RBC Global Asset Management

The Global Investment Outlook

RBC GAM Investment Strategy Committee

FALL 2020

The RBC GAM Investment Strategy Committee

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

Eric Savoie, MBA, CFA
Associate Investment Strategist
RBC Global Asset Management Inc.

Daniel E. Chornous, CFA
Chief Investment Officer
RBC Global Asset Management Inc.

Equity markets have staged a remarkable recovery as central banks provided critical backstops, economies gradually emerged from shutdown and investor confidence was restored. The economy rebounded quickly after mass quarantines, but progress has slowed as the easiest gains have already occurred.

Economic activity rebounds

The world is on a much better footing than a quarter ago as economic activity has substantially rebounded, the threat of COVID-19 has moderated and progress toward a vaccine has progressed. The recovery began earlier than many investors expected, supported by unprecedented amounts of monetary and fiscal stimulus. Real-time measures of activity started to turn up in mid-April and continued to improve until just recently. At this point, developed economies have reclaimed a little more than half of their lost output. Economies are again expanding, but we expect 2020 GDP to be less than 2019 given the magnitude of the decline earlier in the year. We now forecast a contraction in global GDP of 4.0% in 2020, which represents a 0.6 percentage point improvement versus last quarter.

New headwinds emerge and the pace of recovery is slowing

The economy continues to face a variety of challenges on the journey back to normal. Many of the sectors that remain depressed are likely to be structurally limited until virus worries abate. Unemployment remains elevated and those who are still jobless may have difficulty finding work until their industries return to normal operation, which could be months or even years out. For corporations, credit problems usually occur with a lag, meaning the 2020 recession could result in increased defaults in 2021. The latest survey of senior U.S. loan officers suggests some tightening in credit conditions is occurring and that fiscal headwinds are starting to mount. The U.S. has already dialed back its support for the unemployed which could limit consumer spending. We do not believe that these challenges will derail the economic recovery, but they do suggest that it will occur at a slower pace than what we have seen so far.

U.S. presidential election looms

The U.S. presidential election is fewer than two months away and betting markets are favouring a Biden victory over Trump at the time of writing. The Biden platform proposes substantial changes compared with Trump's mostly status quo plan. Some of Biden's proposals could hinder economic growth, including higher taxes, increased regulation and limitations on the energy industry. But there are several policies that could boost economic growth, such as a more coordinated national approach to the coronavirus, a larger fiscal stimulus package, less protectionism and more immigration. Overall, Biden's platform may be worse for growth in the short term, but better beyond a one-year horizon. Equity investors, however, may be more concerned with his proposed corporate-tax hikes than economic growth, so a Biden victory could pose a headwind for the stock market to the extent that this outcome is not already fully priced in.

U.S.-dollar weakness expected to persist

The downtrend in the U.S. dollar is now clearly established. The 10% decline in the trade-weighted dollar since March is just the beginning of a longer-term period of U.S.-dollar weakness, supported by a number of structural, cyclical and political factors. We expect G10 currencies, most notably the euro and the yen, to continue to outperform their emerging-market peers during this phase in the U.S.-dollar cycle. Our view on the Canadian dollar is more nuanced. We have shifted from bearish to bullish on the Canadian currency in acknowledgement of some new positive factors and recognition that the U.S.-dollar downtrend will likely prevail as a more important influence on currency markets.

Sovereign-bond yields remain historically low

The weak economy and highly accommodative central-bank policies resulting from the pandemic pulled longer-term government-bond yields around the world to historically low levels. In the past quarter, yields remained near these levels and fluctuated in a narrow range. Our composite of global bonds suggests yields are well below our modelled equilibrium levels and represent severe valuation risk. Real, or after-inflation, yields are currently negative and we don't think this situation is sustainable as investors will eventually demand compensation for tying up their funds. However, we don't think yields will rise by a significant amount in the foreseeable future because of structural changes related to demographics, an increased preference for saving and the maturation of emerging-market economies. Even a gradual increase in sovereign-bond yields would generate low single-digit to slightly negative total returns, potentially for many years.

Stocks surge as investors bet on earnings recovery

The equity market rally that began in March extended into the summer, with most major indexes posting double-digit gains in the past three months to fully erase or greatly minimize their prior losses. To the extent that investors are looking beyond the pandemic, earnings lost due to COVID-19 have little impact on the present value of stocks as long as earnings ultimately regain their prior trajectory. Firms have experienced severe profit pressure during the shutdown and recovery, but investors are also focused on future earnings which are unlikely to feature COVID-19-related distortions. Within investing styles, the pandemic has accelerated the trend of growth-stock outperformance and the valuation gap between growth and value stocks has now reached extremes not seen since the late 1990s technology bubble. Valuations have crept up in the U.S. equity market, in particular. Our global fair-value composite is now above equilibrium and at its highest reading in over a decade. But valuation dynamics differ significantly among regions, with U.S. equities the most fully priced and other stock markets still at particularly attractive levels.

Asset mix – boosting equity allocation by one percentage point, sourced from bonds

Monetary policy is expected to remain highly accommodative in order to support the economy and financial markets, and price-insensitive asset purchases by central banks will likely keep bond yields from rising. In this environment, we expect sovereign bonds to deliver low-single-digit to slightly negative total returns. Critically, at these low yield levels, sovereign bonds offer less cushion in a balanced portfolio against any deterioration in the macroeconomic outlook.

We recognize that elevated equity-market valuations and optimistic investor sentiment leave stocks vulnerable to correction in the near term, and that style exposures should be managed given the massive valuation gap between growth and value stocks. Over the longer term, however, stocks offer superior return potential versus bonds, a view supported by the still significant equity-risk premium that exists in today's low-interest-rate environment. For these reasons, we shifted one percentage point from our bond allocation to stocks this quarter. For a balanced, global investor, we currently recommend an asset mix of 62 percent equities (strategic neutral position: 60 percent) and 37 percent fixed income (strategic neutral position: 38 percent), with the balance in cash.

Economic & Capital Markets Forecasts

Economic forecast (RBC GAM Investment Strategy Committee)

	United States		Canada		Europe		United Kingdom		Japan		China		Emerging markets*	
	Fall 2020	Change from Summer 2020	Fall 2020	Change from Summer 2020	Fall 2020	Change from Summer 2020	Fall 2020	Change from Summer 2020	Fall 2020	Change from Summer 2020	Fall 2020	Change from Summer 2020	Fall 2020	Change from Summer 2020
Real GDP														
2019A	2.16%		1.66%		1.28%		1.45%		0.69%		6.12%		4.58%	
2020E	(6.00%)	1.10	(7.00%)	1.80	(7.00%)	3.60	(9.00%)	2.00	(5.30%)	2.60	1.25%	1.35	(1.70%)	(0.90)
2021E	3.40%	(2.30)	4.50%	0.70	3.30%	(0.30)	5.20%	2.10	1.40%	(0.40)	8.00%	(2.70)	6.60%	(1.40)
CPI														
2019A	1.81%		1.96%		1.19%		1.79%		0.49%		2.90%		3.19%	
2020E	0.80%	0.80	0.80%	0.80	0.30%	0.80	0.80%	0.80	(0.20%)	0.80	3.00%	1.00	3.10%	0.90
2021E	1.50%	0.50	1.50%	0.50	1.00%	0.50	1.50%	0.50	0.50%	0.50	2.30%	(0.20)	2.90%	0.10

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

Targets (RBC GAM Investment Strategy Committee)

	Aug. 2020	Forecast Aug. 2021	Change from Summer 2020	1-year total return estimate* (%)
Currency Markets against USD				
CAD (USD–CAD)	1.30	1.29	(0.11)	1.4
EUR (EUR–USD)	1.19	1.27	0.10	5.7
JPY (USD–JPY)	105.91	99.00	(2.00)	6.7
GBP (GBP–USD)	1.34	1.36	0.14	1.6
Fixed Income Markets				
U.S. Fed Funds Rate (Upper Bound)	0.13	0.13	N/C	N/A
U.S. 10-Year Bond	0.70	0.75	N/C	0.3
Canada Overnight Rate	0.25	0.25	N/C	N/A
Canada 10-Year Bond	0.62	0.70	(0.05)	(0.1)
Eurozone Deposit Facility Rate	(0.50)	(0.50)	N/C	N/A
Germany 10-Year Bund	(0.40)	(0.30)	N/C	(1.4)
U.K. Base Rate	0.10	0.10	N/C	N/A
U.K. 10-Year Gilt	0.31	0.40	N/C	(0.6)
Japan Overnight Call Rate	(0.06)	(0.10)	0.10	N/A
Japan 10-Year Bond	0.05	0.00	N/C	0.6
Equity Markets				
S&P 500	3500	3675	575	6.7
S&P/TSX Composite	16514	16700	450	4.3
MSCI Europe	121	128	6	8.5
FTSE 100	5964	6150	75	6.8
Nikkei	23140	24600	1000	8.1
MSCI Emerging Markets	1102	1175	185	8.9

*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 setting is 60% equities, 38% fixed income, 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 1979 – 2019, 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	Past range	Fall 2019	New Year 2020	Spring 2020	Summer 2020	Fall 2020
Cash	**2.0%**	1.0% – 16%	3.0%	1.0%	2.0%	1.0%	**1.0%**
Bonds	**38.0%**	25.0% – 54.0%	40.0%	40.0%	39.0%	38.0%	**37.0%**
Stocks	**60.0%**	36.0% – 65.0%	57.0%	59.0%	59.0%	61.0%	**62.0%**

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* Aug. 2020	Past range	Fall 2019	New Year 2020	Spring 2020	Summer 2020	Fall 2020
North America	**41.3%**	18% – 48%	48.3%	43.8%	44.2%	42.3%	41.3%
Europe	**41.0%**	32% – 56%	32.9%	37.7%	37.7%	39.0%	36.0%
Asia	**17.7%**	16% – 35%	18.8%	18.5%	18.2%	18.7%	22.7%

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

Global Equities	MSCI** Aug. 2020	Past range	Fall 2019	New Year 2020	Spring 2020	Summer 2020	Fall 2020
North America	**66.6%**	51% – 66%	63.1%	62.5%	63.6%	65.7%	**65.4%**
Europe	**16.0%**	16% – 35%	18.2%	18.6%	17.8%	16.1%	**16.2%**
Asia	**9.1%**	9% – 18%	11.2%	11.4%	11.1%	10.7%	**9.8%**
Emerging Markets	**8.3%**	0% – 8.5%	7.5%	7.5%	7.5%	7.5%	**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** Aug. 2020	RBC GAM ISC Summer 2020	RBC GAM ISC Fall 2020	Change from Summer 2020	Weight vs. Benchmark
Energy	3.00%	1.99%	1.50%	(0.49)	49.9%
Materials	4.45%	2.70%	4.95%	2.25	111.2%
Industrials	10.15%	9.01%	10.15%	1.14	100.0%
Consumer Discretionary	11.29%	11.65%	13.29%	1.64	117.7%
Consumer Staples	8.18%	8.82%	7.28%	(1.54)	89.0%
Health Care	13.79%	16.77%	14.79%	(1.98)	107.3%
Financials	12.39%	12.96%	12.39%	(0.57)	100.0%
Information Technology	21.56%	21.50%	23.56%	2.07	109.3%
Communication Services	8.97%	8.98%	8.17%	(0.81)	91.1%
Utilities	3.34%	3.52%	2.54%	(0.98)	76.0%
Real Estate	2.87%	2.10%	1.37%	(0.73)	47.8%

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

Last quarter, the RBC GAM Investment Strategy Committee made changes to its strategic asset mix, reducing fixed income and adding to equities. Subsequent to that change, we also announced changes to the regional equity weights. In this Global Investment Outlook, we are providing the current strategic and tactical weights that resulted from these changes, but not positions from last quarter as we were in the midst of the transition.

Very Conservative

Asset Class	Bench-mark	Range	Last quarter	Current recommendation
Cash & Cash Equivalents	2%	0-15%		1.0%
Fixed Income	73%	58-88%		72.0%
Total Cash & Fixed Income	75%	60-90%		73.0%
Canadian Equities	10%	0-20%		10.6%
U.S. Equities	8%	0-18%		8.6%
International Equities	7%	0-17%		7.8%
Emerging Markets	0%	0%		0.0%
Total Equities	25%	10-40%		27.0%

	Return	Volatility
40-Year Average	8.6%	5.3%
Last 12 Months	6.6%	7.2%

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%		1.0%
Fixed Income	58%	43-73%		57.0%
Total Cash & Fixed Income	60%	45-75%		58.0%
Canadian Equities	13%	3-23%		13.3%
U.S. Equities	15%	5-25%		15.6%
International Equities	12%	2-22%		13.1%
Emerging Markets	0%	0%		0.0%
Total Equities	40%	25-55%		42.0%

	Return	Volatility
40-Year Average	8.9%	6.4%
Last 12 Months	7.2%	8.9%

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%		1.0%
Fixed Income	38%	23-53%		37.0%
Total Cash & Fixed Income	40%	25-55%		38.0%
Canadian Equities	15%	5-25%		14.9%
U.S. Equities	25%	15-35%		25.6%
International Equities	15%	5-25%		16.2%
Emerging Markets	5%	0-15%		5.3%
Total Equities	60%	45-75%		62.0%

	Return	Volatility
40-Year Average	9.1%	7.7%
Last 12 Months	8.6%	11.4%

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%		1.0%
Fixed Income	23%	8-38%		22.0%
Total Cash & Fixed Income	25%	10-40%		23.0%
Canadian Equities	18%	8-28%		17.8%
U.S. Equities	30%	20-40%		30.5%
International Equities	19%	9-29%		20.3%
Emerging Markets	8%	0-18%		8.4%
Total Equities	75%	60-90%		77.0%

	Return	Volatility
40-Year Average	9.1%	9.5%
Last 12 Months	9.2%	13.3%

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%		1.0%
Fixed Income	0%	0-15%		0.0%
Total Cash & Fixed Income	2%	0-17%		1.0%
Canadian Equities	29%	19-39%		28.3%
U.S. Equities	38%	18-48%		38.0%
International Equities	20%	10-30%		21.2%
Emerging Markets	11%	1-21%		11.5%
Total Equities	98%	83-100%		99.0%

	Return	Volatility
40-Year Average	9.1%	12.1%
Last 12 Months	9.8%	17.4%

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

Milos Vukovic, MBA, CFA
V.P. & Head of Investment Policy
RBC Global Asset Management Inc.

Aaron Ma, CFA
Analyst, Investment Strategy
RBC Global Asset Management Inc.

The quarter ended August 31, 2020, may have marked the end of the multi-year U.S.-dollar bull market as it depreciated considerably against many currencies. The greenback fell 7.6% against the British pound, 7.0% against the euro, 5.3% against the Canadian dollar and 1.8% against the yen. Among the many factors contributing to U.S.-dollar weakness are the loss of much of the greenback's yield advantage, ballooning public-debt levels, the relative strength of economic recoveries in other countries and uncertainties around the U.S. presidential election. Lower U.S. interest rates have made U.S. Treasury bonds less enticing to foreign buyers. International investors may also be increasingly concerned with the sustainability of the U.S. public-debt load, which has swelled to almost US$25 trillion. U.S. debt has reached its highest level compared to the size of the economy since World War II, and federal debt held by the public is projected to reach or exceed 100% of U.S. gross domestic product, the broadest measure of U.S. economic output, in the fiscal year that begins on October 1. The relative success of the European and Chinese economic re-openings in the quarter likewise served to divert flows away from the U.S. Finally, the increasing possibility of a Biden presidency likely played a role in deflating the dollar. Over the past year, the U.S. dollar has been almost flat relative to the yen but underperformed the other major currencies that we follow.

Global bond yields remained fairly flat at historically low levels over the three-month period. Central banks lowered rates significantly and have communicated their intention to keep them low for the foreseeable future. The weak economic backdrop and an incredible amount of central-bank bond buying have correspondingly helped to keep long-term yields low. The yield on the 10-year U.S. Treasury bond rose to 0.90% in June but finished the quarter up only 5 basis points at 0.70%. All of the key bond markets yielded positive returns in U.S. dollars, but a large portion were as a result of weakness in the dollar. The best performers were the FTSE European Government Bond Index with an 8.3% gain and the FTSE Canada Universe Bond Index, which returned 7.5% in U.S.-dollar terms. The FTSE Japanese Government Bond Index underperformed, rising just 1.1%. The strong quarter for bonds has also pushed year-to-date returns into the black, with positive returns for all of the major indexes.

The rally in global stocks that began in late March carried over into the summer months as optimism about the nascent global economic recovery and an imminent COVID-19 vaccine drove stocks higher. All of the major equity indexes were up in the latest quarter and some have entirely recuperated from earlier losses and made new highs. Returns for broad market indexes ranged from 5.9% for the MSCI Japan Index to 19.5% for the MSCI Emerging Markets Index in U.S.-dollar terms. The S&P 500 Index delivered a total return of 15.5% in the quarter and 9.7% year-to-date thanks to a rally of over 50% from its March 23 low. So far this year, American large-cap stocks have led while British stocks, represented by the MSCI UK Index, have lagged with a decline of 19.4%.

A key characteristic of the equity rally has been its unevenness, as the domination of large technology stocks has resulted in a wide distribution of returns across size, style and sectors. Lingering concerns about the solvency of smaller firms may have played a role in the underperformance of the mid-cap and small-cap stocks relative to large-cap stocks. The mid-cap S&P 400 Index gained 9.6% in the quarter, which is about 6 percentage points lower than the return of the large-cap S&P 500. Consumer Discretionary and Information Technology stocks continued to benefit in the COVID-19 recovery as they led all global equity sectors with returns of 25.9% and 25.6%, respectively, in the past quarter. With the exception of the Energy sector, which lost 3.4%, all sectors produced positive returns. The Russell 3000 Growth Index, which is heavy with stocks in the Information Technology and Consumer Discretionary sectors, outperformed the Russell 3000 Value Index with a gain of 23.4%, which was almost 16 percentage points higher than the return of the value index. Over the one-year period, the growth index outperformed its value counterpart by even higher margin, returning 42.6% compared with an almost flat return for the Russell 3000 Value Total Return Index.

Exchange Rates
Periods ending August 31, 2020

	Current USD	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)
USD–CAD	1.3044	(5.27)	0.45	(2.03)	1.46	(0.17)
USD–EUR	0.8380	(6.98)	(6.00)	(7.90)	(0.08)	(1.22)
USD–GBP	0.7481	(7.61)	(0.91)	(8.97)	(1.10)	2.80
USD–JPY	105.9150	(1.79)	(2.52)	(0.30)	(1.23)	(2.67)

Note: all changes above are expressed in US dollar terms

Canada
Periods ending August 31, 2020

	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	7.48	7.18	8.04	3.99	4.31	1.82	5.85	5.51

U.S.
Periods ending August 31, 2020

	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	1.34	6.95	6.55	5.17	4.38	(3.99)	4.39	6.56
BBgBarc U.S. Agg. Bond Index TR[1]	1.31	6.85	6.47	5.09	4.33	(4.03)	4.31	6.63

Global
Periods ending August 31, 2020

	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	4.03	6.82	6.10	4.12	4.17	(1.45)	3.95	5.51
FTSE European Government TR	8.29	8.95	8.24	3.81	3.97	2.59	6.04	5.33
FTSE Japanese Government TR	1.07	1.14	(3.71)	1.90	4.24	(4.25)	(5.66)	3.39

Canada
Periods ending August 31, 2020

	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	15.66	(1.49)	5.96	4.52	6.99	9.57	3.80	6.04
S&P/TSX 60	14.97	(0.55)	6.51	5.40	7.49	8.92	4.35	6.94
S&P/TSX Small Cap	24.59	(4.65)	0.95	(2.43)	4.18	18.03	(1.10)	(1.01)

U.S.
Periods ending August 31, 2020

	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	15.48	9.74	21.94	14.52	14.46	9.40	19.46	16.19
S&P 400 TR	9.65	(5.55)	4.22	5.38	8.11	3.87	2.10	6.92
S&P 600 TR	12.31	(11.07)	(0.55)	3.82	7.47	6.39	(2.57)	5.34
Russell 3000 Value TR	7.71	(9.91)	0.39	4.11	7.33	2.04	(1.65)	5.63
Russell 3000 Growth TR	23.38	28.90	42.59	23.29	19.95	16.89	39.69	25.09
NASDAQ Composite Index TR	24.34	32.07	49.33	23.63	21.10	17.79	46.30	25.44

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

Global
Periods ending August 31, 2020

	USD					CAD		
Equity Markets: Total Return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
MSCI World TR *	14.74	5.34	16.79	9.82	10.42	8.16	14.51	11.23
MSCI EAFE TR *	11.26	(4.61)	6.13	2.34	4.72	4.88	4.07	3.66
MSCI Europe TR *	12.51	(5.71)	5.43	1.61	3.95	6.06	3.37	2.92
MSCI Pacific TR *	9.24	(2.90)	7.18	3.57	6.31	2.98	5.09	4.91
MSCI UK TR *	6.52	(19.42)	(7.71)	(2.93)	(0.31)	0.41	(9.51)	(1.68)
MSCI France TR *	14.15	(9.41)	0.70	1.70	5.51	7.60	(1.26)	3.01
MSCI Germany TR *	18.66	3.21	16.20	1.72	5.16	11.86	13.94	3.03
MSCI Japan TR *	5.89	(1.64)	10.16	4.27	5.80	(0.18)	8.01	5.62
MSCI Emerging Markets TR *	19.53	0.45	14.49	2.83	8.66	12.68	12.26	4.16

Global Equity Sectors
Periods ending August 31, 2020

	USD					CAD		
Sector: Total Return	3 months (%)	YTD (%)	1 year (%)	3 years (%)	5 years (%)	3 months (%)	1 year (%)	3 years (%)
Energy TR *	(3.42)	(37.19)	(31.02)	(11.88)	(6.37)	(8.96)	(32.36)	(10.74)
Materials TR *	16.93	4.38	16.66	5.57	10.00	10.23	14.39	6.93
Industrials TR *	14.91	(2.58)	7.47	5.14	9.05	8.32	5.38	6.50
Consumer Discretionary TR *	25.95	21.93	32.23	17.09	13.88	18.73	29.66	18.60
Consumer Staples TR *	9.57	2.60	5.90	5.87	7.47	3.29	3.84	7.23
Health Care TR *	4.82	7.74	22.37	11.64	8.81	(1.19)	19.99	13.08
Financials TR *	11.00	(17.05)	(4.93)	(1.68)	3.61	4.64	(6.78)	(0.41)
Information Technology TR *	25.57	33.36	54.43	28.02	25.90	18.37	51.43	29.68
Communication Services TR*	15.25	12.45	21.52	9.79	7.52	8.65	19.16	11.21
Utilities TR *	3.98	(3.61)	1.89	5.37	8.03	(1.98)	(0.10)	6.74
Real Estate TR *	7.01	(9.91)	(7.78)	2.30	NA	0.87	(9.57)	3.62

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

Economic Outlook

Making progress amid new risks

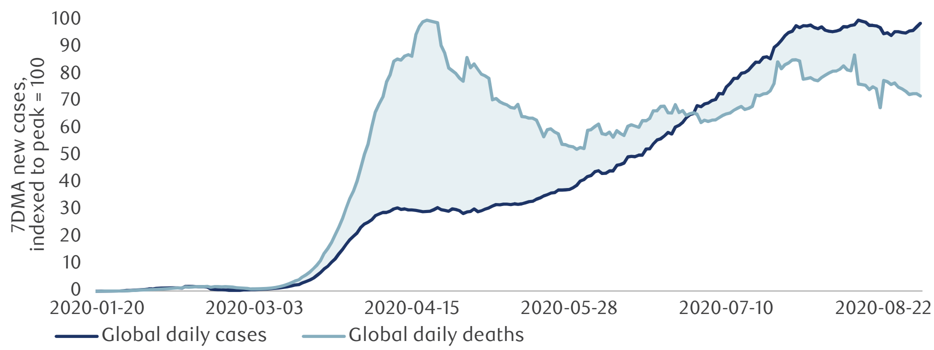
Eric Lascelles
Chief Economist
RBC Global Asset Management Inc.

The world is in a very different place than it was a quarter ago. Economic activity has substantially rebounded, the coronavirus is no longer accelerating and progress continues toward a vaccine (Exhibit 1). These developments were broadly anticipated, but are nevertheless welcome given that they were far from assured.

There has been considerable turbulence along the way. A second wave of infections struck the U.S., while Europe is struggling anew with the virus. The economic rebound was initially quite strong, but the rate of progress has decelerated now that the easiest gains have been claimed, and given remaining social-distancing restrictions.

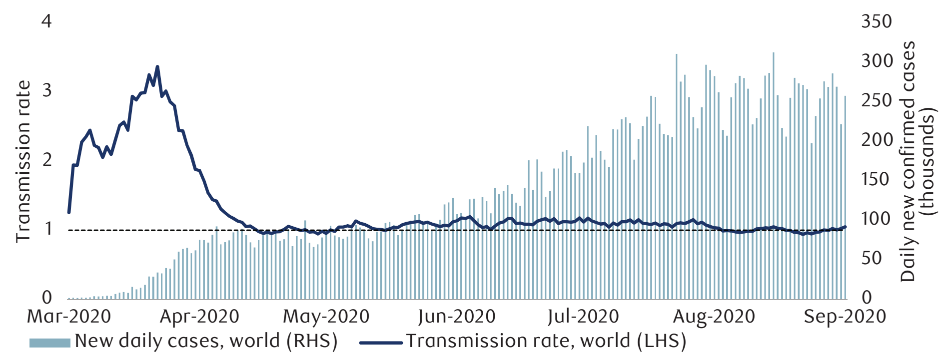
Looking forward, challenges include Europe's present predicament, uncertainty over the extent to which school openings and cooler weather will increase virus transmission, a coming economic drag as fiscal stimulus begins to ebb, and the tendency for credit losses to arrive with a lag after the main economic shock. Each of these issues is ultimately likely to be manageable, but the recovery from here should nevertheless be more muted than it was from April to July. A significant subset of the economy will remain handcuffed until a vaccine has been widely distributed – likely a mid-2021 proposition.

Exhibit 1: Global COVID-19 cases have flattened out after long rise



Note: As of 9/1/2020. 7-day moving average of cases & deaths indexed to 100. Source: ECDC, Macrobond, RBC GAM

Exhibit 2: Global transmission rate hovering around key threshold of one



Note: As of 9/1/2020. Transmission rate calculated as 7-day change of underlying 5-day moving average of new daily cases. Source: ECDC, Macrobond, RBC GAM

While COVID-19 matters should remain the dominant theme for economic forecasters and financial markets, other issues are also bubbling to the surface, including the upcoming U.S. election, the end-of-2020 Brexit deadline, ongoing protectionism and the possibility of an eventual increase in inflation.

The COVID-19 infection trend was quite ominous until fairly recently. Despite significant improvement in many countries, the global tally of new daily infections had continued to rise through July due mainly to problems in the U.S. and a bevy of emerging-market nations.

Fortunately, we can report that the global transmission rate is now back in the vicinity of the key threshold of one – meaning roughly a flat number of new infections per day (Exhibit 2). This is mainly because the U.S. and Brazil – two of the world's most afflicted nations – have lately descended from their respective peaks. That said, there are still plenty of countries that have not yet achieved this objective, including India, the world's second-most-infected country.

The U.S. has suffered the most COVID-19 infections of any country, and struggled to tame its second virus wave between June and August. But the intensity of the outbreak has since decreased after a policy pivot toward marginally stricter social-distancing rules and the shuttering of some high-contact businesses (Exhibit 3). The country's trend infection rate has fallen by more than 30% from its peak, with fatalities also declining. There has been some criticism that the improvement is merely the result of less testing, but the progress appears real to us.

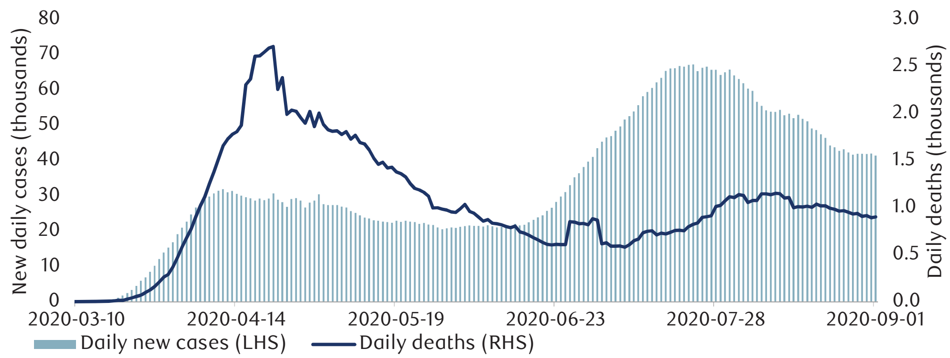
The U.S. improvement has not been restricted to a handful of states. Many are now on an improving trend, including such previous hotbeds as Florida, Arizona and Texas (Exhibit 4)

European challenges

Conversely, Europe is now in the pitch of battle with its own second COVID-19 outbreak. Spain's encounter is proving particularly challenging, but it is not alone in experiencing a rising caseload (Exhibit 5). Initially, we had imagined that Europe could defeat the enemy a second time with little difficulty. After all, Europe had soundly won its first encounter, was learning from initial U.S. missteps and the recent U.S. progress, and lacked the political paralysis that so slowed the U.S. response.

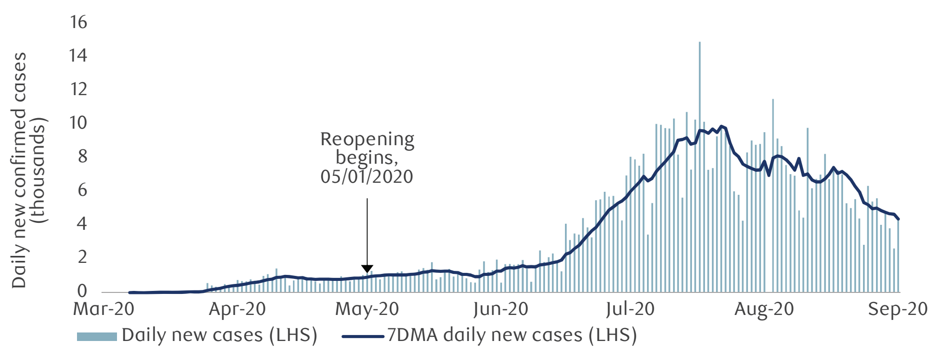
And yet Europe has now suffered through more than a month of rising

Exhibit 3: COVID-19 cases have declined significantly in U.S.



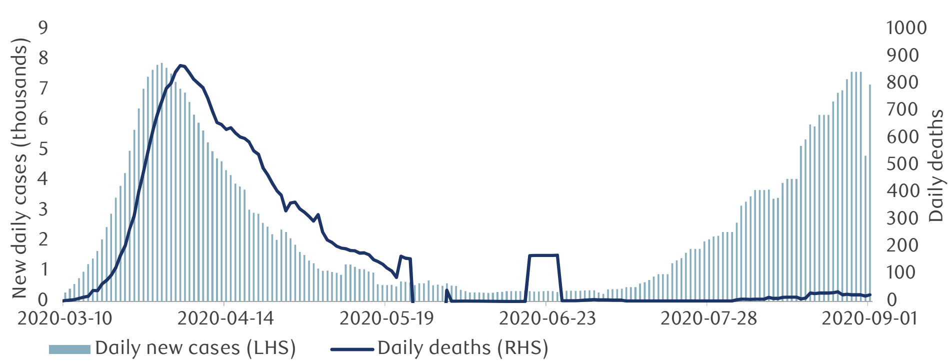
Note: As of 9/1/2020. 7-day moving average of daily new cases and new deaths. Source: CDC, Macrobond, RBC GAM

Exhibit 4: Texas is seeing a decrease in coronavirus cases



Note: As of 9/1/2020. 7-day moving average of daily new cases used as trendline. Source: The COVID Tracking Project, Macrobond, RBC GAM

Exhibit 5: Spain now in second wave of COVID-19

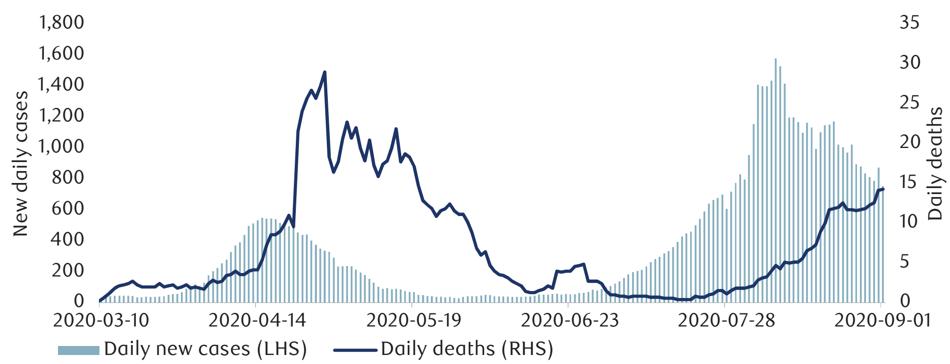


Note: As of 9/1/2020. 7-day moving average of daily new cases and new deaths. Source: CDC, Macrobond, RBC GAM infections without a reversal. Whereas we had initially assumed that the European situation would be resolved in short order, this now appears to be a multi-month journey. Helping to explain the surprising magnitude of the challenge, it would appear that parts of Europe had normalized their behaviour to an excessive degree, including the startling statistic that 83% of French office workers had already returned to their workplaces. Our COVID-19 vulnerability metric continues to flag several European countries as at the very top of the list (Exhibit 6).

Exhibit 6: Likelihood of continued spread based on lockdown severity and current transmission rates of COVID-19

Note: As of 8/28/2020. Likelihood factors in lockdown severity and amount restrictions eased, transmission rate, and population adjusted prevalence of COVID-19. Source: Google, University of Oxford, Apple, ECDC, UN, Macrobond, RBC GAM

Exhibit 7: Japan grapples with second wave of COVID-19



Note: As of 9/1/2020. 7-day moving average of daily new cases and new deaths. Source: CDC, Macrobond, RBC GAM

Virus musings

It has been a considerable saving grace that the second wave of infections – both in the U.S. and Europe – has disproportionately involved young people, who are much less vulnerable to the virus. This helps to explain how the number of fatalities has remained well below its prior peak, even as the infection numbers reached new highs.

It was perhaps inevitable that the virus numbers would again rise at least briefly as policymakers continue to probe for the optimal balance between restoring normality and keeping the virus at bay. A tentative lesson so far is that a surprising fraction of industries can be restarted, but that high-contact industries such as indoor restaurants, bars and gyms remain challenging. With this sort of information in hand, those industries can continue to enhance their safety measures and countries can better calibrate social-distancing policies.

Japan has continued to march to its own drummer, avoiding the initial spike, suffering a mini-outbreak in late April, and now grappling with a more serious one (Exhibit 7). While Japan has vulnerabilities including the fact that the country is older and more densely populated, its culture of mask-wearing, similar to much of Asia, is proving a powerful offset. We believe the country will succeed in again taming the virus, and that it will do so without the magnitude of economic damage that resulted elsewhere.

Looking ahead, there could well be a third global wave, or even more. The re-opening of schools constitutes a calculated risk, and the approach of colder, drier weather in the northern hemisphere could help the virus spread more freely. Providing some historical context, the Spanish flu involved three major waves spanning a year. Fortunately, today's policymakers now know how to respond, and so any further waves seem likely to be smaller than the first one.

It is probably not realistic to think that countries will succeed in eradicating COVID-19, at least until a vaccine is developed. New Zealand and China both came awfully close given their geographic isolation and aggressive quarantining, respectively, but both have nevertheless experienced several subsequent mini outbreaks.

A slowing economic recovery

Developed-world economies shrank by an unprecedented 10% to 20% over the span of just two months during the initial COVID-19 lockdowns.

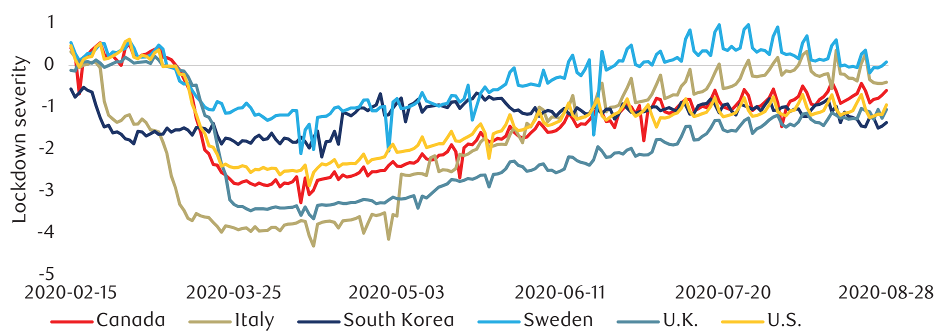
Fortunately, the subsequent recovery has proven nearly as robust as the downturn, thanks in significant part to unprecedented amounts of monetary and fiscal stimulus. The economic rebound began earlier than many would have imagined, with real-time measures of mobility starting to revive by mid-April, and continuing to improve until fairly recently (Exhibit 8).

At this juncture, it appears that developed economies have reclaimed a little more than half of their lost output. This is visible both in our real-time economic activity index for the U.S. (Exhibit 9) and now also via more traditional data series (Exhibit 10).

The fact that such a large chunk of economic activity was able to restart – and to do so fairly quickly – is promising. It was not unreasonable in the early stages of the pandemic to imagine not only that economic activity might fall by far more than it ultimately did, but that only minimal normalization would be possible until the virus was eliminated.

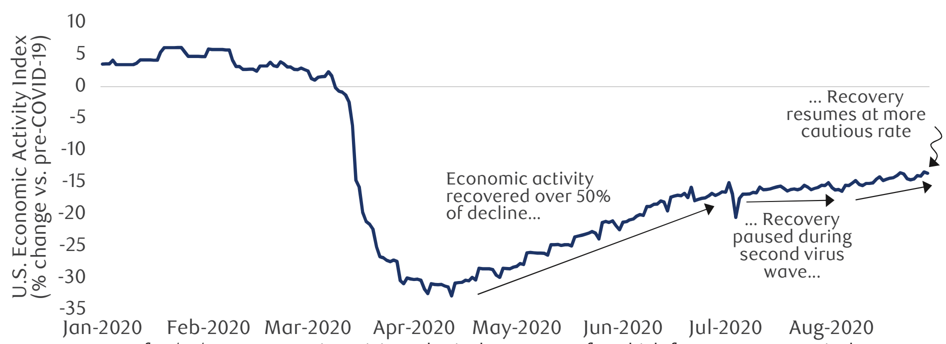
Global purchasing manager indexes (PMIs) convey both the depth of the economic decline and the fact that growth has now returned (Exhibit 11).

Exhibit 8: Improvement in mobility has now mostly plateaued



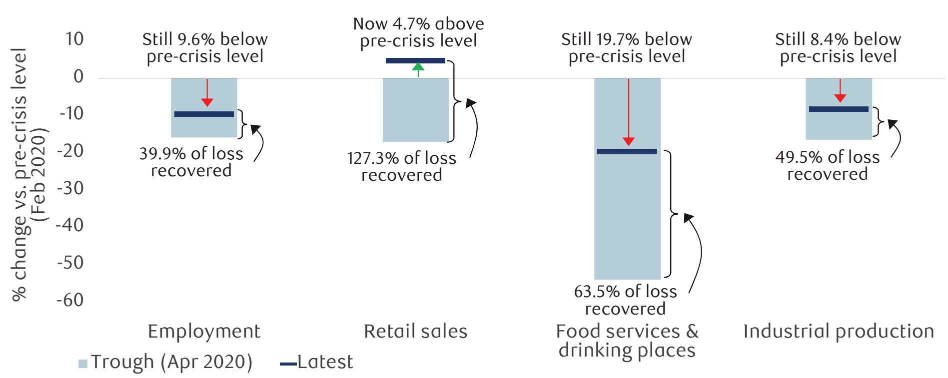
Note: Based on latest data available as of 8/28/2020. Deviation from baseline, normalised to U.S. Source: Google, University of Oxford, Apple, Macrobond, RBC GAM

Exhibit 9: U.S. economic activity picks up after pause



Note: As of 08/29/2020. Economic Activity Index is the average of ten high-frequency economic data series measuring the year-over-year percentage change. Source: Bank of America, Goldman Sachs, OpenTable, Macrobond, RBC GAM

Exhibit 10: U.S. COVID-19 recovery



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

However, the construction of PMIs is such that the return to fully normal readings merely signals a return to growth, not a full unwind of the economic decline.

How is it that such a large fraction of economic activity has been able to return without igniting the virus to an unsustainable degree? There are many reasons. Virus testing and tracing has improved by orders of magnitude, and COVID-19 is now considerably better understood. Medical capacity and the quality of treatment have both improved, including the discovery of two important therapeutic drugs. Society has a better sense for which population groups need continued protection, and which can be allowed greater interpersonal contact. Finally, people and businesses have adapted, with mask-wearing and workplace alterations in force. As such, the amount of economic and human activity that is possible today without losing control of the virus is much greater than it was in March.

The strength of housing markets has been notable and has provided a welcome boost to economic activity (Exhibit 12). That said, and while there is no evidence of weakness yet, we continue to think the housing market may struggle to sustain this enthusiasm due to high unemployment, diminished immigration, fewer university students living away from home, and diminished AirbnbB demand.

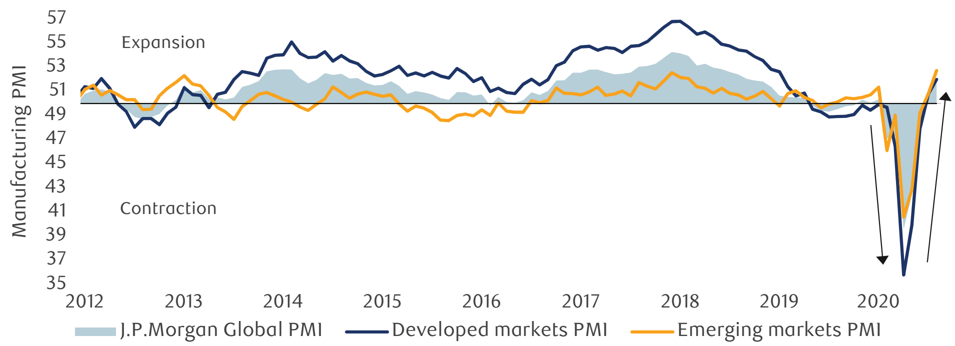
New headwinds

Realistically, the rate of economic recovery should slow from here. Not only might the housing market cease to provide such support, but the easy gains have already mostly occurred. Many of the sectors that remain depressed are likely to be structurally limited until virus worries abate. Similarly, those who remain unemployed may have a harder time re-entering the market than those who have already returned.

While the resumption of schools provides a new tailwind by freeing many parents to return to the workforce, other new headwinds are simultaneously mounting (Exhibit 13).

Prominently, credit problems usually occur with a lag, such that the recession of 2020 will likely result in rising credit defaults right into 2021. The latest survey of senior U.S. loan officers suggests some tightening in credit conditions is occurring (Exhibit 14). The lag may be even more marked than usual this time as many borrowers have taken advantage of special government programs permitting the deferral of monthly payments. But this accumulated debt will eventually come due.

Exhibit 11: Global manufacturing back in expansionary mode



Note: As of Aug 2020. PMI refers to Purchasing Managers Index for manufacturing sector, a measure for economic activity. Source: Haver Analytics, RBC GAM

Exhibit 12: U.S. housing market has been stronger than expected

Note: As of 08/21/2020. Source: Mortgage Bankers Association, Macrobond, RBC GAM

Fiscal headwinds are also beginning to mount. Already, the U.S. has scaled back its support for unemployed workers, which is likely to temper the country's consumer-spending growth. Given unprecedented fiscal deficits, the remaining government largesse will have to decline somewhat over the coming year nearly everywhere (Exhibit 15). This unwinding effort will induce a powerful economic drag, even as deficits remain larger than normal.

Monetary stimulus looks set to remain firmly in place for the foreseeable future, but it is unlikely to prove capable of filling the hole created by fading fiscal support.

It is also reasonable to expect some amount of scarring from an economic shock of this magnitude. Incomes have declined, wealth has deteriorated, and businesses are surely now more cautious about expanding. In turn, these developments may keep economies from reaching their full potential over the next few years.

We do not believe these challenges will unravel the economic recovery altogether, but they provide ample reason to expect that the second half of the recovery will be far slower than the first half.

Normalization timing

When can life and economic activity return fully to normal? There are two answers.

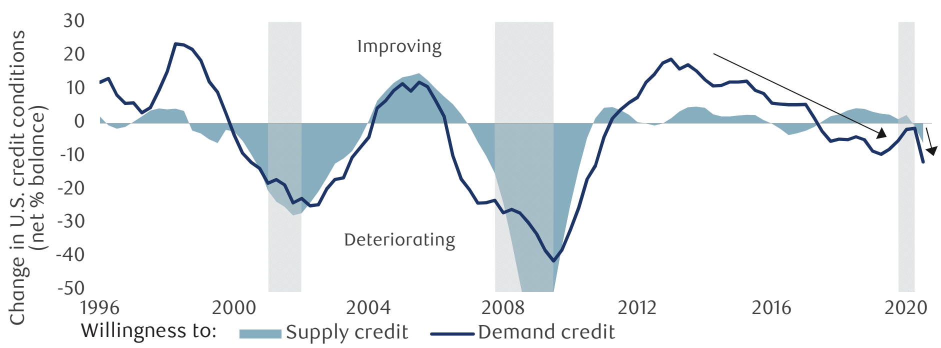
If the question is interpreted as when economies will no longer be specifically limited by the virus, the answer is that this becomes possible once a vaccine has been widely distributed. Betting markets

Exhibit 13: Moderate second-round economic damage (unrelated to second wave of virus) will limit the speed of the recovery over the next year

Factor	Rationale
Debt problems	• Mortgage/rent/loan deferrals will expire and reveal a wave of credit problems • Credit defaults tend to peak with a lag
Fiscal cliff	• Fiscal support to fade over time, providing economic headwind • Have yet to see true consumer appetite without help from government cheques
Indirectly affected sectors	• Mounting damages to businesses not directly affected by pandemic but indirectly affected by economic weakness • Massive layoffs continuing in some sectors even as others revive
Ongoing damage to income	• Economy remains smaller than normal – income therefore continues to undershoot • Should affect spending, reduces ability to do cap ex
Diminished expectations	• Economy now expected to be smaller than otherwise over the next several years • Reduces need to invest in capital stock
Lasting sectoral damage	• Some sectors won't be coming back for several years • Businesses will continue to fail
Lagged housing damage	• Housing has been surprisingly robust so far • But high unemp / low immig / less airBnb / fewer students should soften demand
Lagged expiry	• Commercial leases, loans/bonds, UI and severance all expire with a lag, revealing additional economic damage later

Source: RBC GAM

Exhibit 14: U.S. credit conditions deteriorated a bit



Note: As of Q3 2020. Indices are four-quarter average of responses to a mix of commercial, residential and personal lending questions in the U.S. Senior Loan Officer Opinions Survey. Source: Federal Reserve, Macrobond, RBC GAM have become more optimistic on this possibility, with half of forecasters now anticipating tens of millions of inoculations in the U.S. no later than the first quarter of 2021. Further, nearly 90% believe this milestone will be reached no later than the fall of 2021. As such, the virus will probably cease to be an active drag on economic activity across most of the developed world by the end of 2021.

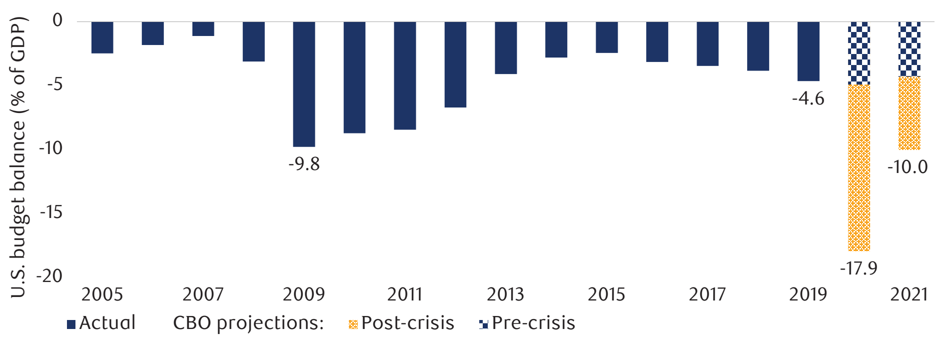
However, if the question is framed instead as when will economies fully recover their losses or perhaps even return to their prior trajectory, the answer is that this should take considerably longer. Economies simply don't snap back to normal overnight, as a long history of past recessions and subsequent gradual recoveries illustrates. Even after a vaccine is developed, we believe it will still take the better part of another year for developed economies to return to their pre-COVID-19 peak, and more like two years to return to their full potential. This is to say, mid-2022 and mid-2023, respectively.

Upwardly revised forecasts

Our 2020 global economic forecast has improved relative to a quarter ago, although we continue to anticipate sharply lower output than in 2019. Economic surprises have tended to be positive in recent months (Exhibit 16), contributing to this conviction.

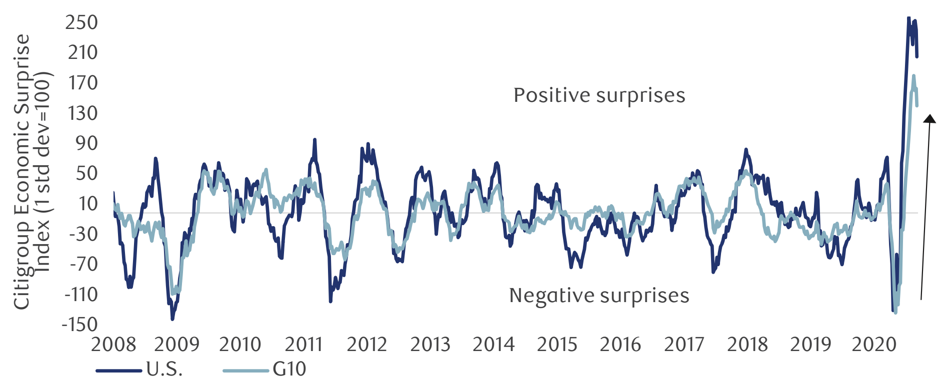
Our global GDP forecast for 2020 is now for a contraction of 4.0% in 2020, an improvement of 0.6 percentage point. To be clear, we believe the economy has already returned to growth, but the depth of this year's earlier decline makes it nearly impossible for the year's output to exceed the prior year.

Exhibit 15: U.S. to record biggest budget deficit since WWII



Note: CBO pre-crisis projections made in March 2020, post-crisis projections made in April 2020. Source: CBO, Haver Analytics, RBC GAM

Exhibit 16: Global economic surprises staged a remarkable rebound



Note: As of 9/1/2020. Source: Citigroup, Bloomberg, RBC GAM

Simultaneously, our growth outlook for 2021 has deteriorated by 1.2 percentage points to 5.1%. This is for two reasons. First, to the extent the economic decline is now expected to be less substantial in 2020, there is less catching up to do in 2021. Second, we now expect the full economic recovery to take somewhat longer, meaning that 2021 represents a smaller part of the recovery than previously assumed. A part of this is that our models now assume that economies cannot fully normalize until after a vaccine has been distributed.

Our new forecasts have a mixed placement relative to the consensus. The new 2020 numbers are above-consensus for the Eurozone and Japan, roughly on-consensus for the U.K., and moderately below consensus for the U.S. and Canada. It is not so much that we expect North America to suffer unduly, but instead that the consensus is that North America will significantly outperform the pack, whereas we suspect the actual outcome will only be modestly better (Exhibit 17). A key theme in the latest forecasts is that of convergence: the divide between the worst and the best is now smaller than before.

Our emerging-market forecasts have mostly been lowered, including for Mexico, Brazil, Russia, India and South Korea. This is mainly because COVID-19 struck emerging-market countries later and several of these countries have opted for more aggressive lockdowns than we had initially budgeted for.

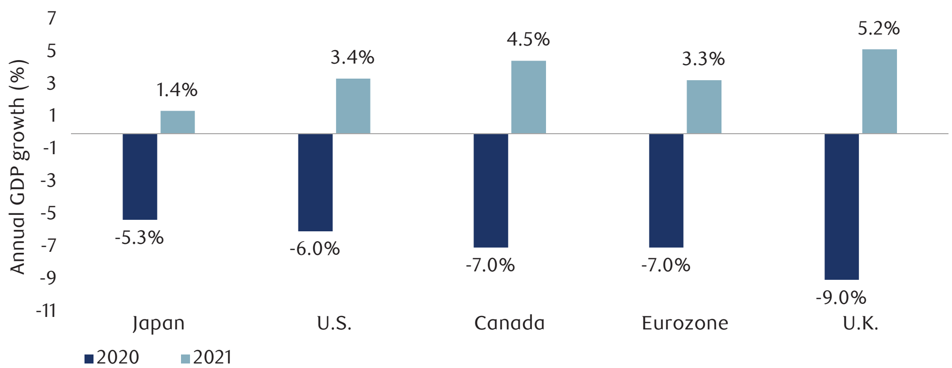
The exception to this pattern of downgrades is China, for which our estimate was raised after the country managed to fully recover its lost output in record time (Exhibit 18).

Even as the range of possible outcomes has narrowed over the past quarter, we continue to operate in a world of heightened uncertainty. The consideration of different scenarios is thus useful. Of greatest relevance, further COVID-19 waves would slow the recovery; alternatively, the development of a vaccine ahead of schedule would accelerate it (Exhibit 19).

A pivotal U.S. election

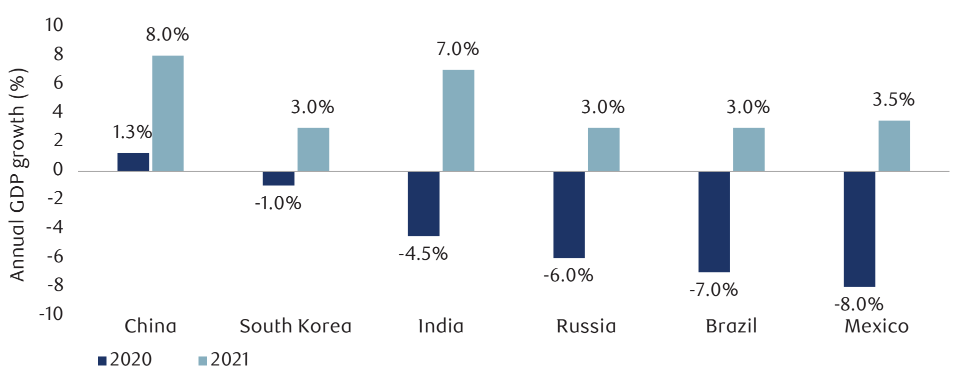
For the first time since COVID-19 engulfed the world, there is another macroeconomic issue that merits serious consideration. At the time of writing, the U.S. presidential election is fewer than two months away. Betting markets believe it is more likely than not that President Trump will be ousted by Democratic challenger Joe Biden (Exhibit 20). The Senate is also expected to flip into Democratic Party hands, yielding a possible sweep for the Democrats given their hold on the House of Representatives (Exhibit 21).

Exhibit 17: RBC GAM GDP forecast for developed markets



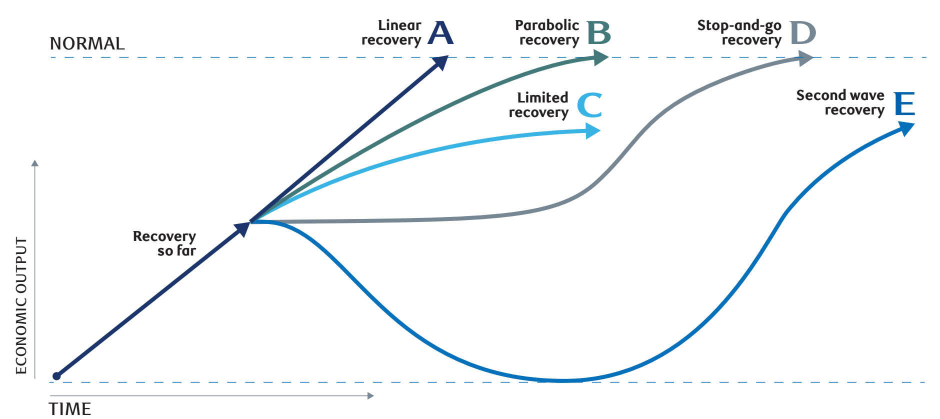
Source: RBC GAM

Exhibit 18: RBC GAM GDP forecast for emerging markets



Source: RBC GAM

Exhibit 19: How will the economic recovery proceed from here?



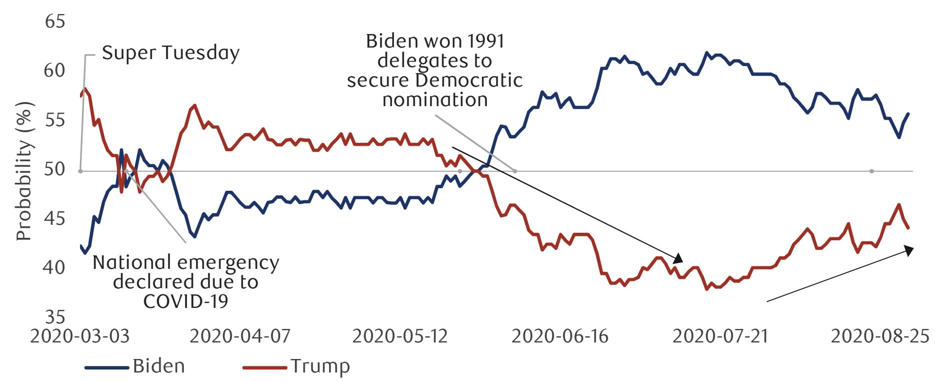
Source: RBC GAM

But the margin of victory is not expected to be large and the 2016 election memorably defied similar predictions. There are also three new wildcards in the forms of increased social unrest on both sides of the political divide, the unconventional nature of campaigning during a pandemic, and possibility that an increase in mail-in ballots could alter voting patterns or even result in uncounted ballots.

The election pits markedly different policy visions against one another. The Biden platform proposes substantial changes relative to the mostly status quo Trump plan. There are several policy planks that could adversely affect the rate of economic growth:

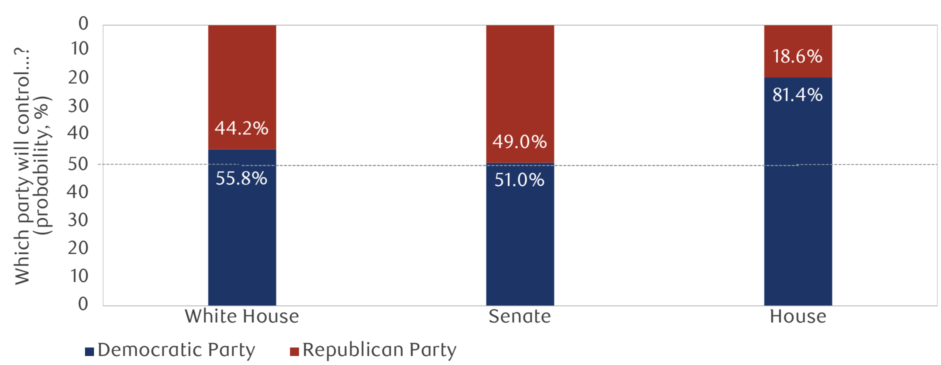
- Biden proposes higher taxes, including the halfway reversal of Trump's corporate-tax cuts.
- Biden is expected to increase regulation, with additional limitations on the energy sector explicitly planned.
- Biden has promised a greater effort to tame COVID-19.
- There are, however, also several pro-growth policies in the Biden platform:
- The aforementioned virus control policies, while economically negative in the short run, should reduce the intensity of the virus – a potential economic positive over the medium run.
- The Democrats propose a substantially larger fiscal stimulus package than the Republicans, even after accounting for the drag from higher taxes.

Exhibit 20: Biden leads Trump, but gap has narrowed



Note: As of 8/31/2020. Based on prediction markets data and RBC GAM calculations. Source: PredictIt; RBC GAM

Exhibit 21: Senate race key for a Democratic sweep



Note: As of 8/31/2020. Source: PredictIt; RBC GAM

- Less protectionism – Biden proposes a re-engagement with multilateral institutions and would likely be less inclined to impose further tariffs (though China should remain a source of friction).
- More immigration – a central driver of population growth and, in turn, of economic growth.

Overall, one might argue that the Biden platform is worse for U.S. growth in the very short run, but plausibly better over a one-year-plus time horizon. Of course, the interests of equity investors do not always jibe with what maximizes economic growth, and the prospect of corporate-tax hikes could nevertheless sour the stock market on a Biden presidency.

U.S. exceptionalism on hold

For decades, the U.S. has easily outgrown its developed-world peers, and has tended to come out of recessions and crises at a particularly enviable clip. However, at least over the coming six to 18 months, it seems conceivable that this advantage could be smaller than usual. There are several reasons for this:

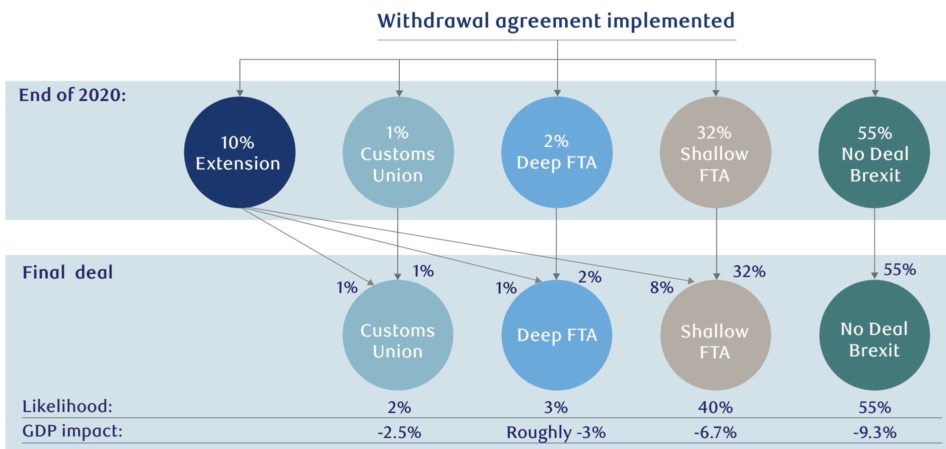
- U.S. fiscal stimulus, while very large, is now starting to unravel, whereas the stimulus in other countries is proving more enduring. In fact, the Eurozone is in the midst of knitting together a more unified fiscal framework than ever before.
- Europe and the U.K. instituted what was arguably a superior worker-support program – subsidizing employees on payrolls rather than supplementing unemployment benefits. The implication is that it may be easier for the labour market to recover in those regions.
- The U.S. political environment is more dysfunctional than in most other developed-market countries, and the American public has proven less compliant with the recommendations of public-health experts.

It would seem a logical extension that U.S. financial-market exceptionalism may also be challenged. The U.S. stock market may struggle to best its peers, and we now look for a structurally weakening U.S. dollar for the same set of reasons. The U.S. dollar has a high starting valuation, and expectations of a Biden presidency would be dollar-negative. By extension, we expect most major currencies will appreciate versus the dollar over the coming year, and conceivably for several years to come.

Globalization in retreat

For the better part of a decade we have noted the tentative retreat of globalization as tariffs and anti-immigration measures in recent years

Exhibit 22: Brexit final arrangement complicated by COVID-19; No-deal Brexit now the most likely scenario



Note: As at Jul. 31, 2020. GDP impact over 15 year span. Source: U.K. Treasury, RBC GAM

joined longer-standing headwinds revolving around structurally low economic growth and increasing economic homogeneity across nations.

COVID-19 has further accelerated that trend. The international flow of people has all but stopped, the flow of goods and services has ebbed, and isolationist instincts have further sharpened. Countries are now prioritizing not just the capacity to sustain themselves via domestic military, food and energy production, but are now also onshoring medical supply chains. The U.S. and China have alternated hot and cold recently, though overall the relationship is continuing to deteriorate.

For a moment, it appeared that the U.S. administration might be too occupied with the pandemic to impose additional protectionist measures. In fact, some prior tariffs were temporarily lifted to permit the flow of necessities during the emergency. But that illusion has been broken by the recent reapplication of an aluminum tariff against Canada and new sanctions against China.

While the economic damage from COVID-19 should eventually fade, the onshoring trend will probably persist. Much of the rest will depend on who occupies the White House come January.

The final Brexit deadline nears

The British economy has struggled through the pandemic, hurt by a belated decision to shut the economy down in March, the country's orientation toward industries requiring human proximity and the ongoing uncertainties surrounding Brexit.

Barring an unlikely further extension, the U.K. should be formally separated from the European Union (EU) at the end of 2020. This will end a nearly five-year soap opera. But there is still uncertainty over what kind of trade deal the country will strike with the EU, and for that matter whether a deal will be forthcoming. According to the EU, time is running short for a deal and the options are becoming more limited. As such, we now identify a 55% chance of a No Deal Brexit – or at least a divorce that lacks a trade deal of any substance – versus a 40% chance of a shallow free trade agreement and a 5% chance of something more comprehensive (Exhibit 22). In turn, U.K. growth may prove underwhelming over the coming several years.

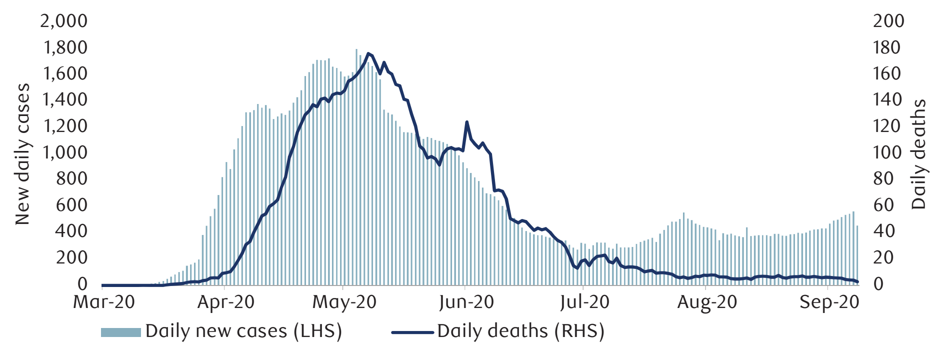
Canadian recovery proceeding

Canada has handled COVID-19 comparatively well, achieving a relatively low number of new daily infections even as economic activity has revived (Exhibit 23).

Although the Canadian economic collapse was initially somewhat more severe than the U.S. due to a mix of greater public compliance and a sectoral skew toward more exposed industries, the recovery has largely kept pace, arguably even outperforming the U.S. in recent months given a bigger relative bounce in Canada's labour market. Other, more subtle measures of Canadian labour-force health also point to substantial improvements, such as the fraction of workers logging fewer than half of their usual hours (Exhibit 24).

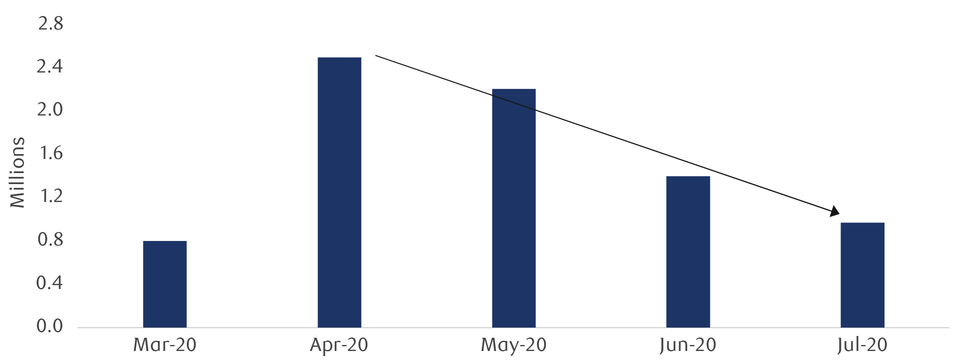
From a fiscal and monetary perspective, Canada is in a position of strength as the government has not stretched itself in either area to the same degree as many other countries. Canada's public debt, while now rapidly mounting, remains lower than most of its peers, and the government appears set to remove fiscal stimulus only gradually. The Bank of Canada has ended one underused liquidity facility, but remains committed to keeping rates low for an extended period.

Exhibit 23: Canada has flattened the curve so far



Note: As of 9/1/2020. 7-day moving average of daily new cases and new deaths. Source: ECDC, Macrobond, RBC GAM

Exhibit 24: Number of Canadians working fewer than 50% of normal hours is declining



Note: As of July 2020. Source: StatCan Labour Force Survey, RBC GAM

Substantial challenges remain for Canada. One is that, even as oil prices have staged a partial rebound, the demand for resources remains depressed due to the diminished state of the economy. Canada has significant exposure to resource sectors.

Second, Canada's housing market, while surprisingly robust, continues to be vulnerable. Unemployment is likely to remain higher than normal for several years and immigration, the classic driver of population growth and thus demand for new homes, has collapsed. Furthermore, and of specific relevance to Canada, the country entered the crisis with stretched housing affordability and high household debt loads. Illustrating this, mortgage deferrals are running around twice as high as a share of the mortgage market in Canada as they are in the U.S.

Emerging-market challenges

Emerging markets have not proven immune to COVID-19. On the contrary, they are currently recording the bulk of the new infections each day

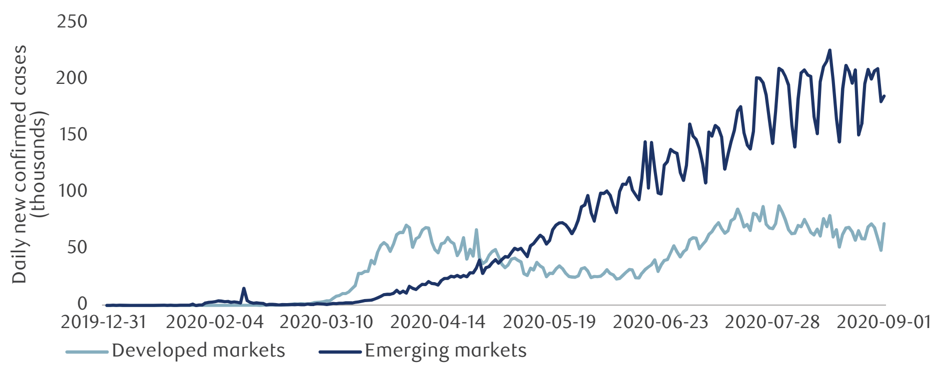
(Exhibit 25). China was of course the point of origin for the virus, and India and Brazil are two of the three most-affected countries, as measured by the number of infections. On a population-adjusted basis, the coronavirus outbreaks across emerging-market nations generally appear less worrisome due to the enormous populations of many emerging-market countries.

While countries including Brazil, Mexico, Russia and South Africa appear to have halted the advance of the virus, a significant number have not, with India being the most prominent.

The economic implications of all this remain up for debate. The initial effect was to send emerging-market economies into a tailspin, but many are now opening up. Some may be doing so prematurely, but this comes primarily at the cost of human lives rather than economic damage. We assume that many emerging-market nations will get access to vaccinations only after wealthier nations have had their turn.

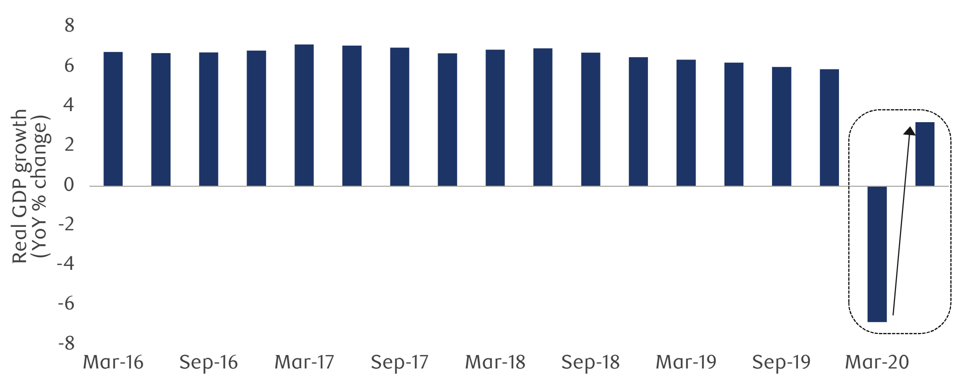
China has the virus well under control thanks to aggressive controls. It remains a country worth watching closely to the extent that it has acted as a bellwether throughout the pandemic. Remarkably, the Chinese economy is already reported to be larger than it was a year ago – an incredibly swift achievement (Exhibit 26). China's rapid turnaround is a helpful development for the many emerging-market economies that are intimately linked into the Chinese economy. It may also help to support commodity prices.

Exhibit 25: COVID-19 continues to ravage emerging-market countries



Note: As of 9/1/2020. Source: ECDC, Macrobond, RBC GAM

Exhibit 26: Chinese economy already larger than a year ago



Note: As of Q2 2020. Source: China National Bureau of Statistics, Macrobond, RBC GAM

Despite China's status as a COVID-19 leading indicator, we are dubious that many other countries, be they developed or emerging, can realistically aspire to achieve new economic highs so quickly. That is likely still a year or two away for most. Nevertheless, China's feat argues for a faster recovery than otherwise.

Inflation to rise over time

As expected, inflation initially ran cold through the worst of the economic shock, briefly even dipping into slight deflation. This was hardly surprising given the highest unemployment rates in nearly a century, paired with a deep albeit brief commodity shock. As the economy recovers over the next year, 2021 inflation should inch closer to normal readings (Exhibit 27).

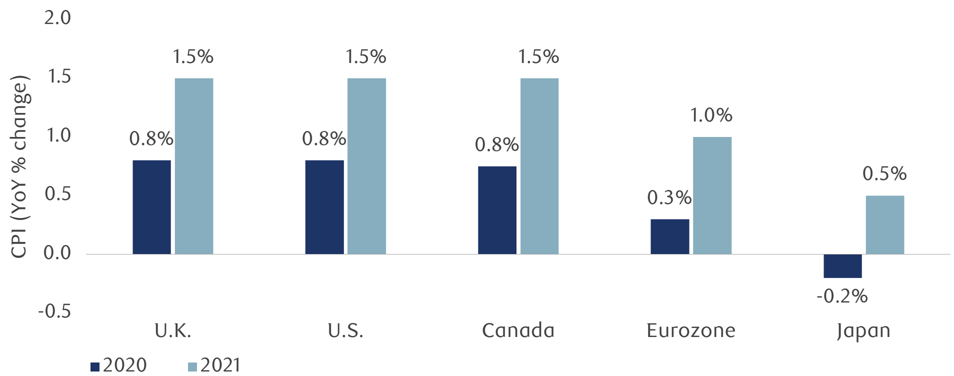
However, the risks arguably tilt in the opposite direction over the longer run. Several new forces threaten to nudge inflation higher in a few years, once the labour market has significantly normalized (Exhibit 28).

First, central banks have now delivered an enormous amount of monetary stimulus, in the form of lower rates, special liquidity facilities and quantitative easing. The quantitative easing represents an explicit expansion of a country's monetary base. In theory, were U.S. monetary stimulus to map fully into real-world money, it could as much as double prices in the economy. It is highly unlikely that the effect will be anything close to as large as this given that banks can't easily cycle all of that money into the economy. Indeed, the quantitative easing of a decade ago yielded not a peep of inflation. However, a critical difference between then and now is that banks were being forced to aggressively deleverage during the global financial crisis, first simply to remain solvent and later to meet more stringent regulations. This dampener doesn't exist today, and so the risk of somewhat more inflation is real.

The U.S. Federal Reserve has also just changed its mandate to put a greater emphasis on achieving full employment and, crucially, indicating a tolerance for higher-than-normal inflation after periods in which inflation has been persistently too low. The last decade has been just such a period, suggesting a willingness to run inflation above the normal 2% target in the coming years.

Second, the pre-existing trend of declining globalization paired with the new appetite to onshore supply chains may also add to inflation. Just as the ascent of China and globalization were profoundly deflationary forces, the partial reversal of these factors should impose some small new upward force on inflation.

Exhibit 27: RBC GAM CPI forecast for developed markets



Source: RBC GAM

Exhibit 28: Inflation is initially low, but should then creep higher over time, with a risk of above-normal readings eventually

Deflationary pressures dominate in short run	
Big shock to demand	• Diminished income; high unemployment
Low oil prices	• From demand shock + price war
Lower inflation expectations	• Market expects lower inflation than pre-crisis
Structural forces	• Deflationary demographics, etc.
Inflationary pressures could emerge over long run	
Central banks	• Large-scale quantitative easing • New inflation mandate • Diminishing central bank independence
Supply chain	• Short term: temporary shortages • Long term: on-shoring raises costs
Inflate away debt?	• Backfires if done enthusiastically, but could be pursued discreetly

Source: RBC GAM

Finally, while rapidly advancing public-debt loads are not by themselves inflationary, there is a chance that policymakers could prove more sympathetic to slightly higher inflation since this might help them erode the burden of the debt over time. This strategy doesn't work when inflation is too high as the bond market quickly prices a larger inflation premium into borrowing costs, but it may be possible on a more limited basis. The recent pivot in the U.S. toward average inflation targeting can be thought of as one such strategy.

In light of these developments, it is reasonable to conclude that there are some new upside inflation risks over the medium and long run, and that, all else being equal, inflation should be expected to run moderately hotter than before. There is some hint of this visible in newly rising inflation expectations (Exhibit 29). However, let's not forget that the consensus expectation for inflation before the pandemic was for persistently below-normal readings due to adverse demographic trends. As such, we can say that inflation may be higher than it would otherwise have been, but this doesn't mean it has to be problematically high.

Long-term pandemic consequences

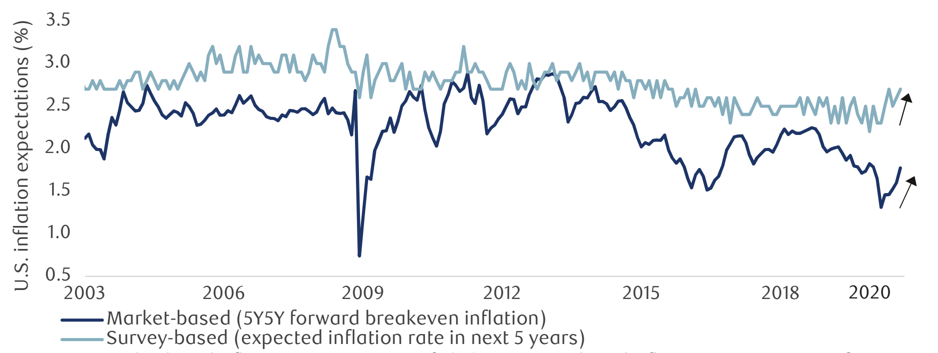
The most visible consequence of the pandemic will be the reduced level of economic output over the next several years. Fortunately, the shock has already proven to be significantly less severe than the Great Depression, and we expect it to be less long-lasting than the global financial crisis (Exhibit 30).

But it is reasonable to expect a variety of other enduring changes as a result of the pandemic. We sort these into three categories: temporary (but still multi-year) changes, permanent changes, and accelerated changes.

Temporary changes include:

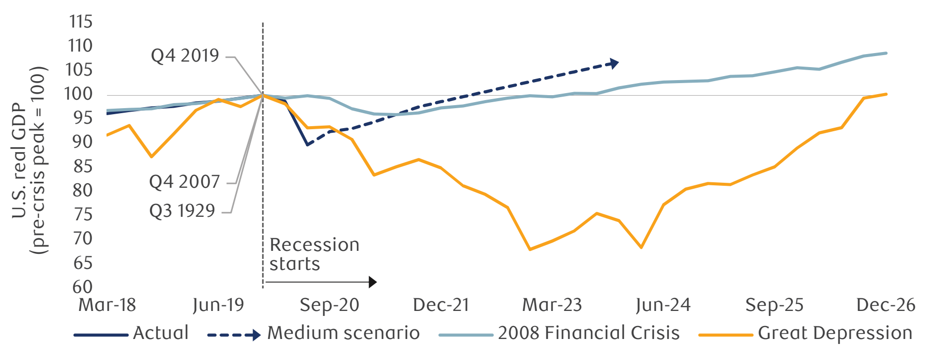
- The prospect of higher inequality as some types of workers suffer structural unemployment at the same time that many others are unaffected.
- The outperformance of big businesses (with their e-commerce capabilities, sophisticated technology infrastructure and deep balance sheets) relative to small businesses (which cluster disproportionately in adversely affected sectors such as food services and retail).

Exhibit 29: U.S. market-based inflation expectations are low but turning upwards



Note: Market-based inflation expectations as of 8/31/2020, survey-based inflation expectations as of Aug 2020. Source: Federal Reserve, University of Michigan Surveys of Consumers, Haver Analytics, RBC GAM

Exhibit 30: U.S. economic trajectory versus past recessions



Note: As of 7/31/2020. Medium scenario based on RBC GAM projections. Source: Haver Analytics, Macrobond, RBC GAM

- A preference for low-density working and living over high density, to the temporary detriment of downtown living and office towers.
- Less usage of public transit.
- Reduced leisure travel, especially via international flights.

We believe these changes should start to unwind in a few years' time, once COVID-19 ceases to be a threat.

Potentially permanent changes include:

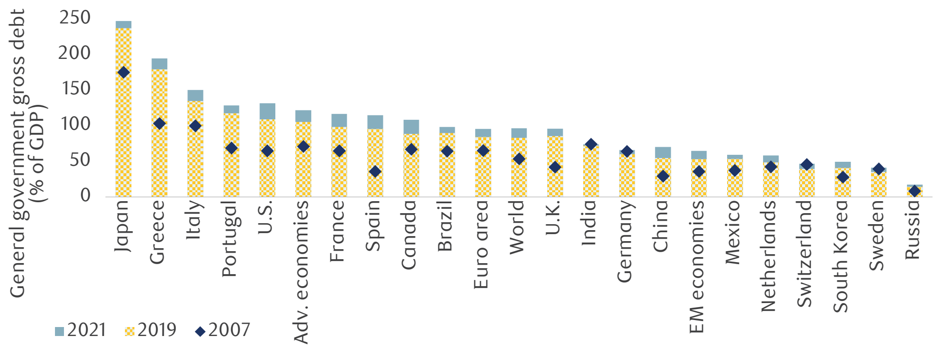
- Higher public-debt loads due to the massive fiscal deficits induced during the pandemic (Exhibit 31). It is unlikely that governments will be willing to deliver sufficient austerity to reverse the debt accumulation, meaning higher debt loads will prove permanent, requiring perpetually higher debt-servicing payments.
- The pandemic and its debt accumulation strengthen the argument that interest rates will have to remain low in perpetuity to keep governments solvent.

- We are hopeful that governments will be willing to allocate greater financial resources toward preparing for low-probability/high impact risks such as future pandemics, asteroid strikes and other assorted perils.
- Investors and businesses may be more willing to take excessive risks in the future to the extent they have been bailed out yet again by policymakers.
- Possibly more inflation, as discussed in the prior section.

Lastly, there are changes that were probably going to happen anyway, but that have arrived years earlier than expected due to the pandemic:

- The technical capacity to work from home has long existed, but now the majority of office workers have had a taste and many quite like it. Even when social-distancing requirements end and office towers can be fully repopulated, it seems reasonable to expect that many people will continue to work virtually, or at least split their work between the office and the home.
- Business travel will likely be permanently diminished for much the same reason: it is technically possible and now increasingly acceptable to interact with colleagues and clients virtually rather than in person.
- Internet-based vendors have been outpacing bricks-and-mortar establishments for decades, but that trend has taken a further leap forward due to the pandemic. Online sales have nearly doubled relative to a year ago. Some of that may be relinquished as physical stores re-open, but much will not. The trend is more likely to continue advancing than to reverse over the next several years.
- Businesses were already shifting toward increased workplace automation, but the costs of social distancing are such that this trend will leap forward.

Exhibit 31: Government debt pre-financial crisis, pre- and post-COVID-19



Note: IMF projections for year 2021. 2021 projections for world, advanced and EM economies estimated based on IMF projections for individual countries. Source: IMF Fiscal Monitor, April 2020, Macrobond, RBC GAM

Bottom line

While the virus is far from gone, it is increasingly coming under control. At a minimum, policymakers have an understanding of how to limit transmission, even if not all have proven willing to accept the accompanying economic hit.

Furthermore, even with a variety of new macroeconomic headwinds in the coming months, the economic recovery can likely continue, if at a slower pace. A full return to normal isn't possible until after a vaccine has been widely distributed, likely a mid-2021 proposition, but even that date is no longer so distant. A full return to economic normality will then take a few more years.

The potential for higher inflation is a novel prospect given the utter dominance of low inflation over the past decade, though the key message is that inflation could be higher than over the past decade, rather than that it will be problematically high.

The pandemic has now cooled to the point that non-virus issues can finally be seriously contemplated. The U.S. election sits at the very front of the pack, with a Biden presidency an increasingly real possibility. This could well be an economic positive over the medium run, but the stock market is unlikely to relish higher taxes.

On the aggregate, although risks to this relatively benign base-case outlook exist, the macroeconomic environment remains supportive of moderate risk-taking in financial markets.

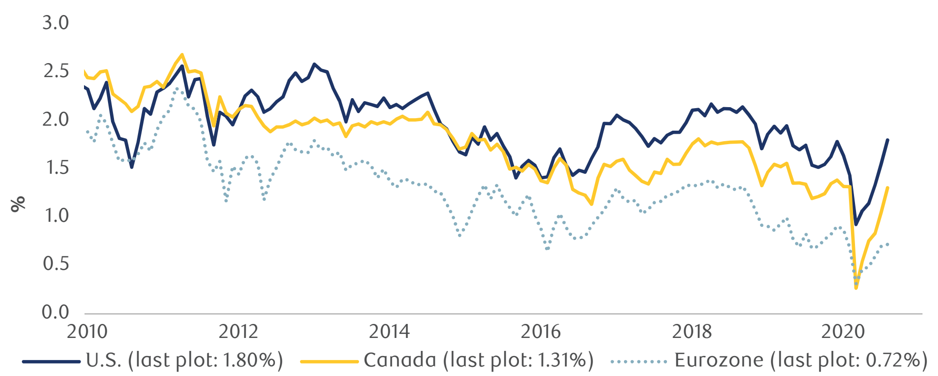
Market Outlook

Navigating low rates, high prices

Eric Savoie, MBA, CFA
Associate Investment Strategist
RBC Global Asset Management Inc.

Daniel E. Chornous, CFA
Chief Investment Officer
RBC Global Asset Management Inc.

Exhibit 1: Implied long-term inflation premium
Break-even inflation rate: nominal vs 10-year real return bond



Note: Eurozone represents GDP-weighted breakeven inflation of Germany, France and Italy. As of August 31, 2020. Source: Bloomberg, RBC CM, RBC GAM

The global economy is finding its footing after falling into the deepest recession since the Great Depression. Economies are gradually re-opening, leading indicators have turned positive, unemployment is declining and stock markets are soaring to new highs. Aiding the recovery have been the massive monetary and fiscal stimulus programs in place and the moderating coronavirus threat in many parts of the world. Our expectation is for the economy to continue to recover, but at a slower pace than the initial phase of the rebound.

Investors are facing a challenging set of circumstances. Interest rates and bond yields are at historic lows and, after a spectacular run, equity-market valuations are creeping up to levels that will depend on support from profit growth to fuel further gains. Moreover, the valuation gap between growth and value stocks has reached levels not seen since the late 1990s technology bubble, and investors may want to manage their style exposures as a result. We have moderated our total-return expectations for all asset classes in this environment, but we continue to believe that stocks offer superior return potential relative to bonds. We look for mid to high single-digit returns for stocks versus low single-digit to slightly negative returns for sovereign bonds over our 1-year forecast horizon. As a result, we nudged our recommended allocation to stocks higher by one percentage point this quarter, sourced from bonds. For a balanced, global investor, we currently recommend an asset mix of 62 percent equities (strategic neutral position: 60 percent) and 37 percent fixed income (strategic neutral position: 38 percent), with the balance in cash.

Lower interest rates for longer

Against the difficult economic backdrop caused by the pandemic, central banks throughout the world slashed interest rates and they remain near zero or in slightly negative territory in most of the developed world. Jerome Powell, chair of the U.S. Federal Reserve (Fed), indicated that policymakers are not planning to raise interest rates in the foreseeable future. One reason for keeping rates low is to stimulate inflation. Inflation expectations inched up as economies reopened, but they remain well below the 2% average that the Fed and other central banks are targeting (Exhibit 1). The massive stimulus injected into the economy and markets could cause consumer prices to rise, but downward pressure on prices from reduced demand, labour-market slack and weak energy prices should provide effective offsets, limiting the threat of unwanted inflation in the intermediate term. As a result, market-based forecasts for interest rates have plummeted to near zero far into the future, and investors widely accept that interest rates will likely remain low for at least the next few years (Exhibit 2).

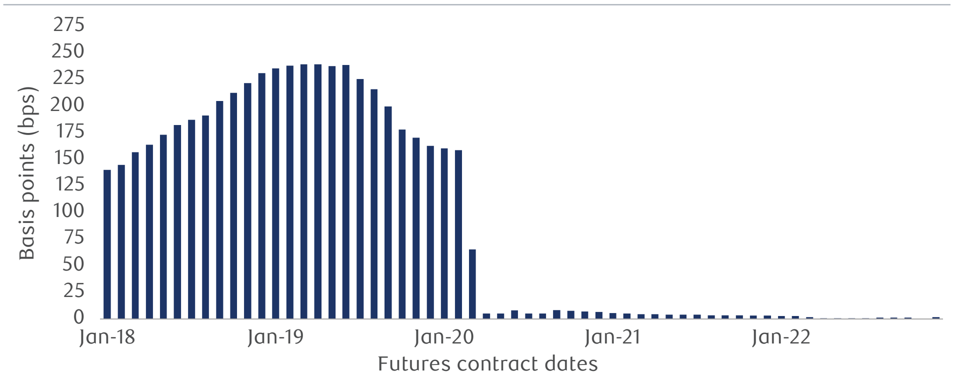
Government-bond yields are historically low and represent acute valuation risk

As with short-term interest rates, the weak economy and highly accommodative central-bank policies pulled longer-term government-bond yields around the world to historically low levels. In the past quarter, yields remained near these levels and have fluctuated in a narrow range. Among the major developed regions that we track, the U.S. 10-year yield, at 0.70%, is second only to Italy's 1.09%, and yields in Germany remain in negative territory (Exhibit 3). Yields are below our modelled equilibrium levels in all major developed regions (see page 38). Taken together, our composite of global bond-equilibrium models situates yields near their lowest ever level relative to fair value and represents severe valuation risk (Exhibit 4).

Negative real yields unlikely to persist indefinitely

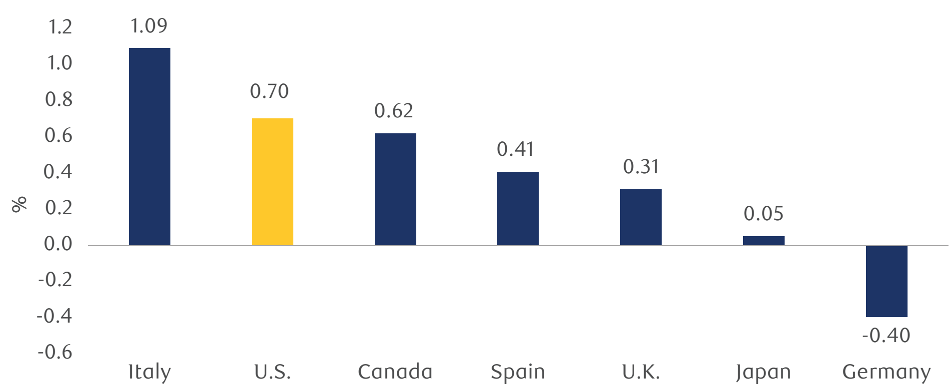
We recently enhanced our bond models to account for secular forces that are likely to keep long-term real interest rates low. Even with these adjustments, bonds look expensive and offer unattractive return potential. Our models combine a real rate of interest with an inflation premium to arrive at a nominal yield for bonds (Exhibit 5). The inflation premium is slightly above 1%, and our model eventually assumes this returns to around the 2% average level that the Fed is targeting. But with the U.S. 10-year yield currently at 0.70%, the after-inflation yield is negative. We don't think real yields are sustainable at these levels as investors will eventually demand compensation for tying up their funds. However, our models don't anticipate a meaningful increase in real rates, which may hover near zero versus 2% historically, because of structural changes related to demographics, an increased preference for saving, and the maturation of emerging-market economies. In any event, our models still suggest that yields are too low and that they should move higher. Even a

Exhibit 2: Implied fed funds rate
12-month futures contracts



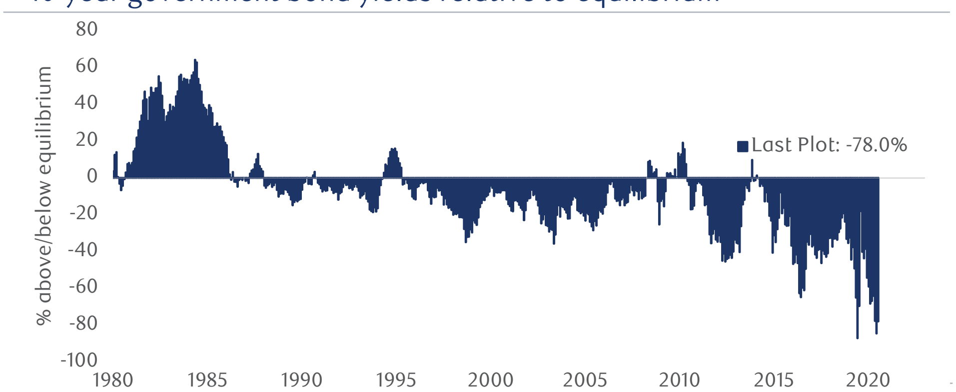
Source: Bloomberg, RBC GAM

Exhibit 3: Global bond yields
10-year government bonds



Note: as of August 31, 2020. Source: Bloomberg, RBC GAM

Exhibit 4: Global bond-market composite
10-year government bond yields relative to equilibrium



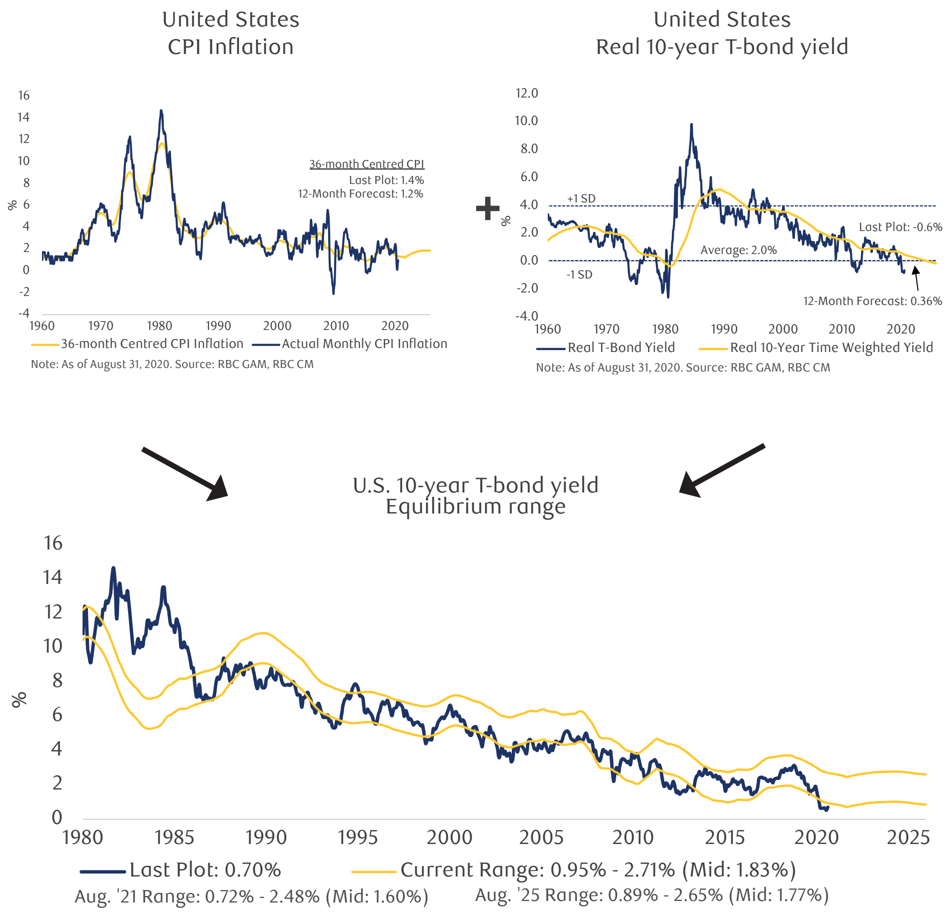
Note: As of August 31, 2020. Source: RBC GAM gradual increase in sovereign-bond yields would generate low single-digit to slightly negative total returns, potentially for many years.

Equities stage remarkable comeback

Equity markets staged a remarkable recovery as central banks provided critical backstops, economies gradually emerged from shutdown and investor confidence was restored. The rally that began in March extended into the summer, with most major indexes posting double-digit gains in the past three months to fully erase or greatly minimize their prior losses (Exhibit 6). The S&P 500 Index climbed 56% from its March 23 low, reaching a new record at the end of August and standing at an 8.6% year-to-date gain excluding dividends.

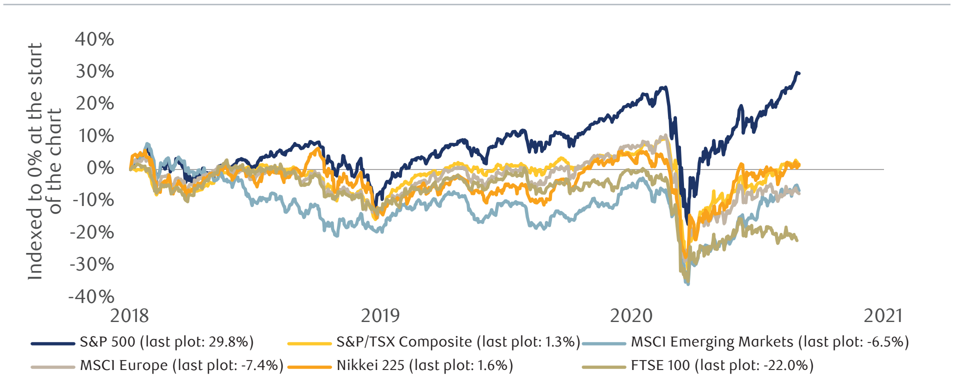
Accompanying this stock-market performance have been improving sentiment and increasing valuations. A sentiment composite by Ned Davis Research has climbed into excessive optimism territory after reflecting extreme pessimism at the depths of the crisis in March (Exhibit 7). Sentiment indicators are generally better at identifying market bottoms than tops, but elevated enthusiasm is one sign of dangerous investor complacency. Moreover, our global fair-value composite has crossed above equilibrium to its highest reading since before the 2008 global financial crisis (Exhibit 8). The combination of highly optimistic investor sentiment and elevated valuations suggests equities could be vulnerable to correction and it would be prudent to lower return expectations accordingly. That said, although *global* equities are above

Exhibit 5: U.S. 10-year bond yield
Fair-value estimate composition



Note: As of August 31, 2020. Source: RBC GAM, RBC CM

Exhibit 6: Major equity-market indices
Cumulative price returns indices

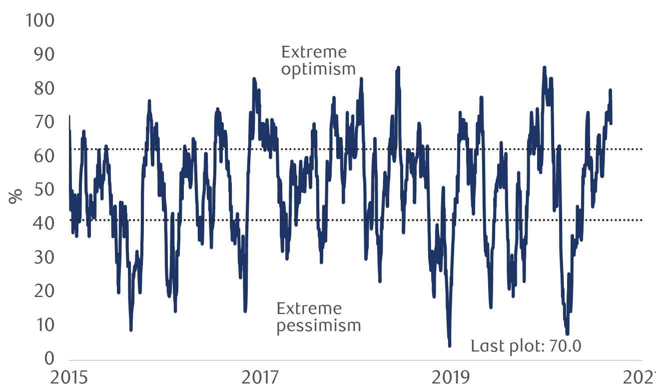


Note: As of August 31, 2020. Price returns computed in local currencies, except MSCI Emerging Markets Index, which is in USD. Source: Bloomberg, RBC GAM fair value, valuation dynamics differ significantly between regions, with U.S. equities the most fully priced and other stock markets still at particularly attractive levels (see page 39).

European and U.K. stocks remain deeply undervalued according to our models, consistent with local valuations through the past decade. We have recognized the possibility of distortion in our models resulting from secular change in European and British inflation rates following the 1980s hyperinflation. As more complete data sets have become available, we have refined our models, stripping out the effect of past inflation on earnings trends, and standardizing our approach to normalized profits with those that have always been applied in our North American models. As a result of removing changes in secular inflation rates from our normalized profitability analysis, our assumptions are now more conservative and look for future profits to grow at a much more reasonable rate than our prior analysis indicated (exhibits 9 and 10).

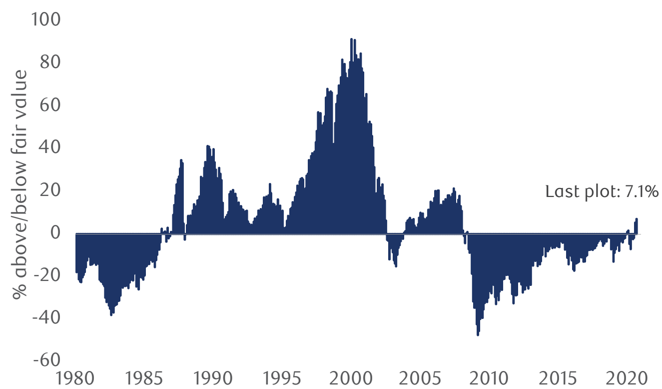
While our upgraded models for European and U.K. markets reduce the degree of undervaluation, these markets still appear quite attractive relative to their own fair value and especially relative to that of the U.S. Importantly, should European and British economic fundamentals improve beyond current expectations, these valuations suggest the prospect of significant gains going forward and perhaps even a period of leadership versus global equity markets.

Exhibit 7: Ned Davis Research Daily Trading Sentiment Composite – Percent bulls



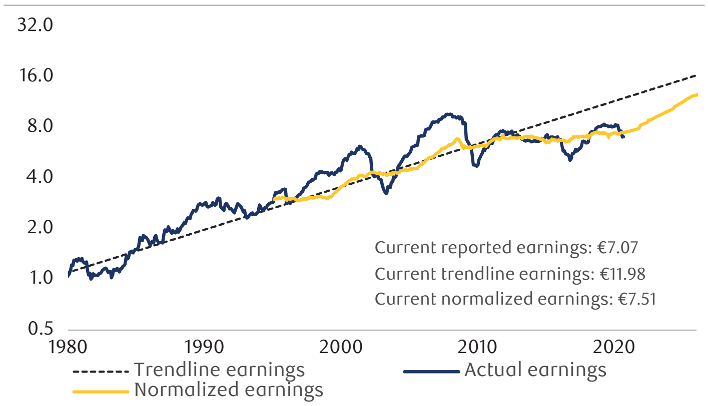
Note: As of September 4, 2020. Source: Ned Davis Research, RBC GAM

Exhibit 8: Global stock-market composite
Equity market indexes relative to equilibrium



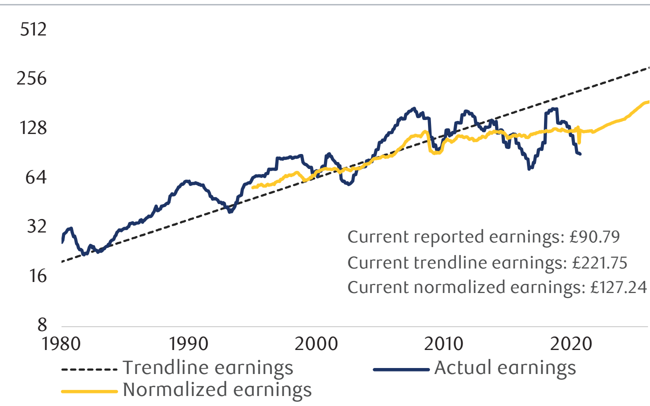
Note: As of August 31, 2020. Source: RBC GAM

Exhibit 9: MSCI Europe earnings comparison



Note: As of September 7, 2020. Source: RBC GAM

Exhibit 10: MSCI United Kingdom earnings comparison



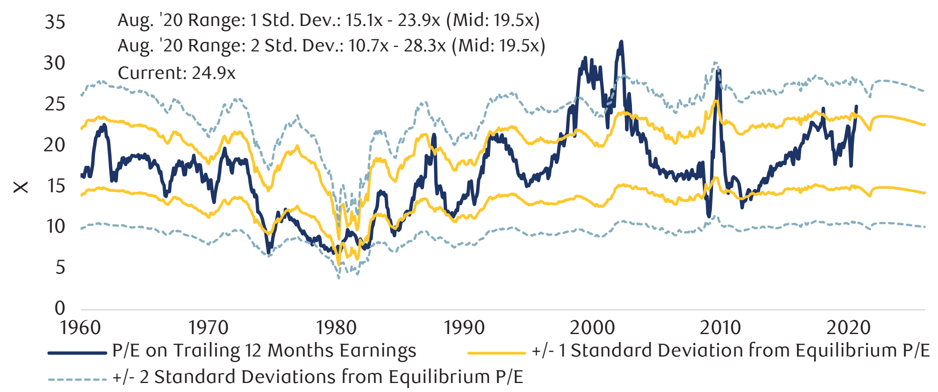
Note: As of September 7, 2020. Source: RBC GAM

Stocks are pricing in an earnings recovery

In the U.S., the price-to-earnings ratio (P/E) on the S&P 500 is high by historical standards, likely because investors are confident that corporate profits will recover. Earnings have plunged due to COVID-19 and analysts expect S&P 500 profits to decline about 30% in 2020. As stock prices rebounded, the P/E rose to more than one standard deviation above our modelled normalized level because falling earnings show up in the denominator of the P/E calculation (Exhibit 11). But investors are likely looking forward to earnings in 2021 and beyond. Estimates have actually been improving and the breadth of upward revisions is at the highest level in over two years as analysts look for a rebound in profits to their pre-COVID-19 peak sometime in late 2021 or early 2022 (exhibits 12 and 13).

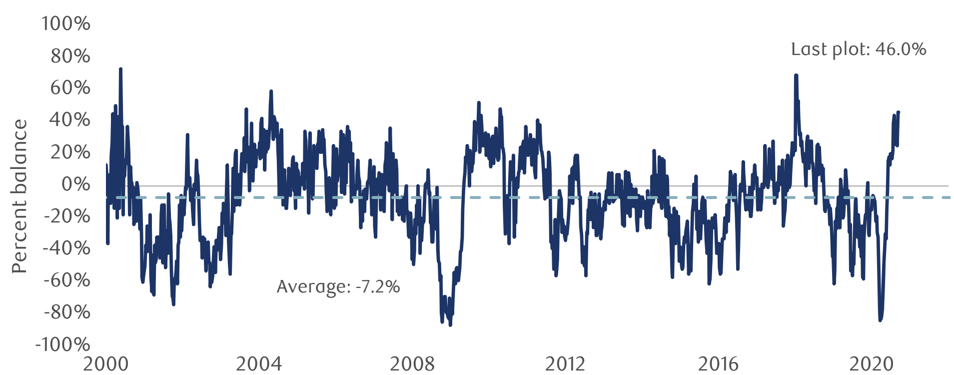
Those confused by the sharp recovery in markets may want to consider that earnings lost due to COVID-19 have little impact on the present value of stocks. In capital-markets theory, today's value for a stock reflects the present value of future profits. Firms have experienced severe profit pressure during the shutdown and recovery, but the market is also focused on future earnings which are unlikely to feature COVID-19 related distortion. Using a discounted cash flow approach, we found that a temporary earnings decline does not have a substantial impact on the market's present value as long as profits ultimately recover to their prior trajectory. In other words, investors likely look across the valley to the long-term earnings power of

Exhibit 11: S&P 500 Index
Normalized (Equilibrium) Price/Earnings Ratio



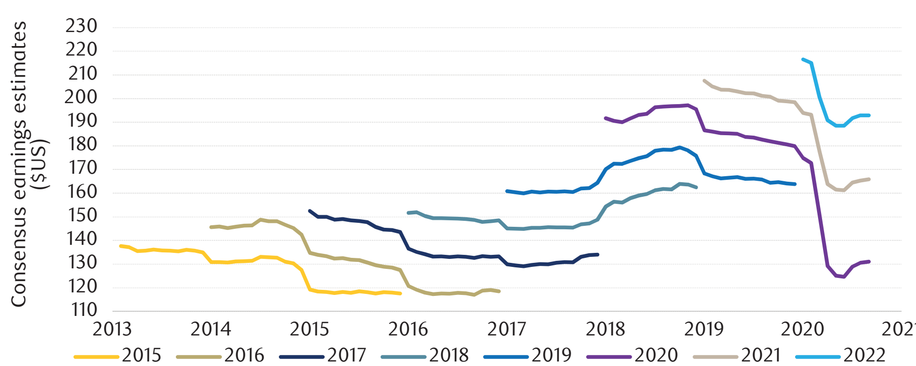
Source: RBC GAM

Exhibit 12: U.S. equities
Companies with upward earnings revisions



Note: As of September 8, 2020. Source: Citi, RBC GAM

Exhibit 13: S&P 500 Index
Consensus earnings estimates



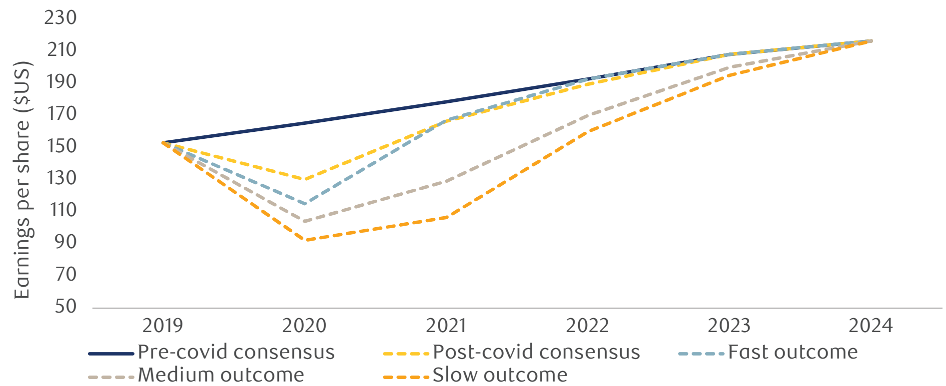
Note: As of September 8, 2020. Source: Thomson Reuters, Bloomberg companies to establish a fair price for stocks even though the near-term outlook is murky.

We've outlined several different scenarios for profits based on our economic-growth forecasts (fast, medium, slow) as well as the consensus of analyst earnings estimates (Exhibit 14). Assuming that profits return to their pre-COVID-19 trajectory by 2024, discounting cumulative profits between now and then back to today, the estimated impact on the S&P 500's present value from the COVID-19 earnings drop amounts to only 5% in the most severe case (Exhibit 15). This analysis would suggest the initial decline in stocks in February/March may have been overdone and that the substantial rebound in prices was appropriate.

Scenario analysis reveals near-term vulnerability but longer-term upside potential for stocks

Looking beyond the COVID-19 decline in profits, stocks hold decent upside potential as long as earnings come through as expected and investor confidence remains elevated. Exhibit 16 shows various combinations of earnings and price-to-earnings multiples for 2021 and 2022. For 2021, an equilibrium P/E of 19.1 and a top-down earnings estimate of US$166.00 would position the S&P 500 at 3173, well below the market's actual level of 3500 at the time of writing. The equilibrium P/E is the level that we believe is consistent with current and expected interest rates, inflation and corporate profitability, but stocks can trade above this equilibrium level in

Exhibit 14: S&P 500 Index
Earnings scenarios



Source: Bloomberg, RBC GAM. As of August 31, 2020.

Exhibit 15: Estimated impact on S&P 500 from earnings lost due to COVID-19

Scenario	$ impact on S&P 500 present value	% impact on S&P 500 present value
Post-covid consensus	-46.4	-1.4%
Fast outcome	-57.4	-1.7%
Medium outcome	-126.6	-3.7%
Slow outcome	-169.9	-5.0%

Note: Assumes earnings ultimately catch up to their pre-virus trend. Discount rate of 6.35% applied to future earnings. Percent impact on S&P 500 present value computed based on pre-virus S&P 500 peak of 3386. As of August 31, 2020.Source: Bloomberg, RBC GAM

Exhibit 16: Earnings estimates and alternative scenarios for valuations and outcomes for the S&P 500 Index

		2021 Top down	2021 Bottom up	2022 Top down	2022 Bottom up
	P/E	$166.0	$165.3	$189.5	$192.9
+1 Standard Deviation	23.4	3887.6	3870.5	4437.7	4517.1
+0.5 Standard Deviation	21.3	3530.8	3515.2	4030.3	4102.4
Equilibrium	19.1	3173.9	3159.9	3623.0	3687.8
-0.5 Standard Deviation	17.0	2817.0	2804.6	3215.6	3273.1
-1 Standard Deviation	14.8	2460.2	2449.3	2808.2	2858.5

Note: As of August 31, 2020. Source: Bloomberg, Thomson Reuters, RBC GAM an environment where investor risk appetite is elevated. Looking ahead to 2022, a top-down earnings estimate of US$189.50 and P/E of 19.4 arrives at a fair-value S&P level of around 3700. Valuations are rather demanding at current levels, but it wouldn't be unreasonable for stocks to continue to generate mid-single-digit total returns over the intermediate to longer term in an environment where earnings meet or exceed expectations, investor confidence remains elevated and interest rates and inflation stay low.

Pandemic caused a wide divide between investment styles

Mass quarantines and stay-at-home measures boosted the proposition of companies with highly scalable online businesses while harming traditional companies with large physical footprints. The result is that, following the initial COVID-19 crisis, investors developed an insatiable appetite for large-cap technology stocks and shied away from traditional cyclical stocks. In fact, the bulk of the S&P 500's performance so far this year has been delivered by a concentrated group of mega-cap technology stocks such as Facebook, Apple, Amazon, Netflix and Google (the "FAANGs"). These five stocks now make up more than 25% of the S&P 500's index weighting, and their impact is significant enough that this year's 8% advance in the S&P 500 falls to flat if one excludes the FAANGs. Removing Microsoft as well would leave the index down slightly (Exhibit 17).

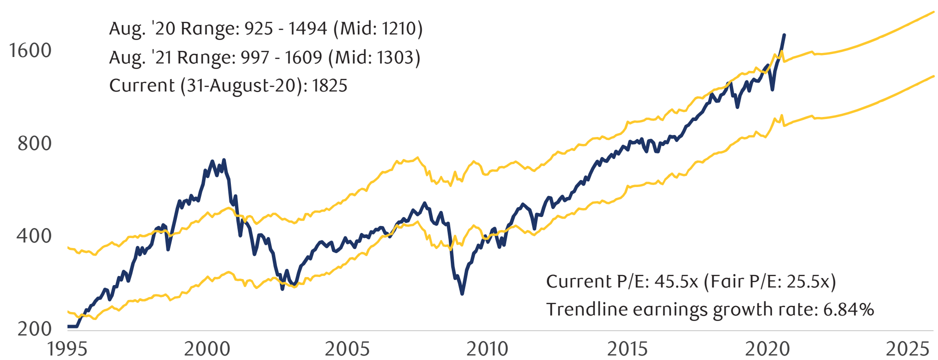
The pandemic has accelerated the trend of growth-stock outperformance that began in the aftermath of the 2008

Exhibit 17: S&P 500 Index performance

	1M	3M	6M	YTD	1Y	2Y	3Y
S&P 500	7.0%	13.6%	11.8%	8.3%	19.6%	9.8%	12.3%
S&P 500 ex. FAANG	6.1%	9.8%	5.0%	0.7%	9.2%	4.6%	7.7%
S&P 500 ex. FAANMG	5.7%	8.8%	3.2%	-1.8%	6.3%	2.7%	6.1%
S&P 500 Avg. Return 1926 – present	0.6%	1.9%	3.7%	N/A	7.7%	6.5%	6.2%

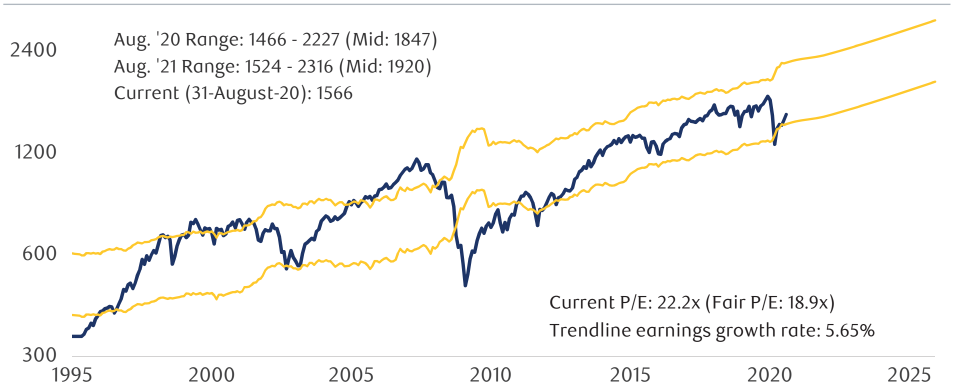
Note: Performance as of August 31, 2020.
Figures are annualized for periods greater than one year.
1-month, 3-month, and 6-month figures are calculated based on a 30 day month.
FAANMG represents Facebook, Amazon, Apple, Netflix, Microsoft and Alphabet (Google).
Source: Bloomberg, RBC GAM

Exhibit 18: Russell 3000 Growth Index
Normalized earnings & valuations



Source: RBC GAM

Exhibit 19: Russell 3000 Value Index
Normalized earnings & valuations



Source: RBC GAM

global financial crisis. The valuation gap between growth and value stocks has now reached extremes not seen since the late 1990s technology bubble. Our valuation models suggest that U.S. growth stocks are expensive relative to their own history, while U.S. value stocks are approaching particularly cheap levels (exhibits 18 and 19). This situation is quite different from the technology bubble, when both groups of stocks were overvalued. On a relative basis, though, the valuation gap between growth and value has now exceeded its tech-bubble peak, and the same is true on a relative-performance basis (exhibits 20 and 21). The current backdrop of weak economic growth still favours growth stocks and the momentum behind them is very strong. Relative valuation gaps are seldom catalysts for durable reversals in trends. However, factors that could cause a shift to value leadership would be more evidence of a self-sustaining economic recovery, rising inflation and pricing power, and a steepening yield curve.

Exhibit 20: Russell 3000 Growth % of equilibrium relative to Russell 3000 Value % of equilibrium – U.S. equity styles: relative valuation

Note: As of August 31, 2020. Source: RBC GAM

Exhibit 21: Growth to value relative performance
Russell 3000 Growth Index / Russell 3000 Value Index

Note: As of August 31, 2020. Source: Bloomberg, RBC GAM

High bar to justify growth-stock valuation premium

Elevated valuations are often associated with lofty expectations, and we performed a simple break-even analysis to determine what the market is pricing in. Exhibit 22 outlines an example for illustrative purposes. Because of the significant valuation premium in growth stocks, an investor that invests $100 in the Russell 3000 Value Index presently would "own" a claim on $6.13 per year in earnings whereas in the Russell 3000 Growth Index those profits would amount to only $2.65 per year. Over time, though, the earnings of growth stocks should rise at a faster pace. Our analysis establishes just how fast those earnings would need to rise for the present value of growth stocks to equal that of value stocks over a variety of time frames. In our analysis, we assumed that earnings of the value index keep rising at their long-term average rate of 5.7%. Given a 10-year horizon and discounting future earnings to the present, earnings of growth stocks would have to rise at a rate of 21.5% each year for the next decade to reach break-even with value stocks.

This hypothetical growth-stock profit rate of increase is a very high bar considering the Russell 3000 growth index hasn't achieved such growth over any 10-year period since 1995, and on average it has grown its earnings at a rate of just 7.2% a year (Exhibit 23). A concentrated group of high performers (i.e. Apple, Amazon, Microsoft, Google, Facebook) *has* achieved such a growth rate historically (Exhibit 24), but this feat is much more difficult to achieve when encompassing an entire index made up of a broad range of companies.

Asset mix – boosting equity allocation, sourced from bonds

We expect the economy to continue rebounding as lockdowns ease and the threat of the virus diminishes globally. Although growth will likely slow from the initial stage of the recovery, a gradual improvement in economic activity should be supportive of further profit growth. Our base case could be challenged by a number of risks, including renewed virus outbreaks, U.S-China trade and geopolitical tensions, and uncertainty related to the upcoming U.S. presidential election.

Against this backdrop, monetary policy will likely remain highly accommodative via ultra-low interest rates to support the economy and financial markets. Moreover, price-insensitive asset purchases by central banks may keep bond yields from rising. We expect sovereign bonds to deliver low-single-digit to slightly negative total returns in this environment and, critically, at these low levels of yields, sovereign bonds offer less cushion in a balanced portfolio against any deterioration in the macroeconomic outlook.

Exhibit 22: Growth versus value break-even analysis

Assumptions

	Russell 3000 Value	Russell 3000 Growth
Price	100.00	100.00
P/E	22.27	45.66
Trendline EPS	$6.19	$2.63
Trendline earnings growth	5.69%	6.85%
Discount rate	6.35%	6.35%

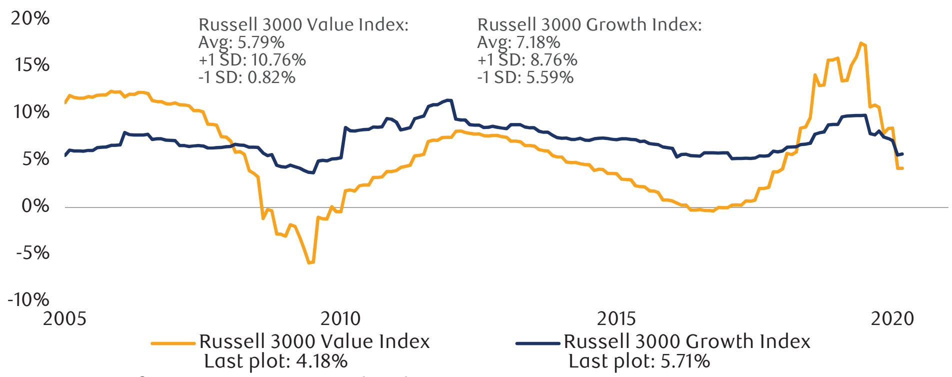
Earnings growth required to justify growth premium

Years	Value earnings	Cumulative earnings	Present value of cumulative earnings (Russell 3000 Value)	Earnings growth required for growth to catch up to value (annualized)
0	$6.19			
1	$6.54	$6.54	$6.15	148.4%
2	$6.91	$13.45	$12.26	82.4%
3	$7.30	$20.75	$18.33	57.9%
4	$7.72	$28.47	$24.37	45.2%
5	$8.16	$36.63	$30.36	37.5%
6	$8.62	$45.26	$36.32	32.3%
7	$9.11	$54.37	$42.25	28.5%
8	$9.63	$64.00	$48.13	25.7%
9	$10.18	$74.19	$53.98	23.5%
10	$10.76	$84.95	$59.80	21.7%
11	$11.37	$96.32	$65.58	20.3%
12	$12.02	$108.34	$71.32	19.1%
13	$12.70	$121.04	$77.02	18.1%
14	$13.43	$134.47	$82.69	17.2%
15	$14.19	$148.66	$88.33	16.4%

Note: As of August 31, 2020. Source: RBC GAM

Stocks still offer reasonable upside potential, especially over a longer time horizon. We recognize that elevated valuations and optimistic investor sentiment leave the equity market vulnerable to correction in the near term, and that style exposures should be managed given the massive valuation gap between growth and value stocks. Over the longer term, however, stocks offer superior return potential versus bonds, a view supported by the still significant equity-risk premium that exists in today's low interest-rate environment (Exhibit 25). For these reasons, we shifted one percentage point from our bond allocation to stocks this quarter. For a balanced, global investor, we currently recommend an asset mix of 62 percent equities (strategic neutral position: 60 percent) and 37 percent fixed income (strategic neutral position: 38 percent), with the balance in cash.

Exhibit 23: Historical earnings-growth rates
Annualized 10-year periods on a rolling monthly basis



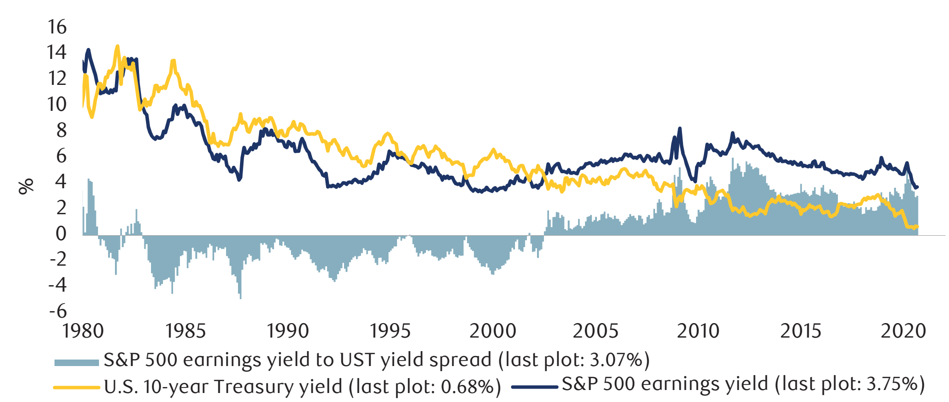
Note: as of August 31, 2020. Source: Bloomberg, RBC GAM

Exhibit 24: "Fab 5" earnings growth stats

			As of 2019 year end			
Company	Market Cap ($US B)	Expected 2020	1-year	5-year	10-year	15-year
Apple	2225	1.1%	0.0%	12.9%	24.7%	42.8%
Amazon	1745	107.6%	13.3%	N/A	27.0%	23.7%
Microsoft	1714	24.2%	27.7%	12.2%	10.5%	9.2%
Alphabet (Google)	1110	5.6%	10.4%	19.1%	16.9%	24.7%
Facebook	841	10.2%	7.8%	49.1%	52.7%	N/A
Average		29.7%	11.8%	23.3%	26.3%	25.1%

Note: periods greater than one year are annualized. As of August 31, 2020. Source: Bloomberg, RBC GAM

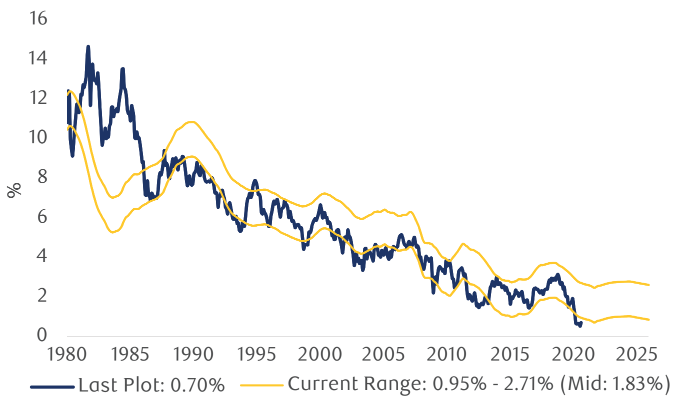
Exhibit 25: S&P 500 earnings yield
12-month trailing earnings/index level



Note: As of September 8, 2020. Source: RBC GAM, RBC CM

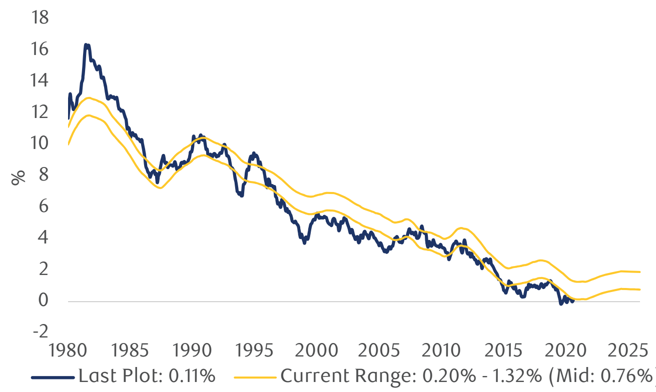
Global Fixed Income Markets

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



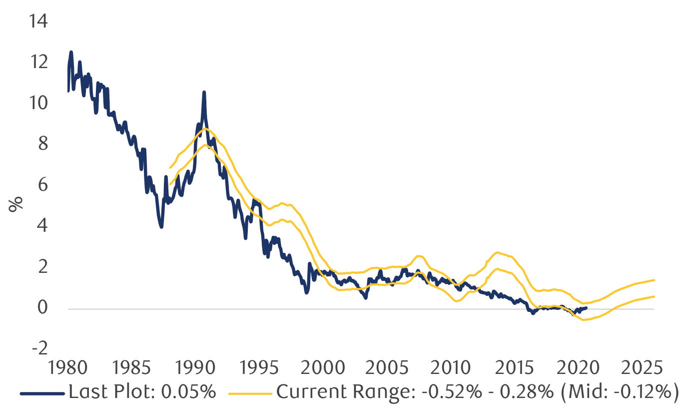
Note: As of Aug. 31, 2020. Source: RBC GAM, RBC CM

Eurozone 10-Year Bond Yield
Equilibrium range



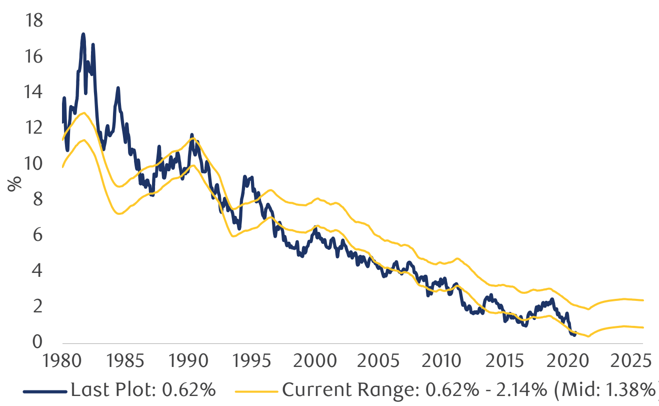
Note: As of Aug. 31, 2020. Source: RBC GAM, RBC CM

Japan 10-Year Bond Yield
Equilibrium range



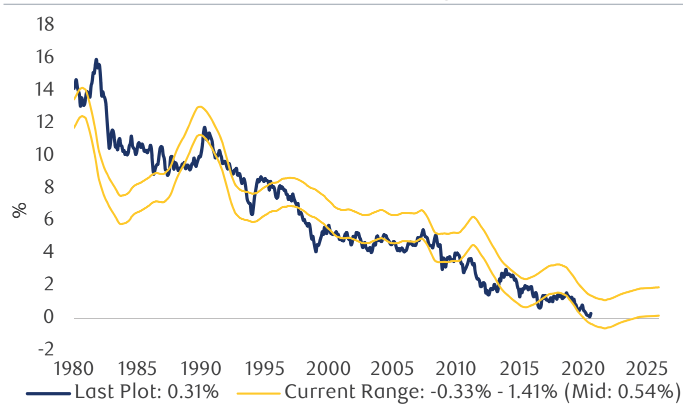
Note: As of Aug. 31, 2020. Source: RBC GAM, RBC CM

Canada 10-Year Bond Yield
Equilibrium range



Note: As of Aug. 31, 2020. Source: RBC GAM, RBC CM

U.K. 10-Year Gilt
Equilibrium range

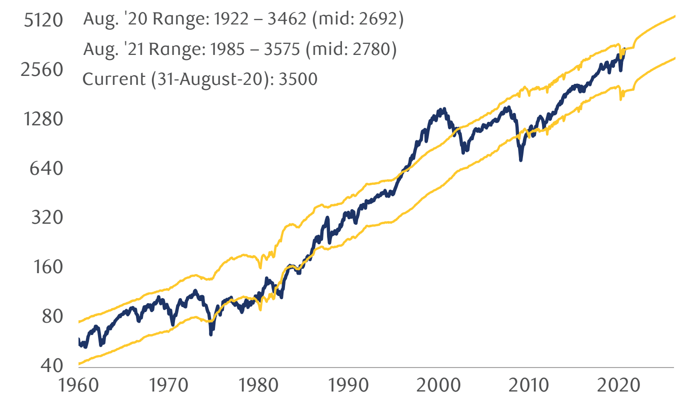


Note: As of Aug. 31, 2020. Source: RBC GAM, RBC CM

> *"The weak economy and highly accommodative central-bank policies pulled longer-term government-bond yields around the world to historically low levels."*

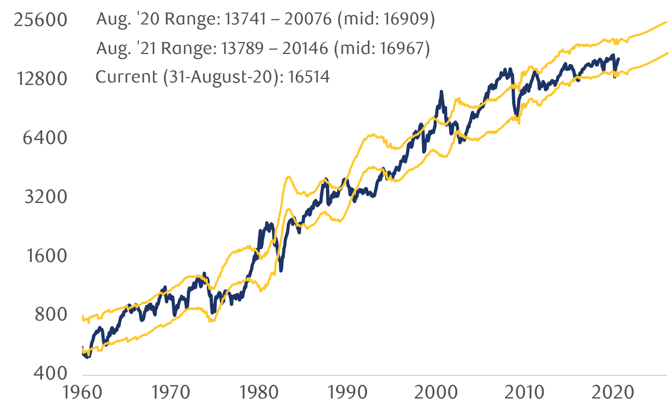
Global Equity Markets

S&P 500 Equilibrium
Normalized earnings and valuations



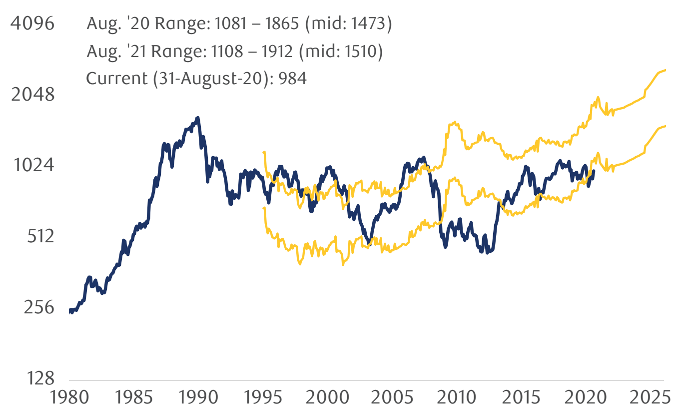
Source: RBC GAM

S&P/TSX Composite Equilibrium
Normalized earnings and valuations



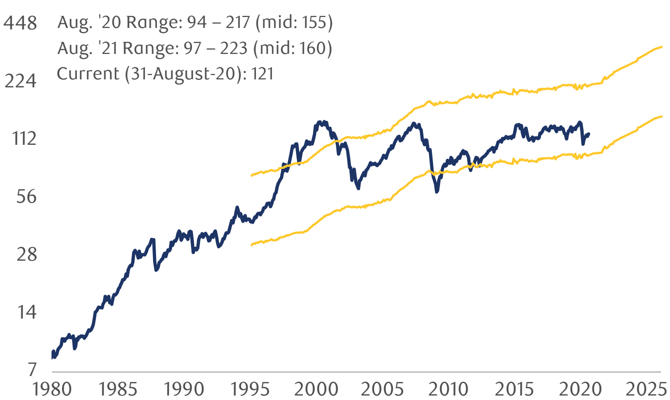
Source: RBC GAM

MSCI Japan Index
Normalized earnings and valuations



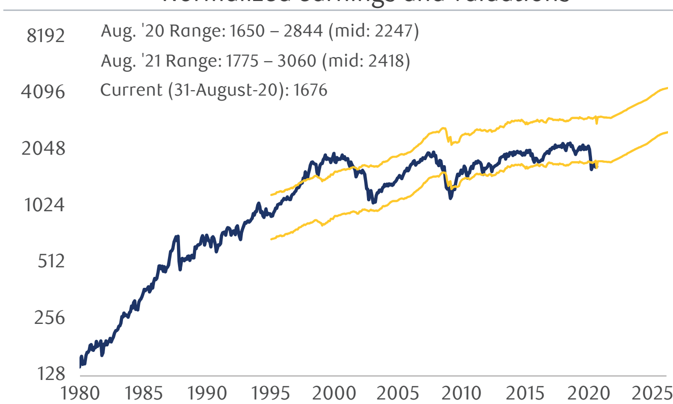
Source: RBC GAM

MSCI Europe Index
Normalized earnings and valuations



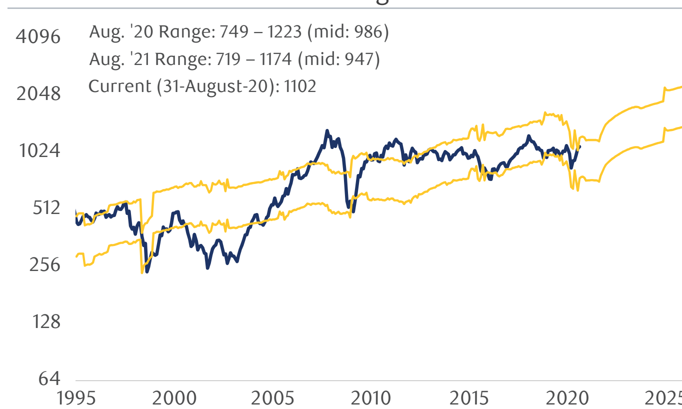
Source: RBC GAM

MSCI U.K. Index
Normalized earnings and valuations



Source: RBC GAM

MSCI Emerging Markets Index
Normalized earnings and valuations



Source: RBC GAM

Note: As of Aug. 31, 2020

Global Fixed Income Markets

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

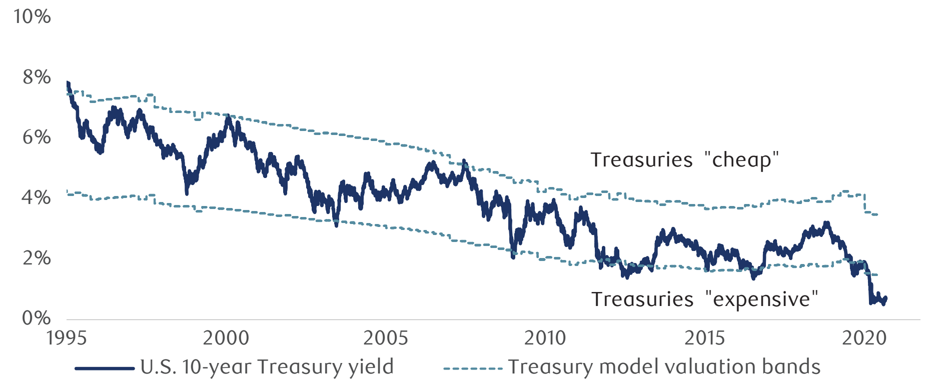
Suzanne Gaynor
V.P. & Senior Portfolio Manager
RBC Global Asset Management Inc.

Taylor Self, MBA
Associate Portfolio Manager,
RBC Global Asset Management Inc.

Government-bond yields in developed markets remain historically low, and we expect that they will be broadly unchanged 12 months from now. The dominant factor in our outlook remains the pandemic. A return to normal appears to be a long way off, and so we can expect the pandemic will continue to have an unprecedented impact on people, governments and economies for the foreseeable future. Eventually the pandemic will subside and at that point yields should rise. Investors should be prepared for lackluster government-bond performance.

The effect of current monetary-policy actions on government-bond yields cannot be underestimated. Central-bank policymakers have lowered policy rates dramatically, and have been clear that they do not expect to raise rates for some time, perhaps years. Equally important is the fact that investors appear to believe in the avowal of central banks to keep rates low. The futures market indicates that investors do not expect the U.S. Federal Reserve (Fed) to raise interest rates until the fall of 2024. In Canada, the market is penciling in the first rate hike from the Bank of Canada (BOC) for the fall of 2023.

Exhibit 1: U.S. 10-year Treasuries are expensive
U.S. 10-year Treasury yield, RBC GAM Treasury model



Note: As of: August 31, 2020. Sources: Federal Reserve, RBC GAM

In addition to an extended period of exceptionally low short-term interest rates, central banks have committed to purchasing substantial amounts of financial assets. Through the first half of 2020, major central banks bought more than US$5 trillion of such assets, and the purchases continue, albeit at a slower pace. These transactions include both government bonds and corporate debt, and in the case of Japan, equities. The impact of past purchases, and ongoing commitments to buy both safe and risky assets to ensure orderly markets, has been remarkable.

With central banks directly backstopping the prices of risky assets, global equities and corporate bonds have staged their fastest-ever recovery from bear markets. Meanwhile, government-bond yields have remained near the lows seen in the depths of the pandemic-linked panic in March. Given the continuing impact of COVID-19, policy support for safe and risky assets alike will remain high, muting upward pressure on government-bond yields.

At the same time, government bonds are expensive, based on historical valuation tools, suggesting higher yields will prevail when the economy returns to something resembling normal. Our fair-value estimate (Exhibit 1) for the U.S. 10-year Treasury-bond yield is between 1.5% and 3.5%, implying a fairly substantial rise in yields from the current 0.70%. Our estimate for the yield on the 10-year Canadian government bond is similar. Of course, we do not expect a return to normal yields overnight, but perhaps over several years. As yields rise, capital losses would offset coupon income.

In addition to higher bond yields in the longer term, we think investors should be wary of another development that we believe will have a large effect on the government-bond market: evolving central-bank policy in response to low interest rates and inflation.

Alongside efforts to cushion the immediate impact of the pandemic, central banks are adapting their tools to longer-term challenges facing their economies. Both the Fed and the European Central Bank (ECB) are undertaking strategic reviews that we anticipate will largely codify actions taken to offset global trends, which have resulted in sluggish economic growth and persistently low inflation. While the pandemic will likely not figure prominently in these reviews, the tools that central banks recently deployed almost certainly will.

The longer-term issues plaguing the global economy include slowing population growth and a larger share of the workforce that is either retired or not working. Absent increases in productivity, these factors will tend to reduce an economy's potential growth, and lower economic-growth rates mean that central bankers must keep policy rates low. Given that most policymakers consider negative interest rates to be ineffective in combatting slow growth, central bankers in the future will likely be forced to use tools other than interest-rate cuts in response to economic downturns.

In addition to facing constraints on the ability to change short-term interest-rates in response to economic fluctuations, policymakers face the problem of too little inflation. At least part of today's subdued price increases can be attributed to the success of central banks in tamping down price pressures via inflation-targeting. Other factors keeping inflation low over the past couple decades probably include technological developments and the globalization of trade, as well as the erosion of workers' bargaining power as reflected in declining union membership. Moreover, low inflation is self-reinforcing, because it generally moderates expectations of future inflation. As the period of high and variable inflation in the 1970s moves further into history, so too have people's memories of that period. While inflation expectations used to be sensitive to changes in current inflation, they do not vary much these days as a greater and growing share of the population has no experience of such episodes.

The decline in inflation and inflation expectations since the 1970s was welcome, but has become a problem for policymakers constrained by low interest rates. When a central bank cuts policy rates to zero, further reductions are limited by inflation. For example, if the policy rate is 0% and people expect 2% inflation, the inflation-adjusted policy rate is -2%. As inflation expectations fall, it becomes harder and harder for central bankers to provide stimulus without descending into negative policy rates – a situation where lenders pay borrowers. Instead of cutting policy rates into negative territory, central bankers can create more policy room by raising expectations for future inflation. Unlike the long-term trends affecting economic growth, central banks can influence inflation expectations via commitments to keep financial conditions loose until a sustained upturn in inflation is generated.

Central-bank asset purchases and balance-sheet management are likely to be a permanent feature of bond markets, with possible implications for the relationship between assets that have generally been designated as "safe" and "risky." Central-bank support for risky assets might already be changing the relationships between government-bond markets, which have historically performed the task of buffering balanced portfolios, and risky assets. The performance of two key markets during the March bond rally illustrates a shift in how investors' ability to depend on government fixed-income markets may be shifting. As pandemic-related panic spread, Japanese equities fell by about a third, while Japanese government bonds rose just 2% at a time when short-term rates were already near zero. In contrast, U.S. government bonds returned 12% given that the Fed was then still able to cut rates significantly.

After years of battling persistently low inflation and sluggish economic growth, the Bank of Japan (BOJ) owns more than 50% of the country's government-bond market and controls bond yields through a program of yield-curve control, which ensures that the gap between short- and long-term interest rates stays small. While a mix of asset purchases and the targeting of long-term yields is intended to stimulate economic growth, it has somewhat undermined the case for holding government bonds as safe assets in a balanced portfolio. Japan's experience raises the possibility that the U.S. could be headed in the same direction

In summary, checks on policymakers' ability to use short-term interest rates to stimulate economic growth means commitments to keep rates low for longer and longer periods will become the norm. Asset purchases will become everyday policy tools, keeping government bond yields from rising substantially. Finally, central banks will likely become more tolerant of higher inflation. In most of our scenarios, what strikes us is the relatively poor outlook for both nominal and inflation-adjusted government-bond returns.

Direction of rates

U.S. – The Fed cut its target range for the fed funds rate to between 0.00% and 0.25% in mid-March. To quote Chair Jerome Powell, the central bank is "not even thinking about thinking about raising interest rates." In addition to the commitment to not raise rates, the Fed will make monthly purchases of US$80 billion in Treasury bonds and US$40 billion of mortgage-backed securities at least through the end of this year.

The Fed will most likely announce the results of its strategic policy review in September. We do not expect a revolutionary outcome. In July, Powell said the review would largely codify what the Fed has already been doing, and we expect that the Fed will pursue a monetary policy focused on generating more inflation when its target is not met. We expect no change to the policy rate in the U.S. over the next 12 months. Our one-year ahead forecast for the 10-year Treasury yield is 0.75%.

Germany – In July, the ECB board of governors left its policy interest-rate unchanged at -0.50% and slowed emergency asset purchases linked to the pandemic, reflecting better market conditions. We do, however, expect asset purchases to continue for the foreseeable future as economic activity remains muted. An agreement struck earlier in the summer will result in substantial EU-backed debt issues in the years ahead to fund pandemic and economic reform. The debt issues will make the EU one of the largest issuers of euro-denominated sovereign debt, representing an enormous transformation for European government-bond markets. We expect that such large EU bond issuance will reduce the difference in borrowing costs between more creditworthy and less creditworthy European governments. As with all other major central banks, we do not expect a change in the ECB's policy rate over the next 12 months, and forecast the 10-year German bund yield to be -0.30% in a year.

Japan – There was no change to the BOJ's 0% policy rate over the past quarter. The BOJ's yield-curve control policy was also unchanged, with the 10-year government-bond yield managed in a range of -0.20% to 0.20%. The BOJ has also increased purchases of Japanese government bonds (JGB). We do not expect a change in interest-rate policy from the BOJ over the next year. Our 12-month forecast for the 10-year JGB is 0.00%, in the middle of the BOJ's yield-curve control band.

U.K. – After cutting the benchmark interest rate to 0.10%, the Bank of England (BOE) left rates unchanged at its August meeting and ruled out the use of negative policy rates. Instead, BOE policymakers said they will tie any eventual change in policy rates to a sustained rise in inflation above the central bank's 2% target and the removal of some of the current high level of economic slack. Policymakers emphasized that risks to the outlook remain skewed to the downside. In addition to the pandemic, the U.K. is entering the final phase of exiting from the EU. With interest rates already near zero and the BOE explicitly ruling out negative rates, we do not expect any change in the policy rate over the next 12 months. Our 12-month forecast for the 10-year gilt yield is 0.40%.

Canada – Over the summer, a surge in COVID-19 infections in the U.S. and globally (but not so much within Canada) cast doubt on the strength of the global economic recovery, resulting in longer-term bond yields hitting post-pandemic lows and Canada's 10-year bond trading at a yield below 45 basis points. Investors now expect that accommodative monetary policies will last longer and perhaps become even more stimulative. Bank of Canada (BOC) Governor Tiff Macklem said in July that he expects the BOC to keep its policy rate near zero until economic slack is absorbed and the central bank's 2 percent inflation target is "sustainably achieved."

The BOC has wound down some of the market-support programs that were introduced in the spring as the pandemic spread. We expect that BOC purchases of Government of Canada bonds through quantitative easing will be even more necessary as supply rises. The government announced changes to its bond-issuance program for this year, shifting the focus to longer-term maturities as well as increasing the frequency and size of issuance. Over the next 12 months, we expect no change to the BOC's 25-basis-point overnight rate, and we expect a 10-year yield of about 70 basis points.

Regional recommendations

We expect the significant new EU issuance to lead to higher interest rates in "core" markets. As such, we are underweighting Germany and channeling the proceeds into Japanese government bonds, which offer higher yields on a currency-hedged basis.

Interest rate forecast: 12-month horizon

Total Return calculation: August 31, 2020 – August 31, 2021

U.S.

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	0.13%	0.35%	0.55%	0.75%	1.30%	1.15%
Change to prev. quarter	0.00%	-0.05%	0.05%	0.00%	-0.15%	
High	0.13%	0.75%	1.20%	1.50%	1.95%	(3.43%)
Low	0.05%	0.10%	0.20%	0.30%	1.00%	3.70%
Expected Total Return US$ hedged: 0.95%						

Germany

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	(0.50%)	(0.40%)	(0.40%)	(0.30%)	(0.01%)	0.02%
Change to prev. quarter	0.00%	0.10%	0.00%	0.00%	(0.11%)	
High	(0.50%)	(0.25%)	(0.10%)	0.00%	0.20%	(2.77%)
Low	(0.50%)	(0.60%)	(0.70%)	(0.75%)	(0.40%)	5.09%
Expected Total Return US$ hedged: 0.39%						

Japan

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	(0.10%)	(0.10%)	(0.10%)	0.00%	0.55%	1.77%
Change to prev. quarter	0.10%	0.10%	0.00%	0.00%	0.00%	
High	(0.10%)	(0.10%)	0.00%	0.20%	0.70%	(0.66%)
Low	(0.10%)	(0.10%)	(0.10%)	(0.20%)	0.25%	6.45%
Expected Total Return US$ hedged: 2.34%						

Canada

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	0.25%	0.50%	0.65%	0.70%	1.10%	0.89%
Change to prev. quarter	0.00%	(0.05%)	0.00%	(0.05%)	(0.15%)	
High	0.25%	0.75%	0.90%	1.00%	1.35%	(1.50%)
Low	0.25%	0.25%	0.25%	0.30%	0.70%	4.76%
Expected Total Return US$ hedged: (0.30%)						

U.K.

	3-month	2-year	5-year	10-year	30-year	Horizon return (local)
Base	0.10%	0.25%	0.30%	0.40%	0.85%	1.35%
Change to prev. quarter	0.00%	0.00%	0.00%	0.00%	0.00%	
High	0.10%	0.60%	0.75%	0.90%	1.00%	(2.09%)
Low	0.10%	0.10%	0.10%	0.05%	0.70%	4.52%
Expected Total Return US$ hedged: 1.53%						

Source: RBC GAM

Currency Markets

U.S. dollar downtrend is established

Dagmara Fijalkowski, MBA, CFA
Head, Global Fixed Income & Currencies
RBC Global Asset Management Inc.

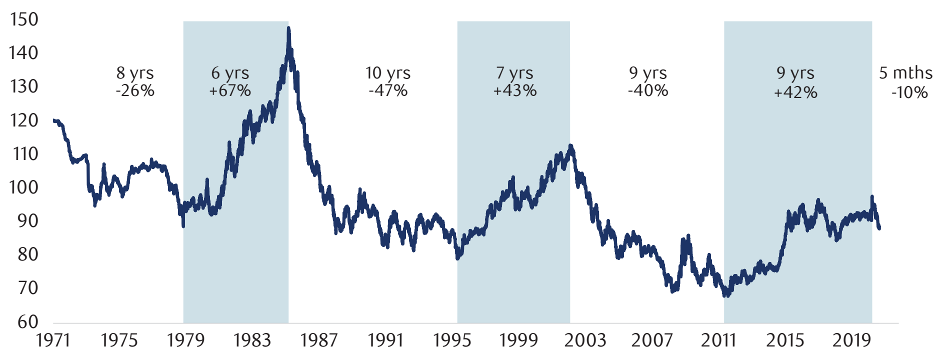
Daniel Mitchell, CFA
Portfolio Manager
RBC Global Asset Management Inc.

The U.S. dollar has turned decisively lower, marking an important long-term currency-market milestone that will help shape the investing landscape for several years to come. Such turning points occur once a decade and are rare enough that many foreign-exchange traders have experienced just one or two of these inflections, which convert headwinds into tailwinds for global assets, economies and currencies. Given the length and breadth of currency cycles as shown in Exhibit 1, we expect dollar weakness to continue. The impact of this regime shift should not be underestimated, and investors would be well served to plan for a structurally weaker greenback.

The degree of the U.S.-dollar weakness since the greenback's 10-year high on March 23 has been impressive. Nearly all currencies have risen against the U.S. dollar over the past five months and many commodities have strengthened. At this point, it is tempting to review the dollar's trade-weighted 10% decline and to question whether it might stall. But the dollar remains overvalued and there are a number of other negative factors that can push it still lower (Exhibit 2). A common thread between several of these factors is a relative decline in the attractiveness of U.S. assets, which will likely undermine demand for the currency. We highlight four of these developments below.

First, the much reduced U.S. interest-rate advantage means that investors are no longer as willing to buy U.S. government bonds. Bond yields are so low that investors are receiving negligible income after adjusting for inflation, a dynamic that is unlikely to change with the U.S. Federal Reserve (Fed) looking to further ease monetary policy. While the U.S. is not unique in having low rates, the yield decline is especially impactful for the U.S. dollar because the interest-rate advantage had been propping up the currency until earlier this year.

Exhibit 1: U.S. trade-weighted dollar



Note: As at Aug. 28, 2020. Source: Bloomberg, RBC GAM

Exhibit 2: Mounting dollar negatives

CYCLICAL	STRUCTURAL	POLITICAL
• U.S. dollar has lost its interest rate advantage • Optimism about Europe means more flows into BTPs, EU equities • U.S. corporates buying euros to adjust over-hedged revenues • Low oil prices reduce benefit of energy independence • Improvement in Eurozone outlook • FX positioning yet to catch up to bearish sentiment • Abundant USD supply	• Loss of fiscal restraint increases likelihood of monetization • Flight out of fiat hits primary reserve currencies most • Current account deficits rooted in American consumerism	• Muddled COVID reopening means economic rebound lags other G10 • De-dollarization of global FX reserves • U.S. "exceptionalism" at risk of being undermined by possible tech taxes, regulation and rising minimum wages

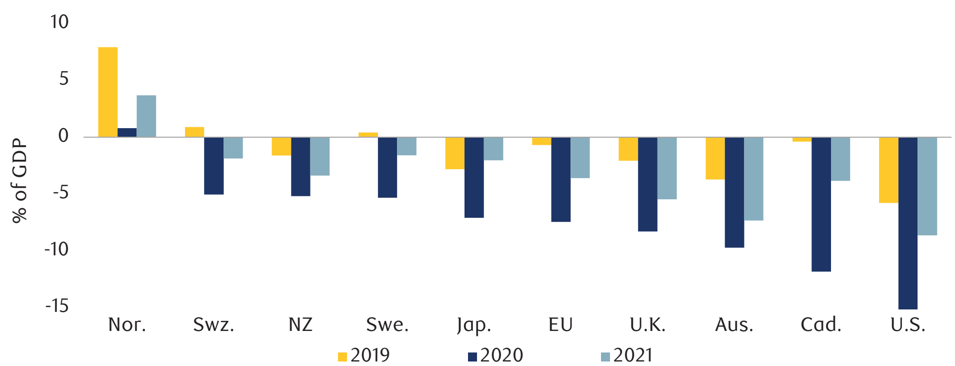
Source: RBC GAM

Second, the extraordinary fiscal spending that followed pandemic lockdowns raises questions about the sustainability of government finances. This is also an issue for many countries, but the U.S. has been spending more than its peers based on the relative size of recent budget deficits (Exhibit 3) and had already exhausted some of its fiscal wiggle room after tax cuts in 2018. The possibility that the Fed could resort to debt monetization, the permanent funding of government operations through central-bank bond purchases, seems more likely than it did just a few months ago, and the recent ascent of gold, silver and other precious metals is evidence that people are beginning to lose faith in the dollar. While other countries and currency blocs also face questions about their financial future, current trends in twin-deficits appear to be especially bad for the U.S. dollar.

Third, stocks and other "risky" assets outside the U.S. are now looking more attractive, underpinned not only by cheaper valuations abroad but by improving economic and political developments. One trait of past dollar declines has been a re-acceleration of global growth, which acted to pull capital away from the U.S. The relative success of China and Europe in re-opening their economies suggests that capital outflows will put pressure on the greenback.

The fourth issue weighing on the greenback is the November U.S. presidential election. The concerns stem from the possibility of an outcome plagued by delayed ballots and contested results, as well as concern that a Joe Biden victory would be more negative for the dollar. Several elements of Biden's platform threaten America's competitive advantage, including financial re-regulation, tougher restrictions on oil from shale and minimum-wage hikes that would increase business costs. Biden's friendlier stance toward traditional trade allies would also mark a departure from the tensions that have supported the greenback over the past four years and would be particularly negative for the U.S. dollar versus the currencies of Canada, Europe and Mexico. Should Biden win, currency markets will be especially sensitive to the composition of a Biden cabinet. Any mention of Elizabeth Warren as Treasury Secretary, for example, would alarm traders because she has laid out a plan for devaluing the dollar.

Exhibit 3: General government budget deficit



Note: As at Apr. 6, 2020. Source: IMF, RBC GAM

Exhibit 4: DXY breaking support levels

Note: As at Aug. 31, 2020. Source: Bloomberg, RBC GAM

The 2017 comparison

Critics might point to the U.S. dollar's decline in 2017 as an example of how the recent losses can reverse (Exhibit 4). Why, then, should we proclaim that the upswing from 2011 has ended?

One reason is that investors have not yet fully reacted to signs of dollar weakness. Sentiment toward the greenback has noticeably soured, and most investment banks are now publishing bearish outlooks on the currency. But they are late to the game in doing so and are struggling to revise forecasts quickly enough to catch up with the decline. Traders have also been caught off-guard by the drop, even though the currency's behaviour is remarkably similar to the beginning of the last U.S. dollar bear market in 2002 (Exhibit 5). With investors waiting to sell every bounce in the greenback, we expect the relentless pace of dollar weakness to continue.

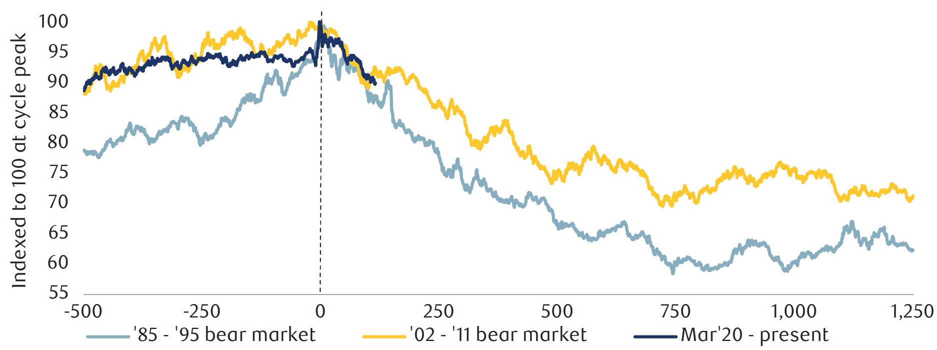
Another important difference from 2017 is that central-bank policy rates have converged toward zero (Exhibit 6), resulting in an absence of interest-rate differentials in the developed world. This removes an important headwind for the euro and yen – historically popular shorts used to buy higher-yielding "carry trade" currencies.

Higher volatility

The convergence of interest rates around the globe has another important consequence: it raises the specter of larger currency swings and could lead the greenback to weaken more quickly. With smaller yield differences from which to profit, foreign-exchange specialists will likely be less active in their trading activities. That could leave the currency markets to participants who are less price-sensitive, and their willingness to pay higher prices might increase volatility. This is particularly the case for cross-border mergers and acquisitions, where less attention is paid to the exchange rates at which currency is acquired to fund a deal.

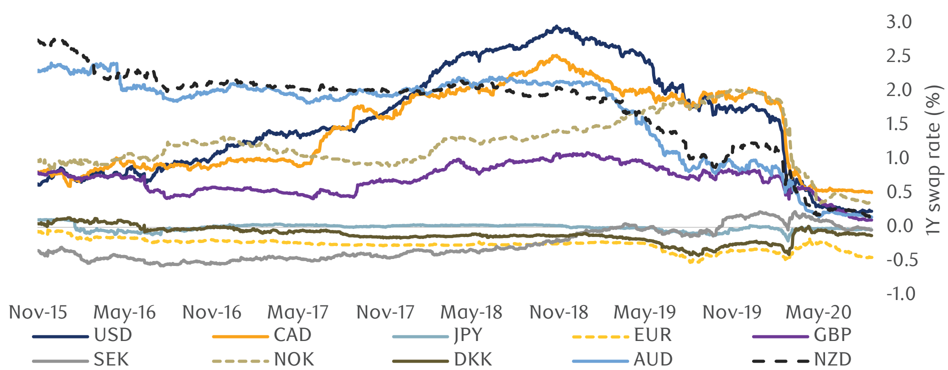
With interest rates near zero in all major markets, there is also one fewer avenue for adjustment in times of macroeconomic stress. Without the ability to cut rates to soften the blow of economic slowdowns, central banks may increasingly accept currency weakness as an economic relief valve.

Exhibit 5: First phase of USD bear market is typically relentless



Note: As at Sep. 1, 2020. Source: Bloomberg, RBC GAM

Exhibit 6: Global rates converging to zero



Note: As at Sep. 1, 2020. Source: Bloomberg, RBC GAM

Emerging-market underperformance

The prospects for emerging-market currencies against the U.S. dollar were improving at the start of 2020, but the outlook has been dimmed by the disproportionately negative impact of the pandemic on emerging markets and their lack of financial resources to cope. Emerging-market currencies have underperformed other risky asset classes since the lows of late March (Exhibit 7). This makes sense in light of still rising COVID-19 cases, an uncertain economic-growth outlook and the negative impact of global trade and supply-chain disruptions. These developments are not new, however, leading us to believe that there are other reasons for the underperformance relative to developed-market peers.

One explanation is that quantitative easing is not as positive for currencies as for other assets that are bought directly by developed-market central banks. To date, all asset-purchase programs have been domestic-only, and so purchases of foreign currencies do not have any role. Another explanation involves the experimental use of unconventional monetary policies by emerging-market central banks with little monetary or fiscal credibility. Indonesia is an example of a country whose currency has weakened after monetary authorities expanded the central-bank balance sheet.

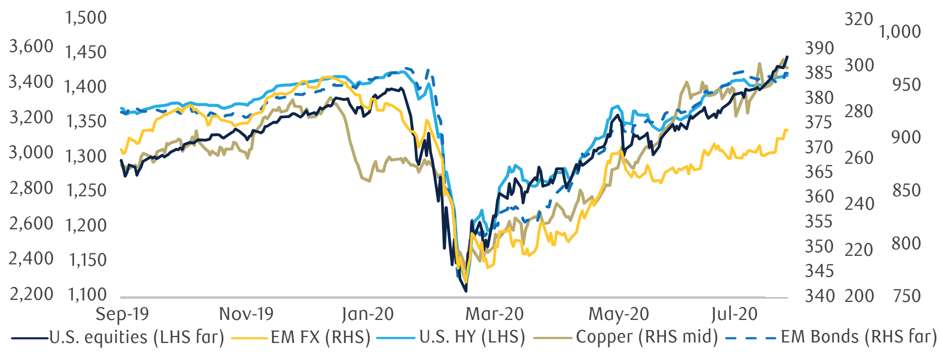
Capital flows into emerging-market assets have been sluggish, with investors having a general preference for making investments on a currency-hedged basis – a less punitive practice now that rates have been slashed in emerging markets. Investor surveys indicate a lack of enthusiasm for emerging-market currencies, and we don't expect this situation to change until economic-growth prospects improve. Investors need more than just a weak dollar to recommit capital to this area.

The euro

We are optimistic about prospects for continued euro strength. This view is due mainly to the fact that the U.S.-dollar bear market has begun, but also represents a nod to improving long-term economic fundamentals in Europe. The European Central Bank's (ECB) swift easing measures and its pandemic-related bond-purchase program seem to have alleviated any new concerns about a Eurozone break-up. Meanwhile, July's first-ever agreement among Eurozone members to jointly issue bonds is the first hint that member countries are making progress toward greater fiscal integration. The collective €750 billion plan to support Europe's economy is crucial for investor confidence in the Eurozone, and we were particularly impressed that politicians were able to show solidarity without the same degree of financial-market stress that was required to force cooperation in past crises.

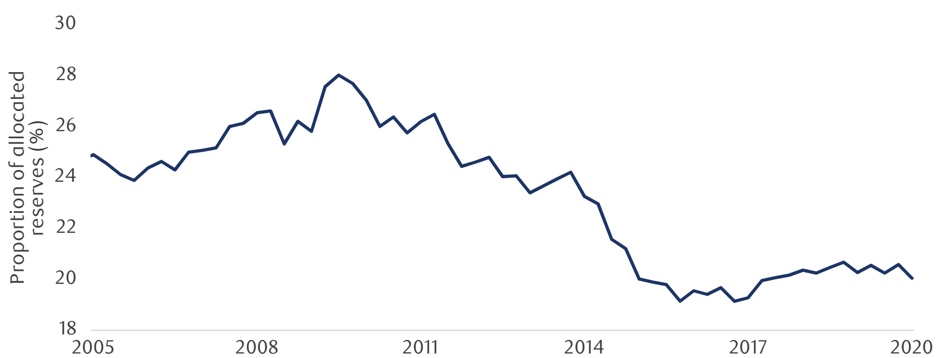
These actions will help to temper some of the risks and bolster Europe's standing in the eyes of long-term investors. Indeed, the creation of a jointly issued European safe asset provides an alternative to U.S.

Exhibit 7: Relative asset-class performance



Note: As at Sep. 2, 2020. Source: Bloomberg, RBC GAM

Exhibit 8: Euro reserve allocation



Note: As at Mar. 31, 2020. Source: COFER, RBC GAM

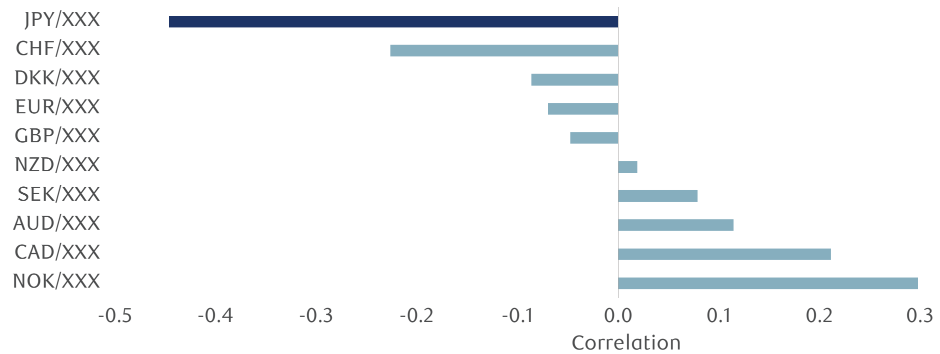
Treasuries and German bunds and will aid the single currency in reclaiming a share of the global reserves lost (currently 20%, down from 28%) over the past decade (Exhibit 8). Our expectation is for the euro to reach 1.27 by August 2021, which would make it the best-performing major currency over the next year.

The yen

The yen exhibits a tighter link to U.S. Treasuries than other G-10 currencies (Exhibit 9) given Japan's ongoing purchases of U.S. government bonds, and with muted bond-market volatility, we should not be surprised by the yen's stability during the past quarter. More recently, the yen has started to appreciate in response to U.S.-dollar weakness and also due to demand for portfolio insurance as global equities surpass pre-COVID-19 levels. The yen also received a boost from last month's resignation of Prime Minister Shinzo Abe, as many investors believe his successor might end policies that are keeping the yen weak.

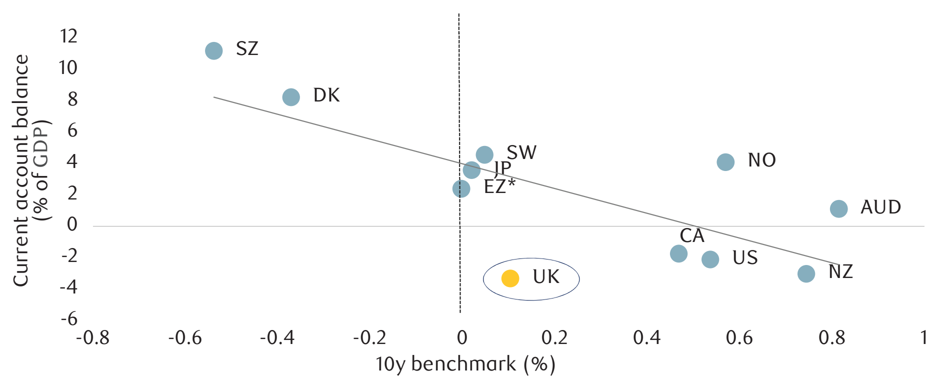
Several developments could result in continued yen appreciation: (i) continued low prices for oil, which reduce the cost of imported energy (ii) a more permanent slowing in foreign direct investment by Japanese companies, which appear to have cut back in response to the pandemic and (iii) any decision by the country's massive pension funds to stop selling the yen now that targeted levels for foreign assets have seemingly been reached.

Exhibit 9: Currency correlation to U.S. yields



Note: Values indicate average correlation to U.S. 10-year yields when each currency is crossed against the the remaining G10 currencies. As at Sep. 1, 2020. Source: Bloomberg, RBC GAM

Exhibit 10: U.K. yields too low based on current-account balance



Note: EZ* is a weighted avg. of the top 10 EZ economies. As at Jul. 31, 2020. Source: Macrobond, RBC GAM

While life insurers are bound to re-emerge as U.S.-dollar buyers at an exchange rate of 100 (compared with about 106 now), we think that broader weakness in the U.S. dollar could lead to yen strength beyond this level. We forecast an exchange rate of 99 yen per dollar in 12 months' time.

British pound

The U.K. has persistently run the largest current-account deficit among developed-market countries, and depends on portfolio inflows to fund it. The share of Britain's public debt owned by foreigners sits at a comparatively high 35%, much of it sitting in the hands of continental European investors. Given Brexit, it seems unlikely that the current level of 10-year gilt yields (at 0.10%, Exhibit 10) is high enough to attract inflows, especially as Bank of England discussions about the possibility of negative interest rates keeps yields capped for now. The onus, therefore, will be on currency weakness to make U.K. assets more attractive.

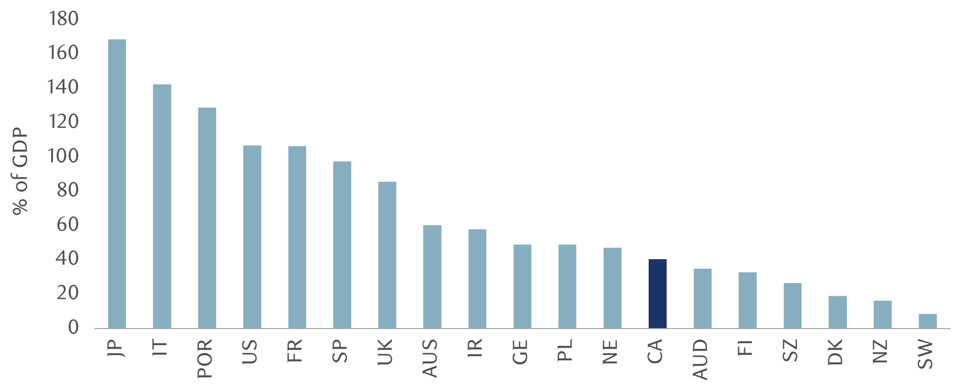
The pound has room to cheapen, especially versus the euro, against which it is fairly valued. We expect the pound to underperform the euro and yen in the coming year. Our base case forecast of 1.36 implies only modest gains against the U.S. dollar from current levels, with risks skewed to the downside should negotiations falter over the U.K.'s future trading relationship with Europe.

The Canadian dollar

Our view on the Canadian dollar is more nuanced, shifting from bearish to bullish versus the U.S. dollar, while remaining bearish against other major currencies. The country's economic-growth prospects are weaker than they are in developed markets in Europe and Asia given Canada's close trade ties with the U.S., whose post-pandemic re-opening has been troubled. Moreover, the combination of low crude prices, Canada's at best indifferent approach to the oil industry and a global movement toward cleaner energy alternatives has limited foreign investment in Canada. France's Total SA, one of the world's largest oil companies, recently wrote off its Canadian investments, and some European lenders have refused to lend to oil-sands producers, which account for most of Canada's energy reserves. Trade and direct-investment dollars have steadily flowed out of the country and continue to put pressure on the loonie.

There are some bright spots for the Canadian dollar. Canada has a highly educated workforce that continues to expand through immigration, and

Exhibit 11: Canada's net debt to GDP is comparatively low



Note: As at Apr. 30, 2020. Source: IMF, RBC GAM

Canadians have been better than Americans in adhering to a pandemic-reopening plan that limits the spread of COVID-19. Moreover, even with the sizable emergency programs recently rolled out by the government, Canada retains capacity for further fiscal spending if needed – an option that many other countries don't have. This advantage is thanks to a build-up in foreign assets by private interests, supporting Canada's balance sheet and improving its creditworthiness in the eyes of debt-rating agencies (Exhibit 11).

Other Canadian-dollar positives include a recovery-led rally in metals prices (likely a more important variable for 2021), and the possibility that competitiveness can be regained relative to U.S., Canada's main trade partner, if Biden wins the U.S. election.

We think the Canadian dollar can manage a small amount of appreciation in the year ahead. It is likely that the broader U.S.-dollar trends will set the tone for the Canadian currency. In expectation of further U.S.-dollar weakness, we are changing our forecast to $1.29 per U.S. dollar, which implies that loonie gains will lag other major currencies.

Conclusion

The downtrend in the U.S. dollar is now clearly established. The 10% trade-weighted decline since March is just the beginning of a longer-term period of U.S.-dollar weakness, supported by a number of structural, cyclical and political factors. We expect G10 currencies, most notably the euro and the yen, to continue outperforming their emerging-market peers during this phase in the U.S.-dollar cycle. Our view on the Canadian dollar is more nuanced. We have shifted from bearish to bullish on the Canadian currency in acknowledgement of some new positive factors and in recognition that the U.S.-dollar downtrend will likely prevail as a more important influence on currency markets.

Regional Outlook – U.S.

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

This year has been a record-breaking one for the U.S. stock market. After making an all-time high in mid-February, the S&P 500 Index experienced the fastest decline in history, plunging 34% in just 23 days, before bouncing back to record a new all-time high just six months from the trough. The turnaround was supported by unprecedented global monetary and fiscal stimulus, which reduced interest rates, supported household incomes, limited corporate insolvencies and restored investor confidence. It has been a wild ride and one that has not conformed to the typical investment playbook. Normally, after a recession, the recovery is broad-based and led by the cheapest, most economically sensitive segments of the market. This time, amid the pandemic-related recession of 2020, the recovery has been more narrow than usual and led by more expensive, less economically sensitive sectors.

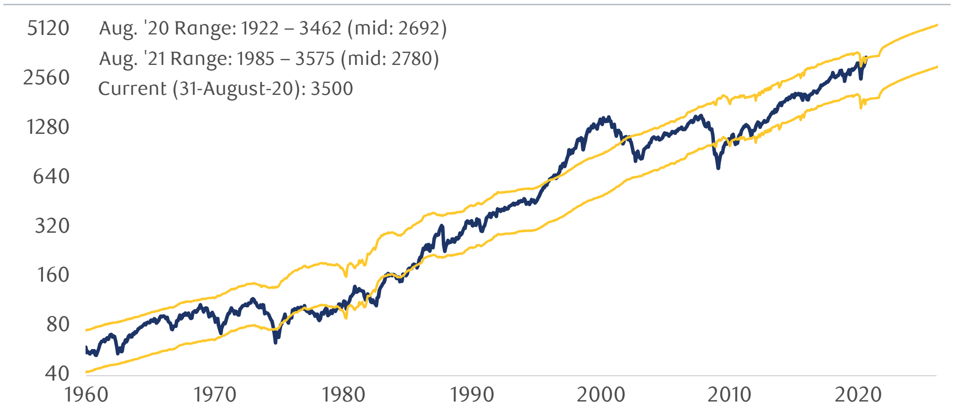
To determine a likely path forward for stocks, let's start with a look at which sectors have led the market over the past three months. At the end of August, five sectors outperformed the broad stock market, with Information Technology, Consumer Discretionary, Communication Services, Industrials and Materials ahead of the benchmark, while Consumer Staples, Real Estate, Financials, Health Care, Utilities and Energy lagged. As in the previous quarter, the leading sectors were driven by businesses that thrive in a world characterized by social-distancing-related practices such as work-from-home, the increased use of e-commerce and entertainment streaming. These businesses, so-called COVID Winners, were gaining momentum prior to the pandemic, and the spread of the virus and subsequent social-distancing measures accelerated business for many of these already large and hugely profitable companies. The "Fab 5," the S&P 500 companies with the largest market values, are prime examples of this trend. Apple has seen an increase in demand for devices and services from people working and studying from home. Microsoft has experienced

United States – Recommended sector weights

	RBC GAM Investment Strategy Committee August 2020	Benchmark S&P 500 August 2020	Active risk vs. Benchmark August 2020
Energy	1.5%	2.3%	(0.8%)
Materials	2.8%	2.5%	0.2%
Industrials	8.3%	8.0%	0.2%
Consumer Discretionary	12.3%	11.5%	0.8%
Consumer Staples	6.0%	6.8%	(0.8%)
Health Care	13.7%	13.7%	0.0%
Financials	9.6%	9.6%	(0.0%)
Information Technology	30.5%	29.0%	1.5%
Communication Services	11.1%	11.1%	0.0%
Utilities	2.7%	2.8%	(0.1%)
Real Estate	1.6%	2.6%	(1.0%)

Source: RBC GAM

S&P 500 Equilibrium
Normalized earnings and valuations



Note: As of Aug. 31, 2020. Source: RBC GAM strong demand as large organizations ramp up spending to shift their businesses to the cloud, and Amazon has benefited from its own cloud business and the surge in e-commerce. Google and Facebook generate most of their revenue from online advertising, which has soared as bricks-and-mortar retailers shift their ad spending to the internet. The Fab 5 stocks have risen an average of over 40% during the past three months, and about 55% between January and the end of August. Together they represent roughly 24% of the S&P 500's market capitalization.

The problem for these stocks is valuation. The stocks appear to be expensive after a tremendous run, with Apple, Microsoft, Google and Facebook trading around 30 times forward earnings and Amazon near 80 times. Excluding these stocks, the S&P 500 trades at about 19 times forward earnings. What these stocks have going for them is extraordinary earnings and cash-flow prospects as they generated record results during a recession and have more cash on their balance sheets than debt. Valuations of other fast-growing COVID Winners, such as Netflix, Paypal, Adobe and Nvidia, have also skyrocketed. In fact, the fastest-growing cohort of stocks in the market has never been as expensive as it is now, particularly compared with the cheapest cohort of stocks made up of COVID Losers, which includes traditional retail, oil and gas producers, hotels, casinos and some restaurants, airlines, cruise lines and banks. The relationship between these two groups represents the most important consideration for investors at this time and begs the question: "what's an investor to do?"

First, a note on style. It is important to recognize that growth stocks have outperformed value stocks for most of the past decade and that the relationship has become more extreme as economic growth has slowed over time. For value stocks to outperform, economic growth will need to increase and broaden out, and long-term interest rates will need to rise modestly.

COVID Losers may experience a snap-back rally that results in short-term outperformance, but it is unlikely to be sustained given the headwinds facing these industries. One potential catalyst for this scenario would be the prompt approval and dissemination of a vaccine for the coronavirus. Some epidemiologists think at least one vaccine could be approved by the end of 2020, with distribution in the West beginning in the first quarter of 2021. Under this scenario, the U.S. economy, at least, would experience solid growth next year as COVID-19-related restrictions are eased.

Other important considerations for investors are the upcoming presidential and congressional elections on November 3. The stakes are higher than normal because two major policies that have occurred under the Trump administration are at risk if he loses. The first is the huge drop in the corporate-tax rate and the second is the drastic reduction in the cost of federal regulation on companies. If Biden wins the presidency and the Democrats take the Senate, both changes would likely be reversed. We estimate the potential hit to earnings in a Biden victory could be between 5% and 12%, though some of this could be offset by a significant expansion of fiscal spending. In addition, the Health Care, Energy, Information Technology and Financials sectors would be targets of increased regulation, possibly hampering their earnings and valuations.

The S&P 500 is expensive at a price-to-earnings multiple of 23 times the consensus earnings estimate of US$148 for the next 12 months, compared with a trailing five-year average of 18. Our read of the market is that investors are expecting government programs to continue to support household incomes and to prevent mass business bankruptcies, and for an effective vaccine to be ready for distribution in the first half of next year, restoring economic activity and earnings growth to 2019 levels by the end of 2021. While we believe such a scenario is possible, we do not believe investors are pricing in another substantial wave of COVID-19 infections in the fall, the failure of Congress to provide additional fiscal support, or a Democratic electoral sweep. The path of the virus and the development of a vaccine continue to be key. In the meantime, we have taken some profits in a few COVID Winners and added to our exposure of select value segments of the market.

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 gained 9.6% in the three months ended August 31, 2020, on a total-return basis, and Canada's stock benchmark is now flat for the year after recovering losses associated with coronavirus lockdowns in the spring. The Canadian index has trailed the S&P 500 Index, which returned 15.5% over the same period, and the MSCI World Index, up 14.7%. The swift overall recovery in equity markets has been supported by substantial global monetary and fiscal responses, which quickly eased the burden of the COVID-19-related lockdown on the global economy. We expect the spread of the virus to remain contained, supporting continued progress in business re-openings that would result in economic and profit forecasts being restored to 2019 levels by 2021. This outlook depends on governments' ability to continue slowing the spread of COVID-19, the discovery and implementation of a vaccine and continued improvement in consumer and business confidence. The return of children to school this fall could result in an uptick in coronavirus cases, moderating the pace of the recovery. The U.S. presidential election in November will also be keenly in focus and the outcome will likely have some impact on Canadian economic growth and profitability given the country's dependence on trade with the U.S.

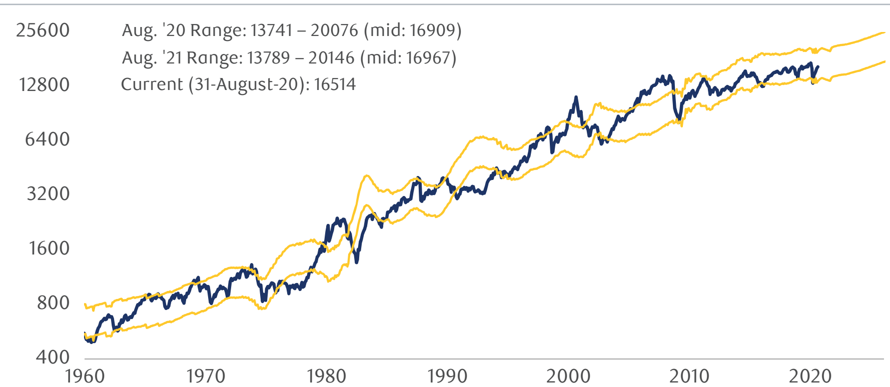
Canada – Recommended sector weights

	RBC GAM Investment Strategy Committee August 2020	Benchmark S&P/TSX Composite August 2020	Active risk vs. Benchmark August 2020
Energy	11.0%	12.0%	(1.0%)
Materials	16.0%	15.3%	0.7%
Industrials	12.5%	11.9%	0.6%
Consumer Discretionary	4.0%	3.5%	0.5%
Consumer Staples	5.0%	4.0%	1.0%
Health Care	0.5%	0.9%	(0.4%)
Financials	29.0%	28.7%	0.3%
Information Technology	9.0%	10.7%	(1.7%)
Communication Services	6.0%	5.2%	0.8%
Utilities	4.5%	4.8%	(0.3%)
Real Estate	2.5%	3.0%	(0.5%)

Source: RBC GAM

S&P/TSX Composite Equilibrium

Normalized earnings and valuations



Note: As of Aug. 31, 2020. Source: RBC GAM

Consensus forecasts call for Canada's GDP growth to drop by 6.5 percentage points in 2020, the deepest downturn on record, and then increase 4.8% in 2021 and 2.8% in 2022. Given Canada's strict lockdown response to COVID-19, the impact on Canada's economy is expected to be deeper than the forecast 5.0% decline in 2020 U.S. GDP.

However, Canada's relative success so far at containing the spread of COVID-19 has led to improvement in employment, retail spending and consumer confidence, albeit with considerable economic slack. The Bank of Canada (BOC) maintained its overnight interest rate at 0.25% in July and indicated that monetary stimulus will continue to support the recovery until inflation returns to its 2% target. Loose monetary policy has resulted in historically low mortgage rates, supporting resilience in the Canadian housing market – a significant driver of economic activity in recent years. The federal government stepped up support for individuals and businesses over the past six months, seeking to replace lost income and wages by providing over $100 billion. These programs will be phased out over this year, potentially limiting the economic recovery.

Analysts now expect S&P/TSX earnings for 2020 to fall by 30%, based on consensus estimates. While this number sounds terrible, it is significantly better than the close-to-50% decline anticipated before Canadian companies reported better-than-expected second-quarter financial results. The decline in year-over-year earnings is expected to come largely from the Energy, Financials, Industrials, Real Estate and Consumer Discretionary sectors. Looking ahead, expectations are for index earnings to rise 39% in 2021, taking them back to within 5% of 2019 levels. The Financials sector, the biggest in the index, is expected to drive a significant amount of this growth along with the cyclical, commodity-related sectors.

The S&P/TSX is valued at 19.6 times trailing 12-month earnings, which is above the long-term average of 16.5, as market valuations anticipate an earnings recovery buoyed by accommodative central-bank policy. The S&P/TSX remains at a significant multiple discount to the S&P 500, which is valued at 24.8 times trailing earnings, mainly because just three sectors – Financials, Energy and Materials – account for about 55% of index earnings. To outperform versus the S&P 500, the S&P/TSX Index would require a sustained economic recovery that supports higher commodity prices.

Growth sectors have continued to outperform during the pandemic. In Canada, most of this growth has come from Shopify, which has led this year's 71% gain in the Information Technology sector. Shopify, a provider of software for online retailers, is now the largest company by market capitalization in the S&P/TSX.

The Industrials, Consumer Staples, Utilities and Materials sectors have also delivered gains so far this year. Gold prices have surged by almost one-third, reaching all-time highs in August, on the back of the fiscal and monetary expansion and historically low interest rates. Precious-metals miners rallied with gold prices, and now comprise over 10% of the S&P/TSX index. Prices for gold equities are still reasonable, and we expect sustained monetary and fiscal support, combined with a weakening U.S. dollar, to continue to support them. The Energy sector continues to be a drag on index performance, down 31% year to date. The outlook for the oil market has improved as global demand for transportation recovers, OPEC limits supply and low prices slow non-OPEC production growth. Oil prices are likely to remain range-bound in the near term with elevated global inventories and a moderating recovery in demand. Given low oil prices, energy producers are focused on reducing debt and costs, and maintaining production rather than increasing it. However, mergers and acquisitions could bolster the sector, as stronger companies take advantage of falling prices to boost reserves.

Stocks in the Financials sector reacted negatively to the lower interest rates that are pressuring revenues, as well as higher loan losses linked to economic turmoil. The sector makes up almost one-third of the index, with Canadian banks being the most influential. We expect bank earnings to recover to previous profitability levels over the next two years. Recent quarterly results and management commentary suggest that the worst may be over in terms of provisions for bad loans. We continue to monitor loan-payment deferrals offered by the banks in the wake of the pandemic, and expect to get a better idea of the true state of homeowners' financial health once they are required to resume paying their mortgages. Going forward, revenue growth will be harder to achieve and banks will look to hold down costs in support of their bottom line. The latest quarterly results reinforced the solid capital positions of the banks. As a result, we believe that the probability of dividend cuts from the large banks is low at this point.

Regional Outlook – Europe

Dominic Wallington
Head, European Equities &
Senior Portfolio Manager
RBC Global Asset Management (UK) Limited

Slow improvement

COVID-19 continues to dominate the news and the economic outlook. Governments everywhere have put in place any number of measures to stimulate their economies, and the era of fiscal austerity that swept Europe after the global financial crisis has been decidedly abandoned. Europe's economy has been somewhat resilient, at least in terms of employment, as it depends less on consumption than the U.S. Consumption accounts for the bulk of U.S. GDP, with products and services such as bars, restaurants, car washes and nail bars contributing to a remarkably stable economy over the past decade. However, many of these products and services require the physical presence of consumers and have therefore collapsed because of COVID-19. Online purchases have grown hugely but are not a large enough percentage of the total to prevent a precipitous plunge in overall consumption.

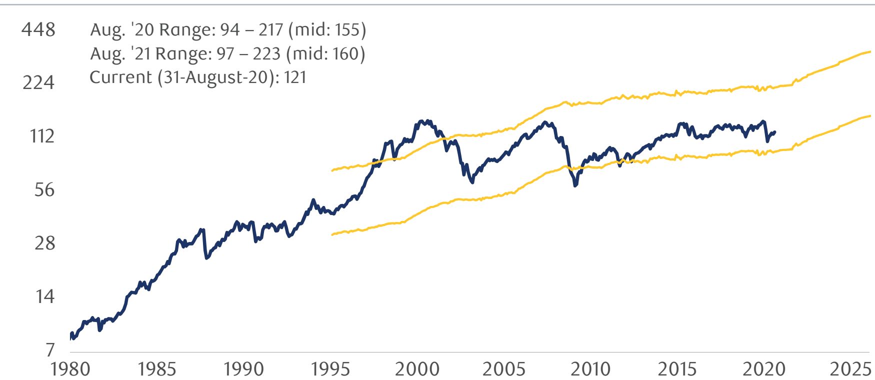
Europe appears to have controlled the spread of COVID-19 better than the U.S. Much of this must stem from a generally more orderly and faster paced practical response to the pandemic. There are no measures that can guarantee a safe emergence from this health crisis, but governments in Europe appear to be treading a sensible line between re-opening and partial closures as the number of cases rises and falls. It is possible that the virus will just melt away, but it could also re-emerge in a more virulent form, and this uncertainty means that the economic-policy response will take longer than normal to work. In the meantime, stable companies and those that are benefiting from an accelerated adoption of online products and services are likely to post the best results and be rewarded by investors as a consequence.

Europe – Recommended sector weights

	RBC GAM Investment Strategy Committee August 2020	Benchmark MSCI Europe August 2020	Active risk vs. Benchmark August 2020
Energy	3.5%	4.3%	(0.8%)
Materials	8.8%	8.0%	0.8%
Industrials	14.5%	14.1%	0.4%
Consumer Discretionary	11.0%	10.3%	0.7%
Consumer Staples	13.8%	14.4%	(0.7%)
Health Care	16.5%	15.8%	0.7%
Financials	15.3%	14.9%	0.3%
Information Technology	9.0%	7.8%	1.2%
Communication Services	3.0%	4.0%	(1.0%)
Utilities	4.0%	4.9%	(0.9%)
Real Estate	0.8%	1.4%	(0.7%)

Source: RBC GAM

MSCI Europe Index Equilibrium
Normalized earnings and valuations



Note: As of Aug. 31, 2020. Source: RBC GAM

A huge policy response

Governments in Europe were quick to recognize the impact of pandemic-related shutdowns, and their reaction was extensive. In the eurozone, a €750 billion recovery fund was launched, of which about half will come in the form of loans and half in grants. It seems highly likely that these measures will be productive, but it will take time for their impact to be felt.

In the U.K. the Chancellor announced a £30 billion stimulus program that includes a reduction of VAT in the hospitality industry, cuts to property-transfer fees and payments to companies that re-employ furloughed staff. The U.K. stimulus looks small relative to Continental Europe's recovery fund but should be seen as a stop-gap until the official budget is presented in October. Presumably the British government is keen to see how Brexit negotiations develop before making decisions about the level of stimulus required.

Equity markets always provide opportunities, however good or bad the macroeconomic environment. Rather than marching to the beat of local economies, stock markets almost everywhere have been driven by global themes. We believe the most important of these themes has been the disruptive power of digital technology. Our analyses often show that the most important question is whether a company or industry will benefit or suffer as a consequence of changes in technology. One statistic that is symbolic of the changes is that, in mid-21019, European technology companies overtook banks as a larger stock-market constituent.

We believe that companies that can consistently make high and stable profits are able to do so because they have a great business that, for one reason or another, is difficult to compete against. These sorts of businesses also tend to be highly adaptive, partly because their management teams can afford to spend more on any necessary adjustments and because their robust competitive situation means that they have more time to think about major secular trends rather than spend the whole time fighting short-term competitive fires. It is interesting to us that, over the past 15 years, these types of companies as a whole have improved their operational performance despite the more volatile times we are living in. They have, as a group, seen their profitability fall by less than half of that of the rest of the market as the COVID-19 pandemic has taken hold and shutdowns have been imposed.

Little movement in the portfolios, but mindful of risks

While infections in Europe have risen substantially in recent weeks, we are hopeful that we have seen the worst of the pandemic and that the slow re-opening of the major economies will continue. Having said this, we realize that people will be tentative about returning to work for some time. The development of a vaccine will help offset these fears but any vaccine will require a significant period of testing to show it is safe and effective. The most likely outcome appears to be: "As goes the virus so goes the economy."

A number of the changes ushered in by the pandemic might well establish themselves in a more or less permanent way. One change is accelerating growth in the use of digital products and services. It is not just technology companies that will benefit from this trend: companies that have successfully adapted to the disruption of the past 15 years and excelled during the worst of the downturn in the first half of 2020 will also reap the rewards. Stocks of the successful companies have risen strongly, while the weaker ones, often in the centre of the storm in say, hospitality or in industries being affected by new technology, like traditional retail, have seen their share prices fall precipitously. In some instances, this has probably been overdone and a market reversal is likely if the virus melts away or is effectively dealt with.

We are aware of the risks of this happening and have tilted the portfolios to a certain extent. Positioning in our core holdings has, however, not changed much for some time and our sector positioning has changed only superficially. We remain happy with the Consumer Staples and Information Technology sectors and less so with Real Estate and Utilities.

Regional Outlook – Asia

Selena Lu
Analyst, Asian Equities
RBC Global Asset Management(Asia) Limited

Asian equities continued to recover from the March 2020 bottom and had returned to pre-COVID-19 levels by the end of August of this year. Governments across the region relaxed lockdown restrictions and implemented fiscal-stimulus and liquidity measures to support the economy. The recovery has been generally rapid, particularly in north Asia, where COVID-19 cases are under control and economies have gradually re-opened. We expect, however, that weak economic data will continue into the third quarter of 2020, and we note that a recent rise in new COVID-19 cases has the potential to weigh on the jobs recovery.

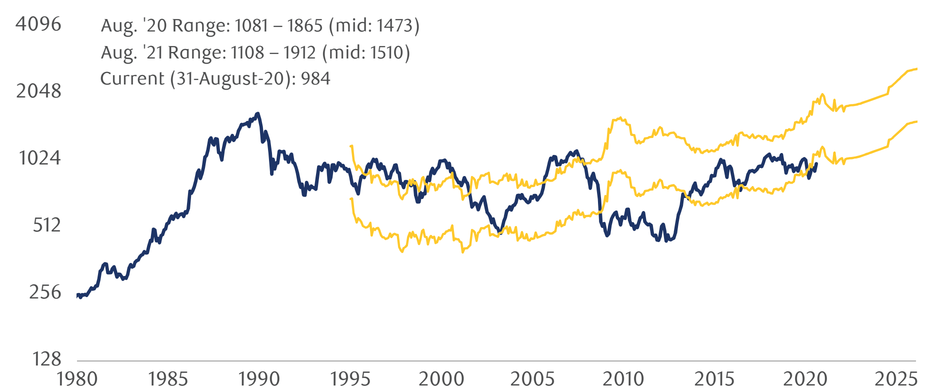
The economies of China and Taiwan are forecast to expand in 2020, while GDP in the rest of the region contracts. China's economy is expected to grow by 2% in 2020 as government-led investment gains traction and global demand recovers. Taiwanese GDP will expand an estimated 0.6% this year, given that exports of technology hardware remain strong. GDP in South Korea also rebounded strongly in the second quarter of 2020, as domestic virus cases dwindled. Less optimistically, economic indicators in Japan have yet to recover, and Australia experienced deflation for the first time since 1998. India, with the world's second-most COVID-19 infections, also faces a challenging outlook, with the economy forecast to shrink 5.1% in 2020.

Asia – Recommended sector weights

	RBC GAM Investment Strategy Committee August 2020	Benchmark MSCI Pacific August 2020	Active risk vs. Benchmark August 2020
Energy	2.3%	2.4%	(0.2%)
Materials	5.0%	5.6%	(0.6%)
Industrials	9.5%	10.6%	(1.1%)
Consumer Discretionary	19.5%	18.4%	1.1%
Consumer Staples	7.5%	6.3%	1.2%
Health Care	9.0%	8.0%	1.0%
Financials	15.5%	16.0%	(0.5%)
Information Technology	16.5%	15.3%	1.2%
Communication Services	11.0%	11.0%	0.0%
Utilities	1.3%	2.0%	(0.8%)
Real Estate	3.0%	4.3%	(1.3%)

Source: RBC GAM

MSCI Japan Index Equilibrium
Normalized earnings and valuations



Note: As of Aug. 31, 2020. Source: RBC GAM

During the three-month period ended August 31, 2020, equity markets in China, South Korea and Taiwan outperformed, while Singapore, Hong Kong and Thailand lagged the benchmark. The Information Technology, Consumer Discretionary, Health Care and Communication Services sectors outperformed, while Utilities, Real Estate, Industrials and Financials underperformed.

Japan

While the Japanese stock market continued to recover, it lagged the regional benchmark by 7.3 percentage points as of August 31. GDP is poised to rebound in the third calendar quarter after contracting sharply in the second, but rising COVID-19 cases could muddle the outlook. The yen appreciated strongly against the U.S.

dollar, reflecting the concerns about accelerating U.S.-China trade tensions and geopolitical friction.

Japanese industrial production expanded 2.7% in June from the previous month, rising for the first time in five months, and companies are planning further production increases in the third quarter. Private consumption turned down in the second quarter, but there are signs that it has started to recover as retail sales surged 13.1% in June, up from a 1.9% gain in May, thanks to steps including the lifting of emergency decrees and government cash handouts. The unemployment rate fell to 2.8% in June from 2.9% in May, improving for the first time in seven months. Exports in the second quarter declined across the board, especially to the U.S.

While Japan has not been as successful at curbing COVID-19 as China and South Korea, the government has felt comfortable shifting its focus to re-opening the economy, exemplified by a new program to reimburse travelers who take vacations within Japan. We expect GDP to have undergone a double-digit contraction in the second quarter from the first quarter, and to bottom out in the third quarter. The announcement late last month that longtime Prime Minister Shinzo Abe would resign could lead to short-term political uncertainty, but we expect that his successor will continue to pursue the current economic policies with aggressive fiscal and monetary easing.

Asia Pacific ex-Japan

The Chinese stock market continued to outperform versus its regional peers. China's economy has recovered from a 6.8% contraction in the first quarter of 2020, with official growth of 3.2% reported for the second quarter. The July purchasing managers' index signaled a continued recovery in factory and construction activity, driven by credit stimulus and investments in infrastructure and property, and exports and imports both rose in June. Policy measures have been rolled out to shore up the economy, including tax cuts, discounted loans and increased spending. Confronted with a difficult geopolitical environment, Beijing plans to pivot to domestic growth and financial-market reforms.

South Korea's stock market ranked second in Asia during the three-month period as economic activity resumed strongly after the lockdowns. The country was effective in containing the virus through widespread testing and contact tracing. Industrial production rebounded, led by autos and electronics, and retail sales received a boost in government cash handouts to households. Capital investment and orders for industrial equipment and construction improved in the second quarter with exports rising at a robust pace of 6.2% in July. However, exports of microchips, which at 20% account for the largest single export category, could weaken in the second half as inventories increase and softer demand for servers is forecast.

Taiwan was Asia's third-best-performing equity market during the three-month period, in part due to the government's decisive actions to contain the spread of COVID-19. Taiwanese GDP rose 0.4% year over year in the first half of 2020, as high exposure to technology helped prevent the sharp fall in exports experienced by other Asian economies. However, private consumption fell 5.1% year over year in the second quarter. The government has rolled out extra spending to support the economy, but as an export-oriented country, Taiwan's growth is subject to substantial uncertainty for the rest of the year.

Hong Kong's stock market underperformed due to a resurgence in COVID-19 infections and increasing geopolitical uncertainty. Hong Kong's economy shrank 9.0% year over year in the second quarter, with consumption falling 14.5% amid a slew of restrictions on public gatherings and service closures due to the coronavirus. The unemployment rate climbed to 6.2% in June from 3.4% in January, and capital investment contracted 20.6%. Weakness in global growth and uncertainty driven by geopolitical tensions are likely to continue to weigh on Hong Kong's economic growth this year.

In Thailand, the stock market underperformed as the coronavirus pandemic has pushed the country's export and tourism-reliant economy into recession. The Bank of Thailand expects an 80% decline in the number of foreign tourists this year and forecasts that GDP will contract 8.1% in 2020. Exports are forecast to drop 10.3% in 2020 given the pullback in tourism and disruptions to global supply chains. The government announced supplementary spending to support the tourism industry and cut interest rates to historically low levels. Thailand's economic growth has shown signs of revival after the easing of lockdowns.

Regional Outlook – Emerging Markets

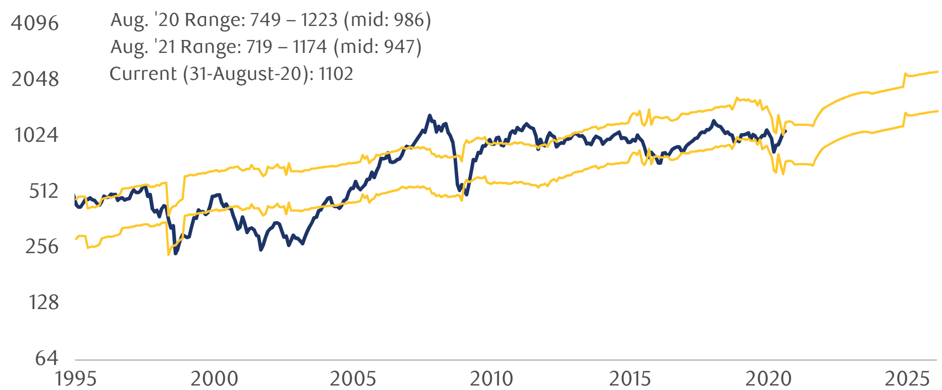
Richard Farrell
Portfolio Manager,
Emerging Market Equities
RBC Global Asset Management (UK) Limited

COVID-19 in emerging markets

Over the past 20 years, emerging-markets equities have gone from being dominated by Latin America and commodity producers to being driven by North Asia and technology. China now makes up over 40% of the MSCI Emerging Markets Index and China, Taiwan and South Korea together account for two-thirds of the benchmark. The "internet enabled" sectors of Information Technology, Consumer Discretionary (e.g. Alibaba) and Communication Services (e.g. Tencent) represent just under 50% of the index, while sectors historically associated with emerging-market equities, namely Energy, Materials and Industrials, now account for less than 20%. North Asian 'Internet enabled' stocks will be the key drivers of emerging-market equities over the next 12 months.

Latin American countries have been particularly affected by the COVID-19 pandemic. However, the emerging-market countries with the three largest stock markets – China, Taiwan and South Korea – have had relatively low infection and death rates compared with the global average. They also avoided the blanket nationwide lockdowns seen in Europe and suffered less economic pain. On a market capitalization-weighted basis, emerging markets as a whole have had a much lower infection rate than the U.S.

MSCI Emerging Markets Index Equilibrium
Normalized earnings and valuations



Note: As of Aug. 31, 2020. Source: RBC GAM

Recent emerging-market performance

From the start of the year until the end of August, and in line with developed-market equities, the emerging-market equity benchmark had recovered almost all of its recent losses, and was down only 0.5%. Excluding China, emerging-market equities were down 11% during the same period, reflecting China's strong performance on the way into and out of the pandemic-driven correction.

So far this year, China, Taiwan and South Korea are the three strongest performers, with the China and Taiwan indexes both up over 10% so far this year. The weakest markets have been Latin American ones most affected by COVID-19 and Russia, which was hurt by a drop in the oil price. Predictably, North Asian currencies have significantly outperformed those in Latin America, Eastern Europe, the Middle East and Africa. Brazil, South Africa, Russia, Mexico and Turkey all have all had large currency depreciations this year, reflecting their exposure to commodities, weak current-account balances, or both.

Performance is being driven by trends similar to those witnessed in developed markets, namely the strong performance of the Information Technology, Consumer Discretionary and Communication Services sectors, with all three up over 15% so far this year. The Health Care sector is another strong performer, up over 30% so far this year, but it makes up only 4.3% of the emerging-market index.

Current valuations

Given the rebound in emerging-market equities, the index is now at its 20-year median level based on price-to-book values, but is near a historically low discount of 36% relative to developed markets. Divergences in country and sector valuations are at an all-time high within emerging markets, reflecting the issues highlighted above. Markets in China and Taiwan, even with relatively strong performances, are only slightly above their long-term median valuations, while South Korea is below its median.

On a sector basis, the price-to-book valuation divergence is more extreme, with Health Care and Consumer Discretionary near 20-year highs and Energy and Financials at long-term lows. The Information Technology sector, even with its strong year-to-date performance, rests just below its 20-year median.

The preceding valuation analysis prompts us to pose the question: are we starting to see a bubble form in parts of the emerging-market universe, particularly in China? While the price-to-book ratio for the Chinese equity market is only slightly above its 20-year median, some sectors look stretched, even when using a 2021 price-to-earnings multiple. The multiple for the Health Care sector has risen to about 38 times next year's earnings from 21, and some individual companies look overvalued. However, the Health Care sector makes up only 5.5% of the Chinese stock index. In contrast, valuations in Financials have continued to fall and the sector now trades at 5.6 times next year's earnings. Financials makes up a relatively large 14.6% of the Chinese index. There are parts of the market that look overvalued, but they are concentrated in technology and the smaller Health Care sector.

12-month outlook and the U.S. dollar

Equity markets seem to be pricing in low growth and inflation over the next decade. As a result, emerging-market equities can continue to rise given historically low foreign-exchange levels versus the U.S. dollar and relatively cheap equities, as ultra-loose monetary policy in developed markets will pull down the discount rate for 'internet enabled' growth stocks. If growth and inflation do not pick up, China, South Korea and Taiwan will likely drive the market over the next 12 months. However, if the unprecedented fiscal and money stimulus in the U.S., Europe and Japan results in an economic-growth rebound and higher inflation expectations, we could see a sharp rotation in the relative performance of asset classes, regions and styles.

A strong rebound in global growth with a weaker U.S. dollar would likely result in strong emerging-market outperformance. Moreover, an increase in inflation expectations, and thus U.S. interest rates, has historically benefited emerging-market value stocks over growth stocks, and could point to a preference for value stocks after an almost 10-year period during which growth has been in favour.

Does recent weakness in the U.S. dollar portend to a change in market expectations around growth and inflation? If it does, Latin America, Eastern Europe, the Middle East and Africa would likely outperform given their exposure to value sectors such as Energy, Materials and, to a lesser degree, Financials.

Conclusion

The recent performance of emerging-market equities has represented a continuation of the trends that we have seen in recent years. 'Internet enabled' growth stocks continue to outperform, benefiting countries and sectors most exposed to this area. This trend in style, country and sector performance has only accelerated during the pandemic.

Over the next 12 months, these trends will likely persist if markets continue to price in low global growth and inflation. However, the unprecedented fiscal and monetary stimulus in the U.S. means that the supply of U.S. dollars is expanding at double the rate of any other major economy. We would expect this to lead to a continued weakening of the U.S. dollar.

A weak U.S. dollar often signals the outperformance of emerging-market equities, given their historical relationship to the U.S. dollar and economic growth. The risk for us, managing money relative to a benchmark, is that this could lead to a style rotation where value starts to outperform. We therefore believe a barbell-type portfolio that avoids the most expensive growth stocks and offers exposure to higher-quality value companies is most appropriate to manage this risk.

RBC GAM Investment Strategy Committee

Members

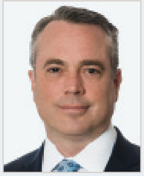
Daniel E. Chornous, CFA

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 $520 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.

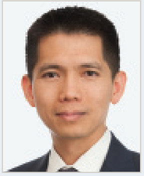
*AUM in CAD as of August 31, 2020



Stephen Burke, PhD, CFA

Vice President and Portfolio Manager
RBC Global Asset Management Inc.

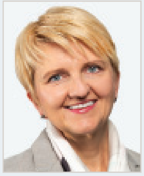
Stephen is a fixed-income portfolio manager and Head of the Quantitative Research Group, the internal team that develops quantitative research solutions for investment decision-making throughout the firm. He is also a member of the PH&N IM Asset Mix Committee. Stephen joined Phillips, Hager & North Investment 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.



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.

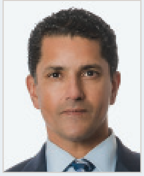
Stu co-leads the North American Equity team and is a member of the RBC GAM Investment Strategy Committee, which is responsible for establishing the firm-wide global asset mix for mutual funds and for institutional and high net worth private clients. Stu began his career in 1996 with RBC Dominion Securities 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 PH&N Canadian Income Fund and the PH&N Monthly Income Fund. 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.



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

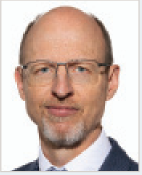
Vice President and Senior Portfolio Manager
Investment Solutions
RBC Global Asset Management Inc.

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.

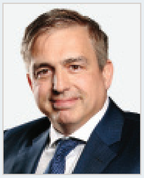
Martin Paleczny, who has been in the investment industry since 1994, began his career at Royal Bank Investment Management, where he developed an expertise in derivatives management and created a policy and process for the products. He also specializes in technical analysis and uses this background to 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.

Jaco is Vice President and Global Head of Quantitative Research & Investments at RBC Global Asset Management Inc. He joined RBC GAM in 2019 to ensure that systematic investing thrives at the firm and to help futureproof the quant business in a world of rapidly evolving technologies and alternative data. Prior to joining, Jaco held an executive role at one of Africa's largest financial services companies, leading the Investment Management Office and working across pension funds, insurance, banking, and wealth management. He also chaired the boards and investment committees of several pension plans and has a track record in driving transformational change. He obtained a Doctor of Commerce (Economics) in 1997 from the University of Pretoria and a Masters of Arts in Economics in 1994 from the University of Toronto.



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.

Global equity advisory committee

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

> **Brad Willock, CFA**
V.P. & Senior Portfolio Manager,
North American Equities
RBC Global Asset Management Inc.

> **Mayur Nallamala**
Head & Senior V.P., Asian Equities
RBC Global Asset Management (Asia) Limited

> **Martin Paleczny, CFA**
V.P. & Senior Portfolio Manager,
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Head, European Equities &
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Head, Global Fixed Income & Currencies
RBC Global Asset Management Inc.

> **Soo Boo Cheah, MBA, CFA**
Senior Portfolio Manager,
Global Fixed Income & Currencies
RBC Global Asset Management (UK) Limited

> **Suzanne Gaynor**
V.P. & Senior Portfolio Manager, Global Fixed Income & Currencies
RBC Global Asset Management Inc.

> **Eric Lascelles**
Chief Economist
RBC Global Asset Management Inc.

Disclosure

RBC Global Asset Management

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