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# Stocks and Bonds

# Investing in Stocks and Bonds

## **Stocks**

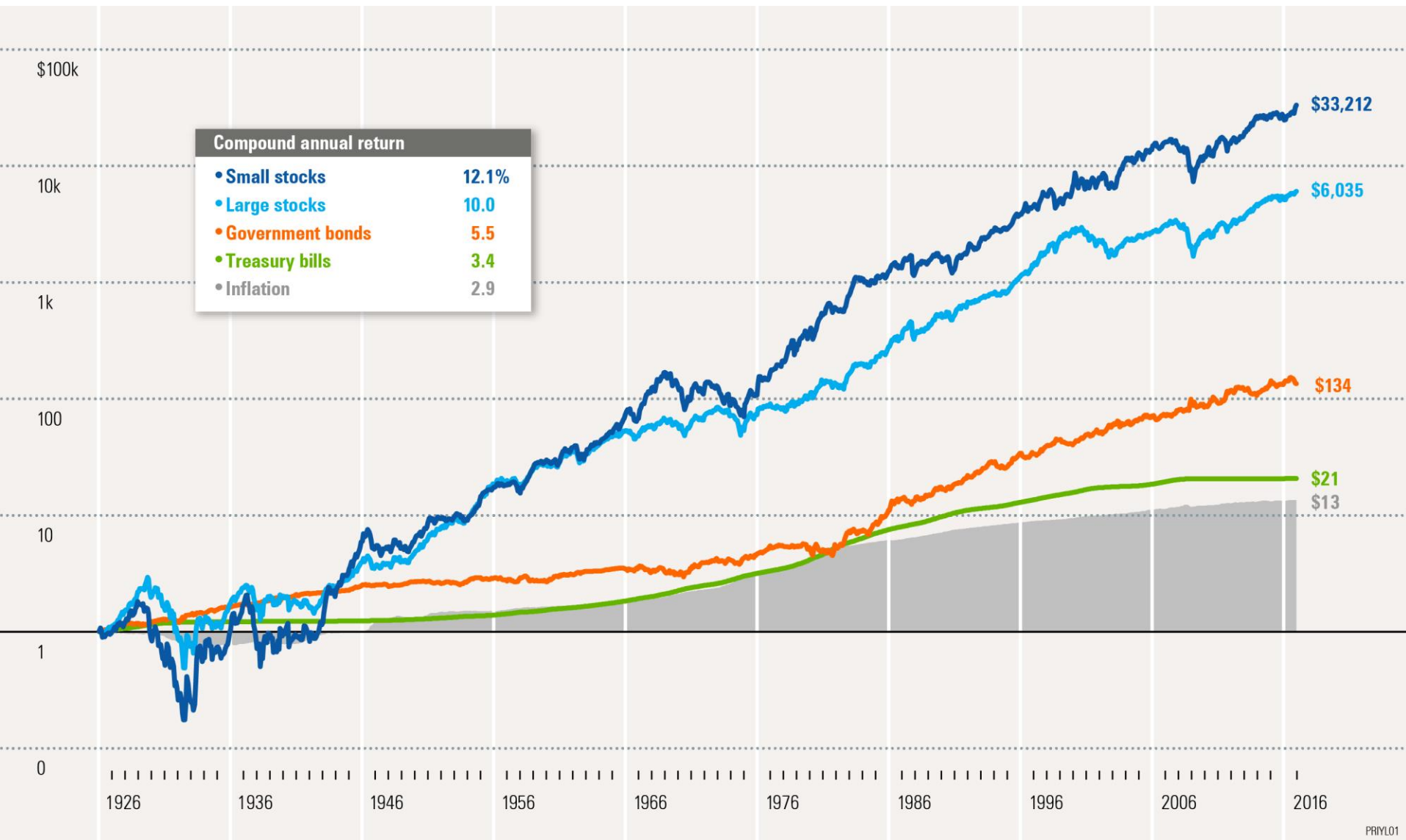
- ▶ Ownership in a corporation
- ▶ Voting rights
- ▶ Historically higher returns
- ▶ More risk

## **Bonds**

- ▶ Potential growth
- ▶ Historically lower risk
- ▶ Income generation

# Ibbotson® SBBI®

## Stocks, Bonds, Bills, and Inflation 1926–2016



**Past performance is no guarantee of future results.** Hypothetical value of \$1 invested at the beginning of 1926. Assumes reinvestment of income and no transaction costs or taxes. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar. All Rights Reserved.

# Ibbotson® SBBI®

## Stocks, Bonds, Bills, and Inflation 1997–2016



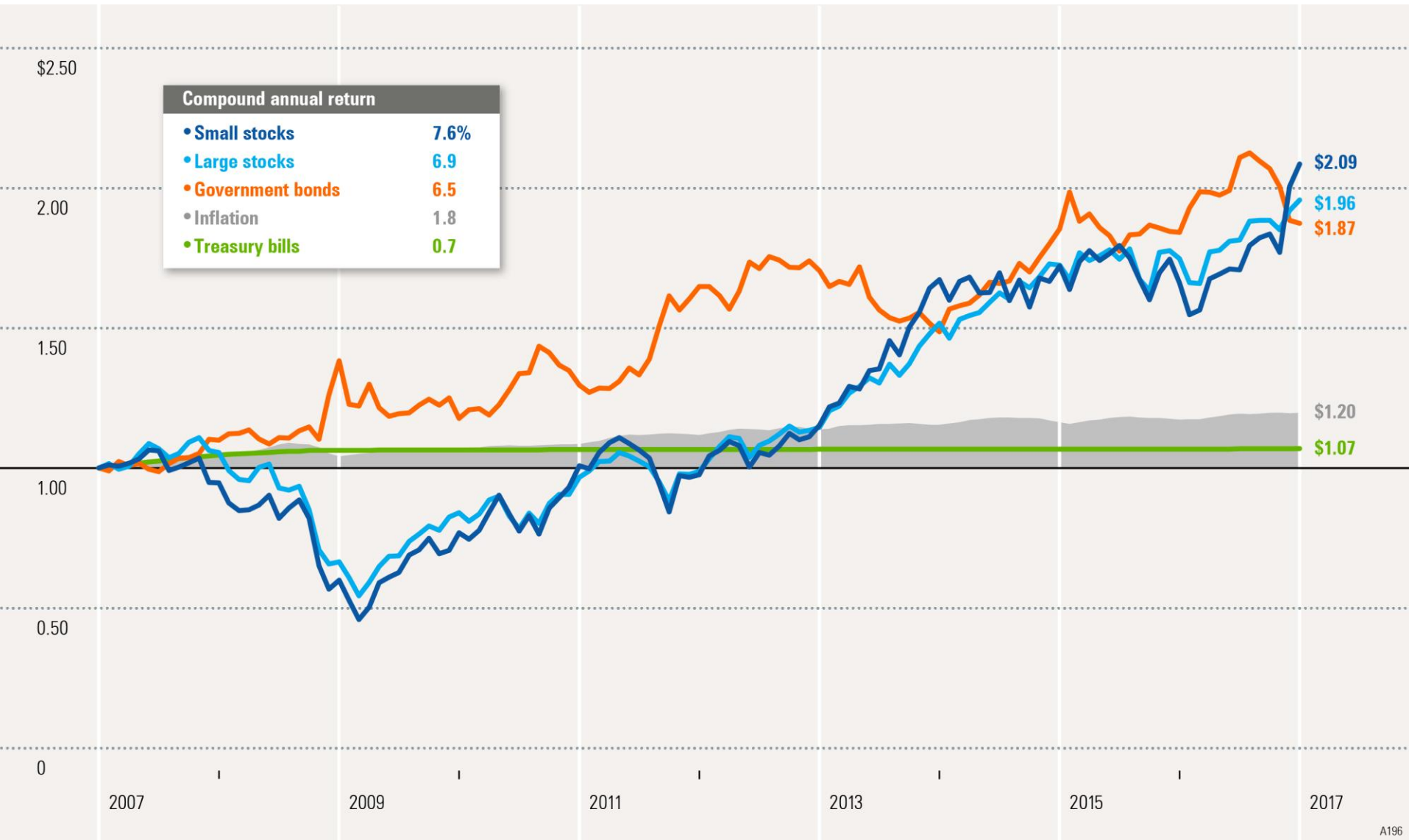
PRIVL02

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# The Past 10 Years

## 2007–2016



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# Stocks, Commodities, REITs, and Gold 1980–2016

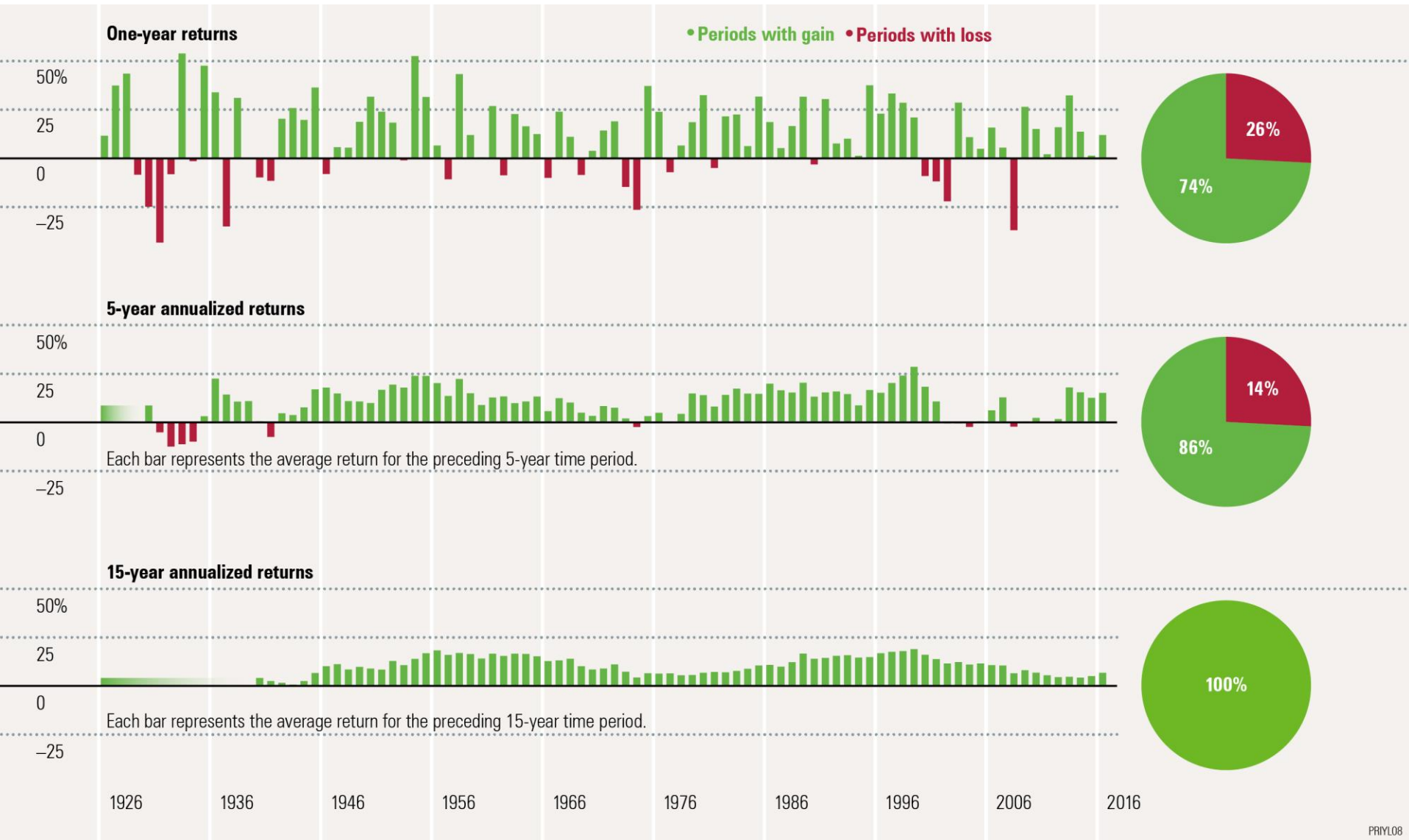


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# Risk of Stock Market Loss Over Time

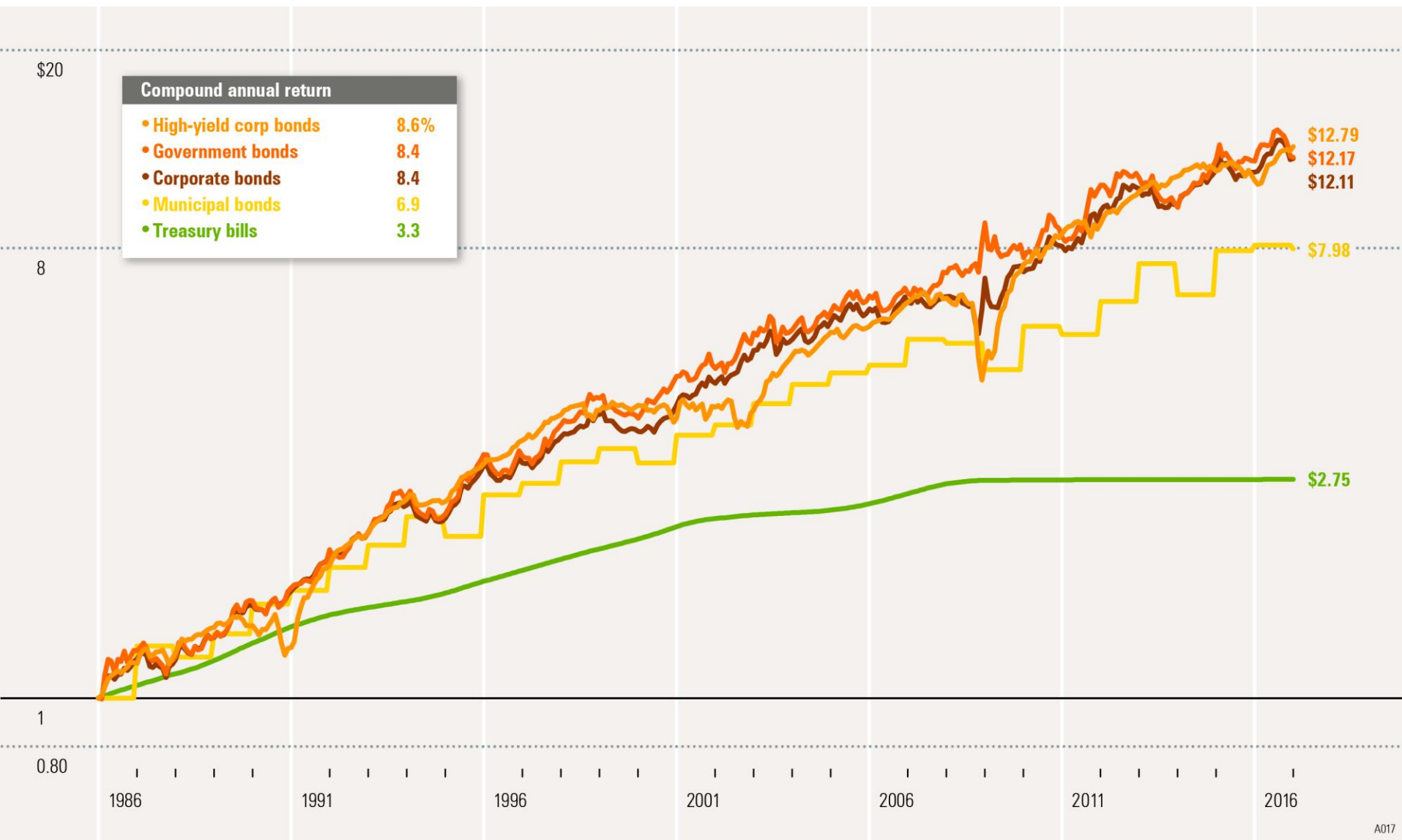
## 1926–2016



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# Bond Market Performance

1986–2016



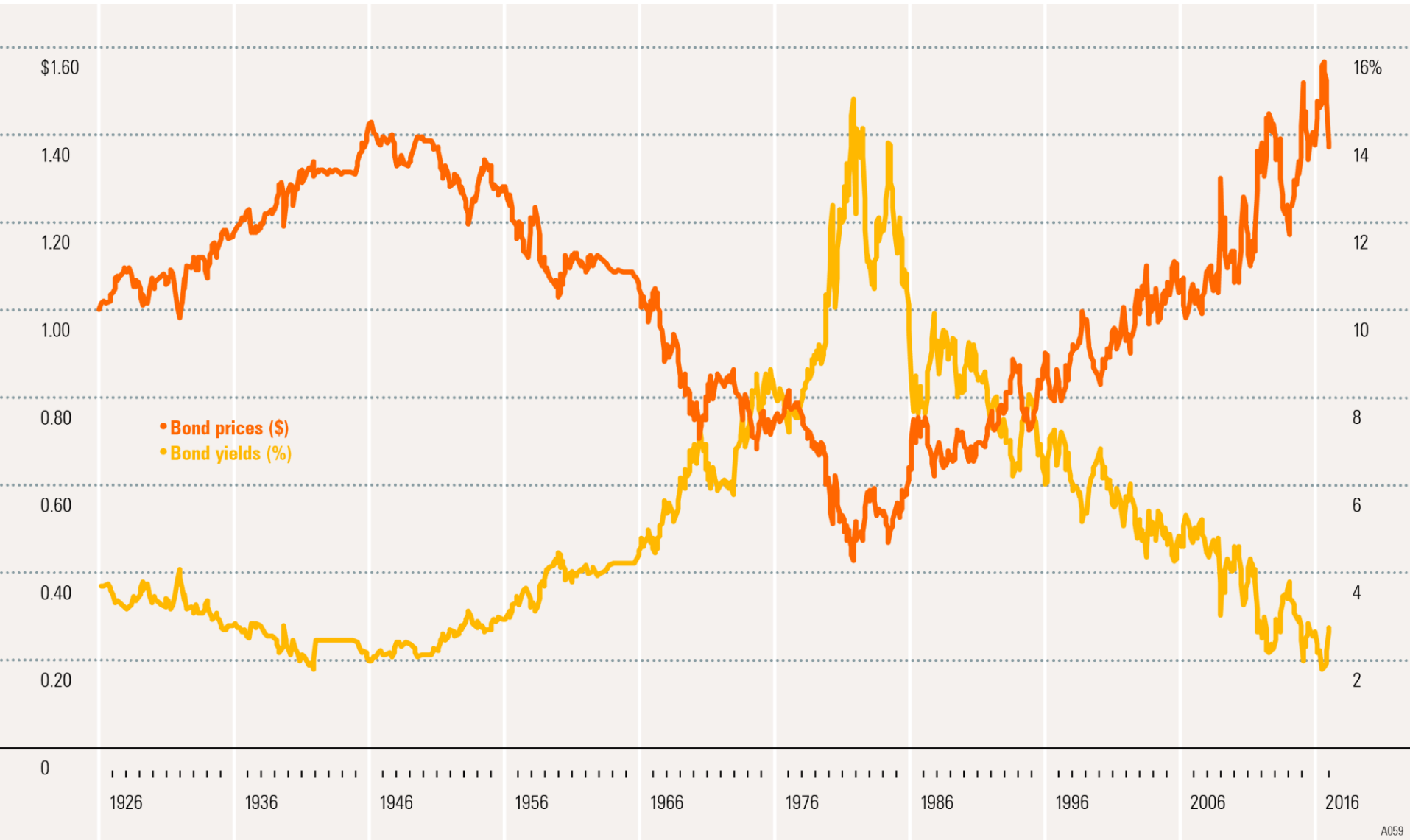
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# Relationship Between Bond Prices and Yields

When yields increase, bond prices decrease

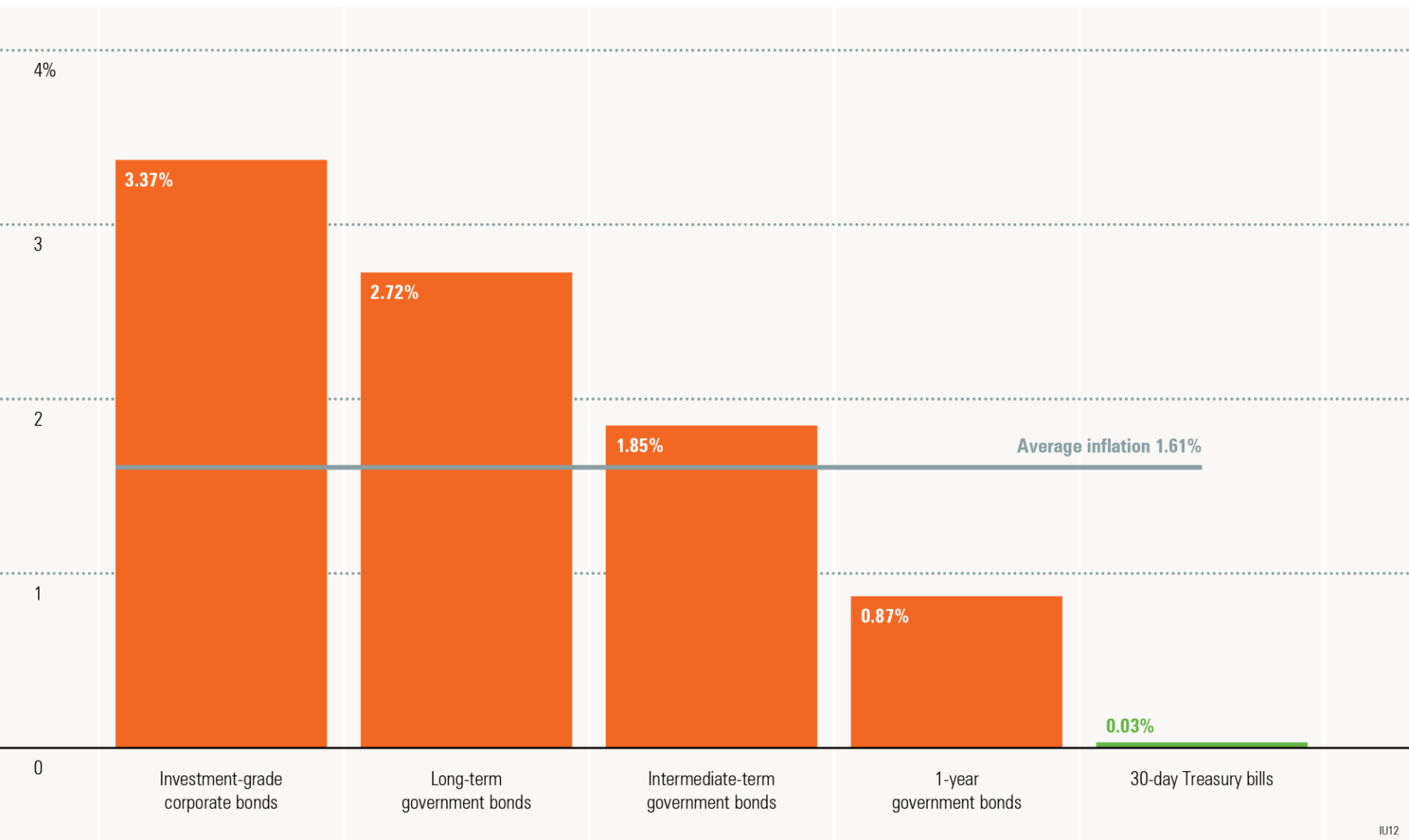


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# Fixed-Income Yields Versus Average 10-Year Inflation

As of December 2016



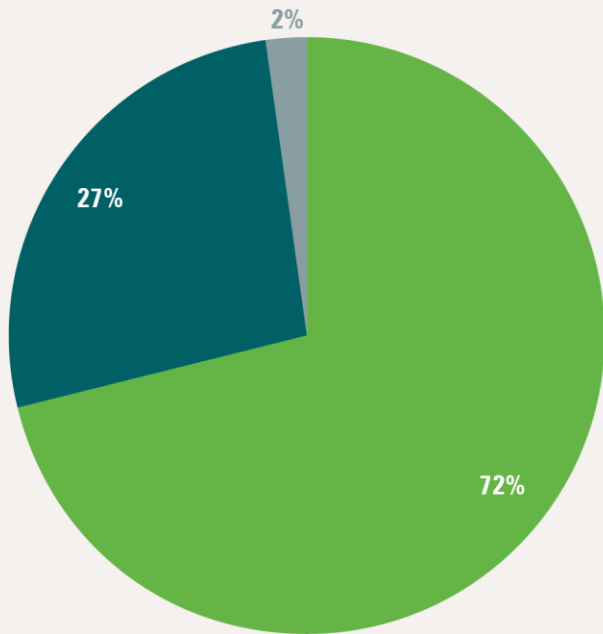
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# Bonds Produced Greater Income

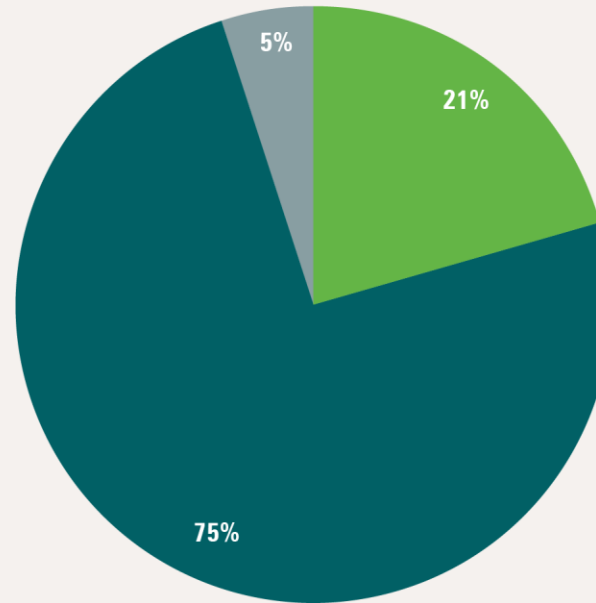
## Percentage of total return 1970–2016

Stocks



Percentages may not add up to 100% due to rounding.

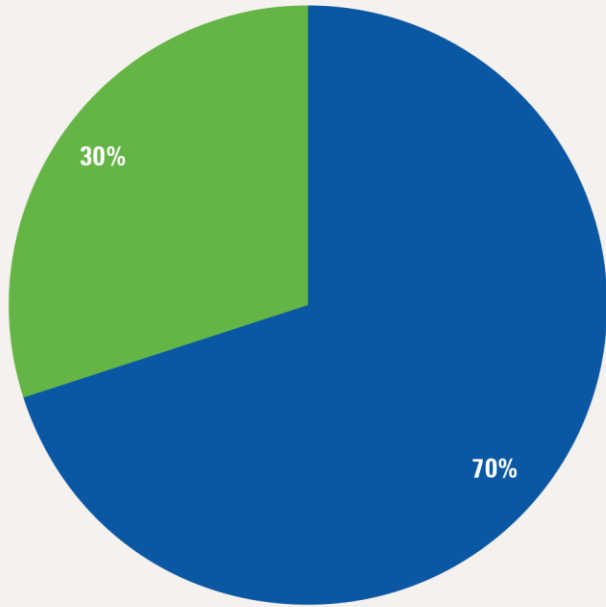
Bonds



- Capital appreciation
- Income
- Reinvestment of income

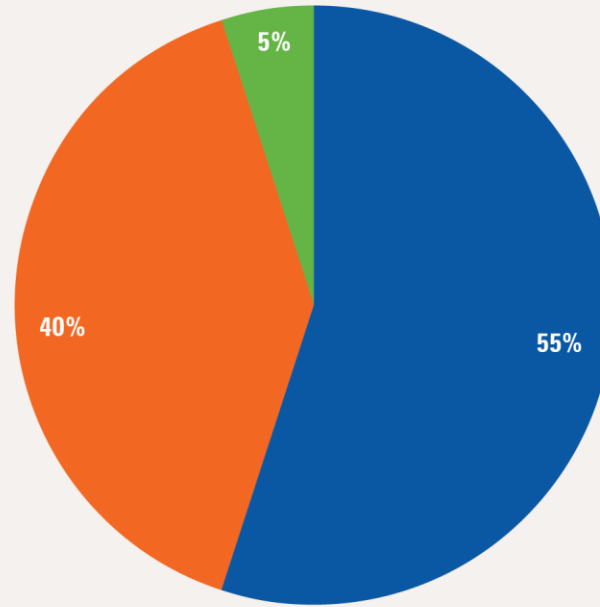
# Adding a Bond Allocation to Diversify 1970–2016

Original portfolio



Return 9.7%  
Risk 12.1%

Lower risk portfolio

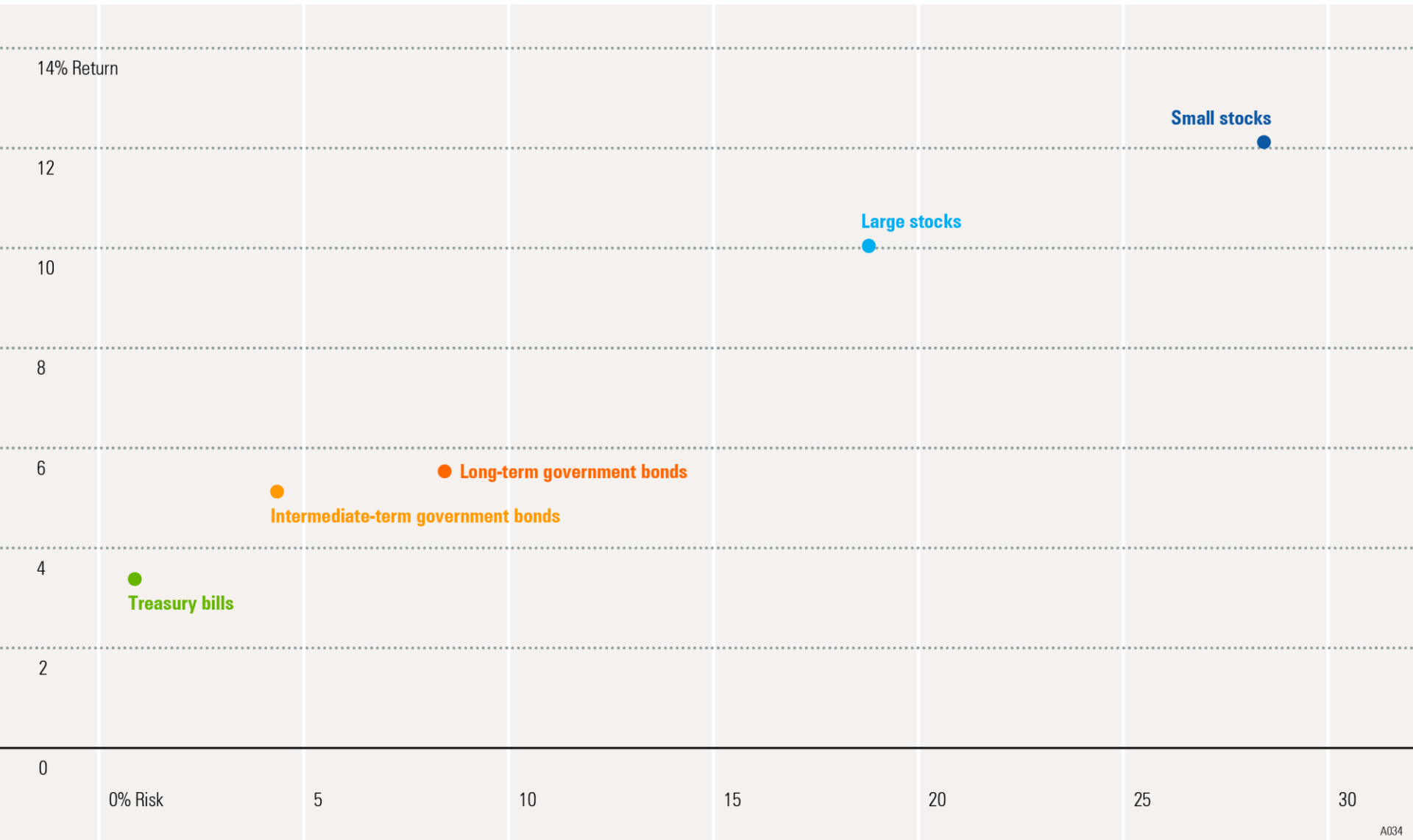


Return 9.7%  
Risk 9.9%

- Stocks
- Bonds
- Cash

# Risk Versus Return

## Stocks, bonds, and bills 1926–2016



**Past performance is no guarantee of future results.** Risk and return are measured by monthly annualized standard deviation and compound annual return, respectively. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar. All Rights Reserved.

# Asset-Class Winners and Losers

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Highest return	33.4	28.6	29.8	21.5	22.8	17.8	60.7	20.7	14.0	26.9	11.6	25.9	32.5	31.3	27.1	18.2	45.1	24.7	1.4	25.6
	22.8	20.3	27.3	5.9	3.8	1.6	39.2	18.4	7.8	16.2	9.9	1.6	28.1	15.1	2.9	17.9	32.4	13.7	0.0	12.0
	15.9	13.1	21.0	0.1	3.7	-6.3	28.7	11.9	7.1	15.8	5.5	-17.9	26.5	13.0	2.1	16.0	23.3	7.4	-0.4	8.2
	15.9	11.9	14.8	-3.6	-0.6	-13.3	26.2	10.9	5.7	13.0	5.3	-36.7	14.4	10.1	0.0	11.1	17.6	2.9	-0.6	1.8
	5.3	4.9	4.7	-9.1	-11.9	-15.7	1.4	8.5	4.9	4.8	4.7	-37.0	0.1	8.2	-3.3	3.4	0.0	0.0	-0.7	1.5
Lowest return	2.1	-7.3	-9.0	-14.0	-21.2	-22.1	1.0	1.2	3.0	1.2	-5.2	-43.1	-14.9	0.1	-11.7	0.1	-12.8	-4.5	-3.6	0.2

• Small stocks

• Large stocks

• International stocks

• Long-term government bonds

• Treasury bills

• Diversified portfolio

PRIVL09

**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. The diversified portfolio is equally weighted between small stocks, large stocks, long-term government bonds, Treasury bills, and international stocks (20% each). © Morningstar. All Rights Reserved.





# Stock and Bond Snapshots

Returns over various time periods as of December 2016






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# Stock and Bond Portfolios

Probability of gain or loss over one-, five-, and ten-year rolling periods, 1970–2016

			Large loss		Large gain	
			< -10%	-10% to 0%	0% to 10%	> 10%
 <b>Aggressive portfolio</b>	Year(s)	1	9%	11%	21%	60%
		5	0%	0%	38%	62%
		10	0%	0%	41%	59%
 <b>Moderate portfolio</b>	Year(s)	1	6%	9%	28%	57%
		5	0%	0%	38%	62%
		10	0%	0%	38%	62%
 <b>Conservative portfolio</b>	Year(s)	1	0%	13%	40%	47%
		5	0%	0%	64%	36%
		10	0%	0%	70%	30%

Percentages are rounded to the nearest whole; may not add up to 100% exactly.

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