How to think about investing?

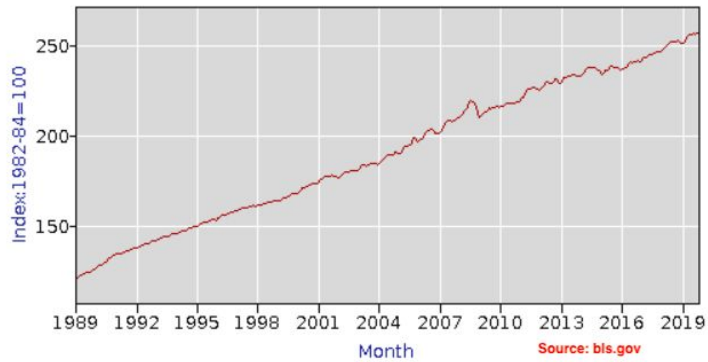
Jana Vembunarayanan

Why not keep your money under the mattress?

Inflation eats into your savings

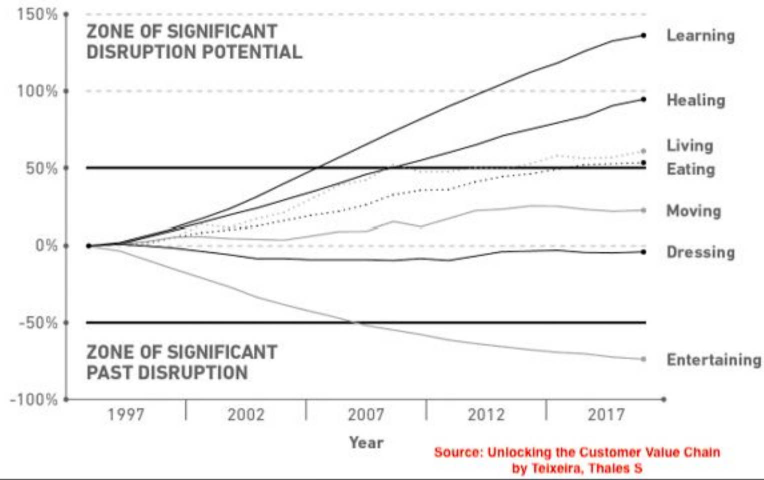
CPI for All Urban Consumers (CPI-U)

Series Id: CUUR0000SA0
Not Seasonally Adjusted
Series Title: All items in U.S. city average, all urban consumers, not seasonally adjusted
Area: U.S. city average
Item: All items
Base Period: 1982-84=100



From 1989 to 2019, Consumer Price Index (CPI) grew from 121 to 251, representing a CAGR of 2.46%
A simple video that explains how CPI is calculated:
https://www.youtube.com/watch?v=-IvsuVtzGko

Cost of education is growing faster than inflation



Source: Adapted from U.S. Bureau of Labor Statistics.

Source: Unlocking the Customer Value Chain by Teixeira, Thales S.

The Big Seven categories correspond to a series of consumption choices that people must make in the course of their daily lives: where to live (housing, home goods, and maintenance), how to move (air and land transportation), what to eat (food, drinks, and their preparation), what to wear (fashion, cosmetics, and personal grooming), how to learn (formal and informal education), how to entertain (media, electronics, and sports), and how to heal ourselves (healthcare, physical and mental treatments).

In real terms, prices increased for five (learning, healing, living, and eating) of the Big Seven items.

In 2018, US Households own $113 trillion in assets

Asset	Amount (in trillions)	% of total assets
Owner-occupied real estate	$25.8	23%
Pension entitlements (including 401K and IRA)	$25.7	23%
Equities and Mutual funds	$21.7	19%
Debt, Government, Municipal Securities	$9.6	8%

Source: https://www.federalreserve.gov/releases/z1/20190606/html/b101h.htm

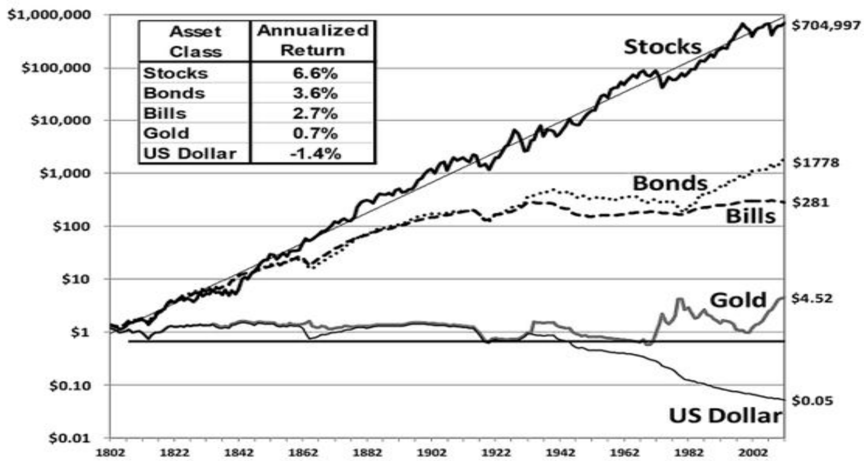
Which asset class will grow faster than inflation?

It depends on who you ask and the period they use for comparison.

Should you invest only in stocks?

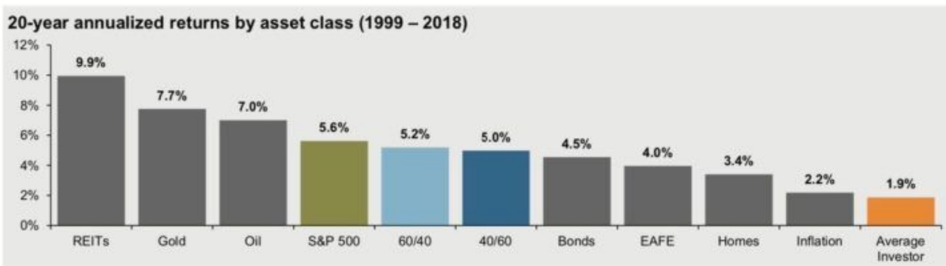
FIGURE 1–1

Total Real Returns on U.S. Stocks, Bonds, Bills, Gold, and the Dollar, 1802–2012



Source: [Stocks for the Long Run]

Should you invest only in REITs?



Source: J.P. Morgan Asset Management; (Top) Barclays, Bloomberg, FactSet, Standard & Poor's; (Bottom) Dalbar Inc.
Indices used are as follows: REITS: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Bloomberg Barclays U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz., Inflation: CPI. 60/40: A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high-quality U.S. fixed income, represented by the Bloomberg Barclays U.S. Aggregate Index. The portfolio is rebalanced annually. 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. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/18 to match Dalbar's most recent analysis.
Guide to the Markets – U.S. Data are as of March 31, 2019.

J.P.Morgan
Asset Management

Even Gold had its good times

	Total Returns	Annual Returns	Real Returns
2010s	0.8%	0.1%	-1.7%
2000s	280.9%	14.3%	11.7%
1990s	-28.2%	-3.3%	-6.3%
1980s	-21.6%	-2.4%	-7.9%
1970s	1365.4%	30.8%	23.7%

	Total Returns	Annual Returns	Real Returns
Since 1970	3064.4%	7.9%	3.7%
Since 1980	97.6%	1.9%	-1.5%
Since 1990	177.1%	4.1%	1.5%
Since 2000	282.6%	9.0%	6.7%

Source: https://awealthofcommonsense.com/2015/07/a-history-of-gold-returns/

Every asset class has its day

A diversified portfolio may reduce volatility

Ranked annual total returns of key indices (1999–2018)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Best	Lg cap growth 33.2%	Fixed income 11.6%	Fixed income 8.4%	Fixed income 10.3%	Sm cap 47.3%	Int'l 20.3%	Int'l 13.5%	Int'l 26.3%	Lg cap growth 11.8%	Fixed income 5.2%
	Int'l 27.0%	Lg cap value 7.0%	Cash 4.4%	Cash 1.8%	Int'l 38.6%	Sm cap 18.3%	Lg cap value 7.1%	Lg cap value 22.3%	Int'l 11.2%	Cash 2.1%
	Sm cap 21.3%	Cash 6.2%	Sm cap 2.5%	Div portfolio -9.8%	Lg cap value 30.0%	Lg cap value 16.5%	Div portfolio 5.4%	Sm cap 18.4%	Fixed income 7.0%	Div portfolio -22.8%
	Lg cap core 21.0%	Div portfolio -1.1%	Div portfolio -4.8%	Lg cap value -15.5%	Lg cap growth 29.8%	Lg cap core 10.9%	Lg cap growth 5.3%	Lg cap core 15.8%	Div portfolio 6.0%	Sm cap -33.8%
	Div portfolio 13.6%	Sm cap -3.0%	Lg cap value -5.6%	Int'l -15.9%	Lg cap core 28.7%	Div portfolio 10.5%	Lg cap core 4.9%	Div portfolio 13.0%	Lg cap core 5.5%	Lg cap value -36.9%
	Lg cap value 7.4%	Lg cap core -9.1%	Lg cap core -11.9%	Sm cap -20.5%	Div portfolio 23.5%	Lg cap growth 6.3%	Sm cap 4.6%	Lg cap growth 9.1%	Cash 5.0%	Lg cap core -37.0%
	Cash 4.9%	Int'l -14.2%	Lg cap growth -20.4%	Lg cap core -22.1%	Fixed income 4.1%	Fixed income 4.3%	Cash 3.1%	Cash 4.9%	Lg cap value -0.2%	Lg cap growth -38.4%
Worst	Fixed income -0.8%	Lg cap growth -22.4%	Int'l -21.4%	Lg cap growth -27.9%	Cash 1.2%	Cash 1.3%	Fixed income 2.4%	Fixed income 4.3%	Sm cap -1.6%	Int'l -43.4%

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Best	Lg cap growth 37.2%	Sm cap 26.9%	Fixed income 7.8%	Lg cap value 17.5%	Sm cap 38.8%	Lg cap core 13.7%	Lg cap growth 5.7%	Sm cap 21.3%	Lg cap growth 30.2%	Cash 1.9%
	Int'l 31.8%	Lg cap growth 16.7%	Lg cap growth 2.6%	Int'l 17.3%	Lg cap growth 33.5%	Lg cap value 13.5%	Lg cap core 1.4%	Lg cap value 17.3%	Int'l 25.0%	Fixed income 0.0%
	Sm cap 27.2%	Lg cap value 15.5%	Lg cap core 2.1%	Sm cap 16.4%	Lg cap value 32.5%	Lg cap growth 13.1%	Fixed income 0.6%	Lg cap core 12.0%	Lg cap core 21.8%	Lg cap growth -1.5%
	Lg cap core 26.5%	Lg cap core 15.1%	Div portfolio 1.8%	Lg cap core 16.0%	Lg cap core 32.4%	Div portfolio 8.1%	Div portfolio 0.1%	Div portfolio 8.7%	Div portfolio 15.1%	Lg cap core -4.4%
	Div portfolio 20.8%	Div portfolio 13.0%	Lg cap value 0.4%	Lg cap growth 15.3%	Int'l 22.8%	Fixed income 6.0%	Cash 0.1%	Lg cap growth 7.1%	Sm cap 14.7%	Div portfolio -4.7%
	Lg cap value 19.7%	Int'l 7.8%	Cash 0.1%	Div portfolio 12.2%	Div portfolio 20.3%	Sm cap 4.9%	Int'l -0.8%	Fixed income 2.7%	Lg cap value 13.7%	Lg cap value -8.3%
	Fixed income 5.9%	Fixed income 6.5%	Sm cap -4.2%	Fixed income 4.2%	Cash 0.1%	Cash 0.0%	Lg cap value -3.8%	Int'l 1.0%	Fixed income 3.5%	Sm cap -11.0%
Worst	Cash 0.2%	Cash 0.1%	Int'l -12.1%	Cash 0.1%	Fixed income -2.0%	Int'l -4.9%	Sm cap -4.4%	Cash 0.3%	Cash 0.9%	Int'l -13.8%

Source: https://www.blackrock.com/us/individual/literature/investor-education/asset-class-returns-one-pager-va-us.pdf

Keep investing simple

Pay off your credit card and student loan.

The home you live in provides the foundation on which everything else stands.

Over a period of a good many years I have known a great many people who at some time or another have suffered in various ways simply because they did not have ready cash. I have known people who have had to sacrifice some of their holdings in order to have money that was necessary at that time.

For a good many years your grandfather kept a certain amount of money where he could put his hands on it in very short notice.

For a number of years I have made it a point to keep a reserve, should some occasion come up where I would need money quickly, without disturbing the money that I have in my business. There have been a couple occasions when I found it very convenient to go to this fund.

Thus, I feel that everyone should have a reserve. I hope it never happens to you, but the chances are that some day you will need money, and need it badly, and with this thought in view, I started a fund by placing $200.00 in an envelope,with your name on it, when you were married. Each year I added something to it, until there is now $1000.00 in the fund.

Ten years have elapsed since you were married, and this fund is now completed.

It is my wish that you place this envelope in your safety deposit box, and keep it for the purpose that it was created for. Should the time come when you need part, I wohld suggest that you use as little as possible, and replace it as soon as possible.

You might feel that this should be invested and bring you an income. Forget it -- the mental satisfaction of having $1000.00 laid away where you can put your hands on it, is worth more than what interest it might bring, especially if you have the investment in something that you could not realize on quickly.

If in after years you feel this has been a good idea, you might repeat it with your own children.

For your information, I might mention that there has never been a Buffett who ever left a very large estate, but there has never been one that did not leave something. They never spent all they made, but always saved part of what they made, and it has all worked out pretty well.

This letter is being written at the expiration of ten years after you were married.

Set aside cash to cover 6 months of your expenses. It might come in handy during an emergency.

Most of us need income from our paycheck every month. What happens if it stopped? It is better to keep six months of expenses in a safe place. Do not worry about the interest. The mental comfort this provides is much higher than the interest income.

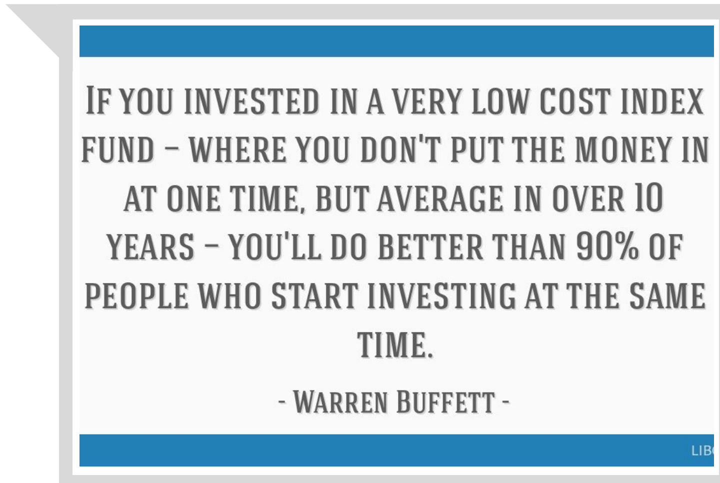
Warren Buffett shared the letter in his 2010 letter to shareholders. The letter was written by in 1939 by Ernest to his youngest son, Fred, who is Warren Buffett's uncle. Source: http://www.berkshirehathaway.com/letters/2010ltr.pdf

Buy a house if you can afford the mortgage.

The home you live in provides the foundation on which everything else stands.

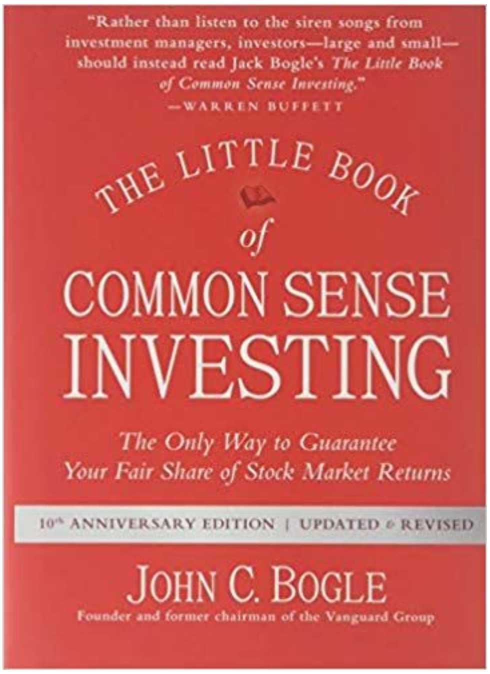
Max out your 401k. LinkedIn matches 50% of your contributions.

Invest your 401k money into low cost index funds



Is there a best investment?


The Best Investment You Will Ever Make is in Yourself.
- Warren Buffett



The Little Book of Common Sense Investing:
https://www.amazon.com/Little-Book-Common-Sense-Investing/dp/1119404509

Thank You