INVESTOR'S GUIDE:

Market volatility

MACKENZIE Investments

BE INVESTED

Perspective

It's about time in the market, not timing the market.

Investment emotional cycle

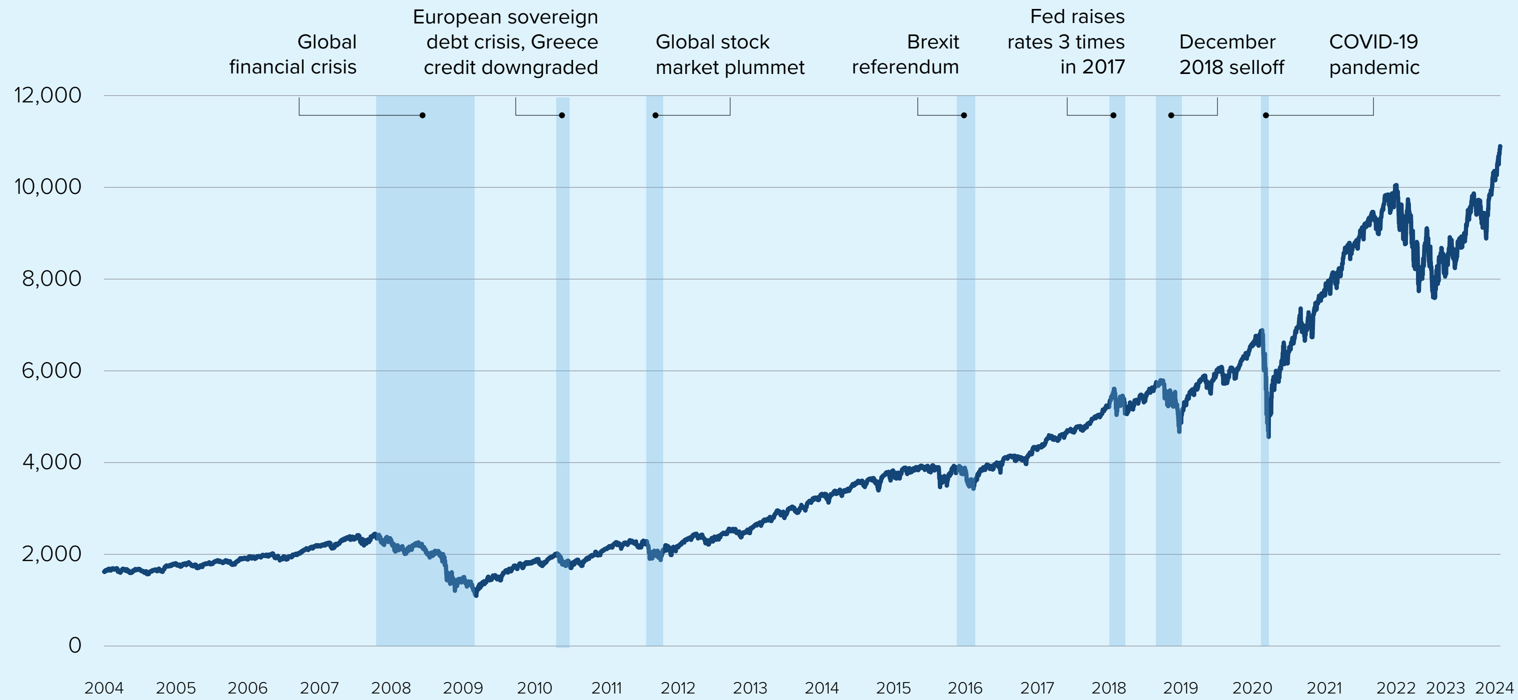
Emotions can compromise financial health.

Source: Darst, David M. (Morgan Stanley and Companies, Inc.). The Art of Asset Allocation, 2003.

The market has faced many economic downturns over time

Historically, despite many periods of increased volatility, markets have remained resilient.

S&P 500 INDEX (USD) – TOTAL RETURN

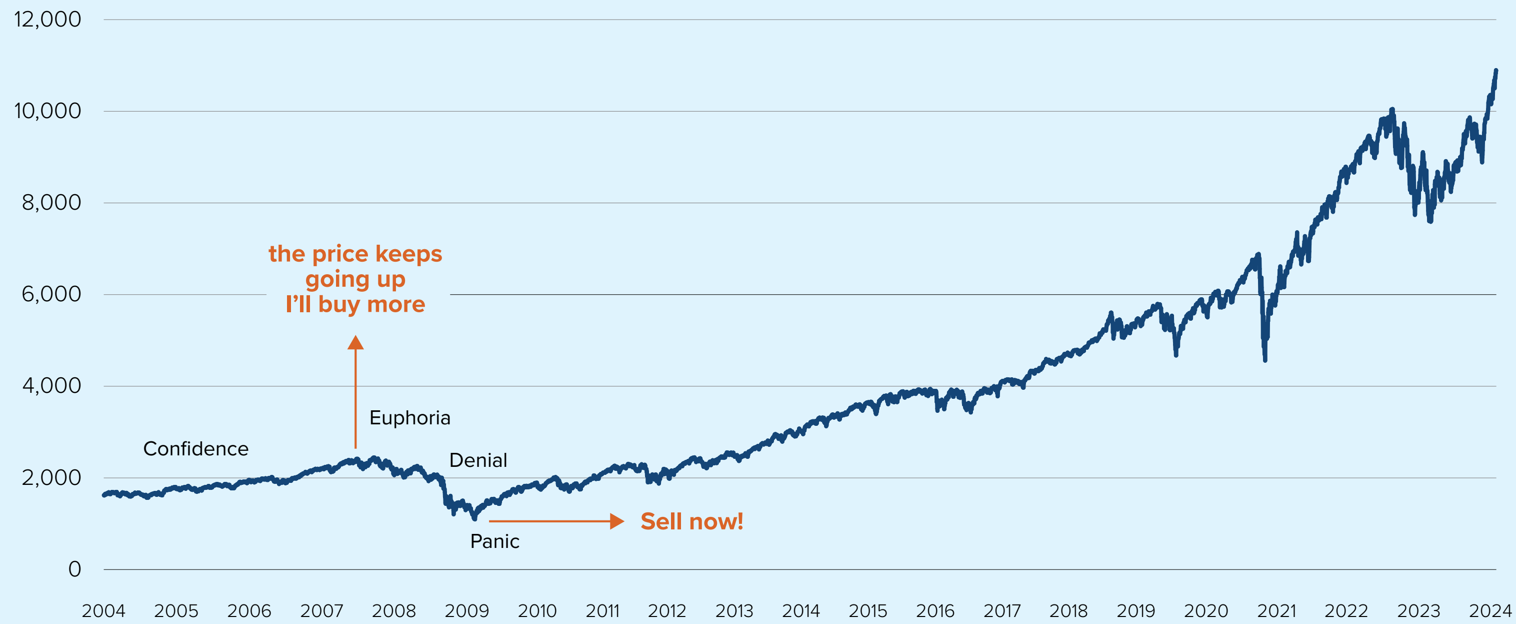


Source: Morningstar Direct, as at January 31, 2024.

These downturns can create an emotional rollercoaster

It's not easy for investors to manage their emotions. There is a tendency to get excited and buy just as markets are set to decline, and to panic and sell just as markets are set to recover.

S&P 500 INDEX (USD) – TOTAL RETURN

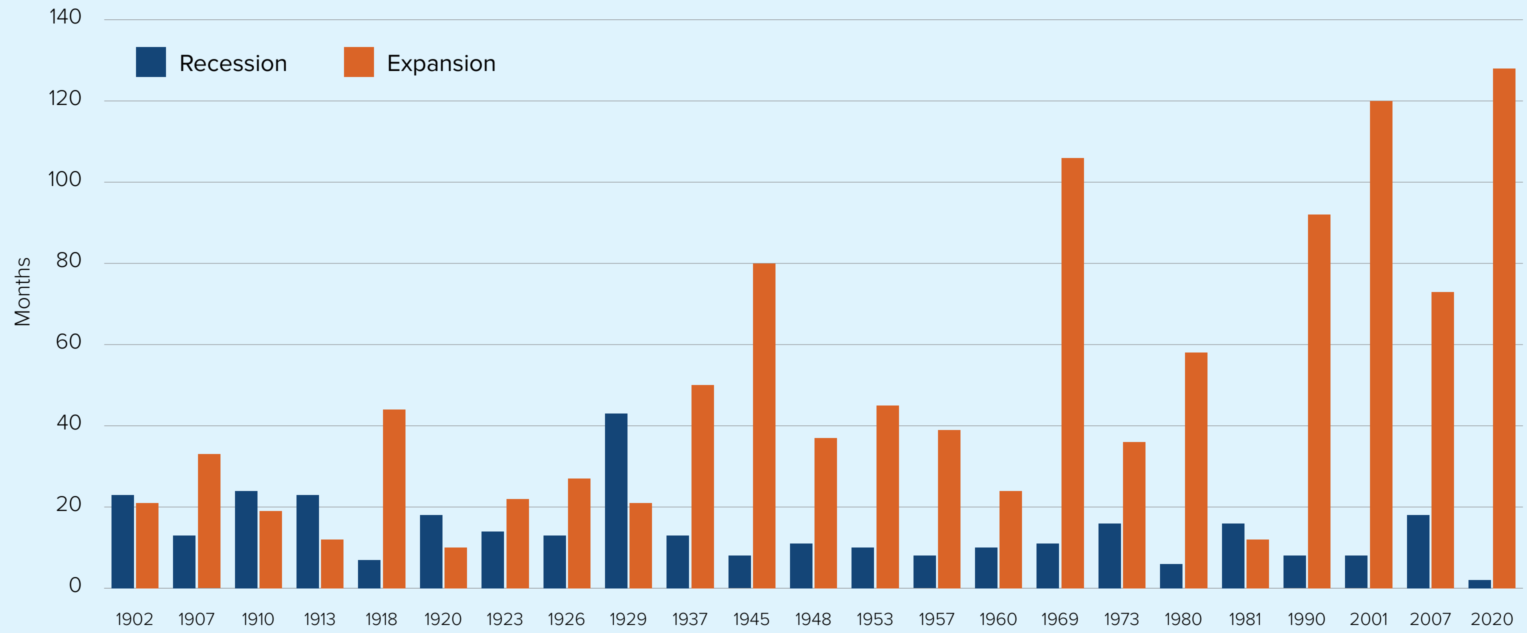


Source: Morningstar Direct, as at January 31, 2024.

Recessions, while unsettling, are usually short-lived

The good times (economic expansion) usually last much longer than the bad times (economic recession).

LENGTH OF RECESSIONS AND EXPANSIONS – SEPTEMBER 1902 TO APRIL 2020



Expansion is the number of months from the previous trough to latest peak.

Recession is the number of months from the peak to the trough of the market cycle.

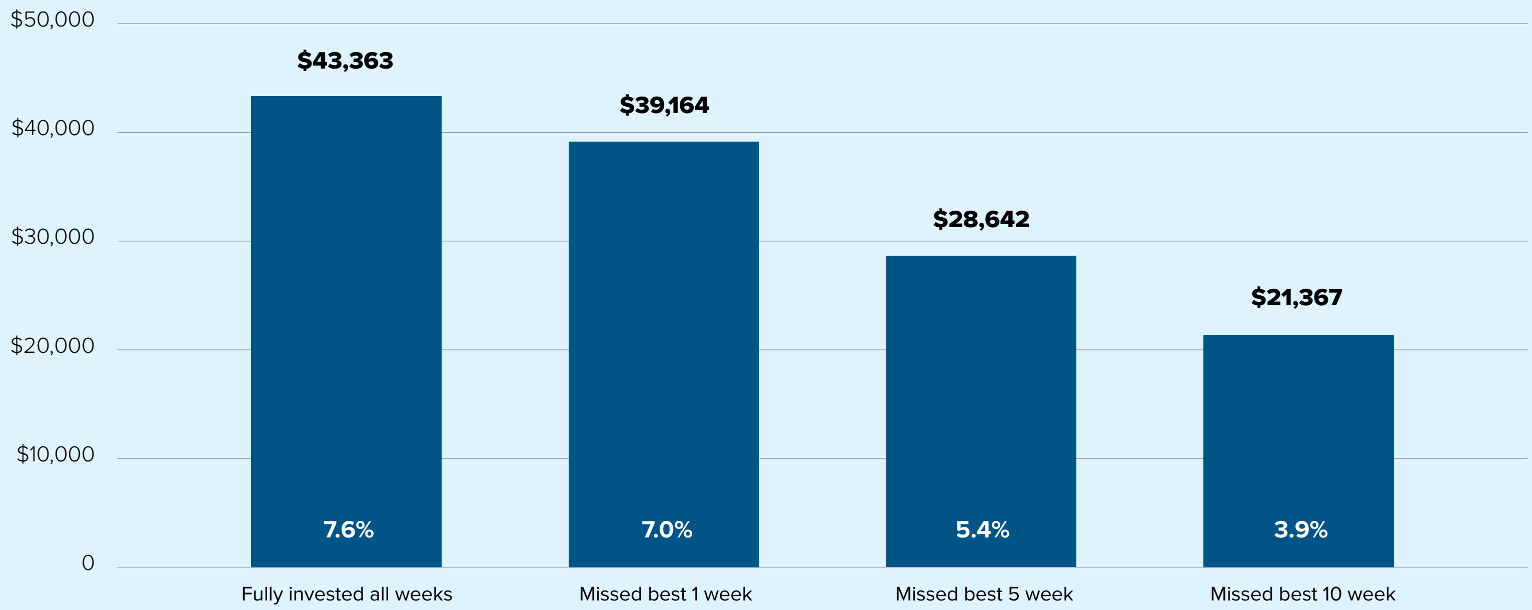
For example March 1991 to March 2001 was an expansionary period lasting 120 months.

Source: National Bureau of Economic Research

It pays to stay invested

Historically, stock markets have rebounded from selloffs, with some of the best days coming on the heels of the worst, so it typically pays to remain invested through volatile times.

VALUE OF $10,000 INVESTED IN THE S&P 500 INDEX FOR 20 YEARS



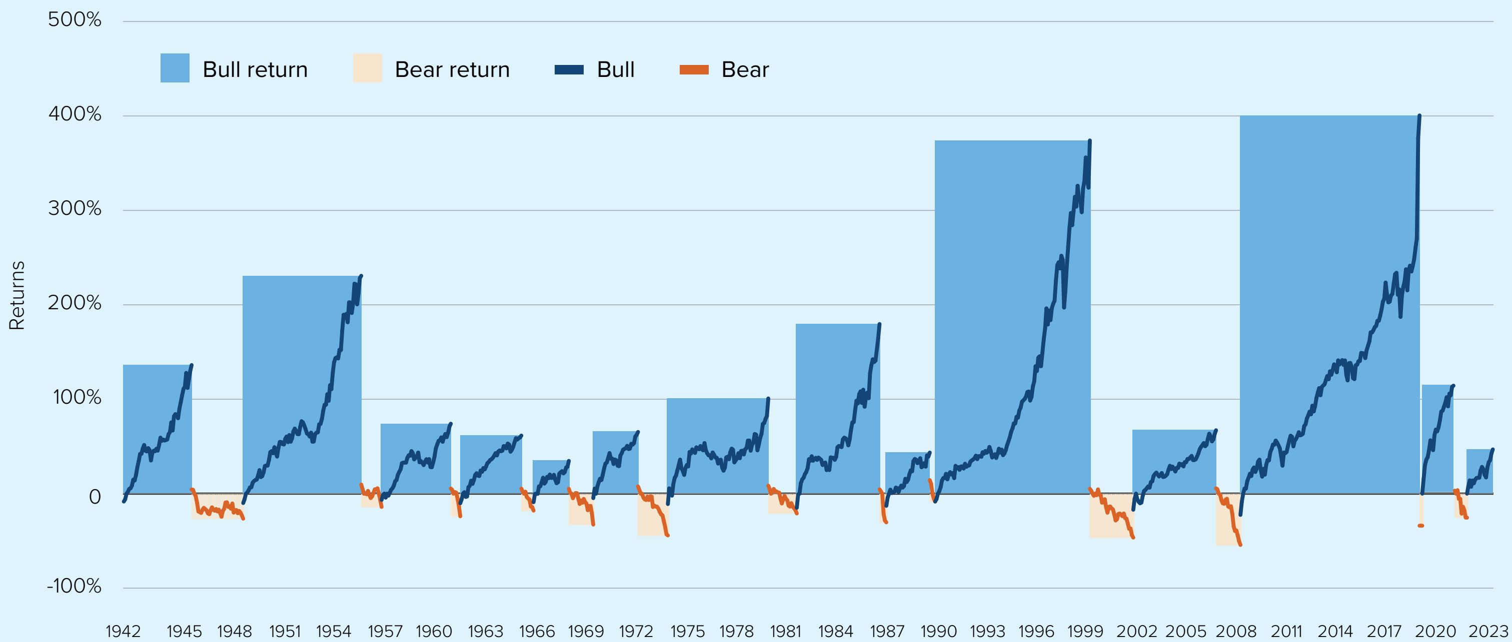
Source: Bloomberg, January 31, 2024

Bulls outrun bears since 1942

The average length of a bull market is much longer than a bear market, where gains in a bull market often far exceed losses in a bear market.

	Average duration	Average return
Bull	56	137%
Bear	15	-29%

S&P 500 INDEX RETURNS



Source: Bloomberg January 31, 2024.
Local currency; price only returns, A bull (bear) market is defined as a prositive (negative) move greater than 20%.

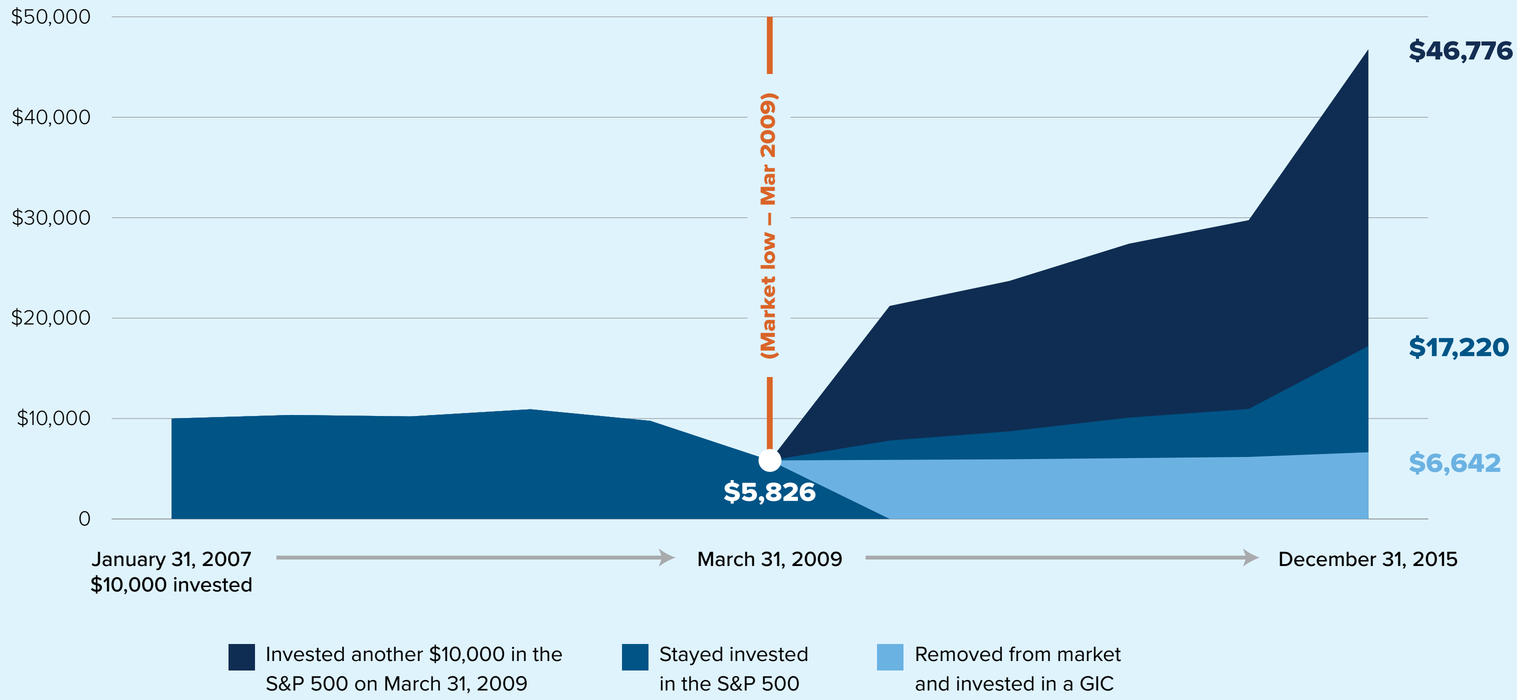
Volatility strategies

Investing is a long-term process. By focusing on the future, you can ride out occasional volatility.

Avoid trying to time the market

It's virtually impossible to know when markets will rebound. Trying to time the market may sometimes look like a smart move, but your long-term investment performance will likely be worse than if you had simply stayed invested through the bad times.

GROWTH OF $10,000 – S&P 500 INDEX



Source: Bloomberg, January 31, 2009 – December 31, 2015
Unlike mutual funds, the returns and principal of GICs are guaranteed.

Asset allocation remains the most important aspect of portfolio management

By diversifying your portfolio across different asset classes, you can achieve greater consistency in returns, and ultimately protect yourself against market volatility.

A DIVERSIFIED PORTFOLIO CAN HELP REDUCE VOLATILITY

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
16.0%	40.7%	23.5%	21.4%	24.8%	28.3%	4.0%	24.8%	18.5%	27.1%	-5.6%	24.3%
15.1%	31.0%	9.8%	21.4%	7.3%	17.0%	3.1%	21.7%	16.2%	25.7%	-8.1%	15.0%
14.7%	11.5%	9.7%	3.5%	7.3%	14.3%	1.4%	16.2%	8.7%	10.3%	-8.4%	11.6%
12.9%	4.3%	8.8%	2.4%	5.9%	13.7%	-0.8%	12.9%	7.5%	-1.6%	-10.7%	8.5%
7.7%	0.9%	7.0%	1.2%	5.0%	9.2%	-3.4%	9.5%	6.0%	-1.6%	-11.7%	7.3%
6.0%	-1.2%	6.8%	1.1%	2.5%	3.1%	-5.9%	8.3%	5.9%	-1.7%	-13.4%	6.9%
5.1%	-1.3%	4.2%	-8.6%	1.7%	2.6%	-6.9%	8.1%	5.3%	-2.5%	-13.9%	6.7%
3.6%	-4.3%	-1.9%	-10.4%	-2.4%	2.5%	-9.3%	6.9%	4.7%	-3.1%	-15.0%	4.7%

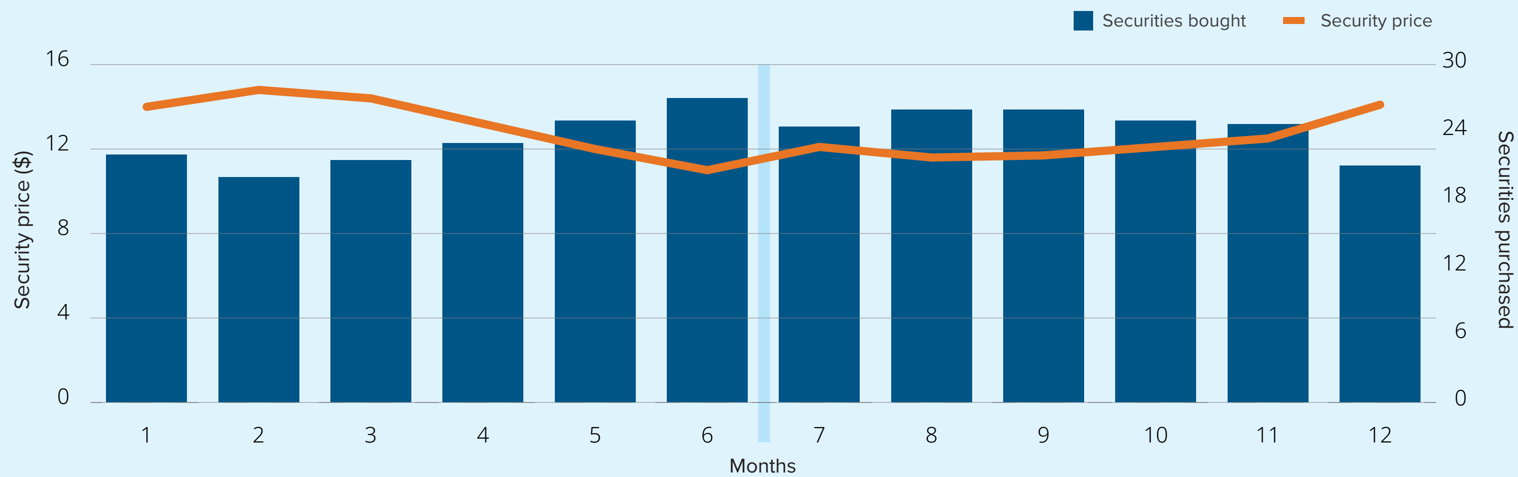
- Emerging Market Equites
- US Equities
- Canadian Equities
- EM Bond (Local currency)
- International Dev Market Equities
- Developed ex-US Aggr Bond
- Canadian Fixed Income
- US Fixed Income

Source: Morningstar Direct. All returns calendar annual returns in CAD. Canadian Equities: Solactive Canada Broad Market TR CAD, U.S. Equities: Solactive US Large Cap TR CAD, International Developed Market Equities: Solactive GBS DM ex NA L&M C TR CAD, Canadian Fixed Income: FTSE Canada Universe Bond, U.S. Fixed Income: Bloomberg US Agg Float Adj TR Hedged CAD, Developed ex-U.S. Aggregate Bond: Bloomberg Gbl Agg xUSD 10% IC TR Hdg USD, EM local currency bonds: JPM GBI-EM Global Core TR USD.

Consider a 'Dollar-Cost Averaging' strategy

Rather than investing all your money at once, making a commitment to invest a smaller amount on a regular basis may lower your average cost per unit by purchasing more units at lower prices.

DCA IN A FLUCTUATING MARKET



Falling market
Reduce the effects of market risk by buying more units at lower prices.

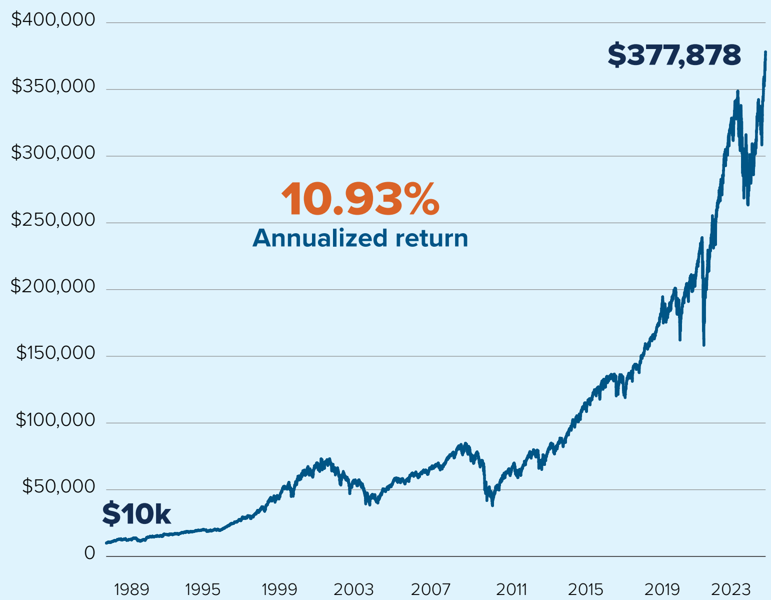
Rising market
Reduce the effects of market risk by buying fewer units at higher prices.

This hypothetical illustration shows how investing $300 each month in a fluctuating market can potentially help reduce the overall cost of the portfolio by buying more securities when the price is lower and fewer when the price is more expensive. For illustrative purposes only.

Markets eventually recover despite volatility

Staying the course is of the utmost importance during periods of volatility as it has historically enabled investors to fully recover from these periods and achieve their long-term investment goals.

GROWTH OF A $10,000 INVESTMENT, 1989-2024
S&P 500 Index (USD) – Total Return



Crisis	Market low	1 yr later	2 years later
The Korean War	13-Jul-50	31.70%	49.70%
Cuban Missile Crisis	23-Oct-62	36.50%	59.20%
JFK Assassination	22-Nov-63	23.90%	31.60%
1969 to 70 Market Break	26-May-70	43.70%	59.70%
1973 to 74 Market Break	6-Dec-74	33.50%	59.30%
1979 to 80 Oil Crisis	27-Mar-80	37.10%	14.00%
1987 Stock Market Crash	19-Oct-87	23.20%	54.40%
Desert Storm	11-Oct-90	29.10%	36.30%
Soviet Coup D'état Attempt	19-Aug-91	11.10%	21.20%
Asian Financial Crisis	2-Apr-97	49.30%	72.50%
Sept 11th	21-Sep-01	-12.50%	7.30%
Dot-com Bubble crash	9-Oct-02	33.70%	44.50%
Invasion of Iraq	11-Mar-03	38.20%	49.90%
North Korean Missile Test	17-Jul-06	25.50%	2.10%
Subprime Mortgage Crisis	9-Mar-09	68.60%	95.10%
US Debt Rating Downgrade	3-Oct-11	32.00%	52.20%
Crimea Annexation	3-Feb-14	17.70%	9.80%
China Yuan Devaluation	11-Feb-16	26.60%	43.20%
2018 Global Recession Scare	24-Dec-18	37.10%	57.50%
COVID-19 Pandemic	23-Mar-20	74.80%	99.20%
Average		**33.00%**	**45.90%**

Source: Morningstar Direct / Bloomberg. As at January 31, 2024.
Snapshots in time of significant negative impact international events from 1950 to March 2020, and the subsequent change in market value from the S&P 500 Index..

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