

30<sup>th</sup> March 2020

## Market Downturns & Recoveries - A Deep Dive

Global financial markets have continued to experience quite extreme volatility as investors struggle to assess the potential depth and duration of social and economic impacts related to the COVID-19 pandemic. Society and economic activity are being severely disrupted in the short term as pandemic containment measures are implemented globally.

The financial impacts of COVID-19 on businesses and households will be mitigated to some extent by quite extraordinary stimulus (monetary and fiscal) policy actions which have been implemented and announced. Inflation outlook is likely to be lower in the short term. Further, the breakdown of the oil production agreement between OPEC and Russia has resulted in a sharp fall in oil prices which, if sustained, will add to the lowering of inflation.

At this point, what we don't know about the near-term outlook is much greater than what we know, although history tells us that pandemics do have a finite life. The unknown is the magnitude and duration of the social and economic disruption.

Equity and credit markets remain highly volatile and could continue their downward movement if the impact of the virus outbreak worsens. However, last week, we saw a significant rebound in the equity markets following the passing of a significant stimulus package in the US. The substantial stimulus packages, in addition to the large falls in oil prices, will be supportive of economic growth and corporate earnings once the worst of the outbreak has passed.

Market downturns and crises all have two things in common. Firstly, they are all different and secondly, they all come to an end.

To help you further understand how downturns impact equity markets and how they respond to changes in economic stimulus, we have attached a 'Deep Dive' technical paper issued by the research house, Morningstar. It is highly technical and will be of interest to those of you who have a thirst for knowledge in this area. Please [CLICK HERE](#) to download a copy of the research paper.

It will help you understand why we adopt certain strategies when dealing with market corrections including remaining disciplined and avoiding trying to time the market.

This market correction started as a result of a social and health scare and so, we need to note that the learnings from previous market downturns may be somewhat limited.

Over the weekend the Australian government announced a further tightening of the social interaction rules and quarantining of overseas arrivals. Today, we are expecting them to announce the 3rd part of their economic stimulus package. We will see how markets respond to these changes – it's a moving target. As new information becomes available, we will be working with our Investment Consultants to assess the implications for the market and our clients' portfolios.

We hope you are coping with the restricted lifestyle conditions and that you remain well. If you have any questions or comments on the above and the research paper, then please do not hesitate to contact us.

Kind regards,

**Peter Wilson CFP®, Dip FP, B.Sc**  
**CEO & Principal Adviser**  
**Strategic Wealth Pty Ltd**  
**Authorised Representatives**  
**Oreana Financial Services**  
**Australian Financial Services Licensee**

## Downturns and Recoveries

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Investors in shares must expect market shocks as part of the long-term benefits of owning part of a company, and on average over time, stock markets fall one year in every five. History provides a valuable guide to how markets normally recover from shocks, showing the missed opportunities of exiting equities and not re-entering.

However, it must be acknowledged that coronavirus did not start as a financial shock, such as a rapid fall in share prices or a market collapse such as the GFC or tech wreck. This started as a social and health scare and has spread into financial markets, which might limit what history can teach us. As supply chains close and countries shut their borders, the wealth created by globalisation will be compromised, and with it, economic growth and business activity will fall, at least in the short term.

Morningstar has prepared a series of slides which show some fundamental principles of investing, and how markets have recovered from previous shocks, with supporting commentary. You are welcome to share these with your clients.

We also have these charts in a PowerPoint slide deck if required.

Please let me know if there is more we can do to support you and your business.

We're here to help you through this volatile time to continue to empower investor success.

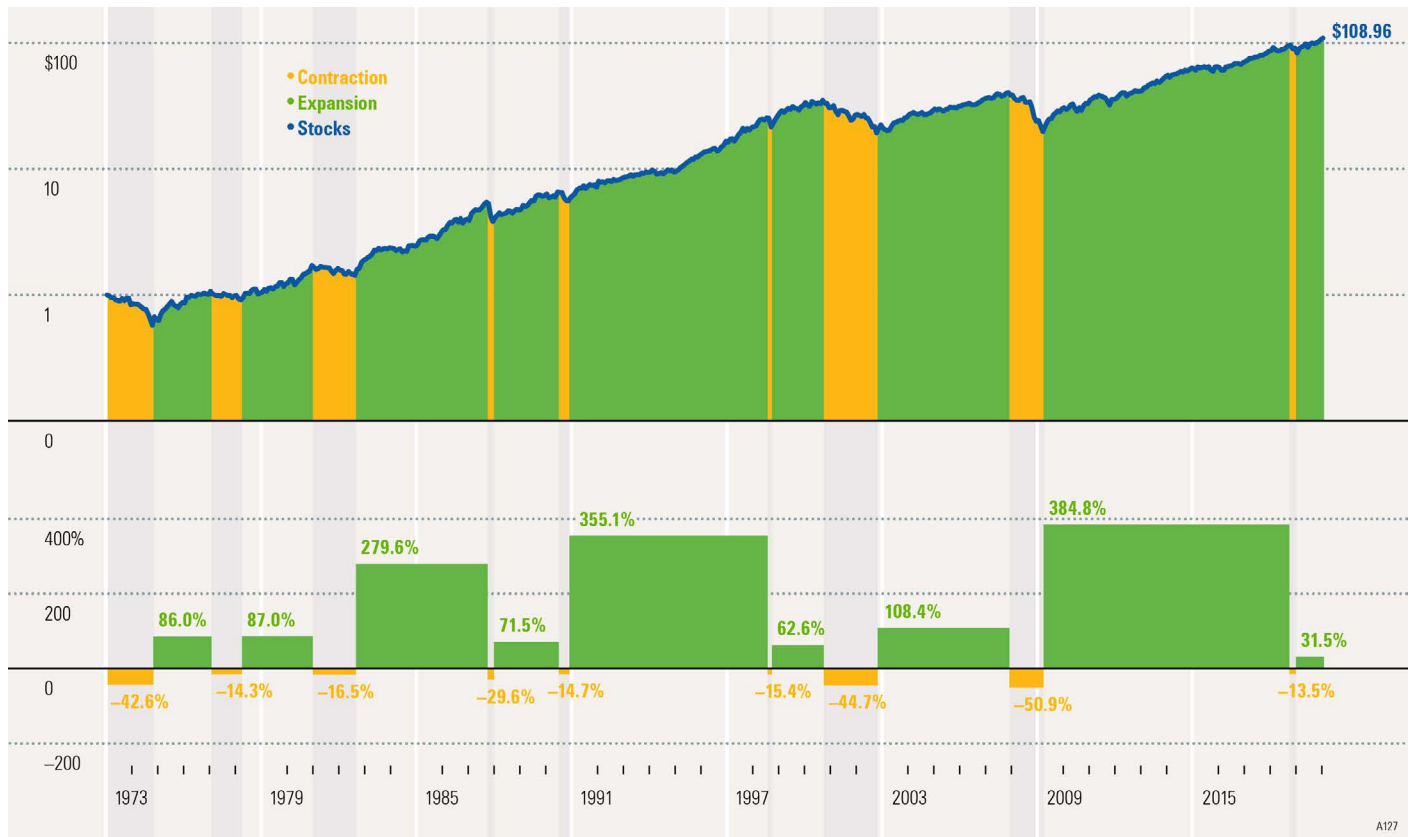
Regards

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# Stock Market Contractions and Expansions 1973–2019



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- ▶ The stock market moves in cycles with periods of contraction followed by periods of expansion. There have been eight market downturns in the past 47 years. The regions shaded in orange highlight a contraction phase of a stock market cycle, and the green regions show an expansion phase. A contraction is defined by a period when the stock market value declined from its peak by 10% or more. These declines seem to happen at random and last for varying time periods. Expansion measures the recovery of the index from the bottom of a contraction to its previous peak and the subsequent performance of the index until it reaches the next peak level before another 10% decline.
- ▶ The last contraction (associated with trade war with China and rising interest rates) began in October 2018 and ended in December 2018. The stock market recovered from this crisis in April 2019.
- ▶ While some periods of decline have been severe, the market, overall, has grown with time. For instance, the stock market fell by 14.7% from its peak at month-end May 1990 to its trough in October 1990 but grew by 355.1% from November 1990 to its next peak in June 1998. No one can predict market declines with certainty. Investors should have a long-term investment horizon to allow their investment to grow over time. Returns and principal invested in stocks are not guaranteed.

### About the data

Large stocks are represented by the Ibbotson® Large Company Stock Index. An investment cannot be made directly in an index. The data assumes reinvestment of all income and does not account for taxes or transaction costs.

# Market Downturns and Recoveries 1926–2019

| Downturn  | % Loss |  | Recovery   |
|-----------|--------|--|------------|
| 34 months | -83.4  | Sep 1929–June 1932<br>July 1932–Jan 1945   | 151 months |
| 6 months  | -21.8  | June 1946–Nov 1946<br>Dec 1946–Oct 1949    | 35 months  |
| 7 months  | -10.2  | Aug 1956–Feb 1957<br>March 1957–July 1957  | 5 months   |
| 5 months  | -15.0  | Aug 1957–Dec 1957<br>Jan 1958–July 1958    | 7 months   |
| 6 months  | -22.3  | Jan 1962–June 1962<br>July 1962–April 1963 | 10 months  |
| 8 months  | -15.6  | Feb 1966–Sep 1966<br>Oct 1966–March 1967   | 6 months   |
| 19 months | -29.3  | Dec 1968–June 1970<br>July 1970–March 1971 | 9 months   |
| 21 months | -42.6  | Jan 1973–Sep 1974<br>Oct 1974–June 1976    | 21 months  |
| 14 months | -14.3  | Jan 1977–Feb 1978<br>March 1978–July 1978  | 5 months   |
| 20 months | -16.5  | Dec 1980–July 1982<br>Aug 1982–Oct 1982    | 3 months   |
| 3 months  | -29.6  | Sep 1987–Nov 1987<br>Dec 1987–May 1989     | 18 months  |
| 5 months  | -14.7  | June 1990–Oct 1990<br>Nov 1990–Feb 1991    | 4 months   |
| 2 months  | -15.4  | July 1998–Aug 1998<br>Sep 1998–Nov 1998    | 3 months   |
| 25 months | -44.7  | Sep 2000–Sep 2002<br>Oct 2002–Oct 2006     | 49 months  |
| 16 months | -50.9  | Nov 2007–Feb 2009<br>March 2009–March 2012 | 37 months  |
| 3 months  | -13.5  | Oct 2018–Dec 2018<br>Jan 2019–Apr 2019     | 4 months   |

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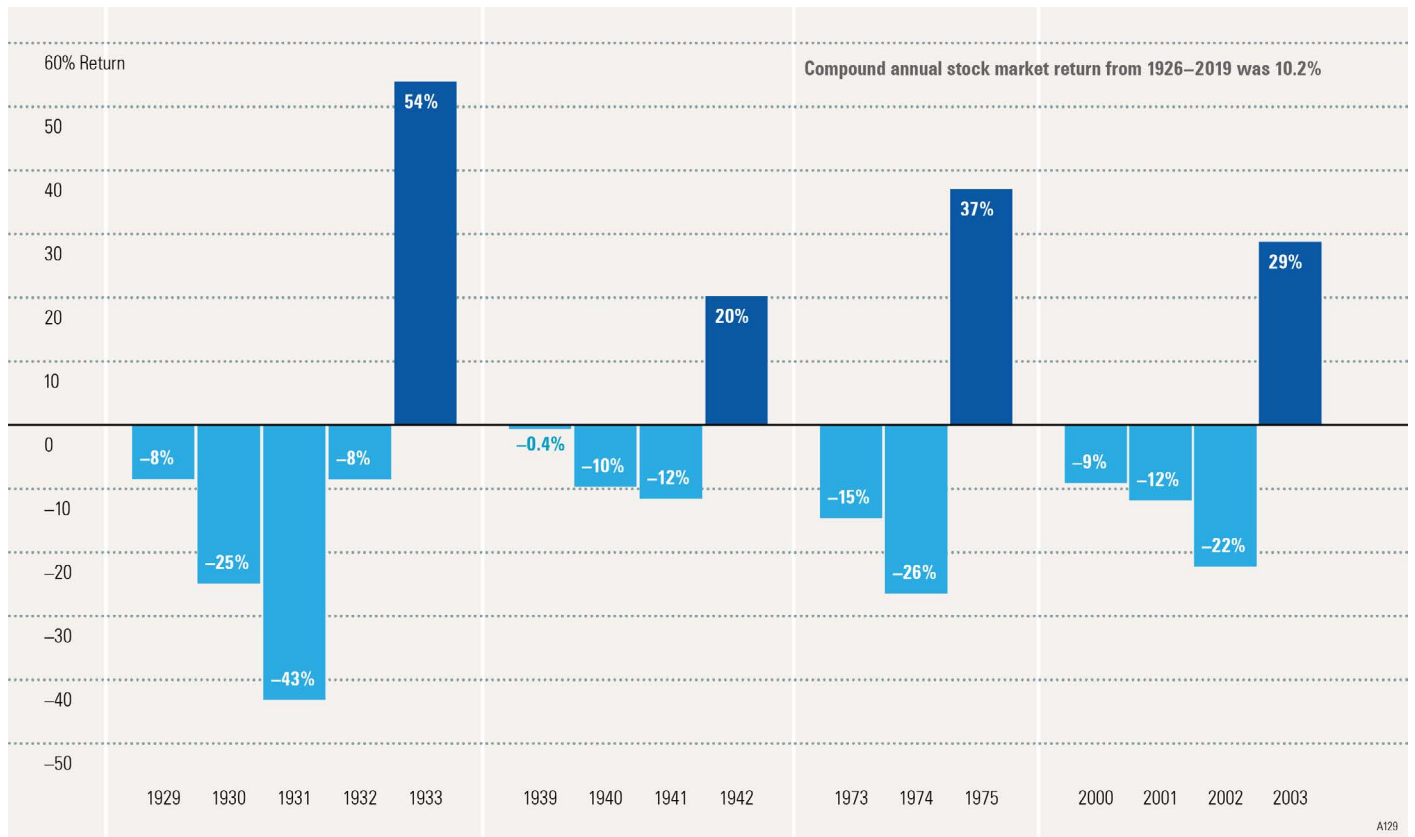
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- ▶ A historical account of past downturns and recoveries can present a better picture of potential market performance. There have been many U.S. equity market downturns over time, with varying levels of severity and differing lengths of recovery. The most severe downturn marked the start of the Great Depression, when stocks lost over 80% of their value. In this case, the recovery period was over 12 years. More recently, stocks lost 44.7% of their value during the early-2000s bear market. This recovery period, lasting four years, was the second-longest in history. Stocks lost 50.9% during the recent 2007–09 bear market; this downturn lasted for 16 months, and the stock market recovered after 37 months, in March 2012. It is evident that stocks are prone to sudden declines in value. These declines seem to happen at random, and there are many different reasons for stock market crashes and bear markets. Sometimes stocks recover their value quickly, while other times the decline lasts for a while.
- ▶ The recovery period may be painfully long. Often, the decline is preceded by a period of high returns, which lulls investors into a false sense of security. Because no one can predict market declines with certainty, a diversified portfolio may be the best solution for a long-term investor who is concerned about both return and risk.
- ▶ Returns and principal invested in stocks are not guaranteed. Diversification does not eliminate the risk of investment losses.

### About the data

Large stocks are represented by the Ibbotson® Large Company Stock Index. Downturns in this example are defined by a time period when the stock market declined by 10% or more from its peak, while the recovery period indicates the number of months from the trough of the downturn to the market's previous peak. An investment cannot be made directly in an index. The data assumes reinvestment of all income and does not account for taxes or transaction costs.

## Periods of Consecutive Negative Stock Returns 1926–2019



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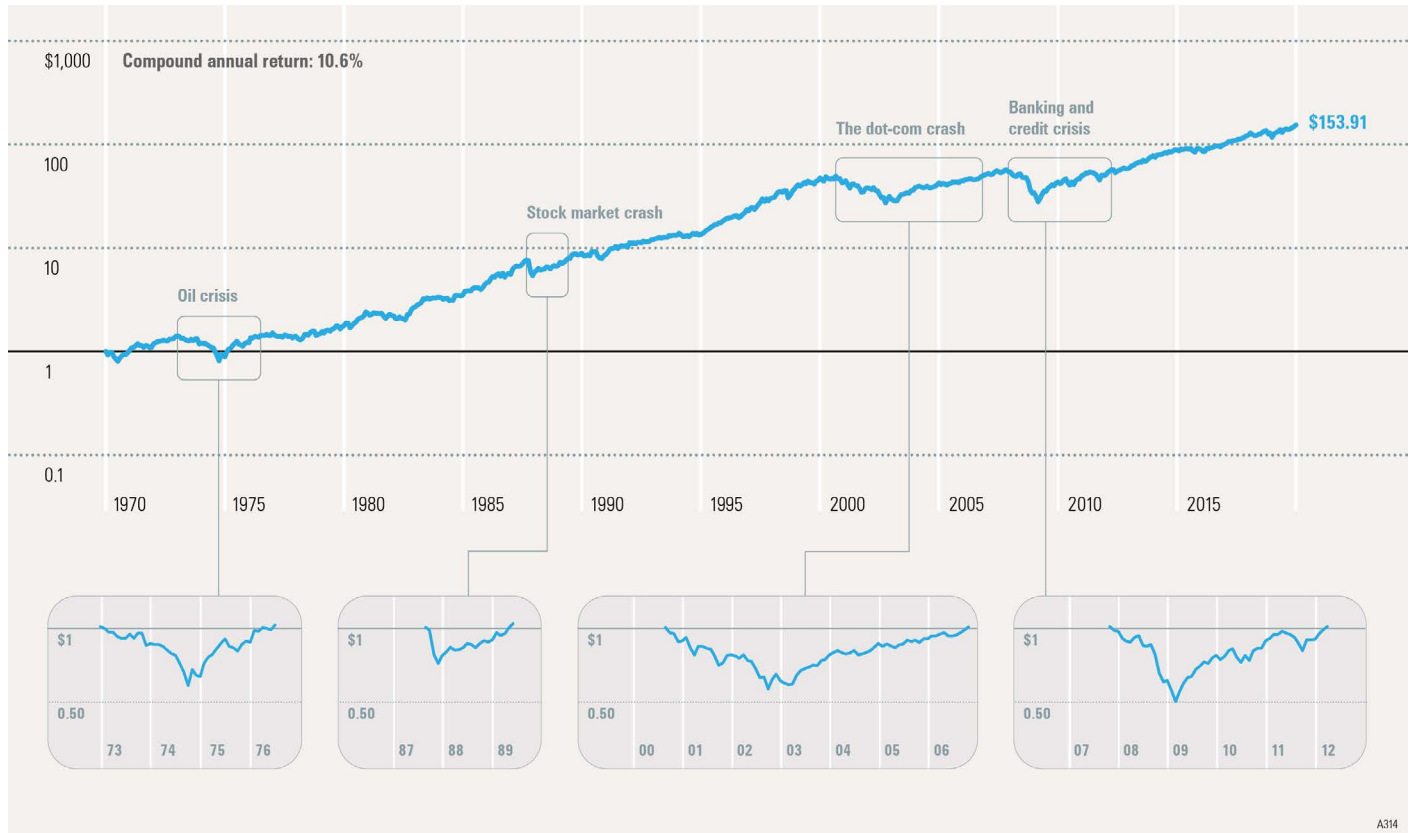
- ▶ Ceasing regular investments during market downturns can sometimes deprive you of future opportunities.
- ▶ The image illustrates that since 1926 there have been four times when the market failed to reach returns above zero for two or more consecutive years. In all four instances, negative returns have been followed by above-average positive returns. This pattern is not guaranteed to repeat itself, but it illustrates the market's potential and one of the reasons to stay focused on your investment plan.
- ▶ A disciplined investment approach is still one of the best strategies for handling market downturns. This includes maintaining a well-diversified portfolio and using dollar-cost averaging, instead of lump-sum purchases, to ease into new investments. Finally, staying focused on a long-term investment plan may enable investors to participate in recoveries.
- ▶ Diversification does not eliminate the risk of investment losses. Dollar-cost averaging does not ensure a profit or protect against a loss in declining markets. Dollar-cost averaging involves continuous investment regardless of fluctuating prices, so investors should consider their financial ability to continue purchases through periods of low price levels. Stocks are not guaranteed and have been more volatile than other asset classes.

### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. An investment cannot be made directly in an index. The data assumes reinvestment of all income and does not account for taxes or transaction costs.

## Crises and Long-Term Performance

### Market Declines in Historical Context, January 1970 – December 2019



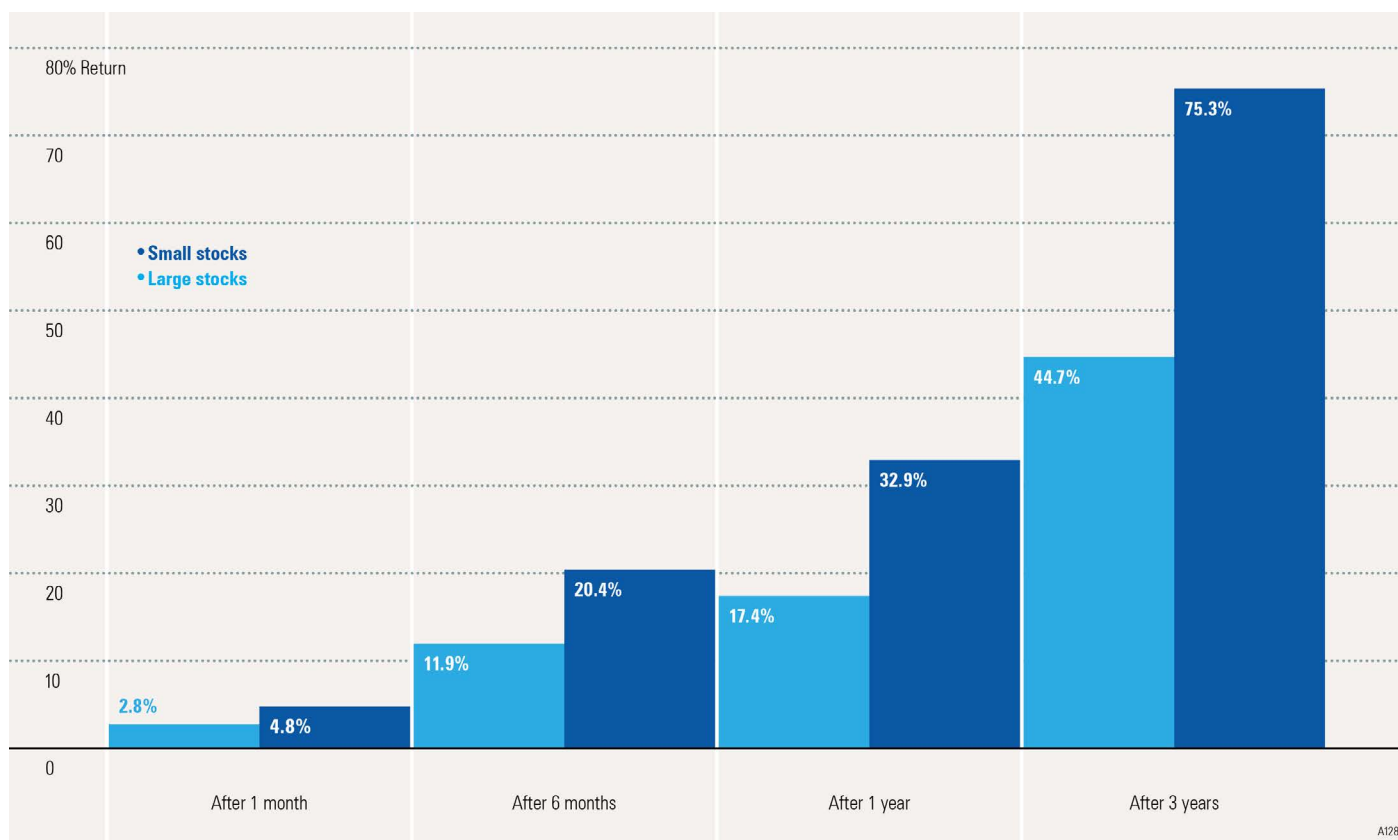
**Past performance is no guarantee of future results.** This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. Four market crises defined as a drop of 25% or more in the Ibbotson® Large Company Stock Index. © Morningstar 2020. All Rights Reserved.

- ▶ Economies and markets tend to move in cycles, and any stock market can have a downturn once in a while. Most investors lose money when the stock market goes down, but some people may think they can time the market and gain. For example, an investor may aim to buy in when the market is at the very bottom and cash out when the recovery is complete, thus enjoying the entire upside.
- ▶ The problem with this type of reasoning is that it's impossible to know when the market hits bottom. Most investors panic when the market starts to decline, then they decide to wait and end up selling after they have already lost considerable value. Or, on the recovery side, they buy in after the initial surge in value has passed and miss most of the upward momentum. The graph illustrates the growth of USD 1 invested in U.S. large stocks at the beginning of 1970 and the four major market declines that subsequently occurred, including the recent banking and credit crisis. Panic is understandable in times of market turmoil, but investors who flee in such moments may come to regret it.
- ▶ Each crisis, when it happens, feels like the worst one ever (the most recent one, as evidenced by the image, actually was). When viewed in isolation on the lower-tier graphs, each decline appears disastrous. However, historical data suggests that holding on through difficult times can pay off in the long run. For example, USD 1 invested in January 1970 grew to USD \$153.91 by December 2019, generating a 10.6% compound annual return. And in the past, when looking at the big picture, every crisis has been eclipsed by long-term growth.
- ▶ Returns and principal invested in stocks are not guaranteed.

#### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. An investment cannot be made directly in an index. Four market crises defined as a drop of 25% or more in the index. Return is represented by the compound annual return.

## Stock Performance After Recessions 1953–2019



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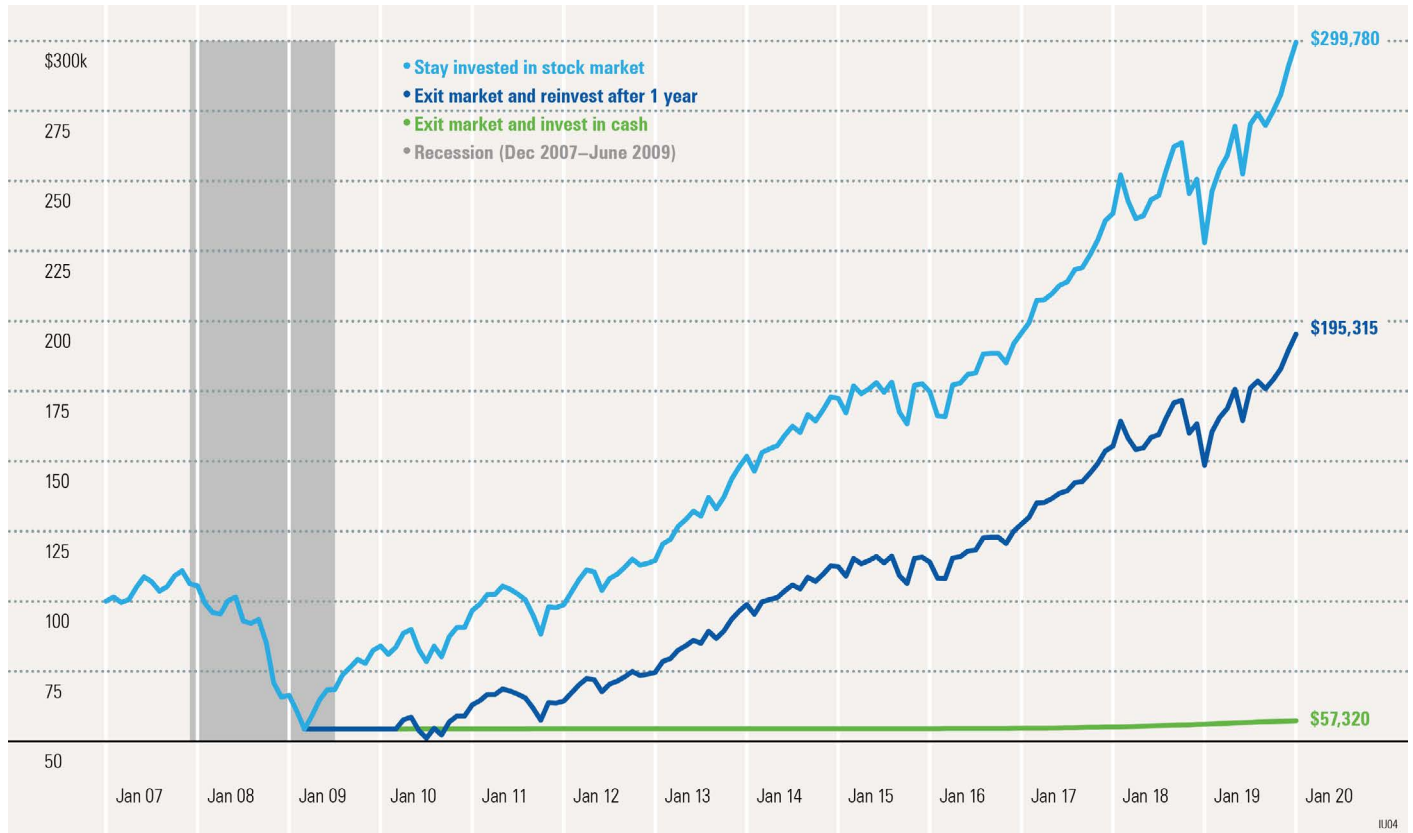
- ▶ Investors who attempt to time the market run the risk of missing periods of exceptional returns. This practice may have a negative effect on a sound investment strategy.
- ▶ This image illustrates the risk of attempting to time the stock market since 1926.
- ▶ A hypothetical \$1 invested in stocks at the beginning of 1926 grew to \$9,244 by year-end 2019. However, that same \$1 investment would have only grown to \$21.47 had it missed the best 51 months of stock returns. One dollar invested in Treasury bills resulted in an ending wealth value of \$21.62. An unsuccessful market-timer, missing the 51 best months of stock returns, would have received a return roughly equivalent to that of Treasury bills.
- ▶ Although successful market-timing may improve portfolio performance, it is very difficult to time the market consistently. In addition, unsuccessful market-timing can lead to a significant opportunity loss.
- ▶ Returns and principal invested in stocks are not guaranteed, and stocks have been more volatile than other asset classes. Government bonds and Treasury bills are guaranteed by the full faith and credit of the U.S. government as to the timely payment of principal and interest. Holding a portfolio of securities for the long term does not ensure a profitable outcome and investing in securities always involves risk of loss.

### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. Treasury bills are represented by the 30-day U.S. Treasury bill. The data assumes reinvestment of income and does not account for taxes or transaction costs.

## The Importance of Staying Invested

### Ending Wealth Values After a Market Decline



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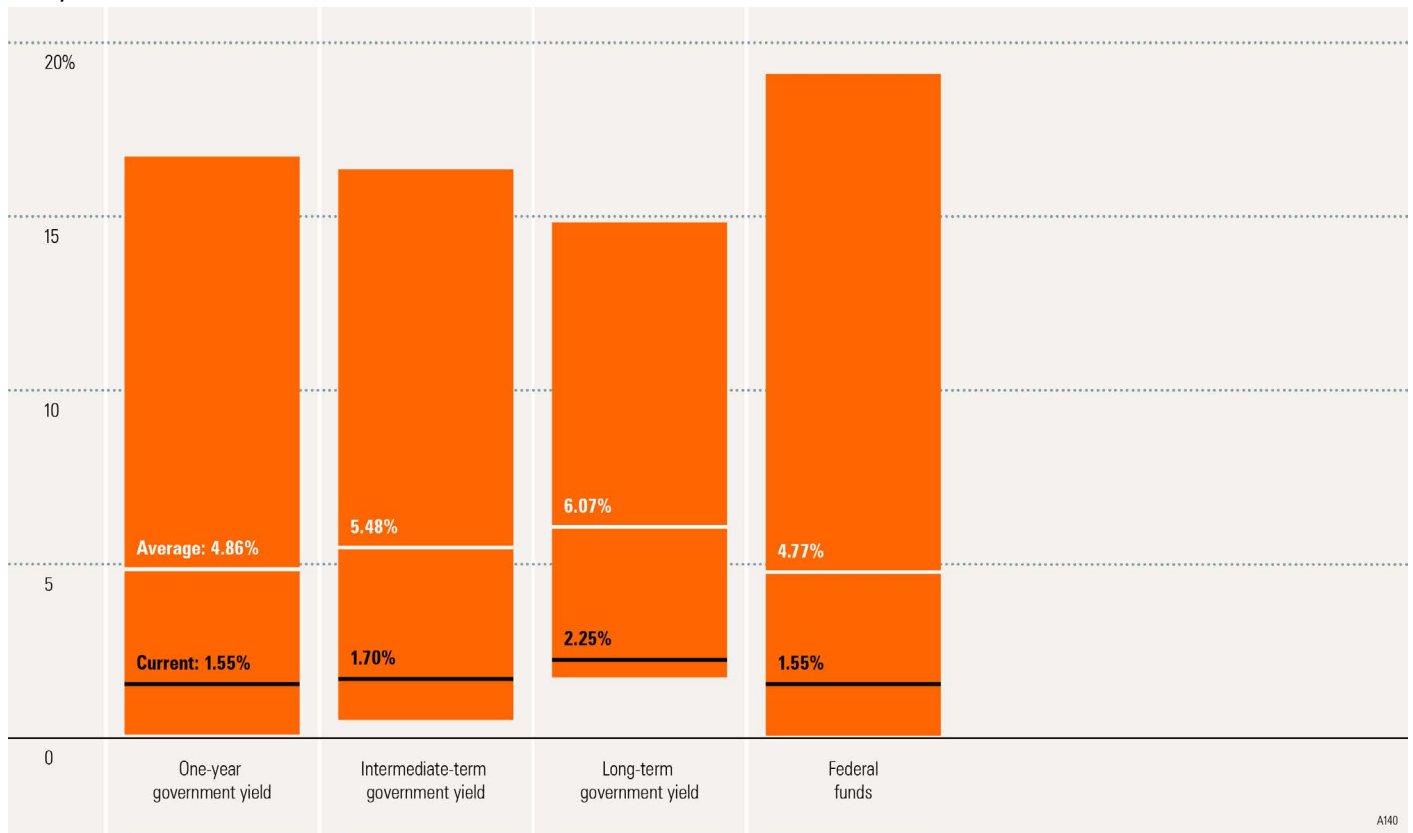
- ▶ Investors who attempt to time the market run the risk of missing periods of exceptional returns, leading to significant adverse effects on the ending value of a portfolio.
- ▶ The image illustrates the value of a USD 100,000 investment in the stock market during the 2007–19 period, which included the global financial crisis and the recovery that followed. The value of the investment dropped to USD 54,381 by February 2009 (the trough date), following a severe market decline. If an investor remained invested in the stock market over the next ten years, however, the ending value of the investment would have been USD 299,780. If the same investor exited the market at the bottom, invested in cash for a year, and then reinvested in the market, the ending value of the investment would have been USD 195,315. An all-cash investment at the bottom of the market would have yielded only USD 57,320. The continuous stock market investment recovered its initial value over the next three years and provided a higher ending value than the other two strategies. While all recoveries may not yield the same results, investors are well advised to stick with a long-term approach to investing.
- ▶ Returns and principal invested in stocks are not guaranteed. Stocks have been more volatile than bonds or cash. Holding a portfolio of securities for the long term does not ensure a profitable outcome and investing in securities always involves risk of loss.

#### About the data

Recession data is from the National Bureau of Economic Research. The market is represented by the Ibbotson® Large Company Stock Index. Cash is represented by the 30-day U.S. Treasury bill. An investment cannot be made directly in an index. The data assumes reinvestment of income and does not account for taxes or transaction costs.



## History of Interest Rates July 1954–December 2019



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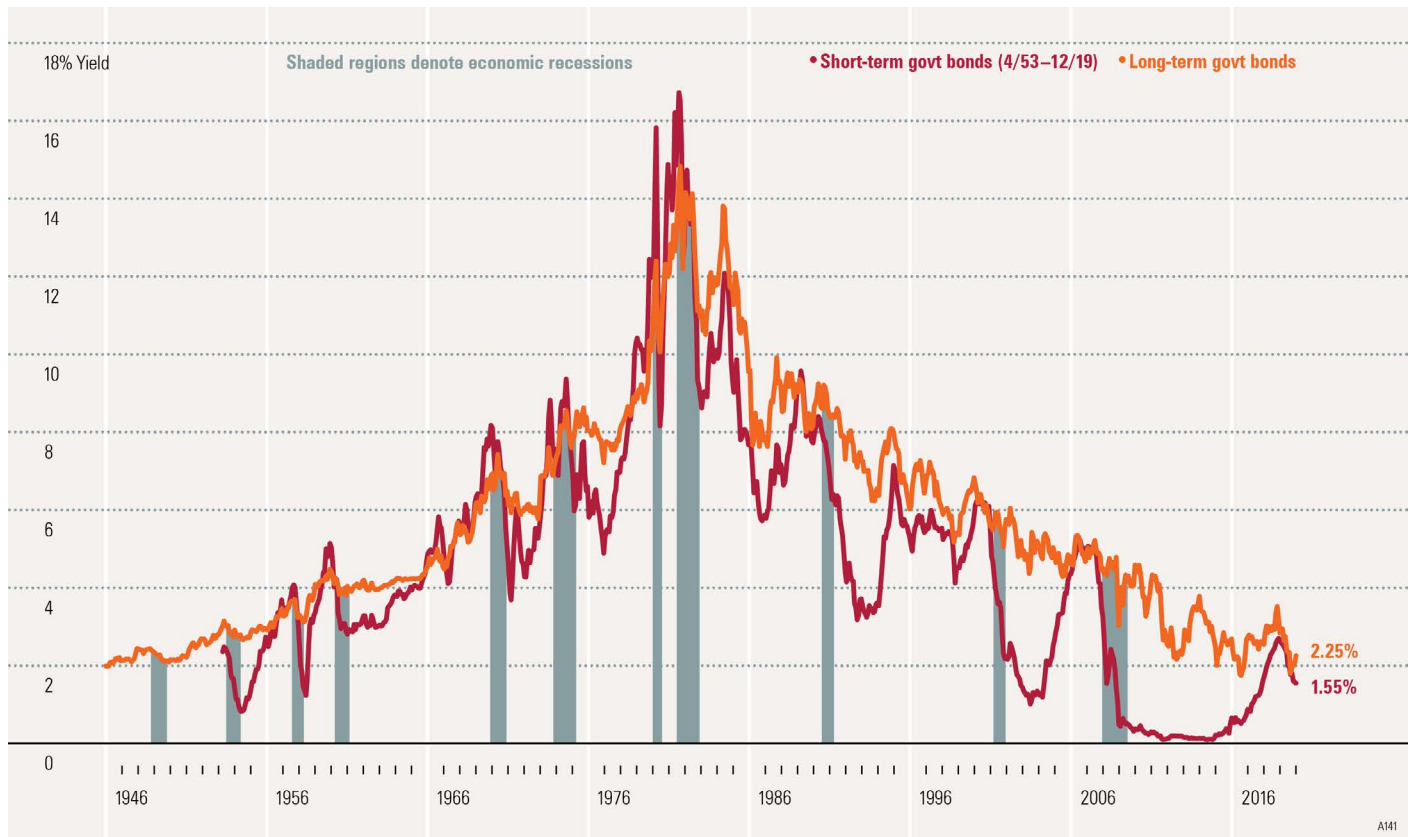
- ▶ Interest rates react to changes in economic cycles. Current interest rates have been at historic lows to stimulate consumer spending, and they have only recently begun to rise again (particularly for intermediate- and long-term bonds).
- ▶ In the loanable funds market, there are numerous interest rates reflecting loans of differing risk and time length. Examples of short-term interest rates are the federal-funds rate, Treasury bills, and one-year maturity bonds. The federal-funds rate is the interest rate at which banks lend funds to each other overnight. The U.S. Federal Reserve sets the target federal-funds rate and tries to achieve that target by buying and selling securities in the federal open market. In addition, there are longer-term rates for intermediate bonds with five-year maturities and long-term bonds with 20- to 30-year maturities. The image displays the high and low ranges, averages, and current rates for bonds of varying maturities, and the federal-funds rate since July 1954.
- ▶ Like the stock market, the bond market is also affected by the state of the economy. The interest rates on bonds are affected by the demand for loanable funds. During an economic expansion, the demand for funds tends to cause interest rates to rise, increasing the costs of borrowing. During an economic contraction or recession, the demand for loans is low and interest rates tend to decline. The most recent interest rates seem to be positioned at relatively low levels, significantly trailing their respective historical averages. Government bonds and Treasury bills are guaranteed by the full faith and credit of the U.S. government as to the timely payment of principal and interest.

### About the data

One-year U.S. government bonds are represented by the U.S. one-year Treasury constant maturity yield, long-term government bonds by the 20-year U.S. government-bond yield, and intermediate-term government bonds by the five-year U.S. government-bond yield. The federal-funds rate is from the U.S. Federal Reserve. An investment cannot be made directly in an index. The data assumes reinvestment of all income and does not account for taxes or transaction costs.

## Bond Yields During Recessions

### 1946–2019



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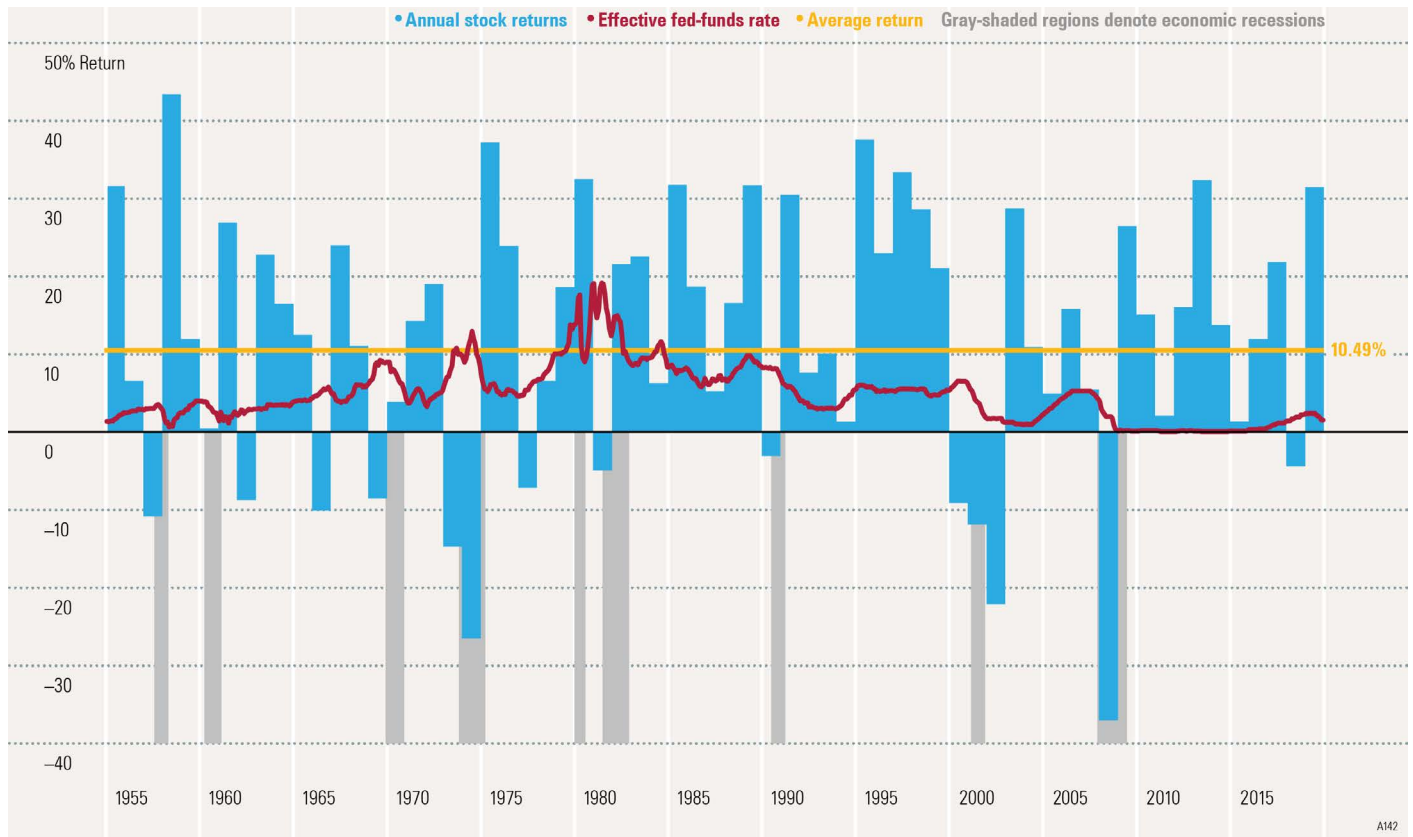
- ▶ Bond yields are driven by factors such as the supply and demand for loans, monetary policy, and inflation expectations.
- ▶ The Federal Reserve uses the federal-funds rate and the discount rate as its primary tools to implement monetary policy. During recessions, the demand for loans falls, and the Fed lowers rates to reduce the cost of borrowing to help stimulate consumer spending. During expansions, the Fed may want to keep inflation in check and "tighten" monetary policy by increasing interest rates. Short-term interest rates like Treasury bills have a close correlation with the federal-funds rate, which the Fed targets through open market operations. Short-term rates have been volatile, whereas long-term rates, which have a maturity of 20 or 30 years, have been relatively stable and have taken longer to react to changes in the economy.
- ▶ Bond yields, especially long-term bond yields, are sensitive to inflation expectations because inflation can erode the value of a bond over time. If inflation expectations are high, lenders require a higher interest rate to lend funds for more than the short term. Therefore, if inflation expectations remain high, long-term interest rates may take longer to drop, even during periods when the Fed is cutting rates. In the long run, interest rates could even rise instead of fall.
- ▶ Although interest rates have generally dropped during recessions and risen during expansions, there has been a general decline of rates since the recession in 1982. Prior to that, interest rates were driven up because of the "oil price shock" of the 1970s. As the Fed aggressively pursued a strategy to lower inflation, interest rates began to fall and actually reached unusually low levels recently.
- ▶ Keep in mind that bond yields and prices move in opposite directions. When yields for new bonds fall, existing bonds with higher yields become more valuable and can demand a higher price. Conversely, when yields for new bonds rise, the prices of existing bonds fall in order to compete with the increased demand for new bonds.

#### About the data

Long-term bond yields are represented by the 20-year U.S. government bond yield and short-term bond yields by the one-year U.S. government bond yield. An investment cannot be made directly in an index. Recession data is from the National Bureau of Economic Research, which does not define a recession in terms of two consecutive quarters of decline in real gross domestic product. Rather, a recession is a recurring period of decline in total output, income, employment, and trade usually lasting from six months to a year and marked by widespread contractions in many sectors of the economy.

## Stock Returns and Monetary Policy

### Annual Returns, 1955–2019



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- ▶ Historically, stock returns have coincided with changing monetary policy.
- ▶ Throughout history, the economy and the stock market have experienced cycles, with declines and rallies succeeding each other, as illustrated in the image. The Federal Reserve can influence the direction of the market by changing the federal-funds rate. In a recession, the Fed's response is usually to decrease the federal-funds rate, which is an expansionary monetary policy. A lower federal-funds rate is achieved through a process of buying government securities in exchange for cash, which is an increase in the money supply. With lower rates and a greater money supply, banks are more likely to lend and people more likely to borrow, which in turn stimulates investment and consumer spending, thus increasing economic activity. When the economy becomes overheated in an economic boom, the Fed typically reverses its stance, raising the federal-funds rate by selling government securities and restricting the money supply, which is a contractionary monetary policy. With higher rates, banks generally lend less, people are less likely to borrow, and economic activity slows.
- ▶ The graph illustrates the relationship between Fed monetary policy, market returns, and recessionary periods. Historically, recessionary periods have been marked by stock market underperformance and a lowering of the federal-funds rate. When the economy is doing poorly, the Fed typically lowers the Fed funds rate, increasing the money supply, and spurring economic activity. Conversely, the end of recessionary periods has been marked by stock market outperformance and an eventual increase in the federal-funds rate as the economic boom is reined in by a reduction in the money supply. In general, stock market outperformance follows periods of expansionary monetary policy and stock market underperformance follows periods of contractionary policy. Of course, it is difficult to predict the exact duration of economic cycles, but for the most part, the Fed's actions and consequent rate movements coincide with up and down swings in stock performance.
- ▶ Stocks are not guaranteed and have been more volatile than the other asset classes.

#### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. An investment cannot be made directly in an index. Stock market returns are presented on an annual basis, and the average return is represented as the compound annual growth rate during the period studied. The federal-funds rate is the Effective Monthly Federal Funds Rate published by the Board of Governors and the St. Louis Fed. Recession data is from the National Bureau of Economic Research.

## Correlations of Various Asset Classes with the Market

### January 1980–December 2019

|                                     | Before recession<br>Jan 1980–Nov 2007 | During recession<br>Dec 2007–Jun 2009 | Entire period<br>Jan 1980–Dec 2019 |
|-------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|
| <b>Small stocks</b>                 | <b>0.72</b>                           | <b>0.95</b>                           | <b>0.77</b>                        |
| <b>International stocks</b>         | <b>0.57</b>                           | <b>0.93</b>                           | <b>0.67</b>                        |
| <b>Commodities</b>                  | <b>0.08</b>                           | <b>0.51</b>                           | <b>0.24</b>                        |
| <b>REITs</b>                        | <b>0.47</b>                           | <b>0.83</b>                           | <b>0.56</b>                        |
| <b>Gold</b>                         | <b>0.05</b>                           | <b>-0.06</b>                          | <b>0.04</b>                        |
| <b>Long-term corp bonds</b>         | <b>0.23</b>                           | <b>0.34</b>                           | <b>0.18</b>                        |
| <b>Long-term govt bonds</b>         | <b>0.18</b>                           | <b>0.03</b>                           | <b>0.03</b>                        |
| <b>Intermediate-term govt bonds</b> | <b>0.12</b>                           | <b>-0.32</b>                          | <b>0.03</b>                        |
| <b>Treasury bills</b>               | <b>0.00</b>                           | <b>-0.11</b>                          | <b>0.01</b>                        |

• Low • Medium • High

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► Correlation is a measure of the degree to which the movements of two investments are related; the higher the correlation, the more related the performance of the investments. In a downturn, an investor would like, if possible, to be invested in the asset classes least correlated with the market. During the most recent recession, investors saw sharp declines in their portfolios, declines that diversification should have reduced. The magnitude of these losses shook many investors' faith in the benefits of diversification. It may look like a portfolio is diversified over the long term, but a severe shock to the market can alter traditional correlation structures and expose weaknesses in diversification plans. The table shows the correlation of various asset classes with the market for three time periods: before the most recent recession, during the most recent recession, and for the entire period since January 1980 until December 2019. Since the market collapsed in 2007, the correlations of many asset classes changed significantly, and the diversification benefit they were supposed to offer was reduced. For example, diversifying into commodities, international stocks, or REITs would not have been as effective during the recession as it was beforehand. However, a few correlations stayed in the same range, and some actually declined. For example, gold and intermediate-term government bonds started moving opposite the market during the recession.

#### About the data

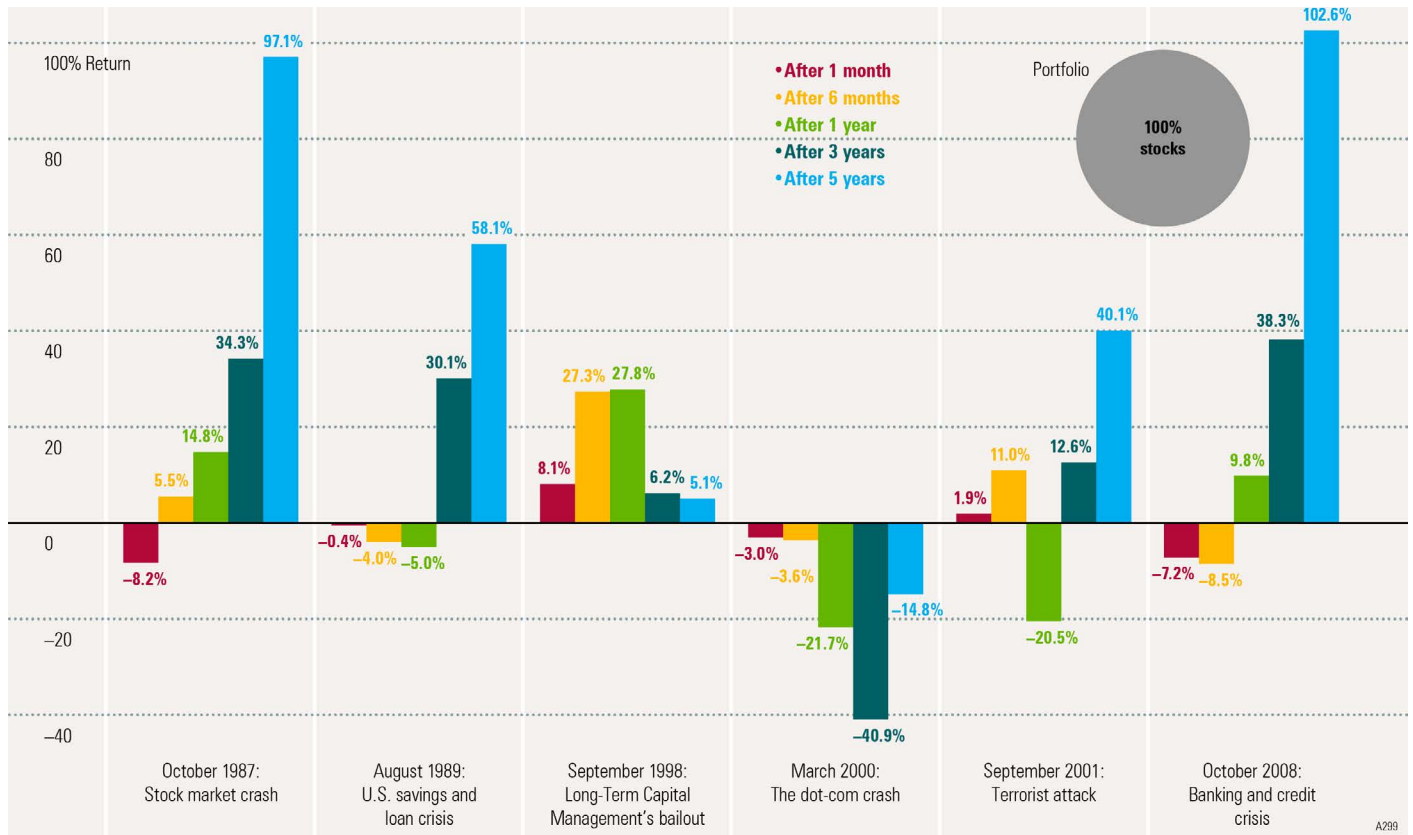
The market is represented by the Ibbotson® Large Company Stock Index. Commodities are represented by the Morningstar Long-Only Commodity Index, and international stocks by the Morgan Stanley Capital International Europe, Australasia, and Far East (EAFE®) Index. REITs are represented by the FTSE NAREIT All Equity REIT Index®, and small stocks by the Ibbotson® Small Company Stock Index. Treasury bills are represented by the 30-day U.S. Treasury bill, long-term corporate bonds by the Citigroup Long-Term High-Grade Corporate Bond Index, long-term government bonds by the 20-year U.S. government bond, gold by the Federal Reserve (2nd London fix) from 1980–87 and the Wall Street Journal London P.M. closing price thereafter, and intermediate-term government bonds by the five-year U.S. government bond. Recession dates (December 2007 to June 2009) are from the National Bureau of Economic Research.

## Correlations of Various Asset Classes with the Market cont...

- Diversification does not eliminate the risk of investment losses. Holding a portfolio of securities for the long term does not ensure a profitable outcome, and investing in securities always involves the risk of loss. Correlation is classified into high, medium, and low categories by the monthly annualised correlation coefficient. Low correlation assets had a correlation coefficient less than or equal to 0.33; medium correlation assets were between 0.34 and 0.66; and high correlation assets were between 0.67 and 1.00. Transactions in commodities carry a high degree of risk and a substantial potential for loss. In light of the risks, you should undertake commodities transactions only if you understand the nature of the contracts (and contractual relationships) you are entering into and the extent of your exposure to risk. Trading in commodities is not suitable for many members of the public. You should carefully consider whether this type of trading is appropriate for you in light of your experience, objectives, financial resources, and other relevant circumstances. Gold/commodity investments will be subject to the risks of investing in physical commodities, including regulatory, economic and political developments, weather events, natural disasters, and market disruptions. Exposure to the commodities markets may subject the investment to greater volatility than investments in more-traditional securities, such as stocks and bonds. International investments involve special risks such as fluctuations in currency, foreign taxation, economic and political risks, liquidity risks, and differences in accounting and financial standards. REITs are subject to certain risks, such as those associated with general and local economic conditions, interest-rate fluctuation, credit risks, liquidity risks, and corporate structure. Small stocks are more volatile than large stocks, are subject to significant price fluctuations and business risks and are thinly traded. Government bonds and Treasury bills are guaranteed by the full faith and credit of the U.S. government as to the timely payment of principal and interest, while stocks, REITs, commodities, gold, and corporate bonds are not guaranteed. With corporate bonds, an investor is a creditor of the corporation and the bond is subject to default risk.

## U.S. Market Recovery After Financial Crises: All-Stock Portfolio

### Cumulative Return of All-Stock Portfolio After Various Events



**Past performance is no guarantee of future results.** Returns reflect the percentage change in the index level from the end of the month in which the event occurred to one month, six months, one year, three years and five years after. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar 2020. All Rights Reserved.

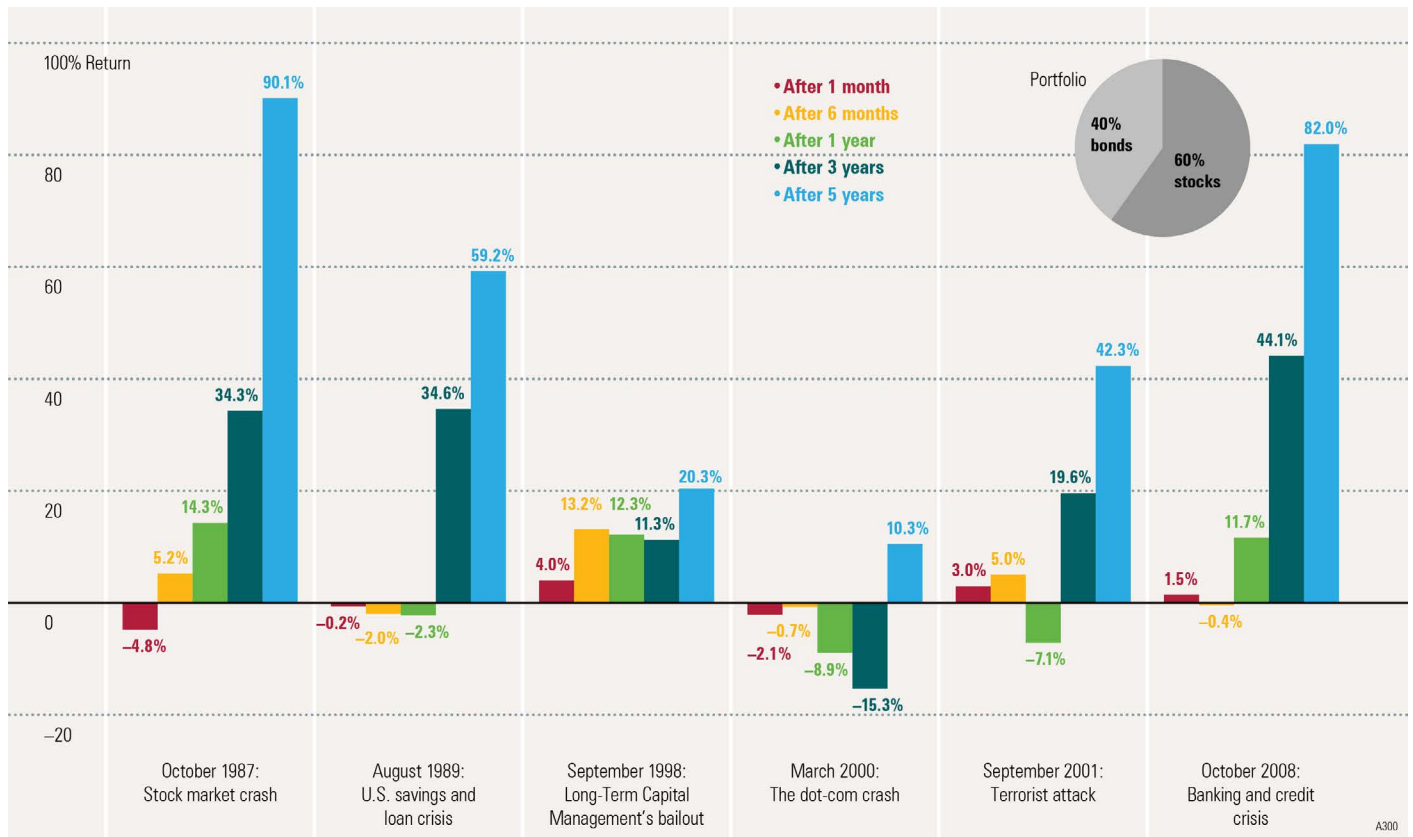
- ▶ Stock prices suffer during financial crises, but they typically recover over time.
- ▶ This image illustrates the cumulative returns of an all-stock portfolio after six historical U.S. financial crises. In the short term, uncertainty from such external shocks can create sudden drops in value. For example, the all-stock portfolio posted a negative return in the month following four of the six analysed crises. Over longer periods of time, however, returns were much more attractive, and investors who stayed the course reaped considerable rewards.
- ▶ Fear and uncertainty might lead investors to sell their investments during tough times, putting downward pressure on prices. Trading because of these emotions can be detrimental to a portfolio's value. By selling during downward price pressures, investors might realise short-term losses. Furthermore, this is compounded as investors wait and hesitate to get back into the market, possibly missing some or all of the potential recovery. The lesson here is that patience can pay dividends.
- ▶ Returns and principal invested in stocks are not guaranteed.

#### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. Calculations are based on monthly data. Data assumes reinvestment of all income and does not account for taxes or transaction costs. For the U.S. savings and loan crisis, August 1989 was chosen because that was the month the Financial Institutions Reform, Recovery and Enforcement Act of 1989 was signed into law. For Long-Term Capital Management, September 1998 was chosen because that was the month the hedge fund was bailed out by various financial institutions. For the banking and credit crisis, October 2008 was chosen because that was the month the Emergency Economic Stabilisation Act was signed into law.

## U.S. Market Recovery After Financial Crises: Balanced Portfolio

### Cumulative Return of Balanced Portfolio After Various Events



**Past performance is no guarantee of future results.** Returns reflect the percentage change in the index level from the end of the month in which the event occurred to one month, six months, one year, three years and five years after. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar 2020. All Rights Reserved.

- ▶ Stock prices suffer during financial crises. However, a balanced portfolio can help mitigate some of the risk.
- ▶ This image illustrates the cumulative returns of a balanced (60% stock/40% bond) portfolio after six historical U.S. financial crises. In the short term, uncertainty from such external shocks can create sudden drops in value. For example, the balanced portfolio posted a negative return in the month following three of the six analysed crises. Over longer periods of time, however, returns were much more attractive, and investors who stayed the course reaped considerable rewards.
- ▶ Fear and uncertainty might lead investors to sell their investments during tough times, putting downward pressure on prices. Trading because of these emotions can be detrimental to a portfolio's value. By selling during downward price pressures, investors might realise short-term losses. Furthermore, this is compounded as investors wait and hesitate to get back into the market, possibly missing some or all of the potential recovery. The lesson here is that patience can pay dividends.
- ▶ Diversification can also limit losses during turbulent market conditions. One of the main advantages of diversification is reducing risk over the long run, not necessarily increasing return. While stocks offer the potential for higher returns, the downside risk can also be extreme. A diversified portfolio can help mitigate such extreme swings in value.
- ▶ Diversification does not eliminate the risk of experiencing investment losses. Government bonds are guaranteed by the full faith and credit of the U.S. government as to the timely payment of principal and interest, while returns and principal invested in stocks are not guaranteed. Stocks have been more volatile than bonds.

#### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. Bonds are represented by the 20-year U.S. government bond. Calculations are based on monthly data. Data assumes reinvestment of all income and does not account for taxes or transaction costs. For the U.S. savings and loan crisis, August 1989 was chosen because that was the month the Financial Institutions Reform, Recovery and Enforcement Act of 1989 was signed into law. For Long-Term Capital Management, September 1998 was chosen because that was the month the hedge fund was bailed out by various financial institutions. For the banking and credit crisis, October 2008 was chosen because that was the month the Emergency Economic Stabilisation Act was signed into law.