

# DATA UPDATE 2 FOR 2020: A RETROSPECTIVE ON A DECADE (2010-19)

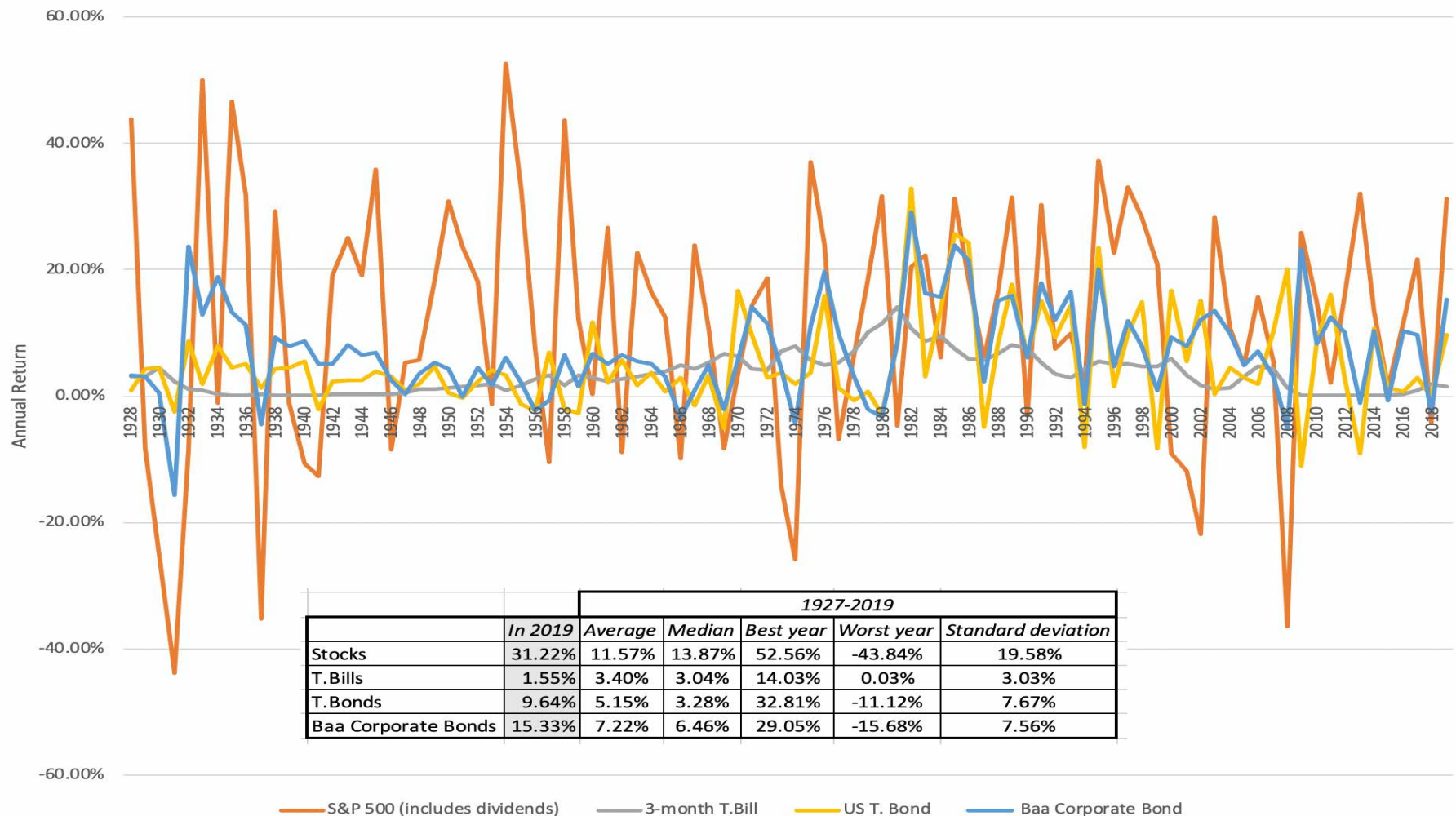
Change is the only constant!

# A Decade in the Rear View Mirror: 2010-2019

- It was a testing period for many active investors, and particularly so for value investors, who found that even as financial assets posted solid returns, what they thought were tried and true approaches to "beating the market" seemed to lose their power.
- In addition, trust in mean reversion, i.e., that things would go back to historic norms was shaken as interest rates remained low for much of the period and PE ratios rose above historical averages and continued to rise, rather than fall back.

# 1. A Good Year for Stocks & Bonds

*Annual Returns on US stocks, Treasuries and Baa Corporate Bonds: 1928-2019*



# More on stocks and bonds in 2019 ...

- Over the 92 years that are in this historical assessment, 2019 ranked as the sixteenth best year and second only to 2013 (annual return of 32.15%) in this century.
- While stocks have garnered the bulk of the attention for having a good year, bonds were not slackers in the returns game. In 2019, the ten-year US treasury bond returned 9.64% and ten-year Baa corporate bonds weighing in with a 15.33% return. The bulk of these returns came from price appreciation, as the US treasury bond rate declined from 2.69% to 1.92%, and the corporate bonds also benefited from a decline in default spreads (the price of risk in the bond market) during the year.

# Putting 2010-19 in perspective...

	<i>Compounded Return for the Decade</i>			
<i>Decade</i>	<i>Stocks</i>	<i>T.Bills</i>	<i>T.Bond</i>	<i>Baa Corporate</i>
1930-1939	-8.86%	10.25%	47.49%	100.11%
1940-1949	126.17%	4.89%	28.03%	65.30%
1950-1959	491.85%	21.87%	8.13%	26.36%
1960-1969	110.68%	47.69%	27.11%	36.73%
1970-1979	77.68%	83.86%	69.40%	97.80%
1980-1989	394.92%	132.29%	209.48%	273.01%
1990-1999	425.55%	60.50%	103.74%	147.12%
2000-2009	-9.14%	30.25%	83.48%	123.77%
2010-2019	252.96%	5.25%	49.92%	97.86%

## a. Historical Equity Risk Premium (updated)

	Arithmetic Average		Geometric Average	
	Stocks - T. Bills	Stocks - T. Bonds	Stocks - T. Bills	Stocks - T. Bonds
1928-2019	8.18%	6.43%	6.35%	4.83%
Std Error	2.08%	2.20%		
1970-2019	7.26%	4.50%	5.93%	3.52%
Std Error	2.38%	2.73%		
2010-2019	13.51%	9.67%	12.93%	9.31%
Std Error	3.85%	4.87%		

*If you trust history (I don't):*

Expected return on stocks in 2020 = T.Bond Rate +  
Historical ERP = 1.92% + 4.83% = 6.75%

Expected price appreciation on stocks = Expected Return  
- Dividend yield = 6.75% - 1.82% = 4.93%



## b. Stocks don't always win in the long term..

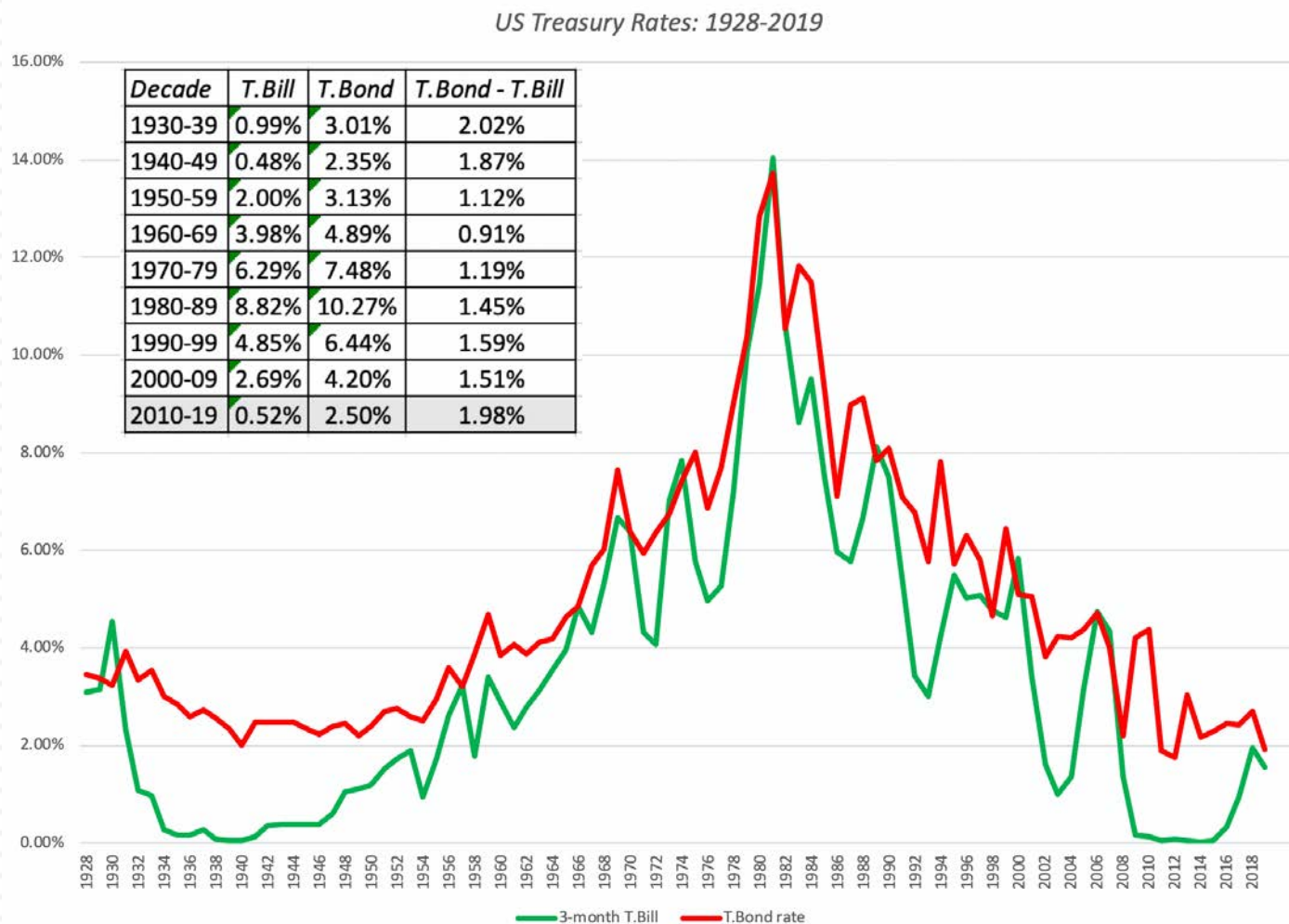
- The fact that stocks have beaten treasury and corporate bonds by wide margins historically is often the sales pitch used to push investors to allocate more of their savings to stocks, with the argument being that stocks always win in the long term. The data should yield cautionary notes.
  - First, in three decades out of the nine in the table, stocks underperformed bonds and treasury bills, and if your response is that ten years is not a long enough time period, you may want to check the actuarial tables.
  - Second, there is a selection bias in our use of the US markets for computing the historical premium. Looking across the globe, the US was one of the most successful equity markets of the last century and using it may be skewing our results upwards. Put bluntly, if you had invested in the Nikkei at the height of its climb in the 1980s, you would still be struggling to get back the money you lost, when the Japanese markets collapsed.

## c. Market Timing

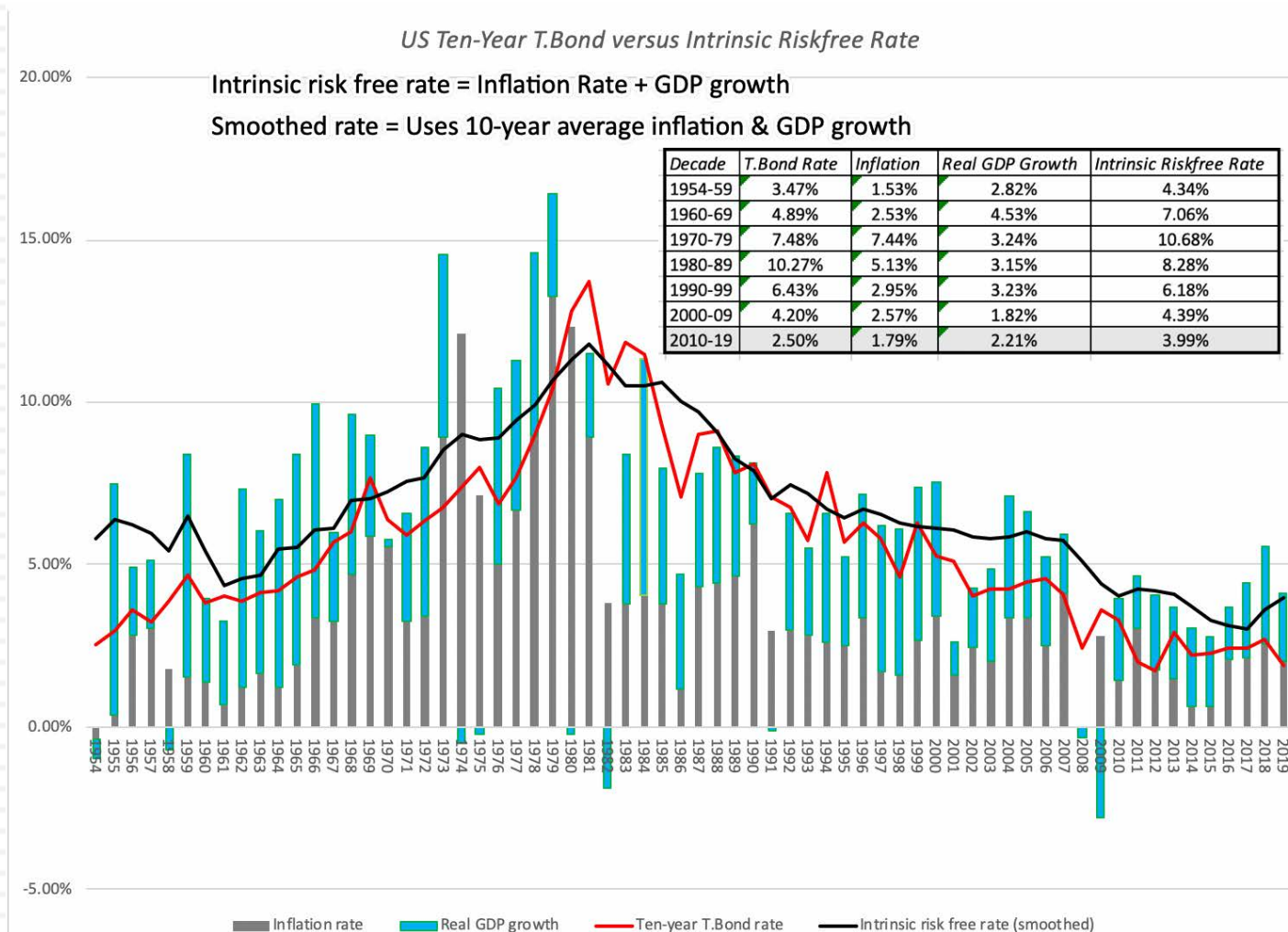
- It is human nature to try to time markets, and some investors make it the central focus of their investment philosophies. The historical return data gives us a sense of both the upside and the downside of doing so.
  - In terms of pluses, an investor who was able to avoid the doomed decades (when stocks earned less than T.Bills and T.Bonds) would be comfortably ahead of an investor who did not, if he or she stayed fully invested in the remaining decades.
  - In terms of minuses, if the market timing investor failed to stay invested in stocks in the good decades, the opportunity costs would quickly overwhelm the benefits.
- In the last decade, there were many investors who believed that a correction was around the corner, driven by their perception that interest rates were being kept artificially low by central banks and that they would revert to historic norms quickly. When that reversion did not occur, these investors paid a hefty price in returns foregone.



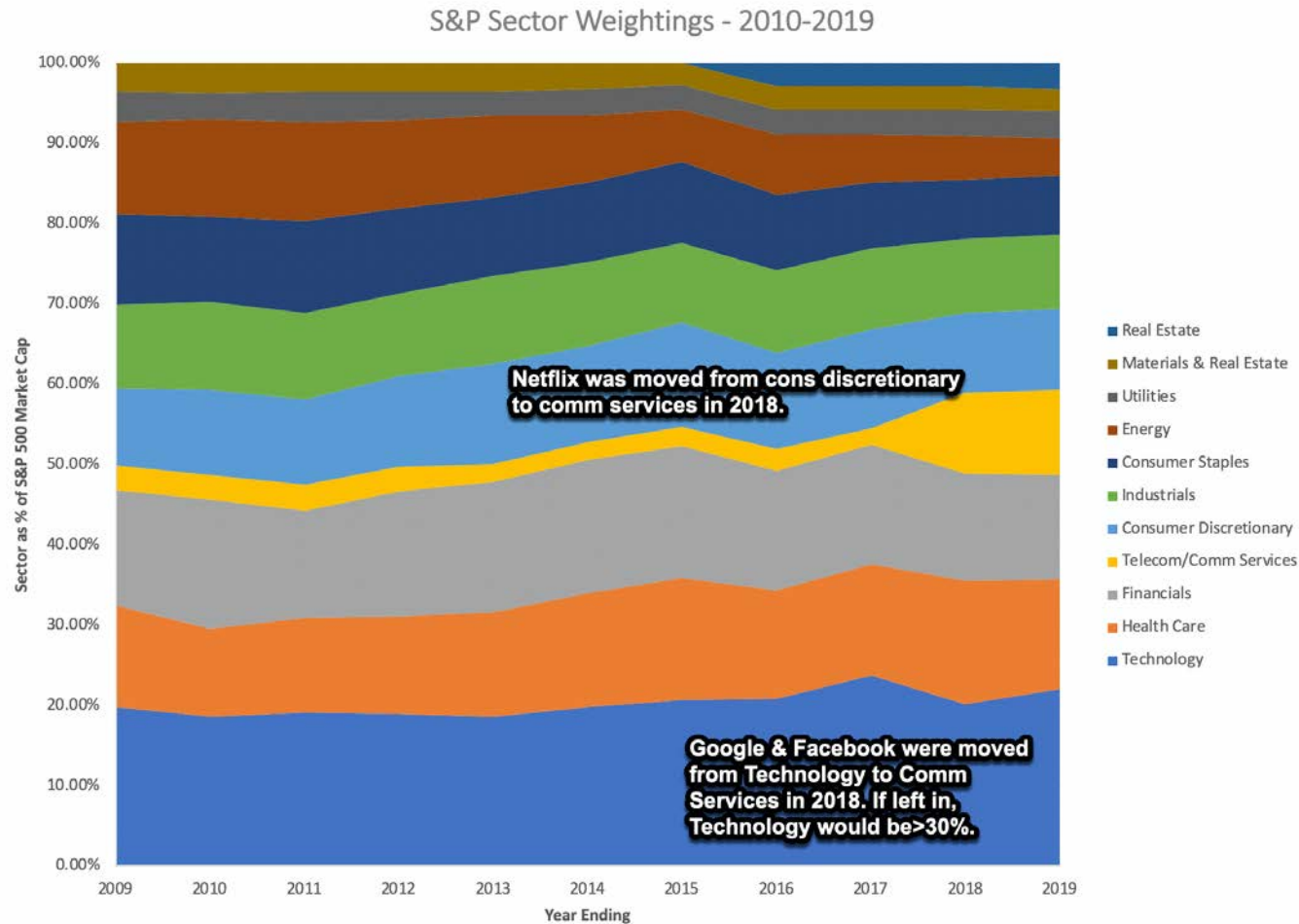
## 2. A Low Interest Rate Decade



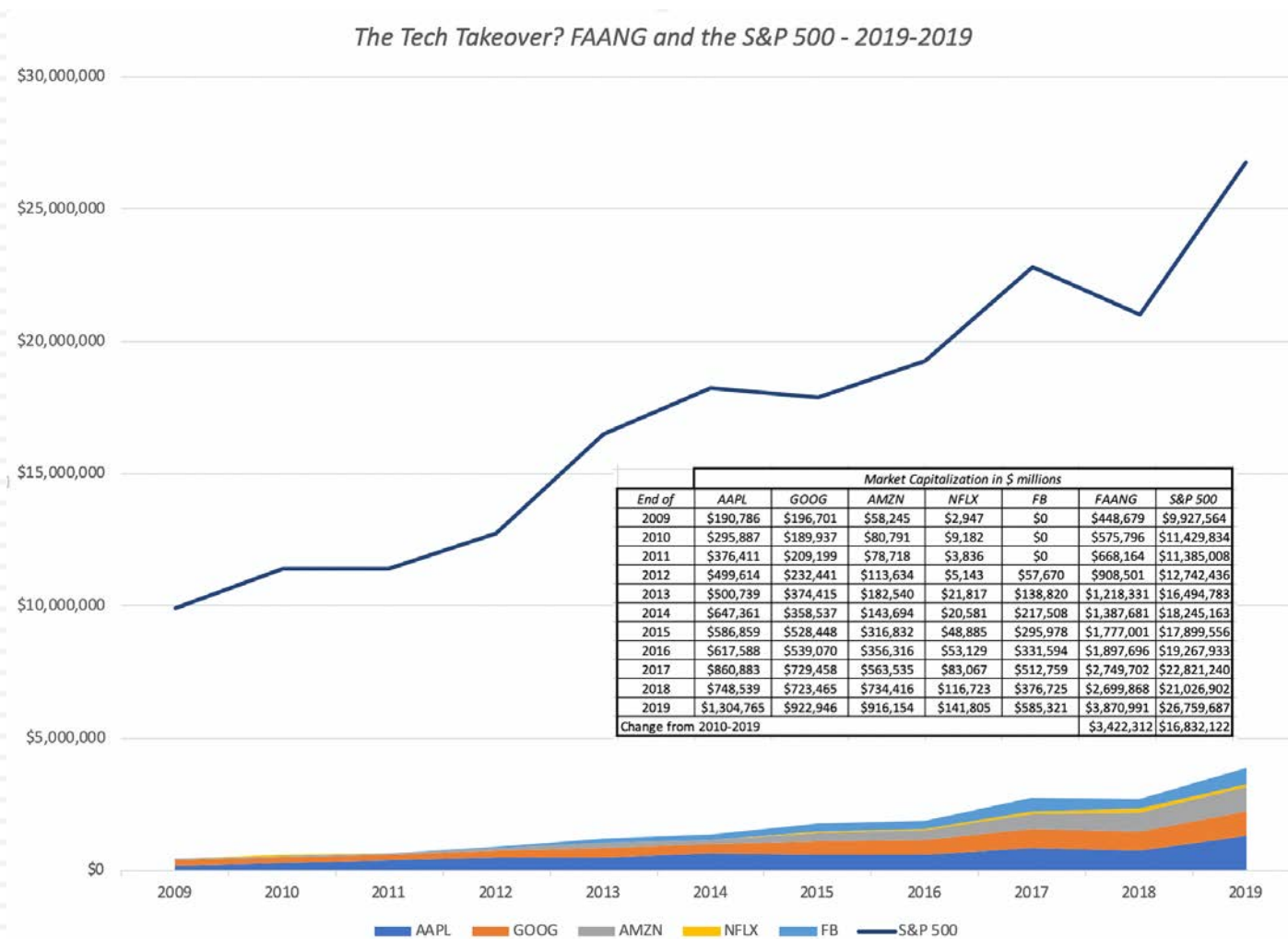
# And Central Banks were only partly responsible...



# 3. A Tech Decade



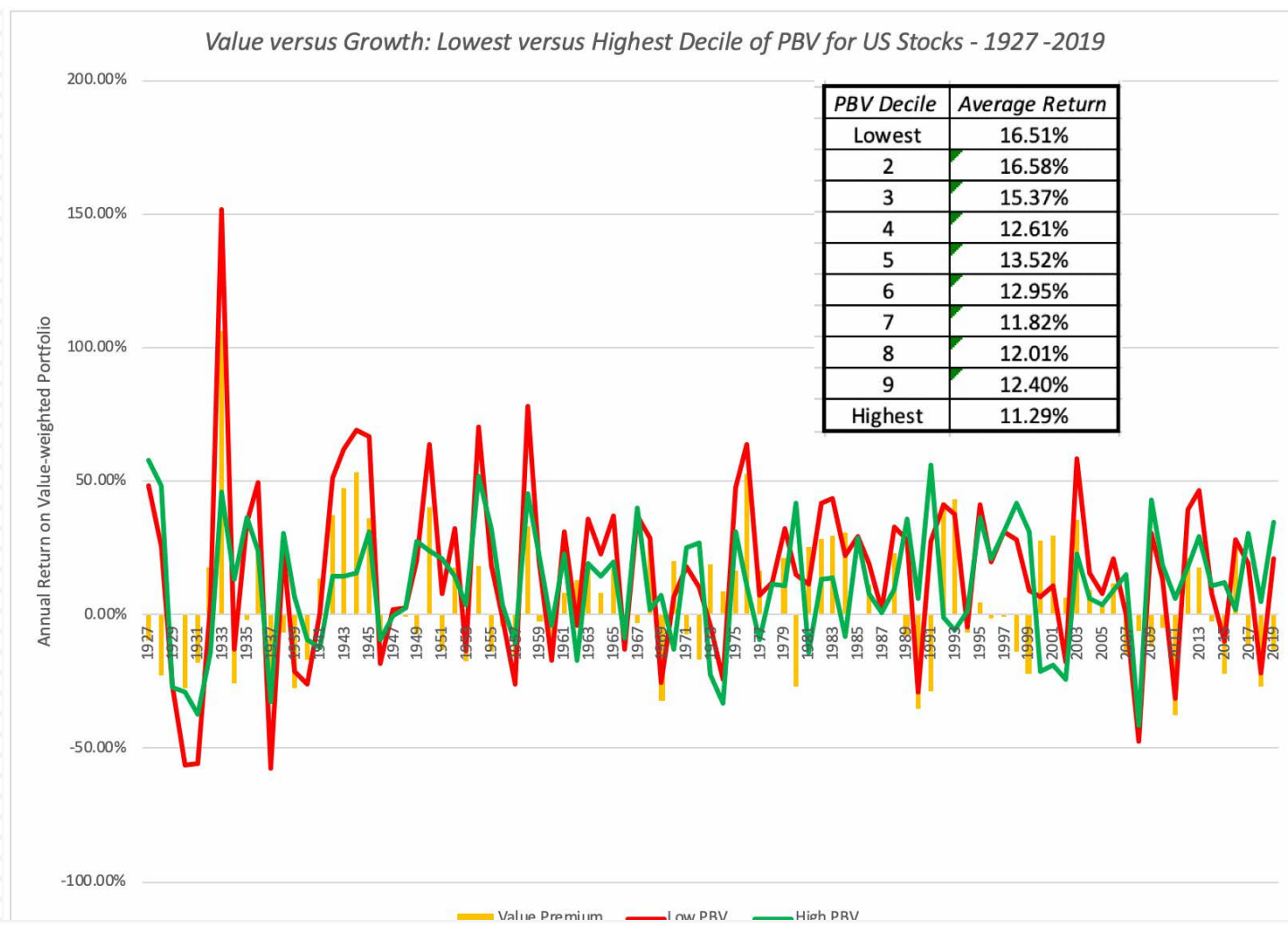
# And FAANG stocks stole the show...



## 4. Old Patterns, New Markets?

- One of the perils of being in a market like the US, where rich historical data is available and easily accessible is that analysts and academics have pored over the data and not surprisingly found patterns that have very quickly become part of investment lore.
- Thus, we have been told that value beats growth, at least over long periods, and that small cap stocks earn a premium, and have converted these findings into investing strategies and valuation practices.
- While it is dangerous to use a decade's results to abandon a long history, the last decade offered sobering counters to old investing nostrums.

# a. Value versus Growth – History





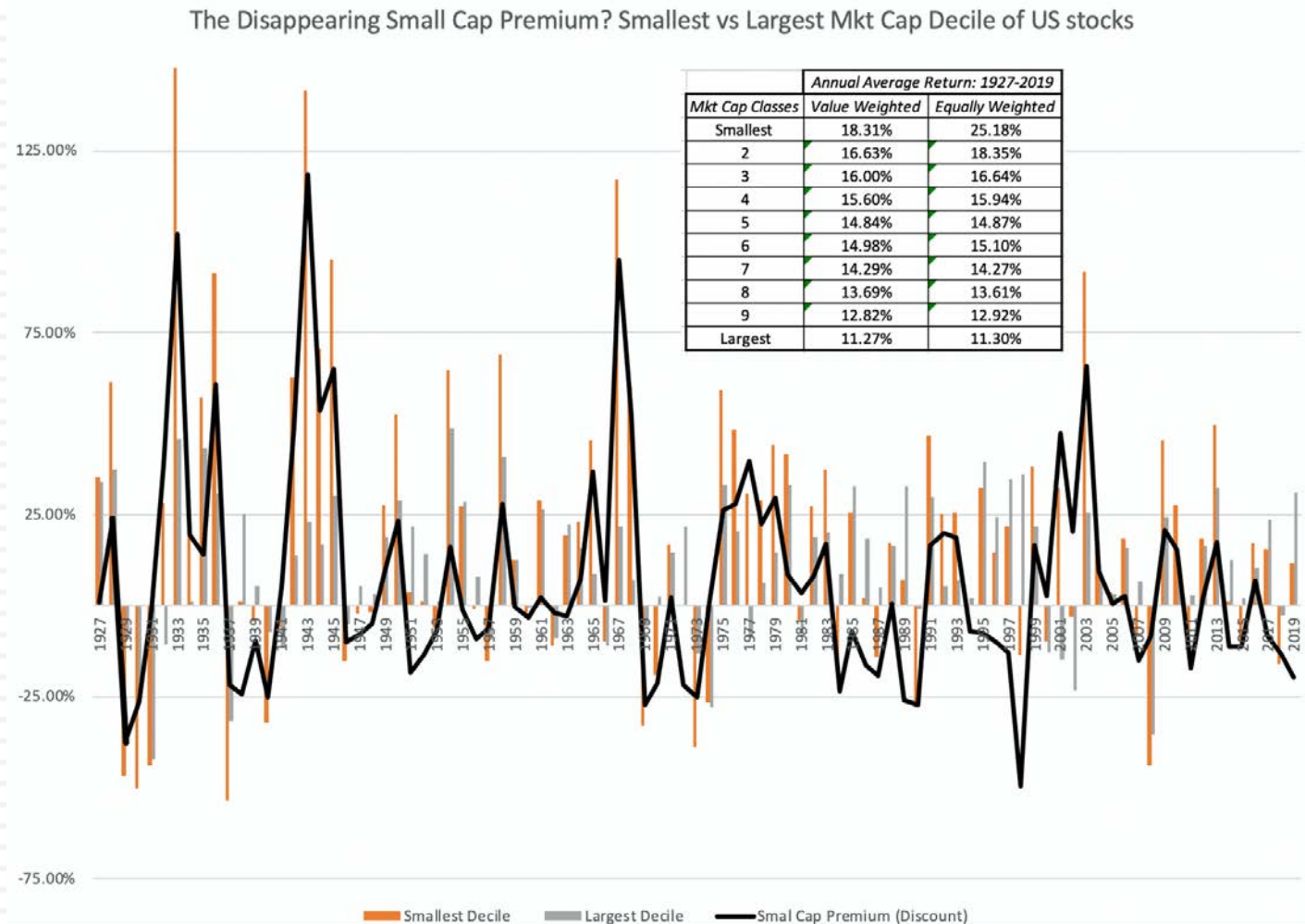
# Across the decades...

## Value vs Growth: US Stocks, by decade

	<i>Lowest PBV</i>	<i>Highest PBV</i>	<i>Difference</i>	<i>Lowest PE</i>	<i>Highest PE</i>	<i>Difference</i>
1930-39	6.04%	4.27%	1.77%	NA	NA	NA
1940-49	22.96%	7.43%	15.53%	NA	NA	NA
1950-59	25.06%	20.92%	4.14%	34.33%	19.16%	15.17%
1960-69	13.23%	9.57%	3.66%	15.27%	9.79%	5.48%
1970-79	17.05%	3.89%	13.16%	14.83%	2.28%	12.54%
1980-89	24.48%	12.94%	11.54%	18.38%	14.46%	3.92%
1990-99	20.17%	21.88%	-1.71%	21.61%	22.03%	-0.41%
2000-09	8.59%	-0.49%	9.08%	13.84%	0.61%	13.23%
<b>2010-19</b>	<b>11.27%</b>	<b>16.67%</b>	<b>-5.39%</b>	<b>11.35%</b>	<b>17.09%</b>	<b>-5.75%</b>



## b. The Size Premium



# Across the decades...

The Small Cap Premium: US stocks, by decade

	<i>Value Weighted</i>			<i>Equally Weighted</i>		
	<i>Largest Decile</i>	<i>Largest Decile</i>	<i>Difference</i>	<i>Smallest Decile</i>	<i>Largest Decile</i>	<i>Difference</i>
1930-39	15.21%	2.90%	12.31%	46.45%	5.09%	41.36%
1940-49	30.82%	7.46%	23.36%	46.36%	9.62%	36.74%
1950-59	22.39%	20.23%	2.16%	21.52%	17.97%	3.56%
1960-69	28.25%	9.52%	18.73%	27.16%	6.87%	20.29%
1970-79	6.70%	4.32%	2.38%	18.86%	6.40%	12.46%
1980-89	16.23%	16.09%	0.13%	14.33%	18.98%	-4.66%
1990-99	12.69%	21.18%	-8.49%	21.24%	18.18%	3.06%
2000-09	13.68%	-0.53%	14.22%	19.60%	1.98%	17.63%
<b>2010-19</b>	<b>13.49%</b>	<b>13.36%</b>	<b>0.13%</b>	<b>9.02%</b>	<b>14.35%</b>	<b>-5.33%</b>

## 5. The Decade's Buzz Words

- Every decade has its buzzwords, words that not only become the focus for companies but are also money makers for consultants, and the last decade was no exception. There were two that stood out to me in the last decade:
  - The first was big data, driven partly by more extensive collection of information, especially online, and partly by tools that allowed this data to be accessed and analyzed.
  - The other was crowd wisdom, where expert opinions were replaced by crowd judgments on a wide range of applications, from restaurant reviews to new (crypto) currencies.

## a. Big Data

- The success of the FAANG stocks and the perception that a big reason for their success is the data that they have collected on their users has led other companies to invest heavily in big data.
- Like all buzz words, big data has been over sold. In particular, for big data to create value:
  - ▣ The data has to be exclusive: For data to be valuable, there has to be some exclusivity. Put simply, if everyone has it, no one has an advantage.
  - ▣ The data has to be useful in changing business offerings: For value conversion to occur, the data that has been collected has to be usable in modifying and adapting the products and services you offer as a business.

## b. Crowd Wisdom

- One of the consequences of the 2008 crisis was a loss in faith in both institutional authorities but also in experts, most of whom had been hopelessly wrong in the lead up to the crisis. It is therefore not surprising that you saw a move towards trusting crowds.
- It is no coincidence that Satoshi Nakamoto (whoever he might be) posted the paper laying out the architecture of Bitcoin in November 2008, a proposal for a digital currency without a central bank or regulatory overlay, where transactions would be crowd-checked (by miners). While Bitcoin has been more successful as a speculative game than as a currency during the last decade, the block chains that it introduced have now found their way into a much wider range of businesses.

# Crowd wisdom and madness!

- The crowd concept has expanded into almost every aspect of our lives, with Yelp ratings replacing restaurant reviewers in our choices of where to eat, Rotten Tomatoes supplanting movie critics in deciding what to watch and betting markets replacing polls in predicting election outcomes.
- I share the distrust of experts that many others have, but I also wary of crowd wisdom. After all, financial markets have been laboratories for observing how crowds behave for centuries, and we have found that while crowds are often much better at gauging the right answers than market gurus and experts, they are also prone to herding and collective bad choices.

# The Decade to Come

- Study the past: It has been said that those who forget the past are destined to relive it, and that is one reason why we pore over historical track records, hoping to get insight for the future.
- But don't try to relive it: It has also been said that army generals who prepare too intensely to fight the last war will lose the next one, suggesting that reading too much into history can be dangerous.
- Be adaptable & keep learning: Keep an open mind and do not take conventional wisdom as a given. I don't know what the next decade will bring us, but I can guarantee you that it will not look like the last one or any of the prior ones,