T. ROWE PRICE INSIGHTS

ON MARKET EVENTS



Coronavirus: Markets Likely to Remain On Edge in the Near Term

Duration and spread of virus will govern longer-term impact.

February 2020

KEY INSIGHTS

- Near-term market volatility is likely to persist as the coronavirus outbreak will remain a key concern in the coming months.
- Higher-risk assets and industry sectors most closely linked to the impact of the outbreak are likely to underperform.
- The impact on the Chinese and global economies remains unclear. The Severe Acute Respiratory Syndrome (SARS) example indicates that a rebound could follow once the outbreak dissipates.



Chris Kushlis
Fixed Income Sovereign Analyst,
Asian Markets

he recent bouts of market volatility across the globe triggered by the coronavirus outbreak are likely to continue in the near term. The full and lasting impact on economies and financial assets remains unclear.

In this environment, it is important to remember that various asset classes and regional economies will perform differently as the situation unfolds. We are closely monitoring a range of indicators to understand the potential impacts across asset classes and our portfolios.

Uncertainty to Drive Near-Term Volatility Across Asset Classes

Markets are likely to remain volatile as the virus spreads and uncertainty remains high. After a positive start to the year, global equities and risk sectors of fixed income sold off notably in mid-January when the seriousness of the coronavirus threat began to emerge.

Many Asian markets then sold off sharply on February 3 due to pent-up concerns unleashed on the first day of business following Chinese New Year holidays.

We do not expect a meaningful rebound in the short term. It will likely be at least several weeks before any clear signs emerge that the outbreak is under control and markets can more confidently assess the full impact on the Chinese and global economies. In the absence of a significant escalation in the outbreak, markets could stabilize following the recent sharp drops, helped by short-term monetary stimulus from Chinese authorities.

Broken down by asset class, our near-term outlook is as follows:

 Equities—Global equity markets declined significantly since the middle of January. Markets had seen a sustained risk rally in previous months, meaning valuations had Markets are likely to remain volatile as the virus spreads and uncertainty remains high. ...there is the potential for the Chinese economy to rebound with an above-potential growth rate once the outbreak subsides.

become stretched in some places, exacerbating near-term volatility. We expect continued volatility and weakness in the near term. The severity of the outbreak is likely to cause, at minimum, a short-term drag on Chinese growth, which will spill over into other areas of the global economy.

• Fixed income—A period of risk aversion across global markets has exerted downward pressure on core government bond yields. U.S. Treasury and German bund yields have already fallen to levels not seen since October and will likely remain suppressed until there is more clarity on the coronavirus spread.

Risk sectors of fixed income, including emerging markets and higher-yielding corporate bonds, could see near-term volatility similar to equity markets. However, most emerging market debt sectors, apart from China, have only seen modest losses. Within Asia, investment-grade corporate bonds, in particular, should continue to display relative stability.

• Currencies—Coronavirus's expected impact on global growth is likely to influence currency markets, including downward pressure on the renminbi. The post-holiday market sell-off saw the Chinese currency move below RMB 7 to the U.S. dollar.

We expect the People's Bank of China (PBoC) to help smooth any abnormal volatility during this period. China may want to avoid raising potential objections from the U.S. authorities in the event of a sharper currency depreciation.

During the SARS outbreak in 2003, many Asia-Pacific (APAC) currencies were more heavily managed, which limited their volatility at the time. Today, there could be more fluctuations, with countries most exposed to tourism and trade with China being the

hardest hit. Fundamentals in most APAC countries remain healthy, which should provide a supportive influence.

Chinese Growth Could See Post-outbreak Rebound

The spread of the coronavirus has already reached a level where it will have a noticeable impact on China's economy. We expect to see a meaningful drop in China's first-quarter growth rate and potentially future quarters if the outbreak persists.

The last major comparable outbreak, SARS, first appeared in late 2002. The peak of the economic impact came around March and April 2003, with the seasonally adjusted annual growth rate dropping sharply from 12% in the first quarter to 3.5% in the second quarter of 2003. It is worth noting that many aspects of the Chinese economy are different today than in 2003. The services sector constitutes a larger share of China's gross domestic product (GDP) than in 2003. This could result in a larger overall impact than SARS had.

Yet, if the pattern of the SARS impacts are a guide, there is the potential for the Chinese economy to rebound with an above-potential growth rate once the outbreak subsides. In 2003, China's growth rate climbed to 15.5% in the third quarter as pent-up demand saw consumption rebound as the SARS outbreak waned.

A similar rebound following the coronavirus could help keep the longer-term track of the Chinese economy on a relatively even keel. Likewise, equity and credit markets could recover as sectors hardest hit from the outbreak benefit from pent-up demand.

That said, outbreaks of this sort remain unpredictable and prone to a range of factors that govern the spread and duration. There is a risk that the coronavirus outbreak could persist longer and with a larger economic impact than SARS.

1-14 days

Reported incubation period before symptoms appear.

Short-Term Stimulus Provides Support

China has already responded with a wide-ranging set of short-term stimulus measures to counter any initial market panic. The policies include a 10-basis-point cut to the reverse reporate and additional liquidity to maintain market functionality, as well as other measures to support the financial sector. Additionally, China has announced a RMB 300 billion lending program to support Wuhan, the city at the epicenter of the outbreak.

Looking longer term, we expect Chinese authorities to take a restrained approach to any sustained stimulus. In recent years, China has focused on deleveraging and will not be overly aggressive in deviating from this path. The PBoC will likely remain reactive to weakness in growth data. Fiscal stimulus rather than monetary measures could be the primary tool to support growth. Overall, we think the aim will be keeping the full-year growth rate broadly in line with targets while tolerating a degree of temporary weakness in the near term.

Key Features of the Epidemic to Watch

The speed and spread of the coronavirus outbreak could change quickly. The key features we are monitoring include:

Rate of spread—We are certain that the number of confirmed cases will grow as authorities improve their ability to locate and diagnose people and as those who are already infected begin to show symptoms. However, Chinese authorities have implemented aggressive containment measures. How markets react will depend on whether the spread appears to reach a peak in the near term or accelerates.

Recent signs that infections in Hubei province are leveling off suggest that containment measures could be having their desired effect. We will be watching

for signs that the spread does not reaccelerate in the coming days.

Location of spread—We are monitoring the progression of cases outside of the Wuhan area in Hubei province. Most international cases have been among people that have visited Wuhan, and recent data have shown that the incidence of new cases outside of China have eased. However, as the virus has a reported incubation period of between one and 14 days before symptoms appear, this trend could change. The number of cases across China could grow substantially in the near term. The extent of spread within China and international infection rates will guide analysis of wider impacts.

Risk of mutation—So far, the reported number of cases and deaths from the new coronavirus indicate that it has a lower mortality rate than SARS. There remains a risk that the virus could mutate to a more lethal form or becomes more easily transmittable among people.

Impacts Beyond Asian Economies

It is too early to accurately assess the longer-term impact on global economies. Compared with SARS, the impact on the rest of the world could be larger simply because China is more embedded in the global economy in 2020 than it was in 2003, and its output forms a much larger share of global GDP.

The lower demand due to slower growth could weigh on oil prices. Countries and companies that typically benefit from lower oil prices could see relative stability, while those more directly affected could experience more volatility.

We expect exports and travel from the APAC region to suffer. This could make a noticeable dent in developed market growth data in the coming months, including lower quarterly GDP figures. At this stage, changes in policy direction from the Federal Reserve or European Central Bank appear unlikely.

Overall, the spread of the coronavirus globally has not reached a level that we believe will severely weaken the long-term growth outlook in the U.S. and other developed economies.

We remain vigilant in monitoring the real-time news flows that could trigger market swings while also keeping our focus on the long-term picture.

WHAT WE'RE WATCHING NEXT

We are looking deeper at idiosyncratic impacts on individual market sectors and asset classes. As the virus spreads, industry sectors more directly exposed to the disruption caused by the virus will likely suffer the largest price swings. Specifically, we are closely watching the Macau gaming sector amid travel restriction and casinos suspending operations. In the retail sector, traditional brick-and-mortar business will likely bear the brunt of the pain, whereas companies focused on online delivery could perform better. The Chinese real estate sector is also coming under pressure due to pauses in home sales to reduce public gatherings in some regions of China. We will continue to look closely at which names are best suited to withstand these pressures and how Chinese authorities respond with any potential sector-specific stimulus.

INVEST WITH CONFIDENCE

T. Rowe Price focuses on delivering investment management excellence that investors can rely on—now and over the long term.

T.RowePrice®

Important Information

This material is being furnished for general informational and/or marketing purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, nor is it intended to serve as the primary basis for an investment decision. Prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. Past performance is not a reliable indicator of future performance. The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

Australia—Issued in Australia by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. For Wholesale Clients only.

Brunei—This material can only be delivered to certain specific institutional investors for informational purpose upon request only. The strategy and/or any products associated with the strategy has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

China—This material is provided to specific qualified domestic institutional investor or sovereign wealth fund on a one-on-one basis. No invitation to offer, or offer for, or sale of, the shares will be made in the People's Republic of China ("PRC") (which, for such purpose, does not include the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the PRC. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the PRC. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the PRC that are expressly authorized under the laws and regulations of the PRC to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the PRC. Potential investors who are resident in the PRC are responsible for obtaining the required approvals from all relevant government authorities in the PRC, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the PRC, or nationals with permanent residence in the PRC, or to any corporation, partnership, or other entity incorporated or established in the PRC.

DIFC—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd. This material is communicated on behalf of T. Rowe Price International Ltd. by its representative office which is regulated by the Dubai Financial Services Authority. For Professional Clients only.

EEA ex-UK—Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.I. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier. For Professional Clients only.

Hong Kong—Issued in Hong Kong by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in any jurisdiction is permitted.

Korea—This material is intended only to Qualified Professional Investors upon specific and unsolicited request and may not be reproduced in whole or in part nor can they be transmitted to any other person in the Republic of Korea.

Malaysia—This material can only be delivered to specific institutional investor upon specific and unsolicited request. The strategy and/or any products associated with the strategy has not been authorised for distribution in Malaysia. This material is solely for institutional use and for informational purposes only. This material does not provide investment advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

New Zealand—Issued in New Zealand by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—THE STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING OFFERED OR SOLD HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Singapore—Issued in Singapore by T. Rowe Price Singapore Private Ltd., No. 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

South Africa—T. Rowe Price International Ltd ("TRPIL") is an authorised financial services provider under the Financial Advisory and Intermediary Services Act, 2002 (FSP Licence Number 31935), authorised to provide "intermediary services" to South African investors.

Switzerland-Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

Taiwan—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

Thailand—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thailaws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision. offer, solicitation, purchase or sale would be unlawful under relevant Thailaws and regulations.

UK—This material is issued and approved by T. Rowe Price International Ltd, 60 Queen Victoria Street, London, EC4N 4TZ which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

© 2020 T. Rowe Price. All rights reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the bighorn sheep design are, collectively and/or apart, trademarks or registered trademarks of T. Rowe Price Group, Inc.