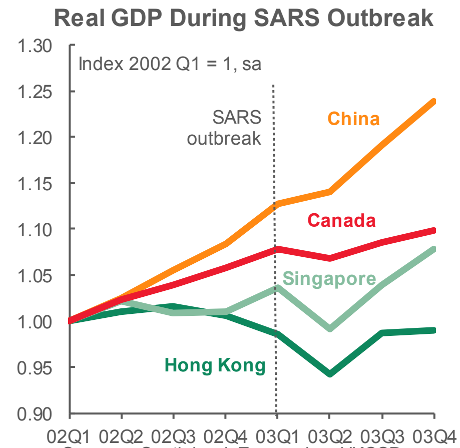
**There was a notable, albeit short-lived impact on the Chinese economy as a result of the SARS pandemic.** Most estimates put the level impact on Chinese GDP around 1.0% of GDP in 2003. Several affected ASEAN countries also saw drops in the order of 0.5% of GDP, while impacts on global GDP were negligible. The impact in China was largely limited to the second quarter of 2003, with GDP rebounding quickly in the third quarter (chart 3). The decline in growth was explained by a retrenchment in domestic consumption as retail sales growth dropped off from 10.8% y/y in December 2002 to 8.1% in May 2003. Final consumption as a component of GDP fell from 4.9 ppt in 2002 to 4.2 ppt in 2003, with transportation, accommodation, and other services hit most acutely. Overall GDP growth nevertheless picked up from 9.1% in 2002 to 10% in 2003 as highly accommodative monetary policy in China was fueling exceptional growth in investment and exports.

**Today's China is notably different.** First, the ongoing structural transformation of the Chinese economy means that consumption represents a bigger share of its output. Whereas retail sales accounted for 33% of nominal GDP in 2002, it is now 43% (as of end-2018). There has also been a shift towards the service sector which now accounts for 54% of GDP (up from 42% in 2003) and 46% of employment (up from 29% in 2003).

**The Chinese economy is more vulnerable today.** Economic growth is already facing headwinds. GDP is estimated at 6.1% for 2019 and is expected to slow again in 2020 to 6.0% (prior to the coronavirus outbreak) as a result of both transitory trade tensions as well as structural changes in the economy. Investment and export levels are already weak. Meanwhile, the central bank has been far more measured in fueling further credit growth after recent deleveraging efforts. A 1% GDP growth shock to a slowing economy at 6% versus one growing above 10% holds far greater downside risks.

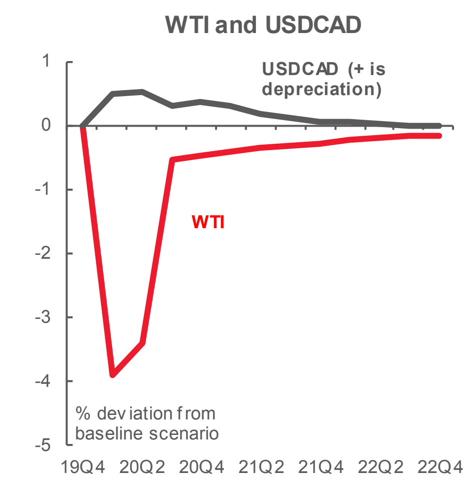
**Aggressive containment measures should support mitigation, but will likely impose a sharper cost—at least temporarily—on the Chinese economy.** By many accounts, the Chinese authorities have been faster to respond to the current outbreak through strict containment measures. As the Lunar Year kicked off, already 14 cities were under lock-down with an unprecedented restriction of 56 mn citizens. Many countries including Canada are more prepared for pandemic management as a result of shortfalls identified in 2003, with screening measures already in place around the world. This gives more hope for faster containment, but also imposes a potentially larger short term impact on China, including an even greater pull effect on commodities. A localized pandemic in China that extends much beyond the seasonal slowdown around holidays will erode some rebound that could otherwise be expected in a shorter outbreak.

Chart 3



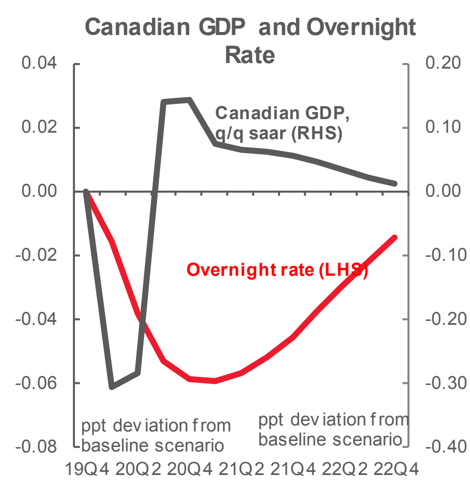

Sources: Scotiabank Economics, HKCSD, DoS, CNBS, Statistics Canada.

Chart 4




Sources: Scotiabank Economics.

Chart 5




Sources: Scotiabank Economics.

**For illustrative purposes, we model one scenario whereby the coronavirus evolves in a manner commensurate with the SARS outbreak.** Under such a scenario, this would subtract 1% from the level of GDP in China by mid-2020 compared to the baseline scenario, with the pandemic brought under control thereafter. This would predominantly feed through domestic consumption channels in China. **Such a hit to the Chinese economy would imply weaker commodity prices.** Taking the share of China in world GDP (IMF: 19% using ppp weights), the corresponding elasticity of oil prices (see Lalonde, Muir, 2007, "The Bank of Canada's Version of the Global Economy Model (BoC-GEM)") and the relatively high energy intensity of China, the **WTI oil price could be 4% lower than otherwise on average over the first half of 2020** (see chart 4). This compares to a roughly 5% move lower in the WTI oil price observed between the close of markets on January 17th and January 23rd.

## IMPACT ON THE CANADIAN ECONOMY IN A GLOBAL PANDEMIC SCENARIO

**If the current outbreak reaches the severity of the SARS, it would likely still have a similarly small and transitory impact on the Canadian economy. Assuming peak severity in the first half of 2020,** the main impact on Canada would likely be indirect, from lower commodity prices and a drop-off in travel-related industries.

**In our simulations using the Scotiabank Global Macroeconomic Model, the combined impact of a 4% lower oil price and the likely disruption to tourism and air travel could leave the level of Canadian GDP lower by just over 0.1% by mid-2020, before the virus is brought under control and commodity prices and growth rebound, similar to the BoC's estimate for the impact from the SARS outbreak.** The annualized GDP growth is expected to be weaker by about 0.3ppts in 2020Q1–Q2 (chart 5).

**In the simulation we assume that the spread of the virus could result in a disruption to Canadian air travel and tourism of the size observed in 2003Q2.** Scaling the impact on air travel and accommodation industries by their 2019 shares of GDP gives -0.3ppts effect on the annualized growth of GDP in Canada in 2020Q1 and -0.1ppts in 2020Q2, including an offset from additional domestic spending generated by Canadian tourists staying home.

**Given the small and temporary nature of the impact, the Bank of Canada would likely look through such a shock.** In our simulation, the policy rate is 6bps lower compared to the baseline at the end of 2020. Thus, such a pandemic shock scenario is unlikely to change our rate call for two rate cuts in the first half of the year to 1.25%, but it does more to support it given the accumulation of weakness that the Canadian economy has already seen. In this context, **the Canadian dollar relative to the US dollar would likely weaken on the order of half a per cent**, due to both the oil price impact and a slightly less favourable interest rate differential.

The estimates are subject to high degree of uncertainty and only illustrate one potential scenario. As health authorities in China and globally deal with the coronavirus outbreak, the unprecedented quarantine measures in China may limit the spread of the disease, but amplify the impact on the economy of China. A resulting sharper decline in oil prices may weaken the Canadian economy even further.

## ALERT BUT NOT ALARM

**It is too early to suggest we are facing a pandemic.** But even in a more challenging scenario where a SARS-like pandemic grips the world, the impact on growth should be small and transitory. It may modestly reinforce multiple drivers that are already contributing to excess slack in the Canadian economy. The starting equilibrium matters as one more potential shock feeds into the narrative of the "serial disappointment" portrayed by the Bank of Canada. It reinforces our rate call for action by the Bank of Canada, but much can happen between now and March.

**Nevertheless, the contagion of fear should not be underestimated at this juncture.** Whereas SARS was a first-in-a-generation experience for most Canadians, consumers may be more sensitive and responsive to the risks now even though Canadian health systems are far-better prepared. Furthermore, the shock is arriving at a very fragile point for the Canadian—and the global—economy as the world is still adjusting to a challenging year in 2019 fraught with disrupted trade flows and stalled business activity. There is also less monetary space today globally than there was in 2003 to respond to any major disruption. Consumers for the most part have been the one engine keeping most economies above water with their resilience already stretched in many economies including Canada. Panic by nature can be non-linear and highly disruptive.

**The onus will be on governments to convey a sense of control and pre-emptively deploy policy levers where possible, otherwise they risk a potentially magnified (and outsized) impact that extends well-beyond what can be predicted by economic drivers alone.**