RBC Global Asset Management

Economic outlook

SPRING 2022

Fragile recovery ahead

Eric Lascelles
Chief Economist
RBC Global Asset Management Inc.

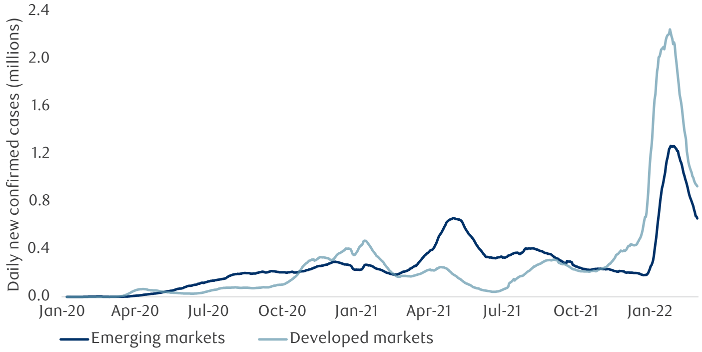
The past few years have made for rough but rapid sailing. Repeated waves of pandemic infections have interrupted the normal rhythm of economic activity and daily life. But beneath this choppiness, the trend rate of economic growth has been powerfully positive.

This year feels somewhat different. In one way, the difference is good: the pandemic is becoming less worrying as the Omicron wave fades and high levels of immunity hopefully limit the danger of future variants (Exhibit 1).

Economic activity has been rebounding in recent months as the latest batch of restrictions ease (Exhibit 2).

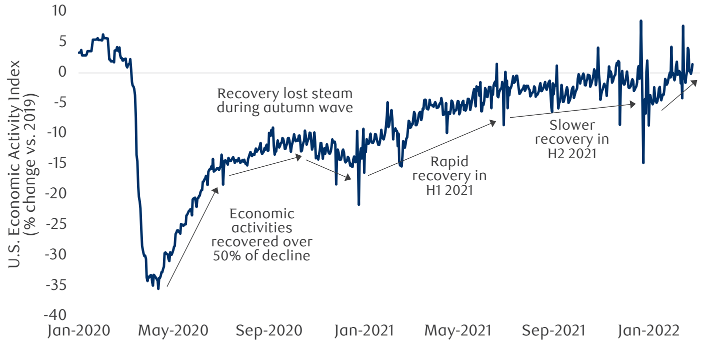
However, another change is less welcome. There are now significant non-COVID growth headwinds for 2022. These include ebbing growth as economies near their potential (Exhibit 3), economic friction due to the highest inflation in four decades, a monetary drag as central banks begin to raise rates, slower-than-usual Chinese economic growth, and, now, a Russia-Ukraine conflict with global consequences.

Exhibit 1: Omicron wave is retreating globally



Note: As of 3/1/2022. Calculated as the 7-day moving average of daily infections. Source: WHO, Macrobond, RBC GAM

Exhibit 2: Economy recovers from Omicron attack and returns to pre-pandemic levels



Note: As of 02/26/2022. Economic Activity Index is the average of nine high-frequency economic data series measuring the percentage change versus the same period in 2019. Source: Bank of America, Goldman Sachs, OpenTable, Macrobond, RBC GAM

Understandably, economic growth is set to slow in 2022. That said, this adversity needs to be put into perspective. While there are undeniably significant new downside risks to the outlook, it remains more likely than not that growth will exceed the pre-pandemic norm, and be sufficient to restore economies to their full potential over time.

Financial markets have become glummer in recent months as they process the new headwinds. We have nevertheless been inclined to take incrementally more investment risk rather than less.

A dampened recovery

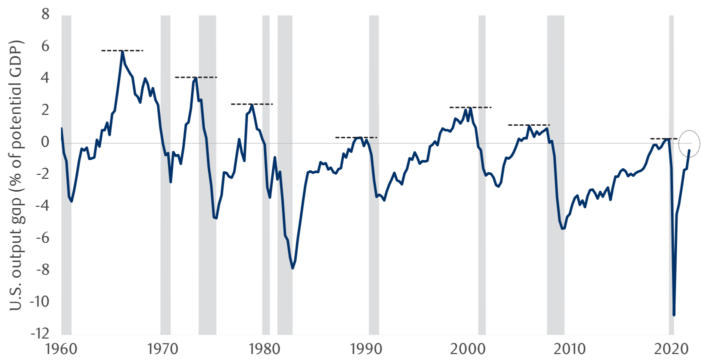
A wide range of economic forces is set to operate on the global economy in 2022 (Exhibit 4).

While tailwinds continue to exist, several are becoming less forceful. The fading of the pandemic is helpful, but most of the resultant boost has already been realized. A bit of economic buoyancy remains as a handful of lagging sectors and prospective workers endeavor to revert to pre-pandemic norms, but this is much less than a year ago (Exhibit 5).

Businesses continue to plan for a robust increase in capital expenditures, though the expected growth isn't as strong as it was a year ago. Meanwhile, the outlook for consumer spending, while still good, isn't as impressive as it was a few quarters ago. Although household finances remain exceptionally healthy and hiring is good, the U.S. personal-savings rate has retreated to its pre-pandemic level, interest rates are rising and consumer confidence has been shaken by high inflation. It is a similar situation in other countries.

> "Our forecasts simultaneously predict below-consensus growth and above-consensus inflation. Is this "stagflation" – an unusual situation in which inflation is high while growth is low?"

Exhibit 3: U.S. output gap just about closed



Note: As of Q4 2021. Shaded area represents recession. Source: CBO, Macrobond, RBC GAM

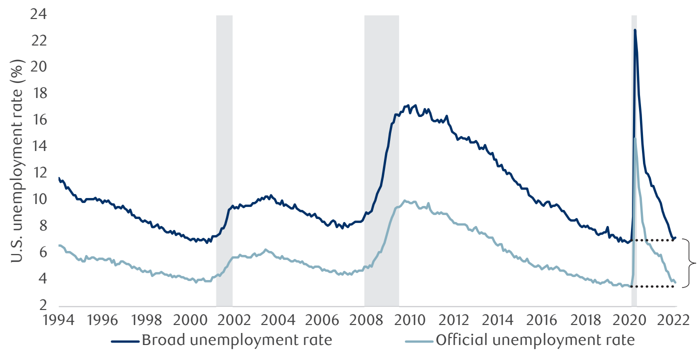
Exhibit 4: Key economic forces for 2022

Positive forces	Negative forces
• Pandemic ebbs • Natural buoyancy • Cap ex plans • Inventory building • Resilient household finances • Supply chain problems to fade	• Omicron damage; future waves • Diminishing buoyancy • Monetary drag • Fiscal drag • China drag • Inflation drag • Geopolitical drag

We anticipate a decelerating, below-consensus economic recovery

Note: As of 02/24/2022. Source: RBC GAM

Exhibit 5: U.S. unemployment rates approaching pre-pandemic levels



Note: As of Feb 2022. Broad unemployment rate defined as U-6 unemployment rate. Shaded area represents recession. Source: BLS, Macrobond, RBC GAM

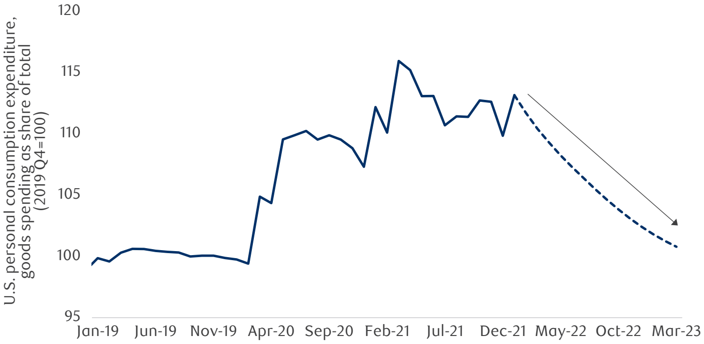
Incidentally, goods spending is likely to retreat to more normal levels after a white-hot pandemic, whereas service spending should rise as people resume high-touch service activities (Exhibit 6).

One undiminished tailwind is the desire of many companies to build up their inventories (Exhibit 7). It also seems reasonable to expect a temporary burst of pent-up demand for certain products when supply-chain troubles ease.

But the headwinds pitted against those favourable forces are significant, and, in general, strengthening. As discussed in more detail later, central banks are now in rate-hike mode and financial conditions are tightening more broadly (Exhibit 8), China's economy has lost momentum, high inflation leaves a mark on growth and geopolitical problems have flared. Additionally, although governments continue to run significant budget deficits, government spending is set to be sharply lower than in the prior two years.

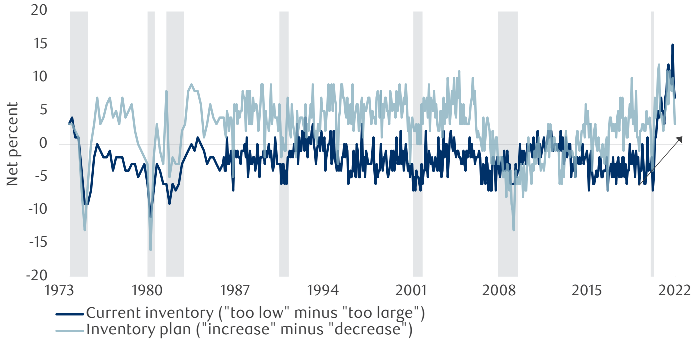
All of this adds up to a prospective rate of economic growth that is not nearly as impressive as that of 2021 (Exhibit 9). Our forecasts for 2022 have moved somewhat lower relative to a quarter ago, and remain below the

Exhibit 6: U.S. consumer spending on goods to retreat to pre-pandemic levels eventually



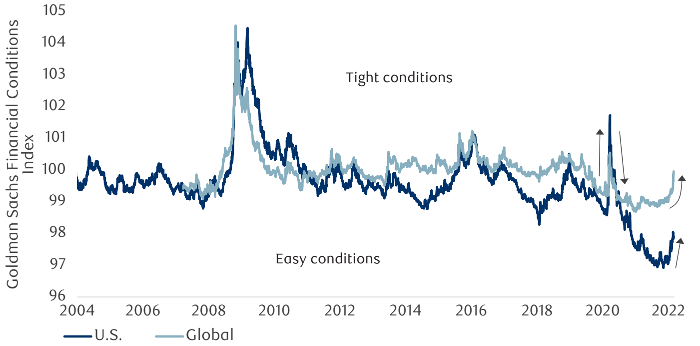
Note: As of Jan 2022. Source: Macrobond, RBC GAM

Exhibit 7: U.S. businesses still plan significant inventory investments



Note: As of Jan 2022. Shaded area represents recession. Source: NFIB Small Business Economic Survey, Haver Analytics, RBC GAM

Exhibit 8: Financial conditions have started to tighten

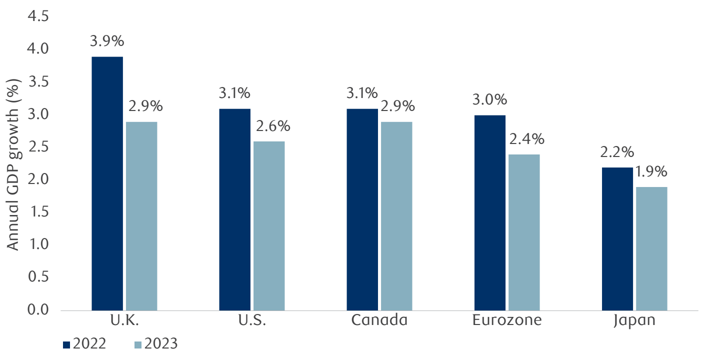


Note: As of 3/2/2022 for U.S., 3/1/2022 for global. Source: Goldman Sachs, Bloomberg, RBC GAM

Exhibit 9: Global economic growth deteriorated but ticked up recently

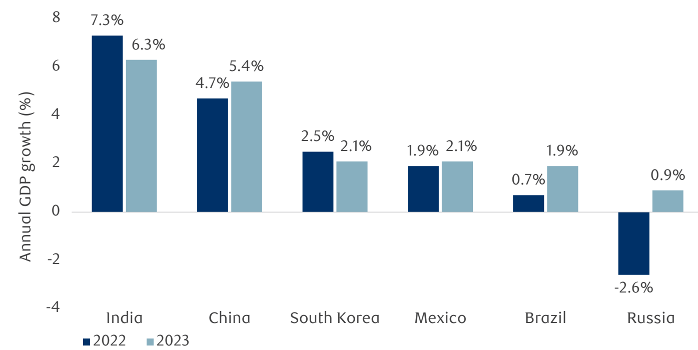
Note: As of 3/3/2022. Shaded area represents U.S. recession. Source: Citigroup, Bloomberg, RBC GAM

Exhibit 10: RBC GAM GDP forecast for developed markets



Note: As of 3/1/2022. Source: RBC GAM

Exhibit 11: RBC GAM GDP forecast for emerging markets



Note: As of 3/1/2022. Source: RBC GAM

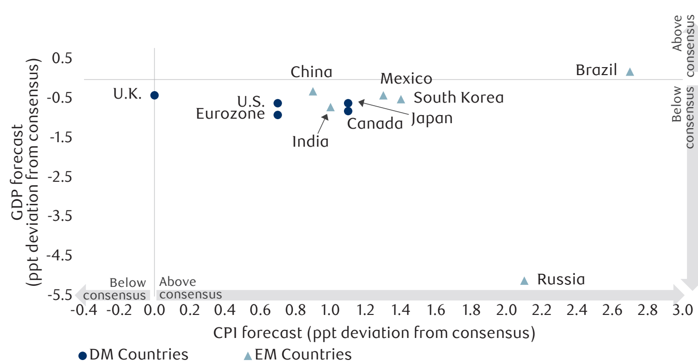
consensus (Exhibit 10). Global growth is set to decelerate to 3.6% in 2022 from 6.2% in 2021. Developed-world growth should fall to 3.0% from 5.1%, while growth in emerging markets is set to slow to 4.1% from 7.3% (Exhibit 11). These forecasts are not bad in an absolute sense, but they do represent a significant deceleration.

Our forecasts simultaneously predict below-consensus growth and above-consensus inflation (Exhibit 12). Is this "stagflation" – an unusual situation in which inflation is high while growth is low? We believe not. The inflation critique is entirely valid, but 3%-plus growth can hardly be called stagnation.

There is significant uncertainty around these prognostications. The precise amount of damage set to be inflicted by Russian sanctions is particularly unclear, with the risk of a significantly worse outcome. Similarly, there is a wide range of views on how much central banks will tighten and the impact that the tightening will have. Accordingly, the risk of U.S. recession in 2022 is significant, at no less than a 25% chance.

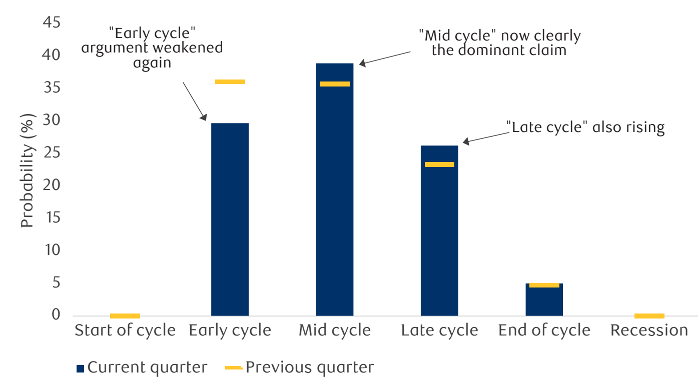
Our business-cycle analysis continues to deliver a "mid cycle" diagnosis (Exhibit 13). This is unchanged from last quarter and has benign implications for the immediate economic and market outlook. But a closer analysis reveals that of the many inputs that go into our scorecard, a falling number are now making "early cycle" counterclaims versus a rising number making "late cycle" counterclaims. In other words, the cycle is still moving forward, and fairly briskly.

Exhibit 12: GAM forecasts vs. consensus for 2022



Note: Deviation measured as difference between RBC GAM forecast (3/1/2022) and consensus forecast (Feb 2022). Source: Consensus Economics, RBC GAM

Exhibit 13: U.S. business-cycle score



Note: As at 02/04/2022. Calculated via scorecard technique by RBC GAM. Source: RBC GAM

Should the rapid clip continue, this could be a cycle with a lifespan of merely five or so years – half as long as the prior two cycles. That would leave several years of growth left, but not an endless runway.

Geopolitical complications

After months of posturing, Russia has delivered on its threats and attacked Ukraine. It appears so far that the war is proving more challenging than Russia or many analysts had anticipated. That said, it still seems likely that Russia will manage to capture a large part of Ukraine, although holding onto it could prove costly.

To end hostilities, Russia demands that Ukraine demilitarize and that it recognize the independence of the country's disputed eastern provinces and Crimea. Further, Russia wants NATO to promise that it will stop expanding into nations adjacent to Russia, and that NATO military installations be moved further from Russia. Ukraine and NATO are unlikely to acquiesce to these demands, suggesting the possibility of an exceptionally bloody conflict and drawn-out period of uncertainty. There is a real chance that President Putin will try to permanently absorb Ukraine into Russia, and then set his sights on other former Soviet Bloc nations.

> "From a long-term perspective, the Russian-Ukraine war brings a wide range of other implications."

From an economic standpoint, Ukraine is being devastated by wartime destruction and Russia is being badly damaged by a barrage of western sanctions that limit the flow of money and importation of key technologies, and impose a range of other restrictions on the country.

The economic impact of the war on the rest of the world is being expressed primarily through the supply and price of commodities. Russia is a major producer of oil, natural gas, wheat, potash, aluminum and copper. Most sanctions do not explicitly limit Russian exports, but access to these commodities is more precarious than before. We budget for some reduction in Russian commodity exports – partially as a Russian response to sanctions, and partially because the West is seeking to reduce its Russian exposure.

The effect this has on the availability and price of commodities will be most damaging for European nations given their particular reliance on Russian energy (Exhibit 14). The damage should be more moderate elsewhere. We project a 0.7% reduction in eurozone 2022 GDP growth (to 3.0%) and a 0.3% reduction in U.S. growth (to 3.1%). There is an undeniable risk that the damage could be greater.

From a long-term perspective, the Russian-Ukraine war brings a wide range of other implications.

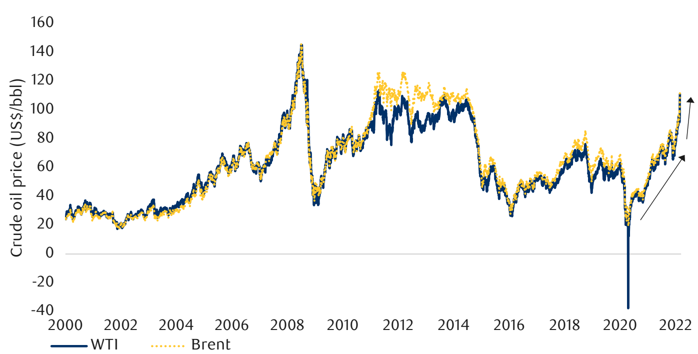
A new Cold War, recalling a lengthy period of elevated East-West hostility that stopped short of outright combat, has clearly resumed. One might argue there was already a milder version underway between Western nations and China. Such tensions result in countries forming military and economic blocs and a weakening of international institutions, both of which are bad for global trade and economic growth over the long run.

Military spending is clearly set to rise, with Germany in particular pivoting sharply. Slightly larger fiscal deficits are probable as a result. Nuclear proliferation may also increase.

Europe is now heavily incentivized to shift its energy supply away from Russia and will rely more on coal and nuclear power. Over the long term, renewable-fuel sources are likely to benefit.

Other geopolitical matters pale in comparison to events in Ukraine. But they should not be ignored. The U.S.-China

Exhibit 14: Oil prices surge on robust demand recovery, Russian invasion



Note: As of 3/2/2022. Source: Bloomberg, Haver Analytics, RBC GAM relationship is challenging and still likely to prove the most important global relationship over the coming decades.

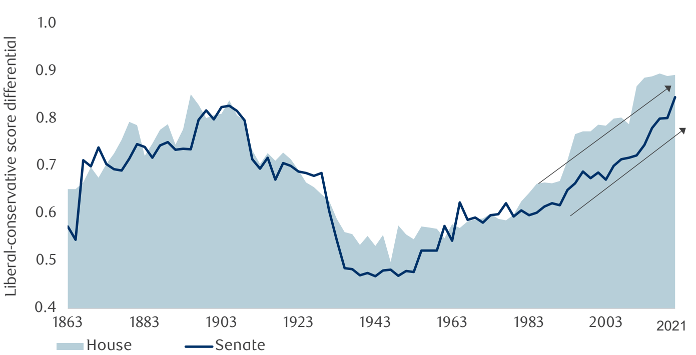
The U.S. November mid-term elections are beginning to come into focus, and it appears that they are likely to issue a rebuke to President Biden. In turn, little legislation will be passed over the ensuing two years. More generally, political polarization continues to grow (Exhibit 15), and one wonders how it will all end.

Pandemic fades

The latest pandemic wave – driven by the hyper-contagious Omicron variant – has significantly retreated (Exhibit 16). Moreover, the wave wasn't quite as bad as it looked. Despite record infection levels, there were fewer hospitalizations and deaths relative to earlier waves because the variant was slightly less severe and many more people had greater protection due to vaccines and the natural immunity won during prior waves.

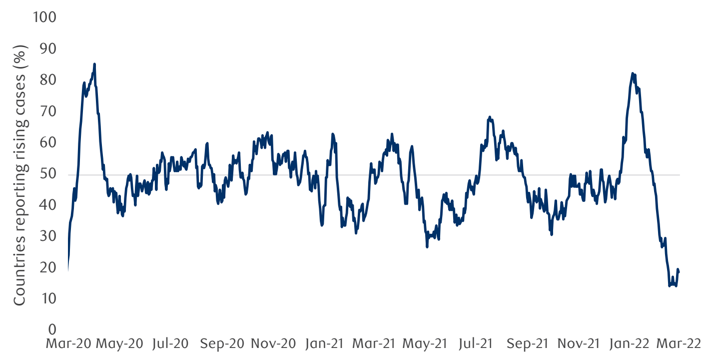
The sheer number of sick individuals during the latest wave overwhelmed testing capacity in many countries, making infection estimates much more uncertain than usual. Fortunately, other metrics unperturbed by this constraint such as hospitalizations (Exhibit 17) and test-positivity rates (Exhibit 18) are also clearly falling.

Exhibit 15: U.S. Congress partisan polarization intensifies



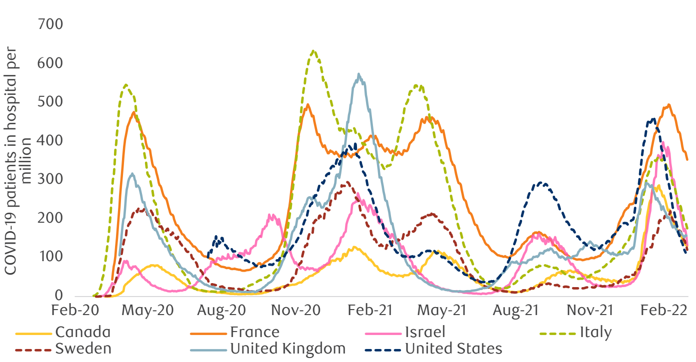
Note: As of 03/03/2022. Measured as the difference between median scores for the Democratic and Republican members in the House of Representatives and Senate. Source: Voteview.com, RBC GAM

Exhibit 16: COVID-19 is in retreat in most countries



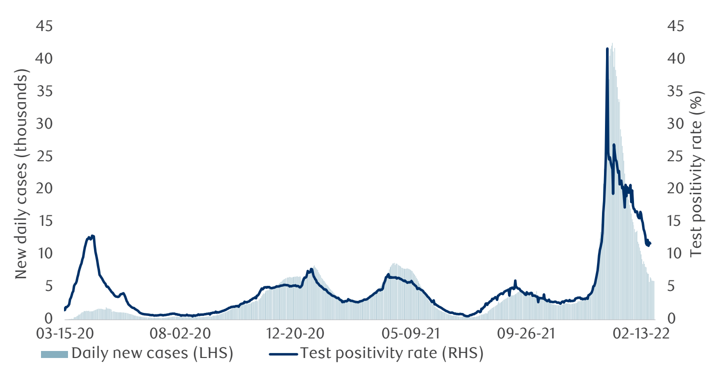
Note: As of 3/1/2022. Change in cases measured as the 7-day change of 7-day moving average of daily new infections. Source: WHO, Macrobond, RBC GAM

Exhibit 17: COVID-19 hospitalizations in developed countries have been declining



Note: Based on latest data available as of 3/2/2022. Source: Our World in Data, Macrobond, RBC GAM

Exhibit 18: COVID-19 cases and positivity rates in Canada continue to fall



Note: As of 3/1/2022. 7-day moving average of daily new cases and test positivity rates. Source: Our World in Data, WHO, Macrobond, RBC GAM

The latest wave inflicted some economic damage, as evidenced by a range of real-time and traditional indicators. However, it is becoming apparent that the damage may not have been quite as great as initially thought, and even more importantly, that a robust recovery is underway now that restrictions are being lifted (Exhibit 19). U.S. office-occupancy rates are rising again in a sign that a return to normality is coming (Exhibit 20).

Our forecasts from a quarter ago had already factored in damage from the Omicron wave and a subsequent economic revival, so no major adjustments are required on that front. A key remaining question is whether future significant waves will arise, and what implications they would have.

Another highly contagious virus variant, called BA.2, has been circulating for several months and has become the dominant strain in countries including Denmark, the U.K., South Africa and India. And yet it is notable that none of those countries is experiencing a significant rise in infections. It may simply be that the Omicron variant infected so many people that there isn't much room for BA.2 to take hold.

Looking further out, it is extremely hard to predict the twists and turns of the pandemic with any confidence. One need only think of the consensus expectation for the pandemic outlook at this point in each of the past two years: both were badly wrong. In the spring of 2020, COVID-19 was expected to vanish after several weeks of lockdown, much as it had in China. In the spring of 2021, COVID-19 was expected to disappear once vaccines had been administered. These expectations were not unreasonable, but neither panned out. The West proved incapable of matching the vigour with which China locked down, thereby allowing the virus to continue spreading. In 2021, more contagious variants radically changed the calculus for reaching herd immunity, pushing the required vaccination rate beyond attainable levels.

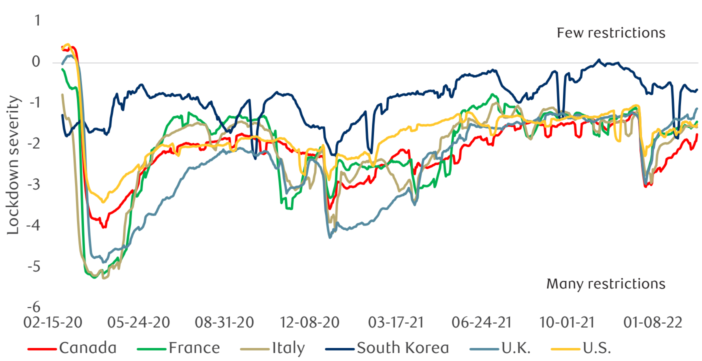
Thus, while it is reasonable as a base-case forecast to expect further variants and waves of COVID-19 to result in fewer deaths and require fewer economic restrictions, there is a range of alternative scenarios that could emerge. These possibilities range from the virus becoming feeble to the point of irrelevance, to it mutating in a way that undermines existing immunity and sets the world back to square one.

Supply chains to improve

Supply chains have been snarled for more than a year, creating headaches for businesses and consumers, and adding significantly to inflation.

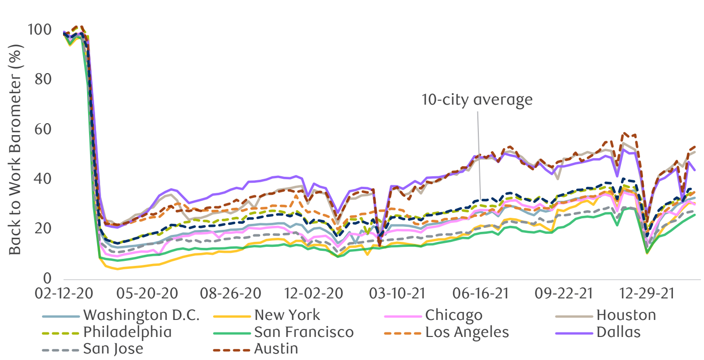
The supply-chain problems are rooted primarily in unusually strong demand, as evidenced by a remarkable increase in

Exhibit 19: COVID-19 restrictions easing in most countries



Note: Based on latest data available as of 2/28/2022. Deviation from baseline, normalised to U.S.and smoothed with a 7-day moving average. Source: Google, University of Oxford, Macrobond, RBC GAM

Exhibit 20: Workers are slowly returning to office



Note: As of the week ending 2/23/2022. The Barometer represents the weekly office occupancy based on swipes of access controls. Source: Kastle Systems, Bloomberg, RBC GAM

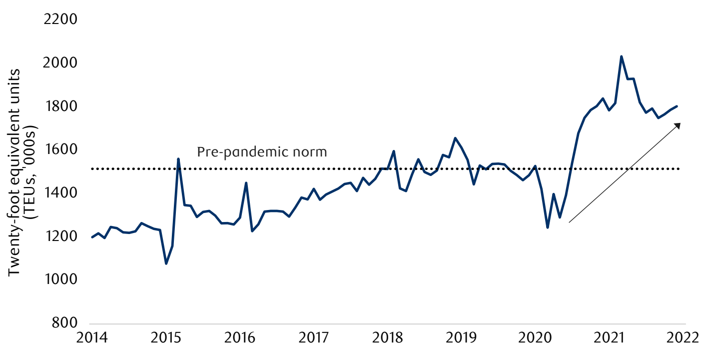
U.S. container imports (Exhibit 21). Supply-side problems have also had an impact, albeit less so. Factory production has in some cases been limited by viral outbreaks and workers have been harder to find than usual, but these are secondary considerations.

The problems related to supply chains remain intense, as evidenced by extremely high shipping costs (Exhibit 22). But there is clear evidence of incremental improvement. The number of ships waiting to unload at Southern California ports has finally begun to fall (Exhibit 23) and manufacturers are complaining slightly less about supplier deliveries (Exhibit 24).

We believe that supply-chain problems will improve somewhat further over 2022. The passage of time allows for producers and transportation companies to further refine their processes. As life returns to normal, demand for goods should ease as the appetite for previously unavailable high-touch services rises. Additionally, demand is normally weaker after Christmas and Chinese New Year, and the next few months offer producers the chance to catch up with demand.

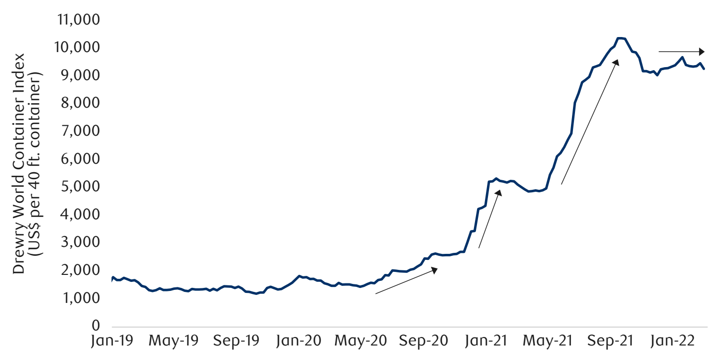
That said, not all supply-chain problems will vanish in 2022. It seems likely that demand for electronics will remain structurally higher and require a permanent increase in

Exhibit 21: Demand for goods in U.S. ports is higher than normal



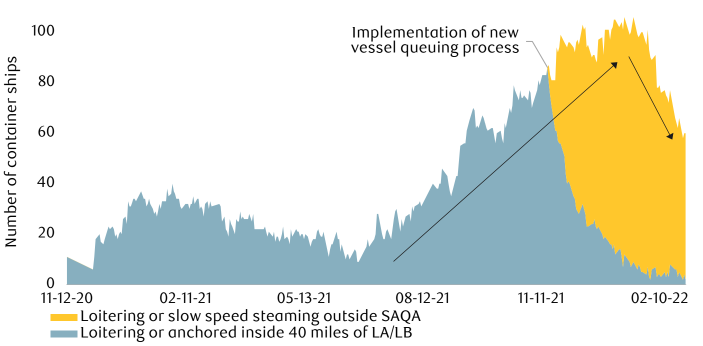
Note: As of Dec 2021. 2019 average shown as pre-pandemic norm. Major U.S. ports included are the ports of Los Angeles, Long Beach, New York & New Jersey, Savannah, Houston, Virginia, Oakland and Boston. Source: Macrobond, RBC GAM

Exhibit 22: Shipping costs remain elevated



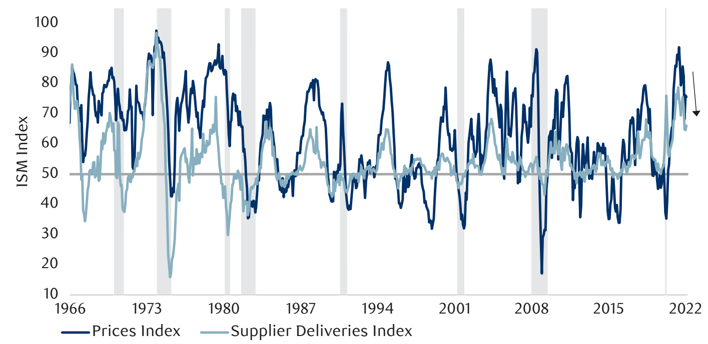
Note: As of the week ended 03/03/2022. Source: Drewry Supply Chain Advisors, RBC GAM

Exhibit 23: Container ship backlog in Southern California has improved recently



Note: As of 03/2/2022. Source: American Shipper, Marine Exchange of Southern California, RBC GAM

Exhibit 24: U.S. manufacturers complain less about suppliers and prices



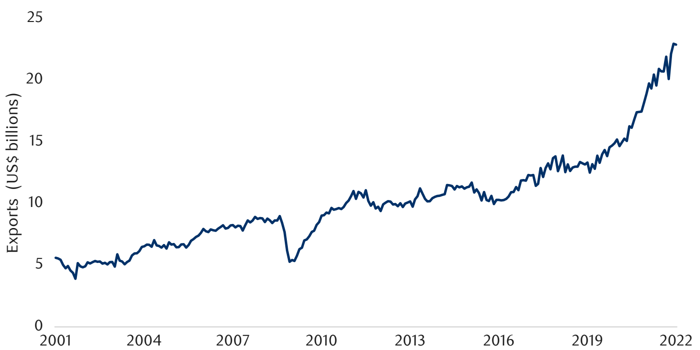
Note: As of Feb 2022. Shaded area represents recession. Source: ISM, Haver Analytics, RBC GAM chip production (Exhibit 25). Russian frictions will also exacerbate supply-chain problems for commodities, and there is no way to know how long this distortion will last.

Inflation high for longer

Inflation is extraordinarily high at 7.5% in the U.S., and is approaching 6% in other developed nations. These are the loftiest levels in several decades, and inflation is more likely to rise than fall over the next few months as the fallout from the Russian-Ukrainian conflict gets reflected. Inflation figures have not just risen, but reliably exceeded consensus expectations (Exhibit 26).

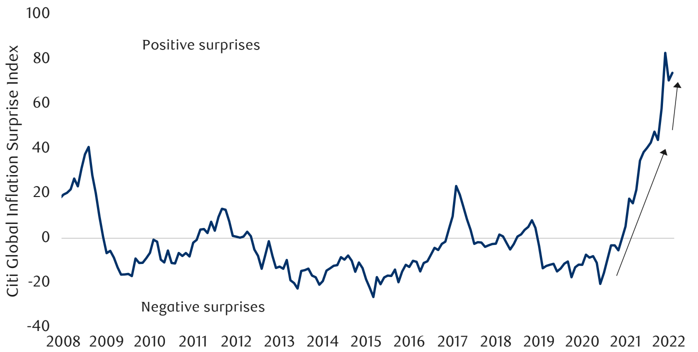
The two most important inflation drivers have been surging commodity prices and the aforementioned supply-chain problems. A variety of more minor inflation drivers include stimulative central banks, labour shortages and a housing boom in much of the world (Exhibit 27).

Exhibit 25: Taiwan exports of electronics grow quickly during the pandemic



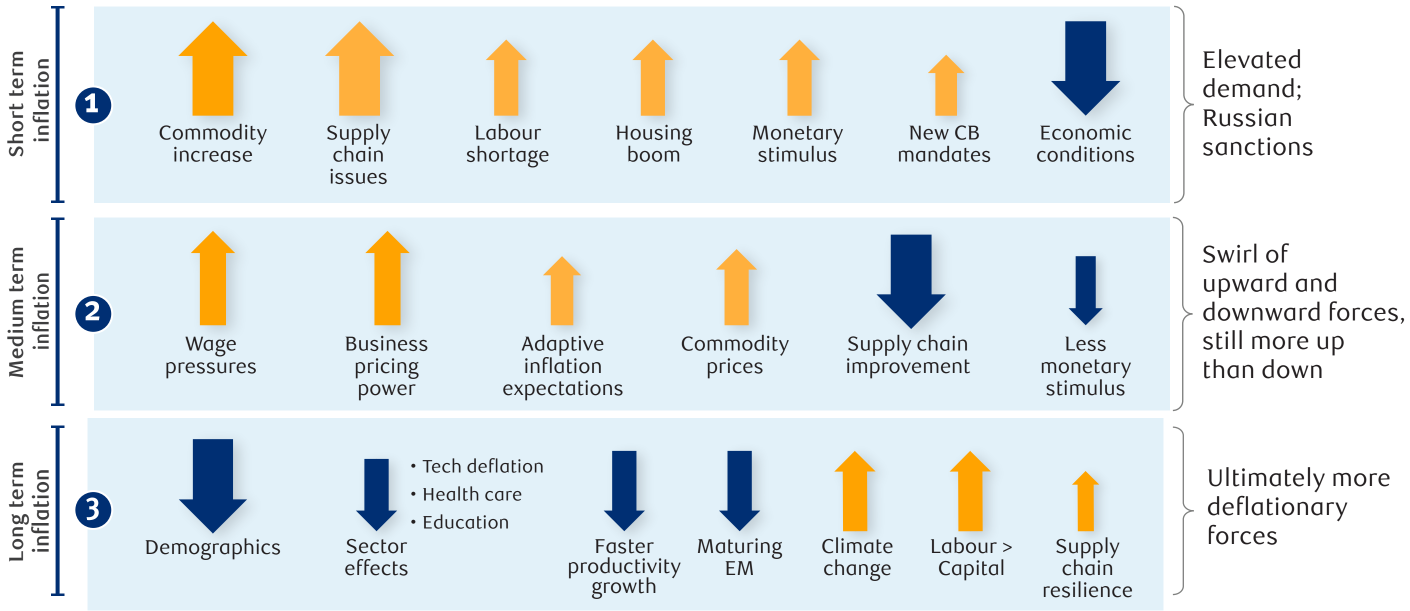
Note: As of Jan 2022. Source: Taiwan Ministry of Finance, Macrobond, RBC GAM

Exhibit 26: Global inflation continues to exceed expectations



Note: As of Feb 2022. Source: Citigroup, Bloomberg, RBC GAM

Exhibit 27: Inflation is quite high in short term, to be elevated in medium term, normal to low in long term

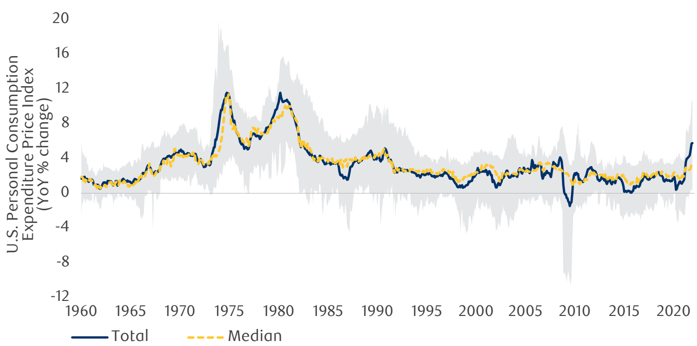


Note: As at 03/03/2022. Source: RBC GAM

Whereas high inflation was initially concentrated in a small number of products – used cars, microchips and energy – the pressures have broadened considerably (Exhibit 28). This breadth makes it more difficult and lengthens the time needed to put the inflation genie back in the bottle.

Turning to the outlook for the coming year, commodity-price pressures may persist somewhat longer than previously imagined given a prospective shortfall in key Russian commodity exports. Resolution of the supply-demand mismatch will take time as other suppliers ramp up and demand destruction occurs.

Exhibit 28: Inflation pressure mounts across a wide array of goods and services



Note: As of Dec 2021. Shaded area represents the range of the 10th to the 90th percentile of YoY % change of PCE Price Index. Source: Federal Reserve Bank of San Francisco, Haver Analytics, RBC GAM

We expect wage pressures to persist and potentially even intensify in 2022 given tight labour markets and a significantly increased cost of living (Exhibit 29). Higher wages may further spark inflation given that businesses intend to pass through the bulk of their cost increases to customers.

Conversely, as mentioned earlier, we anticipate that the most intense supply-chain pressures will ease over the coming year. This reversal is not to be underestimated: supply-chain pressures have arguably generated more inflation over the past year than any other force.

Central banks are also now edging into interest-rate increases, providing a further modest dampener on inflation.

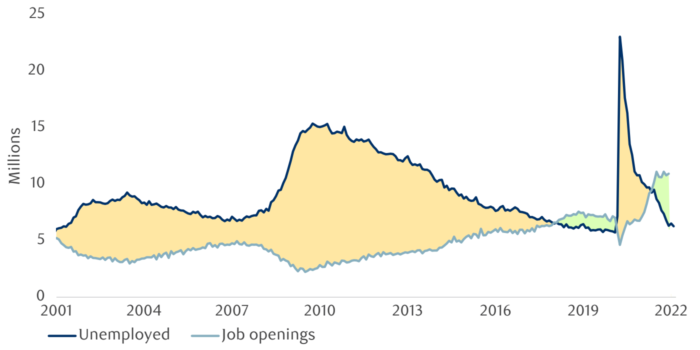
All of this is to say that we anticipate high and above-consensus inflation for 2022, but with a decelerating trend over the second half of the year (Exhibit 30). Real-time inflation measures have already begun to flatten, though events in Ukraine suggest another leap is likely first.

While most analysis about the detrimental impact of high inflation focuses on the monetary-tightening channel, it must also be highlighted that high inflation has a corrosive effect on economic growth all by itself. Historically, functioning in a 6% inflation environment rather than with a more benign rate subtracts up to half a percentage point from the rate of economic growth. Let us hope we are not in a high-inflation environment for long.

If afforded the luxury of a long-term vantage point, we continue to believe that inflation will eventually fully revert to normal, with aging populations and slower population growth even tempting inflation toward a below-normal clip. Even though medium-term inflation expectations have increased to high levels, long-term inflation expectations remain within the normal range (Exhibit 31).

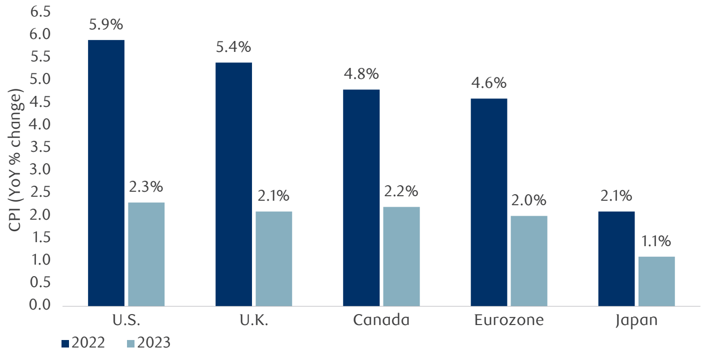
We also believe that this period of high inflation is likely to be less enduring than that of the problematic 1970s (Exhibit 32). The demographic setup is quite different, the current high inflation has more to do with a positive demand shock than a negative supply shock, and the gold standard didn't recently end. But it must be conceded that if the supply of Russian commodities is significantly restricted for an extended period, there will be an additional sniff of the 1970s in the form of a new negative supply shock joining the mix.

Exhibit 29: U.S. labour-market shortage puts workers in strong position



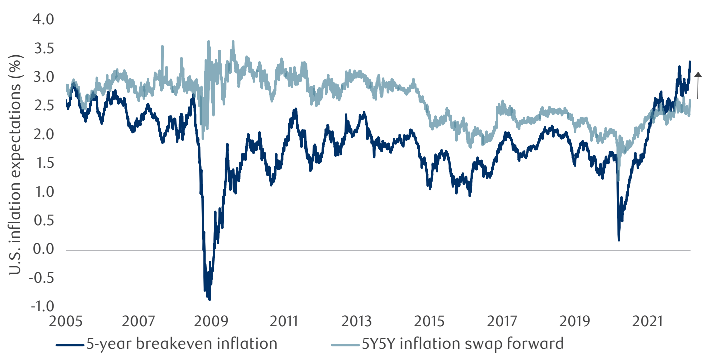
Note: Unemployment as of Feb 2022, job openings as of Dec 2021.
Source: BLS, Macrobond, RBC GAM

Exhibit 30: RBC GAM CPI forecast for developed markets



Note: As of 3/1/2022. Source: RBC GAM

Exhibit 31: U.S. inflation expectations rising though relatively calm about long term



Note: As of 3/2/2022. Source: Bloomberg, RBC GAM

Central banks turn to tightening

Central banks delivered unprecedented monetary stimulus over the past two years (Exhibit 33). This undoubtedly helped reduce the economic damage accumulated across the pandemic.

Until fairly recently, central banks were in no great hurry to unwind that support: Remember that, just a year ago, the U.S. Federal Reserve (Fed) was claiming that its first rate increase might not occur until 2024.

But inflation has since vastly exceeded central-bank forecasts. Initially, central banks viewed the additional inflation as a temporary distortion. But as high inflation has persisted, they have come to recognize that certain aspects of it will not soon depart. In turn, 2022 has become the year in which most developed-world central banks begin their journey back to more normal interest rates (Exhibit 34).

Central banks are acting with a sense of urgency, and rapid-fire rate increases at adjacent meetings may occur in the early going. That said, the Russia-Ukraine conflict and its associated economic damage has seemingly reduced the likelihood of 50-basis-point rate increases, and could yet reduce the amount of tightening delivered later. Central banks should temper their pace of rate increases later in the year as growth slows, inflation peaks and their balance sheets begin to shrink.

We budget for four 25-basis-point rate increases by the Fed this year. The U.K. is on track for a similar amount of tightening, albeit one that began in late 2021. The Bank of Canada is likely to deliver additional tightening, and the European Central Bank somewhat less (and possibly none at all).

As to the final destination for policy rates, we figure the North American neutral policy rate is no more than about 2.00%. This doesn't guarantee that central banks won't opt to surpass that level if inflation remains pressing in 2023, but it is a reasonable target to have in mind for late 2023. This calculation puts modest upward pressure on bond yields. The neutral policy rate is the benchmark interest rate at which economic activity is neither stimulated nor restrained by monetary policy.

Exhibit 32: Inflation – 1970s versus today

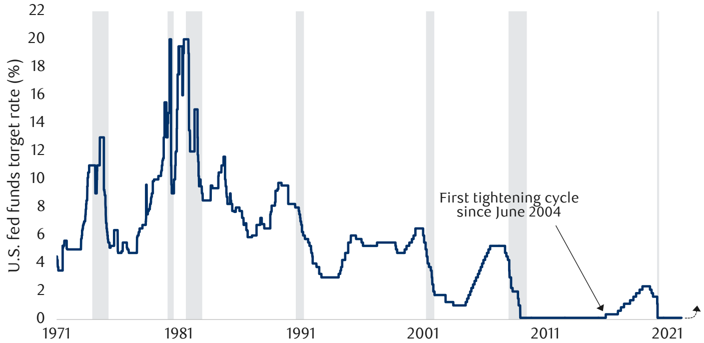
Similarities
- Politicization of central banks
- Large fiscal outlays

Differences
- Central banks target inflation now, more transparent
- Negative supply shock in 1970s/stagflation
- Positive demand shock now
- End of gold standard in 1970s
- Lower unionization now
- Very different demographics
- Giant central bank balance sheets today

Conclusion: high inflation less likely to become structural this time

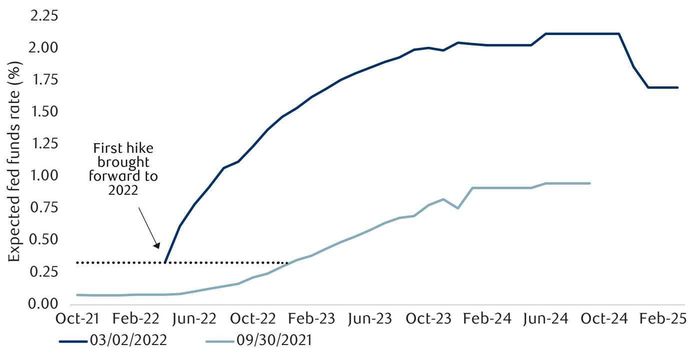
Note: As of 2/14/2022. Source: RBC GAM

Exhibit 33: U.S. Fed on cusp of new tightening cycle



Note: As of 3/3/2022. Shaded area represents recession. Source: Federal Reserve Board, Macrobond, RBC GAM

Exhibit 34: Fed now expected to raise rates fairly quickly



Note: As of 3/2/2022. Source: Bloomberg, RBC GAM

There is no reason that risk assets must tumble when central banks raise interest rates. After all, the very intent of rate hikes is to prevent the economy from overheating and thereby extend the cycle. Four rate increases should theoretically subtract around half a percentage point from a country's economic growth over the subsequent 18 months – hardly a recessionary impact. But given the haste with which central banks have pivoted, the brisk rate at which they intend to proceed and the fact that their actions are motivated by too much inflation rather than too much growth, there is undeniably some risk to economic growth and markets.

China to stabilize

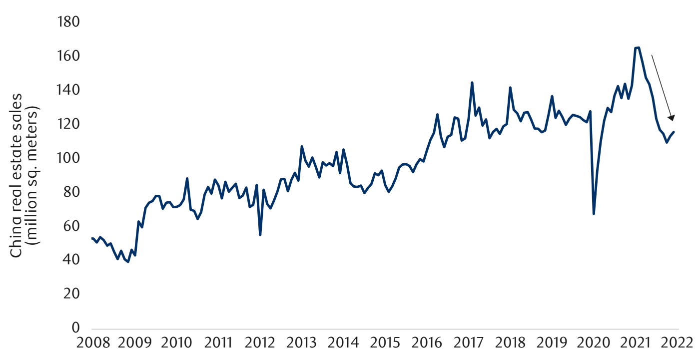
China has fallen out of the economic spotlight but continues to merit attention. It remains the world's most important contributor to global growth, and vies with the U.S. for the status of largest economy.

China dealt with several serious challenges over the past year, and some continue to exert an influence on the economy. Regulators cracked down on technology-sector excesses, softening a key business sector (though potentially to the long-term benefit of the country). Tighter housing-market rules drained some of the excesses from a sector that had previously been a key driver of the Chinese expansion (Exhibit 35). Global supply-chain problems have occasionally limited China's economic production.

China is also now nearly alone in retaining a zero-tolerance policy toward COVID-19 infections. This strategy, paired with the high level of contagiousness of the Omicron variant and the low efficacy of Chinese vaccines, has required the country to substantially shut down entire cities for periods of weeks. Lastly, China's demographics have turned, with the country's working-age population now in permanent decline.

It should be conceded that some of these headwinds are beginning to blow less fiercely. China has not been as busy on the regulatory front recently, and the housing market is no longer being constricted quite so tightly. The fact that global supply-chain problems are beginning to ease is also a positive, but introduces a new risk: Chinese exports could moderate as their strength in recent years has been due in part to outsized global demand for goods. Venturing forward, as demand pivots back to services, China could suffer a significant exports setback.

Exhibit 35: China's real estate market plunged under latest reforms, may be bottoming



Note: As of Dec 2021. Floor space sold monthly in square meters. Source: Haver Analytics, RBC GAM

In the end, what really matters is what the Chinese government wants for the economy over the coming year, and Beijing has been signalling that economic "stability" will be a focus. Thus, while we look for sub-5% GDP growth in China in 2022, it is unlikely that growth decelerates much more than that, and there is the scope for some revival over the year as the central bank bucks the trend with rate cuts and the country's credit impulse turns in a positive direction (Exhibit 36). By any standard other than that of China, this would constitute quite rapid growth.

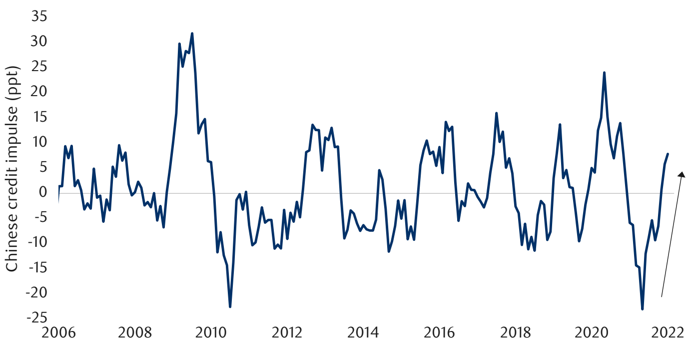
From a geopolitical standpoint, the U.S.-China relationship is likely to remain frosty, with an inclination to grow colder yet if China allies itself more clearly with Russia or strengthens its Taiwan claims.

Bottom line

In conclusion, we continue to anticipate another year of economic recovery, albeit deceleration, and with forecasts that rest moderately below the consensus. Businesses and consumers are still in a position to spend, the pandemic is likely to do less damage in 2022 than 2021, and supply chains are capable of at least partially unsticking.

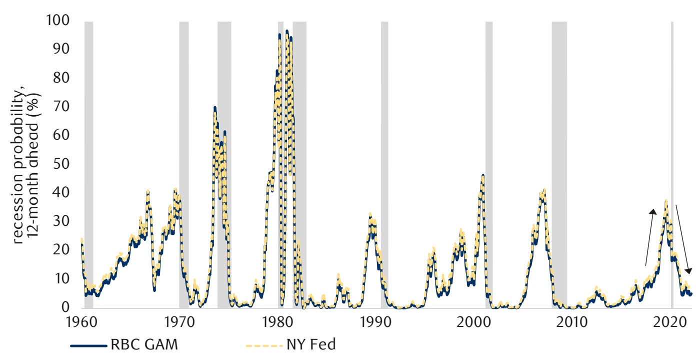
We find ourselves in a time of high uncertainty and perhaps even a degree of danger given the combination of the war in Ukraine, a fresh monetary-tightening cycle and exceedingly high inflation. Economic risks clearly tilt more downward than upward. While traditional recession models continue to assign a recession risk of no more than 10% (Exhibit 37), we assign a probability of at least 25% for the year ahead given this suite of adversities. These numbers mean, of course, that the continuation of this economic expansion is still the most likely outcome.

Exhibit 36: Chinese credit impulse turned supportive for growth



Note: As of Jan 2022. Measured as year-over-year change of 3-month rolling average of sum of total social financing excluding equities and local government bond issuance as % of GDP. Source: Haver Analytics, RBC GAM

Exhibit 37: Yield-curve-based U.S. recession risk remains modest



Note: As of Jan 2022 for NY Fed model, RBC GAM estimates as of 3/2/2022. Probabilities of a recession twelve months ahead estimated using the difference between 10-year and 3-month Treasury yields. Shaded area represents recession. Source: Federal Reserve Bank of New York, Haver Analytics, RBC GAM

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