



A VIRAL MARKET UPDATE VIII: HOT BUTTON ISSUES!

Heat and Light...

Hot Button Issues

- I know that this crisis is not quite done, but I believe we now have lived through enough of it to be able to start separating winners from losers, and use this winnowing process to address three big questions, relating to trends that we have been seeing over the last decade.
 - ▣ Will this market correction lead to growth/momentum investing losing its mojo and allow value investors to reclaim what they believe is their rightful place on top of the investing food chain?
 - ▣ Has this crisis allowed active investors to shine, and use that performance to stop or even reverse the loss of market share to passive vehicles (ETFs and index funds) that has occurred over the last decade?
 - ▣ Will the small cap premium, missing for so many decades, be rediscovered after this market shock?

Market Action: Equities

			Level on 2/14			% Change				
	Index	Country/Region	14-Feb	20-Mar	1-May	4/24-5/1	4/1-5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Americas	S&P 500	US	3214	2305	2831	-0.21%	12.02%	-28.28%	22.82%	-11.92%
	NASDAQ 100	US	9624	6994	8718	-0.78%	14.18%	-27.33%	24.65%	-9.41%
	TSX	Canada	17848	11852	14620	1.39%	11.62%	-33.59%	23.35%	-18.09%
	IPC Mexico	Mexico	45000	34270	36470	6.51%	5.54%	-23.84%	6.42%	-18.96%
	iBovespa	Brazil	114381	67069	80506	1.05%	10.25%	-41.36%	20.03%	-29.62%
Europe	FTSE 100	UK	7409	5191	5763	0.19%	5.16%	-29.94%	11.02%	-22.22%
	DAX	Germany	13744	8929	10862	3.31%	9.32%	-35.03%	21.65%	-20.97%
	CAC 40	France	6069	4131	4559	2.43%	3.71%	-31.93%	10.36%	-24.88%
	S&P Europe 350	Europe	1731	1181	1351	1.99%	7.15%	-31.77%	14.39%	-21.95%
Asia	Nikkei 225	Japan	23688	16553	19619	1.86%	10.11%	-30.12%	18.52%	-17.18%
	Shanghai 50	China	2895	2628	2862	2.30%	6.42%	-9.22%	8.90%	-1.14%
	Hang Seng	Hong Kong	27816	22805	24644	3.14%	6.34%	-18.01%	8.06%	-11.40%
	Sensex	India	41258	29916	33718	5.82%	14.42%	-27.49%	12.71%	-18.28%
Australia & NZ	ASX 200	Australia	7133	4825	5246	0.06%	1.78%	-32.36%	8.73%	-26.45%
	NZX 50	New Zealand	11835	9202	10449	0.28%	5.86%	-22.25%	13.55%	-11.71%
Africa	FTSE/JSE TOP 40	South Africa	52050	36302	46188	1.15%	13.38%	-30.26%	27.23%	-11.26%
	NSE-All Share	Nigeria	27756	22198	23021	2.45%	8.08%	-20.02%	3.71%	-17.06%

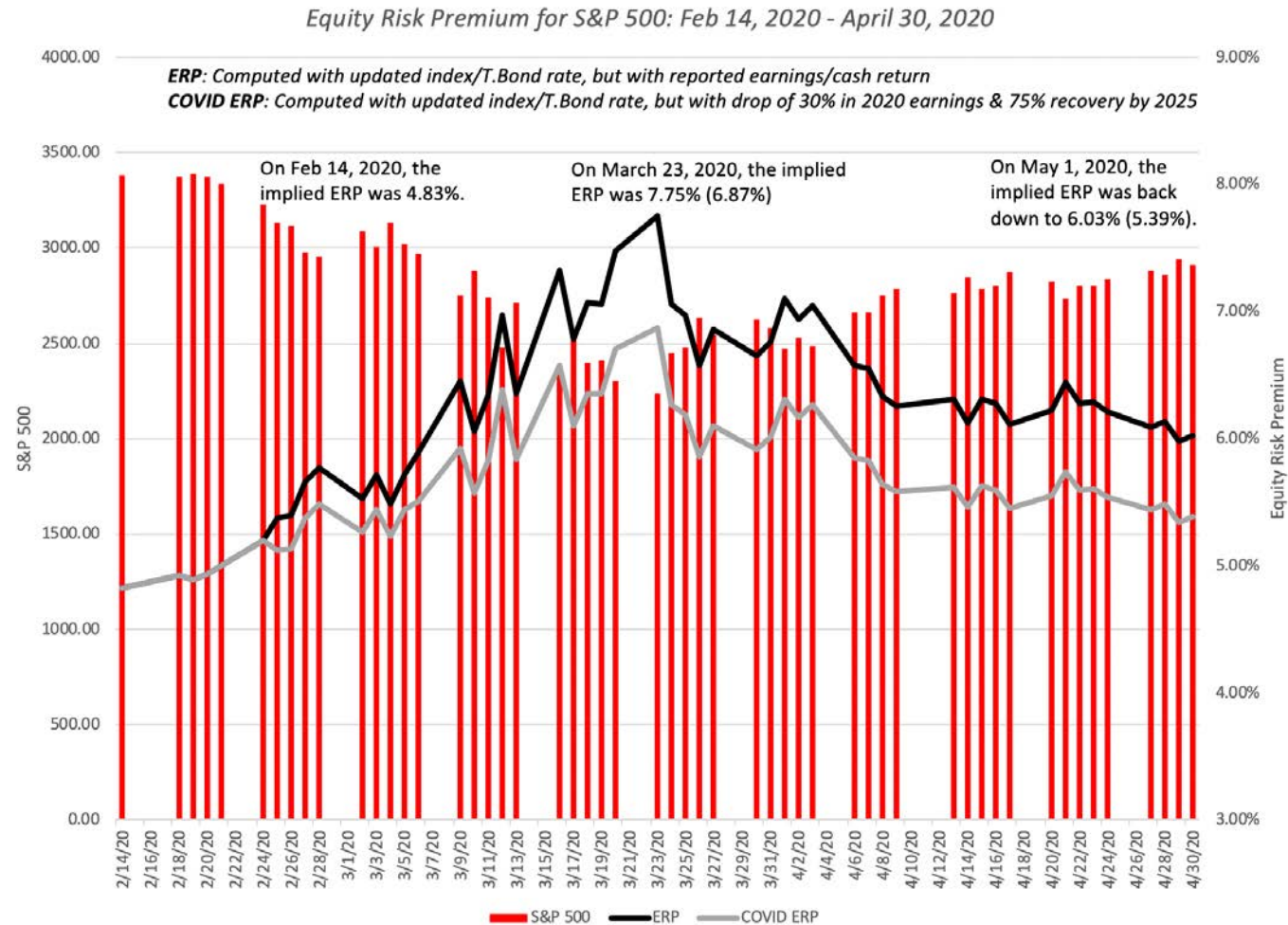
Market Action: Treasuries

	Yields on US Treasuries			
Maturity	2/14/20	4/3/20	4/17/20	5/1/20
3 month	1.58%	0.10%	0.12%	0.12%
2 year	1.42%	0.23%	0.20%	0.20%
5 year	1.42%	0.39%	0.36%	0.36%
10 year	1.59%	0.62%	0.65%	0.64%
20 year	1.89%	1.05%	1.08%	1.04%
30 year	2.04%	1.24%	1.27%	1.27%
	Yield curve slope			
2 yr - 3 month	-0.16%	0.13%	0.08%	0.08%
10 yr - 2 yr	0.17%	0.39%	0.45%	0.44%
30 yr - 10 yr	0.45%	0.62%	0.62%	0.63%

Market Action: Corporate Bonds

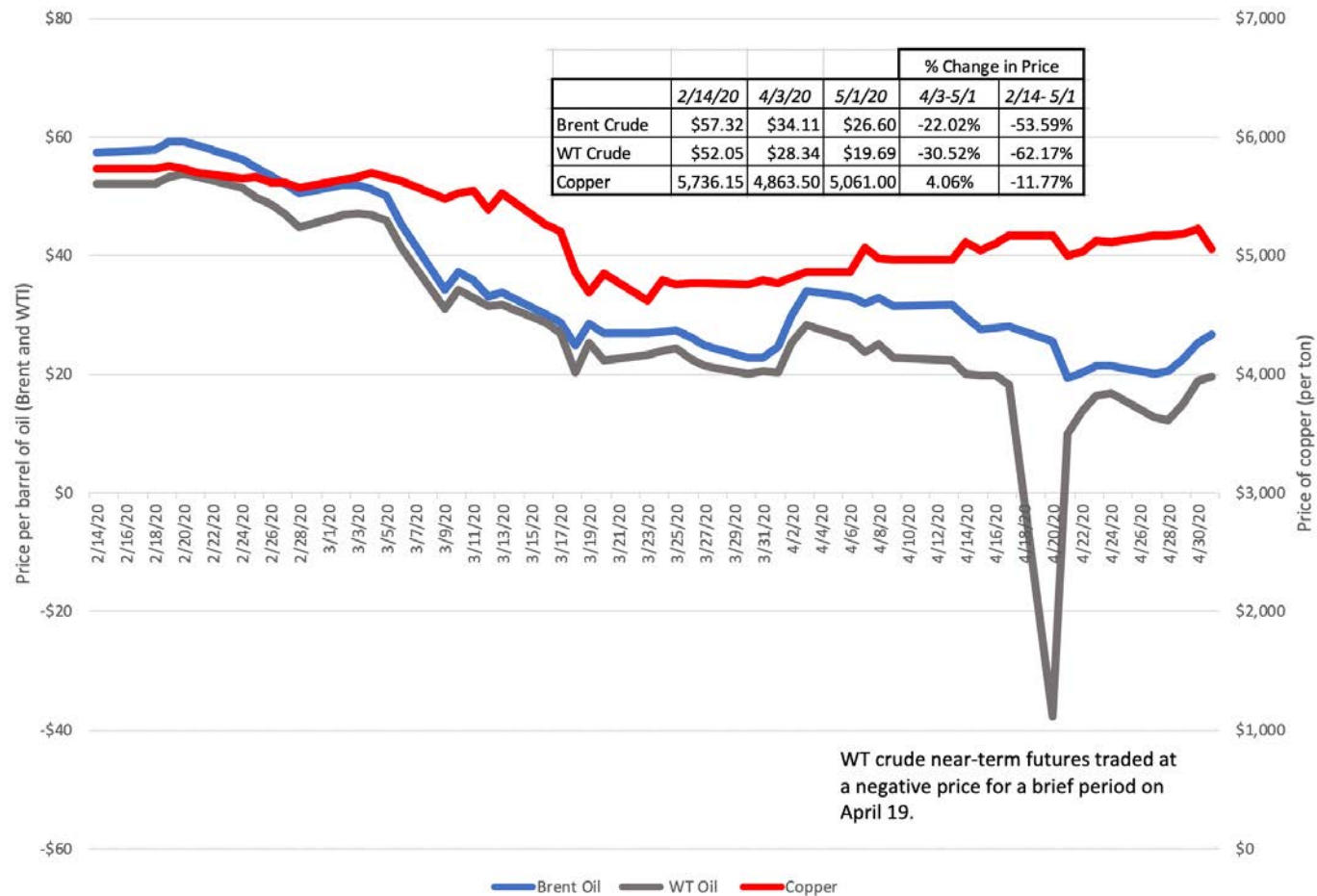
	Yields and Spreads on Corporates								Change from 2/14 - 5/1	
	Spread over 10-yr Treasury				Yield on Treasury				Spread	Yield
S&P Bond Rating	2/14/20	4/3/20	4/17/20	5/1/20	2/14/20	4/3/20	4/17/20	5/1/20		
AAA	0.69%	1.50%	1.16%	1.21%	2.28%	2.12%	1.81%	1.85%	0.52%	-0.43%
AA	0.72%	1.77%	1.29%	1.26%	2.31%	2.39%	1.94%	1.90%	0.54%	-0.41%
A	0.80%	2.29%	1.70%	1.64%	2.39%	2.91%	2.35%	2.28%	0.84%	-0.11%
BBB	1.33%	3.97%	3.03%	2.80%	2.92%	4.59%	3.68%	3.44%	1.47%	0.52%
BB	1.93%	6.76%	4.81%	5.30%	3.52%	7.38%	5.46%	5.94%	3.37%	2.42%
B	3.40%	10.14%	7.93%	7.80%	4.99%	10.76%	8.58%	8.44%	4.40%	3.45%
CCC or lower	9.65%	18.80%	16.32%	17.58%	11.24%	19.42%	16.97%	18.22%	7.93%	6.98%

The Price of Equity Risk

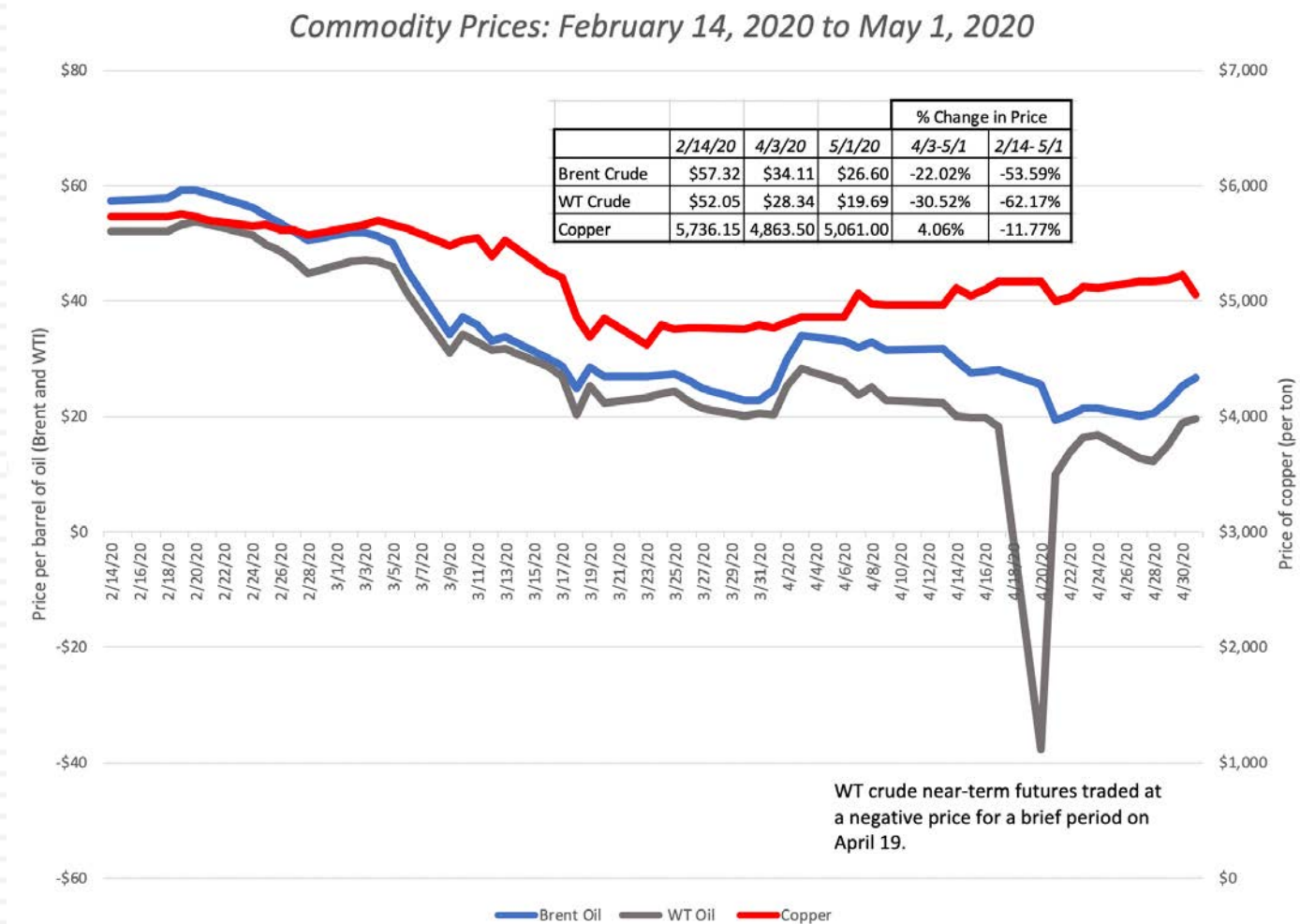


Market Action: Commodity Prices

Commodity Prices: February 14, 2020 to May 1, 2020



Market Action: Gold and Bitcoin



Equities: By Region

Sub Region	Number of firms	Market Cap			Dollar Change			% Change		
		2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Africa	648	\$ 579,098	\$ 363,274	\$ 396,826	\$ (215,824)	\$ 33,552	\$ (182,272)	-37.27%	9.24%	-31.48%
Australia & NZ	1,356	\$ 1,616,626	\$ 951,839	\$ 1,171,480	\$ (664,787)	\$ 219,642	\$ (445,146)	-41.12%	23.08%	-27.54%
Canada	1,574	\$ 2,240,034	\$ 1,360,137	\$ 1,725,687	\$ (879,897)	\$ 365,550	\$ (514,347)	-39.28%	26.88%	-22.96%
China	6,153	\$ 14,006,589	\$12,410,337	\$ 13,353,129	\$ (1,596,253)	\$ 942,792	\$ (653,461)	-11.40%	7.60%	-4.67%
EU & Environs	4,756	\$ 13,652,192	\$ 9,274,331	\$ 11,009,786	\$ (4,377,861)	\$ 1,735,454	\$ (2,642,406)	-32.07%	18.71%	-19.36%
Eastern Europe & Russia	411	\$ 815,900	\$ 492,836	\$ 586,922	\$ (323,064)	\$ 94,086	\$ (228,978)	-39.60%	19.09%	-28.06%
India	1,945	\$ 2,196,205	\$ 1,513,432	\$ 1,688,416	\$ (682,774)	\$ 174,984	\$ (507,790)	-31.09%	11.56%	-23.12%
Japan	3,813	\$ 6,038,444	\$ 4,465,873	\$ 5,236,432	\$ (1,572,571)	\$ 770,560	\$ (802,012)	-26.04%	17.25%	-13.28%
Latin America & Caribbean	938	\$ 2,379,522	\$ 1,378,909	\$ 1,508,455	\$ (1,000,613)	\$ 129,546	\$ (871,067)	-42.05%	9.39%	-36.61%
Middle East	1,148	\$ 3,073,392	\$ 2,557,872	\$ 2,816,287	\$ (515,520)	\$ 258,415	\$ (257,105)	-16.77%	10.10%	-8.37%
Small Asia	7,660	\$ 5,057,996	\$ 3,538,866	\$ 4,285,223	\$ (1,519,130)	\$ 746,357	\$ (772,773)	-30.03%	21.09%	-15.28%
UK	1,094	\$ 3,066,192	\$ 1,923,416	\$ 2,313,548	\$ (1,142,776)	\$ 390,132	\$ (752,644)	-37.27%	20.28%	-24.55%
United States	4,929	\$ 35,641,758	\$23,877,391	\$ 29,461,339	\$ (11,764,366)	\$ 5,583,948	\$ (6,180,419)	-33.01%	23.39%	-17.34%
Global	36,425	\$ 90,363,948	\$64,108,512	\$ 75,553,528	\$ (26,255,436)	\$ 11,445,016	\$ (14,810,420)	-29.06%	17.85%	-16.39%

Equities: By Sector

Sub Region	Number of firms	Market Cap			Dollar Change			% Change		
		2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Communication Services	1,690	\$ 7,342,037	\$ 5,488,763	\$ 6,489,211	\$ (1,853,275)	\$ 1,000,448	\$ (852,827)	-25.24%	18.23%	-11.62%
Consumer Discretionary	4,930	\$ 10,148,621	\$ 7,059,451	\$ 8,539,340	\$ (3,089,170)	\$ 1,479,890	\$ (1,609,280)	-30.44%	20.96%	-15.86%
Consumer Staples	2,300	\$ 7,116,299	\$ 5,701,278	\$ 6,476,403	\$ (1,415,022)	\$ 775,126	\$ (639,896)	-19.88%	13.60%	-8.99%
Energy	1,313	\$ 5,930,247	\$ 3,852,615	\$ 4,586,674	\$ (2,077,632)	\$ 734,059	\$ (1,343,573)	-35.03%	19.05%	-22.66%
Financials	3,853	\$ 14,919,880	\$ 9,915,070	\$ 11,045,925	\$ (5,004,810)	\$ 1,130,855	\$ (3,873,955)	-33.54%	11.41%	-25.97%
Health Care	3,408	\$ 8,970,146	\$ 6,909,417	\$ 8,529,498	\$ (2,060,729)	\$ 1,620,081	\$ (440,649)	-22.97%	23.45%	-4.91%
Industrials	6,546	\$ 10,112,845	\$ 6,894,349	\$ 8,021,543	\$ (3,218,496)	\$ 1,127,194	\$ (2,091,302)	-31.83%	16.35%	-20.68%
Information Technology	4,867	\$ 13,594,754	\$ 9,734,631	\$ 11,846,660	\$ (3,860,123)	\$ 2,112,029	\$ (1,748,093)	-28.39%	21.70%	-12.86%
Materials	4,400	\$ 4,988,086	\$ 3,526,263	\$ 4,233,418	\$ (1,461,823)	\$ 707,155	\$ (754,669)	-29.31%	20.05%	-15.13%
Real Estate	2,298	\$ 4,040,386	\$ 2,699,214	\$ 3,143,627	\$ (1,341,172)	\$ 444,413	\$ (896,758)	-33.19%	16.46%	-22.19%
Utilities	814	\$ 3,199,760	\$ 2,326,774	\$ 2,640,444	\$ (872,986)	\$ 313,670	\$ (559,316)	-27.28%	13.48%	-17.48%
Global	36,425	\$ 90,363,948	\$64,108,512	\$ 75,553,528	\$ (26,255,436)	\$ 11,445,016	\$ (14,810,420)	-29.06%	17.85%	-16.39%

Equities: Worst hit and Best Industries

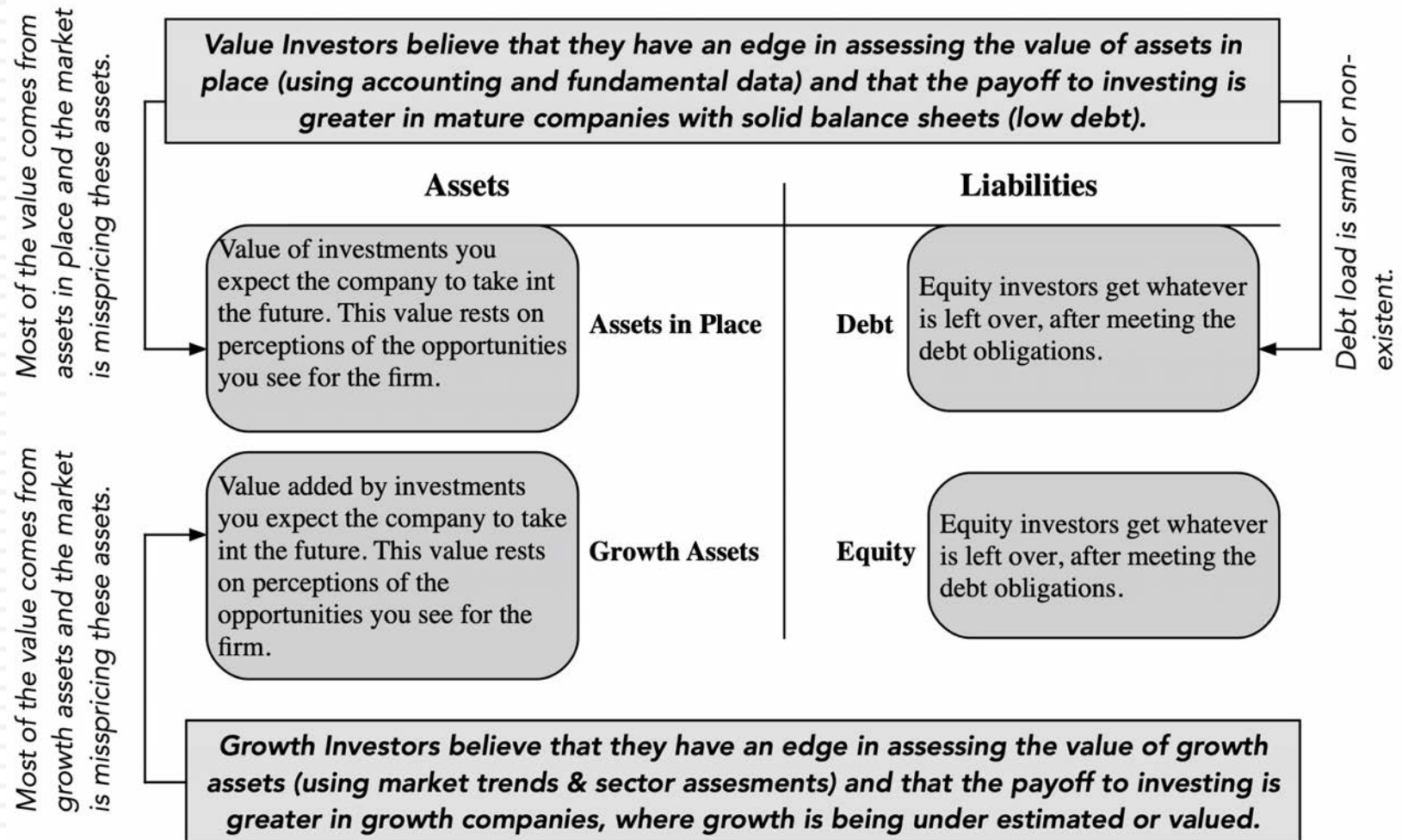
		Worst Performing Industries								
		Market Cap			Dollar Change			% Change		
Industry	Number of firms	2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Air Transport	150	\$ 556,178	\$ 313,482	\$ 351,688	\$ (242,697)	\$ 38,207	\$ (204,490)	-43.64%	12.19%	-36.77%
Oil/Gas (Production and Exploration)	480	\$ 692,963	\$ 318,155	\$ 444,392	\$ (374,807)	\$ 126,237	\$ (248,571)	-54.09%	39.68%	-35.87%
Aerospace/Defense	212	\$ 1,217,844	\$ 674,146	\$ 799,015	\$ (543,697)	\$ 124,868	\$ (418,829)	-44.64%	18.52%	-34.39%
Broadcasting	121	\$ 164,681	\$ 93,967	\$ 108,625	\$ (70,714)	\$ 14,658	\$ (56,056)	-42.94%	15.60%	-34.04%
Hotel/Gaming	505	\$ 715,671	\$ 386,318	\$ 483,034	\$ (329,354)	\$ 96,716	\$ (232,638)	-46.02%	25.04%	-32.51%
Homebuilding	147	\$ 247,004	\$ 127,536	\$ 166,749	\$ (119,469)	\$ 39,214	\$ (80,255)	-48.37%	30.75%	-32.49%
Reinsurance	33	\$ 180,567	\$ 98,174	\$ 122,043	\$ (82,393)	\$ 23,869	\$ (58,524)	-45.63%	24.31%	-32.41%
Food Wholesalers	118	\$ 93,191	\$ 50,097	\$ 64,748	\$ (43,094)	\$ 14,651	\$ (28,443)	-46.24%	29.24%	-30.52%
Oil/Gas Distribution	186	\$ 649,295	\$ 357,879	\$ 455,453	\$ (291,416)	\$ 97,574	\$ (193,842)	-44.88%	27.26%	-29.85%
		Best Performing Industries								
		Market Cap			Dollar Change			% Change		
Industry	Number of firms	2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Precious Metals	518	\$ 418,987	\$ 297,954	\$ 448,303	\$ (121,034)	\$ 150,350	\$ 29,316	-28.89%	50.46%	7.00%
Healthcare Information and Technology	318	\$ 772,658	\$ 607,128	\$ 772,518	\$ (165,530)	\$ 165,390	\$ (140)	-21.42%	27.24%	-0.02%
Drugs (Biotechnology)	912	\$ 1,408,988	\$ 1,134,635	\$ 1,401,350	\$ (274,352)	\$ 266,714	\$ (7,638)	-19.47%	23.51%	-0.54%
Software (Internet)	108	\$ 226,938	\$ 166,704	\$ 224,947	\$ (60,234)	\$ 58,243	\$ (1,991)	-26.54%	34.94%	-0.88%
Retail (Online)	251	\$ 2,455,864	\$ 1,989,522	\$ 2,418,166	\$ (466,342)	\$ 428,644	\$ (37,697)	-18.99%	21.55%	-1.53%
Drugs (Pharmaceutical)	1,050	\$ 3,626,610	\$ 2,891,126	\$ 3,493,441	\$ (735,483)	\$ 602,315	\$ (133,169)	-20.28%	20.83%	-3.67%
Food Processing	1,019	\$ 1,786,740	\$ 1,497,757	\$ 1,703,795	\$ (288,983)	\$ 206,038	\$ (82,945)	-16.17%	13.76%	-4.64%
Household Products	410	\$ 1,453,701	\$ 1,186,736	\$ 1,351,159	\$ (266,966)	\$ 164,424	\$ (102,542)	-18.36%	13.86%	-7.05%
Healthcare Products	633	\$ 1,830,537	\$ 1,350,855	\$ 1,699,442	\$ (479,682)	\$ 348,587	\$ (131,095)	-26.20%	25.80%	-7.16%
Retail (Grocery and Food)	151	\$ 479,616	\$ 397,678	\$ 444,071	\$ (81,938)	\$ 46,393	\$ (35,546)	-17.08%	11.67%	-7.41%



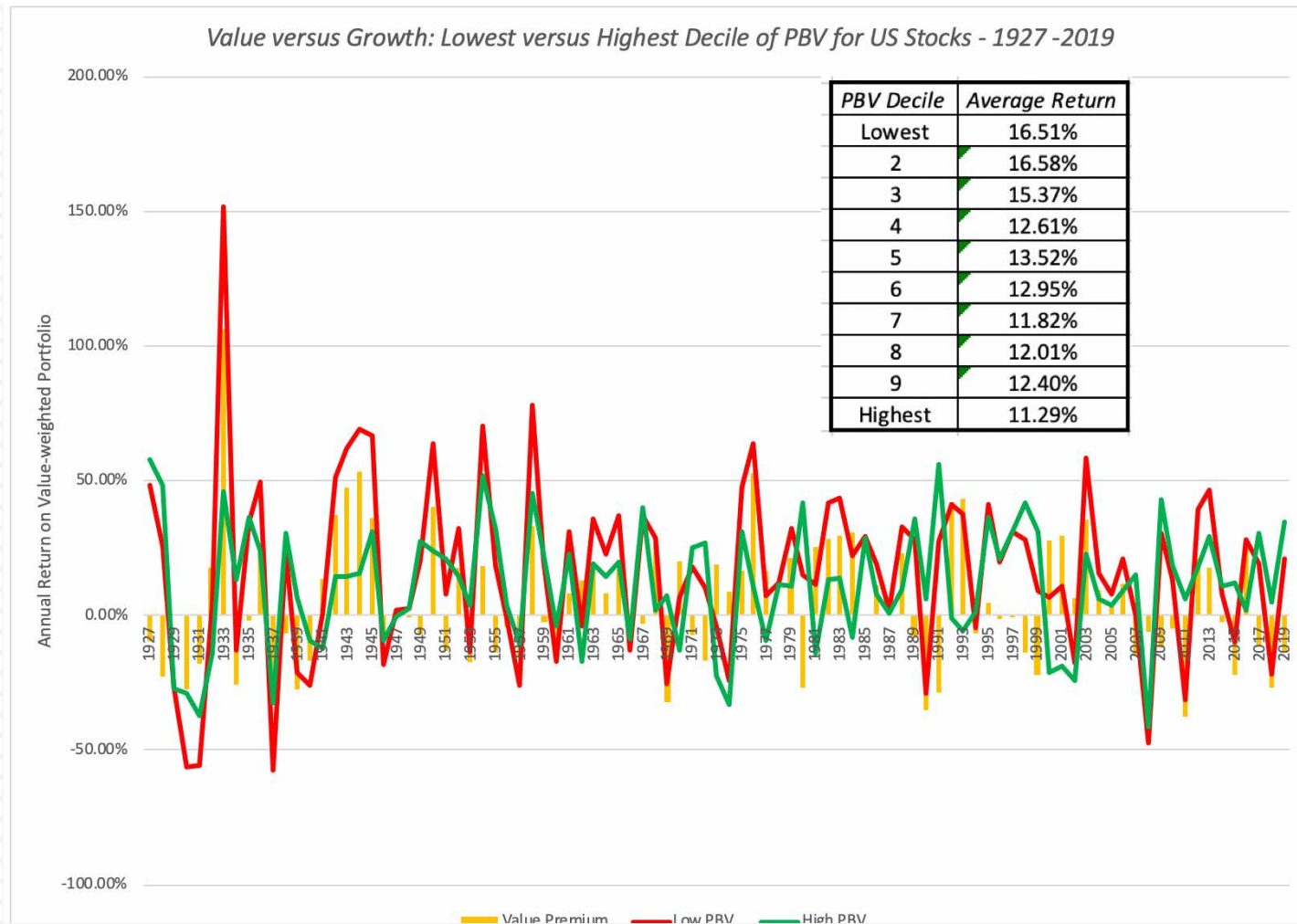
Value vs Growth

Ben Graham's revenge?

The Difference



The Value Investing Edge



Change in the air?

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%
2010-19	11.27%	16.67%	-5.39%	11.35%	17.09%	-5.75%

A Crisis Test?

- The under performance of value has played out not only in the mutual fund business, with value funds lagging growth funds, but has also brought many legendary value investors down to earth.
- Pushed to explain why, the defense that value investors offered was that the 2008 crisis, Fed interventions and the rise of the FAANG stocks created a perfect storm that rewarded momentum and growth investing, at the expense of value.
- Implicit in this argument is the belief that this phase would pass and that value investing would regain its rightful place.

Test 1: Low PE

		Market Cap			Dollar Change			% Change		
Trailing PE	Number of firms	2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Bottom(Lowest)	2,531	\$ 3,282,173	\$ 2,067,866	\$ 2,469,017	\$ (1,214,307)	\$ 401,151	\$ (813,156)	-37.00%	19.40%	-24.77%
2nd decile	2,532	\$ 1,314,373	\$ 784,661	\$ 955,373	\$ (529,713)	\$ 170,713	\$ (359,000)	-40.30%	21.76%	-27.31%
3rd decile	2,531	\$ 4,201,046	\$ 2,935,427	\$ 3,335,668	\$ (1,265,619)	\$ 400,242	\$ (865,378)	-30.13%	13.63%	-20.60%
4th decile	2,532	\$ 4,398,039	\$ 2,936,459	\$ 3,474,370	\$ (1,461,579)	\$ 537,911	\$ (923,668)	-33.23%	18.32%	-21.00%
5th decile	2,531	\$ 5,799,579	\$ 3,983,157	\$ 4,700,279	\$ (1,816,421)	\$ 717,122	\$ (1,099,300)	-31.32%	18.00%	-18.95%
6th decile	2,532	\$ 8,207,321	\$ 5,856,874	\$ 6,814,739	\$ (2,350,447)	\$ 957,865	\$ (1,392,582)	-28.64%	16.35%	-16.97%
7th decile	2,531	\$ 14,744,137	\$10,859,347	\$ 12,724,324	\$ (3,884,790)	\$ 1,864,977	\$ (2,019,813)	-26.35%	17.17%	-13.70%
8th decile	2,532	\$ 15,431,521	\$10,982,010	\$ 13,282,527	\$ (4,449,511)	\$ 2,300,517	\$ (2,148,995)	-28.83%	20.95%	-13.93%
9th decile	2,531	\$ 12,257,330	\$ 9,060,024	\$ 10,828,207	\$ (3,197,306)	\$ 1,768,182	\$ (1,429,123)	-26.08%	19.52%	-11.66%
Top (Highest)	2,532	\$ 7,316,749	\$ 5,522,276	\$ 6,685,775	\$ (1,794,472)	\$ 1,163,499	\$ (630,973)	-24.53%	21.07%	-8.62%
Negative Earnings	11,110	\$ 13,411,680	\$ 9,120,410	\$ 10,283,249	\$ (4,291,270)	\$ 1,162,839	\$ (3,128,431)	-32.00%	12.75%	-23.33%
All firms	36,425	\$ 90,363,948	\$64,108,512	\$ 75,553,528	\$ (26,255,436)	\$ 11,445,016	\$ (14,810,420)	-29.06%	17.85%	-16.39%

Test 2: Low PBV

		Market Cap			Dollar Change			% Change		
Price to Book	Number of firms	2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Bottom decile	3,407	\$ 1,682,364	\$ 1,149,051	\$ 1,307,546	\$ (533,313)	\$ 158,495	\$ (374,818)	-31.70%	13.79%	-22.28%
2nd decile	3,407	\$ 4,045,671	\$ 2,990,772	\$ 3,261,549	\$ (1,054,900)	\$ 270,778	\$ (784,122)	-26.07%	9.05%	-19.38%
3rd decile	3,407	\$ 4,357,408	\$ 2,978,840	\$ 3,359,436	\$ (1,378,568)	\$ 380,596	\$ (997,972)	-31.64%	12.78%	-22.90%
4th decile	3,407	\$ 5,744,445	\$ 3,788,830	\$ 4,355,539	\$ (1,955,615)	\$ 566,709	\$ (1,388,906)	-34.04%	14.96%	-24.18%
5th decile	3,408	\$ 6,823,598	\$ 4,496,831	\$ 5,233,008	\$ (2,326,766)	\$ 736,176	\$ (1,590,590)	-34.10%	16.37%	-23.31%
6th decile	3,407	\$ 8,501,019	\$ 5,677,835	\$ 6,580,962	\$ (2,823,184)	\$ 903,127	\$ (1,920,057)	-33.21%	15.91%	-22.59%
7th decile	3,407	\$ 8,028,692	\$ 5,478,384	\$ 6,463,199	\$ (2,550,308)	\$ 984,815	\$ (1,565,493)	-31.76%	17.98%	-19.50%
8th decile	3,407	\$ 8,957,141	\$ 6,347,483	\$ 7,466,713	\$ (2,609,658)	\$ 1,119,230	\$ (1,490,427)	-29.13%	17.63%	-16.64%
9th decile	3,407	\$ 15,720,644	\$11,607,036	\$ 13,776,885	\$ (4,113,608)	\$ 2,169,848	\$ (1,943,760)	-26.17%	18.69%	-12.36%
Top decile	3,408	\$ 24,330,804	\$18,225,394	\$ 22,044,589	\$ (6,105,409)	\$ 3,819,195	\$ (2,286,214)	-25.09%	20.96%	-9.40%
All firms	36,425	\$ 90,363,948	\$64,108,512	\$ 75,553,528	\$ (26,255,436)	\$ 11,445,016	\$ (14,810,420)	-29.06%	17.85%	-16.39%

Test 3: High Dividend Yield

Dividend Yield Classes	Number of firms	Market Cap			Dollar Change			% Change		
		2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
No Dividends	19,225	\$ 24,707,423	\$17,289,721	\$ 20,743,671	\$ (7,417,702)	\$ 3,453,950	\$ (3,963,753)	-30.02%	19.98%	-16.04%
Bottom quintile	3,440	\$ 14,683,166	\$10,815,860	\$ 13,009,503	\$ (3,867,306)	\$ 2,193,643	\$ (1,673,663)	-26.34%	20.28%	-11.40%
2nd quintile	3,440	\$ 15,339,511	\$10,891,211	\$ 13,012,951	\$ (4,448,300)	\$ 2,121,740	\$ (2,326,560)	-29.00%	19.48%	-15.17%
3rd quintile	3,439	\$ 14,326,211	\$10,101,474	\$ 11,784,654	\$ (4,224,737)	\$ 1,683,180	\$ (2,541,557)	-29.49%	16.66%	-17.74%
4th quintile	3,441	\$ 14,749,540	\$10,569,522	\$ 11,995,030	\$ (4,180,019)	\$ 1,425,508	\$ (2,754,510)	-28.34%	13.49%	-18.68%
Top quintile	3,440	\$ 6,558,097	\$ 4,440,724	\$ 5,007,719	\$ (2,117,372)	\$ 566,995	\$ (1,550,378)	-32.29%	12.77%	-23.64%
All firms	36,425	\$ 90,363,948	\$64,108,512	\$ 75,553,528	\$ (26,255,436)	\$ 11,445,016	\$ (14,810,420)	-29.06%	17.85%	-16.39%

Bottom Line on Value vs Growth

- I believe that value investing has become ritualistic (worshiping at the altar of Buffett and Munger, and paying lip service to Ben Graham) and righteous (with finger wagging and worse reserved for anyone who invested in growth or tech companies).
- I also think that fundamental shifts in the economy, and in corporate behavior, have rendered book value, still a key tool in the value investor's tool kit, almost worthless in sectors other than financial services, and accounting inconsistencies have made cross company comparisons much more difficult to make.
- On a hopeful note, I think that value investing can recover, but only if it is open to more flexible thinking about value, less hero worship and less of a sense of entitlement.



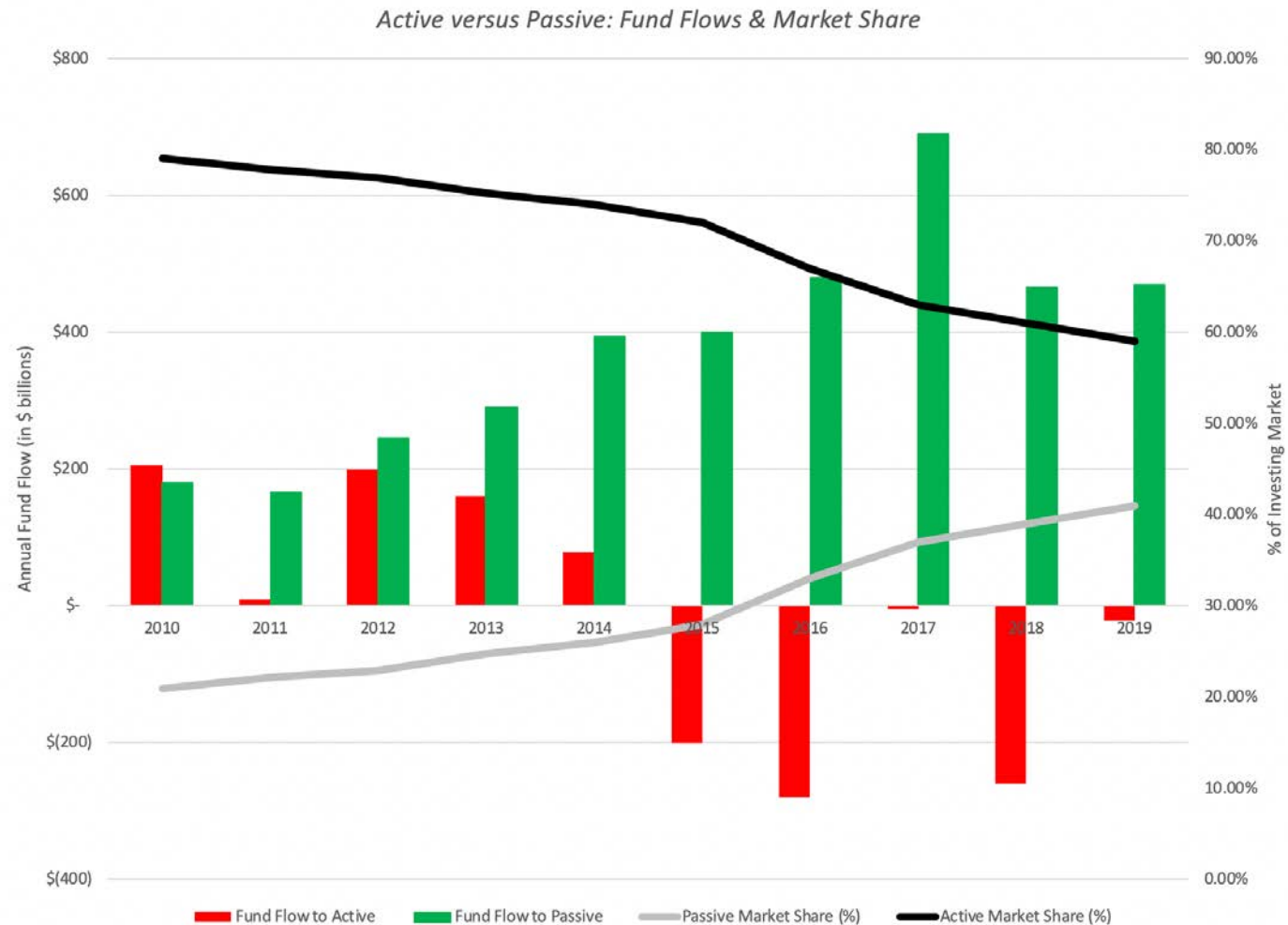
Active versus Passive

The Stock Picking Payoff

Active vs Passive

- ❑ In passive investing, as an investor, you allocate your wealth across asset classes (equities, bonds, real assets) based upon your risk aversion, liquidity needs and time horizon, and within each class, rather than pick individual stocks, bonds or real assets, you invest in index funds or exchange traded funds (ETFs) to cover the spectrum of choices.
- ❑ In active investing, you try to time markets (by allocating more money to asset classes that you believe are under valued and less to those that you think are over valued) or pick individual assets that you believe offer the potential for higher returns.
- ❑ Active investing covers a whole range of different philosophies from day trading to buying entire companies and holding them for the long term.

The Lead In



And the reasons

- Performance: First, the pioneering studies of mutual fund performance, including [this famous one](#) that introduced Jensen's alpha, came to the surprising conclusion that mutual funds underperformed by non-trivial amounts. In the years since, there have been literally hundreds of studies that have asked the same question about mutual funds, hedge funds and private equity, using far richer data sets and more sophisticated risk adjustment models to arrive at the same result.
- Choices: Second, Jack Bogle upended investment management in 1976 with the Vanguard 500 Index fund, the most disruptive change in the history of the investment business. The entry of ETFs tilted the game even further in favor of passive investing, while also offering active investors new ways of playing sectors and markets.

Crisis Test

- If active investors wanted to have a chance to shine, they have got in their wish in the last few weeks, where their market timing and stock picking skills were in the spotlight.
- With their expertise, they should have managed to not only to avoid the worst of the damage in the first few weeks, but should have then gained on the upside, by redeploying assets to the sectors/stocks recovering the quickest.
- While there is anecdotal evidence that some investors were able to do this, with [Bill Ackman's prescient hedge](#) against the COVID collapse getting much attention, I am sure that there were plenty of other smart investors who not only [did not see it coming](#), but made things worse by doubling down on losing bets or cashing out too early.

Mutual Fund Performance

<i>Equity Mutual Funds</i>	<i>Returns in 2020, First Quarter</i>		
	<i>Mutual Funds</i>	<i>MS Index</i>	<i>Active Excess Return</i>
Large Blend	-20.92%	-17.86%	-3.06%
Large Growth	-15.48%	-11.51%	-3.97%
Large Value	-26.77%	-25.10%	-1.67%
Mid-Cap Blend	-28.28%	-26.42%	-1.86%
Mid-Cap Growth	-20.64%	-17.00%	-3.64%
Mid-Cap Value	-32.53%	-35.52%	2.99%
Small Blend	-32.37%	-31.61%	-0.76%
Small Growth	-24.59%	-21.45%	-3.14%
Small Value	-36.89%	-39.68%	2.79%
All US Equity Funds	-21.94%	-20.57%	-1.37%

What next?

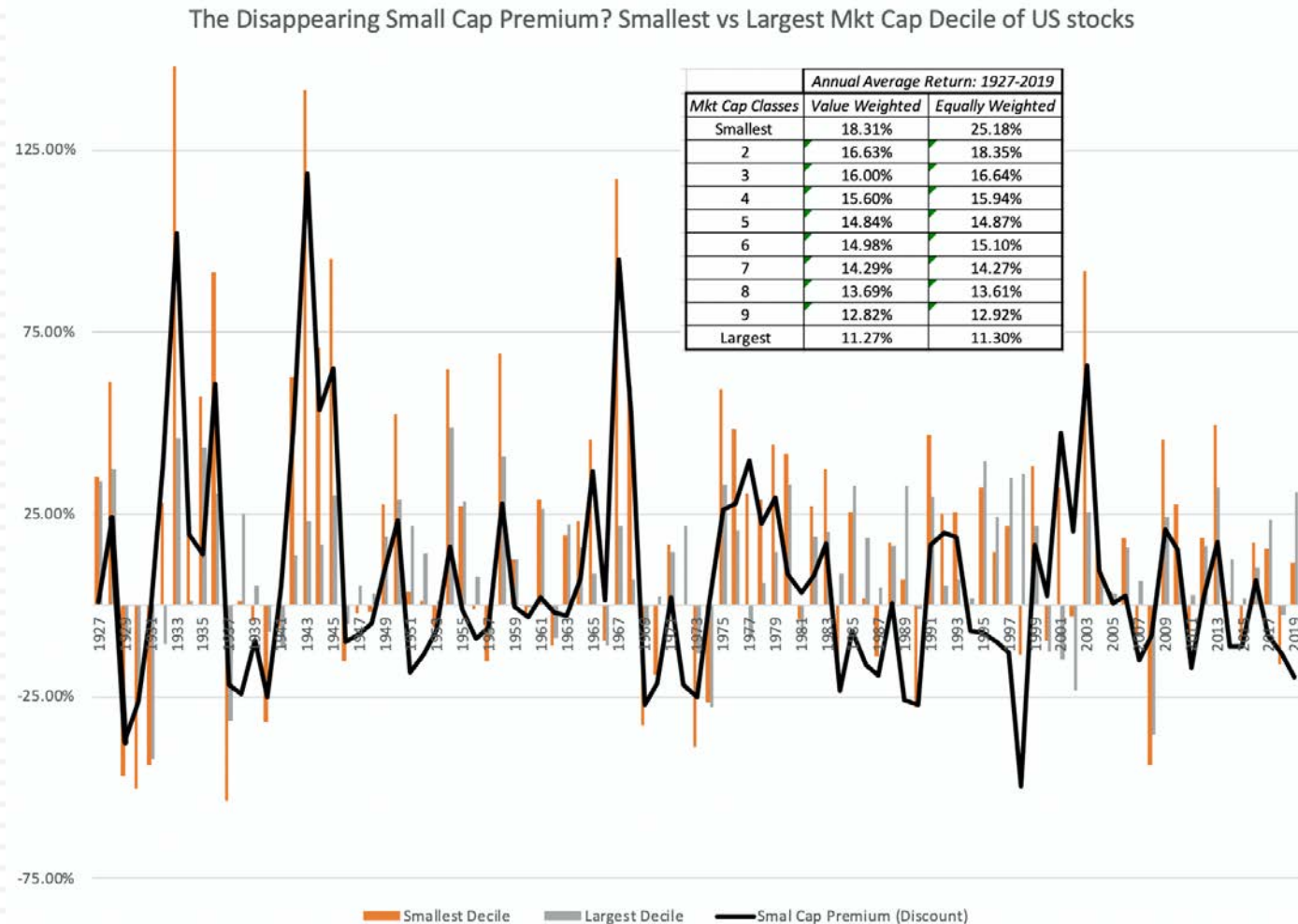
- For active investing to deal with its very real problems, it has to get past denial (that there is a problem), delusion (that active investing is actually working, based upon anecdotal evidence) and blame (that it is all someone else's fault).
- Coming out of this crisis, I think that more money will leave active investing and flow into passive investing, that active investing will continue to shrink as a business, but that there will be a subset of active investing that survives and prospers.
 - I also don't believe that artificial intelligence and big data will rescue active investing, since any investment strategies built purely around numbers and mechanics will be quickly replicated and imitated.
 - Instead, the future will belong to multidisciplinary money managers, who have well thought-out and deeply held investment philosophies, but are quick to adapt investment strategies to reflect market realities and are willing to deal with uncertainty frontally.



The Small Cap Premium

Clutching at straws?

The Small Cap Premium



A Shift?

	<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%
2010-19	13.49%	13.36%	0.13%	9.02%	14.35%	-5.33%

The Crisis Effect

decile(Market Capitalization [M])	Number of firms	Market Cap			Dollar Change			% Change		
		2/14/20	3/20/20	5/1/20	2/14-3/20	3/20-5/1	2/14 - 5/1	2/14-3/20	3/20-5/1	2/14 - 5/1
Bottom decile	3,635	\$ 36,161	\$ 22,501	\$ 24,281	\$ (13,660)	\$ 1,781	\$ (11,879)	-37.78%	7.91%	-32.85%
2nd decile	3,647	\$ 80,288	\$ 51,871	\$ 59,311	\$ (28,417)	\$ 7,440	\$ (20,977)	-35.39%	14.34%	-26.13%
3rd decile	3,641	\$ 147,654	\$ 96,180	\$ 112,896	\$ (51,474)	\$ 16,716	\$ (34,758)	-34.86%	17.38%	-23.54%
4th decile	3,637	\$ 256,374	\$ 165,442	\$ 198,646	\$ (90,932)	\$ 33,203	\$ (57,729)	-35.47%	20.07%	-22.52%
5th decile	3,651	\$ 459,702	\$ 291,865	\$ 352,328	\$ (167,837)	\$ 60,463	\$ (107,375)	-36.51%	20.72%	-23.36%
6th decile	3,642	\$ 853,860	\$ 566,365	\$ 664,993	\$ (287,495)	\$ 98,628	\$ (188,867)	-33.67%	17.41%	-22.12%
7th decile	3,644	\$ 1,549,147	\$ 1,112,201	\$ 1,246,824	\$ (436,946)	\$ 134,622	\$ (302,323)	-28.21%	12.10%	-19.52%
8th decile	3,643	\$ 2,972,931	\$ 2,146,355	\$ 2,414,740	\$ (826,576)	\$ 268,385	\$ (558,191)	-27.80%	12.50%	-18.78%
9th decile	3,642	\$ 7,442,503	\$ 5,161,690	\$ 5,930,638	\$ (2,280,813)	\$ 768,948	\$ (1,511,865)	-30.65%	14.90%	-20.31%
Top decile	3,643	\$ 76,565,329	\$54,494,042	\$ 64,548,872	\$ (22,071,287)	\$ 10,054,830	\$ (12,016,457)	-28.83%	18.45%	-15.69%
Global	36,425	\$ 90,363,948	\$64,108,512	\$ 75,553,528	\$ (26,255,436)	\$ 11,445,016	\$ (14,810,420)	-29.06%	17.85%	-16.39%

What now?

- It is still possible that the shifts in investor behavior and corporate performance could benefit small companies in the future, but I am hard pressed trying to think of reasons why. It is my belief that forces that allowed small cap stocks to earn a premium over large cap stocks have largely faded.
- I am not arguing that investing in small cap stocks is a bad strategy, but investing in small companies, just because they are small, and expecting to get rewarded for doing so, is asking to be rewarded for doing very little. Markets are unlikely to oblige.
- It is possible that you can build more discriminating strategies around small cap stocks that can make money, but that will require again bringing something else to the equation that is not being tracked or priced in by the market already.