

Coronavirus Has Infected Markets ... Now What?

“Everybody has a plan until they get punched in the mouth.” –Mike Tyson



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Beutel Goodman
Fixed Income Team

The Coronavirus (COVID-19) moved swiftly in February. The number of new cases in China appears to be leveling off, but continues to increase outside of China (see Chart 1 on next page). At the time of print, Japan, South Korea, Iran and Italy have seen the growth in new cases accelerate, and in the U.S., reported deaths from the virus continue to increase.

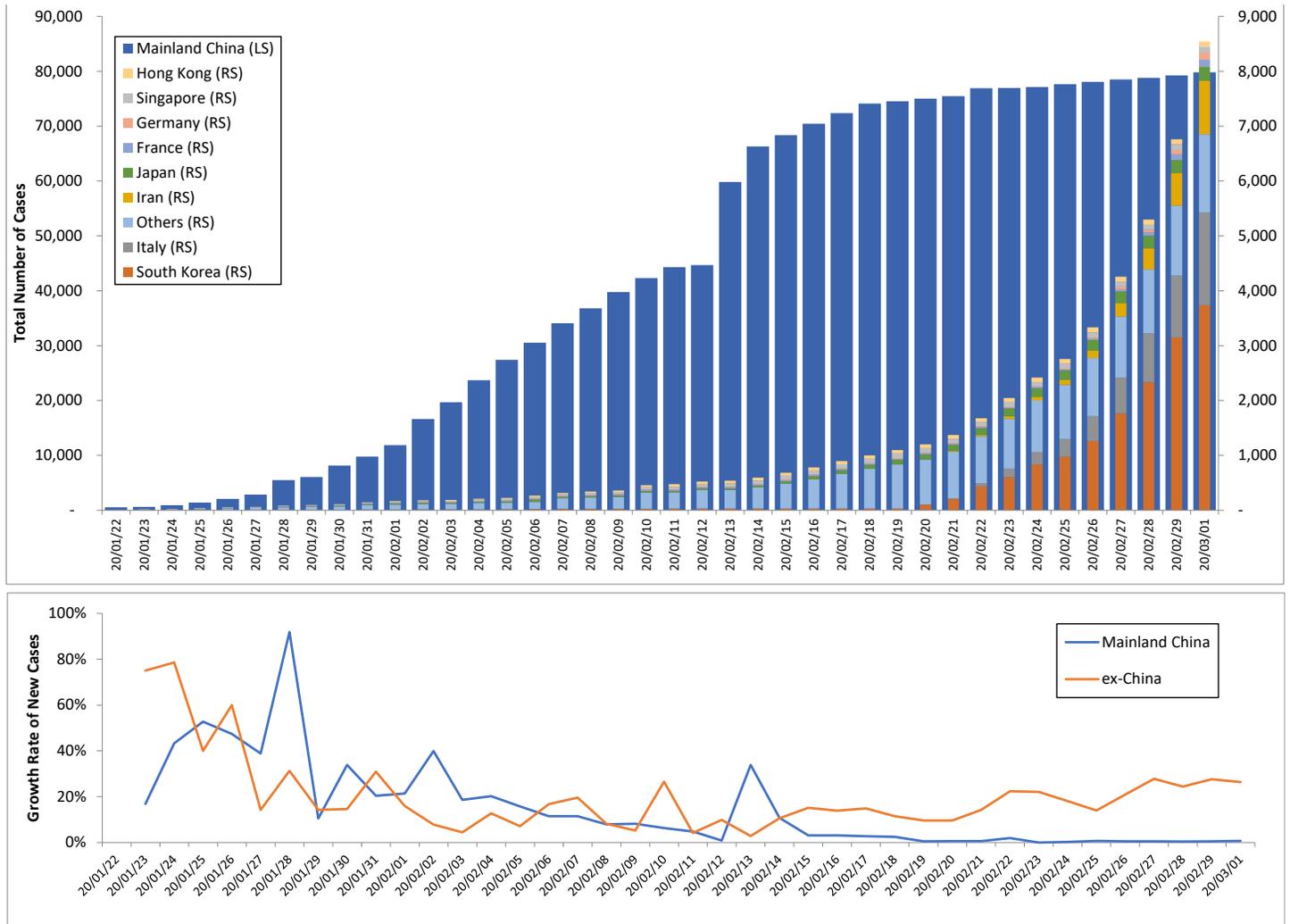
Markets have been caught by surprise and global growth has been significantly revised down. The virus was initially expected to be mostly contained to China, resulting in a weak Q1/2020 but a “V”-shaped recovery in the second quarter with the aid of global stimulus. However, this view is no longer likely as both demand (consumer spending) and supply (industrial productivity) could drop significantly as the virus and fear spread. In this report, we attempt to take an objective view and compare COVID-19 to other historical viral epidemics and pandemics in light of the limited data that is currently available.

COVID-19 vs Other Epidemics / Pandemics

The two main variables that affect how damaging an outbreak will be on society are their mortality rates and the rate of transmission. Chart 2 (next page) illustrates where COVID-19 compares to its peers.

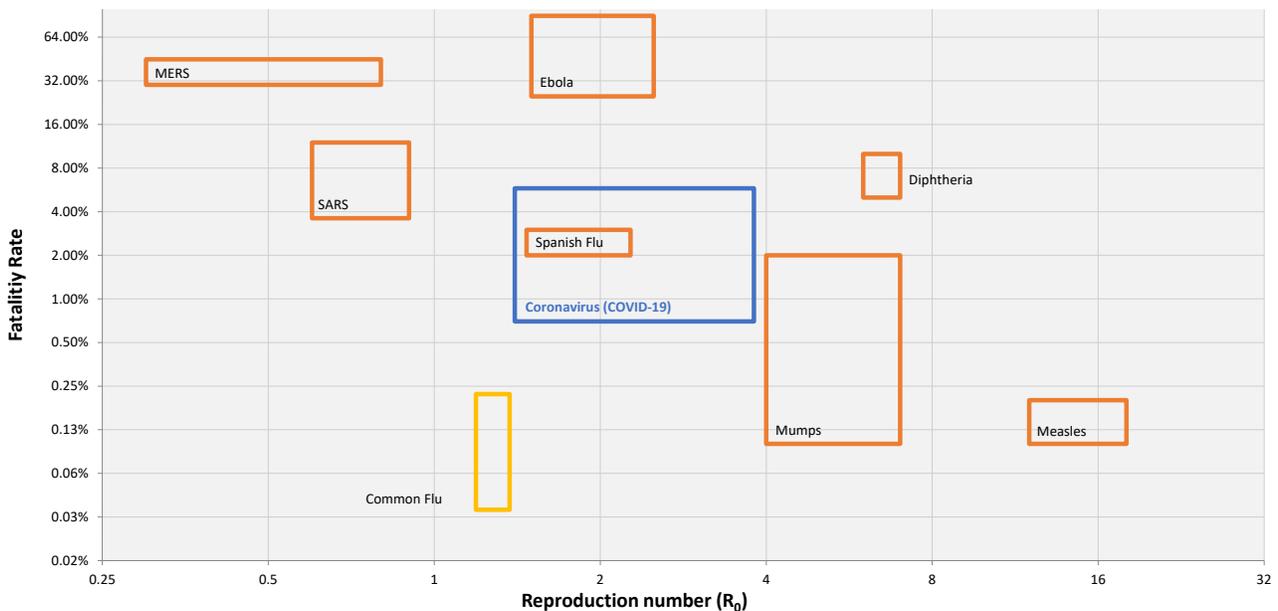
- **Mortality Rates.** Thus far, estimates for COVID-19 mortality rates are anywhere from 0.5% to as high as 6%, with an average around 2.5%¹. However, this rate is highly uncertain due to the limited data. Mortality is also dependent on the age of the infected. Pandemics usually have a U-shaped age-specific mortality rate². COVID-19, though, appears to be less dangerous for children, with a zero mortality rate for children under the age of 9 to date³.

Chart 1: Total Number of Reported COVID-19 Cases, Worldwide, January 22 to March 1, 2020



Source: Johns Hopkins Whiting School of Engineering; <https://systems.jhu.edu/research/public-health/ncov/>

Chart 2: Mortality and Transmission Rates of 20th- and 21st-Century Epidemics and Pandemics



Source: Please see source table on last page.

- **Transmission.** A crude measure, known as the reproduction number or R_0 (R-nought), is a metric that measures the potential of how susceptible an outbreak is to spreading. An R_0 of 2 means that, on average, a person with a disease or infection can spread it to potentially 2 people. However, it is a contentious number and difficult to calculate. COVID-19 has been estimated to have an R_0 between 1.4 and 2.5, according to the World Health Organization. This is similar to SARS, but higher than the common flu. As R_0 is an average, it doesn't mean that everyone with the virus will spread it by that R_0 value. You can have a super-spreader (i.e., one person infecting hundreds of people) and/or a number of infected people who spread it to fewer people than the average. Modern public transportation is a key conduit for spreading infections; propagation can be accomplished locally through municipal subway and buses, regionally by trains, and globally through intercontinental flights.

A frightening part of Chart 2 is that COVID-19 has a similar mortality rate and R_0 to the influenza outbreak of 1918-1919 (known as the Spanish flu), which killed an estimated 2% of the global population. However, the Spanish flu came about when the world was in a much more fragile state. The First World War had just ended and there was limited global knowledge of virology and how quickly and broadly the infection could spread. Today, technology—via better communication and the rapid response of health care systems—should prevent COVID-19 from becoming the next Spanish flu. That being said, we must be mindful that we are a far more connected planet, which has allowed the virus to travel further and faster than it would have 100 years ago. The bottom line is that the statistical metrics thus far are very contentious—hence the large area of the coronavirus in chart 2—and we will not have accurate estimates until more data is collected.

The Economic Effect

China, the epicenter of the outbreak, represents 25% of global manufacturing, and we are now beginning to see the effects on global supply chains as exports from China slow and economic data weaken. Demand now appears to be following suit, particularly with respect to airlines, and specifically in China. As the virus and fear spread, we are also likely to see a drop in consumer spending. Further to this point, in February, a series of large multinational corporations cut revenue forecasts due to disruptions in supply chains and the impact of decreased revenue expectations from a decline in spending in certain sectors of the economy.

In response, the G7 financial chiefs called an emergency meeting and stated that they are ready to take action to protect their respective economies. Central banks have begun to lower interest rates in response to the virus as well, with the U.S. Federal Reserve announcing an

emergency 50-basis-point (bps) cut on March 3 and the Bank of Canada cutting the overnight rate by 50 bps a day later.

However, the effects of lower rates may not provide much economic stimulus. Typically, a rate cut is made in response to a credit cycle where tight monetary policy with relatively high interest rates has choked off borrowers. With money already relatively cheap and the demand for money low, the effects of lowering rates to stimulate markets may have little effect on the economy.

Our Positioning

The Beutel Goodman fixed income team has viewed risk assets as overvalued for some time and acknowledged that they can stay that way for a while. We maintain an overweight position in high-quality short-term corporate bonds (three years and under) for yield purposes, while taking a defensive posture in the rest of the portfolio – specifically an underweight in long-dated corporate bonds as those bonds tend to perform poorly when credit spreads widen (credit curves steepen). In addition, we are overweight four- to seven-year bonds and underweight 30-year bonds as the middle part of the curve has historically outperformed when the Bank of Canada begins cutting interest rates.

We anticipated that the Bank of Canada would cut interest rates at least once (which it did), with potentially more cuts in the first half of 2020, as the Canadian economy was already relatively weak before the COVID-19 concerns. We moved to a neutral duration over the month of February as fears of the Coronavirus grew, but are hesitant to go long as the Canadian market has rallied significantly already. At this point yields may have rallied too much, but until we get more clarity on the situation, we will remain neutral duration.

We continue to monitor the corporate bond market, but we do not believe it represents value yet. Should spreads move wider or the concern around COVID-19 subside, then we will look to add risk.

Notes:

¹See table on following page.

²Smil, V. (2019) *Growth: From Microorganisms to Megacities*

³Worldometer Link can be accessed via the following link: <https://www.worldometers.info/coronavirus/coronavirus-age-sex-demographics/>

Related Topics and Links of Interest:

- [Our Response to COVID-19](#)
- [About Beutel Goodman](#)
- [Beutel Goodman mutual fund profiles](#)

Source Table

| | R ₀ Sources | Fatality Sources |
|-------------------------|--|---|
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