THE BULL MARKET CULT IS KILLING THE ECONOMY

Bottom Line:

1 – The market value of the FAANMG stocks exceeds that of the financial, energy, industrial, and material sectors *combined*
2 – The FAANMG stocks account for just 5% of S&P 500 index' employees and 3% of its outstanding debt
3 – Stock prices and multiples have surged faster than after the past 11 market bottoms. So has gold, which is not normal.
4 – Signs of economic normalization, such as higher yields and steeper curves, should be here by now. They are not.
5 – What is good for the stock market would be bad for the economy, and vice versa
6 – The bull market cult of 2020 rests on endless financial repression: it will destroy most liability-driven investors

All the people took off their earrings and brought them to Aaron. He took what they handed him and made it into an idol cast in the shape of a calf, fashioning it with a tool. Then they said, "These are your gods, Israel, who brought you up out of Egypt." - Exodus 32

Lost in the desert, abandoned by Moses, and manipulated by their priests, Israelites briefly worshiped a golden calf, before being severely punished by the vengeful God of the Old Testament. Investors are in a similar predicament: locked in their homes, torn apart by politics, and surrounded by economic devastation, **investors have erected the FAANMG-driven bull market as their new idol**. Stocks' relentless rise since the March low has brought relief and distraction from the economic and political chaos.

But just as the golden calf was a mockery of Israel's true God, the S&P 500 index no longer represent the economy. **The FAANMG stocks, whose capitalization exceeds that of the financial, energy, industrial, and materials sectors *combined*, account for 5% of the index' employees and 3% of total debt.**

The second part will argue that **the stock market no longer leads the economy**: prices and multiples have rebounded much faster than after any prior market bottoms but many economic indicators have failed to confirm stocks' positive message: five months after a stock market bottom, yields usually rise, curves steepen, gold prices drop, and consumer confidence rebounds – the opposite of what is happening today.

Pension fund managers praying to the FAANMG

The last part will argue that **the what is good for the stock market interests has become bad for the economy, and vice versa**: the bull market requires financial repression, depression-level yields, ever-greater liquidity injections, and the continued domination of a handful of overvalued tech megacaps.

On the other hand, a sustainable recovery would require higher yields, lower asset prices, rapid household formation, greater competition, some inflation, gales of creative destructive destruction, and the normalization of monetary policy – which would destroy a stock market captured by long-duration tech monopolies. "When a measure becomes a target, it ceases to be a good measure": Goodheart's law summarizes the relation between the stock market and the economy.

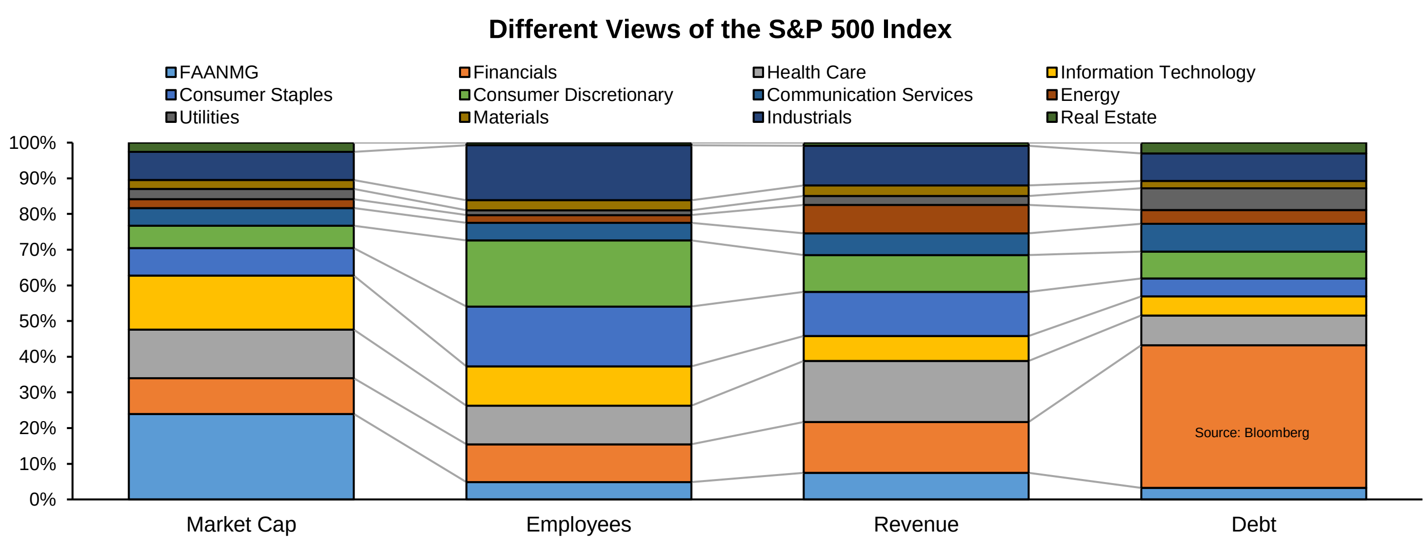
Vincent Deluard, CFA   Vincent.deluard@intlfcstone.com   (+1) 305-925-4922   www.marketintel.stonex.com

The S&P 500 index No Longer Represents the Economy

When economists felt the need to measure growth (or the lack thereof) during the Great Depression before Simon Kuznets introduced the concept of Gross Domestic Product, they thought that stock prices were a good real-time indicator of the general health of the economy. Indeed, the Dow Jones *Industrial* Average captured the reality of the rapidly industrializing and urbanizing economy of the 1930s.

For example, just one of Ford's plant, the River Rouge plant in Michigan, employed 100,000 workers in the 1936. More 10,000 applicants lined up outside Ford's employment office hoping to be hired after the company instituted the "$5 day" and Ford's generous pay practices were significant enough to increase the company's sales of the famous Ford T. By comparison, the four FANG stocks employ an average of just 115,960 workers, whose app store and Google Play purchases contribute close to nothing to these companies' top lines.

The FAANMG stocks matter so much because indices are weighted by market capitalization. **The FAANMG's 25% share of the S&P 500 index would shrink to less than 5% if the index was weighted by employees, or 3% if it were weighted by debt** – probably the most meaningful metric in age of record leverage and plummeting profits.

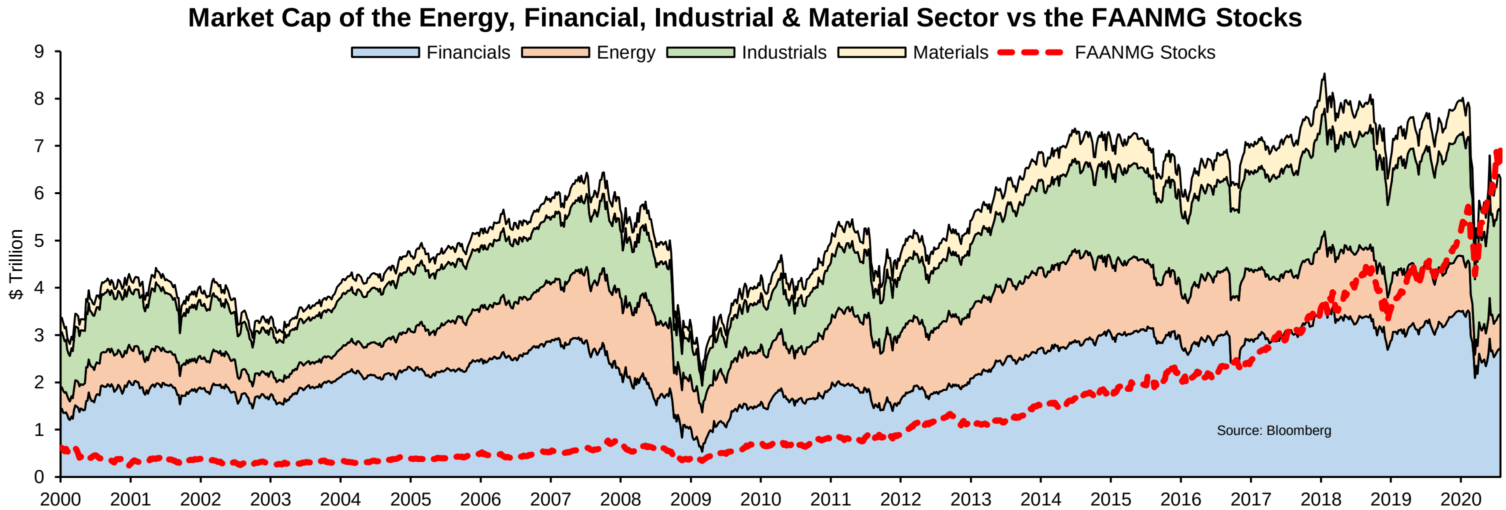


Market cap comparisons between the FAANMG stocks and the rest are simply mind-blowing. With a combined capitalization of $7.2 trillion, **these six stocks are worth more than the financial, energy, industrial, and material sectors *combined***. For reference, the total capitalization of the S&P 500 index on March 9, 2009, was $6.1 trillion and the four most valuable European indices (the FTSE-100, the CAC-40, the Dax, and the Swiss Market indices) are worth $6.6 trillion.

I made a bullish short-term call on the big U.S. tech platforms in April (see "Two Adjustments to the Cockroach Portfolio") based on their cash hoards, the long duration of their cash flow profile and resilient

Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

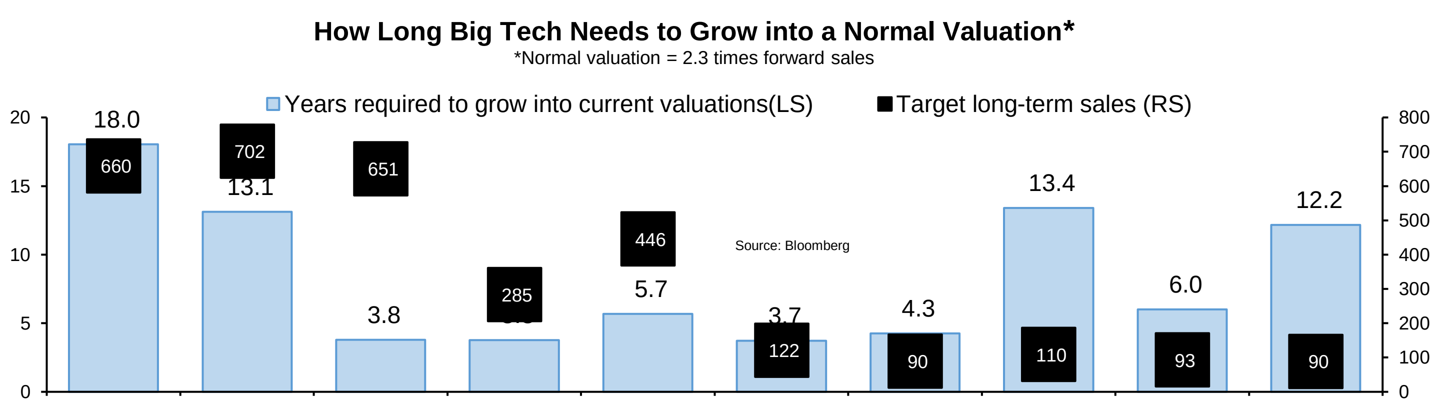
margins, but I would much rather own all the top companies listed in Paris, Frankfurt, London, and Zurich for the next ten years than the stocks of six outstanding but overvalued companies competing for the same economic pie.



As I explained in "Fighting Against Maths", **it is mathematically impossible for the tech megacaps to grow into their valuations.**

"Microsoft's $613 billion market cap in late 1999 seemed absurd in relation to revenues of $19 billion, and yet the company is now worth $1.6 trillion and had revenues of $143 billion this past year. Could this happen again? Let's run the numbers.

Microsoft's revenues have grown by 8.9% annually in the past six years – let's assume that this extraordinary growth continues until the firm reaches steady state. At this point, the stock should trade for the "normal" multiple for S&P 500 index stocks of 2.3. It would take 18 years of 8.9% annual growth in revenue with zero price appreciation for Microsoft to "grow into its valuation". By then, sales would be over $659 billion. For reference, the largest U.S. company by turnover, Walmart, had revenues $514 billion last year.

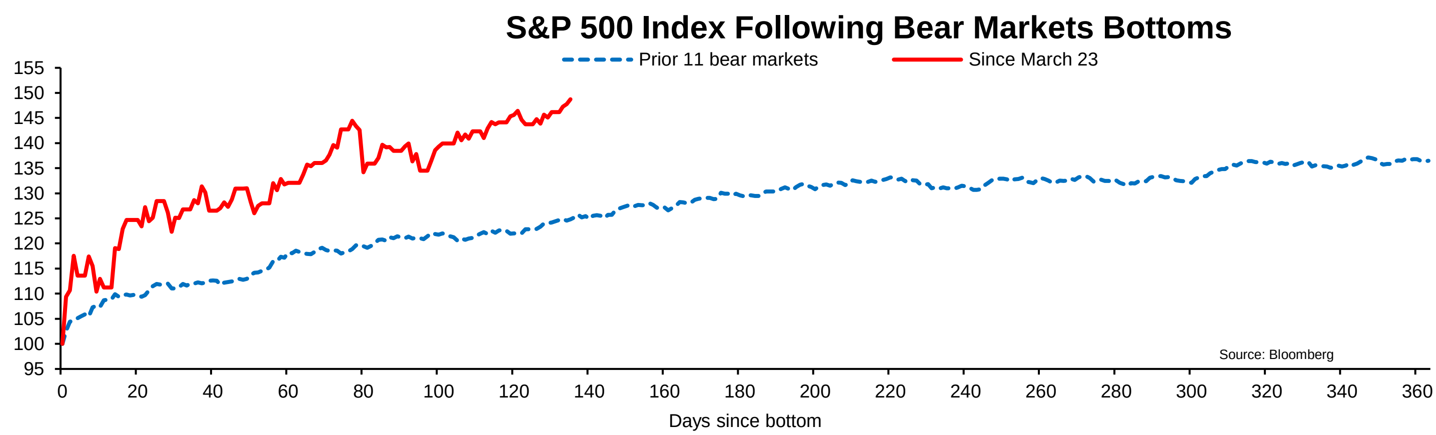


Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

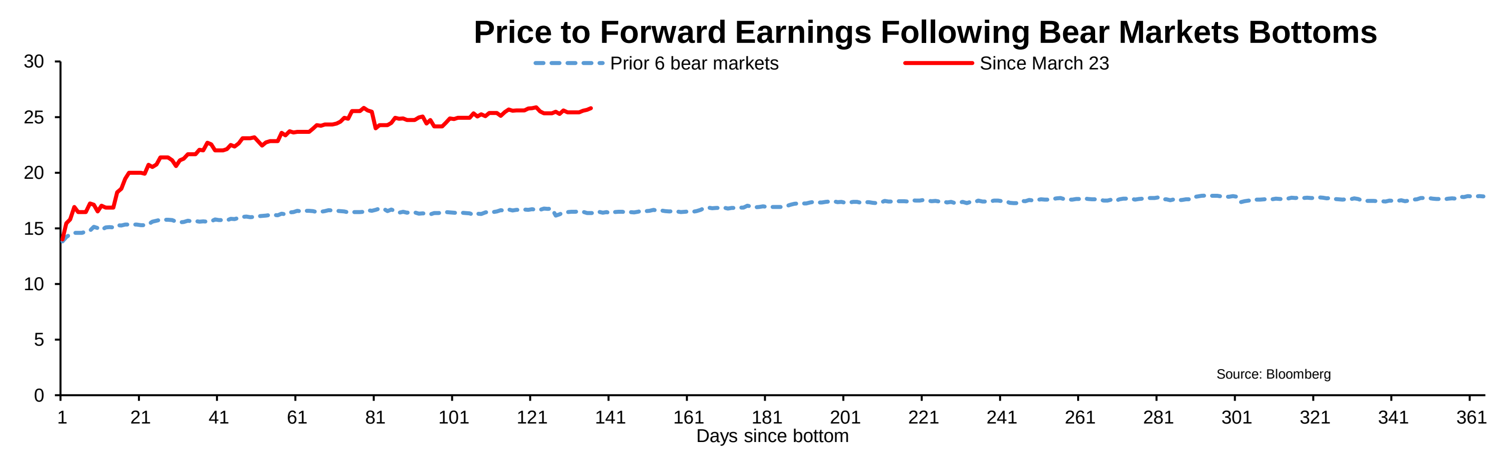
The S&P 500 Index No Longer Leads the Economy

The most common justification for the cognitive dissonance between soaring indices and the worst economic contraction in recorded history is that the stock market cares about the future and ignore the present. It is true that stocks tend to lead economic turns by about 6 to 12 months but *it has been close five months since stocks bottomed on March 23*. Should we not start to see some green shoots of the much-awaited economic recovery announced by stocks' spectacular ascent?

Let's review the evidence by comparing the current bull market to the past rallies which have followed the past 11 bear markets. First, stock prices: **the S&P 500 index gained 50% since March 23, double what has been the average rally in that time frame after the past 11 market bottoms**.

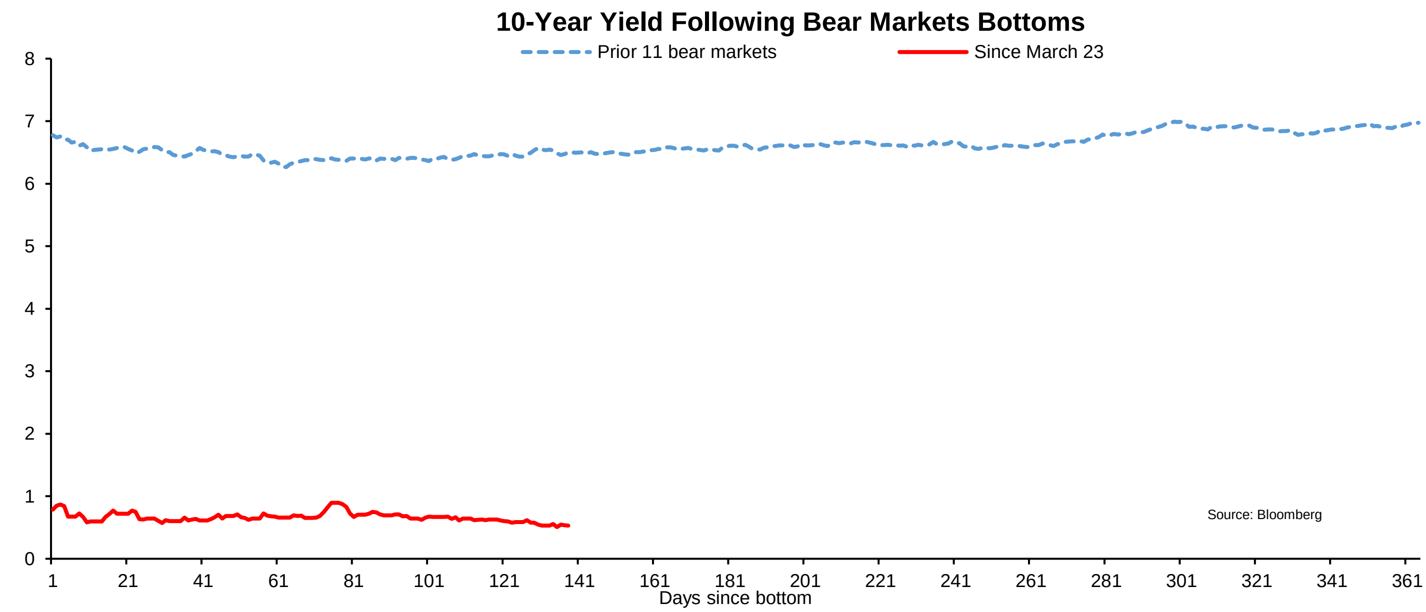


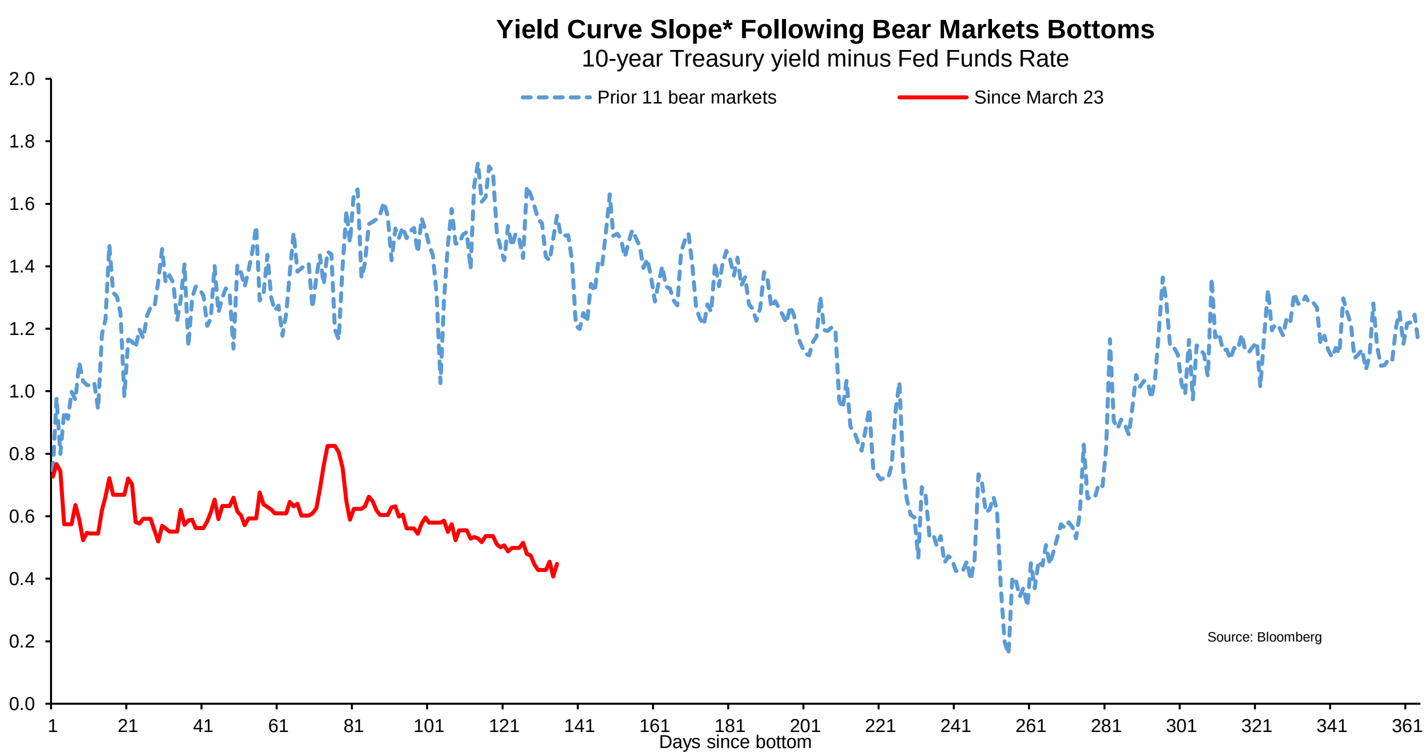
Even more remarkably, **the S&P 500 index' price to expected earnings has soared by 85%, from 14 on March 23 to a record of 26 last week**. Bloomberg's EPS estimates data only cover the past six bear markets --- which all took place during periods of relatively low rates and high valuations – but the data certainly suggests that stocks should be a lot cheaper at this point: on average the S&P 500 has traded for 16 times earnings five months after a bear market bottom.



Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

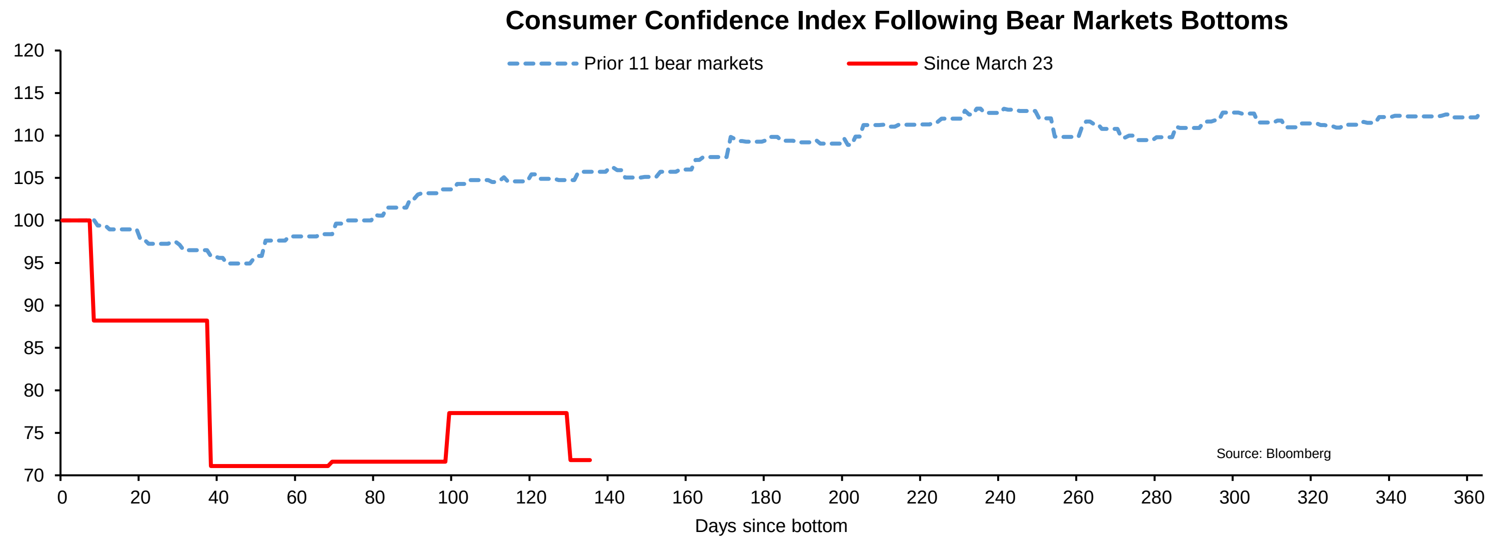
The bond market usually starts to confirm the message of stock prices after five months: long yields typically rise and curves steepen in anticipation of better nominal growth. By contrast, the yield on 10-year Treasuries has almost halved since March 23, and the spread between 10-year yields and the Fed Funds' rate has collapsed to 44 basis points.



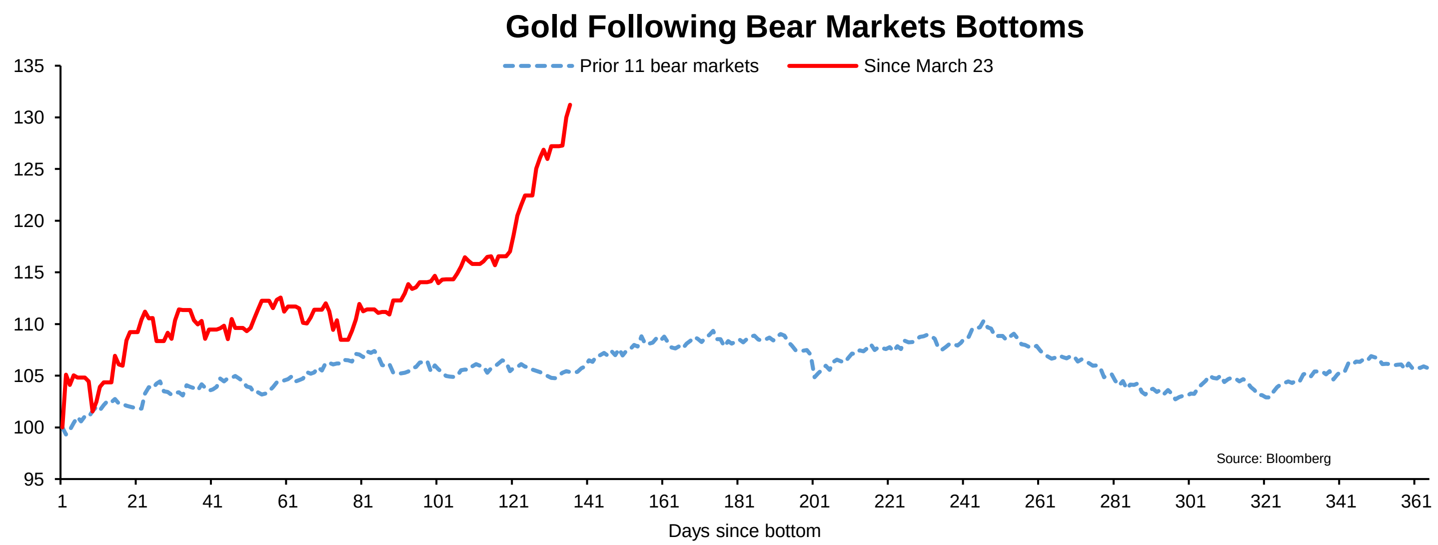


Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

Similarly, consumer confidence usually follows stock prices' rebound after major bottoms. The two series are tied into a virtuous circle: rising stock prices boost consumer confidence, and stocks rally as sentiment improves from the negative extremes experienced at bear market bottoms. However, the University of Michigan Consumer Sentiment Index plunged to 72.5 in July, from 101 at the end of March.



On the other side of the confidence spectrum, gold usually lags stock prices when they emerge from a major bear market bottom. The prospect of higher economic activity, rising rates, and improved investment opportunities usually reduces the demand for safe haven assets which prevails at bear market bottoms. By contrast, the yellow metal has rallied by 32% since the March 23 bottom, and **the opposite trajectories of gold and the dollar index suggest that confidence in the U.S. economy is waning, rather than recovering**.



Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

What Is Bad for the Economy is Good for the Market … and Vice Versa

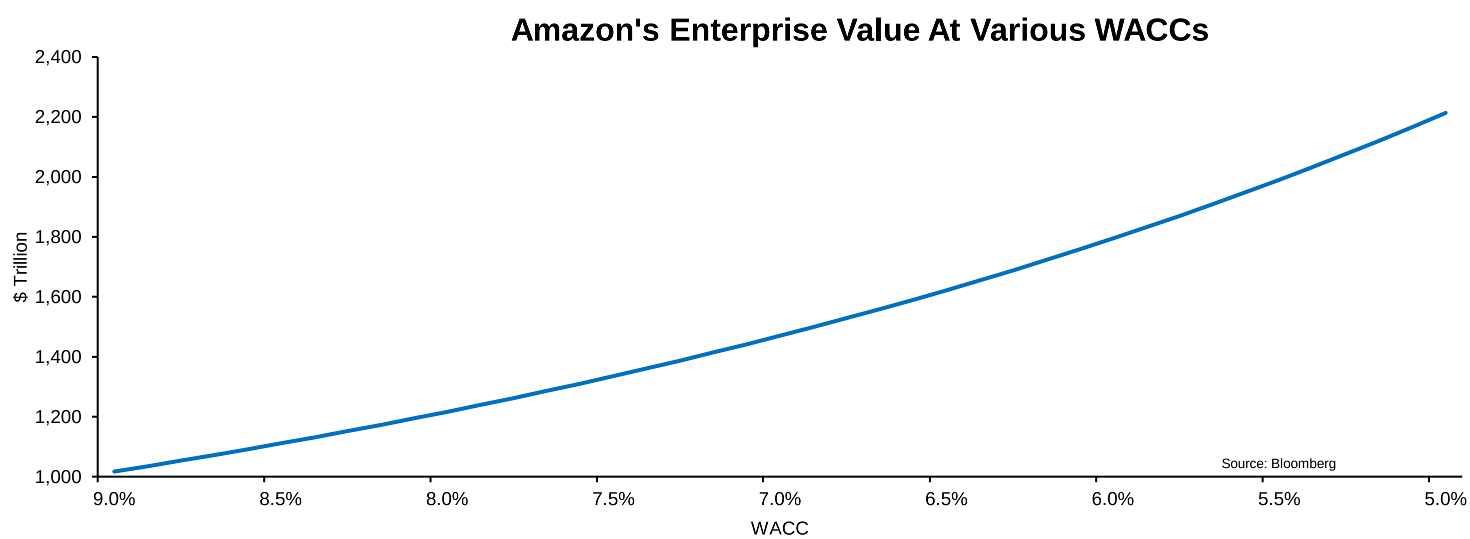
Imagining counterfactual scenarios is a useful exercise to understand the relation between the stock market and the real economy. **What would happen to asset prices if economic growth suddenly accelerated to a nominal rate of 5% (3% real, 2% nominal)?**

Long-term yields would undeniably back up by several hundreds of basis points overnight. Any fixed income instrument with a duration of more than 2 years would be slaughtered. Most corporate issuers would not be able to roll over their debts as coverage ratios would plummet, forcing downgrades and covenant breaches. More terrifyingly, some private equity managers may lose their jobs, and the bonuses of investment bankers packaging leveraged loans into CLOs would shrink. The last two decades have repeatedly showed that this is a cost that politicians will do anything to avoid.

Political irony aside, the effects of a back-up in yields would be disastrous for the big tech platforms and the pension plans which blindly allocate capital to them.

Let's start with big tech: as I explained in Two Adjustments to the Cockroach Portfolio big tech platforms are a long duration asset because so much of their value is derived from the very far future. Consider a stock like Amazon, whose current enterprise value of $1.6 trillion relies on realized free cash flow of just $27 bn in the past twelve months. Investors are not paying 61 times free cash flow for this year's profits but for their future growth. 2020 profits could fall to zero without affecting the stock prices, *provided investors remained confident in Amazon's long-term profits.*

Indeed, based on the company's cost of capital of 6.6% and enterprise value pf $1.6 trillion, Amazon's valuation implies that investors are expecting 35 years of 10% annual growth (!!!). This year's cash flow would account for just 1.6% of the valuation, and 80% of the firm's value would be realized after the tenth year. With these assumptions, Amazon would lose about 2% for every 10 basis points increase in its discount rate. In other words, **Amazon has approximately the same duration as a 20-year bond!**



Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

Some might argue that a lower price for Amazon's stock would not be such a bad thing: on the negative side, Jeff Bezos' net worth would drop by half if long yields[1] rose back to the 3%+ level they were at before the Fed started "not QE-QE" and a Cambrian explosion of asset purchase programs in 2020. He would still be left with $100 billion, $30 billion more than the fortune amassed by Warren Buffet.

On the positive side, Amazon would no longer be able to use stock options to pay exorbitant salaries to its employees. This would level the playing field with normal companies which cannot outsource their payroll expense to the stock market. Seattle's real estate would no longer be reserved for tech millionaires. Private school tuitions – or the need to pay them to secure junior's spot in the professional managerial class – would drop. Workers would be able to move closer to their offices. Young households may be able to buy a bigger house and finally start having babies, which in turn would boost demand and growth.

Amazon may seem like an anecdotal example, but it captures a disturbing reality: ***what is good for the stock market tends to be bad for the economy, and vice versa*.**

The stock market rally is conditioned upon the absolute domination of a handful megacaps, ever lower rates (and, as a result, ever-higher valuations), and Gargantuan liquidity injections by central banks. In other words, *the continuation bull market requires depression-like economic conditions*.

Conversely, most of the things which would actually help the economy would be negative for the stock market:

- **In a functioning economy, consumers can go out to shop and watch movies**, rather than manically buying hand sanitizer online and streaming videos at home. In a good economy, consumers may even be willing to spend an extra 10% to shop at the local store because they enjoy living in economically thriving neighborhood.
- In a good economy, workers make money from rising wages, rather than government handouts. Higher wages are a cost to companies, while the **current generous unemployment benefits and stimulus checks are effectively a subsidy paid by society to maintain consumption – a lot of which ends up as revenue for Amazon and other big tech firms**, the only major sector to be unaffected by the pandemic.
- **In a good economy, competition is vigorous** and incumbents rarely retain their top spot for long. Antitrust agencies prevent dominant players from buying all their competitors, selling below cost, squeezing their suppliers, and using their clients' personal data as a competitive edge - all the tricks used by big technology companies to increase their market dominance.
- **A good economy generates some inflation**: higher rates reduce the valuations of financial assets (especially long duration ones, such as big tech stocks) and rising wages and costs eat the margins of corporations. On the positive side, lower valuations and higher rates would allow households to buy cheaper assets and compound their wealth faster. Furthermore, inflation would be the only way to reduce the real burden of the $1.6 trillion in student loans plaguing the GenZ-ers and Millennials who cannot default on it. Last, inflation would reduce the value of the dollar, saving emerging markets borrowers from balance of payment crises and boosting global growth.

[1] Based on my estimate of Amazon's duration of 20 years, a 2.5% increase in discount rates would lead to an approximate price decline of 50%

Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

Conclusion: Goodhart's Law and Pension Funds' Curse

If the reader shares my view that the biggest risk to the bull market is a functioning economy, she may wonder why such a dysfunction was allowed to happen in democratic societies: should not elections and free speech ensure that policies converge towards social and economic optimums?

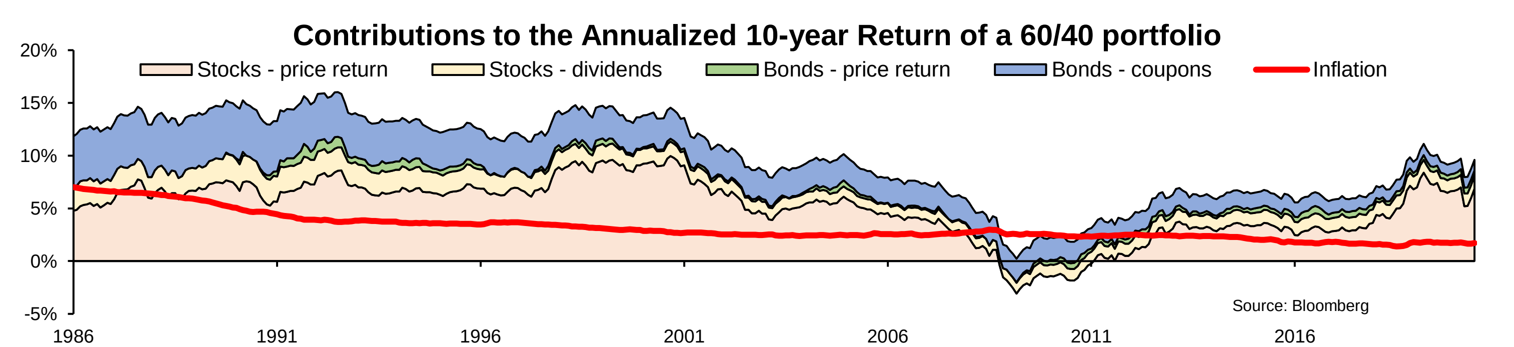
Without going into unprovable conspiracy theories, I would suggest that **the current disconnect between the economy and the stock market is ultimately the result of Goodhart's law**. British economist Charles Goodheart observed that "when a measure becomes a target, it ceases to be a good measure".

The most famous examples of Goodhart's law were the soviet factories which when given targets on the basis of numbers of nails produced many tiny useless nails and when given targets on basis of weight produced a few giant nails. Numbers and weight both correlated well in a pre-central plan scenario. After they are made targets (in different times and periods), they lose that value.

In our case, **the stock market, which used to be a measure of the economy, has become a policy target**. As a result, it has lost its value as a measure of the real world. The elevation of the stock market as a divinity in itself can easily be confirmed by a quick look at @realDonaldTrump's Twitter feed, which features ALL CAPS outbursts of joy for every new high made by the Nasdaq index – even if they happen amidst records new cases, economic lockdowns, and depression-level unemployment rates.

As usual, D. Trump simply puts blunt words on pre-existing social phenomena. The stock market cult – defined as the subordination of all policy objectives to the goal of rising stock prices and the belief that societies will collapse if stock prices drop - began long before 2016.

I would say that the process started with the privatization of pension plans: as more Americans relied on financial assets for their retirement, **societies lost their tolerance for capital losses and the necessary purges associated with bear markets**. The problem has worsened in recent years due to pension funds' reliance on rising equity multiples to achieve their target returns. As shown in the chart below, a 60/40 portfolio generated annual real returns of 8.1% in the past ten years. But **almost all these gains came from the appreciation of stock prices**, rather than dividends or bond coupons. In turn, stock prices' gains came mostly from multiple expansion and the concentration of stock market towards a handful of highly-valued monopolies.



Vincent Deluard, CFA Vincent.deluard@intlfcstone.com (+1) 305-925-4922 www.marketintel.stonex.com

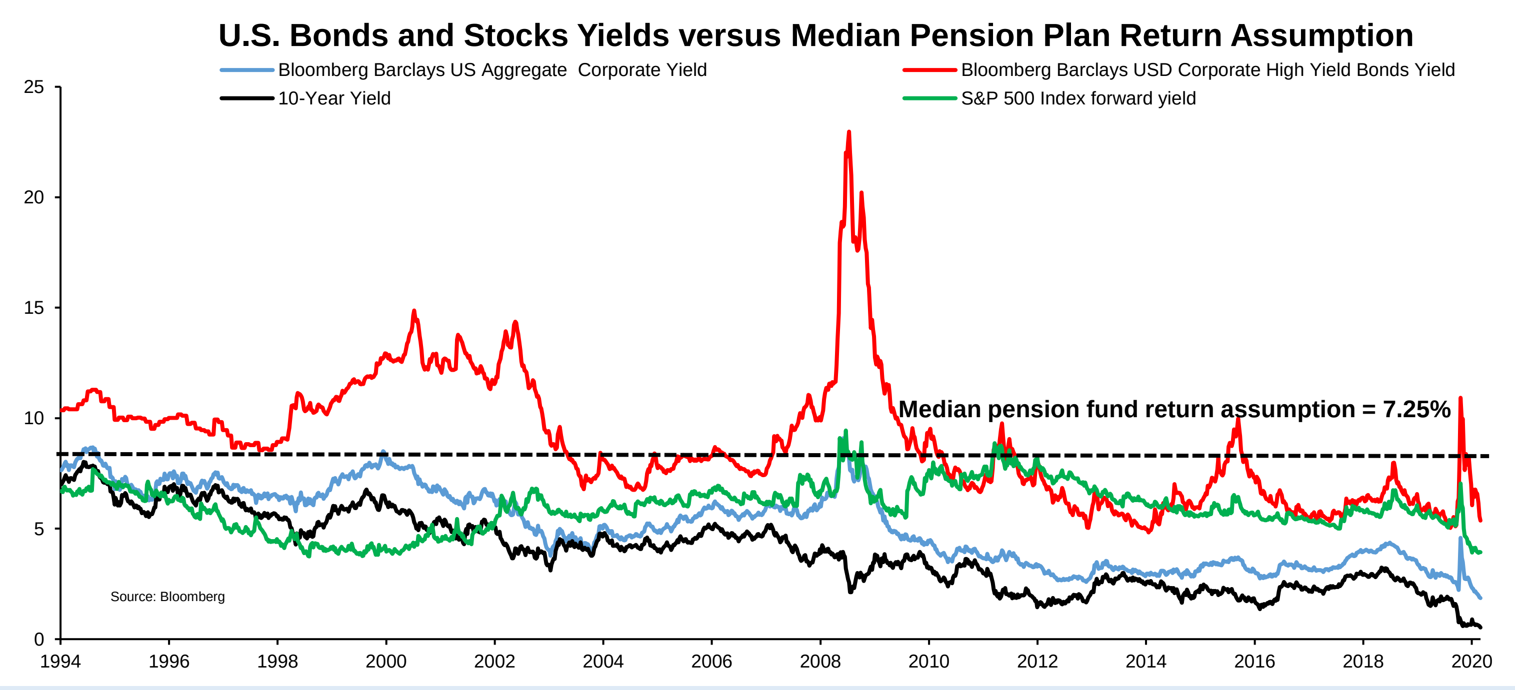
This report does not suggest that the system is about to implode. It is very possible, and even likely, that more asset purchases and yield curve control policies will be required to monetize soaring deficits and to offset the cost of lockdowns. Lower rates and liquidity injections will likely further inflate the bubble in long duration tech megacaps.

But I am entirely certain that **the system is unsustainable over the long-term**. As shown by the experience of other centralized economies, Goodheart's law is a curse which eventually leads to absurd outcomes: in the Soviet Union, it meant that factories produced the goods demanded by the party's *apparatchiks* while the majority of the population faced shortages of basic necessities.

In our case, it means that pension funds and defined-benefit investors are caught in a death loop: **they need lower rates so that equities keep rising despite the lack of healthy economic growth. At the same time, lower yields increase the present value of their liabilities, and prevent them from having any hope of meeting their return targets.**

Consider the following statistics: according to the latest public fund survey by the National Association of State Retirement Administrators, the median pension fund's return assumptions is 7.25%. Pension plans typically allocate their assets into long-term Treasuries, corporate bonds, high yield bonds, and equities, which yield 0.5%, 1.8%, 5.2% and 3.8%, respectively. **How can one achieve a return of 7.25% by mixing assets with an average yield of 2.8%?**

Although I cannot predict when, I am certain that **the Gods of math and reality will eventually punish the mistaken disciples of the bull market cult.**



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