

# Market Returns through a Century of Recessions

What does a century of economic cycles teach investors about investing? Our interactive exhibit examines how stocks have behaved during US economic downturns. Markets around the world have often rewarded investors even when economic activity has slowed. This is an important lesson on the forward-looking nature of markets, highlighting how current market prices reflect market participants' collective expectations for the future.





Shaded periods below represent recessions.  
Click each to learn more.



GROWTH OF \$100  
1926-2021

\$1,000,000

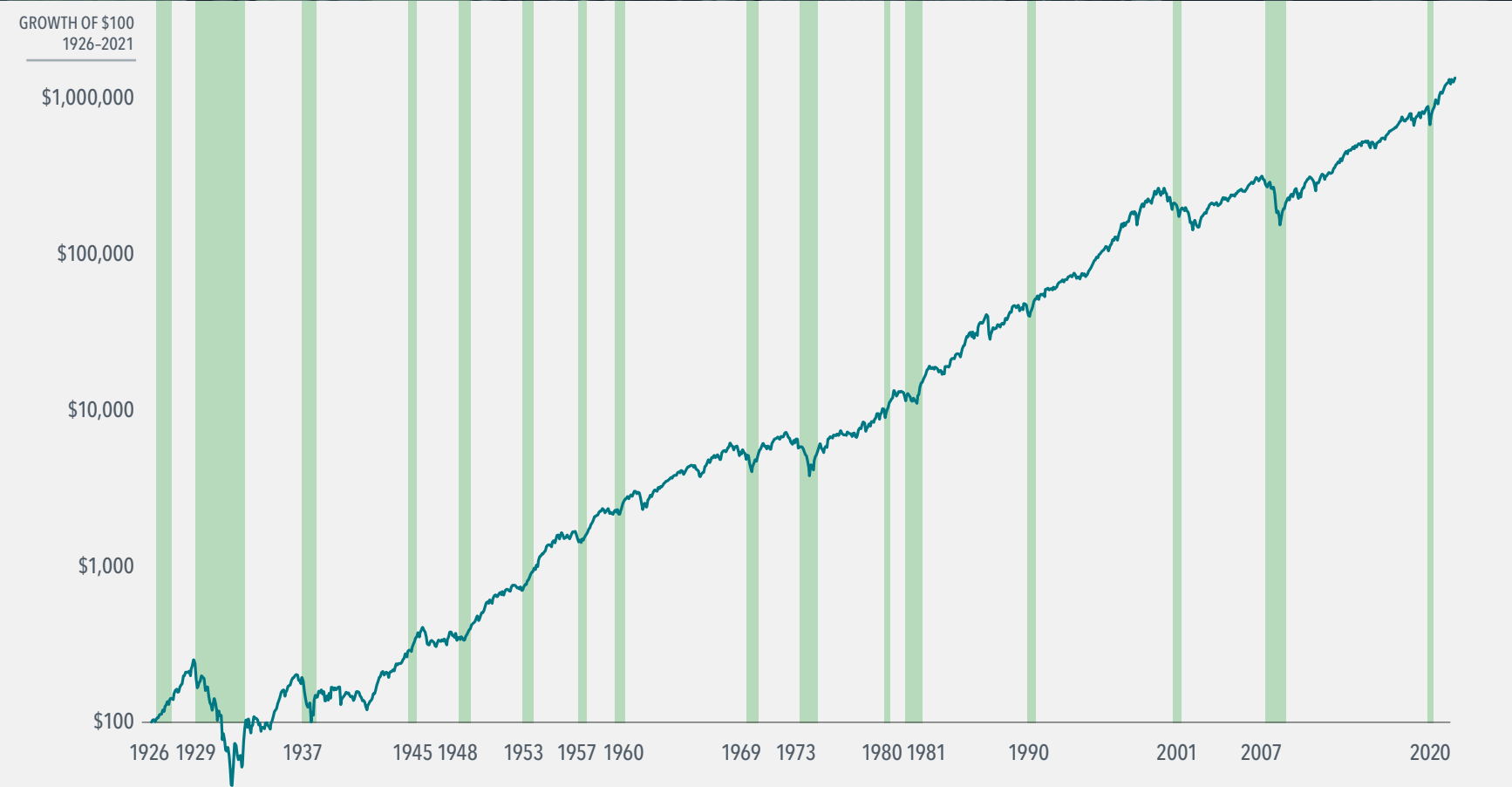
\$100,000

\$10,000

\$1,000

\$100

1926 1929 1937 1945 1948 1953 1957 1960 1969 1973 1980 1981 1990 2001 2007 2020



# 1926–1927



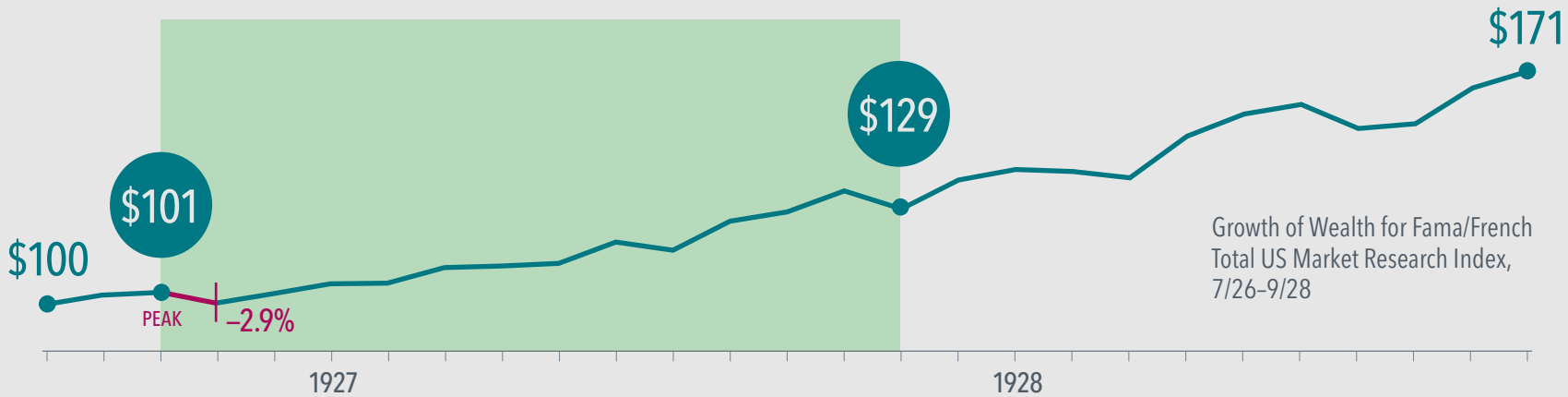
A few years before the Depression, the US experienced a mild, yearlong recession accompanied by a minor bout of deflation. The stock market slipped 2.9% in the first month of the downturn.

## RECESSION

Duration (Months)	Industrial Production	Inflation
13	-6.0%	-1.1%

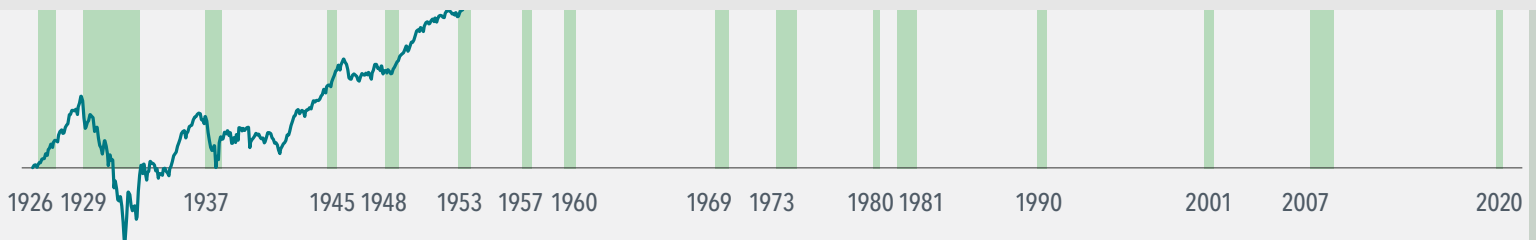
## MARKET DOWNTURN

Duration (Months)	Return from Peak
1	-2.9%



Growth of Wealth for Fama/French Total US Market Research Index, 7/26-9/28

Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# Great Depression



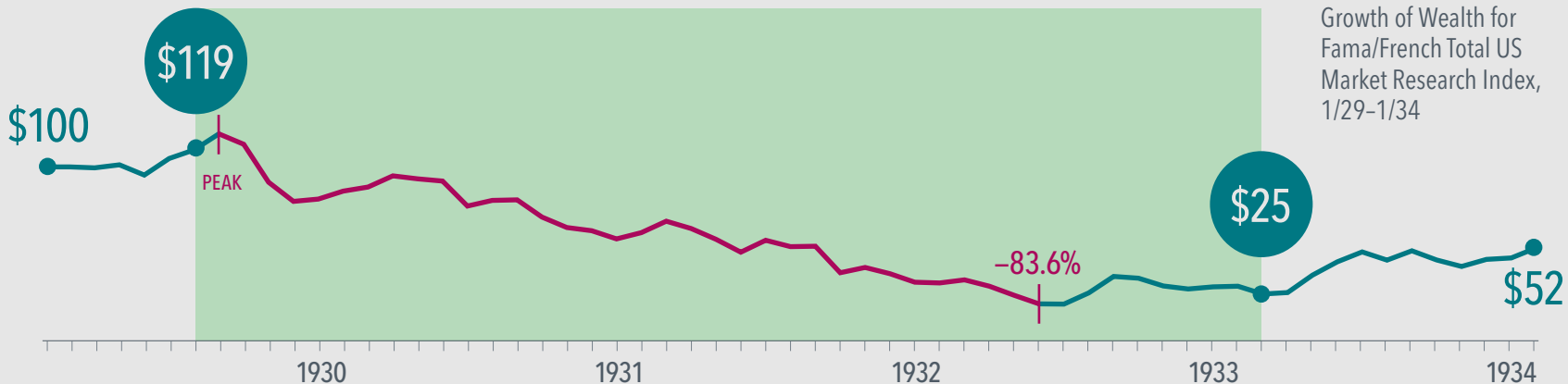
The Depression decimated the US economy—unemployment climbed to 25.2%, and industrial production plunged 48.6%. Before the collapse ended, stocks collectively lost 83.6% in a 33-month market downturn.

## RECESSION

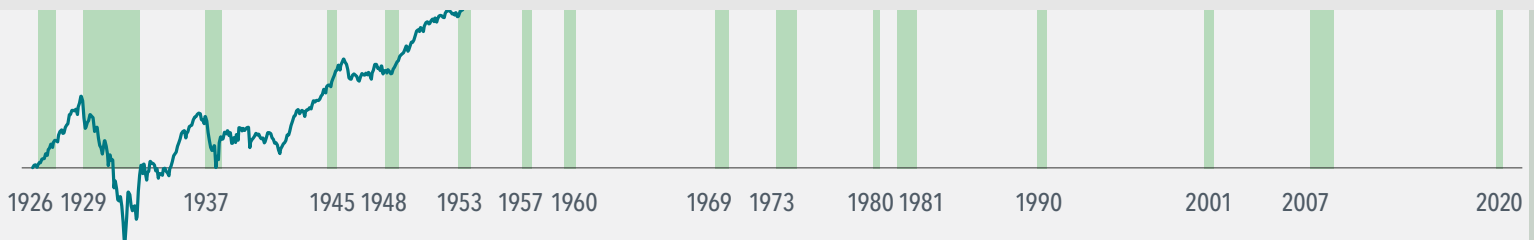
Duration (Months)	Industrial Production	Inflation	Max Unemployment
43	-48.6%	-26.6%	25.2%

## MARKET DOWNTURN

Duration (Months)	Return from Peak
33	-83.6%



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1937–1938



A sharp, 13-month recession—marked by high unemployment and a big dip in industrial production—occurred in the midst of the nation’s recovery from the Depression. Stock market investors suffered a 49.2% loss.

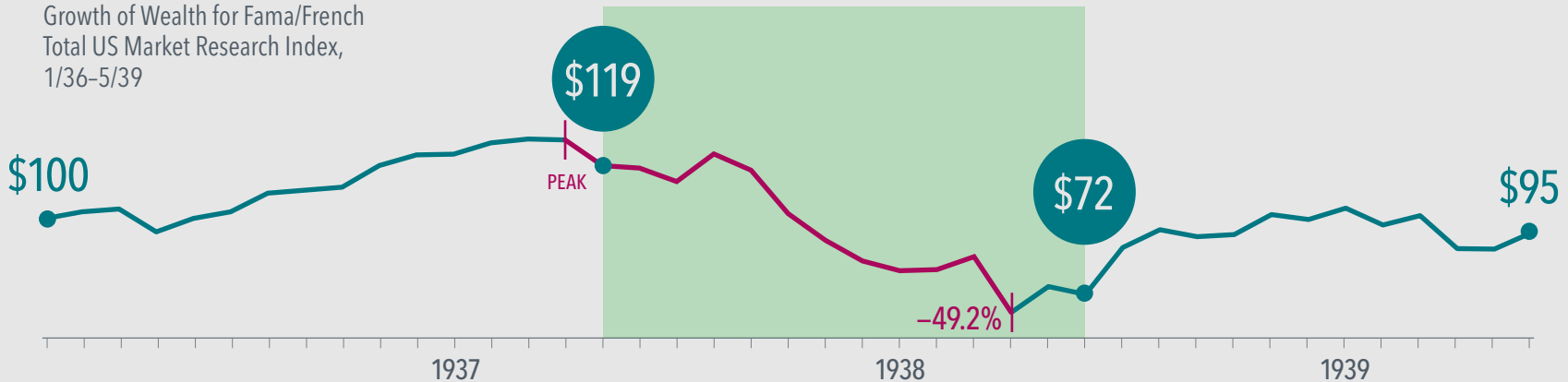
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment
13	-32.5%	-2.1%	19.7%

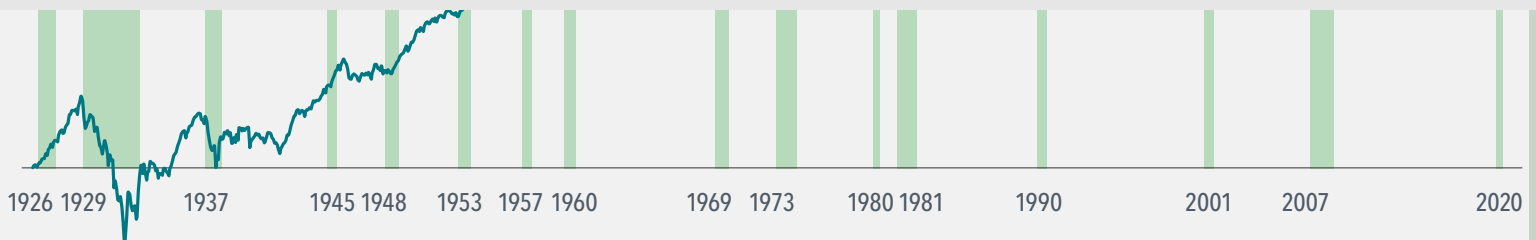
## MARKET DOWNTURN

Duration (Months)	Return from Peak
12	-49.2%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
1/36–5/39



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# World War II Recession



Industrial production plunged 26% during the eight-month recession near the end of World War II. But the stock market dipped only 3.9% early in the recession before rebounding.

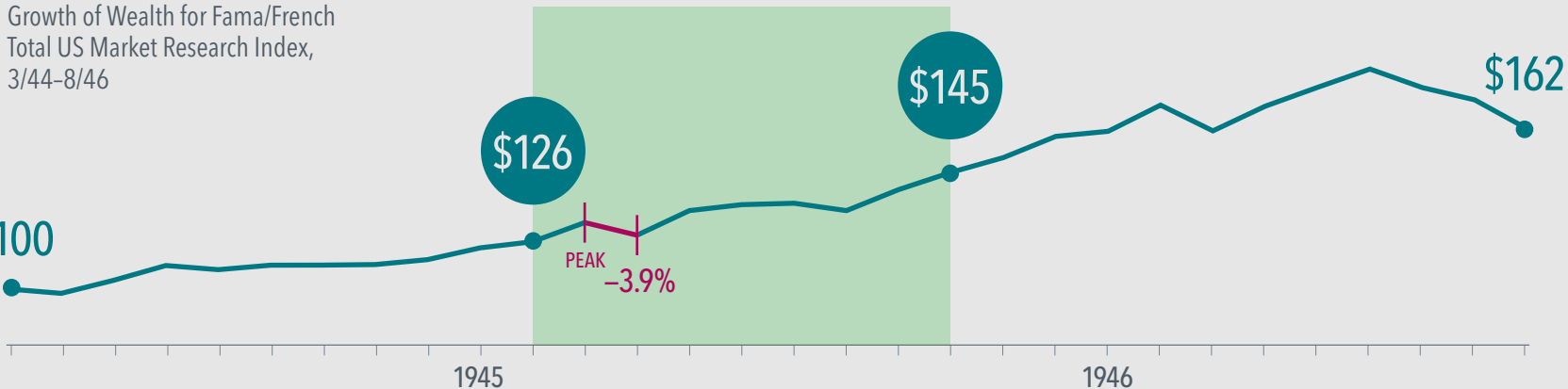
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment
8	-26.0%	1.7%	3.4%

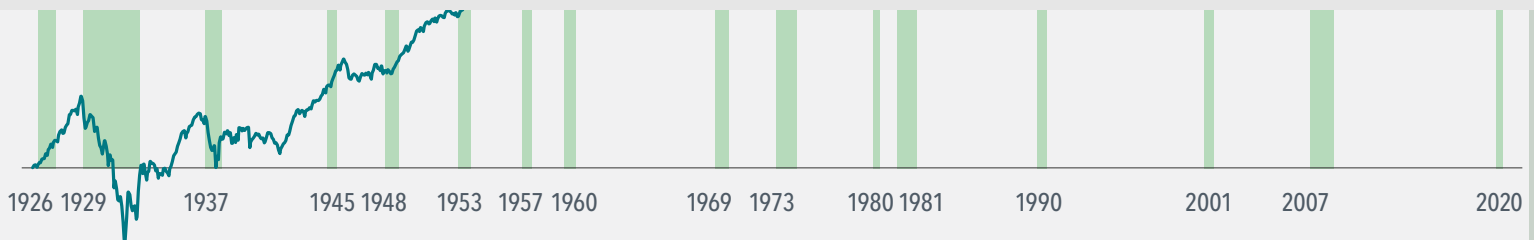
## MARKET DOWNTURN

Duration (Months)	Return from Peak
1	-3.9%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
3/44-8/46



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1948–1949



A modest stock market slide (–11.0%) began five months before this relatively small economic downturn that occurred a few years after the war.

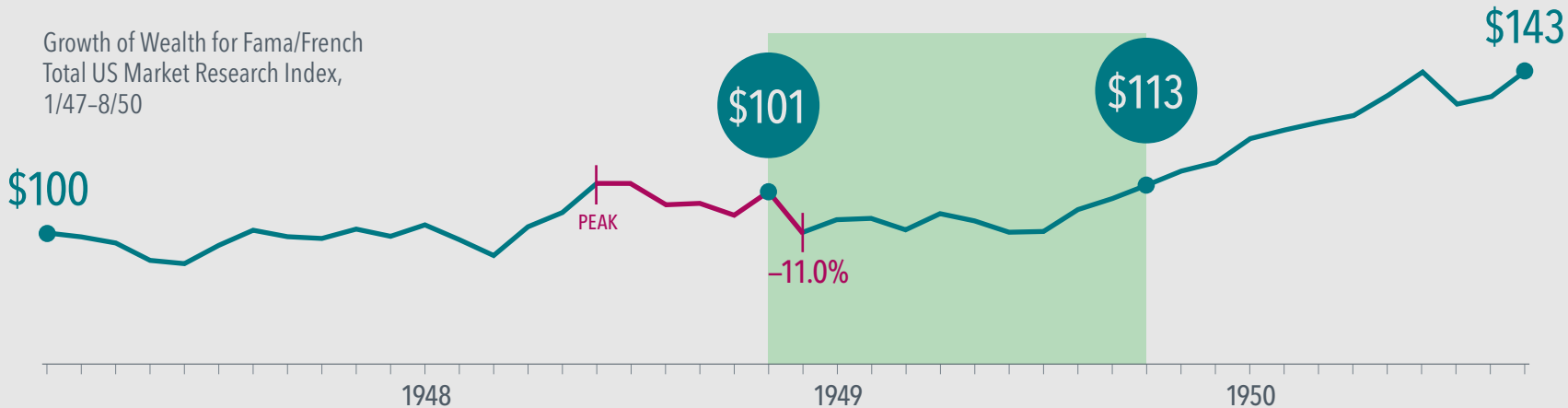
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
11	–5.0%	–1.2%	6.8%	–1.5%

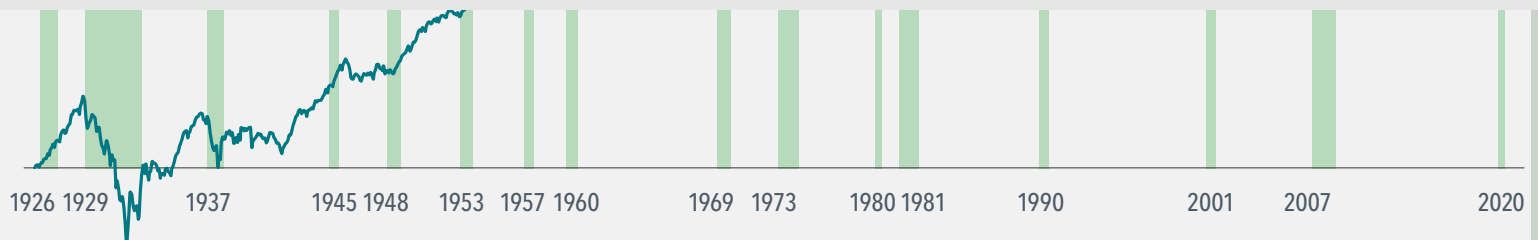
## MARKET DOWNTURN

Duration (Months)	Return from Peak
6	–11.0%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
1/47–8/50



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1953–1954



The Korean Armistice was signed in the summer of 1953. A stock market slump that had begun in March was over by August, but the recession continued until early 1954.

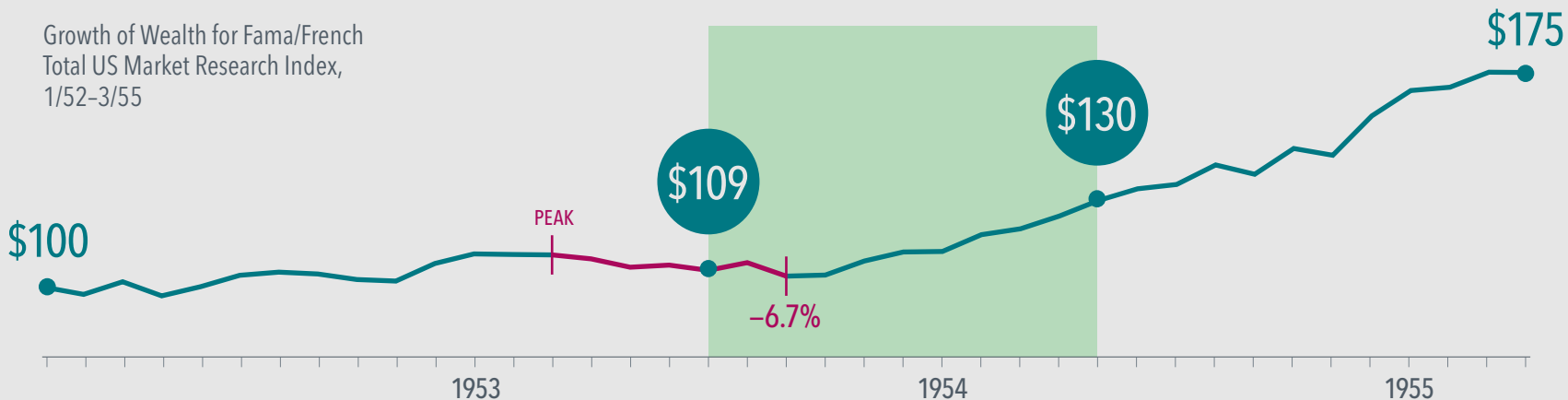
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
10	-9.5%	0.0%	5.9%	-2.4%

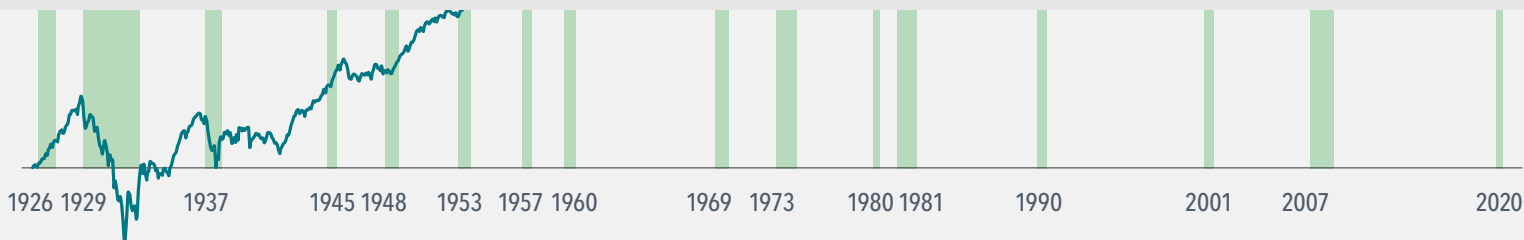
## MARKET DOWNTURN

Duration (Months)	Return from Peak
6	-6.7%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
1/52–3/55



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.





# 1957-1958



A huge drop in industrial production (-11.3%) and a contraction in GDP (-3%) interrupted the 1950s boom. Stocks retrenched 14.9% in the midst of a decade-long climb.

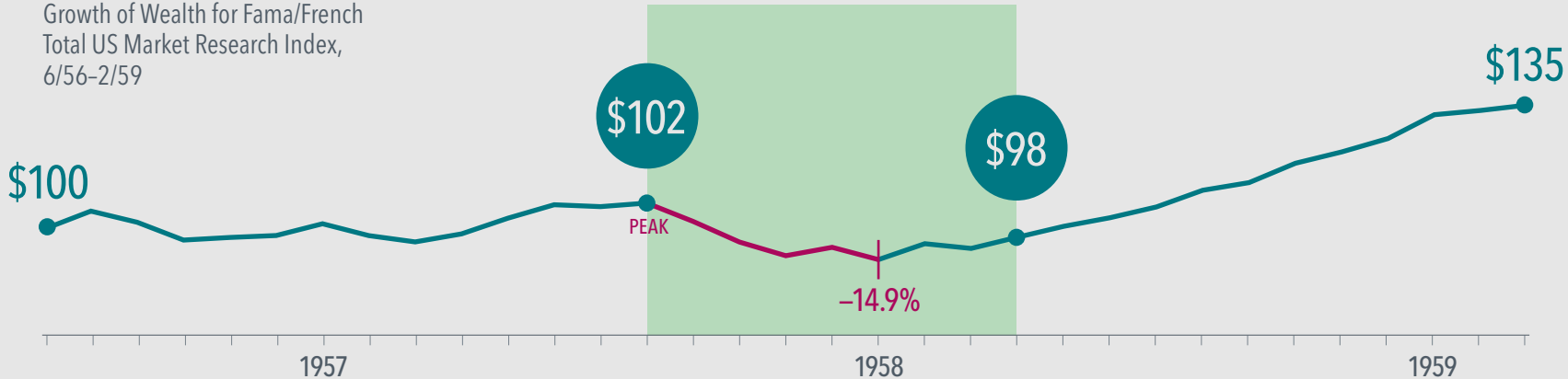
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
8	-11.3%	1.8%	6.7%	-3.0%

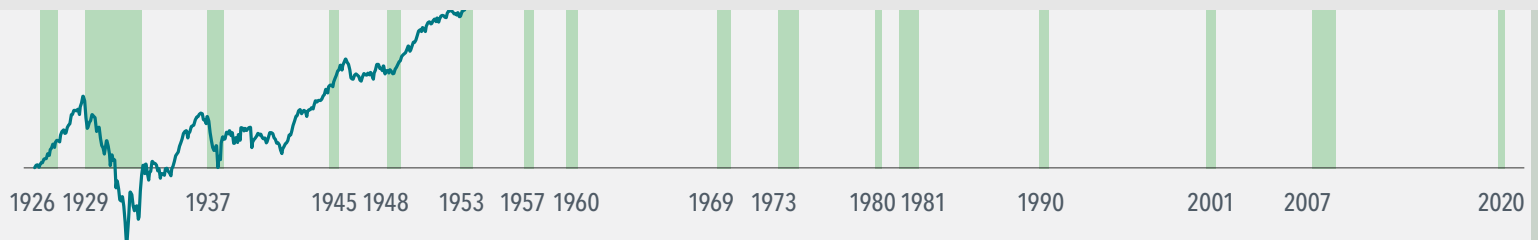
## MARKET DOWNTURN

Duration (Months)	Return from Peak
5	-14.9%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
6/56-2/59



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1960–1961



This four-month pause followed the previous decade's bull market. In the election year of 1960, unemployment rose to 6.6%, and the stock market dropped 7.9%.

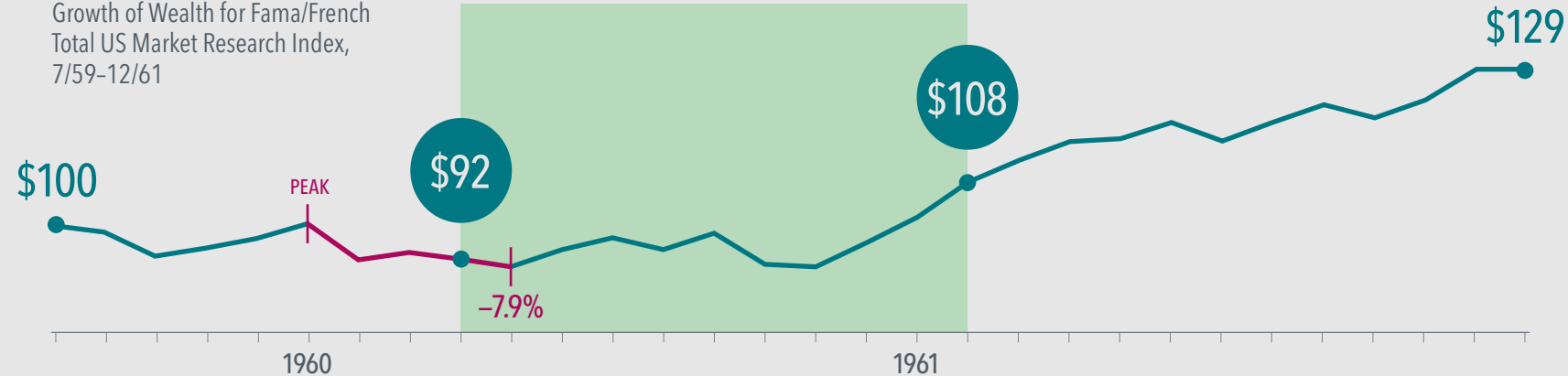
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
10	-6.1%	1.0%	6.6%	0.1%

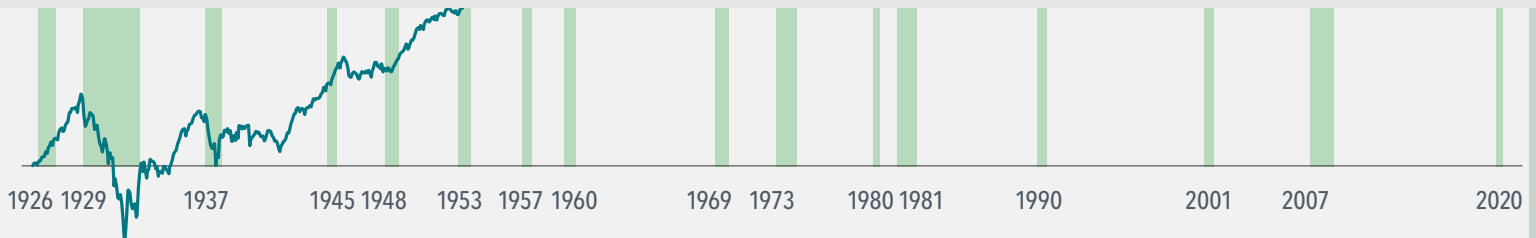
## MARKET DOWNTURN

Duration (Months)	Return from Peak
4	-7.9%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
7/59-12/61



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1969–1970



High inflation and a big jump in unemployment punctuated the 11-month recession that began in December 1969. A volatile stock market eventually lost 33.6% over 19 months.

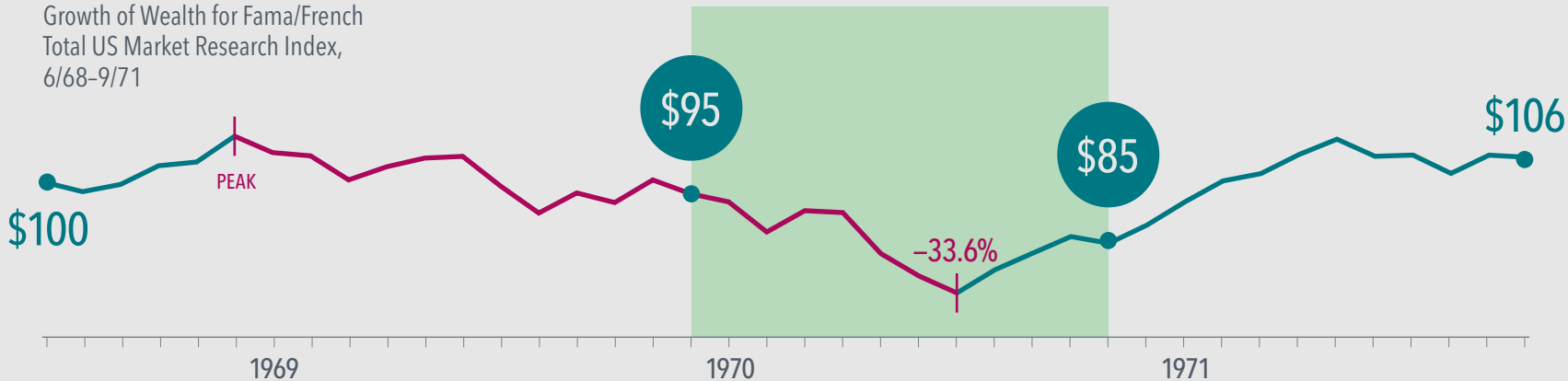
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
11	-5.3%	4.5%	5.5%	-0.2%

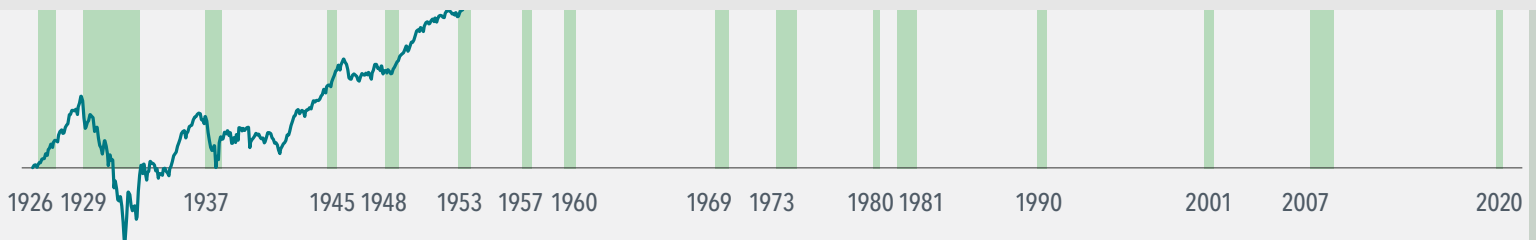
## MARKET DOWNTURN

Duration (Months)	Return from Peak
19	-33.6%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
6/68-9/71



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# Oil Crisis



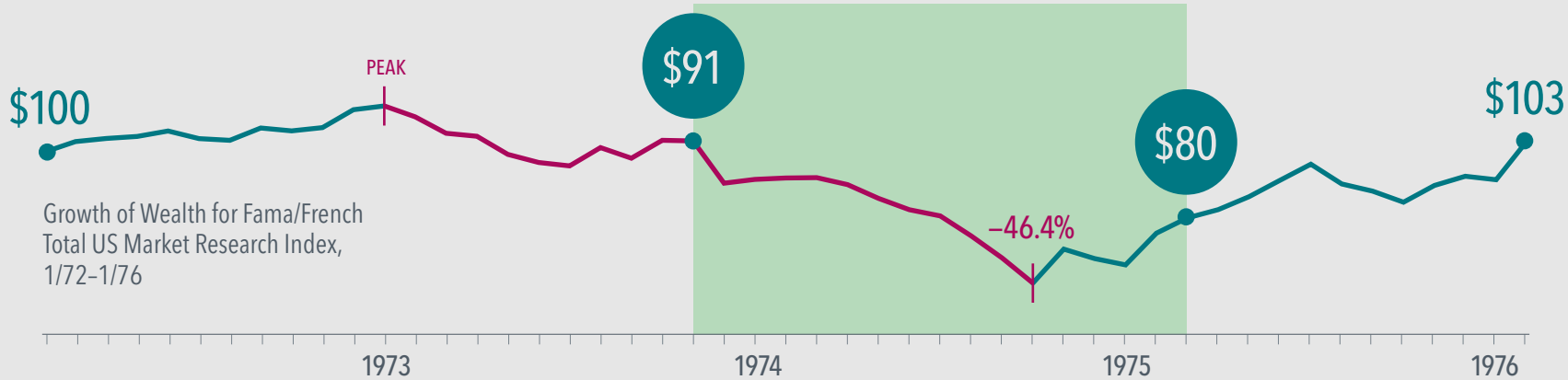
Inflation hit double digits during the 1973–75 recession. The stock market lost nearly half its value in the first 11 months of the 16-month economic downturn.

## RECESSION

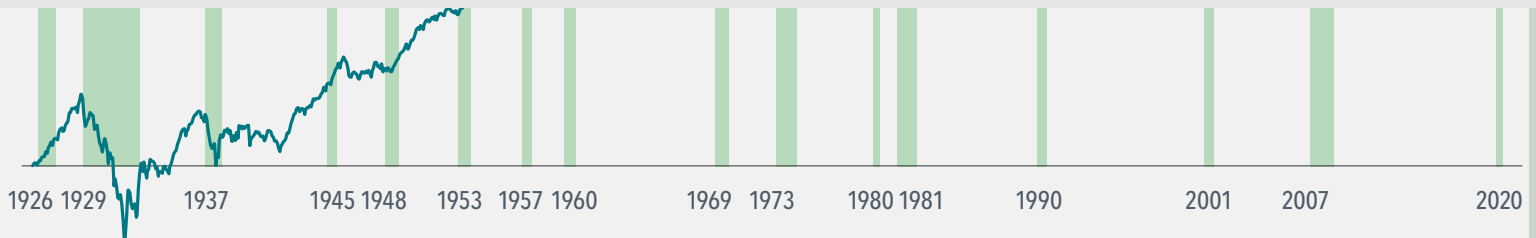
Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
16	-12.0%	14.4%	8.1%	-3.1%

## MARKET DOWNTURN

Duration (Months)	Return from Peak
21	-46.4%



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1980



A 12% stock market decline occurred early in 1980's six-month recession, during which unemployment hit 7.6%. But the market finished the year with an impressive gain of 33.4%.

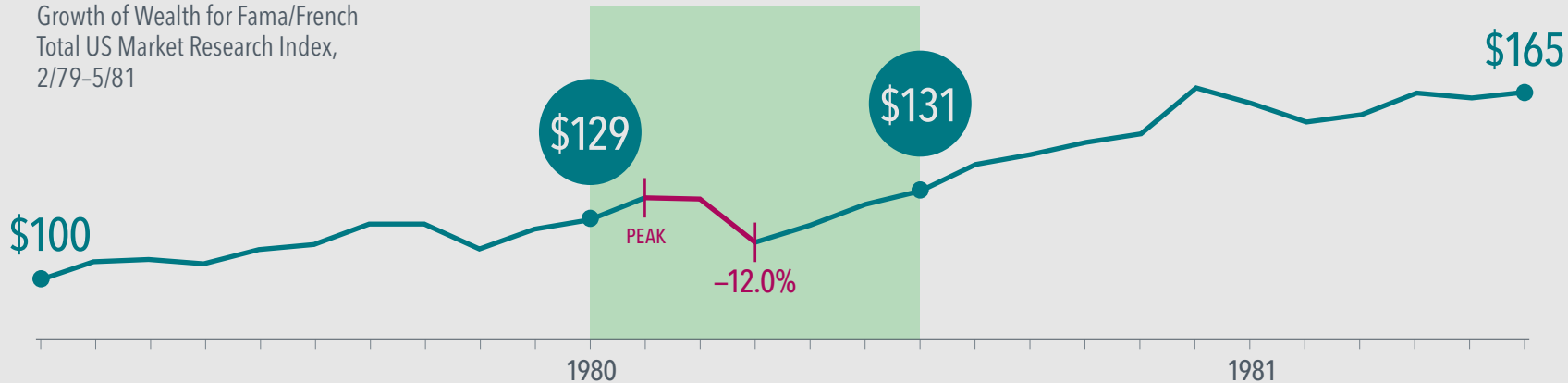
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
6	-5.9%	6.3%	7.6%	-2.2%

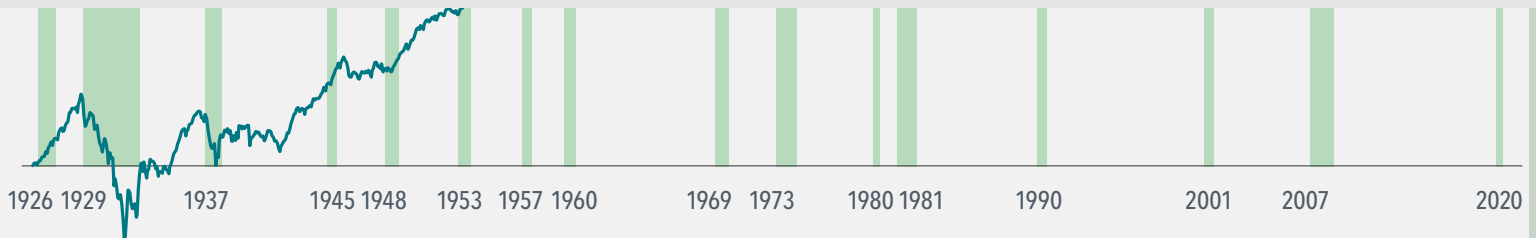
## MARKET DOWNTURN

Duration (Months)	Return from Peak
2	-12.0%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
2/79-5/81



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# 1981-1982



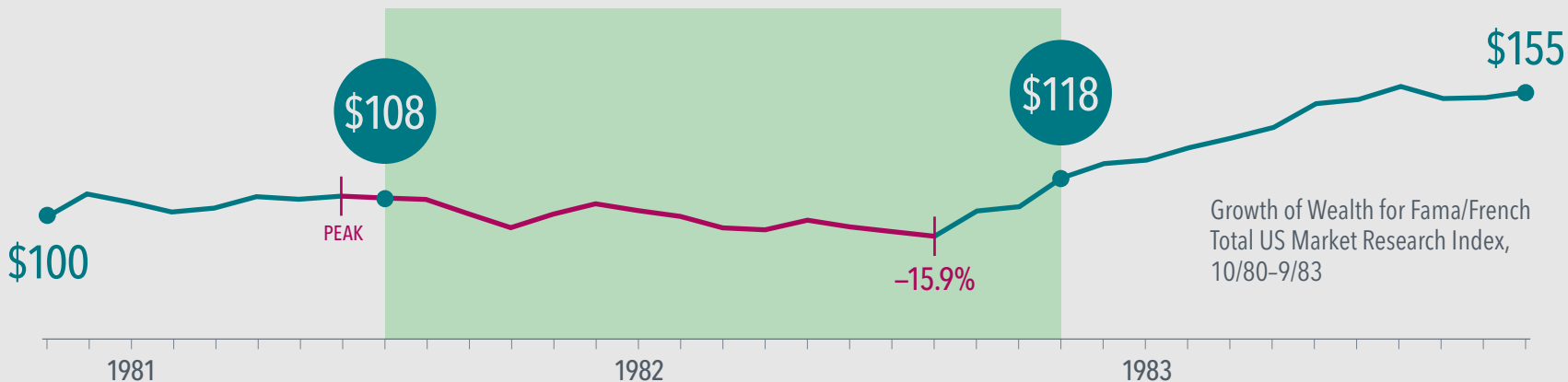
Historically high interest rates preceded a harsh recession that dragged on for 16 months and saw unemployment peak at 10.4%. The stock market experienced a 15.9% slide before beginning a long rally.

## RECESSION

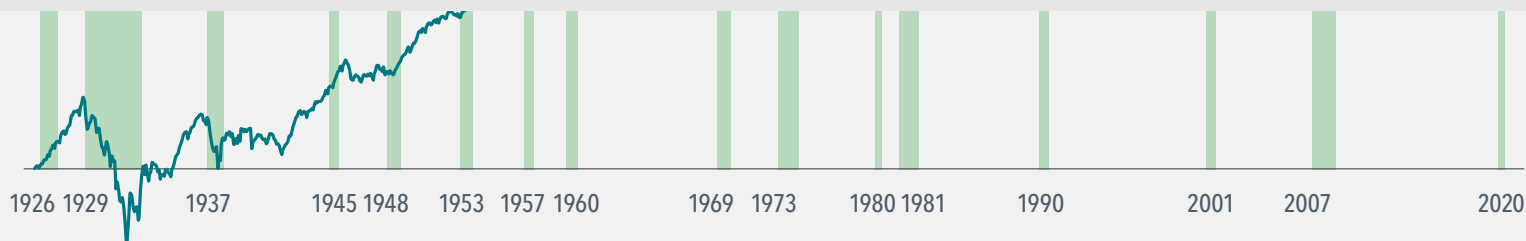
Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
16	-8.3%	7.2%	10.4%	-2.5%

## MARKET DOWNTURN

Duration (Months)	Return from Peak
14	-15.9%



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# Gulf War



Stocks reacted negatively to the onset of the Gulf War in August 1990, dropping 17% over five months as the price of oil doubled. When the market regained its footing, stocks were set to start a nine-year bull market that peaked in the dot-com era.

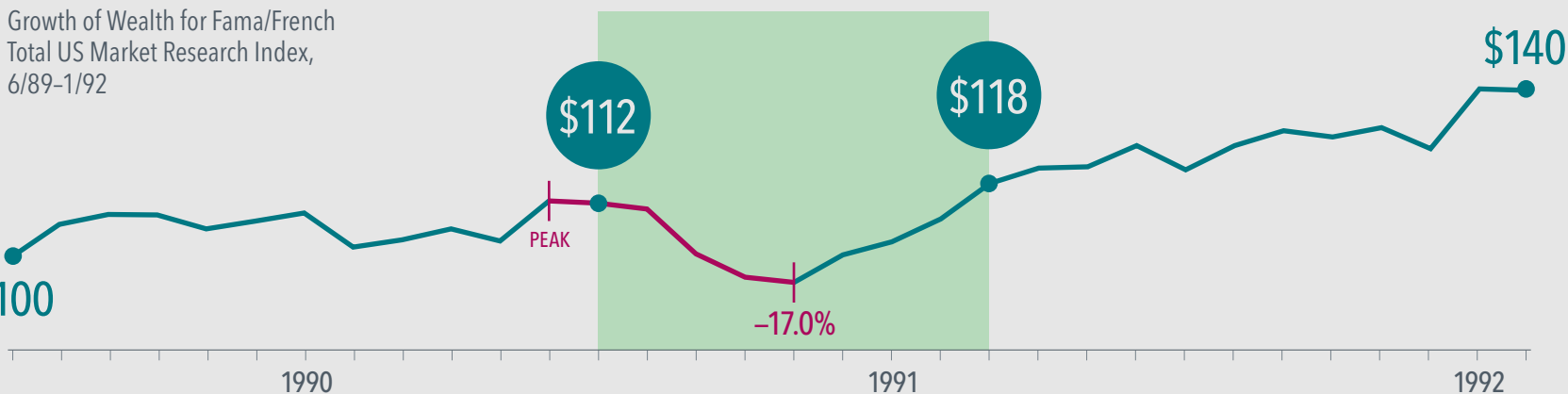
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
8	-3.2%	3.4%	6.6%	-1.4%

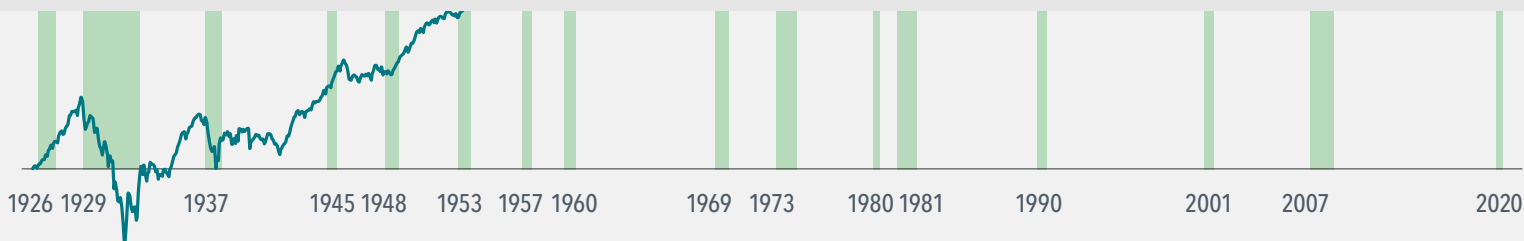
## MARKET DOWNTURN

Duration (Months)	Return from Peak
5	-17.0%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
6/89-1/92



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.

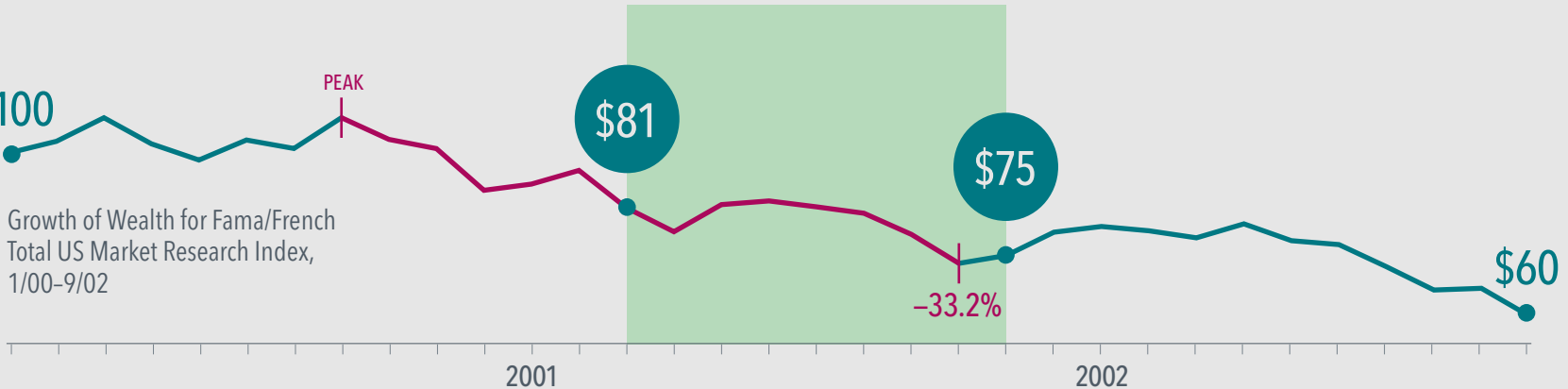


# Tech Boom and Bust

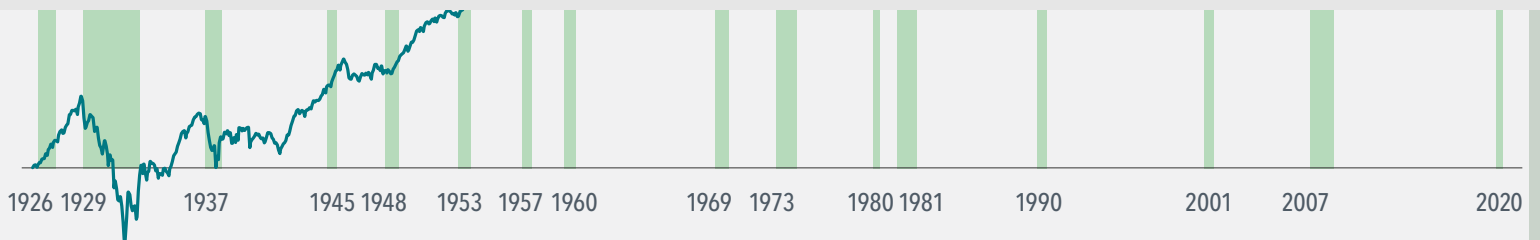


Many investors may not realize that the stock market had started a deep decline before the relatively mild recession in March 2001, which followed the tech boom.

RECESSION					MARKET DOWNTURN	
Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP	Duration (Months)	Return from Peak
8	-3.0%	0.9%	5.3%	0.4%	13	-33.2%



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.





# Global Financial Crisis



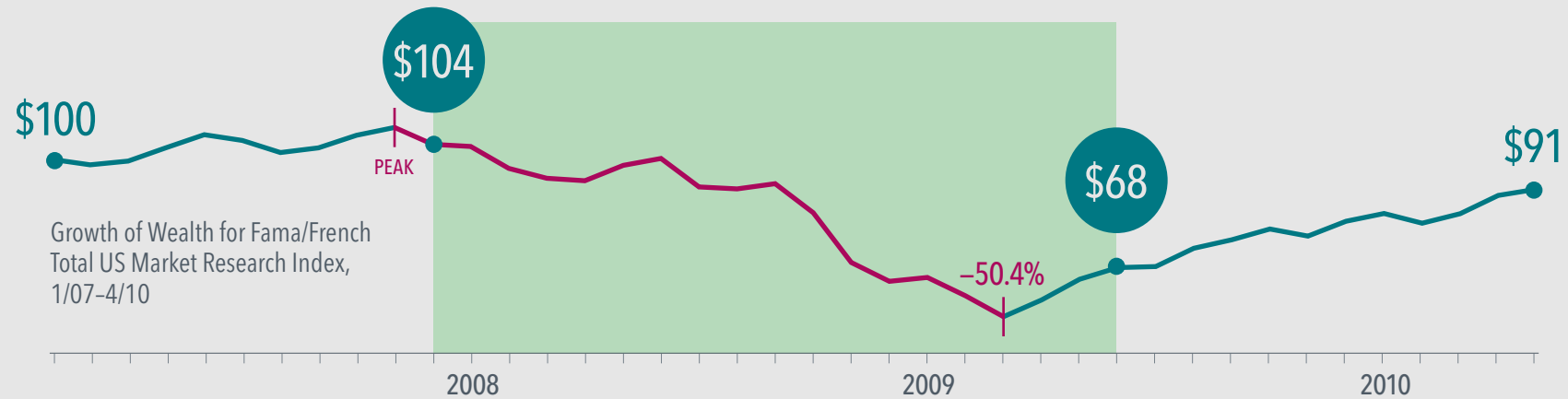
During the Global Financial Crisis, the worst of the 50.4% stock market dive happened in the latter half of an 18-month recession that saw unemployment hit 9.4% and industrial production tumble 17%. But after falling for 16 months, the market started a nearly 11-year bull run.

## RECESSION

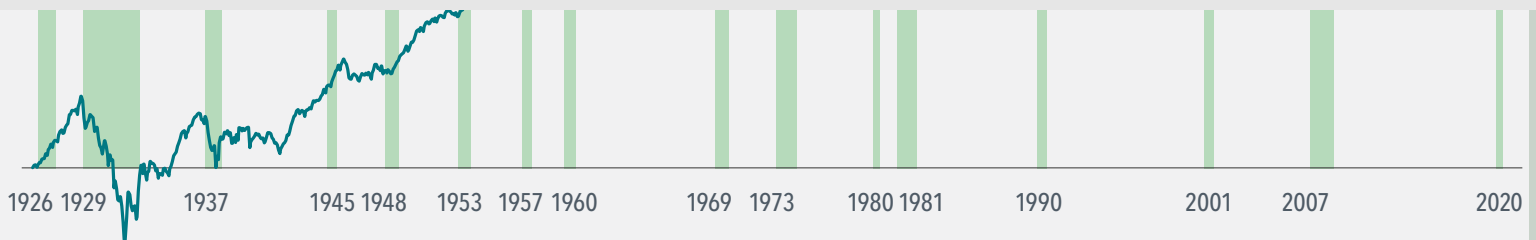
Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
18	-17.0%	1.8%	9.4%	-4.0%

## MARKET DOWNTURN

Duration (Months)	Return from Peak
16	-50.4%



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



# COVID-19



The shortest recession in the past 100 years—and the deepest decline in GDP (–8.9%) since World War II—occurred in early 2020. The US stock market tumbled more than 20% as investors priced in the effects of the pandemic. But stocks made a sharp rebound and recorded a 24.1% gain for the year.

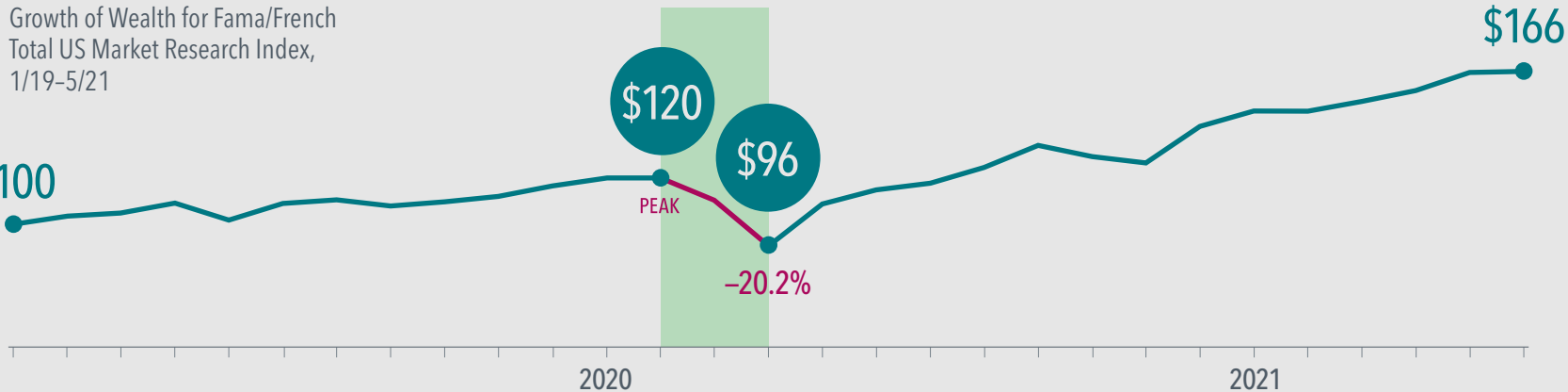
## RECESSION

Duration (Months)	Industrial Production	Inflation	Max Unemployment	Change in GDP
2	–3.8%	–0.2%	4.4%	–8.9%

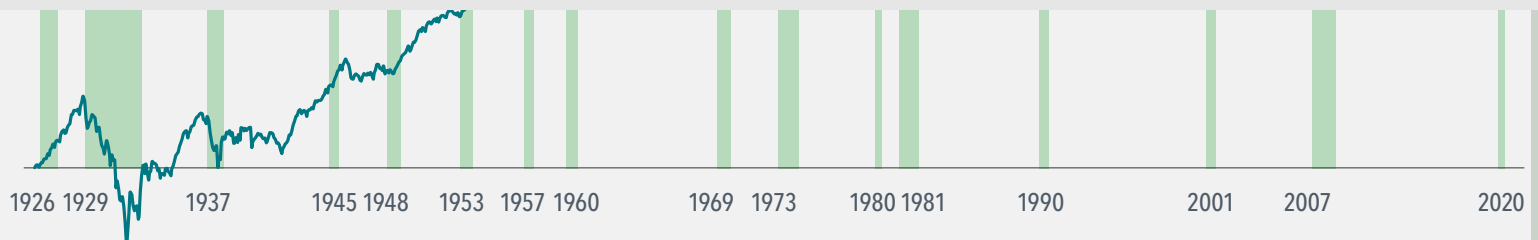
## MARKET DOWNTURN

Duration (Months)	Return from Peak
2	–20.2%

Growth of Wealth for Fama/French  
Total US Market Research Index,  
1/19–5/21



Peak represents month-end stock market peak prior to market downturn associated with recession. Past performance is no guarantee of future results.



## NOTES AND DATA SOURCES

- In US dollars. Stock returns represented by Fama/French Total US Market Research Index, provided by Ken French and available at [mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html). This value-weighted US market index is constructed every month, using all issues listed on the NYSE, AMEX, or Nasdaq with available outstanding shares and valid prices for that month and the month before. Exclusions: American depositary receipts. Sources: CRSP for value-weighted US market return. Rebalancing: Monthly. Dividends: Reinvested in the paying company until the portfolio is rebalanced.
- Growth of wealth shows the growth of a hypothetical investment of \$100 in the securities in the Fama/French US Total Market Research Index from July 1926 through December 2021.
- Gross Domestic Product (GDP) based on quarterly data from the US Bureau of Economic Analysis; quarterly data not available prior to 1947. Percentage change in GDP based on business cycle peak to trough quarter as reported by National Bureau of Economic Research (NBER).
- Industrial Production, Inflation, and Unemployment based on monthly data from Federal Reserve Bank of St. Louis (FRED); Unemployment data not reported prior to 1929.
- All calculations are cumulative.

---

Data presented in the Growth of Wealth chart is hypothetical and assumes reinvestment of income and no transaction costs or taxes. The chart is for illustrative purposes only and is not indicative of any investment.

Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

The Fama/French Indices represent academic concepts that may be used in portfolio construction and are not available for direct investment or for use as a benchmark. Results shown during periods prior to each index's index inception date do not represent actual returns of the respective index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains.

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.

The information in this material is intended for the recipient's background information and use only. It is provided in good faith and without any warranty or representation as to accuracy or completeness. Information and opinions presented in this material have been obtained or derived from sources believed by Dimensional to be reliable and Dimensional has reasonable grounds to believe that all factual information herein is true as at the date of this material. It does not constitute investment advice, recommendation, or an offer of any services or products for sale and is not intended

to provide a sufficient basis on which to make an investment decision. It is the responsibility of any persons wishing to make a purchase to inform themselves of and observe all applicable laws and regulations. Unauthorized reproduction or transmitting of this material is strictly prohibited. Dimensional accepts no responsibility for loss arising from the use of the information contained herein.

"Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., Dimensional Ireland Limited, DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd, Dimensional Japan Ltd. and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

### RISKS

**Investments involve risks. The investment return and principal value of an investment may fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original value. Past performance is not a guarantee of future results. There is no guarantee strategies will be successful.**

**UNITED STATES:** Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

Investment products: • Not FDIC Insured • Not Bank Guaranteed • May Lose Value  
Dimensional Fund Advisors does not have any bank affiliates.



**CANADA:** May 31, 2022. These materials have been prepared by Dimensional Fund Advisors Canada ULC. They are provided for educational purposes only, should not be construed as investment advice or an offer of any security for sale and do not represent a recommendation of any particular security, strategy or investment product.

Commissions, trailing commissions, management fees, and expenses all may be associated with mutual fund investments. Please read the prospectus before investing. Unless otherwise noted, any indicated total rates of return reflect the historical annual compounded total returns including changes in share or unit value and reinvestment of all dividends or other distributions and do not take into account sales, redemption, distribution, or optional charges or income taxes payable by any security holder that would have reduced returns. Mutual funds are not guaranteed, their values change frequently, and past performance may not be repeated.

**AUSTRALIA and NEW ZEALAND:** This material is issued by DFA Australia Limited (AFS License No. 238093, ABN 46 065 937 671). This material is provided for information only. No account has been taken of the objectives, financial situation or needs of any particular person. Accordingly, to the extent this material constitutes general financial product advice, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to the investor's objectives, financial situation and needs. Investors should also consider the Product Disclosure Statement (PDS) and the target market determination (TMD) that has been made for each financial product either issued or distributed by DFA Australia Limited prior to acquiring or continuing to hold any investment. Go to [au.dimensional.com/funds](http://au.dimensional.com/funds) to access a copy of the PDS or the relevant TMD. Any opinions expressed in this material reflect our judgement at the date of publication and are subject to change.

#### **WHERE ISSUED BY DIMENSIONAL IRELAND LIMITED**

Issued by Dimensional Ireland Limited (Dimensional Ireland), with registered office 10 Earlsfort Terrace, Dublin 2, D02 T380, Ireland. Dimensional Ireland is regulated by the Central Bank of Ireland (Registration No. C185067).

Dimensional Ireland does not give financial advice. You are responsible for deciding whether an investment is suitable for your personal circumstances, and we recommend that a financial adviser helps you with that decision.

Dimensional Ireland issues information and materials in English and may also issue information and materials in certain other languages. The recipient's continued acceptance of information and materials from Dimensional Ireland will constitute the recipient's consent to be provided with such information and materials, where relevant, in more than one language.

#### **WHERE ISSUED BY DIMENSIONAL FUND ADVISORS LTD.**

Issued by Dimensional Fund Advisors Ltd. (Dimensional UK), 20 Triton Street, Regent's Place, London, NW1 3BF. Dimensional UK is authorised and regulated by the Financial Conduct Authority (FCA) - Firm Reference No. 150100.

Dimensional UK does not give financial advice. You are responsible for deciding whether an investment is suitable for your personal circumstances, and we recommend that a financial adviser helps you with that decision.

Dimensional UK issues information and materials in English and may also issue information and materials in certain other languages. The recipient's continued acceptance of information and materials from Dimensional UK will constitute the recipient's consent to be provided with such information and materials, where relevant, in more than one language.

**NOTICE TO INVESTORS IN SWITZERLAND:** This is advertising material.

**JAPAN:** For Institutional Investors and Registered Financial Instruments Intermediary Service Providers.

This material is deemed to be issued by Dimensional Japan Ltd., which is regulated by the Financial Services Agency of Japan and is registered as a Financial Instruments Firm conducting Investment Management Business and Investment Advisory and Agency Business.

Dimensional Japan Ltd.

Director of Kanto Local Finance Bureau (FIBO) No. 2683

Membership: Japan Investment Advisers Association

**SINGAPORE:** This document is deemed to be issued by Dimensional Fund Advisors Pte. Ltd., which is regulated by the Monetary Authority of Singapore and holds a capital markets services license for fund management.

**This advertisement has not been reviewed by the Monetary Authority of Singapore.**

This information should not be considered investment advice or an offer of any security for sale. All information is given in good faith without any warranty and is not intended to provide professional, investment or any other type of advice or recommendation and does not take into account the particular investment objectives, financial situation or needs of individual recipients. Before acting on any information in this document, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice. Dimensional Fund Advisors Pte. Ltd. does not accept any responsibility and cannot be held liable for any person's use of or reliance on the information and opinions contained herein. Neither Dimensional Fund Advisors Pte. Ltd. nor its affiliates shall be responsible or held responsible for any content prepared by financial advisors.

## FOR PROFESSIONAL INVESTORS IN HONG KONG

This material is deemed to be issued by Dimensional Hong Kong Limited (CE No. BJE760) ("Dimensional Hong Kong"), which is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

This material should only be provided to "professional investors" (as defined in the Securities and Futures Ordinance [Chapter 571 of the Laws of Hong Kong] and its subsidiary legislation) and is not for use with the public. When provided to prospective investors, this material forms part of, and must be provided together with, applicable fund offering materials. This material must not be provided to prospective investors on a standalone basis. Before acting on any information in this material, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice.

Neither Dimensional Hong Kong nor its affiliates shall be responsible or held responsible for any content prepared by financial advisors. Financial advisors in Hong Kong shall not actively market the services of Dimensional Hong Kong or its affiliates to the Hong Kong public.

### AMERICAS

Austin, Charlotte, Santa Monica, Toronto, Vancouver

### EUROPE

Amsterdam, Berlin, Dublin, London

### ASIA PACIFIC

Hong Kong, Melbourne, Singapore, Sydney, Tokyo

[dimensional.com](http://dimensional.com)

