



Q2

Quarterly Market Review
Second Quarter 2020

Quarterly Market Review

Second Quarter 2020

This report features world capital market performance and a timeline of events for the past quarter. It begins with a global overview, then features the returns of stock and bond asset classes in the US and international markets.

The report also illustrates the impact of globally diversified portfolios and features a quarterly topic.



Overview:

Market Summary

World Stock Market Performance

World Asset Classes

US Stocks

International Developed Stocks

Emerging Markets Stocks

Select Market Performance

Select Currency Performance vs. US Dollar

Real Estate Investment Trusts (REITs)

Commodities

Fixed Income

Global Fixed Income

Impact of Diversification

Quarterly Topic: Long-Term Investors, Don't Let a Recession Faze You



Quarterly Market Summary



















Index Returns

| | US Stock Market | International Developed Stocks | Emerging Markets Stocks | Global Real Estate | | US Bond Market | Global Bond Market ex US |
|------------------------|-------------------|--------------------------------|-------------------------|--------------------|--|------------------|--------------------------|
| 2Q 2020 | STOCKS | | | | | BONDS | |
| | 22.03% | 15.34% | 18.08% | 11.17% | | 2.90% | 1.76% |
| Since Jan. 2001 | | | | | | | |
| Avg. Quarterly Return | 2.1% | 1.4% | 2.7% | 2.3% | | 1.2% | 1.1% |
| Best Quarter | 22.0% | 25.9% | 34.7% | 32.3% | | 4.6% | 4.6% |
| | 2020 Q2 | 2009 Q2 | 2009 Q2 | 2009 Q3 | | 2001 Q3 | 2008 Q4 |
| Worst Quarter | -22.8% | -23.3% | -27.6% | -36.1% | | -3.0% | -2.7% |
| | 2008 Q4 | 2020 Q1 | 2008 Q4 | 2008 Q4 | | 2016 Q4 | 2015 Q2 |

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Long-Term Market Summary

Index Returns

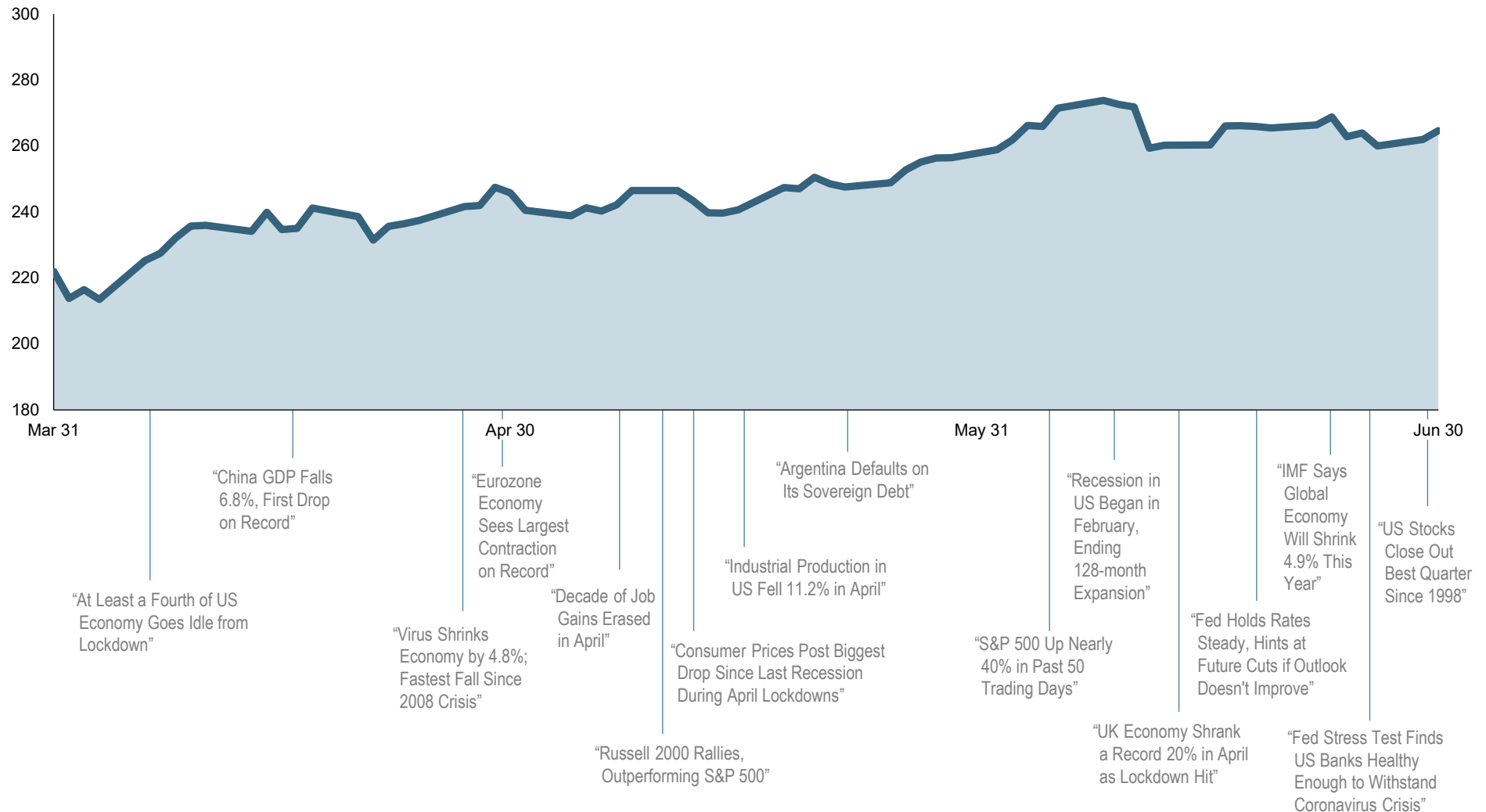
| | US Stock Market | International Developed Stocks | Emerging Markets Stocks | Global Real Estate | US Bond Market | Global Bond Market ex US |
|-----------------|---|---|--|---|---|---|
| 1 Year | STOCKS | | | | BONDS | |
| | 6.53% | -5.42% | -3.39% | -15.91% | 8.74% | 4.00% |
| |  |  |  |  |  |  |
| 5 Years | | | | | | |
| | 10.03% | 2.01% | 2.86% | 1.62% | 4.30% | 4.49% |
| |  |  |  |  |  |  |
| 10 Years | | | | | | |
| | 13.72% | 5.43% | 3.27% | 6.97% | 3.82% | 4.20% |
| |  |  |  |  |  |  |

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World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2020



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

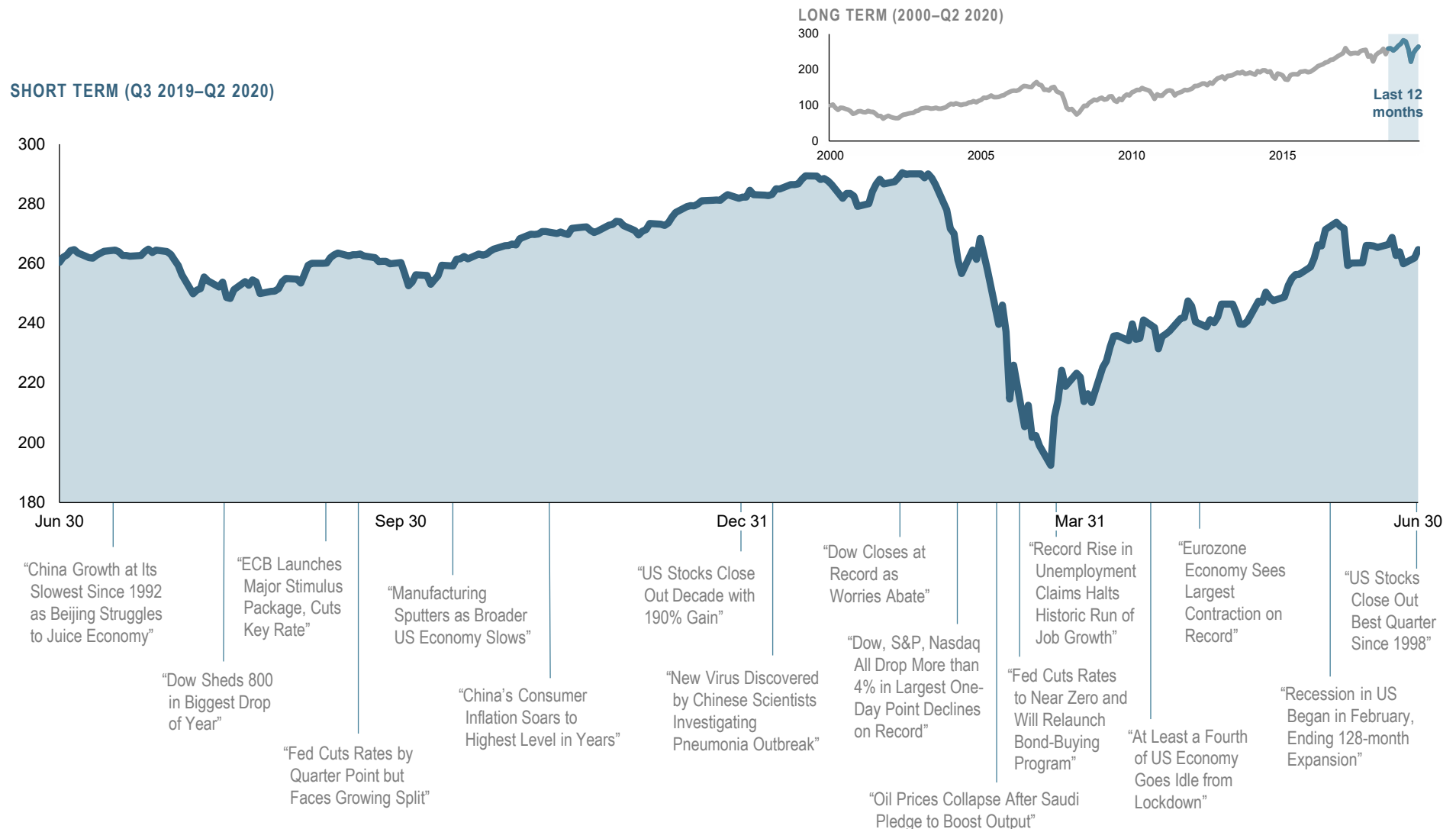
Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2020, all rights reserved.

It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**



World Stock Market Performance

MSCI All Country World Index with selected headlines from past 12 months



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2020, all rights reserved.

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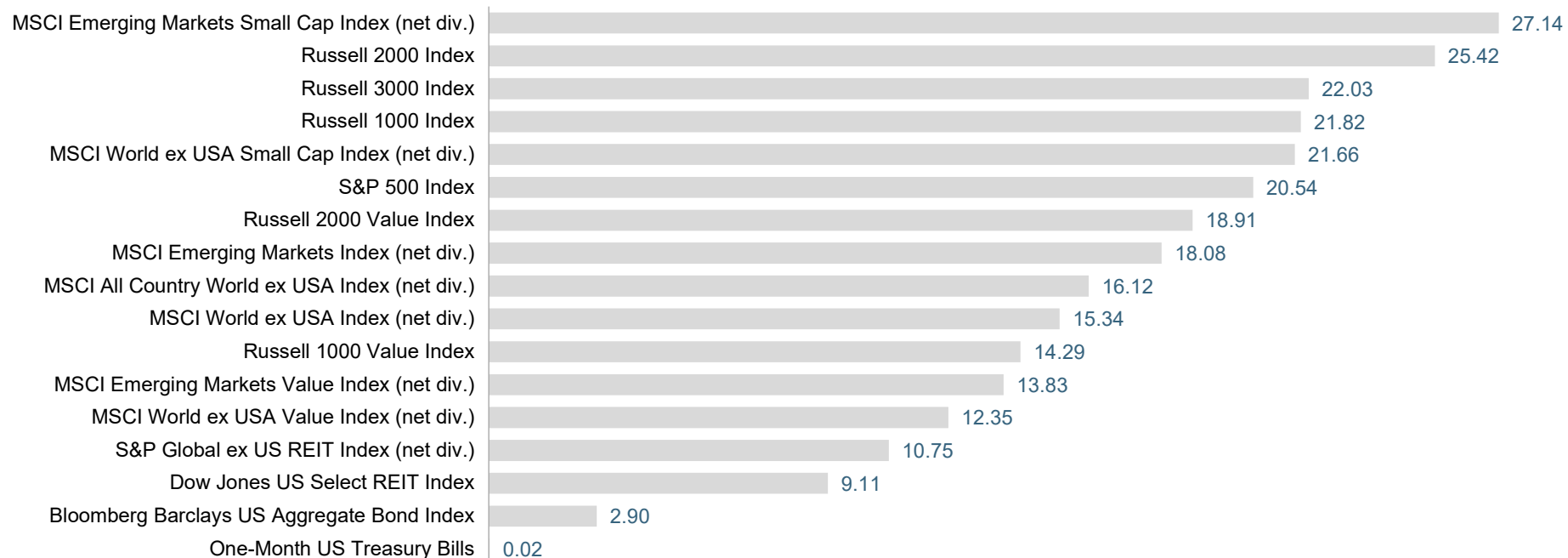
World Asset Classes

Second Quarter 2020 Index Returns (%)

Equity markets around the globe posted positive returns in the second quarter. Looking at broad market indices, US equities outperformed non-US developed markets and emerging markets.

Value stocks underperformed growth stocks, and small caps outperformed large caps.

REIT indices underperformed equity market indices in both the US and non-US developed markets.



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US Stocks

Second Quarter 2020 Index Returns

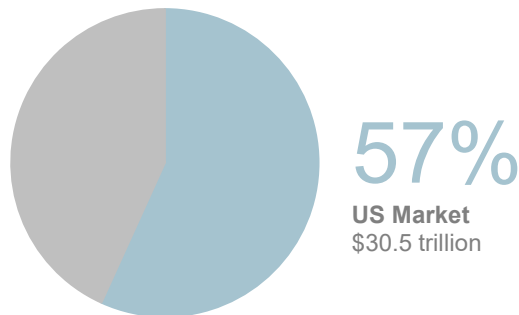
The US equity market posted positive returns for the quarter, outperforming non-US developed markets and emerging markets.

Value underperformed growth in the US across large and small cap stocks.

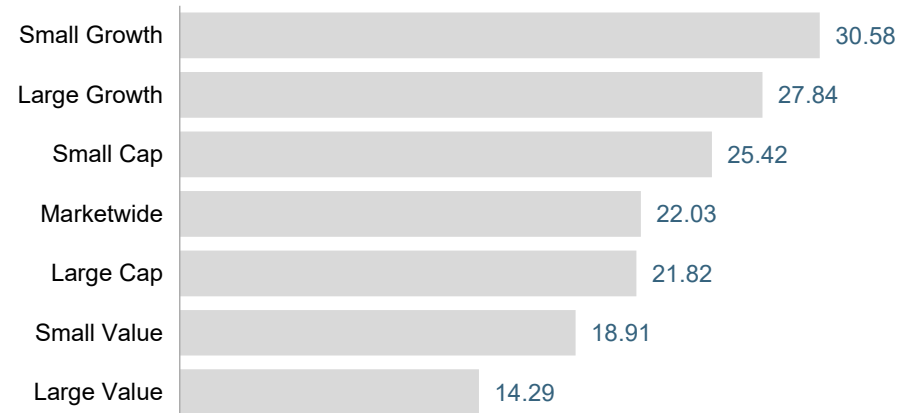
Small caps outperformed large caps in the US.

REIT indices underperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



Period Returns (%)

| Asset Class | YTD | 1 Year | 3 Years* | * Annualized | |
|--------------|--------|--------|----------|--------------|-----------|
| | | | | 5 Years* | 10 Years* |
| Large Growth | 9.81 | 23.28 | 18.99 | 15.89 | 17.23 |
| Large Cap | -2.81 | 7.48 | 10.64 | 10.47 | 13.97 |
| Small Growth | -3.06 | 3.48 | 7.86 | 6.86 | 12.92 |
| Marketwide | -3.48 | 6.53 | 10.04 | 10.03 | 13.72 |
| Small Cap | -12.98 | -6.63 | 2.01 | 4.29 | 10.50 |
| Large Value | -16.26 | -8.84 | 1.82 | 4.64 | 10.41 |
| Small Value | -23.50 | -17.48 | -4.35 | 1.26 | 7.82 |

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International Developed Stocks

Second Quarter 2020 Index Returns

Developed markets outside the US underperformed both the US equity market and emerging markets equities for the quarter.

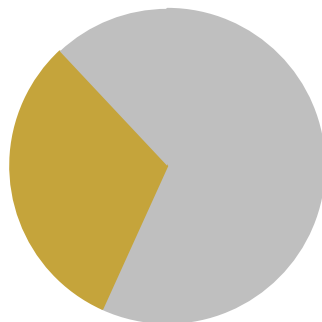
Small caps outperformed large caps in non-US developed markets.

Value underperformed growth across large and small cap stocks.

World Market Capitalization—International Developed

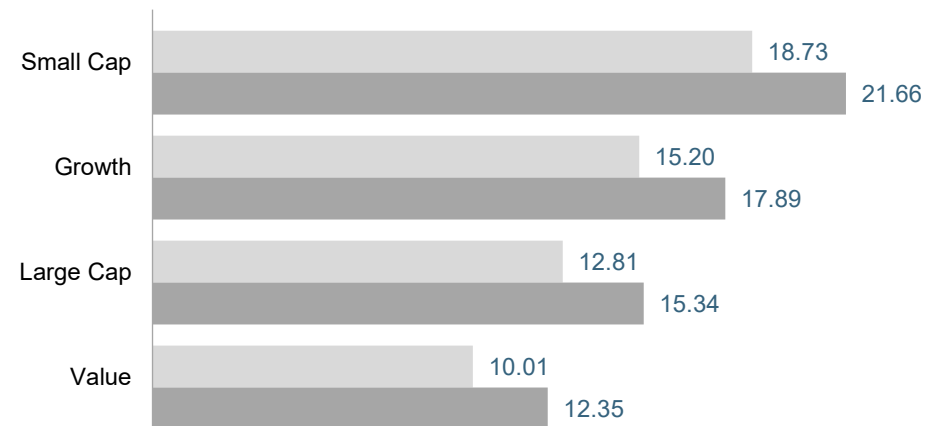
31%

International
Developed Market
\$16.7 trillion



Ranked Returns (%)

■ Local currency ■ US currency



Period Returns (%)

* Annualized

| Asset Class | YTD | 1 Year | 3 Years* | 5 Years* | 10 Years* |
|-------------|--------|--------|----------|----------|-----------|
| Growth | -3.11 | 4.25 | 5.93 | 5.29 | 7.36 |
| Large Cap | -11.49 | -5.42 | 0.84 | 2.01 | 5.43 |
| Small Cap | -12.87 | -3.20 | 0.53 | 3.56 | 7.26 |
| Value | -19.96 | -15.14 | -4.42 | -1.46 | 3.36 |

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Emerging Markets Stocks

Second Quarter 2020 Index Returns

Emerging markets underperformed the US equity market but outperformed developed ex US equities for the quarter.

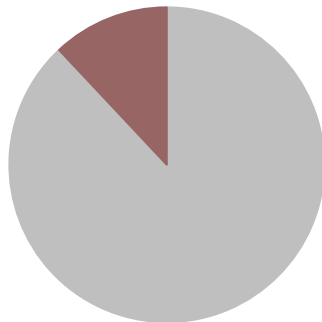
Value stocks underperformed growth stocks.

Small caps outperformed large caps.

World Market Capitalization—Emerging Markets

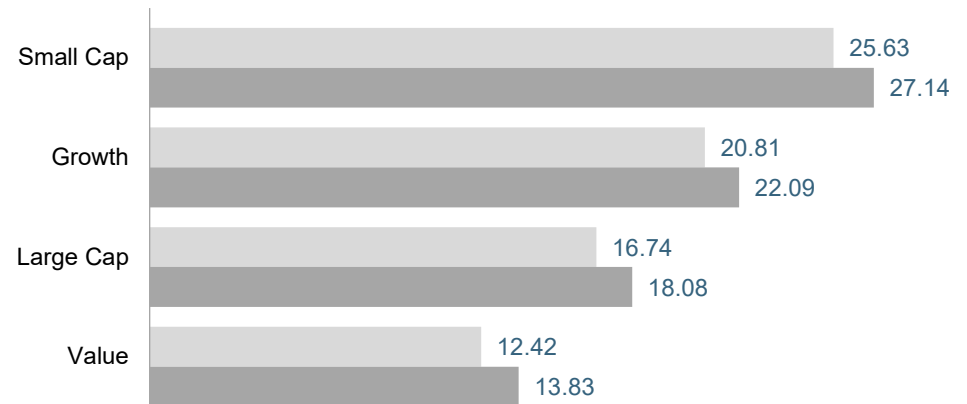
12%

Emerging Markets
\$6.4 trillion



Ranked Returns (%)

■ Local currency ■ US currency



Period Returns (%)

* Annualized

| Asset Class | YTD | 1 Year | 3 Years* | 5 Years* | 10 Years* |
|-------------|--------|--------|----------|----------|-----------|
| Growth | -1.52 | 9.67 | 6.19 | 6.35 | 5.76 |
| Large Cap | -9.78 | -3.39 | 1.90 | 2.86 | 3.27 |
| Small Cap | -12.74 | -8.82 | -2.95 | -1.38 | 1.78 |
| Value | -18.05 | -15.74 | -2.64 | -0.80 | 0.66 |

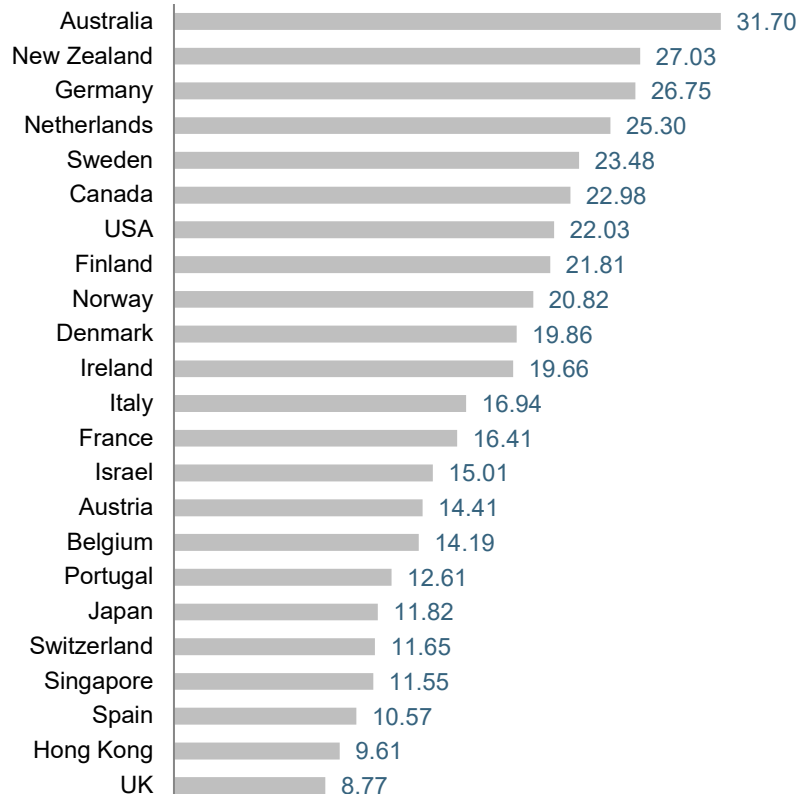
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Select Market Performance

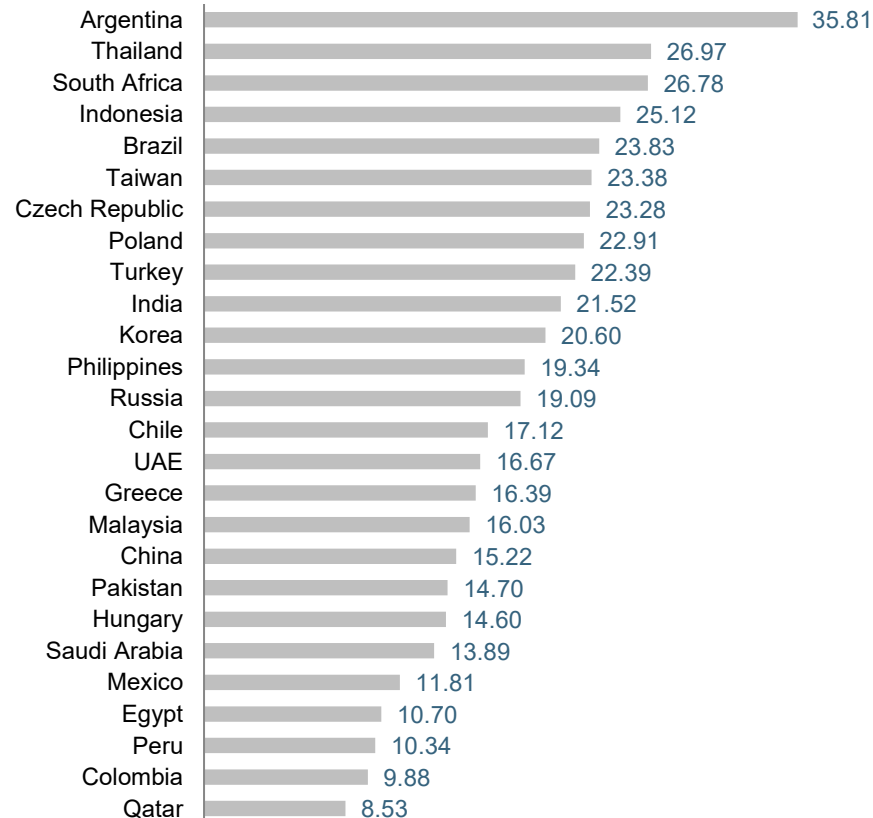
Second Quarter 2020 Index Returns

In US dollar terms, Australia and New Zealand recorded the highest country performance in developed markets, while the UK and Hong Kong posted the lowest returns for the quarter. In emerging markets, Argentina and Thailand recorded the highest country performance, while Qatar and Colombia posted the lowest performance.

Ranked Developed Markets Returns (%)



Ranked Emerging Markets Returns (%)



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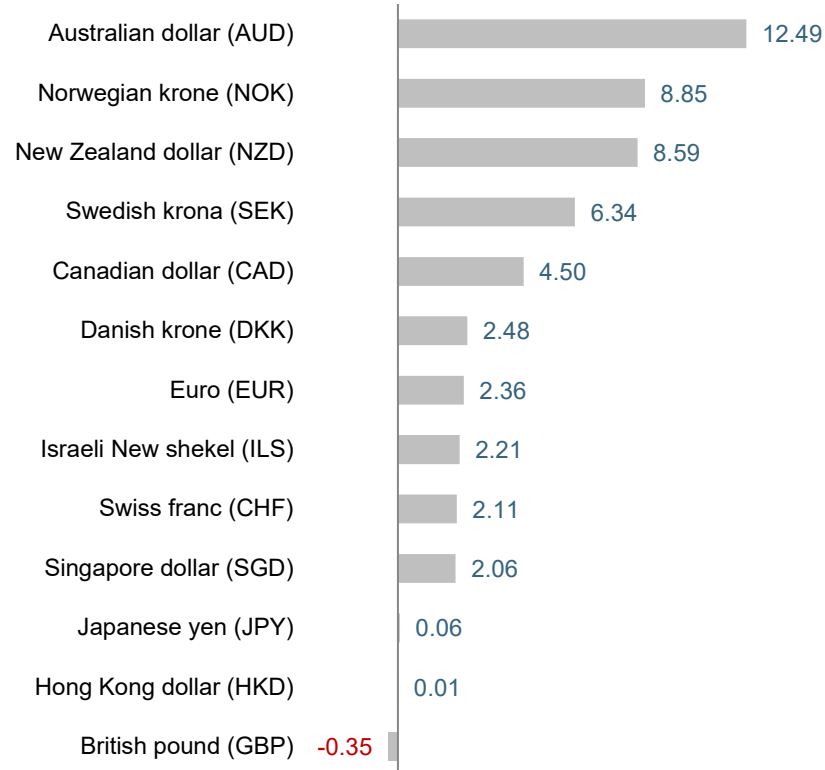


Select Currency Performance vs. US Dollar

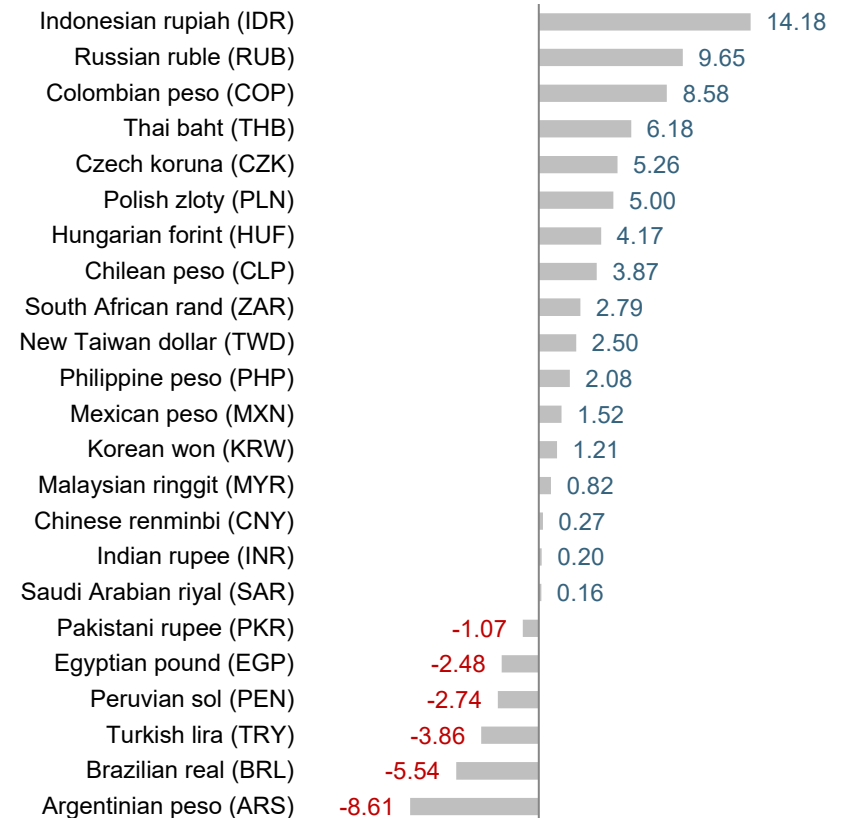
Second Quarter 2020

In developed markets, most currencies appreciated vs. the US dollar except for the British pound. In emerging markets, currency performance vs. the US dollar was mixed. Most currencies generally appreciated vs. the US dollar, but others, notably the Argentinian peso and Brazilian real, depreciated.

Ranked Developed Markets (%)



Ranked Emerging Markets (%)



Real Estate Investment Trusts (REITs)

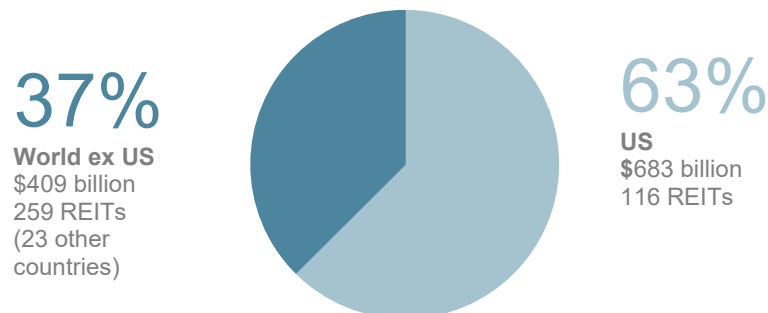
Second Quarter 2020 Index Returns

US real estate investment trusts underperformed non-US REITs in US dollar terms during the quarter.

Ranked Returns (%)



Total Value of REIT Stocks



Period Returns (%)

| Asset Class | YTD | 1 Year | 3 Years* | * Annualized | |
|--------------------|--------|--------|----------|--------------|-----------|
| | | | | 5 Years* | 10 Years* |
| US REITS | -22.01 | -17.71 | -1.99 | 2.45 | 8.27 |
| Global ex US REITS | -25.25 | -19.44 | -2.37 | -0.11 | 5.73 |

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Number of REIT stocks and total value based on the two indices. All index returns are net of withholding tax on dividends. Total value of REIT stocks represented by Dow Jones US Select REIT Index and the S&P Global ex US REIT Index. Dow Jones US Select REIT Index used as proxy for the US market, and S&P Global ex US REIT Index used as proxy for the World ex US market. Dow Jones and S&P data © 2020 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Commodities

Second Quarter 2020 Index Returns

The Bloomberg Commodity Index Total Return returned 5.08% for the second quarter.

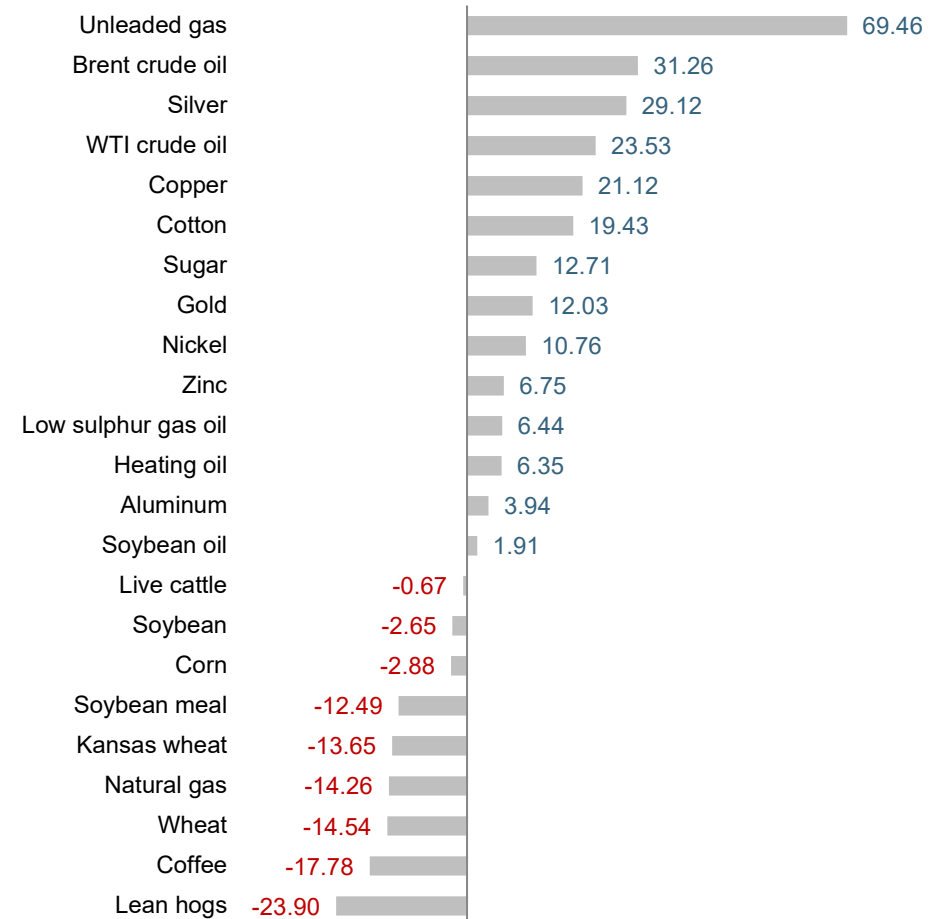
Unleaded gas and Brent crude oil were the best performers, returning 69.46% and 31.26%, respectively.

Lean hogs and coffee were the worst performers, declining 23.90% and 17.78%, respectively.

Period Returns (%)

| Asset Class | QTR | YTD | * Annualized | | | |
|-------------|------|--------|--------------|----------|----------|-----------|
| | | | 1 Year | 3 Years* | 5 Years* | 10 Years* |
| Commodities | 5.08 | -19.40 | -17.38 | -6.14 | -7.69 | -5.82 |

Ranked Returns (%)



Fixed Income

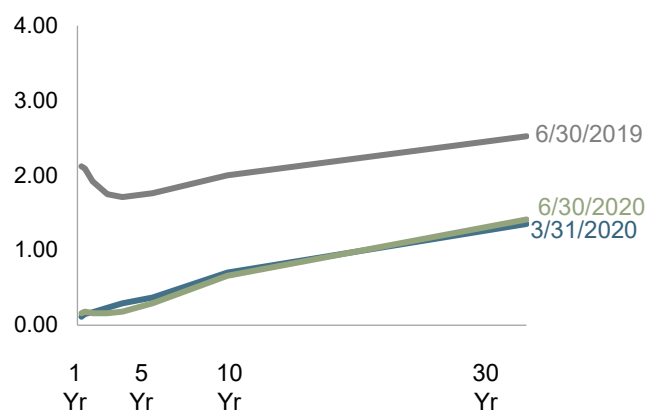
Second Quarter 2020 Index Returns

Interest rate changes were mixed in the US Treasury fixed income market in the second quarter. The yield on the 5-Year US Treasury Note decreased by 8 basis points (bps), ending at 0.29%. The yield on the 10-year note decreased by 4 bps to 0.66%. The 30-Year US Treasury Bond yield increased by 6 bps to 1.41%.

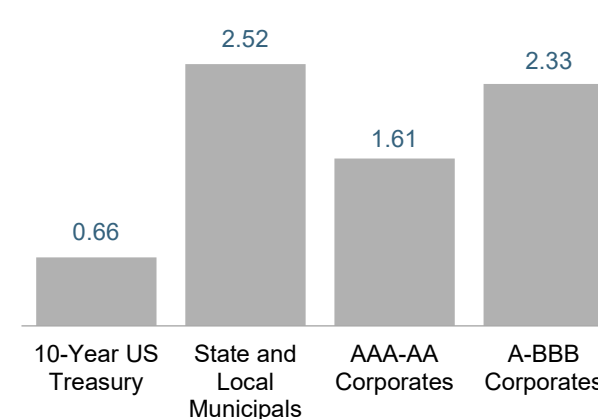
On the short end of the curve, the 1-Month T-bill yield rose by 8 bps to 0.13%, while the 1-year T-bill yield fell by 1 bp to 0.16%. The 2-year note finished at 0.16% after a yield decrease of 7 bps.

In terms of total returns, short-term corporate bonds returned 5.59% for the quarter. Intermediate corporates returned 7.63%. The total return for short-term municipal bonds was 2.38%, while intermediate-term muni bonds returned 3.19%. General obligation bonds outperformed revenue bonds.

US Treasury Yield Curve (%)



Bond Yield across Issuers (%)



Period Returns (%)

| Asset Class | QTR | YTD | 1 Year | 3 Years* | 5 Years* | 10 Years* |
|--|-------|-------|--------|----------|----------|-----------|
| Bloomberg Barclays US High Yield Corporate Bond Index | 10.18 | -3.80 | 0.03 | 3.33 | 4.79 | 6.68 |
| Bloomberg Barclays US TIPS Index | 4.24 | 6.01 | 8.28 | 5.05 | 3.75 | 3.52 |
| Bloomberg Barclays US Aggregate Bond Index | 2.90 | 6.14 | 8.74 | 5.32 | 4.30 | 3.82 |
| Bloomberg Barclays Municipal Bond Index | 2.72 | 2.08 | 4.45 | 4.22 | 3.93 | 4.22 |
| FTSE World Government Bond Index 1-5 Years | 1.41 | 2.11 | 2.27 | 1.86 | 1.68 | 0.62 |
| FTSE World Government Bond Index 1-5 Years (hedged to USD) | 0.53 | 2.79 | 3.96 | 3.09 | 2.38 | 1.96 |
| Bloomberg Barclays US Government Bond Index Long | 0.28 | 20.97 | 25.14 | 11.96 | 9.21 | 7.71 |
| ICE BofA US 3-Month Treasury Bill Index | 0.02 | 0.60 | 1.63 | 1.77 | 1.19 | 0.64 |
| ICE BofA 1-Year US Treasury Note Index | -0.03 | 1.69 | 2.86 | 2.25 | 1.54 | 0.95 |

*Annualized

One basis point (bps) equals 0.01%. Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Yield curve data from Federal Reserve. State and local bonds are from the S&P National AMT-Free Municipal Bond Index. AAA-AA Corporates represent the Bank of America Merrill Lynch US Corporates, AA-AAA rated. A-BBB Corporates represent the ICE BofA Corporates, BBB-A rated. Bloomberg Barclays data provided by Bloomberg. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (S&BBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld). FTSE fixed income indices © 2020 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2020 ICE Data Indices, LLC. S&P data © 2020 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Global Fixed Income

Second Quarter 2020 Yield Curves

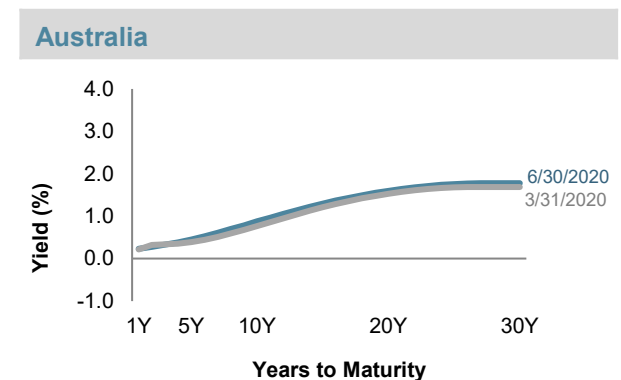
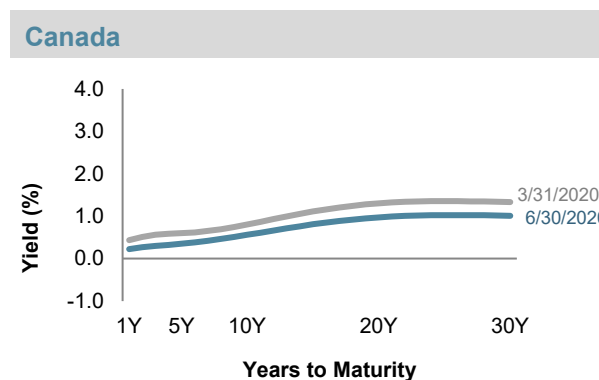
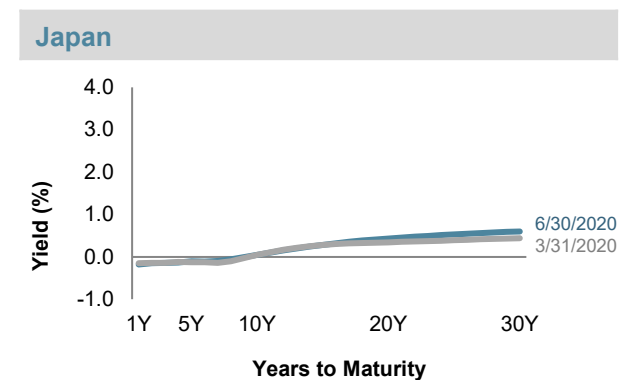
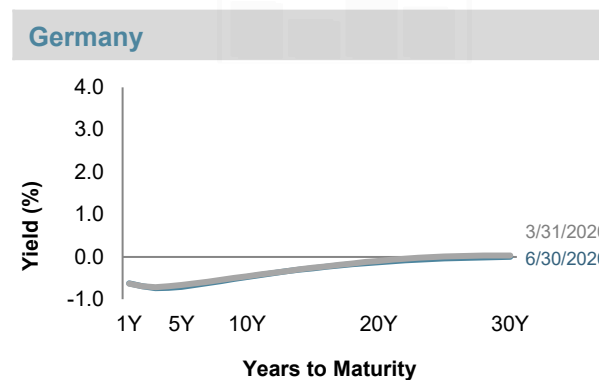
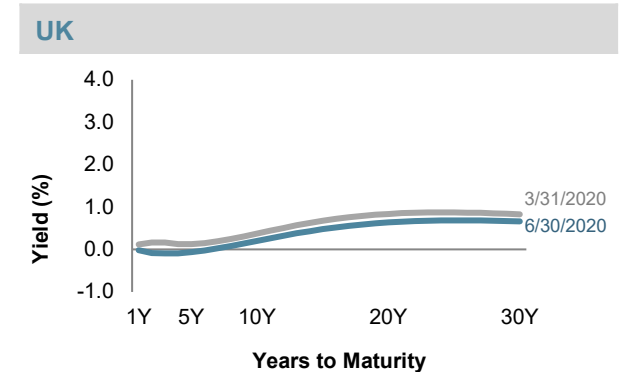
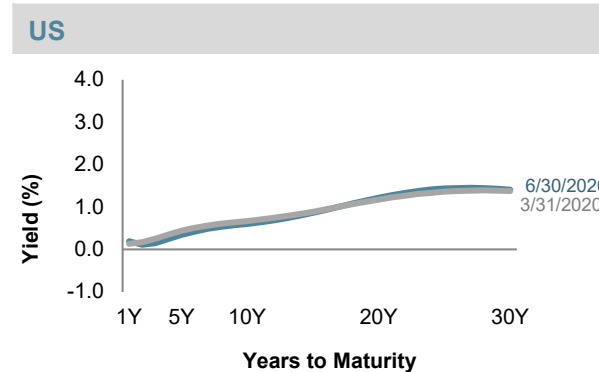
Changes in government bond interest rates in the global developed markets were mixed for the quarter.

Longer-term bonds generally outperformed shorter-term bonds in global developed markets.

Short- and intermediate-term nominal interest rates were negative in Japan, while all maturities finished the quarter negative in Germany.

Changes in Yields (bps) since 3/31/2020

| | 1Y | 5Y | 10Y | 20Y | 30Y |
|-----------|-------|-------|-------|-------|-------|
| US | 5.7 | -9.9 | -6.9 | 4.6 | 3.1 |
| UK | -13.5 | -18.9 | -17.1 | -20.2 | -16.9 |
| Germany | 1.2 | -4.0 | -1.5 | -3.2 | -3.3 |
| Japan | -3.0 | 2.2 | 0.0 | 8.9 | 16.1 |
| Canada | -21.0 | -24.6 | -24.5 | -33.1 | -32.6 |
| Australia | 1.4 | 6.1 | 10.7 | 7.0 | 8.9 |



Impact of Diversification

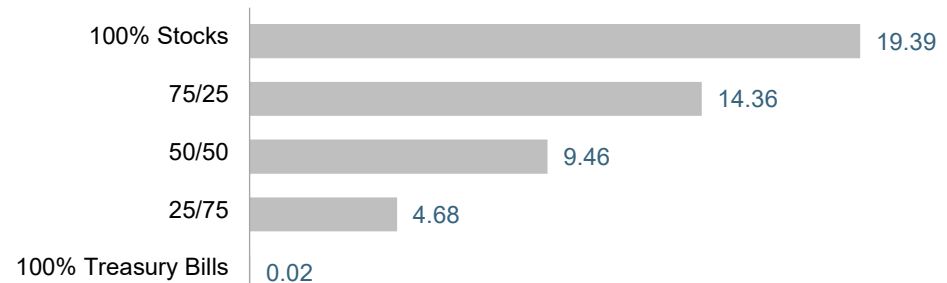
Second Quarter 2020

These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

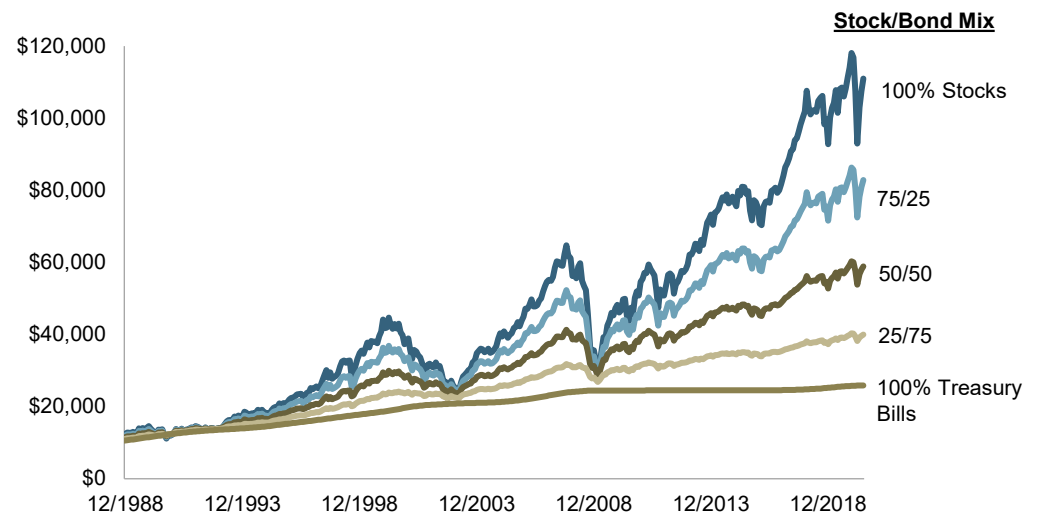
Period Returns (%)

| Asset Class | * Annualized | | | | | |
|---------------------|--------------|--------|----------|----------|-----------|----------------------------|
| | YTD | 1 Year | 3 Years* | 5 Years* | 10 Years* | 10-Year STDEV ¹ |
| 100% Treasury Bills | 0.39 | 1.35 | 1.62 | 1.07 | 0.55 | 0.23 |
| 25/75 | -0.86 | 2.10 | 3.12 | 2.73 | 2.97 | 3.49 |
| 50/50 | -2.34 | 2.57 | 4.48 | 4.29 | 5.31 | 7.00 |
| 75/25 | -4.05 | 2.75 | 5.67 | 5.72 | 7.57 | 10.51 |
| 100% Stocks | -5.99 | 2.64 | 6.70 | 7.03 | 9.74 | 14.02 |

Ranked Returns (%)



Growth of Wealth: The Relationship between Risk and Return



1. STDEV (standard deviation) is a measure of the variation or dispersion of a set of data points. Standard deviations are often used to quantify the historical return volatility of a security or portfolio. Diversification does not eliminate the risk of market loss. **Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect expenses associated with the management of an actual portfolio.** Asset allocations and the hypothetical index portfolio returns are for illustrative purposes only and do not represent actual performance. Global Stocks represented by MSCI All Country World Index (gross div.) and Treasury Bills represented by US One-Month Treasury Bills. Globally diversified allocations rebalanced monthly, no withdrawals. Data © MSCI 2020, all rights reserved. Treasury bills © Stocks, Bonds, Bills, and Inflation Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld).



Long-Term Investors, Don't Let a Recession Faze You

Second Quarter 2020

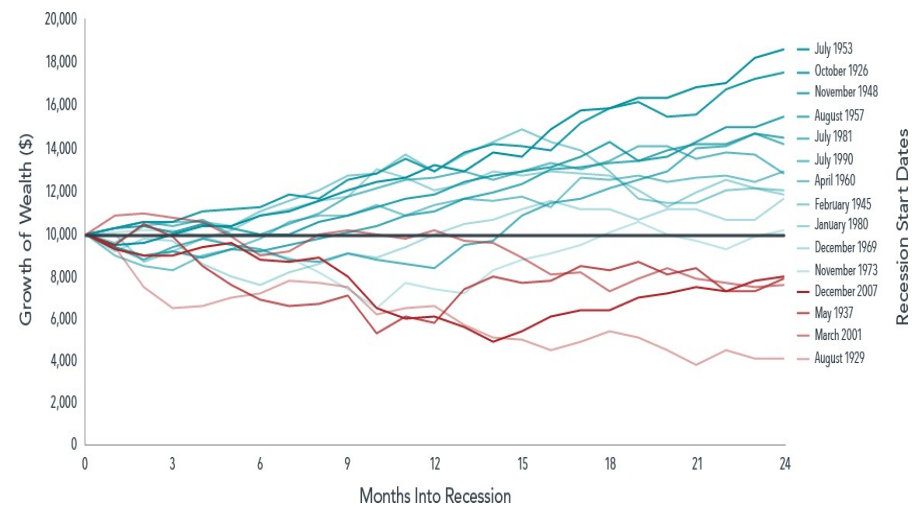
With activity in many industries sharply curtailed in an effort to reduce the chances of spreading the coronavirus, some economists say a recession is inevitable, if one hasn't already begun.¹ From a markets perspective, we have already experienced a drop in stocks, as prices have likely incorporated the growing chance of recession. Investors may be tempted to abandon equities and go to cash because of perceptions of recessions and their impact. But across the two years that follow a recession's onset, equities have a history of positive performance.

Data covering the past century's 15 US recessions show that investors tended to be rewarded for sticking with stocks. **Exhibit 1** shows that in 11 of the 15 instances, or 73% of the time, returns on stocks were positive two years after a recession began. The annualized market return for the two years following a recession's start averaged 7.8%.

Recessions understandably trigger worries over how markets might perform. But history can be a comfort for investors wondering whether now may be the time to move out of stocks.

Exhibit 1. Downturns, Then Upturns

Growth of wealth for the Fama/French Total US Market Research Index



Past performance, including hypothetical performance, is not a guarantee of future results.

In USD. Performance includes reinvestment of dividends and capital gains. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.

Growth of wealth shows the growth of a hypothetical investment of \$10,000 in the securities in the Fama/French US Total Market Research Index over the 24 months starting the month after the relevant Recession Start Date. Sample includes 15 recessions as identified by the National Bureau of Economic Research (NBER) from October 1926 to December 2007. NBER defines recessions as starting at the peak of a business cycle.

1. Nelson D. Schwartz, "Coronavirus Recession Looms, Its Course 'Unrecognizable,'" New York Times, March 21, 2020; Peter Coy, "The U.S. May Already Be in a Recession," Bloomberg Businessweek, March 6, 2020.

Long-Term Investors, Don't Let a Recession Faze You

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GLOSSARY

Fama/French Total US Market Research Index: The value-weighted US market index is constructed every month, using all issues listed on the NYSE, AMEX, or Nasdaq with available outstanding shares and valid prices for that month and the month before. Exclusions: American Depositary Receipts. Sources: CRSP for value-weighted US market return. Rebalancing: Monthly. Dividends: Reinvested in the paying company until the portfolio is rebalanced.

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