

January 2020

On January 19th we shared that optimism had reached historically extreme levels. Although the count of traumatic brain injuries ("headaches" according to Trump) resulting from Iran's ballistic missile attacks on the 8th has reached 64, we fortunately dodged a war that futures were indicating would have sent stocks plunging:

Market Shock Events	Event Date	S&P 500 Index		Calendar Days To	
		One-Day	Total Drawdown	Bottom	Recovery
Iranian General Killed In Airstrike	1/3/2020	-0.7%	?	?	?
Saudi Aramco Drone Strike	9/14/2019	-0.3%	-4.0%	19	41
North Korea Missile Crisis	7/28/2017	-0.1%	-1.5%	14	36
Bombing of Syria	4/7/2017	-0.1%	-1.2%	7	18
Boston Marathon Bombing	4/15/2013	-2.3%	-3.0%	4	15
London Subway Bombing	7/5/2005	0.9%	0.0%	1	4
Madrid Bombing	3/11/2004	-1.5%	-2.9%	14	20
U.S. Terrorist Attacks	9/11/2001	-4.9%	-11.6%	11	31
Iraq's Invasion of Kuwait	8/2/1990	-1.1%	-16.9%	71	189
Reagan Shooting	3/30/1981	-0.3%	-0.3%	1	2
Yom Kippur War	10/6/1973	0.3%	-0.6%	5	6
Munich Olympics	9/5/1972	-0.3%	-4.3%	42	57
Tet Offensive	1/30/1968	-0.5%	-6.0%	36	65
Six-Day War	6/5/1967	-1.5%	-1.5%	1	2
Gulf of Tonkin Incident	8/2/1964	-0.2%	-2.2%	25	41
Kennedy Assassination	11/22/1963	-2.8%	-2.8%	1	1
Cuban Missile Crisis	10/16/1962	-0.3%	-6.6%	8	18
Suez Crisis	10/29/1956	0.3%	-1.5%	3	4
Hungarian Uprising	10/23/1956	-0.2%	-0.8%	3	4
N. Korean Invades S. Korea	6/25/1950	-5.4%	-12.9%	23	82
Pearl Harbor Attack	12/7/1941	-3.8%	-19.8%	143	307
Average		-1.2%	-5.0%	22	47

Source: LPL Research, S&P Dow Jones Indices, CFRA, 01/06/20

However, from this weekend's WSJ:

Stocks Tumble On Virus Concerns

BY GUNJAN BANERJI

U.S. stocks capped off a turbulent week with a punishing selloff as the coronavirus outbreak fanned fears about global economic growth.

The Dow Jones Industrial Average dropped more than 600 points Friday—its steepest one-day loss since August—while the S&P 500 and Nasdaq Composite both fell more than 1.5%. All three indexes suffered their worst January since 2016.

Anxiety swept through the stock, bond and commodities markets on uncertainty about the scope of the economic impact (chart added) of the coronavirus in China, as airlines suspended flights to and from the country and businesses shut down their operations there.

Oil prices have been hit hard, with U.S. crude at its lowest level since early August. A measure of stock swings dubbed the Cboe Volatility Index recorded its biggest January jump on record, a sign of the jitters percolating in markets.

Investors reached for traditionally safer assets like Treasuries and gold. Demand for Treasuries pushed the yield on the 10-year note to 1.521%, nearing 2016's record low, while gold prices hovered near the highest level in almost seven years.

Investors have soured on the market in recent sessions, a reversal from the first two weeks of the year when they piled into stocks on optimism that global growth could rebound. Unlike corporate

earnings or economic data, the long-run impact of the virus is trickier to measure for many investors and analysts, injecting even greater uncertainty into markets. ...

The blue-chip index dropped 603.41 points, or 2.1%, to 28256.03. The S& P 500 shed 58.14 points, or 1.8%, to 3225.52, capping its worst month since August and erasing its gains for the year. The indexes are down 3.7% and 3.1%, respectively, from their Jan. 17 records.

The tech-heavy Nasdaq Composite fell 148 points, or 1.6%, to 9150.94. The index eked out a 2% gain in January, its fifth consecutive month of wins.

Before the week began, the S& P 500 had been on one of its longest stretches without a gain or loss of more than 1% since 1969. That tranquility was shattered Monday when the index dropped 1.6%. It rebounded 1% Tuesday and made modest moves Wednesday and Thursday before dropping sharply again Friday. ...

The World Health Organization on Thursday declared the coronavirus—which has now sickened more than 9,500 people and killed over 200—a public-health emergency of international concern.

The potential effects of the virus darkened the outlook at a time when many investors had been encouraged by progress on trade, along with three interest-rate cuts by the Federal Reserve.

In one sign of the growth worries, the yield on the benchmark 10-year U.S. Treasury note edged back below the yield of the three-month bill this past week. The phenomenon, known as a yield-curve inversion, is often interpreted as a warning sign about a recession ahead. ...

From Friday's Global Investment Strategy's Weekly Report:

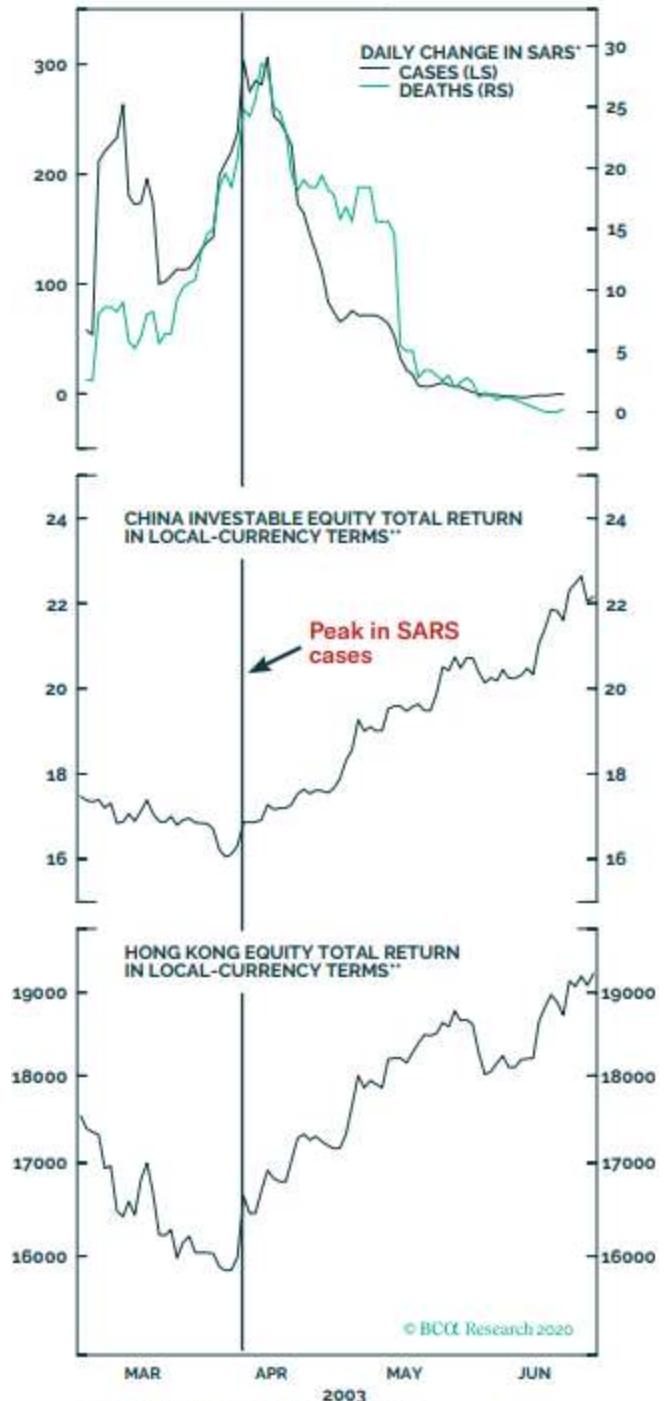


Many commentators have drawn comparisons between today's outbreak and the SARS epidemic in 2003. The SARS episode imposed a significant but short-lived economic toll on the affected countries. While Chinese GDP growth fell to 3.4% in Q2 of 2003, it surged back to 15.7% in Q3, leaving the overall level of GDP down about 1% for the year as a whole relative to what would have transpired if the virus had never emerged. The broader Asia-Pacific region experienced a hit to growth of around 0.5%. In contrast, growth in developed economies was barely affected. Even in Canada, where 44 people died from SARS, the outbreak shaved only around 0.1% from the level of GDP in 2003, according to the Bank of Canada.

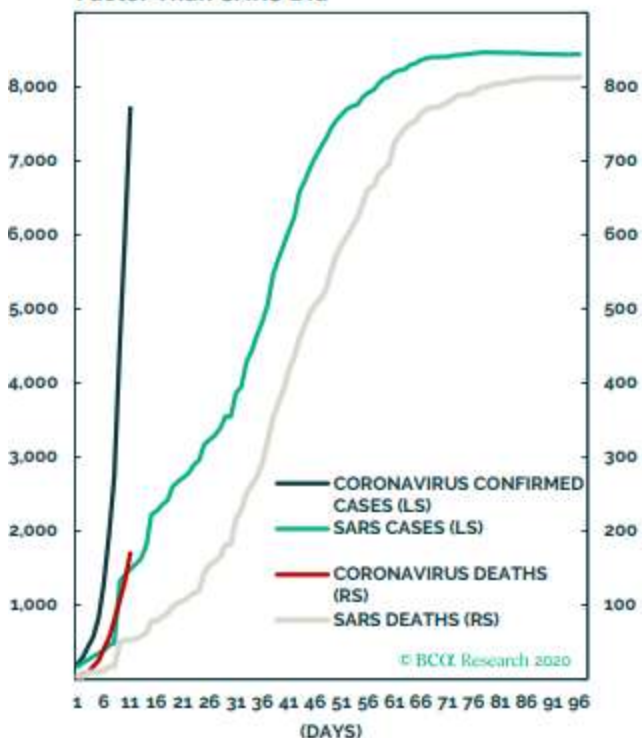
The obvious problem with the SARS analogy is that it is based on a sample of one. We do not know how this new strain of the virus compares to SARS or, for that matter, the Spanish flu, which killed 50-to-100 million people (3%-to-5% of the world's population at the time). We do not even know if the full scope of the SARS outbreak was as fleeting as what we remember

What we do know is that, to date, the coronavirus has spread more quickly than SARS (**Chart 1**). It is not clear if that is because of faster, more accurate reporting methods or because the virus is more communicable. The Chinese Minister of Health has said that this new virus, unlike SARS, can be transmitted while people are still asymptomatic. While others have cast doubt on this claim,

**CHART 3
Markets Bottomed As The SARS Infection Rate Was Peaking**



**CHART 1
The Coronavirus Is Spreading Faster Than SARS Did**



SOURCE: WORLD HEALTH ORGANIZATION (WHO) AND CHINA NATIONAL HEALTH COMMISSION.
 NOTE: CORONAVIRUS NUMBERS ARE FOR CHINA ONLY WHILE SARS NUMBERS ARE GLOBAL.

* SOURCE: WORLD HEALTH ORGANIZATION, SHOWN AS A 5-DAY MOVING AVERAGE.
 ** SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION).

if it turns out to be correct, the coronavirus may be much more difficult to control.

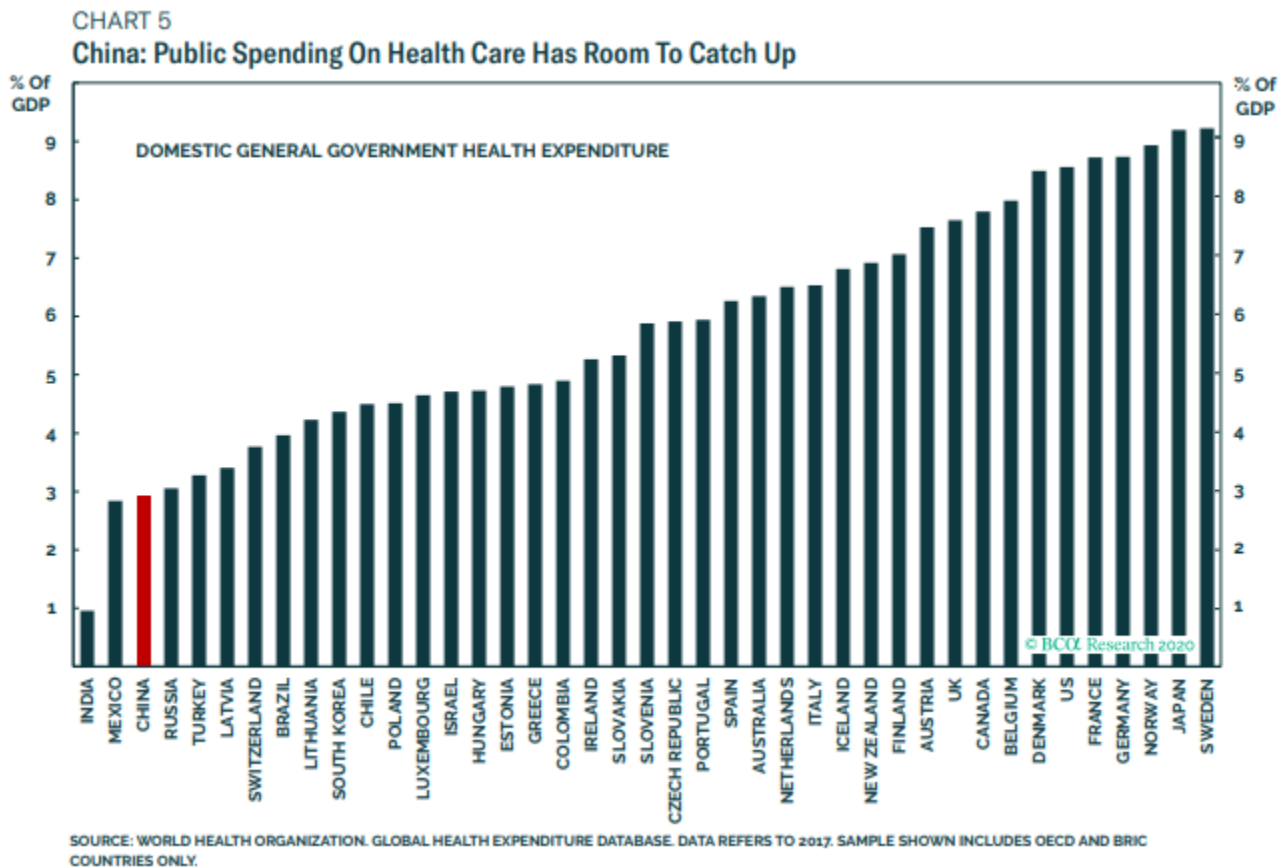
Viruses often become less lethal as they mutate because a virus that kills its host is also a virus that kills itself. Unfortunately, in a world of mass travel, a virus can spread across the globe before it has time to lose potency.

The typical seasonal flu kills less than 0.1% of those who contract it (**which results in an average of 35,000 deaths per year in the U.S.**). Most estimates suggest that SARS killed 10%-15% of infected patients. The Spanish flu killed a similar percentage. The death rate from the coronavirus is currently tracking at 2%-to-3%. However, it is possible that this estimate will rise. The vast majority of the people who have contracted the coronavirus are still sick. In fact, more people have died from it than have fully recovered. Thus, an honest assessment would simply admit that we do not know how bad this potential pandemic will get.

What should investors do? The SARS experience suggests that risk assets will only bottom when the number of new cases peaks (**Chart 3**). It is not clear that we have reached this point yet. ... Until the rate at which new cases are diagnosed begins a clear downward trend, a somewhat cautious stance towards risk assets is warranted.

Global Growth Should Recover Provided the outbreak is contained during the coming weeks, global equities should move higher over the course of the year. This is partly because global growth should pick up thanks to the lagged effects of last year's decline in bond yields, an improvement in the global manufacturing inventory cycle, and diminished Brexit and trade war risks.

Continued fiscal/credit stimulus out of China should also help. China spends less on health care than almost all other countries (**Chart 5**). It is likely that the past few weeks will prompt the government to increase social spending.



Follow-ups

From Verdad's Dan Rasmussen on Jan. 6th:

Prosperity

The US Economy is doing very well, but what does that mean for US equities?

In the 1970s, economist Arthur Okun created the “Misery Index,” which he computed by adding the inflation rate to the unemployment rate.

Our friend Russell Pennoyer has proposed a new measure of macro-economic health that he calls the “Prosperity Index.” The Prosperity Index is computed by subtracting the unemployment rate from the rate of GDP growth. Therefore, prosperity is maximized when GDP growth is high and unemployment is low. The logic of combining these two metrics into a single index is that GDP growth alone may miss the key role that employment plays in an economy driven by consumer spending. We show this index below from 1948 to the present.

Figure 1: The Prosperity Index



Source: FRED

For the last 30 years, the index has averaged -3.4% (the unemployment rate usually exceeds the GDP growth rate). But the three-year rolling average recently reached -1.6% in the third quarter of 2019, marking the highest reading since 2000 and, before that, the economic boom of the 1960s. We are living through a period of great economic prosperity.

But there's a curious thing about economic prosperity: it happens to be negatively correlated with future stock returns. Everyone who's read a sell-side market commentary deck or journalistic commentary on today's market movements knows how much they love to read the GDP and unemployment tea leaves. But the evidence suggests that these economic indicators predict exactly the opposite of what most people think. Below we show the Prosperity Index relative to one-year forward returns on the S&P 500 and on the Fama-French small-cap value index.

Figure 2: Stock Returns vs. the Prosperity Index by Quartile 1948–2018

Prosperity Index (GDP Growth - Unemployment)	S&P 500 1Yr Fwd Return	Small Value 1Yr Fwd Return	Small Value Premium
Q1 -12.9% to -4.2%	18%	29%	11%
Q2 -4.2% to -2.3%	11%	15%	4%
Q3 -2.3% to -0.6%	12%	17%	5%
Q4 -.6% to +9.2%	9%	11%	2%

Source: Ken French data library, Capital IQ, FRED

... What should investors do with this knowledge? We know we are living through an era of great prosperity. We know that economic prosperity tends to be correlated with low future stock returns. ...

The logical answer is to ... search **for** economies not in such good shape, where the economic conditions and stock market valuations look more like the US in January of 2010 than January of 2020.

Below, we show the 12 countries where the Prosperity Index is below -4.2% (equivalent to the fourth quartile of worst economic times in the United States), suggesting that these are the best times to buy stocks in general, and small-cap value in particular, in these countries.

Figure 4: The Prosperity Index by Country

Country	Region	GDP Growth	Unemploy- ment	Prosperity Index	P/S
South Africa	Africa	0.1%	29.1%	-29.0%	1.2x
Greece	Europe	2.3%	16.7%	-14.4%	0.7x
Turkey	Europe	0.9%	13.8%	-12.9%	0.6x
Spain	Europe	2.0%	13.9%	-11.9%	1.2x
Brazil	S. America	1.2%	11.6%	-10.4%	1.7x
Italy	Europe	0.3%	9.7%	-9.4%	0.7x
France	Europe	1.4%	8.6%	-7.2%	1.2x
Hong Kong	Asia	-2.9%	3.1%	-6.0%	1.9x
Austria	Europe	1.5%	7.3%	-5.8%	0.7x
Sweden	Europe	1.6%	6.8%	-5.2%	1.8x
Canada	N. America	1.6%	5.9%	-4.3%	1.5x
Portugal	Europe	1.9%	6.1%	-4.2%	0.7x
Average		1.0%	11.1%	-10.1%	1.2x

Source: StarCapital, Trading Economics

The big thing that jumps out from this page is the dire economic state—and thus relative attractiveness of stocks—in Europe. Greece, Turkey, Spain, Italy, France, Austria, Sweden, and Portugal are all suffering economically. There are also pockets of opportunity in South Africa, Brazil, Hong Kong, and Canada, but Europe is the biggest opportunity.

These are heady times for the US economy and US investors. The US is the largest, strongest economy in the world, and its companies, from Apple to Amazon, seem unbeatable. But prudent investors know that the odds are better on the underdogs, and that prudence suggests a rather sizable international allocation might be the best course of action.

Jason Zweig's January 11th column in the WSJ:

Why Investors Prefer the Shiny Object Over the Rusty Bargain

Pop quiz: Name the giant store whose customers scoff at whatever goes on sale, but flock to buy whatever costs the most.

It isn't a supermarket. It's the stock market—especially over the past decade, when value stocks have moldered in the bargain bin. Such companies, trading at low prices relative to their earnings, net assets or other measures, have underperformed pricier growth stocks by one of the longest and widest margins on record.

Is value investing dead?

No.

When will it recover?

No one can say for certain. But when it does bounce back the gains are likely to make the wait worthwhile.

Mind you, value investors have turned blue in the face predicting the revival of cheap stocks. They've been wrong for years; they might still be wrong. But I don't think they'll be wrong for long.

Consider some evidence gathered by Rob Arnott and his colleagues in a new study. Mr. Arnott is chairman of Research Affiliates LLC, a firm based in Newport Beach, Calif., that pioneered alternatives to traditional index funds. Its investment strategies are used to manage about \$190 billion world-wide.

The researchers sought to determine why value has lagged growth for so long, how unusual that is and what might happen next.

Most of the hottest growth companies over the past decade—Facebook, Amazon, Netflix, Microsoft, Apple and Google's parent Alphabet—are still in fashion. Over the past year, Apple has returned 108%, Microsoft 60% and Facebook 53%, dwarfing the performance of value stocks.

Why have cheap stocks fallen so far behind? The short answer: Investors, already enthusiastic over high-priced growth shares, have turned euphoric, driving their prices even higher relative to value stocks.

Growth companies haven't become permanently more profitable. So value stocks should eventually outperform simply because their shares are cheaper.

For growth stocks, “higher past returns will presage lower future returns,” says Mr. Arnott.

The study finds that value companies aren’t unusually inexpensive relative to their own earnings and assets—but they are nearly the cheapest they’ve ever been compared with growth companies.

That’s true even after adjusting for patents, research and development, and other assets that aren’t fully captured by book value, a traditional measure of net worth.

Financial logic says cheap stocks should ultimately earn higher returns than expensive ones; the less you pay for a piece of the future, the more you will earn in the end. Emotional logic, however, says investors will often overpay for excitement.

Therefore, you should always be prepared for value to lag growth in the short run, even though cheap stocks have earned higher returns over the full sweep of decades. And “the short run” can mean many years.

This isn’t the first time value has underperformed growth for at least 10 years, says Savina Rizova, head of research at Austin, Texas-based Dimensional Fund Advisors LP, which manages about \$610 billion.

Value trailed in 10-year spans ending in the late 1930s, the late 1990s and every year after 2010— about 15% of the total periods.

Over the ensuing decade after such poor returns, value tended to bounce back sharply, beating growth by an average of more than 8 percentage points a year.

After lagging by 3 percentage points annually over the 10 years ending in 1998, for example, value stocks outperformed growth by more than six points annually over the next 10 years.

History is punctuated with periods when investors made more money buying expensive stocks than cheap ones—for a while, anyway.

Radio Corp. of America’s shares rose tenfold from 1925 through 1929, trading at their peak for a feverish 73 times earnings and roughly 16 times book value. By 1932, RCA had fallen 97% from its 1929 summit.

In the early 1970s, investors imagined that a group of top-performing growth stocks called the “Nifty Fifty” would go up indefinitely, despite already lofty prices; even 30 years later, many of them still hadn’t regained their 1972 highs.

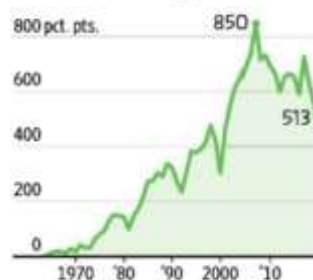
In the late 1990s, no price seemed too high to pay for such leading internet companies as At Home, CMGI, GoTo.com, Lycos and theglobe.com. Between 2000 and 2002 many dotcom shares fell 90% or more.

Of course, today’s hottest growth stocks might not repeat the collapses of the past. They could be made of sterner stuff. But they don’t need to crash for value stocks to outperform. Investors need only decide to pay somewhat less for the hottest stocks.

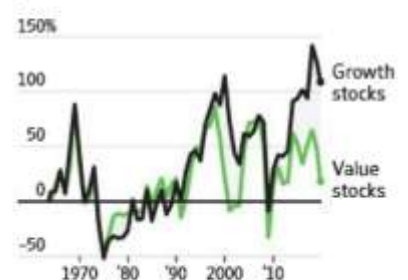
Cheap Stocks Win...Eventually

Over the long run, value stocks have earned better returns than pricier growth stocks. In the past decade, however, cheap stocks underperformed as costly growth stocks became more costly.

Cumulative outperformance of value stocks over growth stocks



Cumulative change in price-to-book ratio



Note: Figures through 3Q 2019
Source: Research Affiliates

“When value gets this cheap [relative to growth],” says Mr. Arnott, “the odds of it succeeding in the future go up drastically.”

It can hurt to sit on your hands while growth investors are clapping theirs to celebrate big gains on expensive stocks that keep getting more expensive. But, sooner or later, value investors will be getting the applause.

From Verdad's Nick Schmitz on Jan. 21st:

Wrong for the Right Reasons

For about one in four years since 1936, US equities have had negative returns, based on our research. In the average down year, stocks lost approximately 12%. In those years, being in equities at all was a bad decision, as we see it.

For about two in five years since 1936, small-cap value stocks have underperformed US equities. In the average year of underperformance, small value lagged the S&P 500 by 10%. In those years, being in small-cap value instead of the broader market was, in our view, a bad decision.

Looking at the negative years combined with the years of underperformance, investing in US small value stocks was the “wrong” decision in 49% of years going back to 1936, in our view. In those bad years, small value stocks lost 1% on average.

Yet, curiously, over this period, small-cap value stocks outperformed by 5% per year, generating a 15% per year compound annual return versus 10% per year for the S&P 500 generating 2.5x as much money over 20 years and over 6x as much over 40 years.

Despite being the “wrong” decision in one out of every four years, holding the S&P 500 during this whole period was a good decision, from our perspective. But despite being “wrong” in 49% of years, we believe holding the Fama-French small value index was an even better decision.

This is because, in the years that Fama-French small value index worked, it really worked. Based on our research, in the average good year, when the market was up and small value outperformed, investors earned an average 37% return, generating 16% of excess return relative to the S&P 500. We can see these stats in Figure 1 below.

Figure 1: Bad Years and Good Years

	Small Value			Good Years
	Stocks Down	Underperforms	Total Bad Years	
Percentage of Years	24%	39%	49%	51%
Fama-French Small Value	-9%	-2%	-1%	37%
S&P 500	-12%	9%	3%	20%
Relative	3%	-10%	-4%	16%

Source: Ken French Data Library, Capital IQ

From our perspective, earning this premium required staying invested because the good years were really concentrated in good days.

And watching markets from quarter to quarter or year to year, it's hard to appreciate just how sporadic those few days were. We counted the last 6,677 trading days for the MSCI Small Value Index going back as far as it goes to 1994. Based on our analysis, missing the best 20 trading days (or 3% of all trading days) would have cut your historical returns in half. And if you missed out on exposure to small value for just the best 10% of trading days, you would have been better off holding cash.

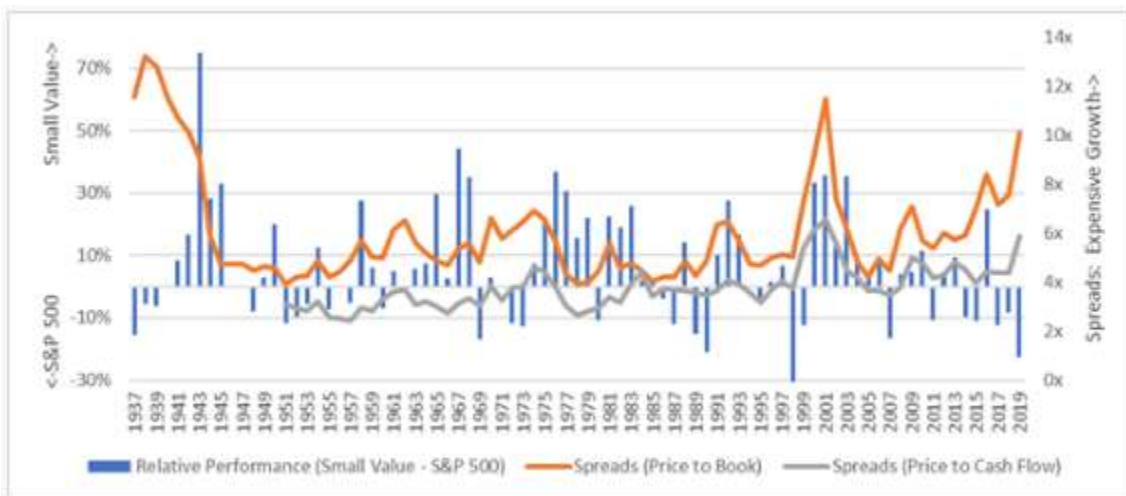
Figure 2: Effect of Missing the Best Trading Days

Growth of \$100 (1994 to 2020)	Value	IRR
All Days (6,677 days)	\$ 1,117	9.7%
All Minus Best Day	\$ 1,029	9.4%
All Minus Best 5 Days	\$ 756	8.1%
All Minus Best 20 Days	\$ 324	4.6%
All Minus Best 10% of Days	\$ 53	-2.4%

Source: Capital IQ

And those really rare, phenomenal returns that made the difference were concentrated in times when it would have been most tempting to sit out small value: times when value stocks traded at an extreme discount to growth stocks. Below is the relative performance of small value minus the S&P 500 Index and the ratio of growth stock valuation multiples divided by value stock multiples historically.

Figure 3: Historical Spreads and Relative Annual Performance of Small Value vs. S&P 500



Source: Ken French Data Library, Capital IQ. Spreads are calculated as the 90th percentile breakpoint divided by the 10th percentile breakpoint of valuations for the whole market.

Historically, the small value premium was driven heavily by keeping exposure precisely after small value had underperformed large growth and valuation spreads had risen above historical levels, based on our analysis. Investors were rewarded when small value was least popular and on sale, relative to the rest of the market.

2019 saw the worst relative performance for small value compared to the S&P 500 since 1998 and saw resulting spread levels not seen since then or the early 1940s. We believe those were very, very good times to ignore the crowds and crowded trades and instead be in small value and out of the S&P 500 for the next 5 to 10 years.

But as with history, we believe it will likely be just a handful of highly unpredictable trading days that make that difference between being “right” and “wrong.”

Positions

JMP - As a general rule, we sell losers, especially in taxable accounts, when a client needs funds, particularly when the stock is no longer a buy. Last position in JMP was sold on 1/6 @ 3.15.



XSLV - Completed the transition to SMMV for the Low Volatility Factor for 2 remaining clients, which held XSLV in taxable accounts.

