

# Investing

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# Reasons to Save: Taxes



Taxes are expensive (rates as of 2020):

- Federal top marginal income tax is 37%
  - Colorado (flat-)income tax is 4.63%
  - New York State top marginal income tax is 8.82%
    - New York City top marginal income tax is 3.88%
  - California top marginal income tax is 12.3%

The maximum tax you pay ranges from **41.63%** (Colorado) to **49.7%** (New York City)

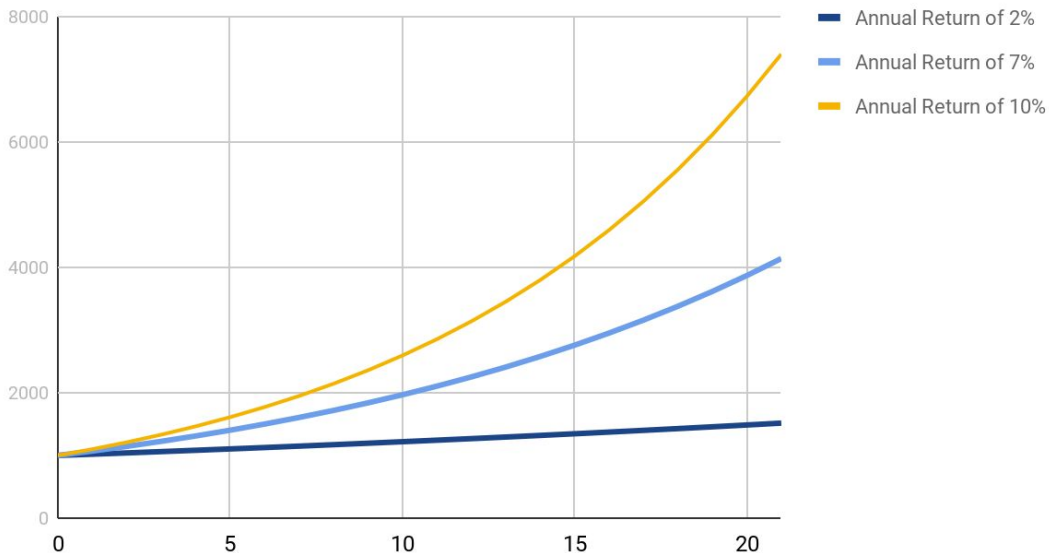
*Spending \$1 ≈ Earning \$2*



# Reasons to Save: Compounding

\$1,515 = \$1000 in 69 years with 2%  
\$4,140 = \$1000 in 69 years with 7%  
**\$7,400** = \$1000 in 69 years with 10%

Growth of \$1000 over 21 years

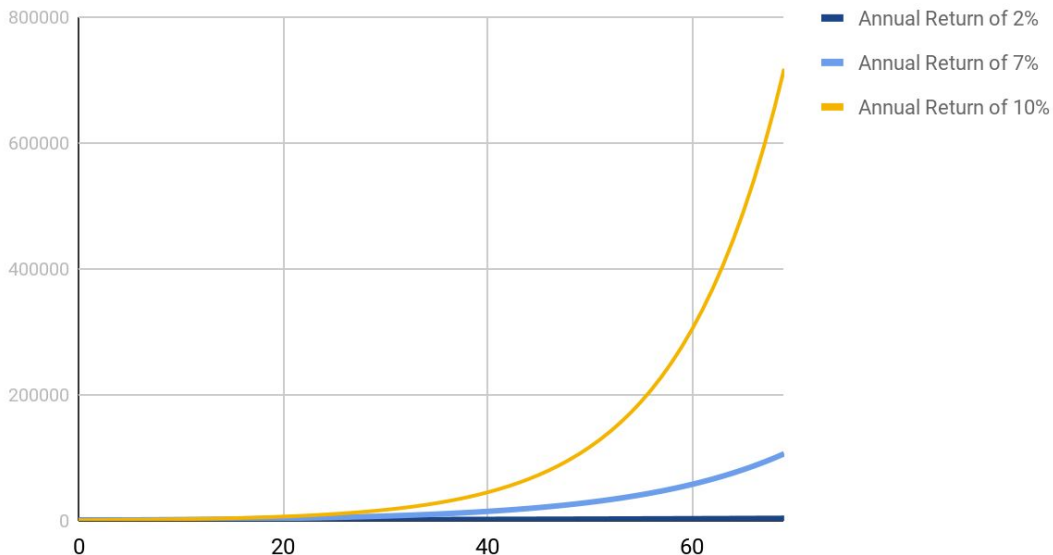




# Reasons to Save: Compounding

\$3,921 = \$1000 in 69 years with 2%  
\$106,532 = \$1000 in 69 years at 7%  
**\$717,951** = \$1000 in 69 years at 10%

Growth of \$1000 over 69 years



# Taxes on Capital Gains

If you sell \$7,400 in stock that you bought for \$1,000,  
you owe \$6,400 in capital gains

Federal top capital gains tax is 23.8%

State capital gains tax = state income tax

The maximum tax you pay ranges from **28.43%** (Colorado) to **36.5%** (New York City)

*Spending \$2  $\approx$  Growing \$3*

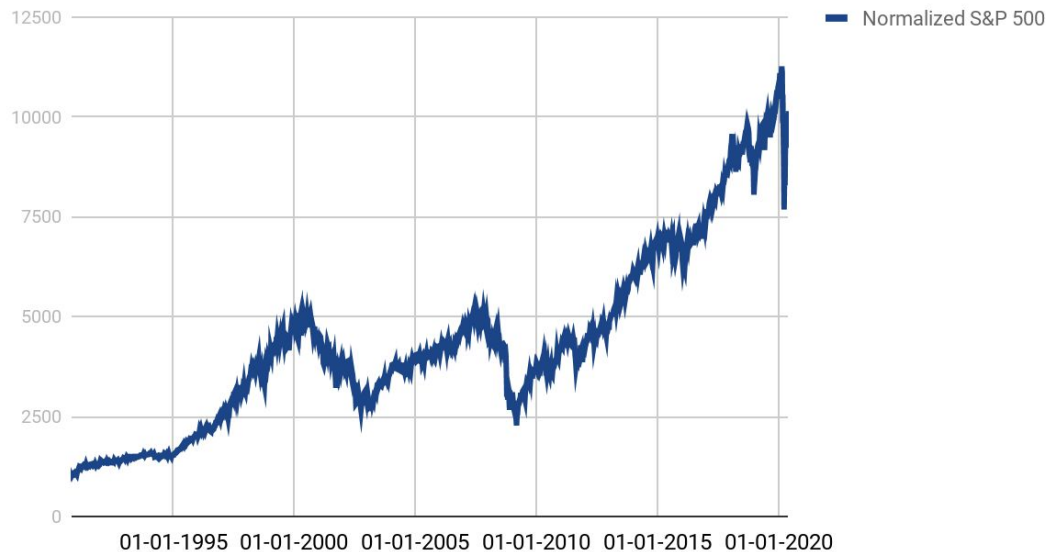




# Last 30 Years

8% / year  $\approx$  10x over last 30 years

Performance of \$1000 over last 30 years

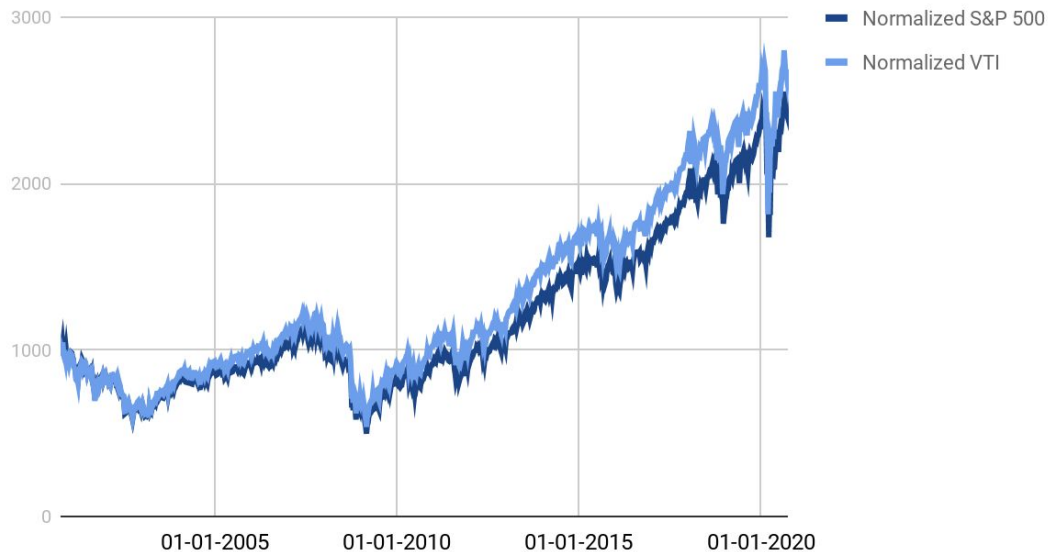




# Last 20 Years

4.7% / year  $\approx$  2.5x over last 20 years

Performance of \$1000 over last 20 years

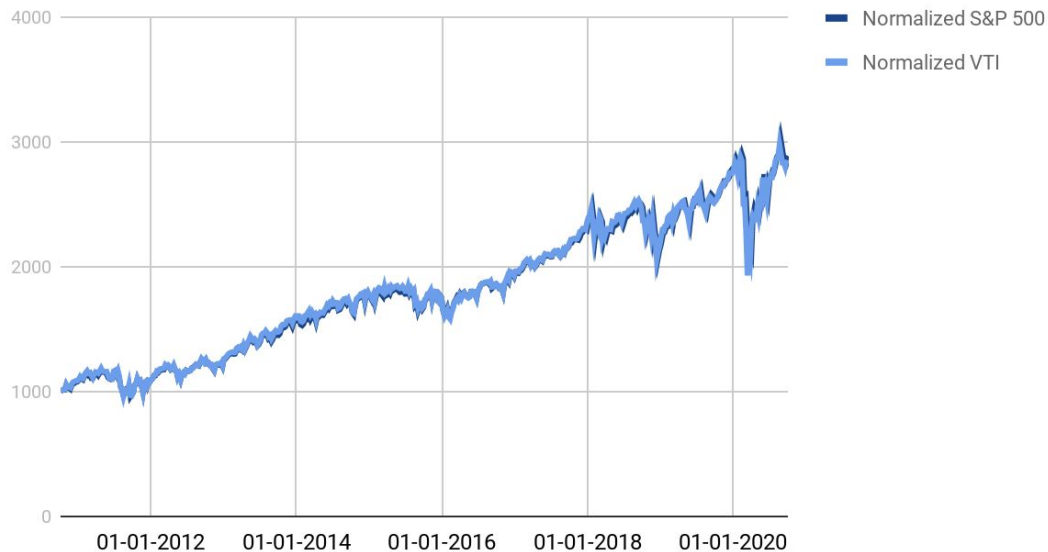




# Last 10 Years

11.6% / year  $\approx$  3x over last 10 years

Performance of \$1000 over last 10 years







# Dollar Cost Averaging

Date	Price	Investment	Shares	
02-14-2020	83.54	1000	11.97	
02-21-2020	82.64	1000	12.10	
02-28-2020	73.09	1000	13.68	
03-06-2020	73.3	1000	13.64	
03-13-2020	66.11	1000	15.13	
03-20-2020	56.01	1000	17.85	
03-27-2020	61.74	1000	16.20	
04-03-2020	60.03	1000	16.66	
04-09-2020	67.81	1000	14.75	
04-17-2020	69.69	1000	14.35	
04-24-2020	68.9	1000	14.51	
	<b>Average Price</b>	<b>Total Investment</b>	<b>Total Shares</b>	<b>Price per Share</b>
	69.35	11000	160.84	68.39



# Recommendation

- ❑ Open a brokerage account (e.g. Vanguard)
- ❑ Invest a fixed amount every month into S&P 500 or VTI #dollarcostaveraging
- ❑ Keep ~1 year of expenses in treasuries (e.g. VGSH)