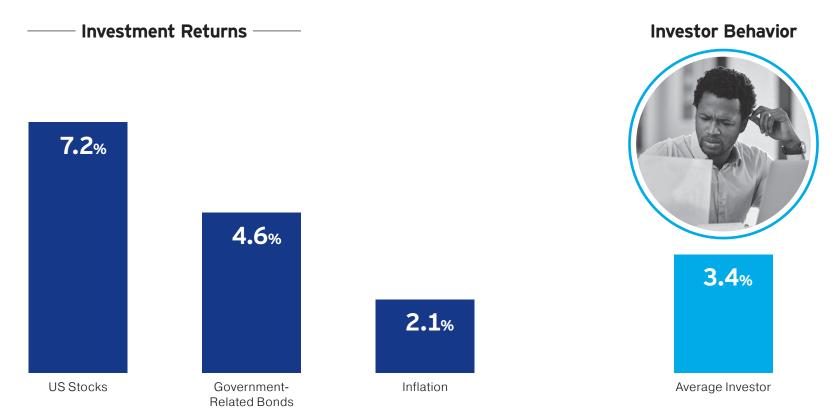


Navigating Volatility

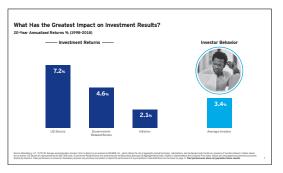
Compelling Wealth Management Conversations

What Has the Greatest Impact on Investment Results?

20-Year Annualized Returns % (1998-2018)



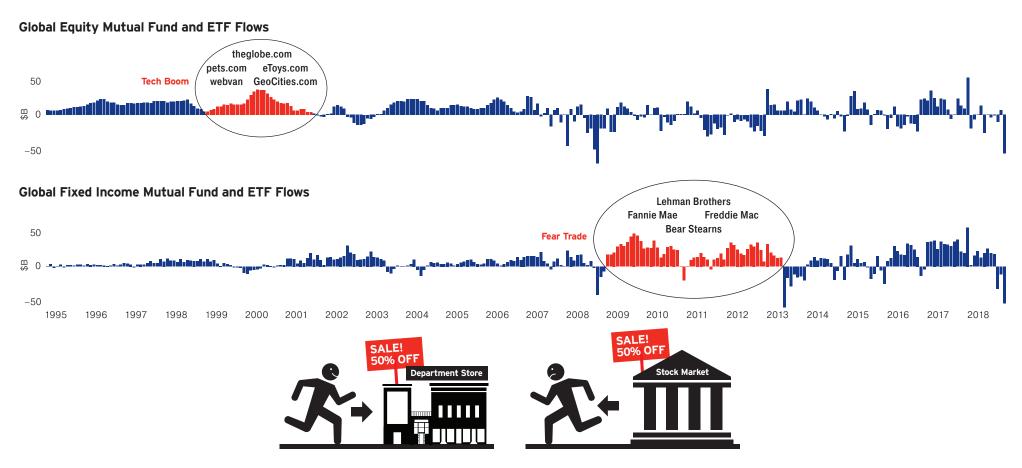
Source: Bloomberg, L.P., 12/31/18. Average asset allocation investor return is based on an analysis by DALBAR, Inc., which utilizes the net of aggregate mutual fund sales, redemptions, and exchanges each month as a measure of investor behavior. Indices shown are as follows: US Stocks are represented by the S&P 500 Index, Government-Related Bonds are represented by the Bloomberg Barclays US Aggregate Bond Index, Inflation is represented by the Consumer Price Index. Indices are unmanaged and cannot be purchased directly by investors. Index performance is shown for illustrative purposes only and does not guarantee future results.



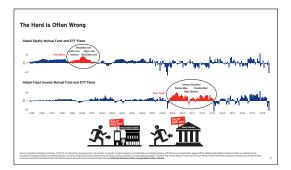
We believe the #1 threat to your investment portfolio is unbridled emotion. More money may be lost due to fear and greed (how we respond) than all of the financial, economic, and geopolitical events combined. It's not the events themselves but our response to the events that can cause the greatest harm.

 How harmful? The average investor doesn't come close to beating the S&P 500 Index and barely outpaces the rate of inflation.

The Herd Is Often Wrong



Source: Investment Company Institute, 12/31/18. For illustrative purposes only. The mention of specific company names is not intended as investment advice. ETF flows are included after January 2015. Global Equity Mutual Funds and ETFs are defined by the Investment Company Institute as tracking the flow of investor funds into all funds domiciled in the US focused on domestic and international equities. Global Fixed Income Mutual Funds and ETFs are defined by the Investment Company Institute as tracking the flow of investor funds into fund domiciled in the US focused on domestic and international fixed income. **Past performance does not guarantee future results.**



Be wary of the herd mentality. From the tech boom to the so-called fear trade, investors have often positioned themselves poorly at the most inopportune times.

Here's an analogy that we believe illustrates the single greatest challenge people face when dealing with the stock market:

How do people respond when there's a significant markdown in prices at their favorite department store? They run into the store searching for bargains.

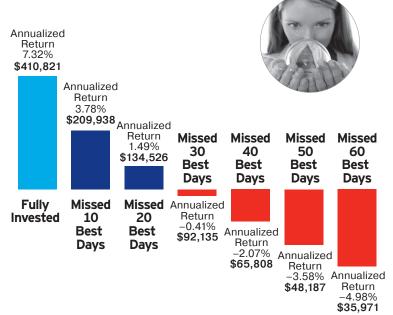
How do they respond when there is a significant markdown in prices in the stock market? They often run out of the "store" and don't return until prices get back to "full retail."

No One Has a Crystal Ball, Yet Often People Act as Though They Do

Missing Even the 10 Best Days in the Market Reduced Returns by Almost 50% in the Last 20 Years

S&P 500 Index: Annualized total returns and growth of \$100,000

investment (1998-2018)



Best Days Come Near the Worst

Despite 2008 being in the center of the Great Recession, it had 7 of the 20 best price return days for the Dow Jones Industrial Average Index since 1945.

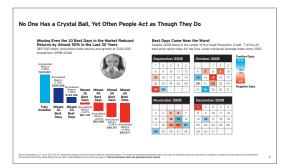
September 2008								
1	2	3	4	5				
8	9	10	11	12				
15	16	17	18	19				
22	23	24	25	26				
29	30							

October 2008							
	1 2 3						
6	7	8	9	10			
13	14	15	16	17			
20	21	22	23	24			
27	28	29	30	31			

Positiv	e Days
11%	
5%	
-5%	
-8%	
Negati	ive Day:

November 2008							
3	4	5	6	7			
10	11	12	13	14			
17	18	19	20	21			
24	25	26	27	28			

December 2008								
1	2	3	4	5				
8	9	10	11	12				
15	16	17	18	19				
22	23	24	25	26				
29	30	31						



Now before we get started, let's agree that no one has a crystal ball.

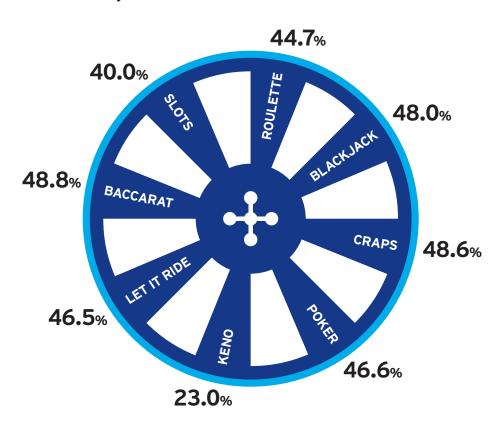
I don't have one, you don't have one, and none of the pundits have one either. And worse than not having a crystal ball is acting as though you do.

The most dramatic example of the folly of market timing is the chart on the left. Missing the 10 best days over that 20-year span drops your investment return by almost half!

These best and worst days tended to appear together, making them incredibly hard to time well. Seven of the top 20 price return days for US stocks since 1945 were in the heart of the Great Recession, the last four months of 2008.

Is the Market Really Like a Casino?

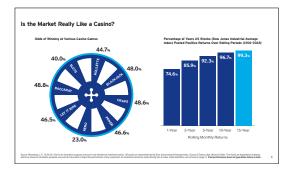
Odds of Winning at Various Casino Games



Percentage of Years US Stocks (Dow Jones Industrial Average Index) Posted Positive Returns Over Rolling Periods (1901-2018)



Source: Bloomberg, L.P., 12/31/18. Chart is for illustrative purposes only and is not intended as investment advice. US stocks are represented by the Dow Jones Industrial Average Index. Source of Casino odds: Wizard of Odds. The charts are hypothetical examples which are shown for illustrative purposes only and do not predict or depict the performance of any investment. An investment cannot be made directly into an index. Index definitions can be found on page 11. **Past performance does not guarantee future results.**

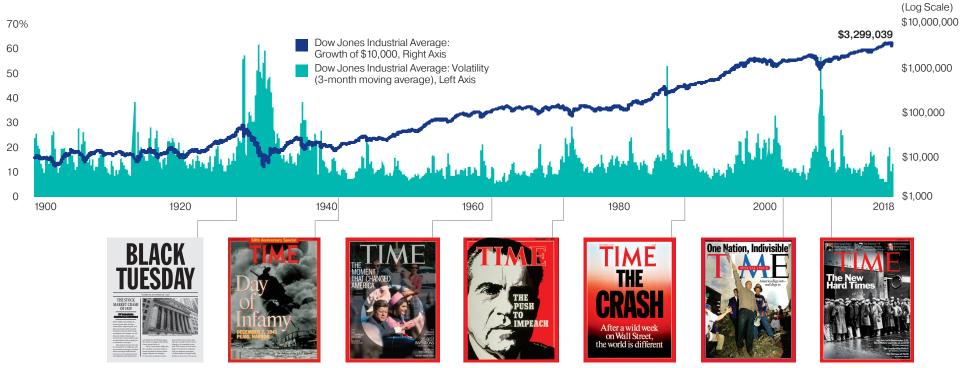


Is the stock market like a Vegas casino? Actually, no.

- Notice that the odds of winning any of the most popular games in Vegas never reach 50%; for comparison's sake, over rolling monthly one-year holding periods, the stock market has been up 74.6% of the time.
- Over rolling monthly 15-year periods (e.g., January 1901 to December 1916, February 1901 to January 1916, all the way up to January 2003 to December 2018), stocks are up 99.3% with the only nine down periods coming during the Great Depression.
- Ironically, the longer you sit at a table in Vegas the worse your odds get, because as we know, "the house always wins."

Every Generation Faces Its Share of Challenges

Dow Jones Industrial Average: Growth of \$10,000 and Volatility (1900-2018)





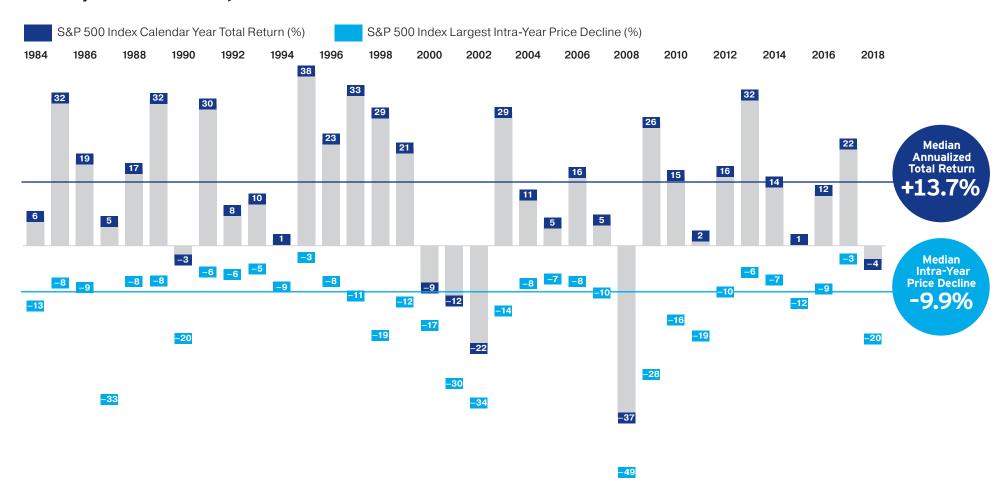
Each generation faces challenges that often appear both unique and overwhelming, but when viewed through the sobering lens of history, we find they are neither.

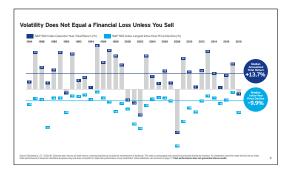
Today, we face any number of challenges which, while significant, are arguably no more daunting than:

- A global depression
- Two world wars
- The Cold War
- The assassination of one president and the resignation of another
- 9/11

And yet the market continues its inexorable climb. Why? In our view, and in spite of our shortcomings, humans are remarkably resilient, as well as masterful inventors and innovators, often striving to make a better place for themselves, their families, and their societies.

Volatility Does Not Equal a Financial Loss Unless You Sell





Market corrections happen fairly often and even in the good years, including fairly significant intra-year declines in recent strong-return years like 2010 and 2012.

- From 1984 to 2018, the S&P 500 Index experienced at least a 5% intrayear decline (i.e., loss) in every year but two. The median intra-year decline over the past 35 years has actually been -9.9%.
- But notice, equities have still posted positive returns in 29 of those last 35 years with median annualized total returns over that period of over 13%.

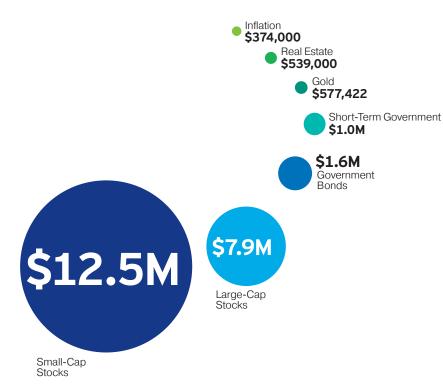
So let's take a page from Warren Buffet. When asked by a CNBC personality in 2009 how it felt to have "lost" 40% of his lifetime accumulation of capital, he said it felt about the same as it had the previous three times.*

The bottom line is, market corrections do not equal a financial loss, unless you sell.

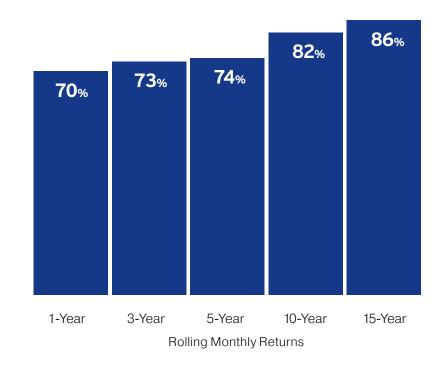
^{*}CNBC, March 9, 2009.

Stocks Outperformed Most Asset Classes Over Time

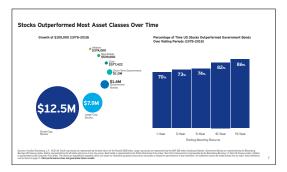
Growth of \$100,000 (1978-2018)



Percentage of Time US Stocks Outperformed Government Bonds Over Rolling Periods (1978-2018)



Sources: FactSet, Bloomberg, L.P., 12/31/18. Small-cap stocks are represented by the total return for the Russell 2000 Index. Large-cap stocks are represented by the S&P 500 Index including dividends. Government Bonds are represented by the Bloomberg Barclays US Treasury Index. Gold is represented by the US dollar spot price of one troy ounce. Real Estate is represented by the Shiller Real Home Price Index. Short-Term Government is represented by the Bloomberg Barclays 1-3 Year US Treasury Index. Inflation is represented by the Consumer Price Index. The charts are hypothetical examples which are shown for illustrative purposes only and do not predict or depict the performance of any investment. An investment cannot be made directly into an index. Index definitions can be found on page 11. Past performance does not guarantee future results.

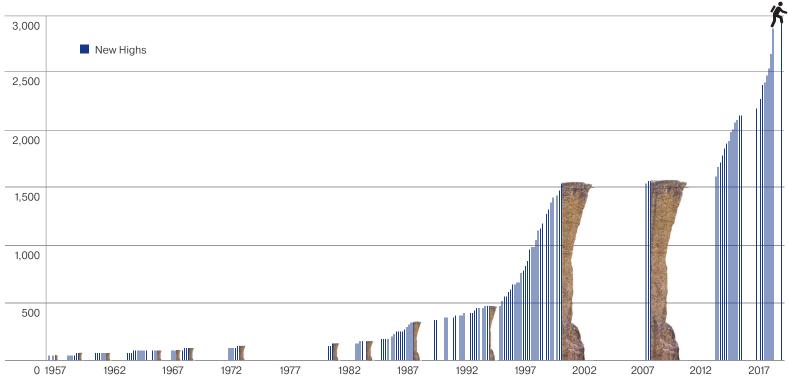


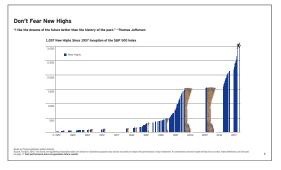
- Stocks have outperformed most asset classes, outperforming bonds over rolling monthly 15-year periods from 1978–2018 (e.g., January 1978 to December 1992, February 1978 to January 1993, all the way up to January 2004 to December 2018) 86% of the time.
- For investors with a growth objective, there are few (if any) better alternatives to stocks.

Don't Fear New Highs

"I like the dreams of the future better than the history of the past." -Thomas Jefferson

1,057 New Highs Since 1957 Inception of the S&P 500 Index

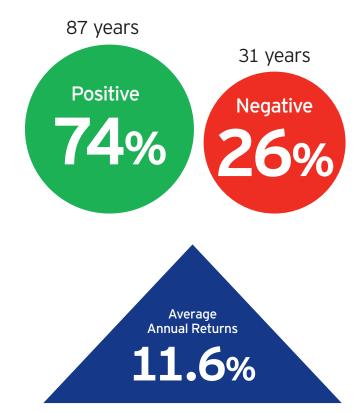




At the top of every mountain is a summit. A recent high in the market is often referred to as a "peak." What isn't defined in markets, though, is the mountain range—and whether there are any taller mountains after the current one. History shows us that there have been many previous peaks, and even after gaps of many years, taller ones have appeared.

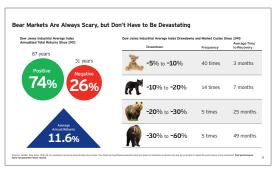
Bear Markets Are Always Scary, but Don't Have to Be Devastating

Dow Jones Industrial Average Index Annualized Total Returns Since 1901



Dow Jones Industrial Average Index Drawdowns and Market Cycles Since 1945

Drawdown	Frequency	Average Time to Recovery		
-5% to -10%	40 times	3 months		
-10% to -20%	14 times	7 months		
-20% to -30%	5 times	25 months		
-30% to -60%	5 times	49 months		



Being attacked by an actual bear or a metaphorical one is a scary proposition, and while a bear market in stocks may not threaten your actual life, it can definitely threaten your financial life. Or can it? The vast majority of stock market bears, like most actual bear encounters, might be a shock to the system but are not actually life-threatening. Whether minor corrections or major selloffs, negative years only represent 26% of the long-term experience of the stock market since 1901 (and this includes the Great Depression, of course). And even with those bear markets included, your average annual return over that period has been 11.6%.

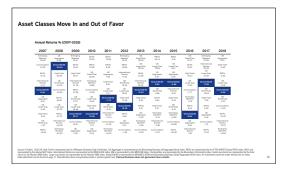
Even if you look at our more recent history since 1945, there have been over 880 months, of which only 97 have given us a 20% downturn or greater (around 11% of the time), all of which inevitably recovered and climbed to new highs.

Asset Classes Move In and Out of Favor

Annual Returns % (2007-2018)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Emerging Markets 39.42	US Aggregate 5.24	Emerging Markets 78.51	MLPs 35.85	MLPs 13.88	Emerging Markets 18.22	US Small Cap 38.82	REITs 30.14	REITs 3.18	US Small Cap 21.31	Emerging Markets 37.28	US Aggregate 0.01
Commodities 16.23	Global 60/40 -25.34	MLPs 76.41	REITs 27.96	REITs 8.29	REITs 18.06	US Large Cap 32.39	US Large Cap 13.69	US Large Cap 0.91	MLPs 18.31	International Stocks 25.03	High Yield -2.40
MLPs 12.72	High Yield -26.55	High Yield 58.17	US Small Cap 26.85	US Aggregate 7.84	International Stocks 17.32	MLPs 27.58	US Aggregate 5.97	US Aggregate 0.55	High Yield 18.27	US Large Cap 21.69	REITs -4.62
International Stocks 11.17	US Small Cap -33.79	International Stocks 31.78	Emerging Markets 18.88	High Yield 6.97	US Small Cap 16.35	International Stocks 22.78	Global 60/40 5.94	Global 60/40 -0.49	US Large Cap 12.05	Global 60/40 17.09	US Large Cap –4.78
Global 60/40 9.54	Commodities -35.65	REITs 27.99	Commodities 16.83	US Large Cap 2.11	US Large Cap 16.00	Global 60/40 13.53	US Small Cap 4.89	International Stocks -0.81	Commodities 11.77	US Small Cap 14.65	Global 60/40 -6.00
US Aggregate 6.97	MLPs -36.91	US Small Cap 27.17	US Large Cap 15.06	Global 60/40 -1.74	High Yield 15.39	High Yield 8.23	MLPs 4.80	High Yield -2.97	Emerging Markets 11.19	High Yield 7.50	US Small Cap -11.01
US Large Cap 5.49	US Large Cap –37.00	US Large Cap 26.46	High Yield 14.74	US Small Cap -4.18	Global 60/40 12.50	REITs 2.47	High Yield 2.21	US Small Cap -4.41	REITs 8.52	REITs 5.23	Commodities -11.25
High Yield 2.58	REITs -37.73	Global 60/40 23.11	Global 60/40 10.26	International Stocks -12.14	MLPs 4.80	US Aggregate -2.02	Emerging Markets -2.19	Emerging Markets -14.85	Global 60/40 6.82	US Aggregate 3.54	MLPs -12.42
US Small Cap -1.57	International Stocks -43.38	Commodities 18.91	International Stocks 7.75	Commodities -13.32	US Aggregate 4.21	Emerging Markets -2.60	International Stocks -4.90	Commodities –24.66	US Aggregate 2.65	Commodities 1.70	International Stocks -13.79
REITs -15.69	Emerging Markets -53.33	US Aggregate 5.93	US Aggregate 6.54	Emerging Markets -18.42	Commodities -1.06	Commodities -9.52	Commodities -17.01	MLPs -32.49	International Stocks 1.00	MLPs -6.52	Emerging Markets -14.58

Source: FactSet, 12/31/18. High Yield is represented by the JPMorgan Domestic High Yield Index. US Aggregate is represented by the Bloomberg Barclays US Aggregate Bond Index. REITs are represented by the FTSE NAREIT Equity REITs Index. MLPs are represented by the Alerian MLP Index. International Stocks are represented by the MSCI EAFE Index. EM is represented by the MSCI EM Index. Commodities are represented by the Bloomberg Commodity Index. Small-cap stocks are represented by the total return for the Russell 2000 Index. Large-cap stocks are represented by the Russell 1000 Index. Global 60/40 is represented by 60%MSCI ACWI and Bloomberg Barclays Global Aggregate Bond Index. An investment cannot be made directly into an index. Index definitions can be found on page 11. Diversification does not guarantee profit or protect against loss. Past performance does not guarantee future results.



Diversification across asset classes may keep investors from chasing last year's performance.

As the chart illustrates, what works in one doesn't necessarily work in the subsequent years. Oftentimes, last year's outperformer falls to the bottom of the pack and vice-versa.

Index Definitions

The Alerian MLP Index is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs).

The Bloomberg Barclays US Aggregate Bond Index is an index of US Government and corporate bonds that includes reinvestment of dividends.

The Bloomberg Barclays Global Aggregate Index is is an unmanaged index considered representative of global investment-grade, fixed-income markets.

The Bloomberg Barclays US Treasury Index is an unmanaged index of public obligations of the US Treasury with remaining maturities of one year or more.

The Bloomberg Barclays 1-3 Year US Treasury Index is an unmanaged index of public US Treasury obligations with remaining maturities of one to three years.

The Bloomberg Commodity Index is comprised of commodities traded on US exchanges, with the exception of aluminum, nickel and zinc, which trade on the London Metal Exchange.

Consumer Price Index (CPI) program produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

The Dow Jones Industrial Average is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.

The FTSE National Association of Real Estate Investment Trusts (NAREIT) Equity REITs Index is an index consisting of certain companies that own and operate income-producing real estate that have 75% or more of their respective gross invested assets in the equity or mortgage debt of commercial properties.

The Gold Spot price is guoted as US dollar per troy ounce.

The JPMorgan Domestic High Yield Index tracks the investable universe of domestic below-investment-grade bonds in the United States.

The MSCI All Country World Index (AC WI) is an unmanaged index considered representative of large- and mid-cap stocks across developed and emerging markets. The index is computed using the net return, which withholds applicable taxes for non-resident investors.

The MSCI EAFE Index is designed to measure developed market equity performance, excluding the US and Canada.

The MSCI Emerging Markets (EM) Index is designed to measure global emerging market equity performance.

The Russell 1000 Index measures the performance of large-capitalization stocks.

The Russell 2000 Index measures the performance of small-capitalization stocks.

The S&P 500 Index is a market-capitalization-weighted index of the 500 largest domestic US stocks.

Shiller Home Price Index tracks changes in home prices throughout the United States.

Indices are unmanaged and cannot be purchased directly by investors. Index performance is shown for illustrative purposes only and does not predict or depict the performance of any investment. Past performance does not quarantee future results.

Neither MSCI nor any other party involved in or related to compiling, computing or creating the MSCI data makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such data. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in or related to compiling, computing or creating the data have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages. No further distribution or dissemination of the MSCI data is permitted without MSCI's express written consent.

About Risk

Fixed income investments have interest rate risk, which refers to the risk that bond prices generally fall as interest rates rise and vice versa.

High yield (junk) bonds involve a higher risk of default and price movement due to changes in the issuer's credit quality, while foreign bonds, including those of emerging markets, may fluctuate more due to increased political concerns, taxation issues, and movements in foreign exchange rates.

Foreign securities have additional risks, including exchange rate changes, political and economic upheaval, relative lack of information, relatively low market liquidity, and the potential lack of strict financial and accounting controls and standards.

Investments in real estate related instruments may be affected by economic, legal, or environmental factors that affect property values, rents or occupancies of real estate. Real estate companies, including REITs or similar structures, tend to be small and mid-cap companies and their shares may be more volatile and less liquid.

Stocks of small- and mid-sized companies tend to be more vulnerable to adverse developments, may be more volatile, and may be illiquid or restricted as to resale.

Stock and other equity securities values fluctuate in response to many factors, including the historical and prospective earnings of the issuer, the value of its assets, general economic conditions, interest rates, investor perceptions and market liquidity.

This material is for illustrative, informational, educational and entertainment purposes only.

This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions.

The opinions expressed by Invesco professionals do not necessarily reflect those of Invesco Distributors, Inc. and are subject to change at any time based on market or other conditions. This is provided for educational and informational purposes only and is not an offer of investment advice or financial products. In addition, the results actual investors might have achieved may vary from those shown.

Commissions, trailing commissions, management fees and expenses may all be associated with mutual fund investments. Mutual funds are not guaranteed, their values change frequently and past performance may not be repeated. Please read the simplified prospectus before investing. Copies are available from your advisor or from Invesco Canada Ltd.

All data is in USD, unless otherwise stated.

Invesco® and all associated trademarks are trademarks of Invesco Holding Company Limited, used under licence.

© Invesco Canada Ltd., 2019

Published on October 21, 2019.

BRVLUSE 10/19 NA9577 12