RBC Global Asset Management

The Global Investment Outlook

RBC GAM Investment Strategy Committee

NEW YEAR 2022

The RBC GAM Investment Strategy Committee

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The RBC GAM Investment Strategy Committee consists of senior investment professionals drawn from all areas of RBC GAM. The Committee regularly receives economic and capital markets related input from internal and external sources. Important guidance is provided by the Committee's regional equity advisors (North America, Europe, Asia, Emerging Markets) and from the Global Fixed Income & Currencies sub-committee. From this, the Committee builds a detailed global investment forecast looking one year forward.

The Committee's view includes an assessment of global fiscal and monetary conditions, projected economic growth and inflation, as well as the expected course of interest rates, major currencies, corporate profits and stock prices.

From this global forecast, the RBC GAM Investment Strategy Committee develops specific guidelines that can be used to manage portfolios.

These include:

The recommended mix of cash, fixed income instruments, and equities.

The recommended global exposure of fixed income and equity portfolios.

The optimal term structure for fixed income investments.

The suggested sector and geographic make-up within equity portfolios.

The preferred exposure to major currencies.

Results of the Committee's deliberations are published quarterly in *The Global Investment Outlook*.

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Executive summary

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Underlying economic conditions remain good by historical standards and corporate-profit growth has been stellar. However, the backdrop is shifting and enthusiasm for the recovery has diminished. Moderating growth, the new Omicron virus variant and fading monetary stimulus have agitated financial markets.

Economy encounters a variety of headwinds

A new coronavirus variant, problematically high inflation, supply-chain challenges and China's property-market slowdown are among the main headwinds facing the global economy. Moreover, policymakers are acknowledging that the recovery is well advanced, allowing for a gradual dialing back of monetary accommodation and less generous fiscal support. As the recovery progresses and economies reach their potential, it is natural for growth to become less buoyant. The recovery is still in good shape and we expect growth to persist into 2022, albeit at a slower pace relative to 2021. Among all of the headwinds, there are two key factors that could continue to support the expansion. The first is that consumers are flush with savings and they have low financial obligations, putting them in a solid position to boost their spending. The second is that businesses have also expressed their desire to rebuild inventories and boost capital expenditures. Weighing the positives and the negatives, we look for 3.5% growth for most developed nations in 2022. This projected growth rate is nearly twice the pre-pandemic norm and consistent with an extension of the economic recovery. However, our below-consensus GDP projection means that the expansion will slow, perhaps to a degree that ends up disappointing investors.

The coronavirus regains traction

The pandemic has become more challenging in recent months as infections are rising throughout the developed world. Colder weather, the reopening of schools and the relaxation of social restrictions have made it easier for the virus to spread. The deterioration is most obvious in Europe, but cases are also ramping up in North America. While the bulk of the current wave is due to the Delta strain, the Omicron variant is proving more contagious than previous versions (though perhaps less deadly), superior at resisting vaccines and better at re-infecting people. Vaccine makers can adapt their formulas to take on the new variant, but it might take a number of quarters before production ramps up and distribution gets to the point where large portions of the population are again protected. Our base case scenario looks for a moderate wave of infections to subtract up to one percentage point from global output over a few quarters. This hit would be worse than the one caused by the Delta variant, but not much different from the late-2020 wave, and far less damaging than the original wave.

Inflation continues to run hot

The rate of inflation has increased further over the past quarter and now stands at extraordinary levels not encountered in decades. Economic demand has snapped back faster than supply, causing higher commodity prices, an insufficient workforce and shortages in a variety of goods. Inflation expectations have consistently been above expectations and real-time measures remain hot. Although supply-chain constraints may ultimately fade and oil prices come down, other inflation pressures may persist or even intensify. Central banks have printed significant amounts of money and are broadly accepting of higher inflation. For these reasons, our inflation forecasts over the next year remain above consensus. Shifting to the longer term, however, we continue to believe that high inflation is cyclical rather than structural. After distortions from the pandemic settle, we should eventually see a return to normal inflation readings. It is even conceivable that inflation over the long term could be lower than normal as the deflationary effect of demographics outweighs structural inflationary forces from climate change and the rising bargaining power of workers to set wages.

Currency markets face increased volatility

Volatility is returning to the foreign-exchange markets, fueled in part by a new COVID variant and in part by diverging central-bank monetary policies. The U.S. dollar has benefited from market expectations that interest rates will be raised next year, but may soon reverse some of its gains as moderating U.S. inflation would suggest less upward pressure on rates. While we have reined in our optimism on the low-yielding euro and Japanese yen, we remain positive on cyclical currencies such as the Canadian dollar. The resilience of the Chinese renminbi amid otherwise negative Chinese developments has been a stabilizing factor for currency markets and is a theme worth monitoring in the year ahead.

Sovereign-bond yields remain unsustainably low

Sovereign-bond yields began the year on a rapid upward trajectory amid the economic reopening, COVID vaccinations and firming inflation, but declined toward the end of the period as slowing growth and mounting concerns about the Omicron variant boosted the appetite for safe havens. Our models continue to suggest that yields are too low and that the key to higher yields lies in the eventual normalization of real interest rates to levels at or above the zero bound. Real rates are currently deeply negative and sovereign-bond investors are accepting an after-inflation loss in purchasing power over time. We don't think this situation is sustainable and, as a result, we expect a gradual increase in yields paced by a gradual upward adjustment in real interest rates. Our own forecast is 1.80% for the U.S. 10-year yield over the next 12 months.

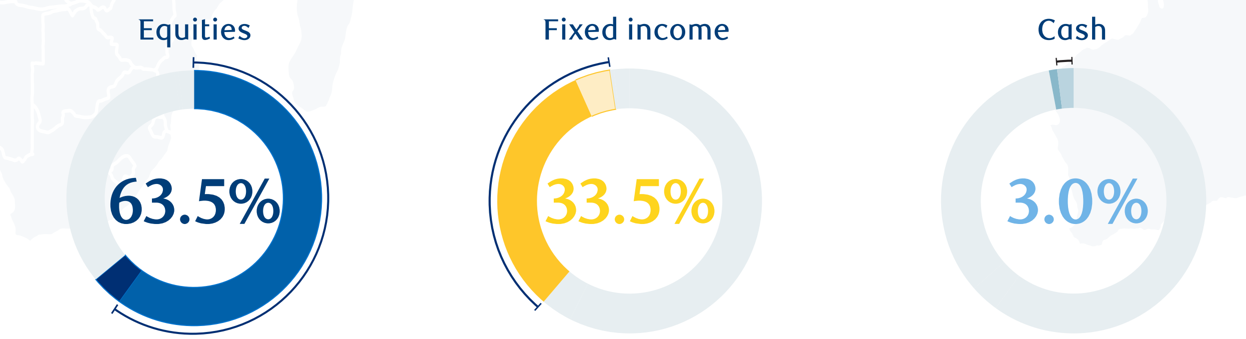
Stocks are fully valued, so profit growth will be critical to sustaining the bull market

Global equities extended gains from 2020 to record another strong year in 2021 and the rally has pushed our global composite of equity market valuations to 25% above fair value. At these levels, stocks are pricing in a favourable outlook for the economy and corporate profits, and the risk is that conditions deteriorate such that equities are left in a vulnerable position. Highly demanding valuations like those we see in the U.S. large-cap equity market are consistent with higher volatility as any doubts over profit growth will likely lead to heightened instability. Continued strong gains in corporate profits will be critical to supporting higher stock prices, and earnings have indeed been spectacular. Stocks are expensive, but an environment of still-low interest rates, and where inflation could transition back to normal levels alongside strong growth in corporate profits, the equity market could deliver mid-single-digit to low-double-digit gains over the next few years.

Asset mix – a second modest trim to stocks

Our base case scenario is for the economy to continue growing at a rapid yet slowing rate as the recovery matures and much of the economic damage from the pandemic has been repaired. As the economy moves into its middling stage, central banks are starting to dial back monetary accommodation and, although conditions fully justify the need for tightening, we recognize that financial markets will be receiving less support. Prospective returns for fixed income are especially unappealing in this environment and any meaningful increase in yields would lead to low or negative returns in sovereign bonds. Stocks continue to offer better return potential relative to fixed income. However, we recognize that the cycle is advancing, valuations are elevated and the market is vulnerable to correction should risks mount. We reduced our equity allocation by 50 basis points during the summer in recognition of the maturing of the recovery. Since then, narrowing market breadth, slowing growth, a lack of leadership outside of U.S. large-cap equities and the threat of the new Omicron variant have motivated us to reduce our equity weight by another 50 basis points this quarter, placing the proceeds into cash. For a balanced, global investor, we currently recommend an asset mix of 63.5 percent equities (strategic neutral position: 60 percent) and 33.5 percent fixed income (strategic neutral position: 38 percent), with the balance in cash.

Recommended asset mix



Strategic neutral position: **60 percent**

Strategic neutral position: **38 percent**

Strategic neutral position: **2 percent**

Economic & capital markets forecasts

Economic forecast (RBC GAM Investment Strategy Committee)

	United States		Canada		Europe		United Kingdom		Japan		China		Emerging markets*	
	New Year 2022	Change from Fall 2021	New Year 2022	Change from Fall 2021	New Year 2022	Change from Fall 2021	New Year 2022	Change from Fall 2021	New Year 2022	Change from Fall 2021	New Year 2022	Change from Fall 2021	New Year 2022	Change from Fall 2021
Real GDP														
2020A	(3.40%)		(5.31%)		(6.55%)		(9.83%)		(4.74%)		2.02%		(1.40%)	
2021E	5.60%	(0.60)	4.70%	(1.50)	4.60%	(0.10)	6.50%	(0.20)	2.20%	(0.30)	7.80%	(1.20)	6.90%	(1.10)
2022E	3.50%	(0.30)	3.60%	(0.10)	3.50%	(0.30)	4.60%	(0.40)	2.30%	(0.30)	4.60%	(0.80)	4.60%	(0.70)
CPI														
2020A	1.25%		0.75%		0.25%		0.85%		(0.02%)		2.49%		3.37%	
2021E	4.60%	0.30	3.30%	0.40	2.60%	0.40	2.50%	0.10	(0.10%)	(0.50)	1.30%	N/C	3.36%	0.24
2022E	3.80%	0.80	3.00%	0.60	2.50%	0.70	3.50%	0.90	0.90%	(0.10)	2.50%	N/C	3.56%	0.37

A = Actual   E = Estimate   *GDP Weighted Average of China, India, South Korea, Brazil, Mexico and Russia.

Targets (RBC GAM Investment Strategy Committee)

	November 2021	Forecast November 2022	Change from Fall 2021	1-year total return estimate* (%)
Currency markets against USD				
CAD (USD–CAD)	1.28	1.17	0.02	9.9
EUR (EUR–USD)	1.13	1.24	(0.03)	8.4
JPY (USD–JPY)	113.15	107.00	4.00	5.3
GBP (GBP–USD)	1.33	1.40	N/C	5.6
Fixed income markets				
U.S. Fed Funds Rate	0.13	0.38	0.25	
U.S. 10-Year Bond	1.44	1.80	0.05	(1.8)
Canada Overnight Rate	0.25	0.75	0.50	
Canada 10-Year Bond	1.57	2.00	0.50	(2.3)
Eurozone Deposit Facility Rate	(0.50)	(0.50)	N/C	
Germany 10-Year Bund	(0.35)	(0.05)	0.20	(3.3)
U.K. Base Rate	0.10	0.50	0.40	
U.K. 10-Year Gilt	0.81	1.25	0.45	(3.3)
Japan Overnight Call Rate	(0.05)	(0.10)	N/C	
Japan 10-Year Bond	0.06	0.10	N/C	(0.4)
Equity markets				
S&P 500	4567	4725	50	4.9
S&P/TSX Composite	20660	21700	500	7.7
MSCI Europe	153	162	(1)	8.8
FTSE 100	7059	7350	(100)	8.7
Nikkei	27822	29800	100	9.0
MSCI Emerging Markets	1212	1300	(60)	10.2

*Total returns are expressed in local currencies with the exception of MSCI Emerging Markets whose return is expressed in USD. Source: RBC GAM

Recommended asset mix

Asset mix – the allocation within portfolios to stocks, bonds and cash – should include both strategic and tactical elements. Strategic asset mix addresses the blend of the major asset classes offering the risk/return tradeoff best suited to an investor's profile. It can be considered to be the benchmark investment plan that anchors a portfolio through many business and investment cycles, independent of a near-term view of the prospects for the economy and related expectations for capital markets. Tactical asset allocation refers to fine tuning around the strategic setting in an effort to add value by taking advantage of shorter term fluctuations in markets.

Every individual has differing return expectations and tolerances for volatility, so there is no "one size fits all" strategic asset mix. Based on a 40-year study of historical returns[1] and the volatility[2] of returns (the range around the average return within which shorter-term results tend to fall), we have developed five broad profiles and assigned a benchmark strategic asset mix for each. These profiles range from very conservative through balanced to aggressive growth. It goes without saying that as investors accept increasing levels of volatility, and therefore greater risk that the actual experience will depart from the longer-term norm, the potential for returns rises. The five profiles presented below may assist investors in selecting a strategic asset mix best aligned to their investment goals.

Each quarter, the RBC GAM Investment Strategy Committee publishes a recommended asset mix based on our current view of the economy and return expectations for the major asset classes. These weights are further divided into recommended exposures to the variety of global fixed income and equity markets. Our recommendation is targeted at the Balanced profile where the benchmark (strategic neutral) setting is 60% equities, 38% fixed income, and 2% cash.

A tactical range of +/- 15% around the benchmark position allows us to raise or lower exposure to specific asset classes with a goal of tilting portfolios toward those markets that offer comparatively attractive near-term prospects.

This tactical recommendation for the Balanced profile can serve as a guide for movement within the ranges allowed for all other profiles.

The value-added of tactical strategies is, of course, dependent on the degree to which the expected scenario unfolds.

Regular reviews of portfolio weights are essential to the ultimate success of an investment plan as they ensure current exposures are aligned with levels of long-term returns and risk tolerances best suited to individual investors.

Anchoring portfolios with a suitable strategic asset mix, and placing boundaries defining the allowed range for tactical positioning, imposes discipline that can limit damage caused by swings in emotion that inevitably accompany both bull and bear markets.

[1]**Average return**: The average total return produced by the asset class over the period 1981 – 2021, based on monthly results.

[2]**Volatility**: The standard deviation of returns. Standard deviation is a statistical measure that indicates the range around the average return within which 2/3 of results will fall into, assuming a normal distribution around the long-term average.

Global asset mix

	Benchmark policy	Allowable range	New Year 2021	Spring 2021	Summer 2021	Fall 2021	New Year 2022
Cash	**2.0%**	0.0% – 15.0%	1.0%	1.0%	1.0%	2.5%	**3.0%**
Bonds	**38.0%**	23.0% – 53.0%	34.5%	34.5%	35.0%	33.5%	**33.5%**
Stocks	**60.0%**	45.0% – 75.0%	64.5%	64.5%	64.0%	64.0%	**63.5%**

Note: Effective June 1, 2020, we reset our strategic neutral positions to reflect long-lasting changes in economy and capital markets' dynamics. Boosting strategic neutral equity exposure by 5% and reducing fixed income by same amount in our reference balanced portfolio.

Regional allocation

Global bonds	WGBI* November 2021	Allowable range	New Year 2021	Spring 2021	Summer 2021	Fall 2021	New Year 2022
North America	**43.6%**	33.6% – 53.6%	41.1%	40.8%	41.7%	39.7%	**46.1%**
Europe	**40.0%**	30.0% – 50.0%	41.0%	36.9%	46.2%	41.0%	**42.5%**
Asia	**16.5%**	6.5% – 26.5%	17.8%	22.3%	12.1%	19.3%	**11.5%**

Note: Past Range reflects historical allocation from Fall 2002 to present.

Global equities	MSCI** November 2021	Allowable range	New Year 2021	Spring 2021	Summer 2021	Fall 2021	New Year 2022
North America	**69.0%**	59.0% – 79.0%	66.0%	65.3%	65.7%	66.8%	**67.8%**
Europe	**14.9%**	4.9% – 24.9%	14.6%	15.4%	16.2%	16.2%	**15.5%**
Asia	**7.8%**	0.0% – 17.8%	10.6%	10.4%	9.4%	8.4%	**8.2%**
Emerging markets	**8.3%**	0.0% – 18.3%	8.8%	8.9%	8.8%	8.6%	**8.6%**

Our asset mix is reported as at the end of each quarter. The mix is fluid and may be adjusted within each quarter, although we do not always report on shifts as they occur. The weights in the table should be considered a snapshot of our asset mix at the date of release of the Global Investment Outlook.

Global equity sector allocation

	MSCI** November 2021	RBC GAM ISC Fall 2021	RBC GAM ISC New Year 2022	Change from Fall 2021	Weight vs. benchmark
Energy	3.27%	1.41%	3.27%	1.86	100.0%
Materials	4.09%	2.90%	2.59%	(0.31)	63.3%
Industrials	10.22%	12.00%	10.22%	(1.77)	100.0%
Consumer discretionary	12.43%	12.83%	13.93%	1.10	112.1%
Consumer staples	6.72%	6.91%	5.72%	(1.19)	85.1%
Health care	12.45%	13.72%	12.45%	(1.27)	100.0%
Financials	13.76%	13.54%	15.76%	2.22	114.5%
Information technology	22.95%	23.57%	24.45%	0.88	106.5%
Communication services	8.75%	9.10%	8.75%	(0.35)	100.0%
Utilities	2.68%	1.28%	1.18%	(0.10)	44.0%
Real estate	2.67%	2.75%	1.67%	(1.08)	62.6%

*FTSE World Government Bond Index. **MSCI World Index. Source: RBC GAM Investment Strategy Committee

At RBC GAM, we have a team dedicated to setting and reviewing the strategic asset mix for all of our multi-asset solutions. With an emphasis on consistency of returns, risk management and capital preservation, we have developed a strategic asset allocation framework for five client risk profiles that correspond to broad investor objectives and risk preferences. These five profiles range from Very Conservative through Balanced to Aggressive Growth.

Very Conservative

Asset class	Bench-mark	Range	Last quarter	Current recommendation
Cash & Cash Equivalents	2%	0-15%	2.5%	3.0%
Fixed Income	73%	68-88%	68.7%	68.7%
Total Cash & Fixed Income	75%	60-90%	71.2%	71.7%
Canadian Equities	10%	0-20%	11.4%	11.3%
U.S. Equities	8%	0-18%	9.0%	8.8%
International Equities	7%	0-17%	8.4%	8.2%
Emerging Markets	0%	0%	0.0%	0.0%
Total Equities	25%	10-40%	28.8%	28.3%

	Return	Volatility
40-year average	8.5%	4.9%
Last 12 months	1.9%	3.3%

Very Conservative investors will seek income with maximum capital preservation and the potential for modest capital growth, and be comfortable with small fluctuations in the value of their investments. This portfolio will invest primarily in fixed-income securities, and a small amount of equities, to generate income while providing some protection against inflation. Investors who fit this profile generally plan to hold their investment for the medium to long term.

Conservative

Asset class	Bench-mark	Range	Last quarter	Current recommendation
Cash & Cash Equivalents	2%	0-15%	2.5%	3.0%
Fixed Income	58%	43-83%	53.6%	53.6%
Total Cash & Fixed Income	60%	45-75%	56.1%	56.6%
Canadian Equities	13%	3-23%	14.2%	14.0%
U.S. Equities	15%	5-25%	16.1%	15.9%
International Equities	12%	2-22%	13.6%	13.5%
Emerging Markets	0%	0%	0.0%	0.0%
Total Equities	40%	25-55%	43.9%	43.4%

	Return	Volatility
40-year average	8.9%	6.1%
Last 12 months	5.3%	3.6%

Conservative investors will pursue modest income and capital growth with reasonable capital preservation, and be comfortable with moderate fluctuations in the value of their investments. The portfolio will invest primarily in fixed-income securities, with some equities, to achieve more consistent performance and provide a reasonable amount of safety. The profile is suitable for investors who plan to hold their investment over the medium to long term.

Balanced

Asset class	Bench-mark	Range	Last quarter	Current recommendation
Cash & Cash Equivalents	2%	0-15%	2.5%	3.0%
Fixed Income	38%	23-53%	33.5%	33.5%
Total Cash & Fixed Income	40%	25-55%	36.0%	36.5%
Canadian Equities	15%	5-25%	15.8%	15.7%
U.S. Equities	25%	15-35%	26.1%	25.9%
International Equities	15%	5-25%	16.6%	16.5%
Emerging Markets	5%	0-15%	5.5%	5.4%
Total Equities	60%	45-75%	64.0%	63.5%

	Return	Volatility
40-year average	9.2%	7.6%
Last 12 months	9.5%	4.3%

The **Balanced** portfolio is appropriate for investors seeking balance between long-term capital growth and capital preservation, with a secondary focus on modest income, and who are comfortable with moderate fluctuations in the value of their investments. More than half the portfolio will usually be invested in a diversified mix of Canadian, U.S. and global equities. This profile is suitable for investors who plan to hold their investment for the medium to long term.

Growth

Asset class	Bench-mark	Range	Last quarter	Current recommendation
Cash & Cash Equivalents	2%	0-15%	2.5%	3.0%
Fixed Income	23%	8-38%	18.4%	18.4%
Total Cash & Fixed Income	25%	10-40%	20.9%	21.4%
Canadian Equities	18%	8-28%	18.7%	18.6%
U.S. Equities	30%	20-40%	31.0%	30.7%
International Equities	19%	9-29%	20.8%	20.7%
Emerging Markets	8%	0-18%	8.6%	8.6%
Total Equities	75%	60-90%	79.1%	78.6%

	Return	Volatility
40-year average	9.4%	9.4%
Last 12 months	12.6%	4.9%

Investors who fit the **Growth** profile will seek long-term growth over capital preservation and regular income, and be comfortable with considerable fluctuations in the value of their investments. This portfolio primarily holds a diversified mix of Canadian, U.S. and global equities and is suitable for investors who plan to invest for the long term.

Aggressive Growth

Asset class	Bench-mark	Range	Last quarter	Current recommendation
Cash & Cash Equivalents	2%	0-15%	0.5%	1.0%
Fixed Income	0%	0-15%	0.0%	0.0%
Total Cash & Fixed Income	2%	0-17%	0.5%	1.0%
Canadian Equities	29%	19-39%	29.0%	29.0%
U.S. Equities	38%	28-48%	37.7%	37.4%
International Equities	20%	10-30%	21.3%	21.1%
Emerging Markets	11%	1-21%	11.5%	11.5%
Total Equities	98%	83-100%	99.5%	99.0%

	Return	Volatility
40-year average	9.6%	12.0%
Last 12 months	18.6%	6.1%

Aggressive Growth investors seek maximum long-term growth over capital preservation and regular income, and are comfortable with significant fluctuations in the value of their investments. The portfolio is almost entirely invested in stocks and emphasizes exposure to global equities. This investment profile is suitable only for investors with a high risk tolerance and who plan to hold their investments for the long term.

Capital markets performance

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The U.S. dollar strengthened against the major global currencies in the quarter ended November 30, 2021. High inflation was a boon to the value of the greenback as its persistence prompted U.S. policymakers to speed up plans to tighten monetary policy. Also supporting the U.S. dollar was strong economic data and the fiscal boost expected from U.S. President Biden's infrastructure spending. The greenback appreciated 4.1% against the euro, 3.4% against the British pound, 2.7% against the Japanese yen and 1.3% against the Canadian dollar. Europe's struggle to contain the latest wave of the coronavirus and the European Central Bank's commitment to keeping interest rates low pressured the single currency. The loonie depreciated the least against the U.S. dollar as a strong domestic economy, higher oil prices and a relatively hawkish central bank supported the Canadian currency. So far this year, the U.S. dollar is relatively flat against the Canadian dollar but has strengthened 7.9% against the yen, 7.0% against the euro and 3.0% against sterling.

All major global bond indexes recorded declines in the latest quarter in U.S.-dollar terms. Bond yields rose across all key markets as traders priced in faster monetary-policy tightening in the face of higher inflation expectations. The yield on the 10-year Treasury-bond increased 14 basis points to 1.44% but rose as high as 1.67% before news broke of the emergence of the Omicron coronavirus variant. U.S. bonds experienced the smallest losses at 0.6% for both the government-bond and aggregate-bond indexes. The FTSE European Government Bond Index and the FTSE Japanese Government Bond Index registered the biggest losses at 4.5% and 3.0%, respectively, as their currencies weakened against the greenback. It was a similar story for the first 11 months of 2021, as all major bond indexes fell and U.S. bonds outperformed. So far this year, the top-performing FTSE U.S. Government Bond Index is down 0.5%, while the worst-performing bond index, the FTSE European Government Bond Index, has dropped 8.1%.

Many global equity markets made new highs during the quarter but most could not hold onto the gains as worries about slowing economic growth, diminished stimulus and a rise in coronavirus infections hurt investor confidence. U.S. stocks performed best in U.S.-dollar terms, with the S&P 500 Index gaining 1.3% backed by corporate earnings growth that exceeded analysts' estimates. The MSCI Germany Index performed worst, with the 9.9% decline reflecting fresh lockdowns to combat the latest spike in COVID infections. The MSCI Emerging Markets Index declined 7.0% on concerns about regulatory risk in China and a slowdown in Chinese economic activity. For the year through November 30, the S&P 500 has been the best-performing index, up 24.4%, while the emerging-markets benchmark was the only major index to experience a loss, down 7.2%.

Investors preferred the stability of larger companies with a track record of rising earnings, as slowing economic growth during the quarter remained top of mind. The small-cap S&P 600 Index declined 1.4% and the mid-cap S&P 400 Index fell 1.3%, compared with the S&P 500's small gain. Similarly, investors favoured the strong earnings of growth stocks over value stocks during a period when investors were less confident about the economy. The Russell 3000 Growth Index recorded a gain of 2.7% while the Russell 3000 Value Index declined 2.1%. Canadian mid-cap and small-cap stocks were bolstered by significant exposure to rising commodity prices and returned 0.8% and 0.4%, respectively, outperforming the large-cap index's 0.25% decline. Only three of the 11 global sectors were up in the latest three-month period given concerns about the economy. The Communication Services sector was the worst performer, recording a loss of 9.2%. Energy, with a 10.0% gain, was the best-performing sector, benefiting from high oil and natural-gas prices. Through November year to date, the Energy sector gained 31.1%, far exceeding the worst-performing global sector, Utilities, which returned 2.5%.

Exchange rates

Periods ending November 30, 2021

	Current USD	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)
USD–CAD	1.2775	1.25	(0.10)	(1.64)	(1.30)	(1.00)
USD–EUR	0.8818	4.11	7.01	5.18	(0.06)	(1.35)
USD–GBP	0.7519	3.38	3.02	0.24	(1.42)	(1.21)
USD–JPY	113.0350	2.75	7.91	8.27	(0.14)	(0.24)

Note: all changes above are expressed in US dollar terms

Canada

Periods ending November 30, 2021

	USD					CAD		
Fixed income markets: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
FTSE Canada Univ. Bond Index TR	(2.80)	(2.97)	(2.19)	5.49	3.91	(1.59)	(3.79)	4.11

U.S.

Periods ending November 30, 2021

	USD					CAD		
Fixed income markets: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
FTSE U.S. Government TR	(0.61)	(0.54)	(1.14)	5.64	3.72	0.64	(2.76)	4.27
BBg U.S. Agg. Bond Index TR[1]	(0.60)	(0.58)	(1.15)	5.52	3.65	0.64	(2.77)	4.15

Global

Periods ending November 30, 2021

	USD					CAD		
Fixed income markets: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
FTSE WGBI TR	(2.53)	(4.18)	(3.96)	4.22	3.24	(1.31)	(5.54)	2.87
FTSE European Government TR	(4.54)	(8.14)	(6.91)	3.71	3.62	(3.34)	(8.43)	2.36
FTSE Japanese Government TR	(2.96)	(6.95)	(7.54)	0.84	0.59	(1.75)	(9.06)	(0.47)

Canada

Periods ending November 30, 2021

	USD					CAD		
Equity markets: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
S&P/TSX Composite	(0.23)	21.89	25.52	15.72	10.85	1.01	23.47	14.21
S&P/TSX 60	0.83	24.60	27.63	16.11	11.56	2.09	25.54	14.60
S&P/TSX Small Cap	0.42	18.42	27.81	15.95	7.37	1.68	25.72	14.44

U.S.

Periods ending November 30, 2021

	USD					CAD		
Equity markets: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
S&P 500 TR	1.32	24.44	27.92	20.38	17.90	2.59	25.83	18.82
S&P 400 TR	(1.30)	16.97	26.47	14.73	12.46	(0.07)	24.40	13.24
S&P 600 TR	(1.40)	14.15	31.42	13.38	12.17	(0.16)	29.27	11.91
Russell 3000 Value TR	(2.13)	18.71	22.92	11.44	10.25	(0.90)	20.91	9.99
Russell 3000 Growth TR	2.73	23.83	29.39	28.31	24.37	4.02	27.28	26.64
NASDAQ Composite Index TR	1.98	19.56	28.20	29.60	25.08	3.26	26.11	27.91

Note: All rates of return presented for periods longer than 1 year are annualized. [1] Bloomberg U.S. Agg. Bond Index TR. Source: RBC GAM

Global
Periods ending November 30, 2021

	USD					CAD		
Equity markets: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
MSCI World TR *	(0.94)	18.00	21.78	16.89	14.61	0.56	20.55	15.52
MSCI EAFE TR *	(5.14)	6.98	10.77	9.83	9.19	(3.71)	9.65	8.54
MSCI Europe TR *	(5.62)	10.70	14.23	10.72	9.86	(4.19)	13.07	9.42
MSCI Pacific TR *	(4.34)	0.74	4.77	8.29	8.07	(2.89)	3.71	7.01
MSCI UK TR *	(3.56)	10.70	16.47	4.82	5.53	(2.10)	15.29	3.59
MSCI France TR *	(4.25)	15.18	14.79	11.70	11.59	(2.80)	13.63	10.39
MSCI Germany TR *	(9.86)	1.63	5.80	8.20	7.40	(8.49)	4.73	6.93
MSCI Japan TR *	(3.15)	0.83	3.94	8.45	8.31	(1.69)	2.89	7.18
MSCI Emerging Markets TR *	(6.98)	(7.18)	2.70	9.27	9.52	(5.57)	1.66	7.99

Global equity sectors
Periods ending November 30, 2021

	USD					CAD		
Sector: Total return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
Energy TR *	10.01	31.08	39.87	(2.37)	(1.16)	11.68	38.46	(3.52)
Materials TR *	(4.99)	9.96	14.88	15.49	11.79	(3.55)	13.72	14.14
Industrials TR *	(4.32)	13.72	13.25	13.06	11.24	(2.87)	12.11	11.74
Consumer discretionary TR *	5.28	18.02	23.80	23.59	19.17	6.88	22.55	22.14
Consumer staples TR *	(3.00)	8.85	6.92	8.77	8.37	(1.53)	5.84	7.49
Health care TR *	(4.77)	10.41	15.03	12.80	14.26	(3.32)	13.87	11.47
Financials TR *	(1.81)	24.55	29.00	10.77	9.64	(0.33)	27.69	9.47
Information technology TR *	4.07	27.27	33.81	35.15	29.67	5.65	32.46	33.56
Communication services TR*	(9.22)	13.45	16.34	17.81	12.14	(7.84)	15.16	16.42
Utilities TR *	(4.48)	2.50	3.34	8.37	9.51	(3.03)	2.30	7.09
Real estate TR *	(3.07)	20.06	21.97	9.68	8.87	(1.60)	20.74	8.39

* Net of taxes. Note: all rates of return presented for periods longer than 1 year are annualized. Source: Bloomberg/MSCI

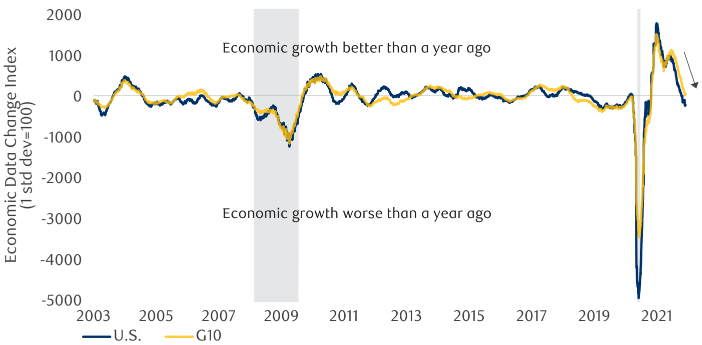
Economic outlook
Headwinds slow recovery

Eric Lascelles
Chief Economist
RBC Global Asset Management Inc.

Several headwinds are slowing or threatening to slow economic growth (Exhibit 1). A new, more contagious coronavirus variant could undermine economic activity for the next few quarters. Inflation remains problematically high. Supply chains are still hobbled, if beginning to improve slightly. China's property-market slowdown also continues. Finally, central banks are becoming more hawkish and fiscal supports are becoming less generous. More generally, growth is becoming less buoyant as economies near their potential.

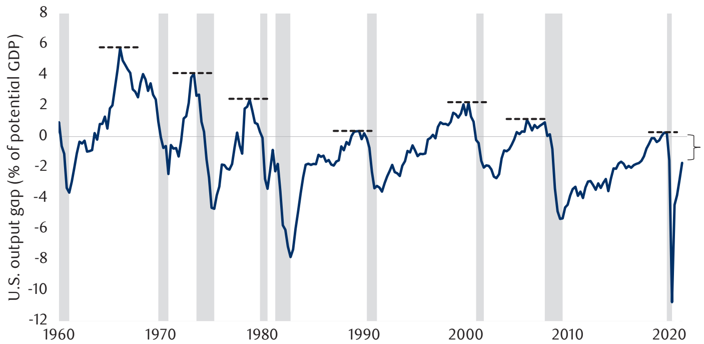
Despite these adverse forces, an economic recovery of sorts should persist into 2022, albeit at a diminished clip relative to 2021 (Exhibit 2). Two key underlying drivers of growth remain resilient. Consumers have accumulated a high level of liquid savings and have low financial obligations. This puts them in a position to spend more, especially as supply-chain problems are resolved. Simultaneously, businesses have expressed a desire to rebuild their inventories and have bold plans for capital expenditures.

Exhibit 1: Economic growth deteriorating globally



Note: As of Dec. 2, 2021. Shaded area represents U.S. recession. Source: Citigroup, Bloomberg, RBC GAM

Exhibit 2: There's still room for catch-up growth in coming year



Note: As of Q3 2021. Shaded area represents recession. Source: CBO, Macrobond, RBC GAM

From an investment perspective, we recommend a modest reduction in the allocation toward equities. This is in response to the aforementioned slowing economic growth, alongside an advancing business cycle, fairly full equity valuations and cautious technical signals. Nevertheless, the recommended equity weight remains above a neutral setting, consistent with the view that a continuation of the economic recovery should support further equity gains.

The next pandemic wave

The COVID-19 pandemic has recently become more challenging in two disparate ways.

The first and ultimately more minor consideration is that COVID-19 infections have been rising in the developed world for a few months (Exhibit 3).

This new wave is seemingly the result of the highly contagious Delta variant taking advantage of colder weather in the northern hemisphere, reopened schools, fewer social-distancing restrictions and waning immunity. The deterioration is particularly intense in Europe, though is by no means restricted to the continent (Exhibit 4). Cases are also edging higher in the U.S. and Canada.

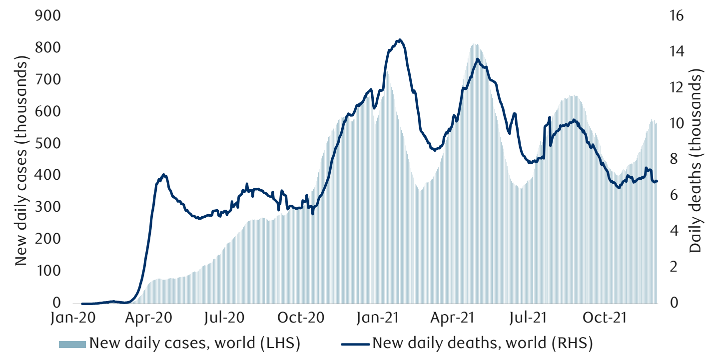
This problem will resolve with time as the weather becomes warmer in a few months and as the widespread vaccination of younger children in developed countries and the delivery of booster shots bolster immunity.

The latest wave, mostly the result of the Delta variant, will have only a modestly negative impact on economic growth due to the mildly tighter social distancing restrictions that have accompanied it (Exhibit 5).

However, the second, more recent, virus-related development could be far more serious. A new Omicron variant appears to be more contagious than any previous strain (albeit perhaps less deadly), is probably more resistant to vaccines and is reportedly better at re-infecting people. It has spread rapidly across southern Africa, and is now surfacing in many other regions.

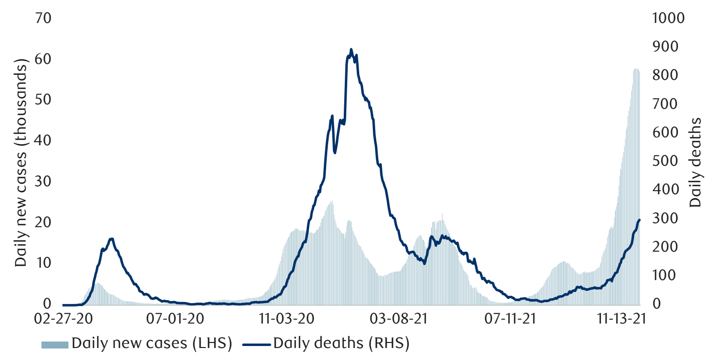
There are a number of ways this development may evolve. If the variant is truly more infectious, a further significant wave of infections is likely.

Exhibit 3: Global COVID-19 cases have risen since early fall



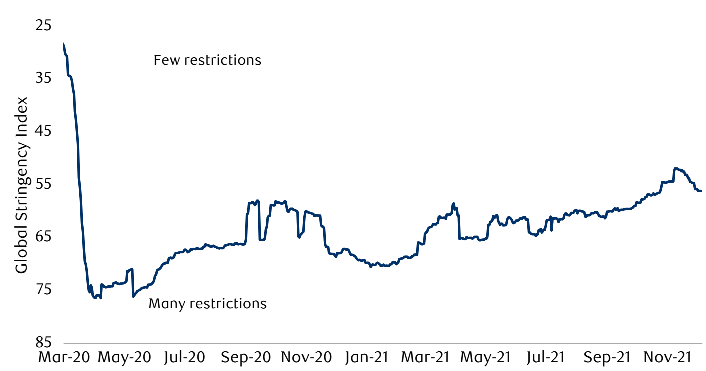
Note: As of Dec. 3, 2021. 7-day moving average of daily new cases and new deaths. Source: WHO, Macrobond, RBC GAM

Exhibit 4: Germany reported record COVID-19 infections in latest wave



Note: As of 12/3/2021. 7-day moving average of daily new cases and new deaths. Source: WHO, Macrobond, RBC GAM

Exhibit 5: Global Stringency Index has tightened



Note: As of Dec. 5, 2021. Global Stringency Index measuring the strictness of lockdown policies that restrict mobility, calculated as stringency index of 50 largest economies. Sources: University of Oxford, IMF, Macrobond, RBC GAM

Vaccine makers indicate they can modify their formulas to better target the Omicron variant if this proves necessary, but the process of formulation, testing, approval, manufacturing and distribution is likely to take a number of quarters to restore a high level of population-wide protection.

In a negative scenario, an especially large wave could significantly impede economic growth, potentially to the point of reducing output by multiple percentage points for a period of a few quarters.

In our base-case scenario, a more moderate wave subtracts up to one percentage point of output over a similar period. This is a bigger hit than from the Delta variant, but not dissimilar to the late-2020 wave, and far less than the damage from the original wave.

A best-case scenario could occur if the Omicron variant is more infectious but significantly less deadly. This would allow the variant to outcompete more dangerous variants, accelerating the world toward some semblance of herd immunity without an unacceptable loss of life. Such a scenario could even add something to economic growth to the extent the virus would burn out more quickly. That said, the supply of labour would be temporarily reduced as large numbers of infected people would have to isolate.

As a possible Omicron wave approaches, several more granular thoughts are also useful:

- China could be more adversely affected than many other countries from an economic standpoint purely due to its zero-tolerance policy toward the coronavirus, an approach that could require widespread lockdowns to maintain and, in turn, exacerbate supply-chain problems.
- While vaccine passports and mandates have largely supplanted blunter and broader restrictions in recent months, a major new wave of infections might well require a return to more forceful restrictions. Europe, notably Austria and Germany, is already travelling down this path in response to a surge in cases.
- From a sector perspective, travel and high-touch service activities such as accommodations and food services are naturally most at risk, consistent with prior waves.
- To the extent that the Omicron variant is reported to be particularly adept at breaking through the natural immunity developed in prior infections, countries like the U.S., with a low vaccination rate and a high infection rate, would be particularly vulnerable. Many poorer nations would be in a similar position.

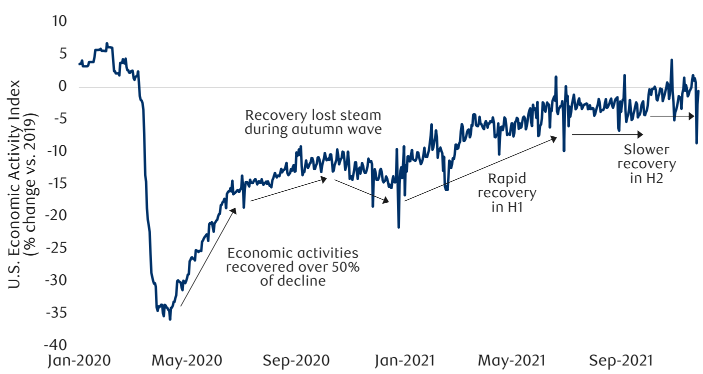
Economic deceleration

Economic growth has slowed significantly from the first half of 2021 (Exhibit 6) and we expect a further deceleration over the year ahead. This should translate into around 3.5% growth for most developed nations in 2022 (Exhibit 7). This growth rate is diminished relative to 2021, but nevertheless nearly twice the pre-pandemic norm and consistent with an extension of the economic recovery.

Several considerations support this faster-than-normal growth prognosis. There is still some natural buoyancy left in the economy given that activity remains below theoretically sustainable levels. Put differently, unemployment has further room to decline and some business sectors can still expect to reclaim lost activity.

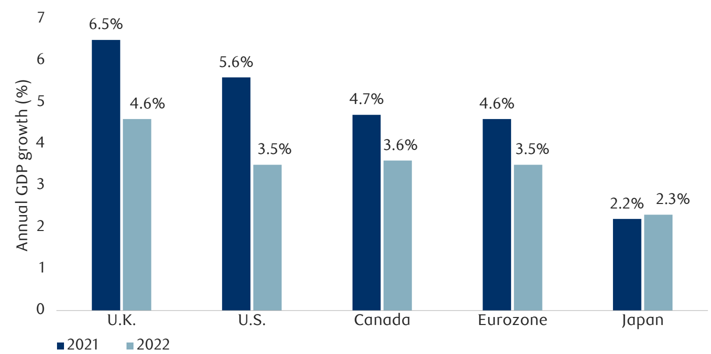
Turning to the major components of the economy, households have accumulated significantly more savings than normal over the past few years (Exhibit 8) and also now enjoy lower financial obligations than usual. Some of this may be converted into spending, especially after supply-chain problems ease. It is a similar situation with businesses: they express enthusiasm for making major capital expenditures (Exhibit 9) and rebuilding inventories (Exhibit 10).

Exhibit 6: Decelerating economic recovery



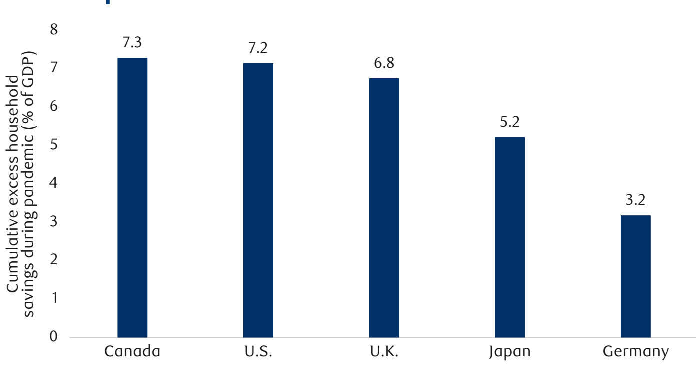
Note: As of Nov. 27, 2021. Economic Activity Index is the average of nine high-frequency economic data series measuring the percentage change versus the same period in 2019. Source: Bank of America, Goldman Sachs, OpenTable, Macrobond, RBC GAM

Exhibit 7: RBC GAM GDP forecast for developed markets



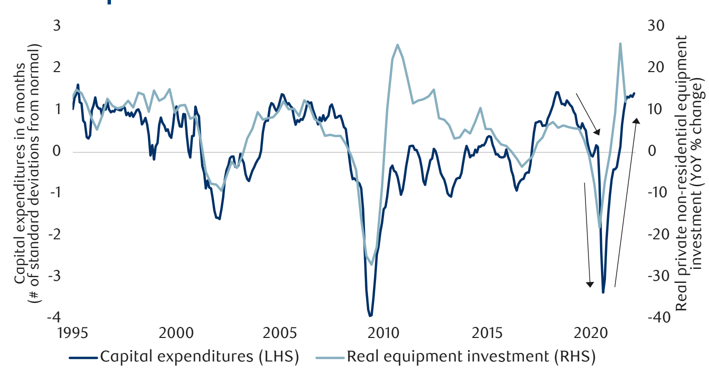
Note: As of 11/30/2021. Source: RBC GAM

Exhibit 8: Considerable excess household savings due to pandemic



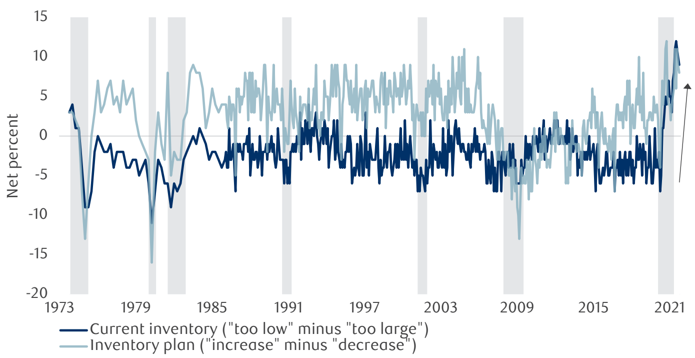
Note: As of Sep 2021 for U.S.; Q3 2021 for Canada and Germany; Q2 2021 for Japan and U.K. Cumulative excess savings vs. 2019 average since March 2020. Source: Macrobond, RBC GAM

Exhibit 9: U.S. capex expectations rise in the wake of the pandemic



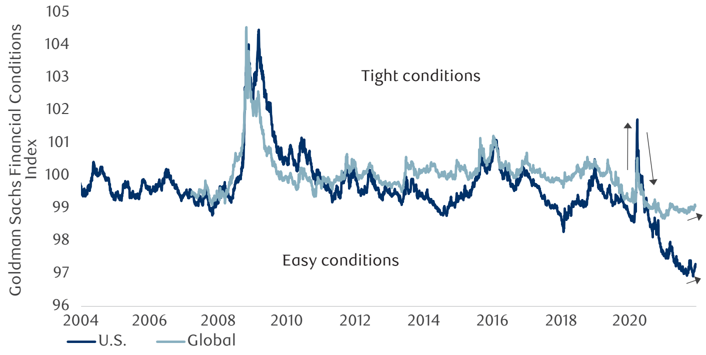
Note: Capital expenditures in 6 months (Nov 2021, in 3-month lead) are 3-month moving average of an aggregate of normalized indicators of future capex from surveys on manufacturing and non-manufacturing firms conducted by NFIB, the Federal Reserve Bank of Chicago, Dallas, Kansas City, New York, Philadelphia, and Richmond. Real equipment investment as of Q3 2021. Source: Haver Analytics, RBC GAM

Exhibit 10: U.S. businesses plan to build inventory



Note: As of Oct 2021. Shaded area represents recession. Source: NFIB Small Business Economic Survey, Haver Analytics, RBC GAM

Exhibit 11: Financial conditions still extremely stimulative but starting to tighten

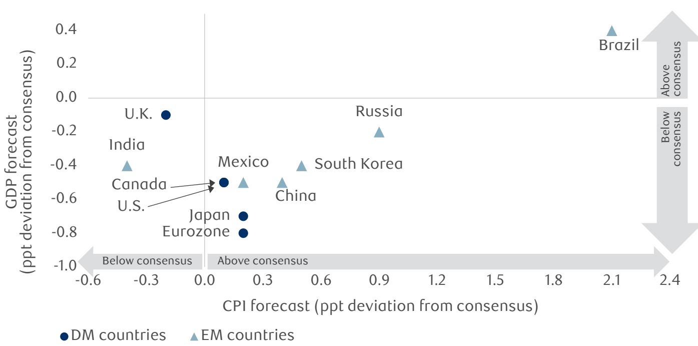


Note: As of Dec. 1, 2021 for U.S., 11/30/2021 for global. Source: Goldman Sachs, Bloomberg, RBC GAM

Financial conditions remain quite friendly to consumers and businesses even as central banks tighten monetary policy by pulling back on bond buying and laying the groundwork for a gradual rise in interest rates (Exhibit 11).

All of this is to say that, absent headwinds, the 2022 growth outlook would be pretty "fantastic." However, there are several headwinds that dial back the outlook down to "good" on an absolute basis, and potentially somewhat disappointing relative to what the consensus has priced in (Exhibit 12).

Exhibit 12: RBC GAM forecasts vs. consensus for 2022



Note: Deviation measured as difference between RBC GAM forecast (Nov. 30, 2021) and consensus forecast (Nov 2021). Source: Consensus Economics, RBC GAM

There are six headwinds to consider:

1

Another wave of COVID-19 infections appears to be on the way, and potentially of a fairly significant magnitude if Omicron lives up to its early billing. This does non-trivial economic damage.

2

Inflation is at its highest level in several decades, and hasn't begun to ebb in any significant way. This exacts a toll on economic growth.

3

Supply chains, while improving somewhat, are still dysfunctional and restricting economic activity.

4

China's economic slowdown, driven disproportionately by a cooling housing market, has negative implications not just for the country but for the world.

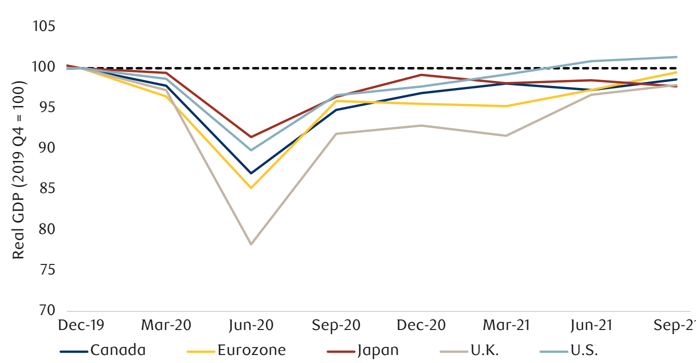
5

Monetary policy is becoming less generous, and fiscal policy, despite further spending initiatives, is set to exert a significant drag on 2022 growth.

6

While there is still some buoyancy remaining in the economy as some sectors still scramble to return to normal levels of activity, a great deal of this normalization has already occurred, dulling the pace of growth (Exhibit 13).

Exhibit 13: Room for further economic recovery



Note: As of Q3 2021. Source: Macrobond, RBC GAM

These adjustments yield a below-consensus view, and one that is supported by the fact that the consensus forecast has been declining for some time (Exhibit 14) and economic surprises have been mostly negative lately.

Most of these factors are also applicable to emerging-market economies, resulting in broadly softer and below-consensus GDP forecasts there, too (Exhibit 15).

Canada has a further headwind to consider: in late November major flooding in British Columbia cut the country's most important port off from the rest of the country. Significant damage will likely be visible in fourth-quarter GDP, followed by a rebound in early 2022.

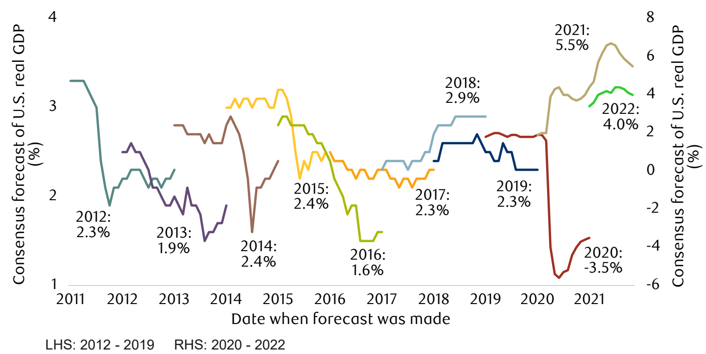
Supply-chain woes

Supply-chain problems remain intense. While the supply of goods has been modestly constrained by Asian pandemic waves, power outages and a decline in migrant factory workers, the main story is one of unusually strong demand. Shipping from Asia to North America is a remarkable 27% higher than it was before the pandemic. Shippers and suppliers have struggled to keep pace, resulting in inventory shortages and higher goods prices. These problems have arguably been most intense in the U.S., though the U.K. has also felt a disproportionate impact.

Fortunately, supply-chain problems may be starting to improve, and we have become somewhat less pessimistic on the supply-chain outlook in recent months. The cost of shipping goods, while still extremely high, has begun to fall (Exhibit 16). Similarly, manufacturers report that supplier deliveries are starting to arrive more dependably (Exhibit 17).

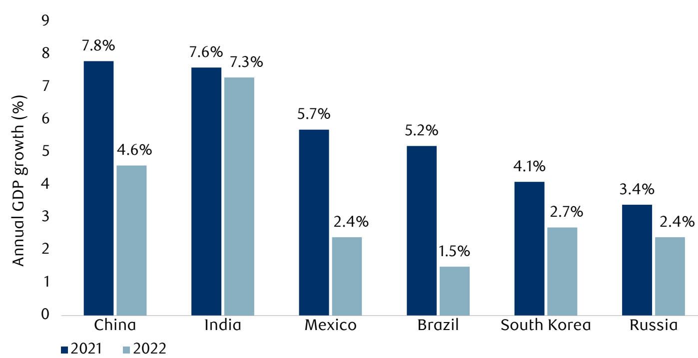
It makes sense that supply-chain problems are peaking. With the holiday shopping season in full swing and products in stores, the shipping pinch has already come and gone. Once the consumer-oriented Chinese New Year ends in early February, there should be a further slackening of demand. For both of these reasons, consumer spending usually softens in the first quarter of the year, allowing supply chains to catch up.

Exhibit 14: U.S. consensus growth forecast declining



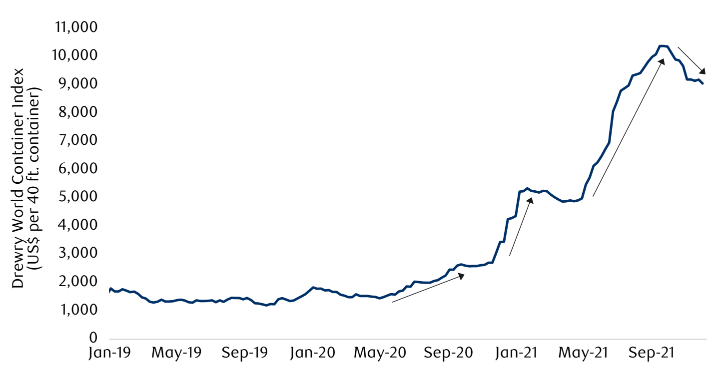
Note: As of Nov 2021. Source: Consensus Economics, IMF, RBC GAM

Exhibit 15: RBC GAM GDP forecast for emerging markets



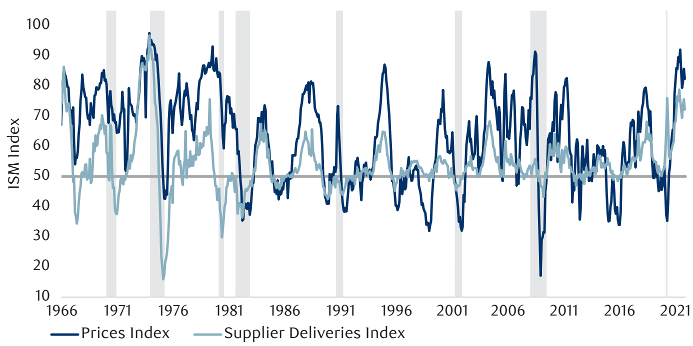
Note: As of Nov. 30, 2021. Source: RBC GAM

Exhibit 16: Shipping costs falling but still elevated



Note: As of the week ended Dec. 2, 2021. Source: Drewry Supply Chain Advisors, RBC GAM

Exhibit 17: U.S. manufacturers complain slightly less about suppliers and prices



Note: As of Nov 2021. Shaded area represents recession. Source: ISM, Haver Analytics, RBC GAM

That said, notable if diminishing supply-chain frictions should persist across 2022. One problem is that supply chains aren't built with much slack or redundancy. Further, there isn't much incentive for shipping companies to permanently expand their capacity when the additional demand is probably temporary.

The second issue is that modern goods are built with many materials and parts sourced from different places. It takes just one missing input for a product to go unfinished. Computer-chip shortages, for instance, largely explain the sharp drop in car production. Third, the pandemic has unleashed permanent changes in demand including a greater appetite for electronic products that will require more chip-fabrication plants. All of this is to say that some supply-chain induced price pressures will persist.

Of course, considerable uncertainties remain. Another major wave of infections over the coming months could again damage supply chains, especially given China's zero-tolerance policy for infections. Conversely, consumers could abandon their recent infatuation with goods and return to previously neglected services, leading to the resolution of supply-chain problems more quickly than expected.

High inflation

The rate of inflation increased even further over the past quarter, and is now in the range of 4% to 6% in most developed nations. These are extraordinary levels not encountered in decades. There are several reasons for

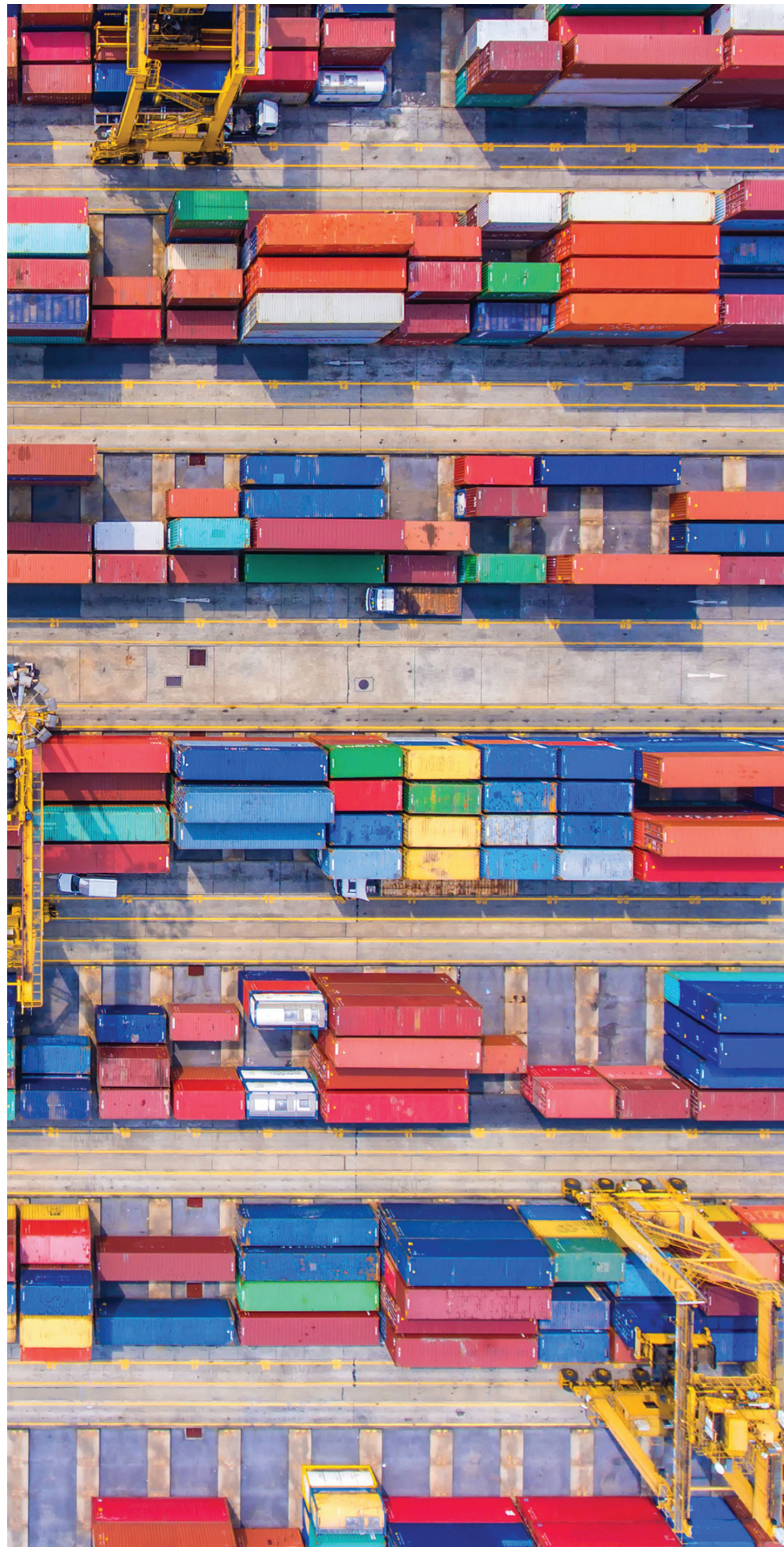
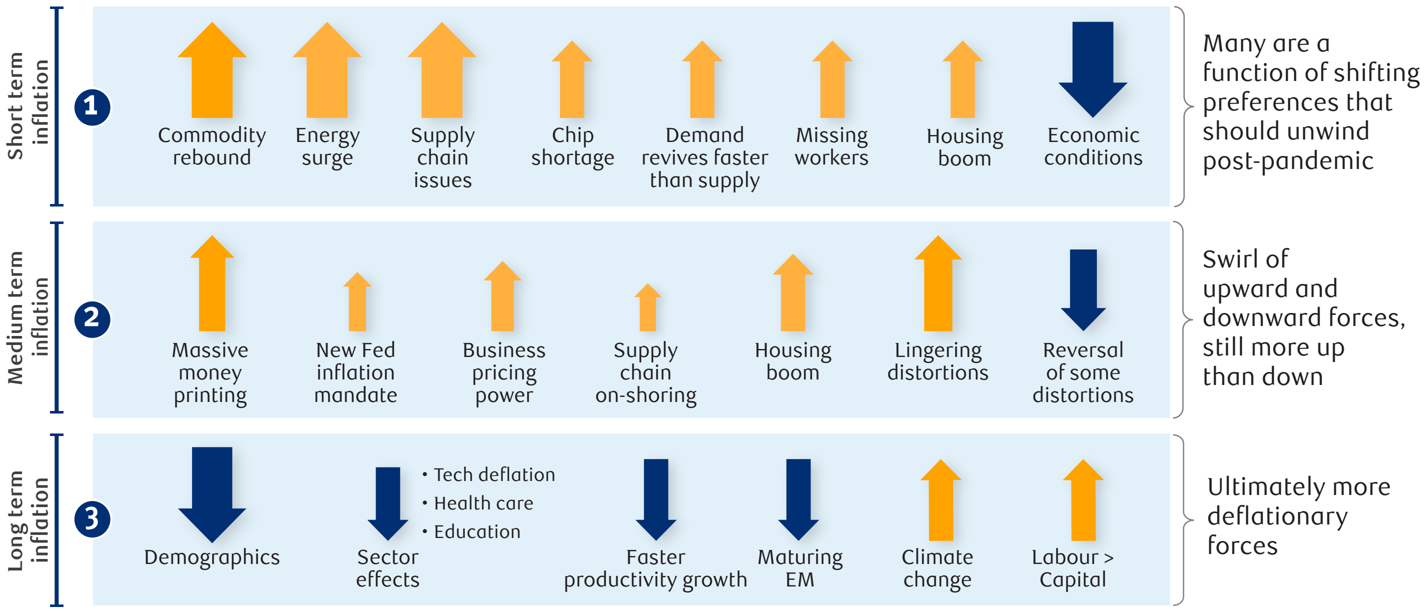


Exhibit 18: Inflation to be quite high in short term, a little high in medium term, normal to low in long term



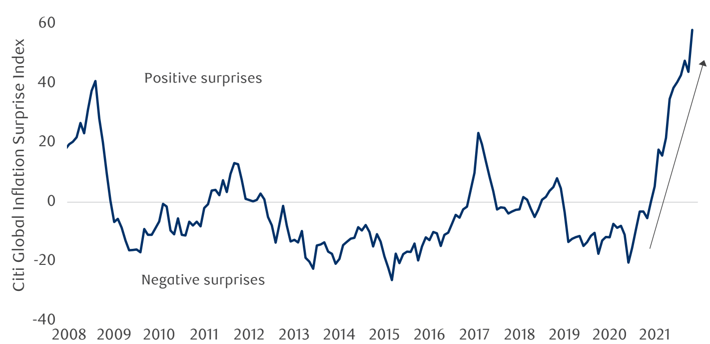
Note: As of Nov. 4, 2021. Source: RBC GAM

this bout of high inflation, with most representing some variation on the theme of economic demand snapping back more quickly than supply (Exhibit 18). This effect can be seen in higher commodity prices, insufficient workers and a shortage of any number of goods. Also, the early-pandemic housing boom is now beginning to show up in consumer price indexes via higher rents.

Our research finds that U.S. inflation tends to pick up before it does in other countries. This means that the Eurozone and Japan may continue to experience price pressures for several months after the U.S. has peaked.

In the short run, it doesn't pay to bet against further high inflation. Inflation indicators have repeatedly been higher than expected, and real-time measures remain hot (Exhibit 19). Our forecasts remain above the consensus.

Exhibit 19: Global inflation surprises skyrocket after end of initial lockdowns



Note: As of Nov 2021. Source: Citigroup, Bloomberg, RBC GAM

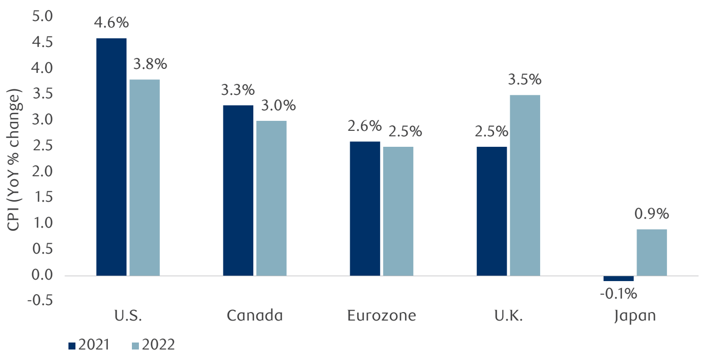
Over the coming year, inflation should decline, but probably not all the way to normal (Exhibit 20). While supply-chain pressures will likely fade and we budget for lower oil prices over the coming quarters as oil production rebounds (Exhibit 21), other inflation pressures may persist or even intensify.

Central banks have printed a lot of money and are broadly more indulgent of higher inflation. Higher home prices have yet to fully be reflected in inflation readings.

Inflation pressures have broadened (Exhibit 22), and no longer emanate solely from rising gasoline and car prices. This suggests it is no longer as simple as taming those two sectors for inflation to come back down.

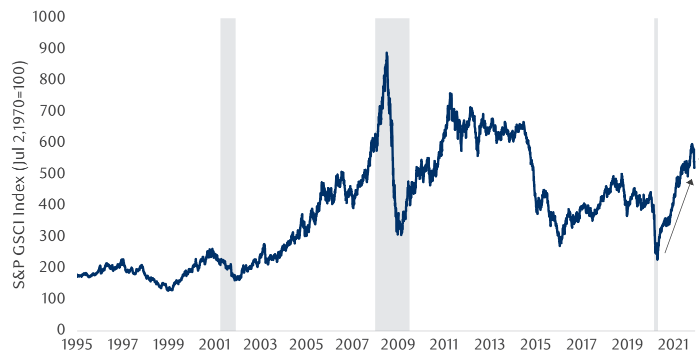
Additionally, we expect robust wage growth over the coming year in many parts of the world: workers have noticed the recent increase in their cost of living and – unusually – are in a strong position to demand higher wages given the tightness of the labour market (Exhibit 23).

Exhibit 20: RBC GAM CPI forecast for developed markets



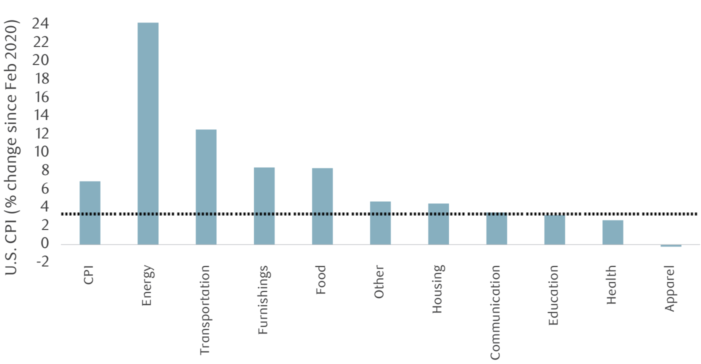
Note: As of Nov. 30, 2021. Source: RBC GAM

Exhibit 21: Commodities rallied but oil-price strength may fade



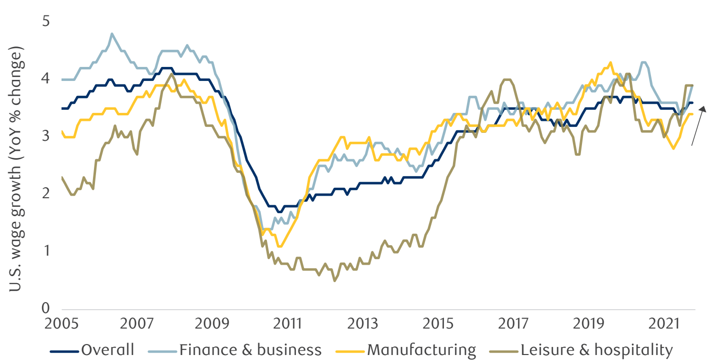
Note: As of Dec. 2, 2021. Shaded area represents recession. Source: S&P, Haver Analytics, RBC GAM

Exhibit 22: Inflation has outpaced normal rate for many categories



Note: As of Oct 2021. Dotted line represents the cumulative % change since Feb 2020 if inflation grows at annual rate of 2%. Source: BLS, Haver Analytics, RBC GAM

Exhibit 23: Wage growth has been fairly robust, with further pressures to come



Note: As of Oct 2021. 12-month moving average of median wage growth. Source: Federal Reserve Bank of Atlanta, Haver Analytics, RBC GAM

Lastly, businesses have expressed their intention to pass higher costs to consumers (Exhibit 24). In short, while inflation will likely fall over 2022, it may not return all the way to normal 2.0% readings.

Despite all of this, we remain firm in our conviction that high inflation is cyclical rather than structural. Over the long run, after the pandemic dust has settled, normal inflation readings should eventually prevail. We even highlight the risk that inflation over the long term could be lower than normal as adverse demographics (Exhibit 25) could outmuscle the structural inflationary pressures emanating from climate change and the rising clout of workers relative to businesses.

Chinese housing headwinds

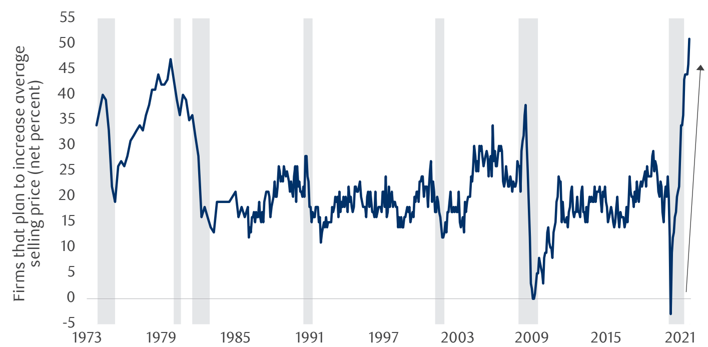
The Chinese economy slowed significantly over the past several months as problems in the housing market boiled over. Prompted in significant part by stricter housing-market rules, several major Chinese homebuilders including Evergrande have run into financial distress, missing bond payments and scrambling to address liquidity problems by selling off portions of their businesses.

It remains unclear whether these liquidity issues could eventually morph into solvency problems, but either way the entire sector is now cooling. The Chinese credit impulse has turned negative, construction has fallen and demand for properties is also notably lower (Exhibit 26).

Given that the housing market accounts for around 25% of Chinese economic activity, this dip limits economy-wide growth. Simultaneously, China has engaged in a largely technology-focused regulatory crackdown over the past several quarters, supply-chain problems are limiting Chinese production, the country has struggled to secure sufficient energy to power its electrical grid, and China's aging population is a challenge for the years ahead.

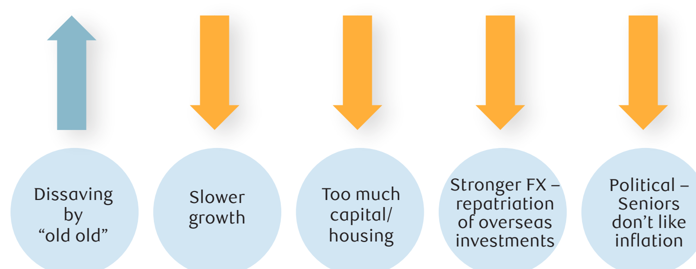
As a result, we forecast that Chinese economic growth will be below 5% in 2022, a below-trend rate of growth. Given that China is responsible for around a quarter of global growth, this weighs on global growth as well.

Exhibit 24: Record high fraction of U.S. businesses planning to raise prices



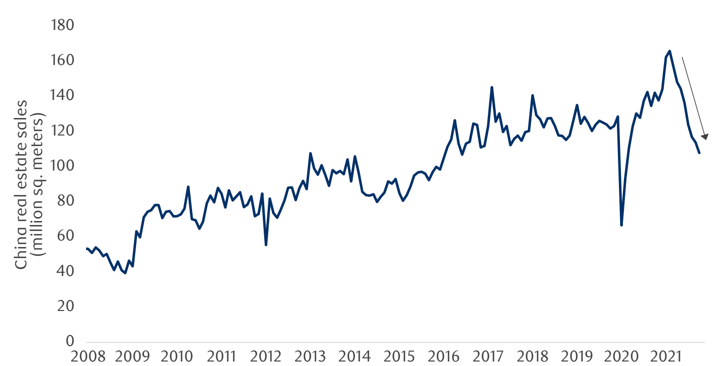
Note: As of Oct 2021. Shaded area represents recession. Source: NFIB Small Business Economic Survey, Haver Analytics, RBC GAM

Exhibit 25: Deflationary forces from adverse demographics



Note: As of Nov. 10, 2021. Source: RBC GAM

Exhibit 26: China's real estate market depressed by latest reforms



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

Fortunately, we do not foresee an outright economic disaster unfolding in China. The country is very good at resolving debt excesses, and so the recent housing-market woes are probably not China's "Lehman moment" (meaning a financial crisis is unlikely). Other comparisons to Japan's bust in the early 1990s offer some parallels – similar housing excesses, rising debt and deteriorating demographics. But there are also important differences in the form of China's better policy response and the fact that China still has plenty of room to catch up to developed-world living standards. Yes, China may be leaving behind its halcyon days of 7% and 8% annual growth, but this doesn't mean it is suddenly stuck with Japan's 1% pace. Monetary policy remains likely to become more supportive as the country seeks to steady growth.

China's success at keeping the pandemic at bay has not been cost-free. The country has had to repeatedly lock down neighbourhoods, factories and ports when even minor outbreaks were detected. This could be a significant disadvantage for China if the Omicron variant proves to be as infectious as feared.

Less generous policy supports

Government support is set to become less generous across the developed world in 2022 (Exhibit 27).

Central banks are scaling back the rate of their bond purchases, or have ended these initiatives altogether, as in the case of the Bank of Canada. The U.S. Federal Reserve is on track to halt its purchases around the middle of 2022, and it has said it will consider accelerating the process.

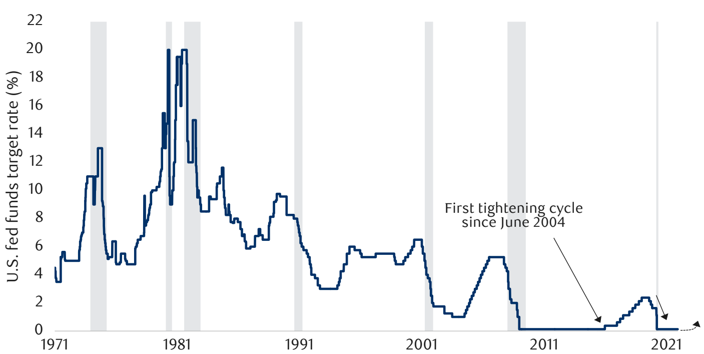
Rate hikes are now anticipated for most developed-world central banks in 2022. The bulk of the tightening should be delayed until the second half of the year, but some exceptions are possible. Markets have scrambled to price in additional tightening over the past several months (Exhibit 28), motivated by high inflation.

Even so, plenty of stimulus remains in place. Not only are central-bank balance sheets still very large, but policy rates remain at extraordinarily low settings.

We continue to anticipate less tightening than imagined by financial markets. Supply-chain problems should become less intense and growth should decelerate over the coming year. What constitutes a normal interest rate is very low in a high-debt world, meaning central banks don't have all that far to travel before policy tightening will begin to pinch growth.

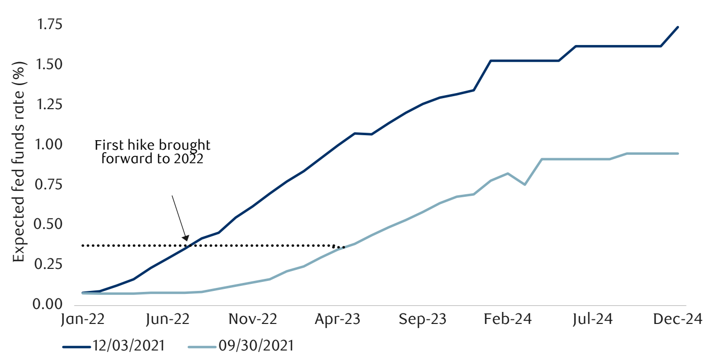
With regard to fiscal policy, no amount of infrastructure spending or other initiatives in 2022 can match the explosion of economic support that was ignited in 2020 and 2021 during the worst of the pandemic. As such, even though we budget for a further round of U.S. spending initiatives and see many other countries making campaign promises

Exhibit 27: U.S. fed funds rate low but to rise over next few years



Note: As of Dec. 2, 2021. Shaded area represents recession. Source: Federal Reserve Board, Macrobond, RBC GAM

Exhibit 28: More hawkish Fed moves up the timing of first hike



Note: As of Dec. 3, 2021. Source: Bloomberg, RBC GAM and delivering expansive budgets, the coming year is set to experience a fiscal drag simply because that support will be smaller than in the prior few years (Exhibit 29). Looking further ahead, U.S. fiscal initiatives may become considerably scarcer in 2022 and beyond as the midterm elections are on track to deliver a divided Congress.

We continue to budget for a broadly weaker U.S. dollar over the coming year. This outlook is based on the greenback's current expensive valuation and the fact that U.S. dollar bear markets have historically lasted longer than the current one. By extension, we look for a stronger euro, pound, yen and Canadian dollar.

Longer-run considerations

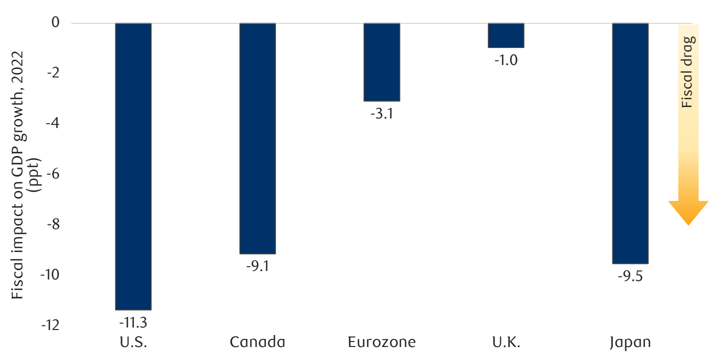
Looking beyond the coming year, several further trends and themes will become relevant.

Our latest business-cycle analysis finds that the U.S. economy has advanced from early cycle to mid cycle (Exhibit 30). This is a fairly benign development in several ways. A mid-cycle economy is associated with solid growth, and suggests that the current cycle has considerable time left to run. Indeed, our various recession models continue to indicate that the risk of a recession is fairly low in the year ahead.

However, the cycle has been advancing unusually quickly, which raises the possibility that it may continue to move briskly through its remaining phases. This could result in something like a five-year cycle. That would be a contrast to the prior two, which lasted closer to a decade each. Further, risk assets like stocks tend to perform best when the cycle is young. A mid-cycle reading is still entirely consistent with moderate equity gains, but not the explosive returns frequently achieved at the start of a cycle.

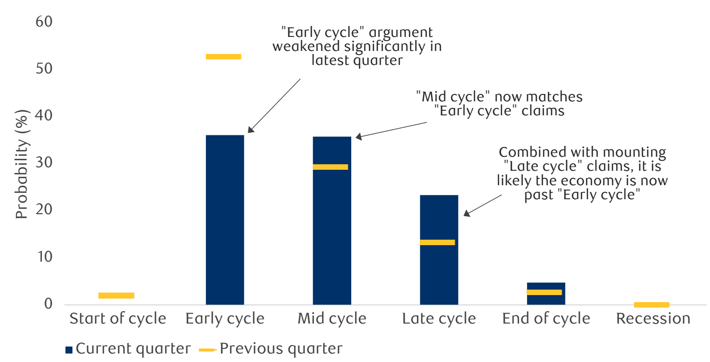
When the pandemic eventually abates, the implications will vary considerably by sector. Some sectors of the economy are already operating at normal levels – including health care and financial services – and so won't get much of a boost. Conversely, many high-touch service sectors – including arts, entertainment and recreation – should enjoy a considerable leap as they recover a great deal of remaining lost ground (Exhibit 31).

Exhibit 29: Theoretical fiscal drag for developed countries in 2022



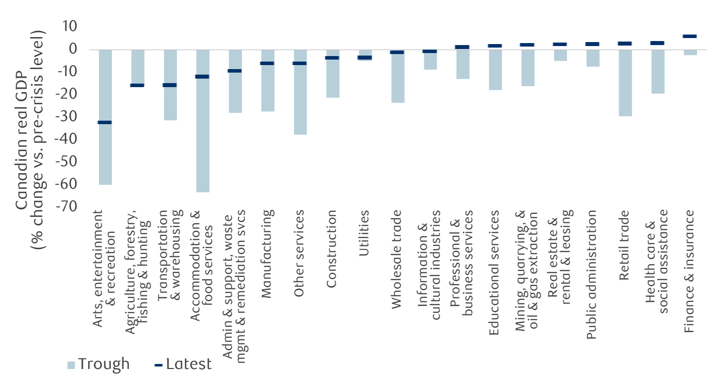
Note: RBC GAM estimates as of Oct. 21, 2021 based on IMF and OECD forecast of fiscal balance. Source: Macrobond, RBC GAM

Exhibit 30: U.S. business cycle score



Note: As at Oct. 29, 2021. Calculated via scorecard technique by RBC GAM. Source: RBC GAM

Exhibit 31: Pace of recovery varies across industries



Note: As of Sep 2021. Trough since Feb 2020. Source: Macrobond, RBC GAM

We continue to anticipate several long-term consequences of the pandemic, including the prospect of far more remote work (Exhibit 32), less business travel, somewhat diminished downtowns and a permanently higher online share of spending.

Structural trends without a pandemic link are also worth highlighting:

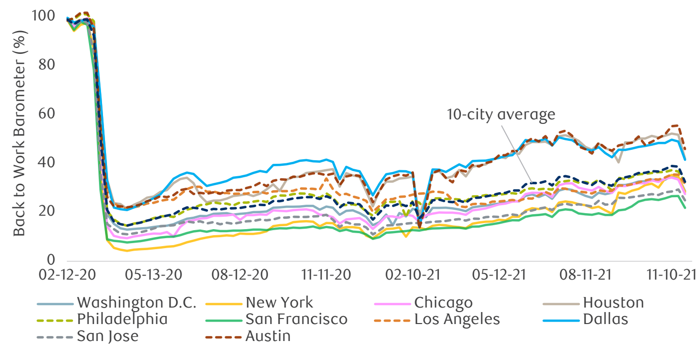
Populations are set to grow more slowly and to skew older in the future, with dampening implications for growth and inflation alike, though with considerable variation by country (Exhibit 33).

Providing a partial offset to these demographic challenges, we anticipate faster productivity growth in part due to the many technological leaps that have occurred during the pandemic, and in part due to favourable pre-existing trends in the rate of scientific advancement, research and development, and capital expenditures. China, despite the geopolitical threat it presents to the West, has now reached the technological frontier and is in a position to help push global innovation forward.

We also see several forces that may collectively increase the clout of workers and decrease the clout of businesses and investors. Examples include the prospect of labour shortages as baby boomers retire, rising minimum wages, an expanding social safety net, a new global minimum corporate tax rate and significant antitrust efforts. These could result in faster wage growth and flatter profit margins.

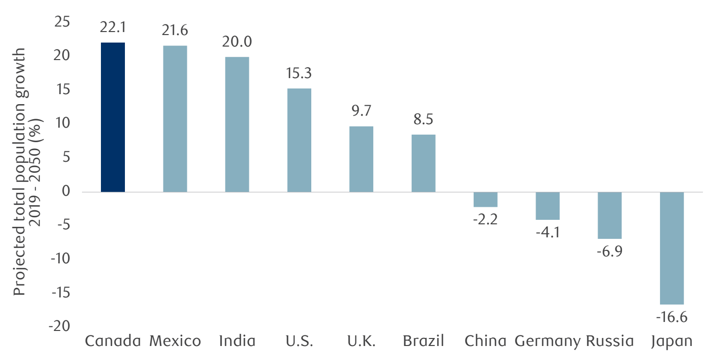
Finally, the effects of climate change cannot be ignored. While the aggregate impact on global economic activity may only be moderate, the effects at the industry level are set to be enormous. Carbon taxes and similar initiatives represent an enormous challenge to the fossil-fuel industry, utilities and energy-intensive industries. Conversely, there are opportunities in green technologies, and capital expenditures are likely to rise as economies reorient themselves.

Exhibit 32: Office occupancy still very low nearly two years later



Note: As of the week ending Nov. 24, 2021. The Barometer represents the weekly office occupancy based on swipes of access controls. Source: Kastle Systems, Bloomberg, RBC GAM

Exhibit 33: Canadian demographics are less challenging than others



Source: UN World Population Prospects 2019, Macrobond, RBC GAM

Bottom line

Significant challenges clearly exist for the global economy over the year ahead. Some of these are highly uncertain, including the contours of any further pandemic waves and the timeline for inflation to normalize. Other challenges are no less relevant but at least somewhat better understood: the outlook for snarled supply chains, the prospect of diminishing natural economic buoyancy and fading support from policymakers.

Fortunately, households and businesses are collectively well positioned to push the economy forward even in the face of these challenges, and we accordingly believe the economic recovery can persist in 2022, despite some bumps along the way.

This nuanced view is consistent with reducing equity exposure modestly, but nevertheless maintaining an above-neutral orientation, especially given that the business cycle still appears to have some years left to run.

Market outlook

The bull market encounters turbulence

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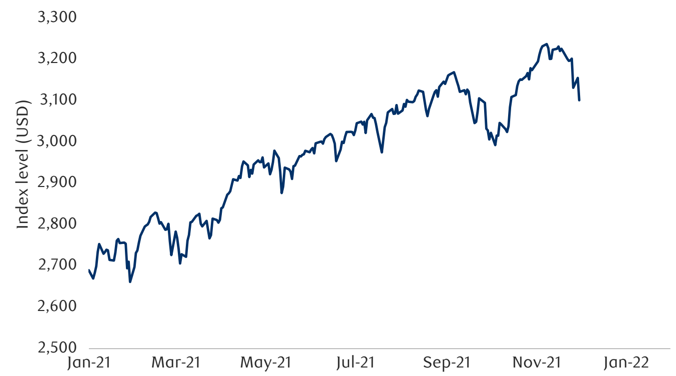
Global equities encountered volatility in November as financial markets absorbed a spate of negative news. The new Omicron coronavirus variant, the first signs of central-bank tightening, China's economic challenges and persistently high inflation all moved to the forefront, sending stock prices and bond yields lower in a bout of heightened market volatility (exhibits 1 and 2).

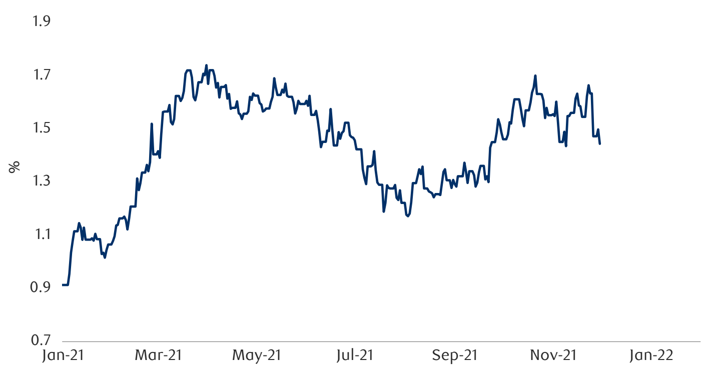
Inflation is elevated and represents a concern for central bankers and financial planners. The need for extraordinary monetary stimulus is becoming less evident, and policymakers are beginning to dial back accommodation and/or communicate their intention to raise interest rates. We think price pressures will ultimately calm as economies slowly resume normal operations and supply-chain issues are resolved. This scenario would provide central banks the opportunity to adjust monetary policy at a measured pace. At this time, there is little reason to suspect that the U.S. Federal Reserve (Fed) is behind the curve, and it is worth noting that a tightening in monetary policy does not always result in a negative outcome for risk assets.

Exhibit 1: MSCI World Index
U.S. dollars



Note: MSCI World Index in U.S. dollars. As of November 30, 2021.
Source: Bloomberg, RBC GAM

Exhibit 2: U.S. 10-year bond yield



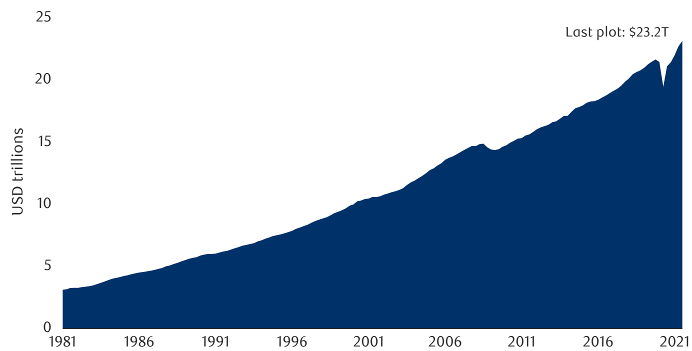
Note: As of November 30, 2021. Source : Bloomberg, RBC GAM

Let's not forget the positive developments which have receded somewhat from view and yet remain quite prevalent. While the path to normalization is uneven and the recovery will undoubtedly hit speed bumps, the economy is progressing. It is worth recognizing that despite a variety of challenges, the U.S. economy is already the biggest it has ever been (Exhibit 3). And even though leading indicators of economic growth are off their highs, they are still at levels consistent with a robust and above-average expansion over the next 12 months (Exhibit 4). Moreover, the corporate-profit outlook remains robust, supported by strong nominal GDP growth which we expect to continue into next year.

Our base case is for economic and corporate-profit growth to continue moderating, but remain at above-average rates. In this environment, we recognize the balance of risks to our outlook could be shifting. Valuations are demanding, stimulus is set to fade and a variety of technical indicators related to style leadership and market breadth are signaling caution. We remain overweight stocks in our asset mix, but acknowledge that the balance of risks and reward may be shifting as the economic cycle matures. We began to reflect this view during the summer by taking half a percentage point out of our equity allocation. This quarter, we trimmed our equity allocation by another 0.5% and placed the proceeds into cash. So we remain overweight equities, but have moderated the degree of overweight. We remain underweight fixed income as we believe bond yields are unsustainably low, and that any meaningful upward movement in yields from here will lead to low or negative returns in sovereign bonds. We have been building a small cash position over the past several quarters, sourced from both equities and fixed income. Our 3% allocation to cash should act as a cushion against portfolio volatility, but can also be deployed should opportunities arise, technical indicators become more supportive and/or risks prove less harmful than initially feared. For a balanced global investor, we currently recommend an asset mix of 63.5 percent equities (strategic neutral position: 60 percent) and 33.5 percent fixed income (strategic neutral position: 38 percent), with the balance in cash.

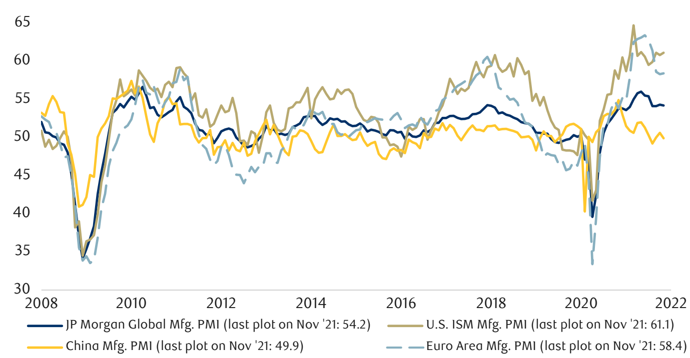
Exhibit 3: U.S. nominal GDP

U.S. dollars, seasonally adjusted annual rate (SAAR)



Note: As of September 30, 2021. Source: Bureau of Economic Analysis

Exhibit 4: Global purchasing managers' indices



Note: As of December 3, 2021. Source: Haver Analytics, RBC GAM

> "Inflation is among the most important indicators we are monitoring, reflecting its critical impact on the course of monetary policy and our own investment outlook."

Significant healing in Fed indicators

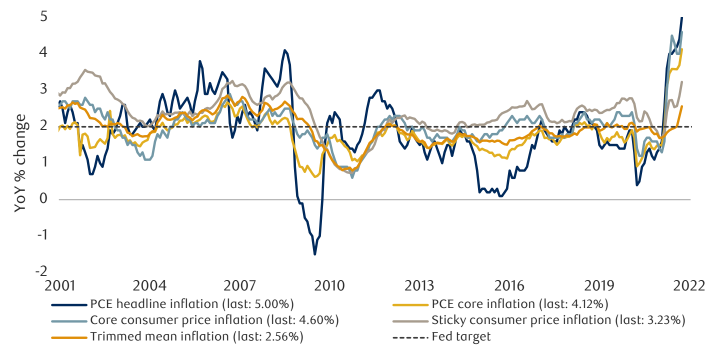
Many of the metrics the Fed is monitoring have healed considerably since the beginning of the pandemic. Economic growth and commodity prices have rebounded as demand for goods and services surged with the reopening of economies and the relaxation of restrictions. Consumer-price inflation was initially concentrated in areas such as computer chips, real estate and transportation, but all of the inflation indicators we monitor are now moving meaningfully higher, including the ones that remove extreme readings from their calculations (Exhibit 5). Inflation is among the most important indicators we are monitoring, reflecting its critical impact on the course of monetary policy and our own investment outlook.

While inflation has pushed higher, other metrics monitored by the Fed have improved. The U.S. unemployment rate is back down to 4.2% and wages are rising at their fastest pace in the past three decades (exhibits 6 and 7). Considering these factors together with elevated inflation, it now appears appropriate for the Fed to begin removing at least some of the massive stimulus that was injected into the system to offset the pandemic. The Fed has already begun tapering bond purchases, which have been reduced to a pace of US$105 billion per month as of November from US$120 billion, and rate hikes will likely begin once the asset purchases are fully unwound. The speed at which rates rise will depend on the Fed's view on the persistence of inflationary pressures.

Inflation expectations are critical, not yet problematic

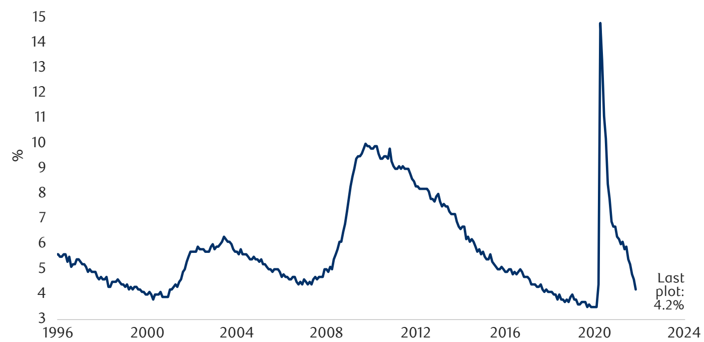
The real concern with inflation is not necessarily the published year-over-year change in the Consumer Price Index (CPI) that is reported every month, but rather consumer and investor expectations for inflation over the medium to longer term. The consensus view is for extremely high inflation in the near term, at close to 5% for 2021, and somewhere between 2% and 5% in 2022 (Exhibit 8). Longer-term inflation expectations have risen significantly over the past year and a half, but most of this move represents a rebound from extremely low levels. Expectations are now situated slightly above 2% in the U.S. and a bit below 2% in Canada and Europe (Exhibit 9). So it appears that there has been a shift in inflation expectations from below to above

Exhibit 5: U.S. inflation measures



Note: As of November 30, 2021. Source: Bloomberg, RBC GAM

Exhibit 6: U.S. unemployment rate



Note: As of November 30, 2021. Source: Haver Analytics, RBC GAM

Exhibit 7: U.S. average hourly earnings

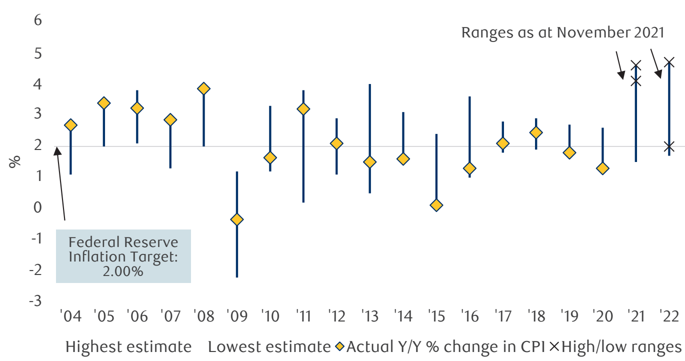
Note: as of August 31, 2021. Source: Wolfe Trahan & Co.

historical averages, but not significantly so. We believe this change is manageable, realistic and, as the current issues pass, we could see tempering inflation readings over the coming years.

Market is pricing in rate hikes as early as mid-2022

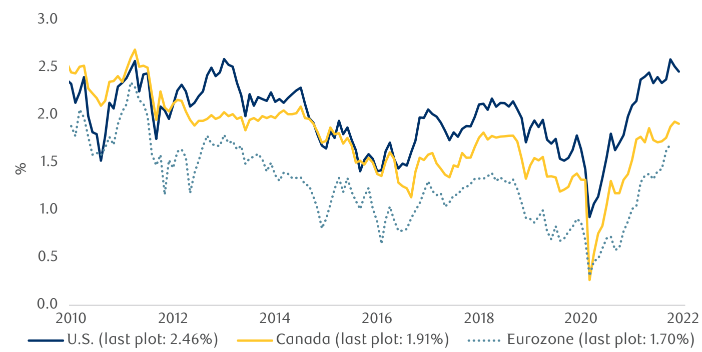
Given the extent to which the economy has recovered, a gradual tightening of monetary policy is becoming more appropriate and the market is beginning to price in U.S. rate hikes next year. The Koenig Taylor Rule, a function of GDP growth and inflation, suggests the fed funds rate should currently be above 3% (Exhibit 10). But Fed policymakers could tread carefully as they did in the aftermath of the global financial crisis and keep interest rates well below this modelled level. Pricing in the futures market is consistent with the view that the Fed will tighten at a gradual pace, with investors expecting two rate hikes in 2022 (Exhibit 11). Our own expectation is for only one hike, as we foresee the Fed exercising caution, particularly as the current inflationary pressures could subside. In any event, we think at least one rate hike sometime next year is warranted and it would represent validation that the economy is on a stronger footing. In this environment, we are confident that measured tightening decisions by the Fed are unlikely to destabilize markets.

Exhibit 8: United States
Inflation estimate dispersion



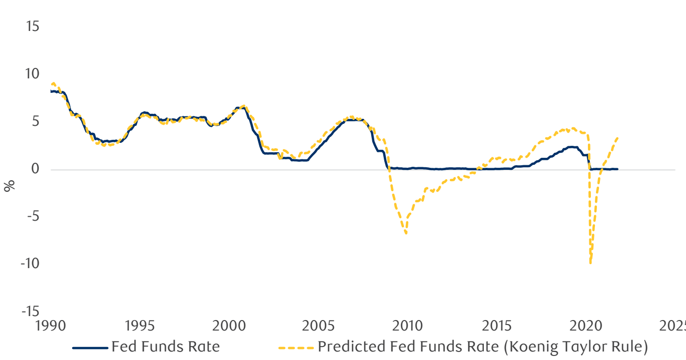
Note: As of November 30, 2021. Source: Consensus Economics, RBC GAM

Exhibit 9: Implied long-term inflation premium
Breakeven inflation rate: nominal vs 10-year real return bond



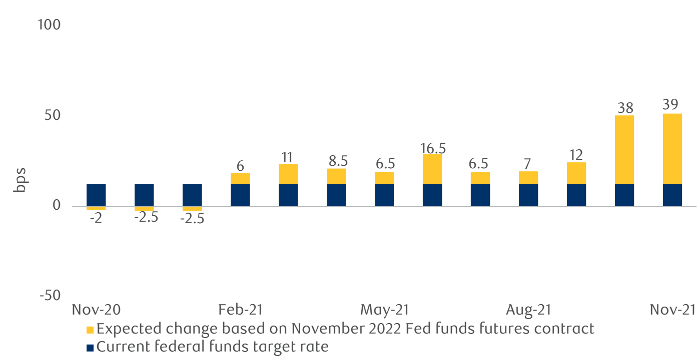
Note: As of November 30, 2021. Eurozone represents GDP-weighted breakeven inflation of Germany, France and Italy. Source: Bloomberg, RBC CM, RBC GAM

Exhibit 10: Koenig Taylor rule and fed funds rate



Note: As of October 31, 2021. Source: Federal Reserve Bank of Dallas, RBC GAM

Exhibit 11: Fed funds rate and implied expectations
12-month futures contract



Note: As of November 30, 2021. Source: RBC GAM

Exhibit 12: S&P 500 return statistics prior to and following the first rate hike
Data since July 1954

		Trailing returns (%)		First rate hike	Forward returns (%)*			
		12 months	6 months		6 months	12 months	24 months	36 months
April 1955		34.3	19.8		11.6	27.4	9.8	4.6
September 1958		18.0	18.6		10.8	13.6	3.4	10.1
July 1963		21.4	5.8		11.1	21.9	11.5	8.1
November 1967		17.1	4.1		3.5	13.2	-0.4	-3.3
December 1968		13.0	7.0		-9.1	-14.6	-8.2	-2.1
July 1971		29.8	6.5		4.3	7.8	3.3	-5.8
January 1973		17.0	11.1		-14.7	-17.2	-23.0	-8.7
August 1977		-5.8	-2.8		-9.5	5.8	5.0	8.6
September 1980		15.5	19.2		5.9	-4.7	-0.6	9.4
March 1984		3.0	-6.6		6.1	14.1	23.3	23.5
April 1987		22.4	18.3		-12.7	-9.4	3.6	4.7
March 1988		-12.2	-19.2		4.8	12.4	14.5	13.0
February 1994		4.5	4.7		-2.4	1.9	16.3	18.9
March 1997		21.4	15.1		18.9	39.6	27.9	24.6
June 1999		21.1	11.4		6.7	6.0	-5.6	-10.3
June 2004		17.1	2.8		6.4	4.4	5.5	9.6
December 2015		5.1	-1.1		0.2	8.9	13.6	7.8
	# of observations	Median trailing returns (%)			Median forward returns (%)*			
All cycles	17	17.1	6.5		4.8	7.8	5.0	8.1
No-recession cycles	8	19.2	5.3		3.9	11.1	12.6	8.0
Recession cycles	9	17.0	11.1		5.9	5.8	3.4	8.6

Source: RBC GAM. *periods greater than 12 months are annualized

Monetary tightening is not necessarily bad for risk assets

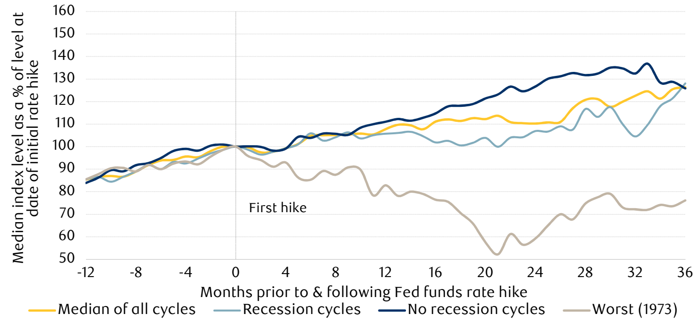
Although a new cycle of monetary tightening may intuitively seem harmful for risk assets, a look at past hiking cycles reveals this is not always the case: stocks tend to do quite well leading into a period of rising rates. We have identified 17 cycles of monetary tightening dating back to the 1950s and listed returns for the S&P 500 Index in each of those instances in Exhibit 12. The first part of the table looks at market returns 12 months and six months leading into the first rate hike. On average, the S&P 500 gained 17% and 6% in those periods, respectively. This experience is also plotted in Exhibit 13, where t=0 on the chart represents the date of the first rate hike in any given tightening cycle. Notice that all of the lines on the chart are rising into the first hike. Even in cycles where the economy ultimately fell into recession, stocks more often than not delivered strong returns leading up to a period of rising rates. Where the experience tends to differ between cycles is once rate hikes get underway. In roughly half of cycles, the Fed found itself behind the curve and was forced to hike aggressively, sending the economy into recession and often leading to a market correction. But in instances where the Fed is removing stimulus because the economy is on solid footing and there is no recession, stocks do very well, rising another 11% in the 12 months after hiking begins. While there are questions around inflation, the removal of stimulus and whether economic growth can be sustained in an environment of rising rates, we think it is worth keeping the potentially positive implications of this table in mind.

> "As pandemic-related distortions fade and economies return to normal, we would look for yields in all major regions to rise at a gradual pace."

Sovereign bonds exhibit meaningful valuation risk

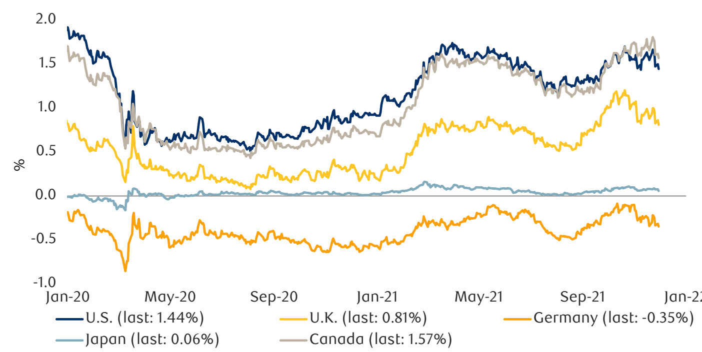
Global bond yields climbed over the course of the year but encountered significant fluctuations, and they remain well below where our models would deem appropriate. Yields began the year on a rapid upward trajectory amid the economic reopening, COVID vaccinations and firming inflation, but declined toward the end of the period as slowing growth and mounting concerns about the Omicron variant boosted the appetite for safe-haven assets – a pattern displayed in all major regions (Exhibit 14). The U.S. 10-year yield, for example, began the year below 1.00% and climbed as high as 1.74% in the spring before settling back toward 1.44% at the end of November. Although bond yields are above their lows, valuation risk remains extreme according to our models. Exhibit 15 plots our global composite of bond yields relative to their respective equilibrium levels and it suggests that yields, in aggregate, are 73% below normal. As pandemic-related distortions fade and economies return to normal, we would look for yields in all major regions to rise at a gradual pace (Page 45).

Exhibit 13: S&P 500 and the fed funds rate hike
Implications for current cycle, following first rate hike



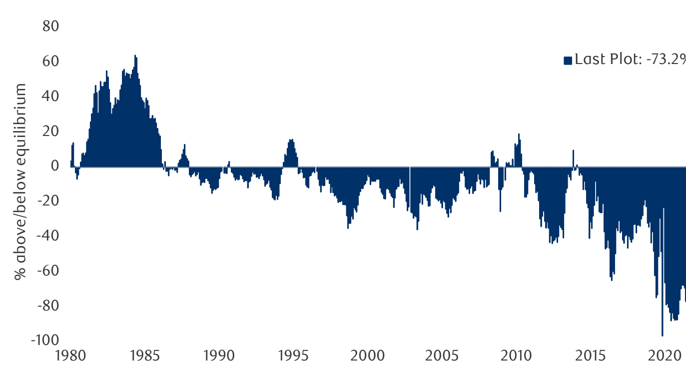
Note: As of November 30, 2021. Source: RBC GAM

Exhibit 14: 10-year government-bond yields



Note: As of November 30, 2021. Source: RBC GAM

Exhibit 15: Global bond-market composite – 10-year government-bond yields relative to equilibrium

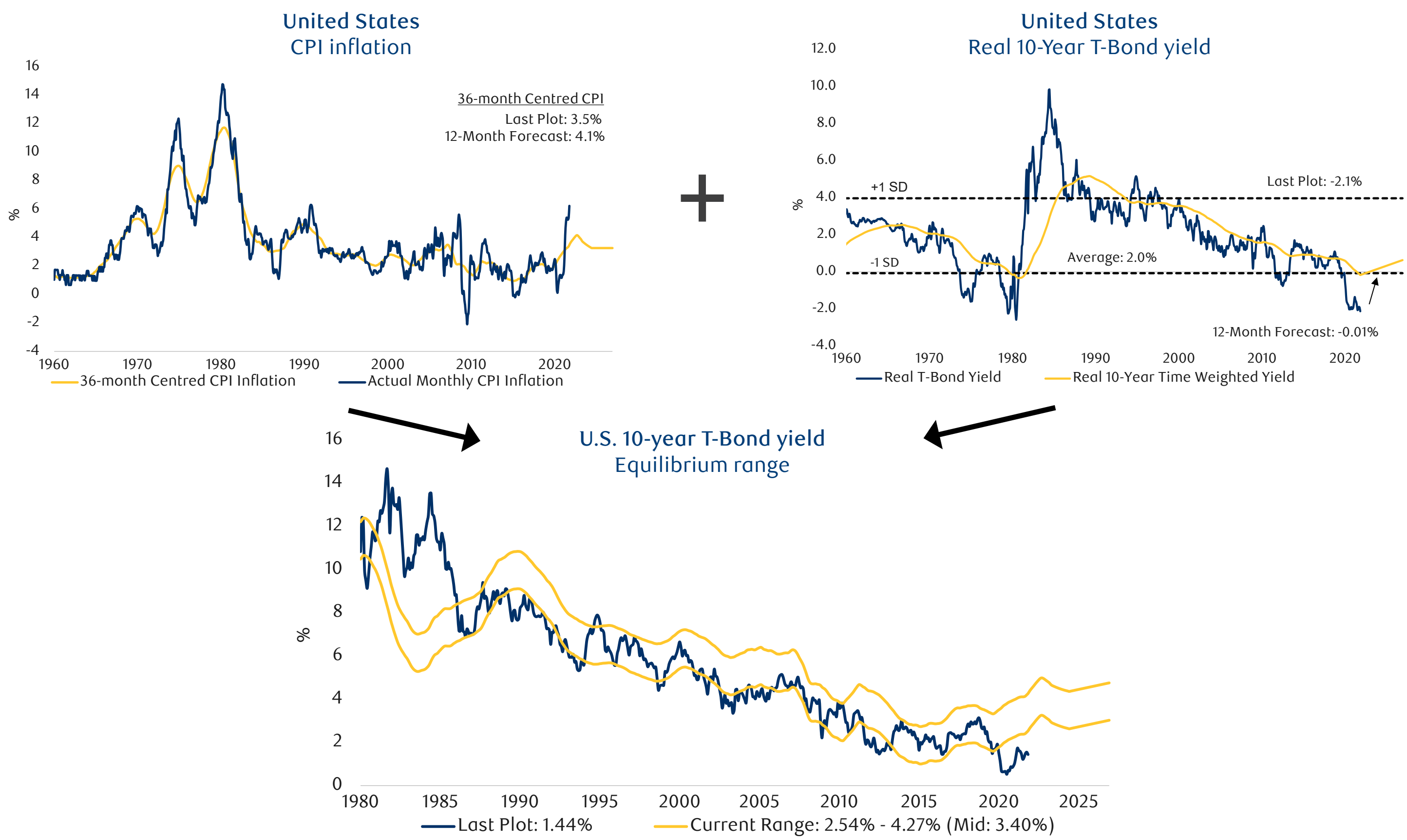


Note: As of November 30, 2021. Source: RBC GAM

Real interest rates are unsustainably low

A closer look at our bond model's components reveals that the key to higher yields lies in the eventual normalization of real interest rates to levels at or above the zero bound. Exhibit 16 decomposes our model for 10-year Treasuries into an inflation premium and real interest rate that added together arrive at a nominal bond yield. Our approach to modeling inflation uses a 36-month moving average that smooths the current short-term spike. But the model still situates the inflation premium over 3%, and that figure will likely decline as the current inflation spike rolls through our moving average. However, we think the real rate of interest, or after-inflation interest rate, remains unsustainably low and is likely to rise from here. It is currently at negative 2.1%, suggesting that sovereign-bond holders are accepting an after-inflation loss in purchasing power over time. As we have mentioned in past writings, a number of secular forces such as aging populations, an increased preference for saving and slowing economic growth have held real rates low. But our models suggest that even accounting for these factors, a more appropriate real rate would be around 0% or slightly above. If real rates rise to 0% and the inflation premium buried in the model is 3.5%, then the nominal yield should be 3.5%. A rise to this level from the current 1.44% would represent a painful experience for bond holders. We do think the direction of travel for yields is higher, but we don't think reported inflation will actually be reflected to its full extent as investors look ahead to alleviation of the special factors that have pushed it higher. We therefore think 3.5% on a 10-year Treasury yield would be an excessive expectation over our 12-month forecast horizon. If we are wrong, our model gives a sense of where yields could go if inflation takes solid root. Our own forecast is 1.80% for the U.S. 10-year yield over the next 12 months.

Exhibit 16: U.S. 10-year bond yield
Fair-value estimate composition



Note: As of November 30, 2021. Source: RBC GAM, RBC CM

Equities in review: stocks enjoyed strong start to 2021, followed by increasing divergence

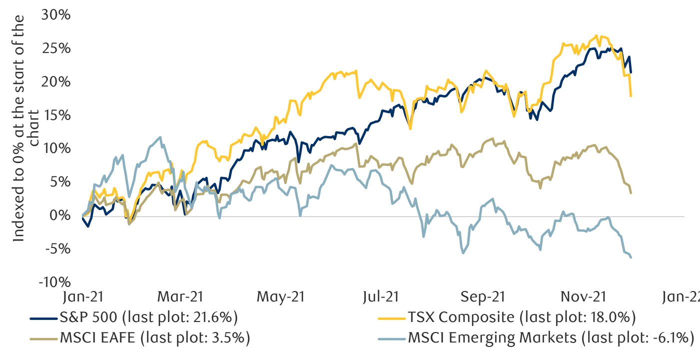
Global equities extended gains from 2020 to record another strong year in 2021, supported by vaccine rollouts, a reopening of economies and ample stimulus. The MSCI World Index rose 15.3% in the 11 months ended November 30, 2021, in U.S. dollars. In contrast to last year, however, returns varied widely by region. North American equites led, with the S&P 500 gaining 21.6% and the TSX Composite up 18.0%, while the MSCI EAFE Index was up only 3.5%, all in U.S.-dollar terms (Exhibit 17). Emerging-market equities were down slightly through November as troubles in China's property market and developing nations' increased difficulty dealing with the coronavirus weighed on returns. Most equity markets encountered heightened volatility in November on concerns about slowing growth and the discovery of Omicron.

After a long streak of gains, stocks have become increasingly expensive and valuations are at levels that haven't been seen for two decades. As of November 30, our composite of global equity market valuations was 25% above fair value, which is the most since the late 1990s technology bubble (Exhibit 18). To be clear, valuations are nowhere near as extreme as at the peak in 1999/2000 when valuations on this measure approached twice their fair value. The contribution to the latest overvaluation is mostly from U.S. equities, but Canada too has been a driver more recently. As we step outside of North America, valuations are more attractive on a relative basis, especially in Europe (page 46). The relative attractiveness of international stocks has motivated us to hold tactical overweight positions in those regional markets. The overvaluation of U.S. equities merits special attention because it is the world's bellwether stock market and has significant influence on the course of equities around the globe.

U.S. equities situated in high-volatility valuation zone

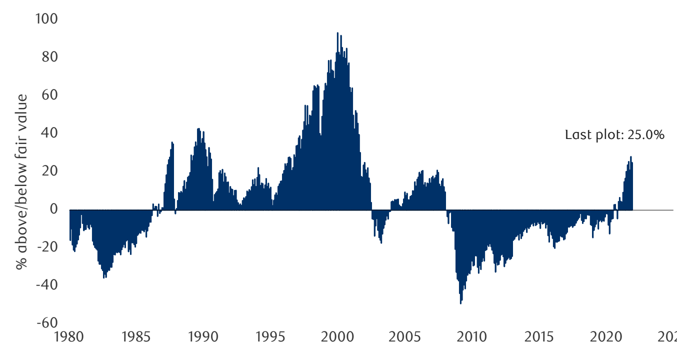
Elevated valuations like those we see in the U.S. large-cap market have important implications for investors, particularly with respect to volatility, but also for return expectations. We've computed return statistics for the S&P 500 based on historical valuation levels to get a sense of what we can expect in the current environment. Our analysis starts with Exhibit 19, which plots a standardized

Exhibit 17: Major equity-market indices
Cumulative price-returns indices in USD



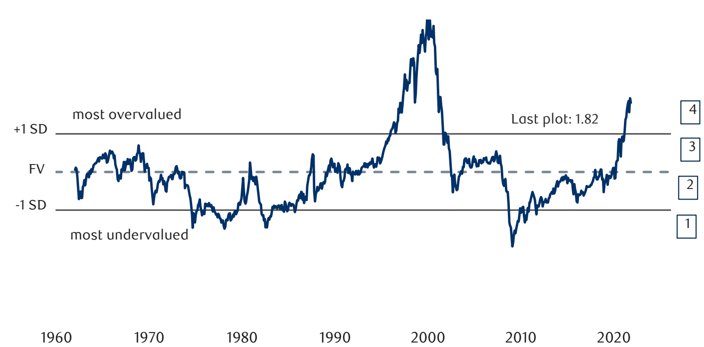
Note: As of November 30, 2021. Price returns computed in USD. Source: Bloomberg, RBC GAM

Exhibit 18: Global stock-market composite
Equity-market indexes relative to equilibrium



Note: As of November 30, 2021. Source: RBC GAM

Exhibit 19: Standardized S&P 500 fair-value bands



Note: As of November 30, 2021. Source: RBC GAM

Exhibit 20: S&P 500 Index
Return prospects by valuation zone

Valuation	Data set (Bucket)	1-year average return	Batting average^	1-year average return in win*	Max loss	1-year return std. dev.
(S&P 500 most overvalued)	4	9.3%	65.7%	22.3%	-27.5%	20.5%
1 SD above	3	3.5%	66.7%	11.3%	-39.5%	14.0%
Equilibrium	2	9.7%	78.0%	15.9%	-44.8%	15.0%
1 SD below (S&P 500 most undervalued)	1	16.3%	90.1%	18.8%	-12.8%	14.4%

*Win = Periods where returns are above 0%. ^Batting average = Incidence of winning in any given period. As of November 30, 2021.
Source: RBC GAM

version of our S&P 500 fair-value model where fair value is the dotted line running down the centre of the chart and the solid lines represent one standard deviation above and below the midpoint. The chart was segmented into four zones or buckets. Bucket 4 is more than one standard deviation above fair value, Bucket 1 is more than one standard deviation below fair value and buckets 2 and 3 are within one standard deviation from fair value on either side of the midpoint. Return statistics were computed based on where the S&P 500 was situated at the start of any one-year measurement period dating back to the 1960s and are shown in Exhibit 20. Notice that stocks have performed the best, on average, when starting from the cheapest zone (Bucket 1). In this zone stocks delivered yearly gains averaging 16.3% and rose in 90.1% of months. This has been the most favourable bucket for investors and it is where stocks began the bull market that emerged from the depths of the global financial crisis in 2009. But stocks have gotten significantly more expensive after a long bull run and now have climbed all the way to Bucket 4 – the most expensive zone. Interestingly, this zone doesn't necessarily feature the lowest 1-year returns on average, but it does have the lowest incidence of positive returns, at only 65.7%, and the highest standard deviation of returns compared with the other buckets. Investors should recognize that this valuation zone has historically been the most volatile place to hold stocks and, while profits can be realized in this space, any doubts about corporate profits are likely to lead to heightened instability.

Inflation and interest rates are key valuation drivers

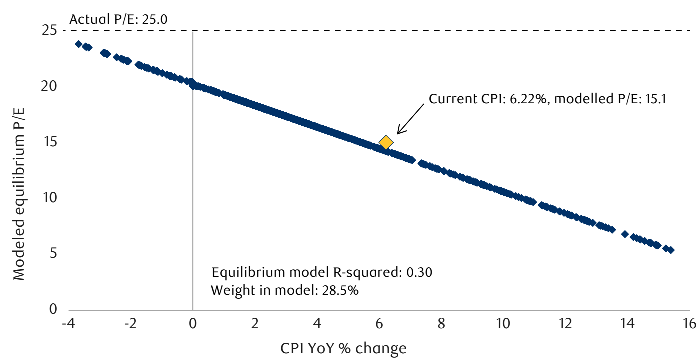
Part of the reason stocks are expensive is that the macroeconomic environment supports high valuations. Low interest rates and, until recently, low inflation have been key drivers that boosted the price investors were willing to pay for riskier assets. Our own models determine an equilibrium price-to-earnings ratio (P/E) for stocks based on a combination of six macroeconomic factors. The model weights these factors based on the strength of their historical relationships with valuations. The inflation, interest rate and bond yield components greatly influence the end result as they make up a combined 86% of the weight in the final equilibrium P/E equation. These three key drivers have an inverse relationship with P/Es, meaning that higher inflation, interest rates and/or yields are consistent with lower P/E ratios. Exhibit 21 plots the relationship between inflation and P/Es. Notice that, as we get further to the right of the graph, higher inflation rates are associated with falling P/Es. But what it also means is that from current high inflation readings, a decline in inflation back toward more normal levels could act as a support for valuations.

The relationships between P/Es and interest rates are more interesting, as they exhibit a hockey-stick shape (exhibits 22 and 23). Usually, falling rates are consistent with higher P/Es, but below certain levels, falling interest rates and yields reflect an economy in crisis and P/Es actually fall in this situation. As the crisis environment subsides, though, the initial lift-off in interest rates and yields from extraordinarily low levels actually coincides with rising valuations. We saw this play out in the rise of the 10-year yield from the March 2020 low to a level that until recently was actually consistent with rising valuations. But we are now past the crest in the chart where any further increase in the U.S. 10-year yield would likely weigh on valuations. Short-term interest rates, still near zero, could be raised several times by the Fed before meaningfully hindering P/Es.

Earnings surge, propelled by strong nominal GDP growth

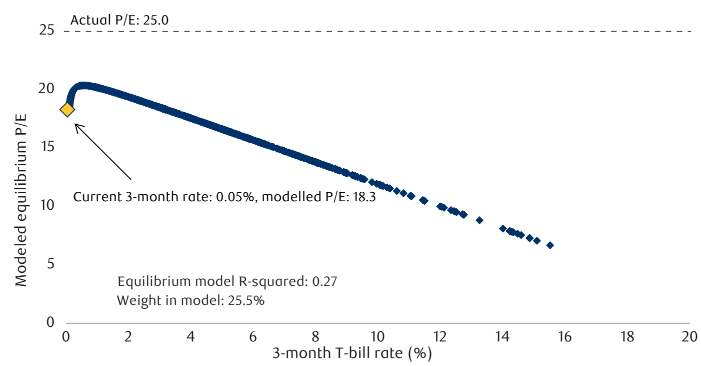
The other critical part of the equity equation, and one that could justify today's high valuations, is that corporate-profit growth has been outstanding. Our model suggests a favourable earnings environment is likely to persist, with S&P 500 profits projected to rise 47% in 2021 from 2020

Exhibit 21: S&P 500 equilibrium model
P/E factor as a function of CPI



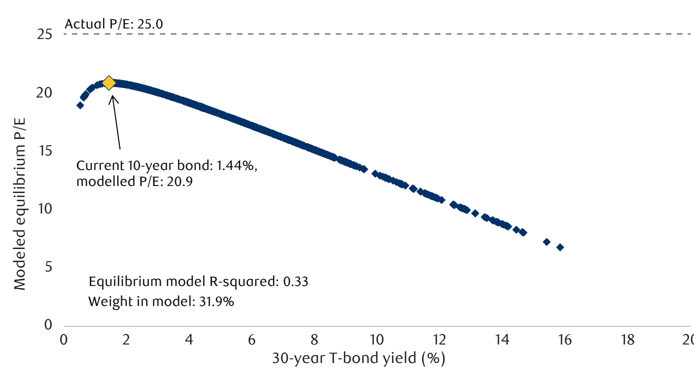
Note: As of November 30, 2021. Source: RBC GAM

Exhibit 22: S&P 500 equilibrium model
P/E factor as a function of 3-month T-Bill rate



Note: As of November 30, 2021. Source: RBC GAM

Exhibit 23: S&P 500 equilibrium model
P/E factor as a function of 10-year bond yield

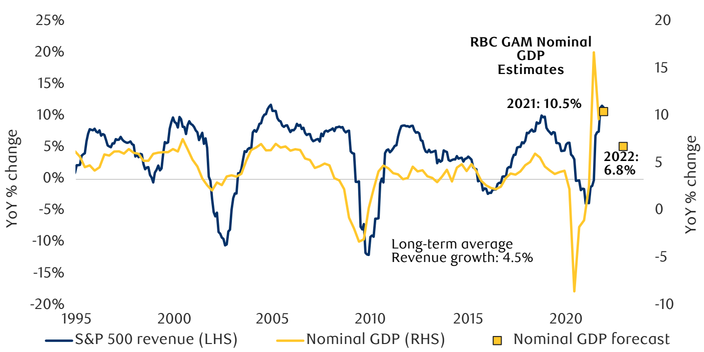


Note: as of November 30, 2021. Source: RBC GAM

as a powerful economic recovery has put earnings on track to exceed their pre-pandemic trajectory. Significant nominal GDP growth has contributed to double-digit gains in revenues and, while we expect GDP to slow a bit next year, we continue to look for above-average growth (Exhibit 24). A simple regression of nominal GDP growth versus S&P 500 profit growth suggests our forecast of 7.3% nominal GDP growth in 2022 is consistent with an 18.9% gain in earnings for next year (Exhibit 25).

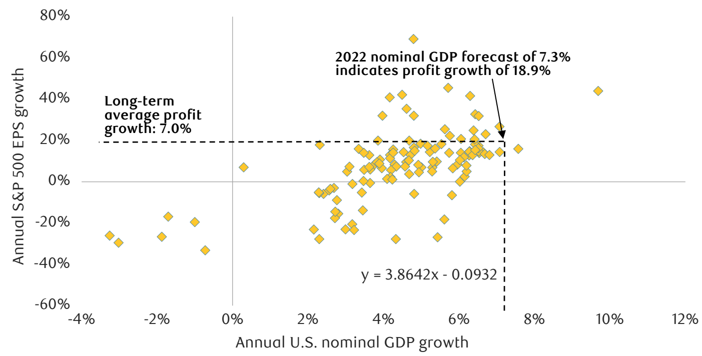
The consensus of analysts' estimates projects an 8% increase in S&P 500 earnings in 2022, but this forecast could well be exceeded as analysts have been persistently underestimating profits since the pandemic began. Exhibit 26 plots the month-by-month S&P 500 earnings estimates, which have been subject to constant and meaningful upward revisions as the recovery progressed. In fact, in each of the past six quarters, 80% to 90% of earnings releases exceeded the consensus of analysts' estimates (Exhibit 27). The risk now is that sufficient upward revision has been baked in, and future forecasts could be more difficult to surpass. Our simple regression model, however, would suggest that estimates may still be too low. The bull market could be well supported if this trend of upward revisions to earnings estimates continues.

Exhibit 24: United States
S&P 500 revenue and nominal GDP



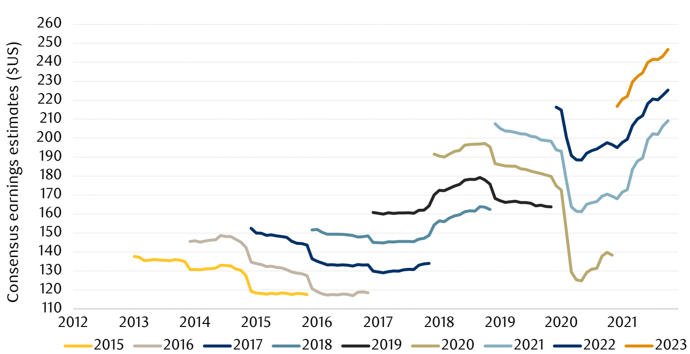
Note: As of November 30, 2021. Source: RBC GAM. Source: RBC CM, RBC GAM

Exhibit 25: S&P 500 EPS vs U.S. nominal GDP growth



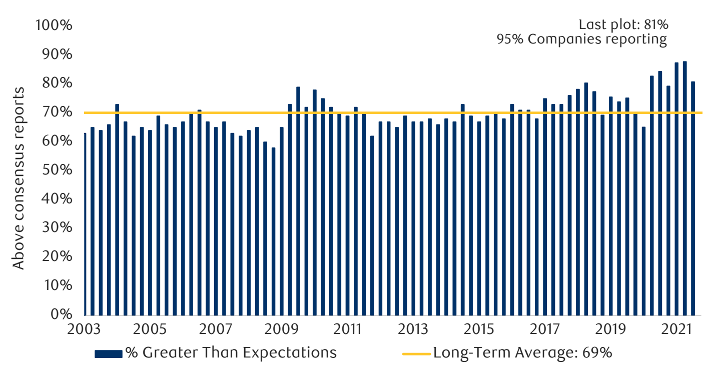
Note: Based on quarterly data back to January 1990. Source: Bloomberg, RBC GAM

Exhibit 26: S&P 500 Index
Consensus earnings estimates



Note: As of November 29, 2021. Source: Thomson Reuters, Bloomberg

Exhibit 27: Companies reporting results above consensus forecasts



Note: As of November 30, 2021. Source: Refinitiv

Exhibit 28: Earnings estimates & alternative scenarios for valuations and outcomes for the S&P 500

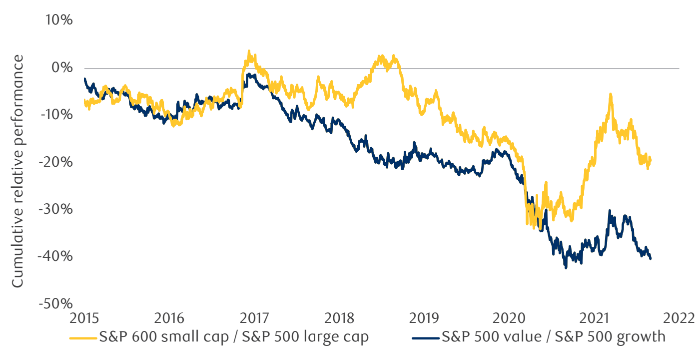
		Consensus			
		2022 Top down	2022 Bottom up	2023 Top down	2023 Bottom up
	P/E	$228.0	$225.6	$241.9	$247.0
+1 Standard Deviation	23.4	5326.0	5268.8	5650.0	5770.3
+0.5 Standard Deviation	21.1	4814.0	4762.3	5106.9	5215.6
Equilibrium	18.9	4302.0	4255.8	4563.7	4660.9
-0.5 Standard Deviation	16.6	3790.0	3749.2	4020.5	4106.1
-1 Standard Deviation	14.4	3277.9	3242.7	3477.3	3551.4

Note: As of November 30, 2021. Source: Bloomberg, Thomson Reuters, RBC GAM

Scenario analysis reveals high valuations and strong earnings growth are necessary for meaningful gains in stocks

Decent returns for stocks are still possible but, given today's level of valuations, the bar is elevated. Exhibit 28 plots a variety of scenarios for the S&P 500 based on different earnings and P/E ratios. Our model suggests that the equilibrium P/E for the S&P 500 is 18.9 in 2022 based on expected interest rates, inflation and corporate profitability. If the market traded at this P/E and generated earnings in line with the consensus estimate, the outcome would be unappealing, with the S&P 500 declining slightly next year and ending up flat by the end of 2023. But if the market manages to trade at a P/E slightly above equilibrium, say 0.5 to 1.0 standard deviation above, the S&P 500 could trade in a range between 4700-5300 in 2022 and 5000-5700 in 2023, resulting in total returns of 5% to 13% annualized over the next two years. Moreover, it is worth considering that continued strong nominal GDP growth could result in materially higher earnings than indicated by the consensus. While stocks are in a vulnerable position should confidence fade or the outlook deteriorate, investors may want to acknowledge that in an environment of still-low interest rates, and where inflation could transition back to normal levels alongside strong growth in corporate profits, the equity market could continue to deliver mid-single-digit to low-double-digit gains over the next few years.

Exhibit 29: Relative style performance



Note: As of November 30, 2021. Source: Bloomberg, RBC GAM

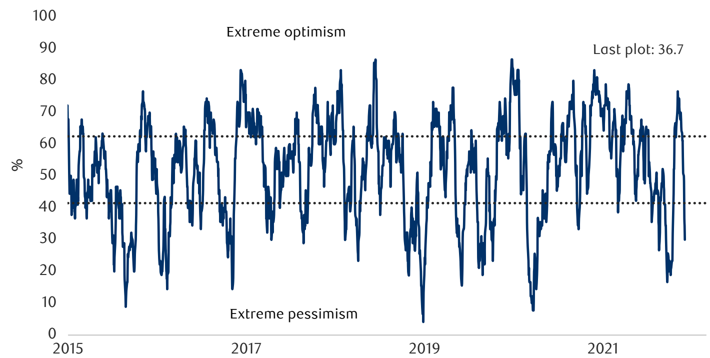
What's in style? Large-cap growth

The style leadership that has been in place since spring of 2021 has been somewhat of a concern, and we have yet to see any significant shift back to the leaders that were in place during the economic reopening. Large-cap growth stocks extended their gains relative to small-cap value stocks as the year progressed and the initial enthusiasm over economic reopening and vaccines faded. By the end of November, value stocks fell to a new all-time low relative to growth stocks, and small caps completely erased their earlier gains versus large caps for the year (Exhibit 29). Although the pandemic prompted a brief and powerful rotation into value and small-cap stocks earlier in the economic recovery, style preferences have shifted back to large-cap growth stocks, signaling that investors may be concerned about the sustainability of the expansion. We have not seen any re-emergence of value and/or small cap leadership, but if we did, and it were sustained, such a shift would represent a strong signal from investors that the economy is strong enough to generate the broad-based profit growth required to fuel a new leg up in equities.

Investor confidence and market breadth wane, often contrarian signals

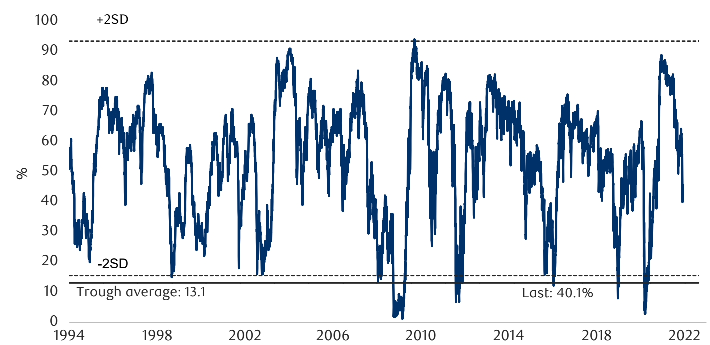
Consistent with style leadership shifting to a more cautious stance, measures of investor sentiment and market breadth peaked in the summer of 2021 and most have been declining since then. Importantly, some of these metrics could already be approaching encouraging levels. Exhibit 30 plots a composite of daily trading sentiment indicators compiled by Ned Davis Research. These indicators suggest that sentiment had climbed to extremely optimistic levels in the summer, but that it has since backed off and is now at a more neutral reading. Measures of price momentum have displayed similar patterns, with the percentage of stocks trading above their 200-day moving average and the percentage of stocks in rising monthly price trends having both come off of extremely positive readings (exhibits 31 and 32). Equities are generally vulnerable to correction when these indicators are falling, but it is also worth noting that they have traversed a significant distance, and that lows on these charts tend to be associated with a definitive bottom.

Exhibit 30: Ned Davis Research Daily Trading Sentiment Composite – Percent bulls



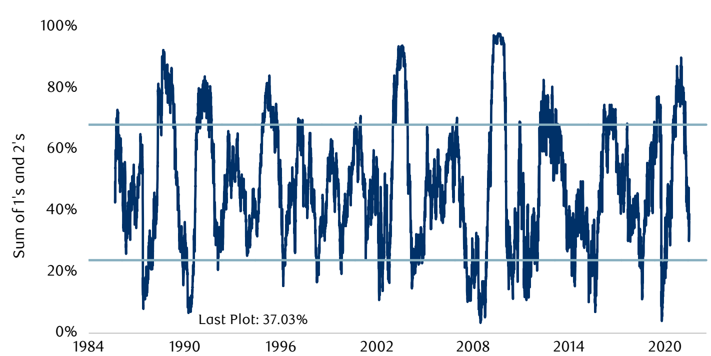
Note: As of December 1, 2021. Source: Ned Davis Research, RBC GAM

Exhibit 31: New York Stock Exchange Composite Index – % of stocks above their 200-day moving average



Note: As of December 1, 2021. Source: Bloomberg, RBC GAM

Exhibit 32: S&P 500 Index
Monthly price momentum

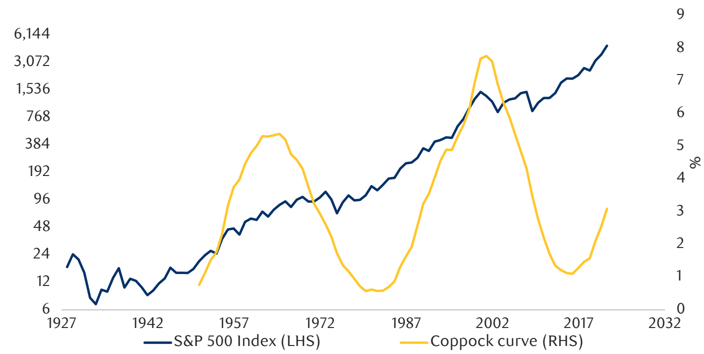


Note: As of December 3, 2021. Source: RBC GAM

Stocks remain in a long-term rising trend

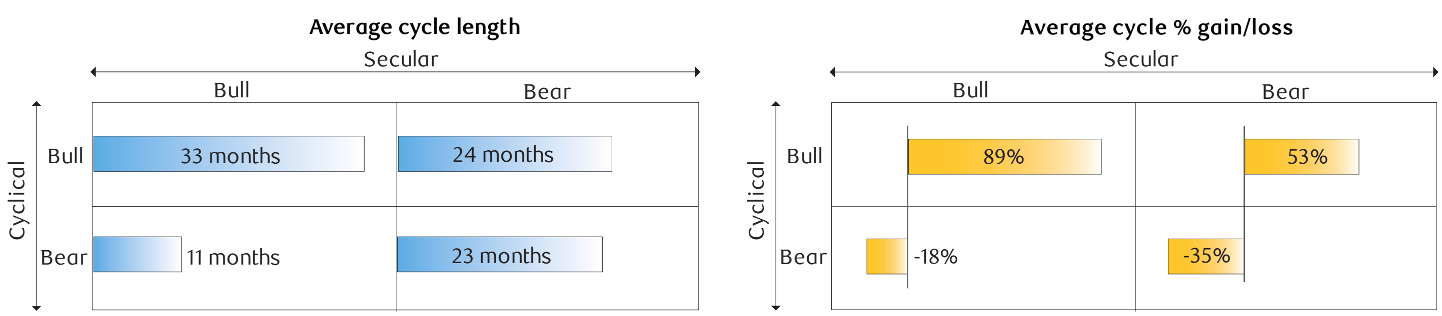
The recent volatility in stocks hardly registered on a very long-term chart of the S&P 500, and this bigger-picture view informs our thinking on where equities may be headed in the short term. Exhibit 33 plots the S&P 500 back to the 1920s, and overlaid on the chart is our supercycle price momentum indicator. While the equity market has experienced extended periods of sideways movement, these phases have tended to be followed by sustained and powerful advances that can be measured in decades. This supercycle indicator turned higher in 2016 and suggests that we are currently in a supercycle bull market. The last time we had a turn higher in this indicator was in the early 1980s followed by a nearly 20-year-long bull market.

Exhibit 33: S&P 500 Index
Supercycle price momentum



Note: Coppock curve based on yearly data as of December 1, 2021.
Source: Bloomberg, RBC CM, RBC GAM

Exhibit 34: U.S. equity-market cycle statistics



Note: Uses Robert Shiller's historical U.S. stock market data since january 1870. Data based on monthly closing prices. Source: RBC GAM

The secular backdrop provides useful context for what to expect during correction or rally phases. Rally phases during supercycle bull markets average almost 40% longer and two thirds greater in magnitude than that of supercycle bear markets (Exhibit 34). And corrections have historically been half as long and about one third less damaging in supercycle bull markets versus bear markets. If we are right in thinking that we are in a supercycle bull market, then we should expect corrections to be shallow and short-lived and anticipate advances to be long and powerful.

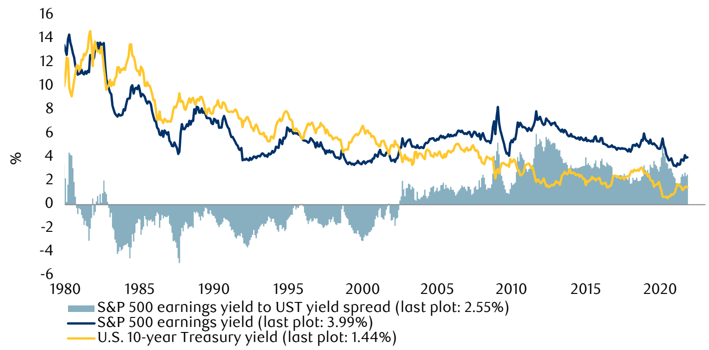
Asset mix – a second modest trim to our equity overweight

Our base case scenario sees the economy continuing to grow at a rapid yet slowing rate as the recovery matures. Much of the economic damage from the pandemic has been repaired and the expansion has moved into the middling stage of the business cycle. At this point, central banks are starting to dial back monetary accommodation and, although conditions fully justify the need for tightening, we recognize that financial markets will, at the margin, be receiving less support. Other risks to our outlook include the ebb and flow of the pandemic, challenges in China's property sector and inflation. That said, there is a possibility that all of these risks prove less harmful than initially feared, resulting in an even better outlook for economies and risk assets than we've budgeted.

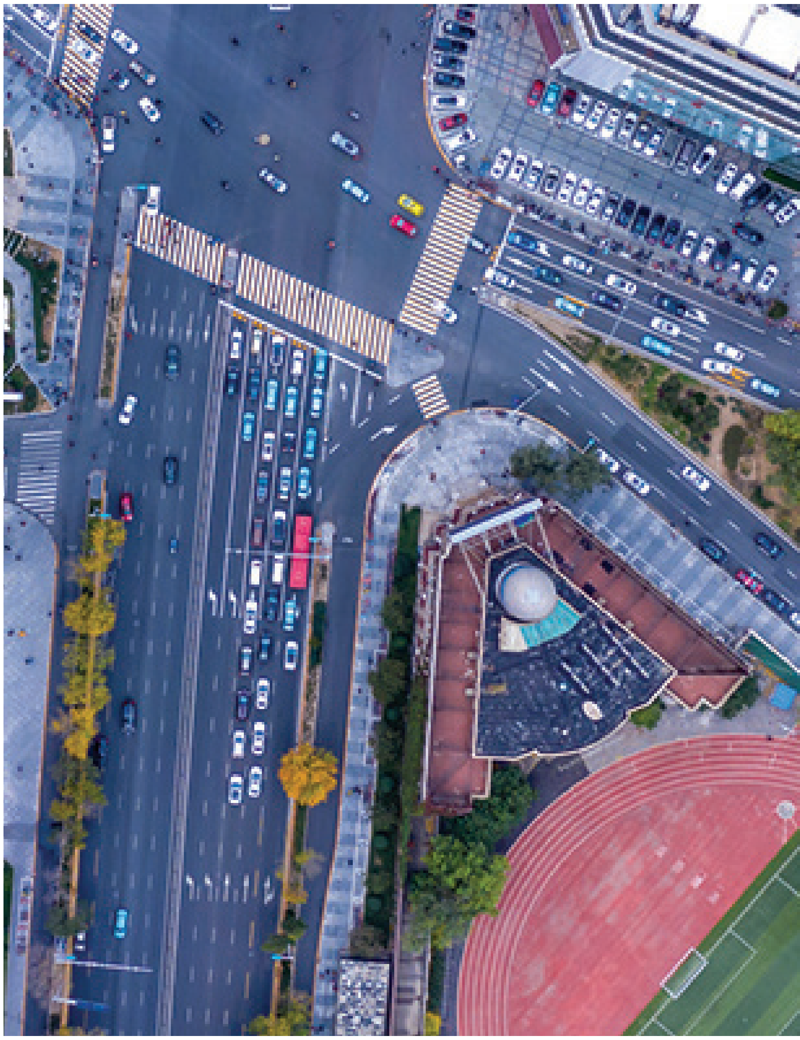
Against this backdrop, sovereign bonds look particularly unappealing. As the economy continues on its bumpy path to normalization, we expect interest rates to rise at a gradual pace. Any meaningful increase in yields from today's extremely low levels would result in low or potentially negative returns for sovereign bonds and, as a result, we remain underweight fixed income in our asset mix.

Stocks continue to offer superior potential, especially relative to fixed income. Exhibit 35, which plots the earnings yield of the S&P 500 versus the U.S. 10-year bond yield, continues to suggest that stocks are attractive relative to bonds. That said, we recognize that the cycle is advancing, valuations are elevated and the market is vulnerable to correction should risks mount, investor confidence wane and/or the economic outlook deteriorates. We reduced our equity allocation by 50 basis points in the summer in recognition of the maturing of the recovery. Since then, narrowing market breadth, slowing growth, a lack of leadership outside U.S. large-cap equities and the threat of the new Omicron virus variant have motivated us to reduce our equity weight by another 50 basis points this quarter, placing the proceeds into cash. This leaves us with a modest risk-on position with 63.5% in equities versus our strategic neutral of 60.0%, reflecting our continued preference for stocks, but also an acknowledgement that the opportunity set is less attractive than it was at earlier points in the recovery. We are maintaining a modest of a cash buffer to be deployed should opportunities arise or if technical conditions were to improve. For a balanced global investor, we currently recommend an asset mix of 63.5 percent equities (strategic neutral position: 60 percent) and 33.5 percent fixed income (strategic neutral position: 38 percent), with the balance in cash.

Exhibit 35: S&P 500 earnings yield
12-month trailing earnings/index level

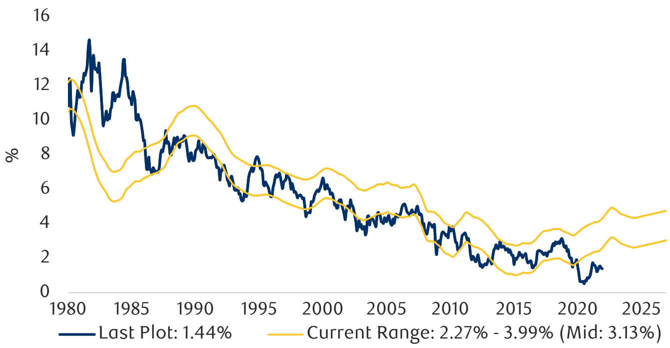


Note: As of November 30, 2021. Source: RBC GAM, RBC CM



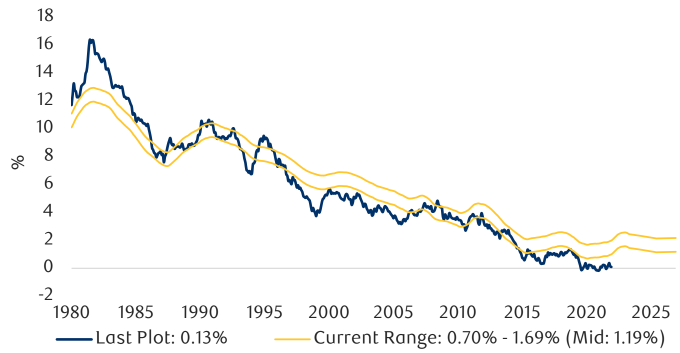
Global fixed income markets

U.S. 10-Year T-Bond Yield
Equilibrium range



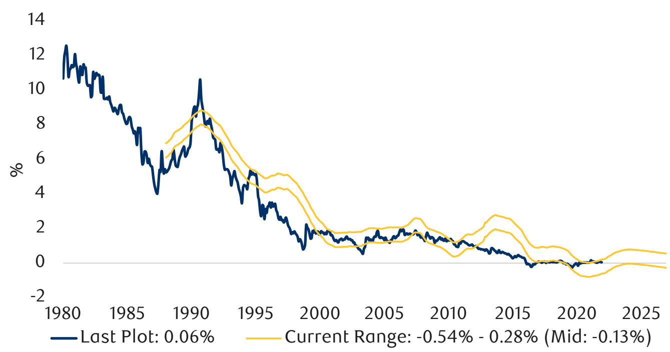
Note: As of November 30, 2021. Source: RBC GAM, RBC CM

Eurozone 10-Year Bond Yield
Equilibrium range



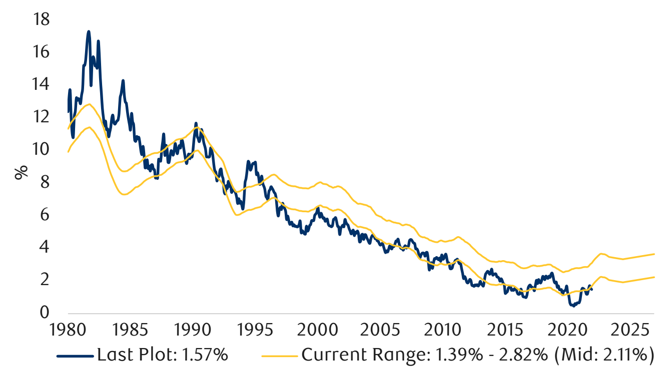
Note: As of November 30, 2021. Source: RBC GAM, RBC CM

Japan 10-Year Bond Yield
Equilibrium range



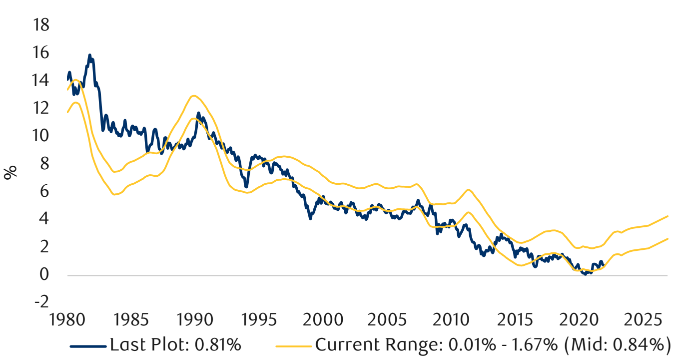
Note: As of November 30, 2021. Source: RBC GAM, RBC CM

Canada 10-Year Bond Yield
Equilibrium range



Note: As of November 30, 2021. Source: RBC GAM, RBC CM

U.K. 10-Year Gilt
Equilibrium range

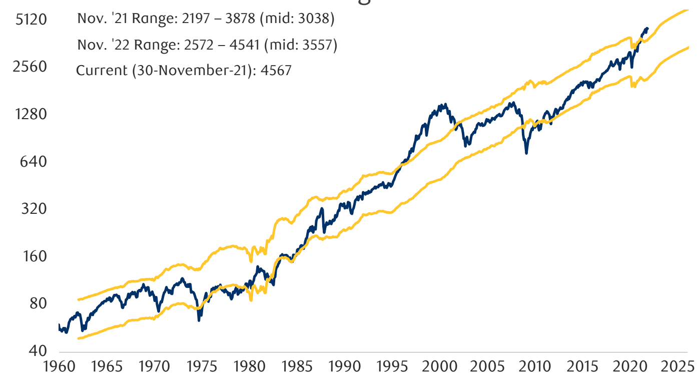


Note: As of November 30, 2021. Source: RBC GAM, RBC CM

"Global bond yields climbed over the course of the year but encountered significant fluctuations, and they remain well below where our models would deem appropriate."

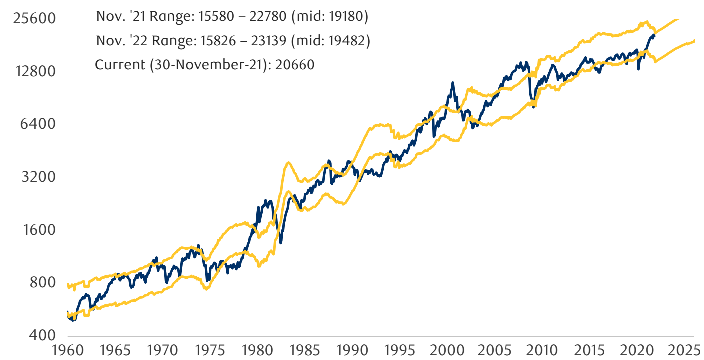
Global equity markets

S&P 500 Equilibrium
Normalized earnings and valuations



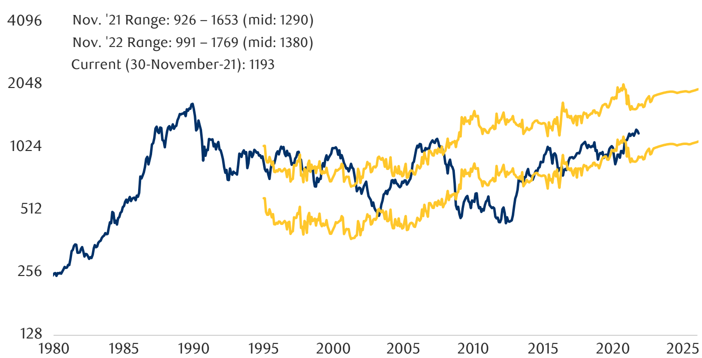
Source: RBC GAM

S&P/TSX Composite Equilibrium
Normalized earnings and valuations



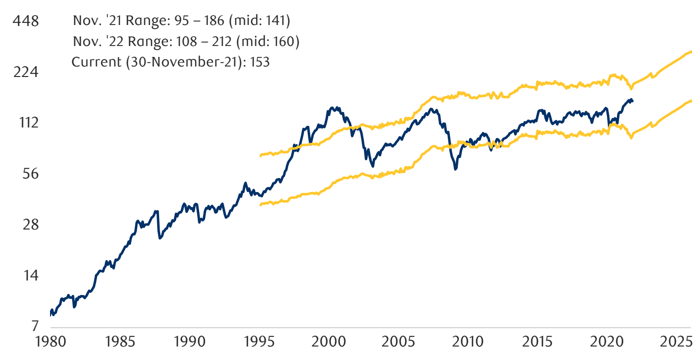
Source: RBC GAM

MSCI Japan Index
Normalized earnings and valuations



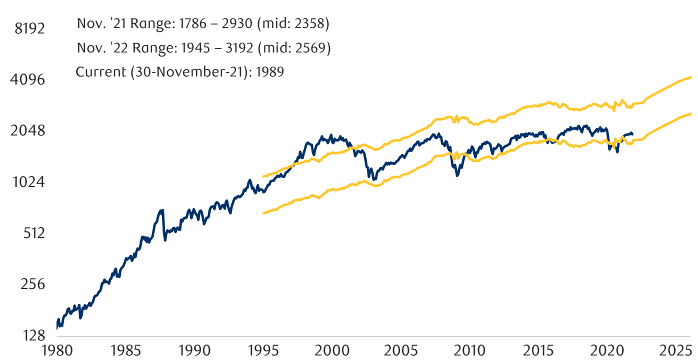
Source: RBC GAM

MSCI Europe Index
Normalized earnings and valuations



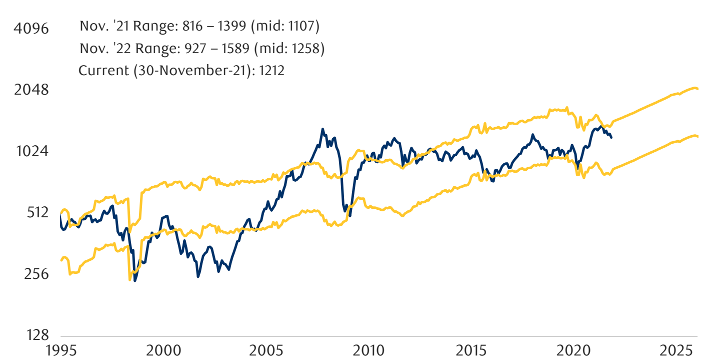
Source: RBC GAM

MSCI U.K. Index
Normalized earnings and valuations



Source: RBC GAM

MSCI Emerging Markets Index
Normalized earnings and valuations



Source: RBC GAM

Note: The fair value estimates are for illustrative purposes only. Corrections are always a possibility and valuations will not limit the risk of damage from systemic shocks. It is not possible to invest directly in an unmanaged index.

Global fixed income markets

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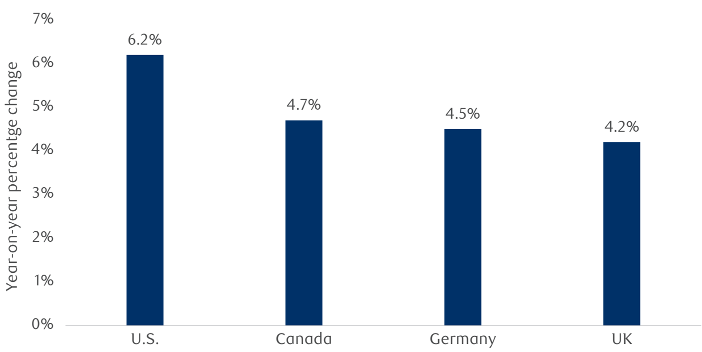
Inflation is at multi-decade highs, economic activity is strong and central banks are expected to raise policy rates substantially over the next year. Yet bonds continue to offer paltry yields. Our own forecast is for the yield on the 10-year U.S. Treasury to rise to 1.80% – still near historically low levels – over the next year from 1.44% at the time of writing. This state of affairs has left us and many other investors seeking an answer to the question: with inflation so high, why are bond yields so low?

Simply put, bond investors believe that inflation will be, as central bankers like to say, "transitory," and unlikely to last. Forecasts of where inflation will be in 2023 are around 2% – even though inflation of at least 4% in most major economies is currently running hotter than at any time since the 1990s (Exhibit 1). Most of the price pressures, however, have been in parts of the economy most affected by the pandemic, which we believe represents a one-off shock. While we expect the current period of higher inflation to pass, it could persist across the globe for most of the next year.

The good news is that the worst of the inflation headache should be behind us. In particular, the surge in headline and core inflation has been driven by particularly strong demand for goods amid shutdowns in services sectors

Exhibit 1: Global consumer-price inflation



Note: As of October 2021. Source: National statistical offices, Bloomberg

and disruptions to supply chains. We expect that goods-related inflation will cool as demand for physical goods ebbs and supply chains catch up. In the meantime, consumers' increased comfort with in-person interactions is likely to accelerate the shift in spending toward services such as entertainment and travel. Finally, the winding-down of government pandemic-spending programs, which provided a substantial fillip to household budgets, should ease overall demand.

We are increasingly asked about the parallels between today's markets and the last time surging inflation expectations ran headlong into low and stable bond yields – the 1960s and 1970s. At that time, inflation expectations and bond yields were low and stable due to a combination of central-bank efforts to hold down long-term yields and the U.S. government's commitment to keep the U.S. dollar fixed at US$35 per ounce of gold. However, increasingly expansive fiscal and monetary policies during the Kennedy and Johnson administrations began to stoke inflation, and central bankers held off on rate hikes as long as possible given the then-prominent belief that optimal employment could only occur after inflation had started rising.

At the same time, developed-market economies were experiencing a surge in demand as the generation born in the 20 years after World War II (the Baby Boomers) and women began joining the workforce in droves. Union membership was widespread and labour's bargaining power was largely backed by public policy. The shock of leaving the gold standard in the early 1970s, followed by the rapid rise in oil prices, sent inflation, and inflation expectations, soaring. As result, the yield on the 10-year Treasury rose as high as 15.8% in 1981, inflicting substantial losses on investors (Exhibit 2).

One could draw parallels between the Fed's reluctance to act in the 1970s with its current policy framework of average inflation targeting (AIT), which aims to let inflation exceed its target for a time with the goal of boosting employment. In both cases, the cost of higher inflation was expected to be outweighed by the benefits of job creation.

This premise was eventually proven to be false in the 1970s, and there is a chance, albeit small in our view, that the pandemic could end up being a shock to the global economy similar in scope to the one that prompted inflation to shoot higher in the 1970s. This time around, it is possible that government largesse financed by debt might create a sufficiently large increase in demand that the impact will be similar to the expansion of the labour force 50 years ago.

But there is another very important distinction between the pre-inflationary period of the 1960s and the time leading up to the pandemic: the macroeconomic backdrop. Fifty years ago, expansive fiscal spending and loose monetary policy were pursued during a period of very strong underlying drivers of economic growth. In 1970, the labour force was growing at nearly 3%. In contrast, current projections for the labour force are running at just 0.5% to 1.0% a year (Exhibit 3), with similar levels of economic growth.

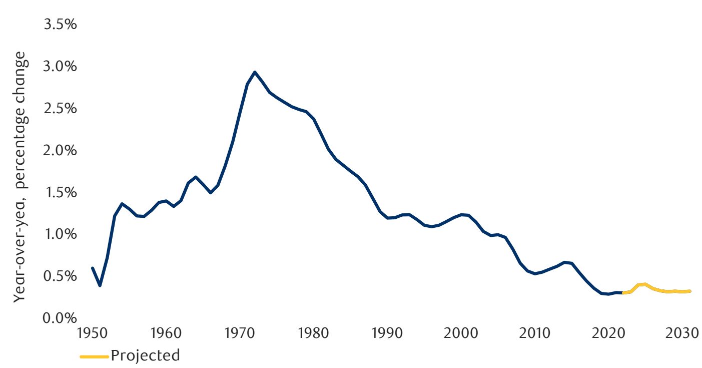
Moreover, the commitment today of most central banks to keep inflation close to 2% did not exist in the 1970s and continues to be a hugely important reason why bond yields remain low in an environment of rising inflation.

However, should price pressures begin to expand beyond the relatively narrow set of industries that they are currently affecting, the odds will increase that much higher bond yields lie ahead. Indeed, investors worried

Exhibit 2: History of the U.S. 10-year Treasury yield

Note: As of November 22, 2021. Source: Bloomberg

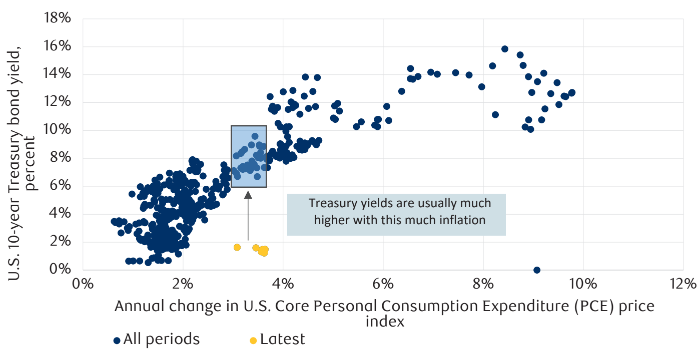
Exhibit 3: U.S. potential labor-force growth



Note: As of October 30, 2021. Source: U.S. Congressional Budget Office about an extended period of yields exceeding 2% could start to demand extra compensation – in the form of higher government-bond yields. In fact, Exhibit 4 shows that current rates of core inflation have historically been associated with 10-year bond yields of 6% to 10%.

At this point, we don't see glaring signs of persistently high inflation. We also note that low yields have been shaped by long-running, structural forces that preceded the pandemic and are likely to survive it. These forces include population aging; technological change and globalization; increased income and wealth inequality; rising government debt loads; and large-scale bond purchases by central banks. In some cases, the pandemic may have even reinforced some of these trends. Moreover, a growing number of bond investors are holding bonds for liquidity, or regulatory or policy reasons, which means they are not likely to demand full compensation for inflation. Over time, we expect inflation to remain close to 2% and bond yields further underpinned by structural reasons to be low.

Exhibit 4: Core inflation and Treasury yields



Note: Data period January 1980 to October 2021. Source: Bloomberg

Direction of interest rates

Our forecast for the 10-year Treasury yield is unchanged from last quarter: we expect the yield to be around 1.80% over the next year.

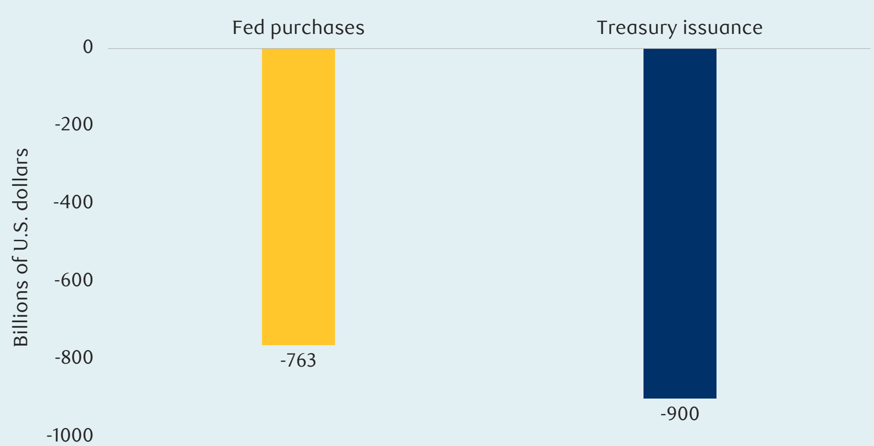
U.S. – The U.S. Federal Reserve Board (Fed), spurred by a faster-than-expected labour-market recovery and worries about the persistence of inflation, started to reduce the pace of asset purchases in November. In turn, the scaling-back of bond purchases by the Fed means that policymakers are preparing to hike interest rates. Many investors believe that the first rate hike will likely occur in the second half of 2022 after the Fed completely halts buying bonds. Investors expect at least two rate hikes by the end of 2022 and as many as three, based on interest-rate futures. We are penciling in just one because we are somewhat more concerned about the lasting negative impact of the pandemic on the economy.

Both labour-market and inflation considerations should give the Fed pause before it embarks on an interest-rate hiking cycle. We do not expect the slowdown and eventual stop of Treasury purchases by the Fed to affect yields much, as the reductions are likely going to be offset by a decline in bond issuance next year (Exhibit 5) amid a phasing-out of pandemic-related spending programs and improved growth.

The elevation of Lael Brainard to Vice Chair of the Fed most likely will have little impact on the path of monetary policy but suggests a greater focus on bank regulation. A new group of rotating voting members is due in January to join the Federal Open Market Committee, the Fed's policymaking body, making the Fed marginally more hawkish, in our view.

We are raising our forecast for the 10-year Treasury yield to 1.80% over the next year from 1.75% last quarter.

Exhibit 5: Fed bond buying vs Treasury-bond issuance
Projected changes for 2022, compared to 2021



Note: As of October 30, 2021. Source: Deutschebank, Federal Reserve, U.S. Department of Treasury

We expect the BOC to hike interest rates twice by the end of 2022, raising the policy rate to 75 basis points and the 10-year yield to rise to 2.00% from about 1.60%.

Canada – The Bank of Canada (BOC) stopped quantitative easing in November, which was earlier than the year-end expectations of investors. The unexpected end of the asset-purchase program was bad for bonds as yields rose in anticipation of earlier rate hikes. Updated economic forecasts suggest that the BOC believes that economic slack is likely to be absorbed in the first half of 2022, alongside continued above-target inflation. This scenario suggests that the BOC could begin hiking interest rates as soon as next April.

The market expects five BOC rate hikes before the end of 2022 in an outcome that we view as unlikely given that the BOC almost never gets so far ahead of the Fed, which is expected to hike three times in the same period. We expect the BOC to hike interest rates twice by the end of 2022, raising the policy rate to 75 basis points and the 10-year yield to rise to 2.00% from about 1.60%. As in the U.S., the likely cooling of inflation pressures and an anticipated reduction in bond supply as fiscal spending is reined in are likely to ease upward pressure on Canadian government bond yields.

We forecast the yield on the U.K. 10-year gilt will rise to 1.25% over the next year from approximately 0.90% currently.

U.K. – The Bank of England (BOE) unexpectedly held interest rates steady at its November meeting but has telegraphed interest-rate hikes for next year. We expect at least two rate increases that would lift the BOE's bank rate to 0.50% from 0.10% currently. The first hike is likely to be a relatively small 0.15%, moving the policy rate away from emergency levels, while the second would be 0.25%, more in line with the scope of past rate hikes. We had expected the BOE to leave rates unchanged next year, but the central bank has mounted one of the most vigorous public responses to the global surge in inflation. The BOE has also forecast that it plans to conclude quantitative easing by the end of the year. We forecast the yield on the U.K. 10-year gilt will rise to 1.25% over the next year from approximately 0.90% currently.

We expect the 10-year bund yield to reach -0.05% before the end of 2022 from -0.20% currently. We forecast no rate hikes in that time.

Eurozone – As in most regions, we expect the eurozone to adopt a more restrictive monetary-policy stance over the next year. The surge in COVID cases over the past month has dented Europe's economic recovery somewhat, but in our view probably won't sidetrack the European Central Bank's (ECB) quest to move the eurozone away from emergency support measures. Supporting such action is inflation at multi-year highs in many members of the single-currency area, suggesting a gradual tightening of policy should be in the cards for next year.

Unlike most other central banks, however, the ECB's support for the economy will in our view be limited to reducing asset purchases rather than boosting benchmark interest rates. As an example, we expect that a 1.5 trillion-euro program instituted when the pandemic hit in early 2020 to be wound down sometime in 2022.

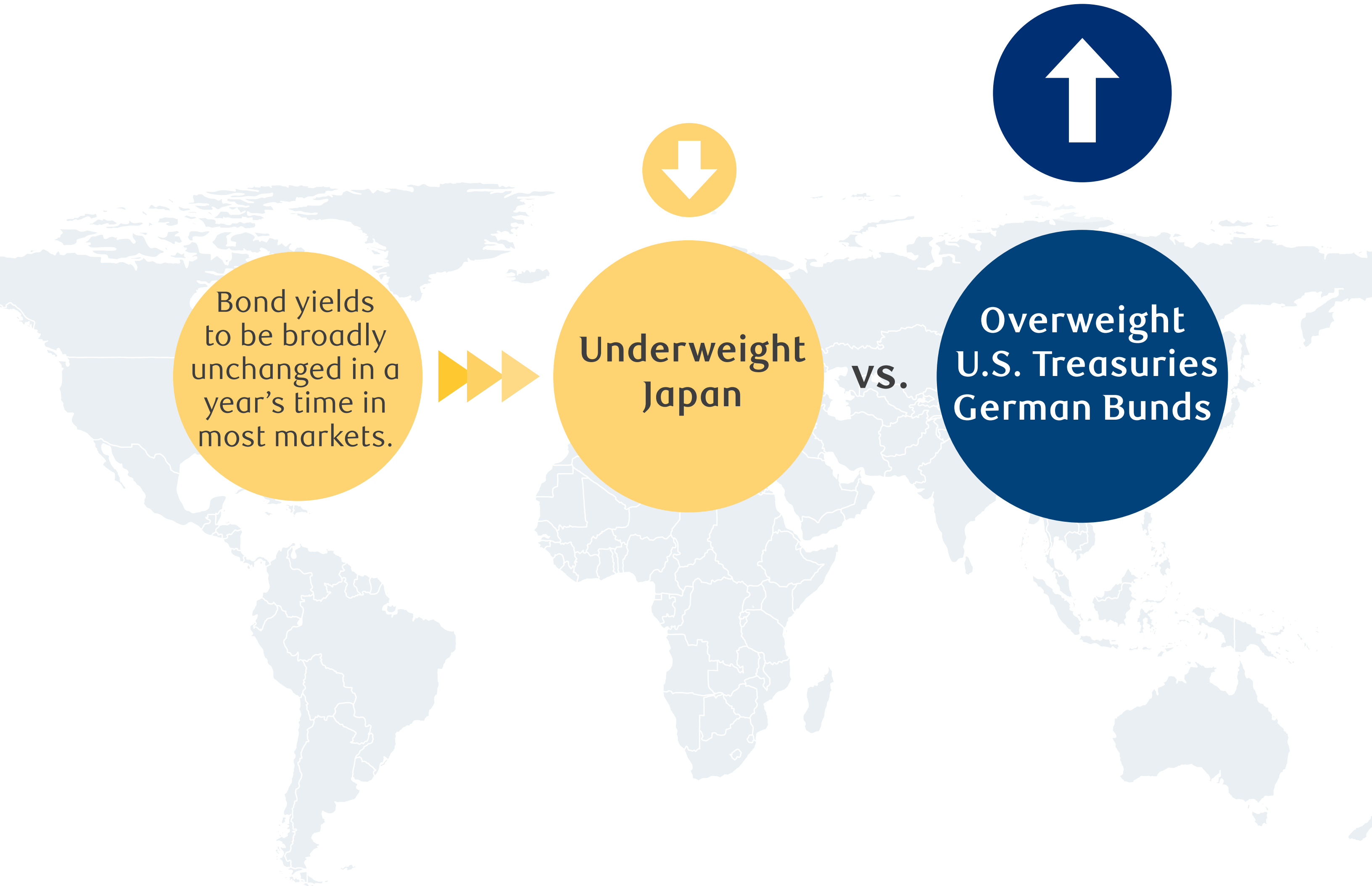
This development is important for the eurozone because 2022 will likely be the first year since 2018 that the value of bonds purchased by the ECB lags the amount issued by eurozone governments. The resulting increase in the supply of bonds will tend to raise yields, especially in Italy, whose government is among the five largest sovereign borrowers. While German bond issuance is likely to remain modest, we expect yields to rise given an increase in new bonds issued in common by eurozone members, which will reduce demand for German bunds. We expect the 10-year bund yield to reach -0.05% before the end of 2022 from -0.20% currently. We forecast no rate hikes in that time.

We forecast the 10-year JGB yield to be broadly unchanged at 0.10% over the next year from 0.07% currently.

Japan – Japan's economic recovery from the pandemic is lagging most of its global peers given the country's relatively lackluster vaccine rollout, and this situation will in our view keep the Bank of Japan (BOJ) committed to buying unlimited quantities of government bonds in order to maintain the 10-year yield between -0.20% and +0.20%. While the BOJ's "yield-curve control" policy is, thus far, another failed attempt in Japan's long-running efforts to bolster price growth, a more pronounced jump in economic growth bolstered by fiscal stimulus will likely keep yields in the upper part of the BOJ's target range over the coming months. We forecast that the yield on the 10-year Japanese government bond (JGB)apanese government bond will be broadly unchanged at 0.10% over the next year from 0.07% currently.

Regional outlook

Our forecasts are for bond yields to be broadly unchanged in a year's time in most markets. As a result, countries and regions offering higher yields on a currency-hedged basis and with relatively steep yield curves should be attractive over the coming months. We are retaining our overweight positions in U.S. Treasuries and German bunds, and our underweight in Japan.



Interest rate forecast: 12-month horizon

Total Return calculation: November 30, 2021 – November 30, 2022

U.S.

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	0.38%	0.75%	1.50%	1.80%	2.20%	(0.96%)
Change to prev. quarter	0.25%	0.10%	0.25%	0.05%	(0.15%)	
High	0.63%	1.40%	2.15%	2.50%	2.85%	(5.07%)
Low	0.13%	0.13%	0.50%	0.90%	1.30%	5.50%
Expected Total Return US$ hedged: (0.7%)						

Germany

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	(0.50%)	(0.30%)	(0.25%)	(0.05%)	0.25%	(3.94%)
Change to prev. quarter	0.00%	0.10%	0.15%	0.20%	0.10%	
High	(0.50%)	(0.25%)	(0.00%)	0.20%	0.45%	(6.24%)
Low	(0.50%)	(0.60%)	(0.60%)	(0.50%)	(0.35%)	2.73%
Expected Total Return US$ hedged: (2.6%)						

Japan

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	(0.10%)	(0.10%)	(0.05%)	0.10%	0.75%	(0.43%)
Change to prev. quarter	0.00%	0.00%	0.45%	0.00%	0.00%	
High	(0.10%)	(0.05%)	0.00%	0.25%	0.85%	(2.08%)
Low	(0.10%)	(0.10%)	(0.10%)	(0.10%)	0.40%	4.94%
Expected Total Return US$ hedged: 0.3%						

Canada

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	0.75%	1.50%	1.80%	2.00%	2.30%	(1.83%)
Change to prev. quarter	0.50%	0.80%	0.55%	0.50%	0.30%	
High	1.00%	1.60%	2.00%	2.25%	2.60%	(3.99%)
Low	0.25%	0.50%	0.75%	1.00%	1.40%	6.77%
Expected Total Return US$ hedged: (1.5%)						

U.K.

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	0.50%	0.60%	1.00%	1.25%	1.50%	(8.80%)
Change to prev. quarter	0.40%	0.40%	0.60%	0.45%	0.20%	
High	0.60%	1.30%	1.60%	1.75%	1.90%	(14.74%)
Low	0.10%	0.20%	0.50%	0.75%	1.10%	(2.41%)
Expected Total Return US$ hedged: (9.0%)						

Source: RBC GAM

Currency markets

Volatility returning to the currency markets

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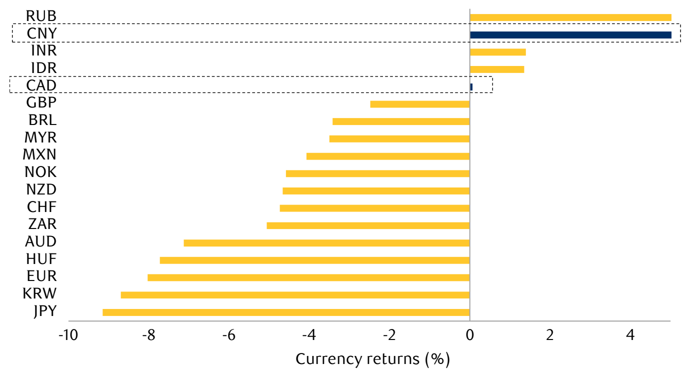
Having spent most of 2021 in a sleepy state of tight currency ranges, the foreign-exchange market awoke in November to U.S.-dollar gains against most other developed and emerging-market currencies. Moreover, the greenback's trading range widened during the quarter to an amount that was twice what it had been at any point during the year (Exhibit 1). Only a few currencies appreciated as much as the greenback – the Canadian dollar and Chinese renminbi notably among them (Exhibit 2).

The greenback's gains were driven by domestic and international factors. In the U.S., decent economic data and the passage of President Biden's infrastructure bill were somewhat positive for the U.S. dollar, but it was the persistence of consumer-price inflation that had the greatest impact on currency markets. U.S. Federal Reserve (Fed) governors had to abandon previous arguments that high inflation would be short-lived, and started planning the removal of the emergency stimulus that was injected during the pandemic. While the Fed has only just started to reduce

Exhibit 1: USD breaks out of trading range

Note: USD index is proxied by the DXY index. As at Nov. 30, 2021.
Source: Bloomberg, RBC GAM

Exhibit 2: Currency returns, year-to-date



Note: As at Nov. 29, 2021. Source: Bloomberg, RBC GAM the pace of monthly asset purchases – a process that takes time and would need to be completed before interest-rate increases take place – financial markets are currently pricing in three rate hikes in 2022.

Another factor that makes the U.S. dollar more attractive is the deteriorating economic outlook in Europe and China. Chinese economic growth is slowing, and Europe is beset with skyrocketing COVID cases just as colder weather and fuel shortages conspire to raise energy costs. We have dialed back our optimism on the euro, mostly in response to these developments rather than the European Central Bank's (ECB) continued insistence that it will not tighten monetary policy next year.

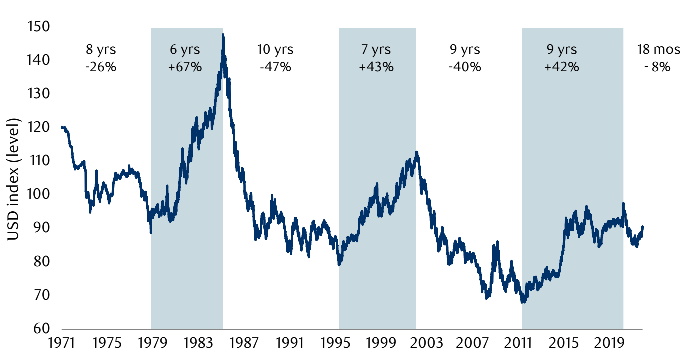
While we have tinkered with our shorter-term forecasts, our longer-term outlook for currency markets remains broadly intact. The U.S. dollar remains overvalued against most G10 currencies and a decline of 14% is needed for it to reach fair value (and more if the greenback is to become competitive). This process takes time, and our research suggests that several more years of U.S.-dollar weakness lie ahead (exhibits 3 and 4). In this context, periods of appreciation should be viewed as opportunities to hedge U.S.-dollar exposure before the U.S. dollar resumes its decline. Given the diminished U.S. capacity for fiscal spending and the fact that global and China risks are reflected in current financial markets, the build-up of long U.S.-dollar positions should be taken as a warning sign that the greenback is more vulnerable to correction.

We have previously argued that there will be greater dispersion in the movements of the world's currencies – specifically that cyclical and commodity-oriented currencies would likely outperform low-yielding currencies such as the euro and Japanese yen (Exhibit 5). Within the G10, we continue to see greater value in the Canadian dollar, Norwegian krone and Australian dollar. These three currencies benefit from both rising prices of their exports and central banks that are likely in our view to tighten monetary policy more quickly than the Fed.

Watching inflation

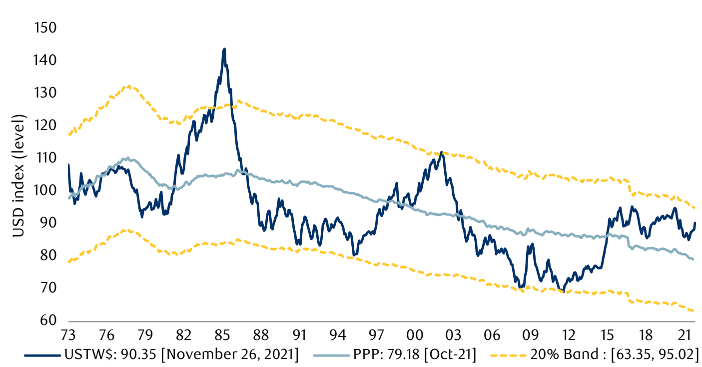
The recent inflation spike that has gripped markets in the wake of the pandemic is not rooted solely in strong demand for goods and services, but also in supply-chain issues, higher energy prices and the unfortunate timing of poor weather. The Fed had described goods-price gains associated with these one-off supply shortages as "transitory," hoping perhaps to treat them similarly to volatile food and energy prices that are excluded when measuring underlying inflation. Concerned about a loss of credibility, policymakers have since backpedaled on this message and are now expected to accelerate the reduction of asset purchases so that they gradually fall to zero early in 2022. Powell said as much in his November 30 comments to Congress, which came as a surprise to us in light of a new and more transmissible COVID variant that we thought would have made the central bank more cautious in reducing stimulus. More important for the dollar is the

Exhibit 3: Long-term cycles in the U.S. trade-weighted dollar



Note: As at Nov. 26, 2021. Source: Bloomberg, Federal Reserve, RBC GAM

Exhibit 4: USD purchasing power parity valuation



Note: The USD index uses the new Fed USD index from Dec.31, 2019 onward. As at Nov. 26, 2021. Source: Federal Reserve, Bloomberg, RBC GAM eventual timing of interest-rate increases, of which three are expected in 2022 based on market indicators. Rate hikes will not of course combat colder weather, port congestion or shortages of microchips used in auto production. What they will do is something that must be done: formally recognize that monetary policy may just be too loose for a period when inflation has reached levels not seen since the early 1990s.

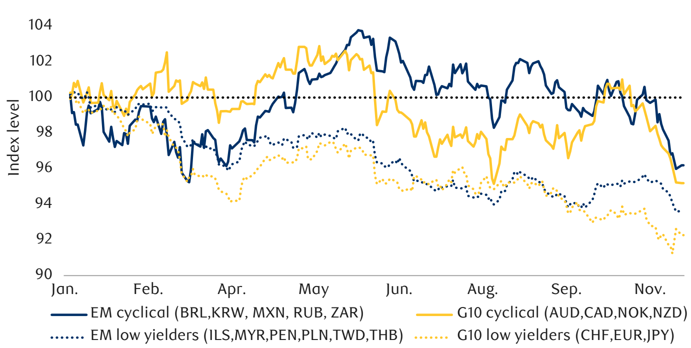
We suspect that inflation in the U.S. will settle down in the time that it takes the Fed to complete its asset purchases, easing pressure on the Fed to move quickly on interest-rate hikes next year. Expectations of a slower path to rate hikes would be negative for the greenback and might offset safe-haven support for the dollar as investors react to greater uncertainty related to COVID infections over the next few months.

The importance of the Chinese renminbi

The renminbi's stability is impressive, particularly in light of slowing economic activity, missed bond payments by large real-estate developers, tensions with Taiwan and a far-reaching regulatory crackdown that has affected a broad swath of the Chinese economy. The renminbi's stability against the U.S. dollar and its simultaneous appreciation against currencies of China's trading partners has led the Chinese trade-weighted currency basket to a six-year high (Exhibit 6). This strength has persisted as the balance of capital flows has supported the renminbi, and Chinese policymakers haven't been required to intervene. Among the reasons for these capital flows are higher yields on Chinese government bonds, the recent inclusion of China in bond and equity indexes and the reduction in tourism 'imports' given restrictions preventing Chinese citizens from travelling abroad.

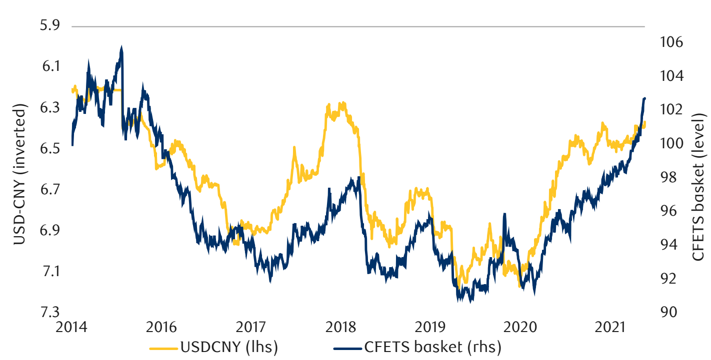
The renminbi has grown in importance for the currency markets in recent years, and its resilience has acted as a stabilizing influence on emerging-market exchange rates, particularly those of Asian countries whose economies are most tied to China. China's aspirations for global influence are reflected in efforts to secure a larger share of global foreign-exchange reserves, and it is therefore unlikely that the People's Bank of China would push back aggressively against the renminbi's appreciation, provided that such capital inflows remain orderly. Any change in the stance of the Chinese central bank would have us re-evaluate our positive stance on cyclical emerging-market currencies, especially in light of the uncertainty introduced by the new Omicron COVID variant and its impact on the economies of less vaccinated regions.

Exhibit 5: Performance of EM and G10 currency baskets this year



Note: As at Nov. 30, 2021. Source: Bloomberg, RBC GAM

Exhibit 6: USDCNY and renminbi trade-weighted index



Note: As at Nov. 30 2021. CFETS = China Foreign Exchange Trade System. Source: Bloomberg, RBC GAM

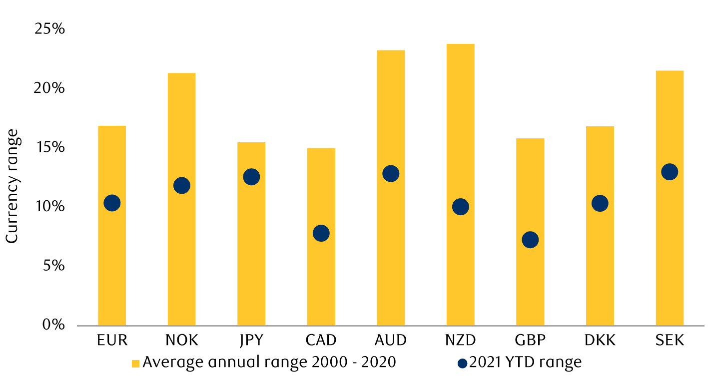
Expecting higher currency volatility

Financial-market volatility has fallen in recent years as central-bank bond purchases and low global interest rates made for a friendly and stable investment landscape. However, the narrow trading ranges (Exhibit 7) and low historical volatility to which we've become accustomed are not normal for the foreign-exchange market and are unlikely to persist. Going forward, diverging monetary policies among major central banks should drive greater capital movement across borders and, by extension, greater fluctuations in exchange rates. We know that global liquidity injections by central banks have been a major driver of stocks and other assets and so their removal is not likely to unfold smoothly.

In times of market turmoil, we often look for portfolio insurance in assets whose values tend to rise when equity markets are falling. The Japanese yen has long been regarded as such an asset, but the historical relationship between falling markets and yen strength needs to be reconsidered if we are entering a period in which equity and bond prices decline in tandem. As inflation fears threaten to depress the value of both stocks and bonds, yen strength during times of risk aversion may not be such a given.

While the yen does tend to rise when equities fall, an analysis by Spectra Markets shows that its movements are actually driven more by fluctuations in the bond market. Weeks in which equity-market sell-offs are accompanied by rising yields, for example, tend to result in yen declines – often meaningful ones (Exhibit 8). Given concerns over uncontrolled inflation, the combination of lower stocks and higher yields becomes more likely, and in such scenarios investors looking to the yen for portfolio protection would be wise to find alternative safe-haven currencies. With this in mind, we have reduced our forecasts for the yen, even though it trades slightly cheap relative to bond yields. The currency may appreciate as the greenback softens, but negative yields in Japan mean that the yen will likely underperform other major developed-market currencies.

Exhibit 7: Currencies trading in a narrower range



Note: As at Nov. 30, 2021. Source: Bloomberg, RBC GAM

Exhibit 8: The yen does not offer protection when yields rise

	Weeks when S&P declines more than 2%	
	Classic risk off	**Fed/inflation fears**
	Yields ↓	Yields ↑
Mean yen move	0.91%	(0.22%)
Median yen move	0.83%	(0.29%)
% of time yen rises	76%	44%

Note: Analysis covers period since 2003. As at Nov. 26, 2021. Source: Spectra Markets, RBC GAM

Commodity currencies and the Canadian dollar

This year's strength in commodities has become increasingly important for exchange rates. The oil-linked currencies of Norway, Russia and Canada are among the top performers in 2021, as higher export prices have supported trade balances in those countries. This rise in export prices relative to import prices points to a further rise in the Canadian dollar, but the recent loonie weakness in part reflects overall strength in the U.S. dollar. Fluctuations in both the U.S. dollar and commodity prices have largely explained exchange-rate movements between the two currencies this year as other drivers, such as equities and interest-rate spreads, took a back seat. Exhibit 9 offers guidance on how the Canadian dollar might perform based on historical relationships with these two factors. Should the U.S. dollar give back some of its overall strength and oil prices remain elevated, the loonie could reasonably settle below 1.20 per U.S. dollar. However, we recognize that elevated oil prices are only really beneficial to the Canadian economy when they result in business investment that generates spending and job creation. To date, capital expenditures in the oil patch have been restrained by the government's efforts to tighten environmental standards and by a preference among investors for capital to be returned through dividends and stock buybacks rather than investments in new projects.

Even without energy-related business investment, the Canadian economy seems to be doing fine. The economy managed to grow at an annualized clip of 5.4% in the third quarter, labour markets have recovered to their pre-pandemic peak and spending on services rebounded. Relatively strong economic data should continue in 2022, as higher vaccination rates and broad public support for social distancing lower the odds of renewed lockdowns in Canada.

Among the other themes we are monitoring for the trajectory of the Canadian economy are:

- A continued push for immigration after temporary workers and students already in the country were integrated during border closures. Student permits rose 63% in the first nine months of 2021 versus the same period last year, and the Trudeau government

Exhibit 9: Oil and the USD pull the loonie in opposite directions

DXY Level \ WTI price	50	60	70	80	90	100	110	120
88	1.23	1.21	1.18	1.16	1.13	1.11	1.08	1.06
89	**1.25**	1.22	1.20	1.17	1.15	1.12	1.10	1.07
90	**1.26**	**1.24**	**1.21**	1.19	1.16	1.14	1.11	1.09
91	**1.27**	**1.25**	**1.22**	1.20	1.17	1.15	1.12	1.10
92	1.29	**1.26**	**1.24**	1.21	1.19	1.16	1.14	1.11
93	1.30	**1.28**	**1.25**	1.23	1.20	1.18	1.15	1.13
94	1.31	**1.29**	**1.26**	**1.24**	1.22	1.19	1.17	1.14
95	1.33	**1.30**	**1.28**	**1.25**	1.23	1.20	1.18	1.15
96	1.34	**1.32**	**1.29**	**1.27**	1.24	1.22	1.19	1.17
97	1.36	1.33	**1.31**	1.28	1.26	1.23	1.21	1.18
98	1.37	1.34	1.32	1.29	1.27	1.24	1.22	1.19
99	1.38	1.36	1.33	1.31	1.28	1.26	1.23	1.21

2021 range

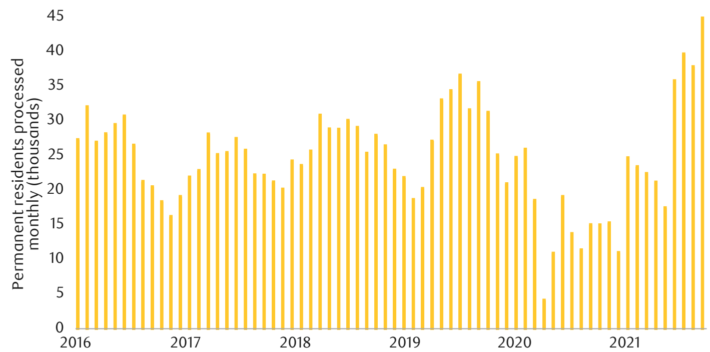
Note: Table calculated from coefficients of regression with a 1-year lookback period. As at Nov. 30, 2021. Source: Bloomberg, RBC GAM is processing applications at a faster pace to achieve its recently increased target of admitting 401,000 permanent residents this year (Exhibit 10).

- The easing of bottlenecks in the global supply chain, which has led to a shortage of the memory chips used in cars and trucks. Canada is the world's 12th-largest automobile producer, and an easing of the disruptions would be a welcome sign for the Canadian auto-parts industry as well. The shortage of chips has forced automakers around the world to prioritize production of higher-margin vehicles produced abroad.
- Devastating floods in British Columbia, which limited access to Canada's busiest port, in Vancouver, and hindered economic activity in the country's third-largest province by population.

The Bank of Canada (BOC) has already begun removing economic stimulus through the completion of its plan to end asset purchases well ahead of other developed-market central banks. Many investors believe that the BOC won't get too far ahead of the Fed on interest-rate hikes – presumably because any resulting rise in the Canadian dollar would make the country's non-oil exports less competitive. While it is true that efforts by the BOC to raise interest rates before the Fed would cause the loonie to rise, the currency is cheap and has room to strengthen before it begins to constrain economic activity. We point to the hiking cycles of 2002 and 2010 (Exhibit 11) as examples when the BOC was similarly undeterred from taking a more hawkish stance than the Fed.

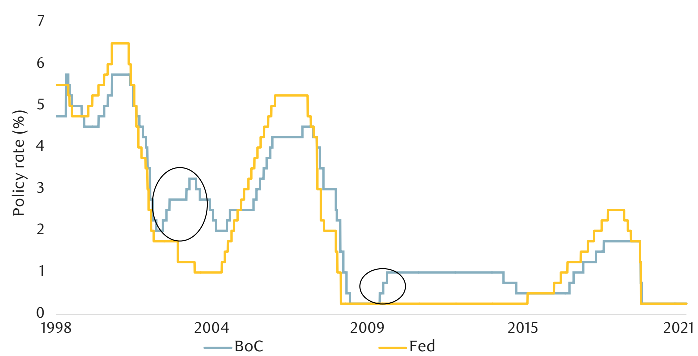
The loonie stands out as one of the few G-10 currencies to strengthen in a year when the U.S. dollar has gained. Still, the 10-cent range between $1.20 and $1.30 is unusually small in the context of exchange rates that are usually quite volatile. We continue to expect outperformance of the Canadian dollar over other developed-market currencies with a 12-month forecast of $1.17 per U.S. dollar. In the shorter term, the emergence of a new COVID variant and the associated weakness in oil and stocks may see the exchange rate test the year's highs. Further gains in the U.S. dollar are likely to be met by selling pressure, however, as Canadian investors have been waiting for greenback rallies that allow them to hedge U.S.-dollar exposure. These periods of strength would represent an opportune time for investors to accumulate Canadian dollars.

Exhibit 10: Canadian immigration



Note: As at Sep. 30, 2021. Source: Government of Canada, RBC GAM

Exhibit 11: Bank of Canada has hiked before the Fed in the past



Note: As at Nov. 30, 2021. Source: Bank of Canada, Federal Reserve, RBC GAM

Euro

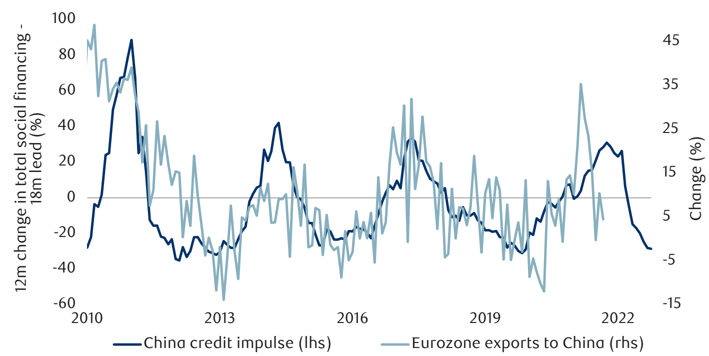
We have reined in our optimism on the euro, pulling our forecasts lower for a second consecutive quarter, as the single currency weakened by 5% since August to its current level of 1.13. Negative yields make the euro a favourite short for funding positions in higher-yielding currencies, a dynamic that is unlikely to change given the ECB's inclination to leave interest rates on hold at a time when other central banks have been hinting at rate hikes next year.

Three other developments limit the euro's prospects and are largely responsible for our change in forecast:

1. Slower Chinese economic activity and a slowdown in loan growth hint at a meaningful reduction in European exports to China (Exhibit 12).
2. Germans voted in a more conservative coalition government, which will likely push back against plans for European nations to increase fiscal spending. This adds extra pressure on the ECB to keep monetary policy loose.
3. Europe's higher exposure to imported energy makes the region's economy more vulnerable to shocks like the spike in natural-gas prices (Exhibit 13). Not only is this hard on consumer wallets and corporate profits, but the higher import cost also erodes Europe's current-account surplus.

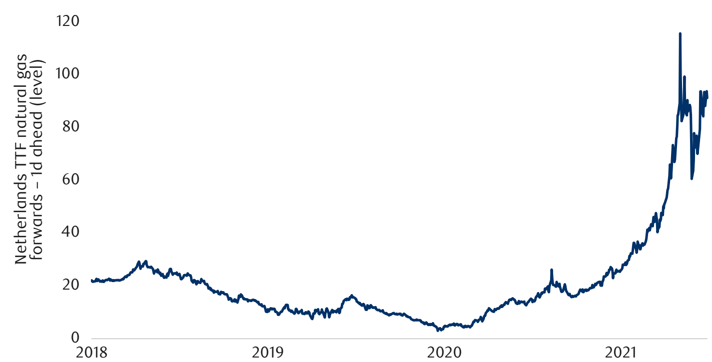
Even with these negatives, we are penciling in a rise in the euro as the greenback weakens and because we think the Fed will hike fewer times next year than market indicators suggest. We have dropped our 12-month forecast this quarter to US$1.24 per euro.

Exhibit 12: Weaker demand from China



Note: As at Oct. 29 2021. Source: China General Administration of Customs, Eurostat, RBC GAM

Exhibit 13: Rising energy prices weigh on Eurozone economic growth



Note: As at Nov. 30, 2021. Source: Bloomberg, RBC GAM

Conclusion

Volatility is returning to the foreign-exchange markets, fueled in part by a new COVID variant and in part by diverging central-bank monetary policies. The U.S. dollar has benefited from market expectations that interest rates will be raised next year, but may soon reverse some of its gains as moderating U.S. inflation would suggest less upward pressure on rates. While we have reined in our optimism on the low-yielding euro and Japanese yen, we remain positive on cyclical currencies such as the Canadian dollar. The resilience of the Chinese renminbi amid otherwise negative Chinese developments has been a stabilizing factor for currency markets and is a theme worth monitoring in the year ahead.

Regional outlook – U.S.

Brad Willock, CFA
V.P. & Senior Portfolio Manager
RBC Global Asset Management Inc.

The S&P 500 Index generated a return of 1.3% during the three-month period ended November 30, 2021, as robust earnings and extremely easy financial conditions were largely offset by concerns about inflation at a three-decade high, the increased likelihood next year of tighter monetary policy and a resurgence of COVID-19 cases in the U.S. and elsewhere. The U.S. stock benchmark was up 24.4% through November to more than twice its March 2020 low, and just off the all-time high close on November 18. Given the changing investment landscape and recent detection of a new coronavirus variant, it seems like an ideal time to evaluate where we stand.

Let's start by recognizing that the pandemic remains our most important economic and geopolitical consideration. On November 26, the World Health Organization declared the latest SARS-Cov-2 variant and named it Omicron. First identified in South Africa on November 9, the variant has a number of mutations that leads some epidemiologists to fear it may pose another significant hurdle as we close in on the end of the pandemic's second year. However, it will take until mid-December to determine how contagious and virulent the variant is, and how effective human immune systems, the current crop of vaccines and anti-viral therapies will be at dealing with this new threat. The best case would be that Omicron proves less virulent than Delta and replaces it as the dominant strain. The worst case would be that Omicron turns out to be highly contagious and deadly enough that vaccines require significant reformulations to offer protection. In any case, uncertainty abounds, and in such circumstances financial markets typically move over weeks to levels that represent an expected outcome somewhere between the best- and worst-case scenarios. Investors will be looking closely at the most pandemic-sensitive parts of the market such as travel, gaming, hotels, cruise lines, restaurants and energy. Many stocks in these areas were already down significantly in the weeks before the Omicron news as macroeconomic storm clouds gathered. We will be looking for high-quality companies that appear to be pricing in a worst-case scenario. The appearance of the Alpha, Beta and Delta variants all caused short-lived financial-market sell-offs. Pfizer has said it would take about 100 days to adapt its vaccine formulation to the chemistry of the new variant if needed, giving investors a timeline to recalibrate the risks.

United States – Recommended sector weights

	S&P 500	
Energy	2.8%	0.2%
Materials	2.5%	-0.8%
Industrials	7.9%	0.0%
Consumer discretionary	12.9%	0.6%
Consumer staples	5.6%	-0.8%
Health care	12.7%	0.5%
Financials	10.9%	0.6%
Information technology	29.3%	0.7%
Communication services	10.3%	0.0%
Utilities	2.4%	-0.5%
Real estate	2.7%	-0.5%

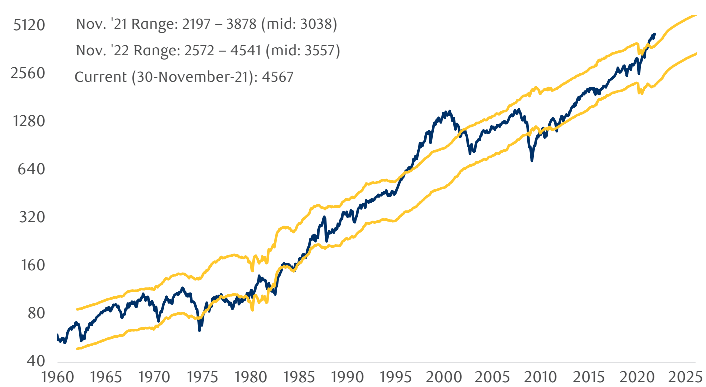
-1.0% -0.5% 0.0% 0.5% 1.0%

Underweight Overweight

Note: As of Nov. 2021. Source: RBC GAM

> "The path taken by the pandemic will have a lot to say about when and how fast the Fed raises interest rates. The Omicron variant could, if anything, prompt policymakers to pause tightening plans until the outlook becomes clearer."

S&P 500 equilibrium
Normalized earnings and valuations



Source: RBC GAM

On the monetary-policy front, the U.S. Federal Reserve (Fed) has started reducing stimulus, and policymakers have signaled that bond purchases related to quantitative easing will end by June of next year. Recent 30-year highs in consumer inflation have prompted investors to expect the Fed to accelerate the winding-down of bond purchases and begin hiking interest rates as early as April. The Fed is focused on achieving maximum employment and seems convinced that this year's inflation jump should ease as supply-chain congestion is relieved and demand shifts from goods to services. The path taken by the pandemic will have a lot to say about when and how fast the Fed raises interest rates. The Omicron variant could, if anything, prompt policymakers to pause tightening plans until the outlook becomes clearer.

In terms of fiscal policy, Congress has a lot to get done before its members head home for the year-end holidays. The Democrats' US$1.2 trillion infrastructure proposal has been signed into law by President Biden, but a US$1.7 trillion bill focused on the party's social and climate agenda faces cuts in the Senate after being passed by the House of Representatives.

Even prior to the appearance of the Omicron variant, we had begun reducing our exposure to travel, hotels, retail and energy because we thought valuations assumed a best-case scenario with respect to the pandemic. Data shows that the number of new COVID-19 cases began rising in the majority of U.S. states during the last week of October and that hospitalizations began rising over the last two weeks of November. Still, we have refrained from shifting to an overweight allocation to defensive stocks because the economic backdrop remains constructive. The job market is improving, with first-time unemployment claims at a 50-year low and wages and salaries growing at a double-digit rate. According to the Atlanta Fed, real GDP growth for the fourth quarter is forecast to exceed 8%. Next year, economic growth is expected to slow to between 3% and 4%, which should translate into corporate revenue growth of 7% and earnings growth of 9%. In the meantime, we continue to maintain exposure to long-term themes such as digitization, electrification, decarbonization, artificial intelligence and machine learning, and infrastructure improvement. These are the areas that we believe are likely to experience tailwinds for many years to come.

Regional outlook – Canada


Sarah Neilson, CFA
Portfolio Manager
RBC Global Asset Management Inc.


Irene Fernando, CFA
Portfolio Manager
RBC Global Asset Management Inc.

The S&P/TSX Composite Index climbed 1.0%, reaching new highs in the three-month period ended November 30, 2021. In U.S.-dollar terms, the S&P/TSX lost 0.2% due to a strengthening U.S. dollar. Global equity markets continued to reflect in some cases optimism about the progress of COVID-19 vaccinations in much of the developed world, fueling the economic growth and strong corporate earnings. The S&P 500 Index gained 1.3%, and the MSCI World Index fell 0.9% during the period.

The continued strong market returns in Canada have been supported by positive momentum in commodity prices, especially in energy, as improving demand from the economic recovery has been met with low inventory levels. Financials, the Canadian market's biggest sector, have also contributed significantly to the S&P/TSX returns, thanks to improved bank earnings and strong capital markets. The Information Technology sector rallied to start the year but faded in the most recent quarter as highly valued growth companies struggled to keep pace with cyclical sectors. Defensive and interest-sensitive sectors were the worst performers over the three-month period.

Evidence of and expectations for sustained economic strength helped propel Canadian stocks. Consensus forecasts call for Canadian GDP to recover and grow by 5.0% in 2021, and climb another 4.0% in 2022. The Bank of Canada (BOC), which has a positive outlook on the recovery, recently halted its support for the economy with the curtailment of quantitative easing. Canada's relatively high vaccination rates should help limit any COVID-related restrictions going forward, supporting the economic momentum. While Canadian businesses are anticipating strong demand as restrictions ease, supply-chain constraints and labour challenges are raising costs and boosting inflation. Ultimately, near-term growth could slow, and central banks will be weighing the persistence of rising inflation with moderating growth as they move to reduce monetary stimulus. Investors continue to anticipate that the BOC will begin to raise interest rates in mid-2022. Rate increases could take some of the euphoria out of Canada's housing market, where prices have steadily increased over the past decade. Residential investment now represents close to 10% of Canadian GDP, a record level, and a lack of supply has kept prices and demand firm, further supported by low borrowing costs.

The outlook for S&P/TSX earnings continues to improve, with consensus estimates forecasting growth of 67% in 2021 and a further 5% in 2022. The swift economic recovery, vaccine rollouts, strong commodity prices and significant economic stimulus have supported the earnings outlook and expectations are for market earnings in 2021 to surpass 2019's pre-pandemic earnings by 20%. Looking

Canada – Recommended sector weights

	S&P/TSX Composite	
Energy	13.1%	0.4%
Materials	11.4%	-0.6%
Industrials	11.7%	0.5%
Consumer discretionary	3.6%	0.4%
Consumer staples	3.6%	0.4%
Health care	0.8%	-0.3%
Financials	32.1%	0.9%
Information technology	11.5%	-1.0%
Communication services	4.8%	0.2%
Utilities	4.4%	-0.4%
Real estate	3.0%	-0.5%

-1.5% -1.0% -0.5% 0.0% 0.5% 1.0% 1.5%

Underweight — Overweight

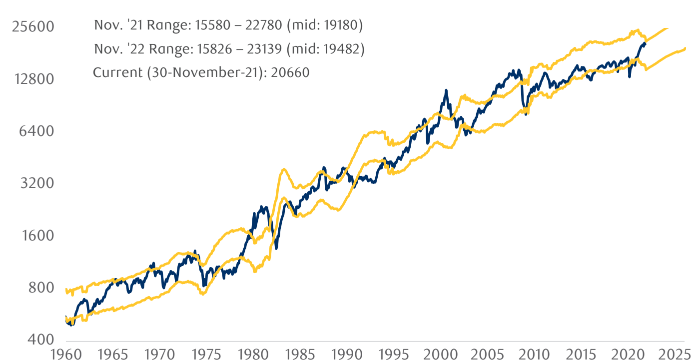
Note: As of Nov. 2021. Source: RBC GAM

out to 2022, earnings growth is expected to come from all sectors, with Industrials, Energy, Consumer Discretionary and Information Technology the biggest contributors. The healthy earnings outlook for the broad market will likely lead to higher dividends and increased share buybacks. Inflation pressures and supply-chain issues could weigh on next year's profit margins and growth expectations, though we continue to see evidence of costs being passed through to consumers in the form of higher prices.

S&P/TSX valuations are close to their historical average multiple, and at 14.7 times forward earnings there remains a significant multiple discount to the S&P 500, which has a forward P/E of 20.4. The discount is explained by the composition of the Canadian stock market, which is heavily exposed to the Financials, Energy and Materials sectors. We think the S&P/TSX could close the valuation discount in a cyclically driven recovery scenario.

S&P/TSX Composite Equilibrium

Normalized earnings and valuations



Source: RBC GAM

The improving economy, the restoration of pre-pandemic levels in dividends and buybacks and strong capital markets are supporting a positive outlook for the Financials sector. The outlook for Canadian bank earnings continues to improve, with rising loan growth and better credit quality offsetting persistently low interest rates and higher spending on technology. Moreover, regulators recently allowed banks to begin raising dividends and share buybacks. The banks trade at fair valuations, and the case for continued stock returns stems from accelerating business growth, interest-rates increases from historically low levels and the benefits of cost-cutting and technology investment.

North American benchmark oil prices have gained about 35% this year, recovering from record lows experienced last year. Demand for fuel used in transportation and manufacturing as the economy recovered from the pandemic lows drove crude oil demand to over 95 million barrels a day, not quite at the pre-pandemic 100-million-barrel-a-day level, but supply has not kept pace. Natural-gas prices have also been surging globally due to low inventories. As a result of these higher fuel prices, energy producers are set to generate significant gains in free cash flows, which is being used to reduce debt and boost dividends and share buybacks. Valuations remain low for the Energy sector due to near-term price uncertainty and continued questions about the longer-term outlook for demand and spending requirements to address emissions reductions.

Both of Canada's major railroad companies, Canadian Pacific and Canadian National, recently vied to acquire U.S.-based Kansas City Southern, and Canadian Pacific emerged as the winner in September. The acquisition, which requires the approval of the U.S. Surface Transportation Board, would create the first rail network linking the U.S., Canada and Mexico, and provide Canadian Pacific with business opportunities for many years to come. In the near term, supply-chain issues and volatility in volumes could weigh on the outlook.

Looking ahead, global plans to address climate change by encouraging companies and individuals to reduce carbon emissions will remain important themes, with massive amounts of funding required to address emissions-reduction goals. Corporations and governments are weighing the potential for global carbon-pricing collaboration and more stringent climate-risk disclosure requirements. The pace of transition is set to increase and there will be significant investment and economic impacts from these actions.

Regional outlook – Europe

David Lambert
Senior Portfolio Manager,
RBC Global Asset Management (UK) Limited

European equity markets kept grinding higher over the period, supported by strong earnings growth across all industries and reflecting easy comparisons with a weak 2020. However, the stock market's exceptional strength is due largely to the fact that earnings are consistently exceeding expectations which – unusually – did not trend downward as the year progressed.

Macroeconomic indicators have continued to be positive, suggesting economic expansion, although they are no longer rising. A period in which these indicators have flattened out often precedes a tendency for investors to shift to less risky investments as they favour higher-quality companies. This change in preference isn't necessarily a negative for the overall stock market as long as positive macroeconomic indicators continue to support good earnings growth, and we do expect this to be supportive for equity markets.

Going into 2022, we expect earnings growth across Europe to fall back to a more normal 7% to 9% from the extraordinary 45% pace that followed the recovery from the depths of the pandemic. We don't consider valuations to be particularly stretched (and relative to the U.S., Europe still looks cheap), adding to our view of a benign environment going into next year.

That said, we need to be mindful of today's elevated levels of global inflation and their possible impact on bond yields. The inflation spike has been driven primarily by the extraordinary demand for goods that arose out of coronavirus-related lockdowns, and which has outstripped supply. The supply chain has been under huge strain and we have seen many industries struggle to obtain parts and goods in a timely fashion, which has exacerbated the situation. We are confident that the supply-chain issues will resolve themselves over the course of 2022, but their continued impact could keep inflation higher for longer.

The reaction of central banks and the bond market to the inflation uncertainty will have a huge impact on investors. Equity investors don't like swift rises in bond yields, but can cope with slowly climbing yields. For this reason we continue to keep a close eye on bond yields, especially as major central banks embark on scaling back the bond purchases that over a decade have ballooned their balance sheets.

We are keeping an eye on the COVID situation in Europe, where soaring case numbers led to short-term lockdowns last month. We do not expect the latest outbreaks to hurt the long-term investment case for the companies we own in our portfolios, and we believe that any short-term equity-market volatility associated with the latest restrictions could provide investment opportunities.

Europe – Recommended sector weights

	MSCI Europe	Recommended weight
Energy	4.7%	-0.2%
Materials	7.9%	-0.5%
Industrials	15.2%	0.3%
Consumer discretionary	11.8%	0.5%
Consumer staples	12.7%	0.0%
Health care	14.3%	-0.2%
Financials	15.8%	0.8%
Information technology	8.6%	0.5%
Communication services	3.5%	-0.3%
Utilities	4.2%	-0.7%
Real estate	1.3%	-0.3%

-1.0% -0.5% 0.0% 0.5% 1.0%

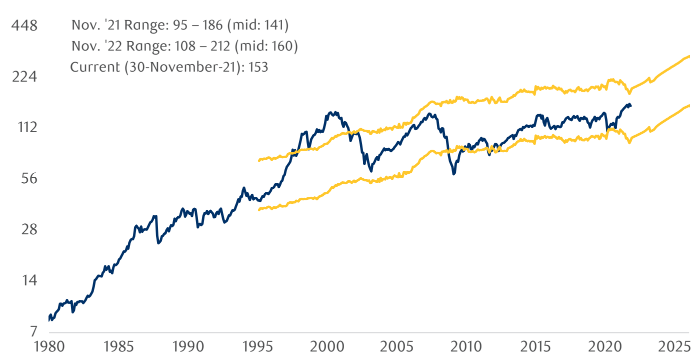
Underweight | Overweight

Note: As of Nov. 2021. Source: RBC GAM

> "We still favor capital-light, high-return businesses that have the ability to expand their asset base quickly, and thereby increase shareholder returns at a much higher rate than the broad market over a long period."

MSCI Europe Index Equilibrium

Normalized earnings and valuations



Source: RBC GAM

We recognized the need for a more "balanced" portfolio over the course of the recovery from 2020, but we are entering a phase where we can focus once again on high-quality, lower-risk companies. We still favor capital-light, high-return businesses that have the ability to expand their asset base quickly, and thereby increase shareholder returns at a much higher rate than the broad market over a long period.

Within the consumer sectors, we see large barriers to entry for luxury-goods companies. Europe is the global leader in luxury, and companies in this area have recorded their highest and most consistent returns on equity in decades. It is difficult to make inroads against entrenched luxury brands, and the industry has been among the leaders in embracing e-commerce. This backdrop leads us to believe that luxury-goods companies will offer investors significant shareholder value over the medium to long term.

Another area of interest for us in recent years has been the development of digital payments, including related services such as credit-checking, vouchers and software. It is clearly an area of growth, and one that has been dominated by U.S. businesses. However, some European companies have begun to compete globally through a combination of industry consolidation and organic growth.

We tend to shy away from capital-heavy industries, and those subject to heavy regulation such as banks, telecommunications and utilities. However, some sectors have very low valuations and are throwing off a lot of cash. One example is Energy, and we have gently added to positions in this sector.

Europe's banking industry has undergone a restructuring since the global financial crisis, and continues to do so. Many European banks have adopted a risk-averse utility-type model that emphasizes straightforward banking services over capital markets and other areas that require taking on greater financial risks. This approach means that European financial companies are less attractive as long-term investments, and they are receiving lower valuations as a result. However, the lower-risk profile and exposure to the positive impact of higher interest rates on loan margins make the banks more attractive than they have been for some time.

We have emerged from the worst global recession since the Great Depression and the quickest bear market and subsequent bull market on record, accompanied by big swings in investor sentiment. We will therefore continue to monitor our portfolios in an attempt to minimize exposure to unwanted risks and factors in the market, enabling us to maintain a good risk-return profile for the funds.

Regional outlook – Asia

Chris Lai
Associate Portfolio Manager, Asian Equities
RBC Global Asset Management(Asia) Limited

Asian equities were broadly flat over the three-month period, with a wide divergence in performance among countries. Stock markets in Indonesia and Philippines outperformed, rebounding after 12 months of underperformance. Japanese stocks also did well, as the appointment of a new prime minister brought optimism of further fiscal support. In China, economic growth weakened. We have cut our 2021 Chinese GDP forecast to 7.8%, reflecting Beijing's forceful response to COVID-19 outbreaks, cooling property markets, slowing exports and power outages earlier in the year.

We expect Asian growth to continue rising gradually, and for domestic demand to catch up to exports as a growth driver. Developed Asian countries have reached high COVID-19 vaccination rates and developing countries are starting to make progress, which in time should also lead to a surge in consumption. The factors affecting inflation are likely to shift to domestic demand from exports, and in our view inflation will remain within central-bank targets. We expect most central banks in the region to shy away from rate hikes except for those in South Korea and India, where economic growth has been more robust.

Japan

Economic growth in Japan is starting to accelerate on vaccination progress, but another surge in cases suggests that short-run economic activity will slow. While the pandemic has pushed Japan back into overall deflation, elevated commodity prices have led to welcome price increases in some areas of the economy. We expect Prime Minister Fumio Kishida to follow a fiscal course of economic expansion while the Bank of Japan (BOJ) extends its accommodative monetary policy. Equity markets in the country have been fueled by optimism of increased near-term government spending.

Business confidence at domestic companies has improved given the stabilizing COVID-19 situation. While supply constraints have resulted in stagnant production, demand remains solid, and the sharp increase in prices for raw materials and intermediate goods suggests that demand will stay strong for finished goods. However, a slowing Chinese economy could cool sales of Japanese goods, machinery in particular.

Inflation started to tick up in in the second half of 2021 due to the higher commodity prices and gradual depreciation in the yen, and an expected recovery in consumer spending may also contribute to what we expect will be an overall modest increase in inflation. The BOJ will continue to focus on maintaining easy financial conditions through bond-market transactions and lending programs. Japanese employment has been holding up well, and is forecast to be 2.8% in the fourth quarter of this year compared with 2.7% in 2021's third quarter.

Asia – Recommended sector weights

Sector	MSCI Pacific	Recommended weight
Energy	2.2%	-0.2%
Materials	6.2%	-0.3%
Industrials	11.5%	0.0%
Consumer discretionary	15.8%	0.3%
Consumer staples	5.6%	-0.3%
Health care	6.9%	0.0%
Financials	17.1%	0.3%
Information technology	19.7%	0.5%
Communication services	8.9%	0.3%
Utilities	2.0%	-0.3%
Real estate	4.0%	-0.3%

-0.6% -0.4% -0.2% 0.0% 0.2% 0.4% 0.6%

Underweight | Overweight

Note: As of Nov. 2021. Source: RBC GAM

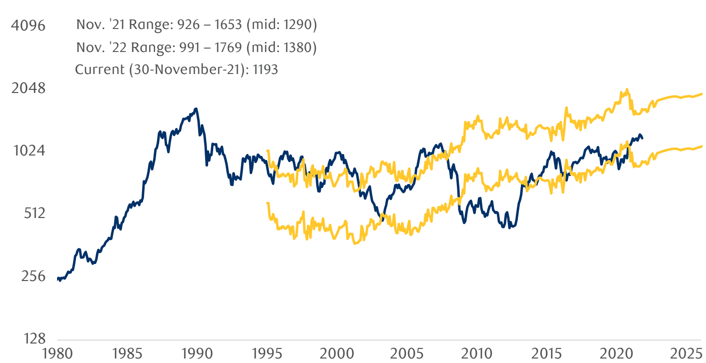
Rest of Asia

We believe that the growth slowdown in China will prompt Beijing to introduce monetary and fiscal-easing measures to bolster the economy. These steps include facilitating credit for manufacturing and small businesses, and higher fiscal spending financed in part by sales of government bonds. The government may also boost the domestic supply of coal and other fuels to ease power outages and related supply-chain disruptions. However, assuming that economic growth remains above 7%, we expect Beijing to continue with measures aimed at reducing carbon emissions as the government has committed China to being a leader in clean energy.

India's economy has been expanding quickly since the country emerged from an especially bad surge in coronavirus cases earlier this year. The economy is strong enough today and progress on vaccinations has been such that the biggest near-term issue is not demand but

MSCI Japan Index Equilibrium

Normalized earnings and valuations



Source: RBC GAM

supply. While aggregate demand shows signs of fatigue, as in weaker auto sales and exports, we believe this decline reflects supply-side bottlenecks like chip shortages. Other economic indicators exceed pre-pandemic levels and remain strong, including manufacturing tax collections. India's central bank, meanwhile, has embarked on plans to tighten monetary policy in part by ending bond purchases. However, financial conditions remain relatively loose, given that GDP growth is forecast to rise to 9.5% in the 2022 fiscal year from 7.7% in the current year.

In Indonesia, the current-account deficit has narrowed given that the country is a net commodity exporter. However, we see risks to the balance of payments from still-slow progress on COVID-19 vaccinations and an acceleration in quantitative easing. The rebound in Indonesia's economy has been one of the slowest in Asia, with a 2021 GDP forecast of 4%. By comparison, the Philippines is expanding at a 5% rate and India at nearly 8%. Economic growth has been blunted by repeated COVID-19-related lockdowns, as only 30% of the population had been fully vaccinated as of mid-November.

In South Korea, we expect GDP growth to continue making strides toward pre-pandemic levels, supporting further policy-rate hikes. Export growth remains strong, signaling a possible decoupling from slowing Chinese demand. South Korea is benefiting from exports of chemicals and other petroleum products as strong demand has enabled producers to raise prices to a degree that they can more than offset the negative impact of rising commodity-linked costs. Personal consumption is gradually recovering, boosted partly by fiscal stimulus. Consumer inflation is forecast to be 2.3% in 2021, supporting rate hikes in a country where inflation historically runs between 1% and 2%.

In Hong Kong, the pace of recovery will likely remain constrained by the pandemic, surging energy prices, slowing Chinese growth and uncertainty over U.S.-China relations. While GDP growth for 2021 is forecast at 6.8%, the economy is slowing because of China. Retail sales remain 25% below 2018 levels, reflecting a dearth of tourists, especially from China. Border restrictions in Hong Kong remain among the toughest globally.

Regional outlook – Emerging markets

Philippe Langham
Head and Senior Portfolio Manager,
Emerging Market Equities
RBC Global Asset Management (UK) Limited

Emerging-market equities have been negatively affected by the weak performance of China, which accounts for about a third of the emerging-market benchmark and has been the weakest-performing emerging-market country over the past 12 months. The decline in Chinese stocks since the start of 2021 has been driven primarily by regulatory uncertainty surrounding technology and the impact of relatively tight monetary policy. The impact of internet stocks has been particularly pronounced given that its weighting in the Chinese benchmark peaked at almost 50% a year ago.

The regulatory measures aimed at technology companies include banning unfair competition, restricting the use of personal data, and banning fake reviews and cash incentives to attract positive ratings. These moves have caused many investors to question whether Chinese authorities will allow capitalism to thrive. Our belief is that such fears can be alleviated when consideration is given to the crucial role played by the economy's private sector, which accounts for at least 80% of new jobs and is needed to help upgrade the economy in areas such as semiconductors, automation and renewable energy.

It is difficult to predict how long the regulatory overhang will last. However, recent official criticism of internet companies has been less strident, and there has been a number of announcements by mainland authorities indicating that they want to encourage foreign investment in Chinese equities, with Hong Kong's stock market remaining an important conduit.

That said, we do believe that the Chinese government's priorities have shifted in recent years from an emphasis on economic growth to the primary goal of greater equality and social stability. Going forward, we believe that it will be important to be cautious in areas that are vulnerable to government intrusion and to be positioned in areas that the government is likely to support such as renewable energy, electric vehicles and technology that reduces the country's dependence on foreigners. Companies that are truly innovative and that can compete on the global stage should fare well. This environment should ultimately favour high-quality companies with strong management teams and clear competitive advantages.

The other key issue hurting Chinese equities has been monetary and fiscal policies that have been relatively tight in contrast to what has occurred in the developed world since the onset of the pandemic almost two years ago. The growth rates of both Chinese money supply and bank lending have fallen to multi-year lows, and, as a consequence, so has GDP growth.

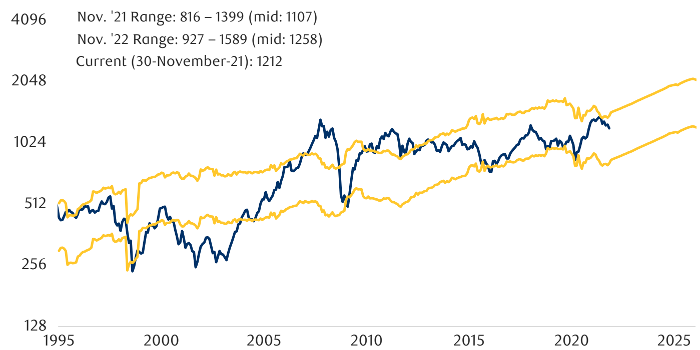
Part of this weakening has been due to recent efforts to reduce property companies' debt burdens through adherence to much tighter leverage restrictions as well as measures to cool property prices. These rules led to the much publicized financial stresses facing Evergrande, China's most leveraged developer with debts exceeding US$300 billion. The Evergrande situation has driven concerns that China may face a "Lehman moment" leading to a collapse in debt markets. But unlike U.S.-based Lehman Brothers in 2008, China's current debt crisis was triggered by authorities, and there is every reason to believe that Chinese policymakers can deal with the fallout through a managed liquidation.

Given the economy's relative weakness, some monetary-easing measures seem likely although policy should remain relatively conservative to avoid further debt build-ups. The growing political desire to upgrade the economy and secure technological independence should also support an acceleration in investment and infrastructure spending.

China's struggles come against a global economic backdrop that has been brightening somewhat. The reopening of economies has led to the strong outperformance of value and cyclical stocks following several years of underperformance, supported by pent-up consumer demand and rising inflation due in part to loose U.S. monetary and fiscal policies. Sustained strength in energy prices has the potential to intensify any inflation scare and could lead to uncomfortably high bond yields and the underperformance of high-valuation stocks. Emerging-market stocks would benefit most from a situation in which economic growth remains strong, with value and cyclical stocks leading. If, on the other hand, we enter a stagflationary environment, defensive stocks trading at reasonable valuation levels would outperform. The course of the pandemic, and the emergence of any new COVID-19 variants, will of course also affect the cyclical recovery that is unfolding. There continues to be much uncertainty as to the extent to which existing vaccines can contain new variants such as the recently discovered Omicron strain.

Stark valuation differences remain in emerging markets at the sector level. Sectors that have benefited from the pandemic such as Health Care, Consumer Discretionary, Communication Services and Information Technology continue to look very expensive relative to history. On the other hand, the Financials and Energy sectors trade at relatively low valuations even after rallying last year. In

MSCI Emerging Markets Index Equilibrium
Normalized earnings and valuations



Source: RBC GAM

terms of sector positioning, we favour consumer sectors driven by high returns and tailwinds such as rising incomes, positive reform momentum, attractive demographics, rising urbanization and positive employment trends. Among cyclical sectors, we prefer Financials based on valuation, improving asset quality and the scope for growth in customer numbers and expanded services. We have reduced our exposure in recent months to the more expensive internet-related parts of the market. In addition to concerns on valuation, we see increasing signs that internet companies will face headwinds in terms of competition, regulation and higher taxes.

Much of the difference in emerging-market country performance can be attributed to the sectoral make up of individual indexes, with Chile, Turkey and other markets whose companies tend to be cyclical and exposed to Financials looking relatively cheap. Taiwan, with its high technology weighting, looks expensive, but we are optimistic about the outlook for India. Not only is India's economy expanding quickly, but the country offers a good choice of high-quality companies. However, we recognize that the Indian stock market's recent strong performance means that it is beginning to look expensive. Latin America's equity markets have disappointed investors over the past year, but a combination of attractive valuations, economic recovery and policy improvements support a more optimistic outlook. That said, political instability remains a larger risk in Latin America than in many of our markets.

RBC GAM Investment Strategy Committee Members

Daniel E. Chornous, CFA
Chief Investment Officer
RBC Global Asset Management Inc.
Chair, RBC GAM Investment Strategy Committee

Dan Chornous is Chief Investment Officer of RBC Global Asset Management Inc., which has total assets under management of approximately $602.9 billion*. Mr. Chornous is responsible for the overall direction of investment policy and fund management. In addition, he chairs the RBC Investment Strategy Committee, the group responsible for global asset-mix recommendations and global-fixed income and equity portfolio construction for use in RBC Wealth Management's key client groups including retail mutual funds, International Wealth Management, RBC Dominion Securities Inc. and RBC Phillips, Hager & North Investment Counsel Inc. He also serves on the Board of Directors of the Canadian Coalition for Good Governance and is Chair of its Public Policy Committee. Prior to joining RBC Asset Management in November 2002, Mr. Chornous was Managing Director, Capital Markets Research and Chief Investment Strategist at RBC Capital Markets. In that role, he was responsible for developing the firm's outlook for global and domestic economies and capital markets as well as managing the firm's global economics, technical and quantitative research teams.

*AUM in CAD as of November 30, 2021

Stephen Burke, PhD, CFA
Vice President and Portfolio Manager
RBC Global Asset Management Inc.

Stephen is a fixed-income portfolio manager and Head of the Quantitative Research Group, the internal team that develops quantitative research solutions for investment decision-making throughout the firm. He is also a member of the PH&N IM Asset Mix Committee. Stephen joined Phillips, Hager & North Investment Management in 2002. The first six years of his career were spent at an investment-counselling firm where he quickly rose to become a partner and fixed-income portfolio manager. He then took two years away from the industry to begin his Ph.D. in Finance and completed it over another three years while serving as a fixed-income portfolio manager for a mutual-fund company. Stephen became a CFA charterholder in 1994.

Soo Boo Cheah, MBA, CFA
Senior Portfolio Manager
RBC Global Asset Management (UK) Limited

Based in the U.K., Soo Boo is responsible for managing global fixed-income allocations. He specializes in assessing the impact of central bank policies and global macroeconomic trends on developed-market bonds. In his role as a senior portfolio manager, he integrates a wide range of investment strategies involving interest rates, currencies, and derivatives. Soo Boo started his career in the investment industry in 2000 and holds an MBA from University of New Brunswick. Soo Boo has been a CFA charterholder since 2002.

Hanif Mamdani

Head of Alternative Investments
RBC Global Asset Management Inc.

Hanif Mamdani is Head of both Corporate Bond Investments and Alternative Investments. He is responsible for the portfolio strategy and trading execution of all investment-grade and high-yield corporate bonds. Hanif is Lead Manager of the PH&N High Yield Bond and Alternative strategies, including a multi-strategy hedge fund. He is also a member of the Asset Mix Committee. Prior to joining the firm in 1998, he spent 10 years in New York with two global investment banks working in a variety of roles in Corporate Finance, Capital Markets and Proprietary Trading. Hanif holds a master's degree from Harvard University and a bachelor's degree from the California Institute of Technology.

Sarah Riopelle, CFA

Vice President and Senior Portfolio Manager
Investment Solutions
RBC Global Asset Management Inc.

Since 2009, Sarah has managed the entire suite of RBC Portfolio Solutions. Sarah is a member of the RBC GAM Investment Strategy Committee, which sets global strategy for the firm, and the RBC GAM Investment Policy Committee, which is responsible for the investment strategy and tactical asset allocation for RBC Funds' balanced products and portfolio solutions. In addition to her fund management role, she works closely with the firm's Chief Investment Officer, ensuring that all aspects of the investment management function at RBC GAM are running smoothly. She is a member of the RBC Wealth Management Diversity Leadership Committee. Sarah joined RBC Global Asset Management in 2003 as a Senior Analyst within Investment Strategy. From there, she moved to the Canadian Equity team as an analyst and then a portfolio manager. She began her career in the investment industry in 1996 after graduating from the University of Ottawa with a Bachelor of Commerce degree, majoring in Finance and International Management. She was awarded the Chartered Financial Analyst designation in 2001.

Martin Paleczny, CFA

Vice President and
Senior Portfolio Manager
RBC Global Asset Management Inc.

Martin Paleczny, who has been in the investment industry since 1994, began his career at Royal Bank Investment Management, where he developed an expertise in derivatives management and created a policy and process for the products. He also specializes in technical analysis and uses this background to implement derivatives and hedging strategies for equity, fixed-income, currency and commodity-related funds. Since becoming a portfolio manager, Martin has focused on global allocation strategies for the full range of assets, with an emphasis on using futures, forwards and options. He serves as advisor for technical analysis to the RBC GAM Investment Strategy Committee.

Jaco Van der Walt, DCom

Vice President and
Global Head of Quantitative Research & Investments
RBC Global Asset Management Inc.

As Head of Quantitative Investments, Jaco leads an experienced team that is driven to continually innovate across all its capabilities, including research, portfolio management, data and systems to leverage the combination of human and machine in investment decision-making. He previously held an executive role at one of South Africa's largest financial services companies, leading the Investment Management Office, with experience spanning pensions, insurance, banking and wealth management. As asset owner, he also chaired the boards and investment committees of several of the company's pension plans, promoting investment excellence and driving transformational change to ensure members reach their retirement goals. Jaco began his investment career in 1996 and holds a Master's degree in Economics from the University of Toronto and a Doctorate from the University of Pretoria.

Dagmara Fijalkowski, MBA, CFA

Head, Global Fixed Income & Currencies
RBC Global Asset Management Inc.

As Head of Global Fixed Income and Currencies, Dagmara leads a team of 40+ investment professionals in Toronto, London and Minneapolis with almost $100 billion in assets under management. In her duties as a portfolio manager, Dagmara leads management of several bond funds, including the RBC Bond Fund, and manages foreign-exchange hedging and active overlay programs. She leads the Fixed Income Strategy Committee which determines appropriate level of risk taking given market opportunities. Dagmara is a member of the RBC Investment Policy Committee, which determines the asset mix for balanced products; and the RBC Investment Strategy Committee. In 2016, she was appointed to the RBC GAM Executive Committee. Dagmara, who began her investment career in 1994, holds an MBA from the Richard Ivey School of Business at the Western University in Canada and a Master's degree in economics from the University of Lodz in Poland. Dagmara has been a CFA charterholder since 1997.

Stuart Kedwell, CFA

Senior Vice President and
Senior Portfolio Manager
RBC Global Asset Management Inc.

Stu co-leads the North American Equity team and is a member of the RBC GAM Investment Strategy Committee, which is responsible for establishing the firm-wide global asset mix for mutual funds and for institutional and high net worth private clients. Stu began his career in 1996 with RBC Dominion Securities in the firm's Generalist program, a two-year internship in which participants rotate through different areas of the firm. In 1998, he joined the RBC Investments Portfolio Advisory Group, which provides investment ideas and recommendations to RBC DS Investment Advisors. He was also a member of the RBC DS strategy & focus list committees. Stu has been with the firm since 2002 and is a CFA charterholder.

Eric Lascelles

Chief Economist
RBC Global Asset Management Inc.

Eric is the Chief Economist for RBC Global Asset Management Inc. (RBC GAM) and is responsible for maintaining the firm's global economic forecast and generating macroeconomic research. He is also a member of the RBC GAM Investment Strategy Committee, the group responsible for the firm's global asset-mix recommendations. Eric is a frequent media commentator and makes regular presentations both within and outside RBC GAM. Prior to joining RBC GAM in early 2011, Eric spent six years at a large Canadian securities firm, the last four as the Chief Economics and Rates Strategist. His previous experience includes positions as economist at a large Canadian bank and research economist for a federal government agency.

Scott Lysakowski, CFA

Vice President and Senior Portfolio Manager
Head of Canadian Equities (Vancouver)
RBC Global Asset Management Inc.

Scott is Head of the Vancouver-based Canadian Equity Team. He is primarily responsible for overseeing equity research and portfolio management of the firm's core Canadian equity strategies. Scott also serves as lead manager for the Canadian income strategies. Scott began his investment management career with the firm in 2002 as a senior research analyst and portfolio manager within the Toronto-based Canadian Equity Team. He transitioned to the Vancouver team seven years later and assumed his current leadership role in 2012. During his 15-year tenure with the organization, he has conducted research for and managed a broad spectrum of Canadian equity portfolios, specializing in dividend and income mandates.

Milos Vukovic, CFA

Vice President, Investment Policy
RBC Global Asset Management Inc.

Milos, who joined RBC in 2003, oversees investment-management activities including new-fund launches, performance analytics and trade-cost analysis. He is also responsible for developing and monitoring investment mandates and implementing tactical asset allocation for the RBC GAM investment solutions. Milos earlier worked for a Big 4 accounting firm and two top-tier securities firms. He earned an MBA at the Schulich School of Business and has held the CFA designation since 2004. He is a board member of both the Canadian Buy-Side Investment Management Association and the Canadian Advocacy Council for Canadian CFA Institute Societies, and recently joined IIROC's Market Structure Advisory Committee.

Brad Willock, CFA

Vice President and
Senior Portfolio Manager
RBC Global Asset Management Inc.

Brad Willock joined RBC Global Asset Management in July 2002 and is a Senior Portfolio Manager and CFA charterholder. In his current role, Brad has responsibility for RBC Global Asset Management's core and income-oriented U.S. equity strategies. He joined RBC in May 1996 after receiving a bachelor's of commerce degree with distinction from the University of Calgary. Prior to that, Brad obtained a bachelor's of science degree at the University of British Columbia and represented Canada at the 1992 Barcelona Summer Olympics in volleyball.

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