

Market Review

Fourth Quarter 2020, and 2021 Outlook

Q4 2020 and Year Ahead



Summary

- During 2020 stock and bond markets declined at record rates, and recovered at record rates. Today the valuation of financial assets is at record levels.
- Current record highs indicate that future returns will likely be lower than most investors expect. Along with lower returns, expect more volatility.
- A solution to the crisis is increasingly likely to achieve our best-case scenario of being available to those most in need, before the end of 2020.
- We expect solid growth in the second half of 2021 and throughout 2022.
- Perfection is currently priced into both the stock and bond markets.
- Investors should expect corrections, as perfection is an unlikely outcome for the next 6 months.



"Winter is Coming"

For those of us looking at the financial markets on January 1, 2020 and again on November 1, 2020, without any reference to the pandemic, economic disruption, and changing work environment, it has been a wonderful year.

All of the financial markets, stocks, bonds, gold, and cryptocurrencies alike, have appreciated as if there was no pandemic, and no economic disruption. Fortunately, expenditures of trillions (literally) of dollars in financial aid to replace the U.S. economic activity wiped out by the pandemic, have come to the rescue.

The stock and bond market's meteoric rise has overwhelmed the economic turmoil and uncertainty taking place below the surface of the financial markets. The pain from the economic turmoil of this magnitude has many of us scratching our heads about the market's rise, while wondering what we have missed.

2020 registered a record <u>unemployment</u> toll and a record <u>employment</u> toll in the months that followed. We had a record <u>downturn</u> in the stock market, and a record <u>upturn</u> in the months that followed. We had a record amount of stimulus injected into our U.S. economic system, and now have a record amount of debt, which must be repaid.

And today, we are setting valuation records in the capital markets, while ignoring the potential damage this pandemic has carved into the infrastructure of our U.S. economy.

What should investors expect in the months to end 2020, and during 2021?

First things first. It is important to remember that the capital markets are forward looking... this means current information, and future expectations are well priced into the markets <u>present</u> values. This is often the most difficult concept for investors to embrace. I see it almost daily. Investors frequently call to discuss a development they read in the paper or saw on television.



They cherish this information as if it was unknown. Of course by the time its in the papers or on television, it is well-priced into the securities market.

Coming into the 3rd quarter of 2020, the capital markets offered investors a panoply of diverse uncertainties, each with the potential to seriously damage our U.S. and global economy.

The spread of the virus going into the flu season, a highly contentious election for the highest office in the U.S., and the U.S. economy's ability to withstand the stresses inherited from the lack of all activities travel-related loomed as a huge reminder that uncertainties ruled. Of course, the capital markets loathe uncertainty.

Good News!

Going into the 4th quarter, the market staggered onto potential solutions for 2 of the 3 most obvious uncertainties.

Today, we have solid data supporting several vaccine candidates available to help our citizenry conquer the virus, and the election results have been largely settled, with a new administration taking office in January. These events have now been priced into the capital markets as if they were the best-case outcomes available. Yet uncertainty smolders below the surface.

How will corporate America's struggling hospitality, travel and entertainment industry weather the winter? The winter promises to offer the potential for less activity over the next 6-9 months, as industry and citizens alike - wait for a solution to the viral crisis?

When intelligent investors dissect the U.S. economy, they will find that the service industry accounts for over 60% of economic revenue. The service industry, has been the most vibrant growth engine over the last 20+ years. It is struggling. This is being overlooked by the capital markets. Why? Most sectors of the service industry thrive on activity and are largely made up of smaller companies with less access to capital. Shutdowns quell activity, and smaller companies having less access to capital, often have can't withstand long periods of inactivity or



recessions.

The capital markets have ignored the potential for a significant amount of bankruptcies, as inactivity promises to increase during the winter months. Bankruptcies frequently have unintended consequences, as one company's failure may endanger several other dependents. In 2021 we will find out if the U.S. Federal Reserve's promise for abundant monetary stimulus, is matched by the new U.S. administration's ability to fund and create fiscal stimulus. Both existing infrastructure projects and new renewable resource projects have been identified and are sorely needed.

Reasonable Expectations for our Future?

We believe every investor should be grateful for the U.S. Federal Reserve's response in 2020, which offered trillions of dollars of available liquidity to our U.S. economy. This liquidity propelled stock and bond prices alike to extreme values. (This is another way of saying that a significant amount of future returns have been pulled into present valuations.)

Intelligent investors should expect lower future returns, and meaningful corrections from time to time.

This is NOT to say that investors should leave the capital markets.

It <u>is</u> to say we have been incredibly lucky. We have a solution to the virus within the next year, an end to a contentious election, a U.S.

Federal Reserve which acted quickly and forcefully, and capital markets that have MORE than rewarded investors at current levels.



Intelligent investors should never forget that societies greatly benefit from the technological advances, which typically emerge from difficult times such as the one we just encountered. Humans tend to step up to the challenge when lives hang in the balance. Humanity and civilization in general, tends to emerge stronger as each setback is conquered. The innovations created under the pressure of a healthcare crisis, may well act as a springboard for our future economy as it has in the past.

Science and Capital Markets

Be prepared for lower appreciation over the next few years, for both stocks and bonds. Expect stock markets to offer volatile returns.

The Science of Investing™ tells us that "value" investments have outperformed "growth" investments by over 1% per year, over the last 100+ years. "Small" companies have outperformed large companies by a similar amount over the last 100+ years. Both "value" and "small" companies along with Foreign stock markets have underperformed the U.S. stock markets for over 10 years.

For investors who believe in The Science of Investing[™], "Value investments", "smaller companies", and "foreign" stock markets may well offer superior returns when compared to the S&P 500 for investors with a multi-year investment horizon. <u>Remain well diversified</u>. As we come out of this recession, <u>diversification will be important to EVERY successful investment allocation</u>.

Yet, be prepared for the next 6-9 months of uncertainty. Current markets are priced for perfection.

While we strongly believe our economy will emerge from this pandemic during the second half of 2021, all intelligent investor's expectations should embrace setbacks from time to time.

Winter is coming.

*For those who would like to discuss their 401k plan's investment allocation, please feel free to call Steven Abernathy at 212-293-3469.

Quarterly Market Review

Third 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: When It's Value vs. Growth, History Is on Value's Side

Quarterly Market Summary

Index Returns



Global
International Emerging Global Bond
US Stock Developed Markets Real US Bond Market
Market Stocks Stocks Estate Market ex US

	Market	Stocks	Stocks	Estate	Market	ex US
3Q 2020		STO	CKS		ВО	NDS
	9.21%	4.92%	9.56%	2.37%	0.62%	0.68%

Since Jan. 2001						
Avg. Quarterly Return	2.1%	1.4%	2.8%	2.3%	1.2%	1.1%
Best	22.0%	25.9%	34.7%	32.3%	4.6%	4.6%
Quarter	2020 Q2	2009 Q2	2009 Q2	2009 Q3	2001 Q3	2008 Q4
Worst	-22.8%	-23.3%	-27.6%	-36.1%	-3.0%	-2.7%
Quarter	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2016 Q4	2015 Q2

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.

Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net div.]), Emerging Markets (MSCI Emerging Markets Index [net div.]), Global Real Estate (S&P Global REIT Index [net div.]), US Bond Market (Bloomberg Barclays US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Barclays Global Aggregate ex-USD Bond Index [hedged to USD]). S&P data © 2020 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2020, all rights reserved. Bloomberg Barclays data provided by Bloomberg.

Long-Term Market Summary

Index Returns as of September 30, 2020



Global Global **Bond** International **Emerging US Stock** Developed **Markets** Real **US Bond** Market Market **Stocks Stocks Estate** Market ex US 1 Year **STOCKS BONDS** 15.00% 0.16% 10.54% -18.58% 6.98% 1.82% 5 Years 13.69% 5.32% 8.97% 2.20% 4.18% 4.33% 10 Years 13.48% 4.37% 2.50% 5.58% 3.64% 4.06%

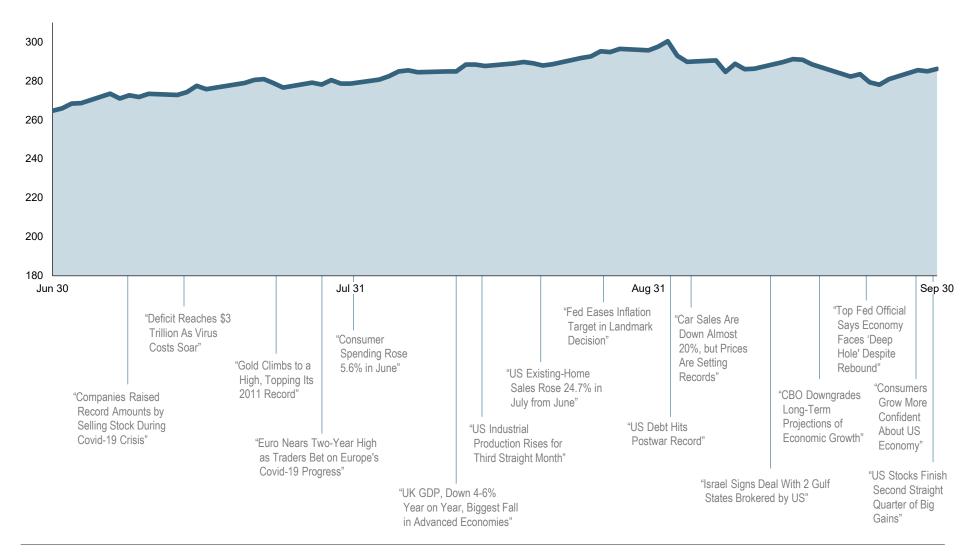
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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World Stock Market Performance



MSCI All Country World Index with selected headlines from Q3 2020



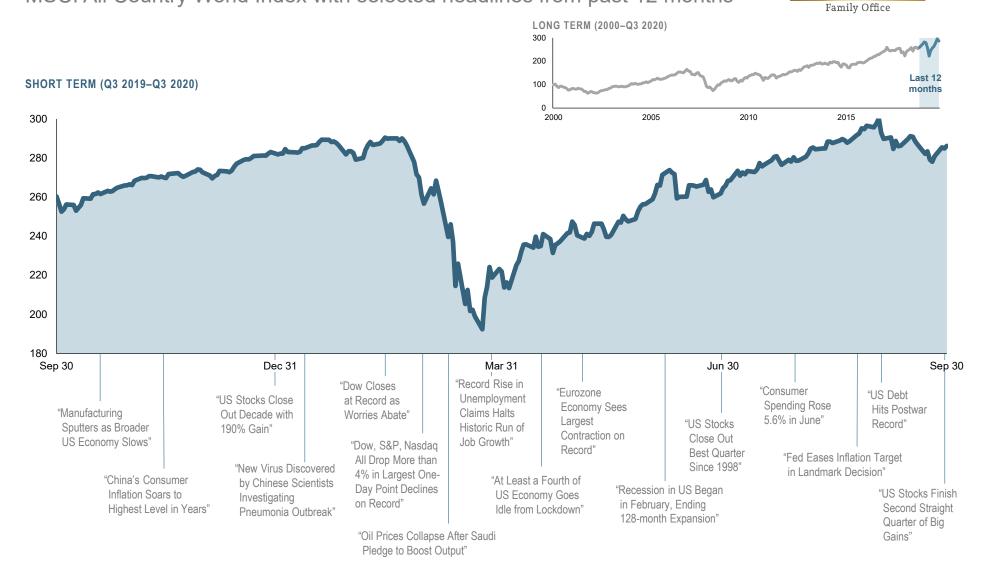
These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

World Stock Market Performance



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

The Abernathy Group II



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.

World Asset Classes

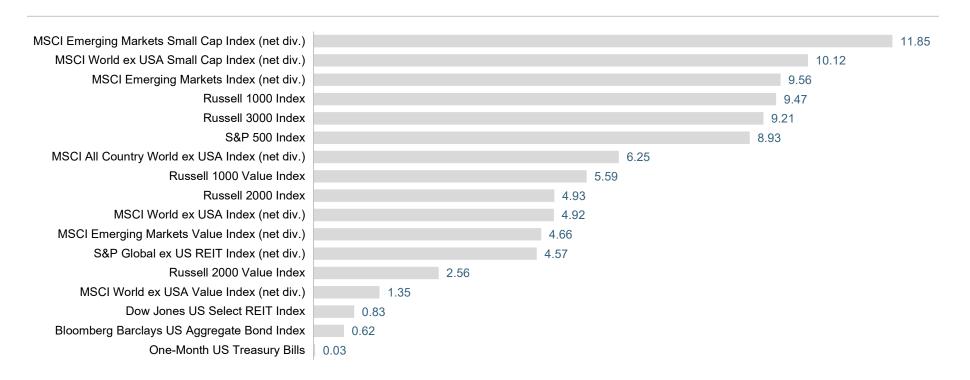
Third Quarter 2020 Index Returns (%)



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

Value underperformed growth across regions. Small caps outperformed large caps in non-US developed and emerging markets but underperformed in the US.

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



US Stocks

Third Quarter 2020 Index Returns



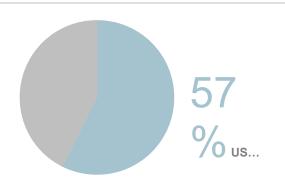
The US equity market posted positive returns for the quarter, outperforming non-US developed markets but underperforming emerging markets.

Value underperformed growth across large and small cap stocks.

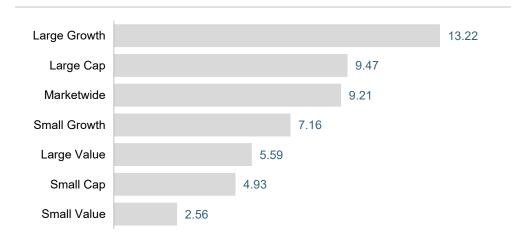
Small caps underperformed large caps.

REIT indices underperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



Period Returns (%)

* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Large Growth	24.33	37.53	21.67	20.10	17.25
Large Cap	6.40	16.01	12.38	14.09	13.76
Marketwide	5.41	15.00	11.65	13.69	13.48
Small Growth	3.88	15.71	8.18	11.42	12.34
Small Cap	-8.69	0.39	1.77	8.00	9.85
Large Value	-11.58	-5.03	2.63	7.66	9.95
Small Value	-21.54	-14.88	-5.13	4.11	7.09

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.

Market segment (index representation) as follows: Marketwide (Russell 3000 Index), Large Cap (Russell 1000 Index), Large Cap Value (Russell 1000 Value Index), Large Cap Growth (Russell 1000 Growth Index), Small Cap (Russell 2000 Index), Small Cap Value (Russell 2000 Value Index), and Small Cap Growth (Russell 2000 Growth Index). World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. Russell 3000 Index is used as the proxy for the US market. Dow Jones US Select REIT Index used as proxy for the US REIT market. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2020, all rights reserved.

International Developed Stocks

Third Quarter 2020 Index Returns



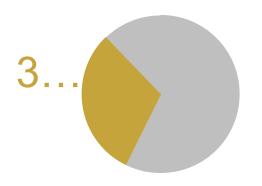
Developed markets outside the US posted positive returns for the quarter but underperformed US and emerging markets equities.

Value underperformed growth.

Small caps outperformed large caps.

Ranked Returns (%) Local currency US currency Small Cap 6.61 10.12 Growth 5.02 8.51 Large Cap 1.48 4.92 Value -2.05 1.35

World Market Capitalization—International Developed



Period Returns (%)

*	Α	n	nı	ıa	liz	e

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Growth	5.13	13.64	7.06	9.09	6.61
Small Cap	-4.05	6.88	1.42	7.35	6.55
Large Cap	-7.13	0.16	0.62	5.32	4.37
Value	-18.88	-12.74	-5.88	1.38	1.99

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Market segment (index representation) as follows: Large Cap (MSCI World ex USA Index), Small Cap (MSCI World ex USA Small Cap Index), Value (MSCI World ex USA Value Index), and Growth (MSCI World ex USA Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI World ex USA IMI Index is used as the proxy for the International Developed market. MSCI data © MSCI 2020, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

Emerging Markets Stocks

Third Quarter 2020 Index Returns

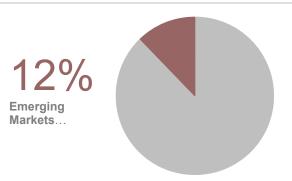


Emerging markets posted positive returns for the quarter, outperforming the US and developed ex US equity markets.

Value underperformed growth.

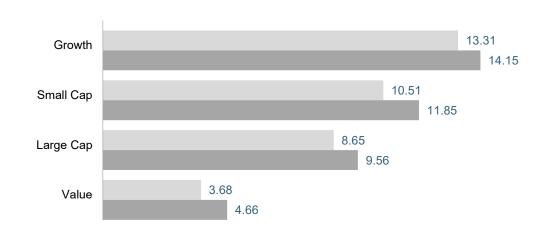
Small caps outperformed large caps.





Ranked Returns (%)

■ Local currency ■ US currency



Period Returns (%)

* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Growth	12.41	27.80	7.45	13.26	5.29
Large Cap	-1.16	10.54	2.42	8.97	2.50
Small Cap	-2.40	6.89	-1.09	4.60	1.03
Value	-14.23	-5.70	-2.89	4.45	-0.44

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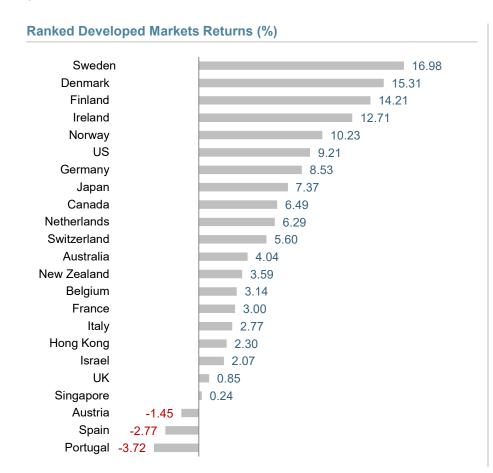
Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index used as the proxy for the emerging market portion of the market. MSCI data © MSCI 2020, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

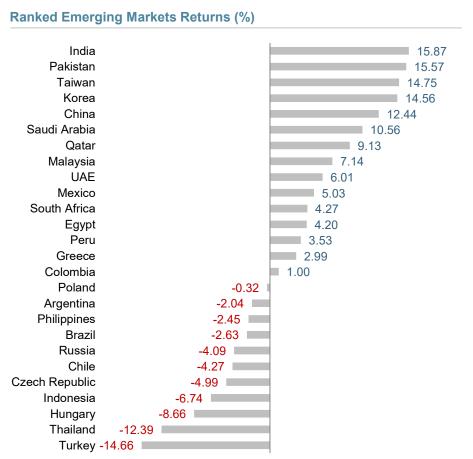
Select Market Performance

Third Quarter 2020 Index Returns



In US dollar terms, Sweden and Denmark recorded the highest country performance in developed markets, while Portugal and Spain posted the lowest returns for the quarter. In emerging markets, India and Pakistan recorded the highest country performance, while Turkey and Thailand posted the lowest performance.





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MSCI Index returns are in USD net of dividend withholding taxes. Country returns are the country component indices of the MSCI All Country World ex USA IMI for all countries except the United States, where the Russell 3000 index is used instead. Frank Russell Company is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. MSCI data © MSCI 2020, all rights reserved. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.

Select Currency Performance vs. US Dollar

Third Quarter 2020

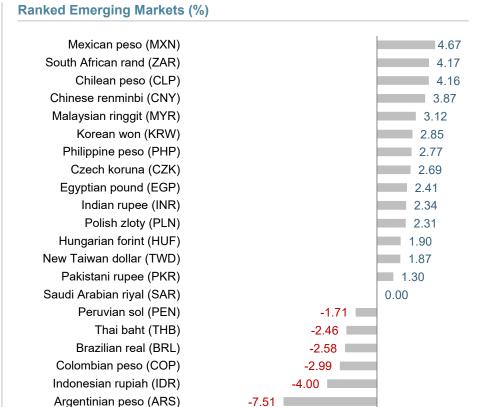
Hong Kong dollar (HKD)



In developed markets, all currencies appreciated versus the US dollar. In emerging markets, currency performance versus the US dollar was mixed. Most currencies generally appreciated versus the US dollar, but some, notably the Turkish lira and Russian ruble, depreciated.

Ranked Developed Markets (%) British pound (GBP) 4.63 Danish krone (DKK) Euro (EUR) 4.41 Australian dollar (AUD) 4.10 Swedish krona (SEK) 4.10 Swiss franc (CHF) Norwegian krone (NOK) 3.10 New Zealand dollar (NZD) 2.68 Japanese yen (JPY) 2.23 Singapore dollar (SGD) 2.19 Canadian dollar (CAD) 1.97 Israeli new shekel (ILS)

0.01



-8.18

-11.03

Russian ruble (RUB)

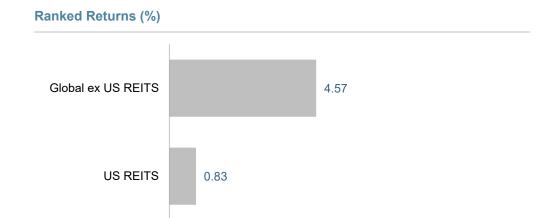
Turkish lira (TRY)

Real Estate Investment Trusts (REITs)

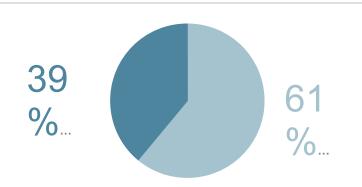
Third Quarter 2020 Index Returns



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



Total Value of REIT Stocks



Period Returns (%)

* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
US REITS	-21.36	-22.33	-1.85	1.99	7.03
Global ex US REITS	-21.84	-18.37	-1.62	1.67	4.13

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.

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

Third Quarter 2020 Index Returns



The Bloomberg Commodity Index Total Return returned 9.07% for the third quarter of 2020.

Lean hogs and Silver were the best performers, returning 30.76% and 25.06%, respectively.

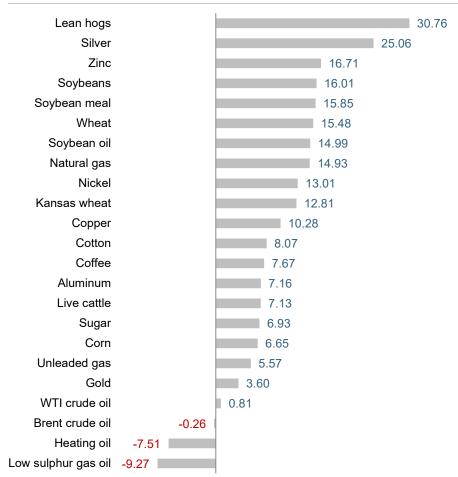
Low sulfur gas and Heating oil were the worst performers, declining 9.27% and 7.51%, respectively.

Period Returns (%)

* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Commodities	9.07	-12.08	-8.20	-4.18	-3.09	-6.03

Ranked Returns (%)



Fixed Income

Third Quarter 2020 Index Returns

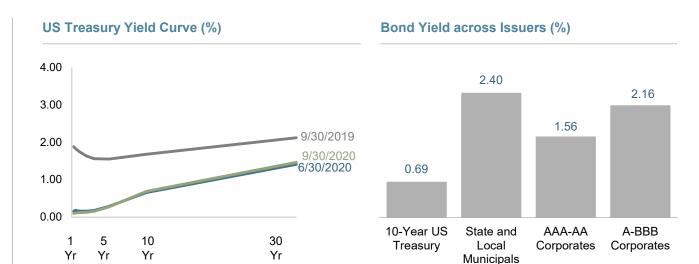


Interest rate changes were mixed in the US Treasury fixed income market during the third quarter. The yield on the 5-year US Treasury note decreased by 3 basis points (bps), ending at 0.31%. The yield on the 10-year US T-note rose by 3 bps to 0.64%. The 30-year US T-bond yield increased by 5 bps to 1.46%.

On the short end of the yield curve, the 1-month US Treasury bill yield decreased to 0.08%, while the 1-year T-bill yield decreased by 5 bps to 0.14%. The 2-year US T-note yield finished at 0.09% after a decrease of 2 basis points.

In terms of total returns, short-term corporate bonds returned 0.92% for the quarter. Intermediate-term corporates returned 1.33%.

The total return for short-term municipal bonds was 0.83%, while intermediate munis returned 1.40%. Revenue bonds outperformed general obligation bonds.



Period Returns (%) *Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Bloomberg Barclays US High Yield Corporate Bond Index	4.60	0.62	3.25	4.21	6.79	6.47
Bloomberg Barclays US TIPS Index	3.03	9.22	10.08	5.79	4.61	3.57
FTSE World Government Bond Index 1-5 Years	2.01	4.16	5.21	2.03	2.01	0.21
Bloomberg Barclays Municipal Bond Index	1.23	3.33	4.09	4.28	3.84	3.99
Bloomberg Barclays US Aggregate Bond Index	0.62	6.79	6.98	5.24	4.18	3.64
FTSE World Government Bond Index 1-5 Years (hedged to USD)	0.24	3.04	3.22	3.02	2.31	1.90
Bloomberg Barclays US Government Bond Index Long	0.13	21.13	16.21	11.79	8.18	7.18
ICE BofA 1-Year US Treasury Note Index	80.0	1.77	2.37	2.19	1.54	0.93
ICE BofA US 3-Month Treasury Bill Index	0.04	0.64	1.10	1.69	1.20	0.64

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 (SBBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). 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

Third Quarter 2020 Yield Curves



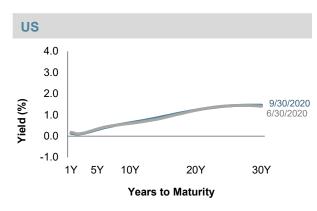
Changes in Government bond interest rates in the global developed markets were mixed for the quarter.

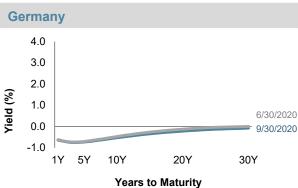
Longer-term bonds generally outperformed shorter-term bonds in global ex-US developed markets.

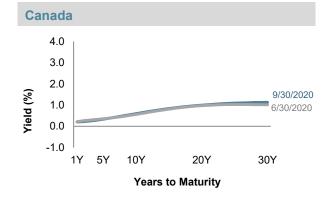
Short- and intermediate-term nominal interest rates were negative in Japan, while all maturities finished the quarter in negative territory in Germany.

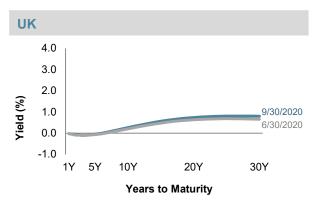
Changes in Yields (bps) since 6/30/2020

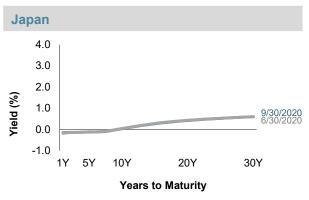
	1Y	5Y	10Y	20Y	30Y
US	-5.4	-3.3	3.4	1.3	5.3
UK	0.0	1.8	6.1	10.7	13.9
Germany	-2.0	-2.8	-5.7	-9.2	-7.6
Japan	3.0	-1.1	-1.2	-1.2	0.2
Canada	-2.1	-1.9	3.9	2.6	12.2
Australia	-14.5	-8.3	-5.9	-9.6	-5.1

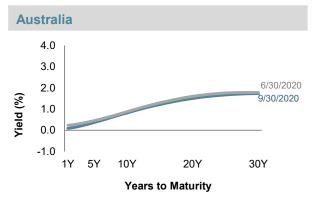












Impact of Diversification

Third Quarter 2020



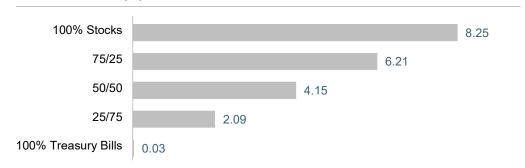
These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

Period Returns (%)

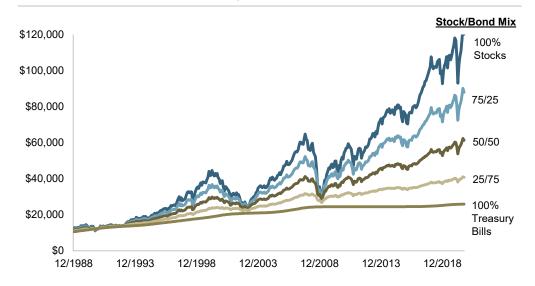
* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV¹
100% Stocks	1.77	11.00	7.68	10.90	9.13	13.71
75/25	1.90	8.89	6.40	8.58	7.12	10.28
50/50	1.71	6.48	4.95	6.16	5.01	6.85
25/75	1.22	3.78	3.32	3.65	2.82	3.42
100% Treasury Bills	0.42	0.83	1.54	1.07	0.55	0.23

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 M, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield).

When It's Value vs. Growth, History Is on Value's Side

Third Quarter 2020



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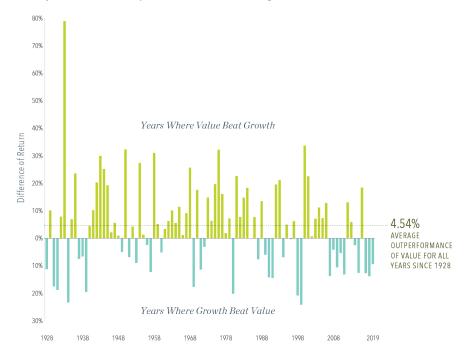
Logic and data provide the basis for a positive expected value premium, offering a guide for investors targeting higher potential returns. There is pervasive historical evidence of value stocks outperforming growth stocks. Data covering nearly a century in the US, and nearly five decades of market data outside the US, support the notion that value stocks—those with lower relative prices—have higher expected returns.

Recently, growth stocks have enjoyed a run of outperformance vs. their value counterparts. But while disappointing periods emerge from time to time, the principle that lower relative prices lead to higher expected returns remains the same. On average, value stocks have outperformed growth stocks by 4.54% annually in the US since 1928, as **Exhibit 1** shows.

Some historical context is helpful in providing perspective for growth stocks' recent outperformance. As **Exhibit 1** demonstrates, realized premiums are highly volatile. While periods of underperformance are disappointing, they are also within the range of possible outcomes.

We believe investors are best served by making decisions based on sound economic principles supported by a preponderance of evidence. Value investing is based on the premise that paying less for a set of future cash flows is associated with a higher expected return. That's one of the most fundamental tenets of investing. Combined with the long series of empirical data on the value premium, our research shows that value investing continues to be a reliable way for investors to increase expected returns going forward.

Exhibit 1. Value Add Yearly observations of premiums: value minus growth in US markets, 1928–2019



Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In US dollars. Yearly premiums are calculated as the difference in one-year returns between the two indices described. Value minus growth: Fama/French US Value Research Index minus the Fama/French US Growth Research Index.

Fama/French US Value Research Index: Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

Fama/French US Growth Research Index: Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdag equivalents since 1973).

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Nasdaq equivalents since 1973).

When It's Value vs. Growth, History Is on Value's Side

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GLOSSARY

Value Stock: A stock trading at a low price relative to a measure of fundamental value such as book equity.

Growth Stock: A stock trading at a high price relative to a measure of fundamental value such as book equity.

Value Premium: The return difference between stocks with low relative prices (value) and stocks with high relative prices (growth).

DISCLOSURES

Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP.

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