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TRIVARIATE RESEARCH

WHAT SHOULD YOU DO NOW?

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PILOTS TURN THE SEATBELT SIGN ON AFTER THE TURBULENCE STARTS

We clearly have a more negative outlook about corporate earnings now than we did at the beginning of the year.

Macro conditions directionally negative: Brent crude oil has gone from $79 to $119 (51% higher) YTD, and the dollar has strengthened 7% YTD against the Euro, both of which are in aggregate negative for US corporate earnings. GDP expectations are now lower than they were at the beginning of the year (see Atlanta Fed's comments on housing starts). Financial conditions have tightened. Trivariate's proprietary gauges of economic, industrial, and consumer activity have all deteriorated since the beginning of the calendar year.

Expectations higher: Nonetheless, sell-side consensus earnings expectations are now $231.45 for 2022, up 3% from the $224.45 consensus bottom-up earnings expectations at the beginning of the year. Hence, we feel worse about relative estimate achievability now than we did at the beginning of the year, and **we expect July earnings season to be a catalyst for material downward revisions.** Post-Labor Day, when most sell-side analysts emerge from their summer vacation and sharpen their pencils for the first time on 2023 estimates, we expect further downward revisions to the current $251.83 earnings expectations for 2023 (8.8% growth above the overly optimistic 2022 estimates). Downward revisions themselves do not have to be accompanied by lower equity markets, however, the estimates embedded in the forecasts for the second half of the 2022 seem particularly at-risk considering macro developments year-to-date. Like most pilots, the analysts turn the seat belt sign on after the turbulence starts, even though the radar shows the storm just ahead. We see that as the case for analysts beginning in a few weeks.

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WE HAVE SEEN SIX TURNS OF MULTIPLE COMPRESSION YTD

On January 3rd of this year, the market traded at 21.4x the 12-month forward consensus earnings estimates (4797 for SP500 relative to the $224.45 bottom-up earnings expectations.) Today, the market is somewhere between 15.2 and 15.8x forward earnings. At 3667, the market is 15.8x 2022 expectations of $231.45, or 15.2x one half of this year's expectations of $231.45 and next year's $251.83. **There has been six turns of multiple compression year-to-date** resulting from a more hawkish Fed and higher actual rates, a growth scare that now seems increasingly plausible, a war, etc.

Forward earnings data have existed since 1978. Over that time frame, the average market multiple has been 17x trailing earnings and 15x forwards earnings. Today we are roughly trading in-line with the 45-year average. Many investors have recently argued that today's environment merits below average multiples, owing to the combination of over-earning and a hawkish Fed. The near-term is tough to call, **but our view is that today's basket of US equities is vastly superior to much of history.** The SP500 constituents are less capital intensive, have less inventory impediments to a recovery, and generally do not have excess labor. Furthermore, balance sheets of the banks are in good shape, and growth stocks are maintaining their growth status for the longest amount of time in decades. Combined, this augers for a higher average multiple for the next ten years than the previous 45. Taking earnings and multiples together, the following chart shows a range of multiples and earnings outlooks relative to the current consensus forecast and multiples. It seems reasonable to assume 10-15% downside to the consensus 2023 numbers as a starting point, although a range of outcomes are shown on the slide.

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WE ARE AT 15.2X THE 12-MONTH FORWARD EARNINGS EXPECTATIONS

Taking earnings and multiples together, the below chart shows today's price, and a range of multiples and earnings outlooks relative to the current consensus forecasts. We assume 10-15% downside to the consensus 2023 numbers as a starting point, and a range of outcomes on the relative multiple are shown vertically.

2023 Growth Expectations Implied from Consensus 2022E Expectations

	Growth	(25%)	(20%)	(15%)	(10%)	(5%)	0%	5%	10%	15%
Multiple	PE Ratio	173.59	185.163	196.736	208.309	219.881	231.454	243.027	254.599	266.172
80%	12.6	2193.0	2339.2	2485.4	2631.6	2777.8	2924.0	3070.2	3216.4	3362.6
85%	13.4	2330.1	2485.4	2640.7	2796.1	2951.4	3106.8	3262.1	3417.4	3572.8
90%	14.2	2467.1	2631.6	2796.1	2960.6	3125.0	3289.5	3454.0	3618.5	3782.9
95%	15.0	2604.2	2777.8	2951.4	3125.0	3298.6	3472.3	3645.9	3819.5	3993.1
Current	15.8	2741.3	2924.0	3106.8	3289.5	3472.3	3655.0	3837.8	4020.5	4203.3
105%	16.6	2878.3	3070.2	3262.1	3454.0	3645.9	3837.8	4029.6	4221.5	4413.4
110%	17.4	3015.4	3216.4	3417.4	3618.5	3819.5	4020.5	4221.5	4422.6	4623.6
115%	18.2	3152.4	3362.6	3572.8	3782.9	3993.1	4203.3	4413.4	4623.6	4833.7

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SOMEWHERE BETWEEN AT TROUGH AND 20% MORE DOWNSIDE?

In terms of downside, that likely means flat to down 20% downside is the range of reasonable outcomes from here, albeit we admit that the volatility of the price-to-earnings ratio is far greater than the volatility of the earnings. A more extreme recession that causes a material earnings decline would obviously translate to more downside absent multiple expansion.

Implied % Upside or Downside

Growth	(25%)	(20%)	(15%)	(10%)	(5%)	0%	5%	10%	15%
PE Ratio	173.59	185.163	196.736	208.309	219.881	231.454	243.027	254.599	266.172
12.6	(40.0%)	(36.0%)	(32.0%)	(28.0%)	(24.0%)	(20.0%)	(16.0%)	(12.0%)	(8.0%)
13.4	(36.3%)	(32.0%)	(27.8%)	(23.5%)	(19.3%)	(15.0%)	(10.8%)	(6.5%)	(2.3%)
14.2	(32.5%)	(28.0%)	(23.5%)	(19.0%)	(14.5%)	(10.0%)	(5.5%)	(1.0%)	3.5%
15.0	(28.8%)	(24.0%)	(19.3%)	(14.5%)	(9.8%)	(5.0%)	(0.2%)	4.5%	9.3%
15.8	(25.0%)	(20.0%)	(15.0%)	(10.0%)	(5.0%)	0.0%	5.0%	10.0%	15.0%
16.6	(21.3%)	(16.0%)	(10.8%)	(5.5%)	(0.2%)	5.0%	10.3%	15.5%	20.8%
17.4	(17.5%)	(12.0%)	(6.5%)	(1.0%)	4.5%	10.0%	15.5%	21.0%	26.5%
18.2	(13.8%)	(8.0%)	(2.3%)	3.5%	9.2%	15.0%	20.8%	26.5%	32.3%

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MIDDLE OF 2024 TO GET BACK TO 4800?

We recently evaluated 95 years of daily S&P500 returns and found there were 25 sell-offs of 10% or more since 1928. Seven of those sell-offs exceed 30% peak-to-trough, with three, including the TMT crisis, the Great Financials Crisis, and COVID, all having occurred in the last 25 years.

There is plenty to be worried about. The risk of a recession seems higher than normal, inflation remains elevated (even if it is beginning to roll-over in certain areas like housing and used car pricing), and stagflation seems possible. The Fed Governors seem closer to a group of arrogant theoreticians than humble practitioners.

Nonetheless, we have already seen six turns of multiple compression and our judgment is that a 30% peak-to-trough decline is not that likely unless the consensus starts believing an earnings decline of more than 10-15% from current expectations is likely. Is this a once every 15-20 years level of sell-off? Maybe, but probably not. If we use 30% trough-to-peak as the bogey, we have somewhere between 3 and 10% more downside.

Historically, the peak-to-trough sell-offs averaged seven months, and it took 2.5 years from the beginning point to get your money back. If that is the case, we probably will not see $4800 on the S&P500 again until the middle of 2024.

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WHY DO SO MANY PEOPLE FOCUS ON SOMETHING THEY CAN'T DO?

We all know there is tons of excess capacity in several parts of the financial industry. **But is there more excess anywhere than people who watch the Fed for a living?** Most bulge-bracket firms and large money management complexes have multiple people commenting on the Fed path, and few have demonstrated an ability to predict what the Fed will do six months from now. Some pundits were saying that a 75bps hike would be good for stocks because the Fed is finally going to catch up to inflation and get it under control. Our view is that a more hawkish near-term the Fed is the worse it is for stocks. Why? It increases the probability of a recession.

We had taken the stance that the Fed are smart people with access to good information. We are starting to worry that we were wrong. Given the last 75bps hike was in 1994, we analyzed the data and magnitude of interest rate hikes then and compared to it to the interest rate cycle so far this year. After 729 days of no action, the Fed hiked 25bps on March 15th, 50bps on May 4th, and 75bps this week. Most think 50bps more in July is a *fait accompli*, which would take the mid-point Fed Funds rate to 2.125%. If the 1994 analog is perfect, that would imply that the Fed would cut by mid-March 2023. We are not saying that is likely, however, we would not at all be surprised the Fed to get directionally dovish by year end, or even for them to end up cutting rates by the end of 2023. No matter what the path, we frankly find all the Fed conversation annoying. Why do people talk so much about something they demonstrably cannot predict? Our best guess is that the market will not like anything that is hawkish, and **we remain skeptical that hawkish banter causes multiple expansion.**

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COMPARING THE LAST 75BPS HIKE TO NOW: WHAT WOULD 1994 IMPLY?

The 1994 hiking cycle saw the Fed do three 25bps hikes followed by two 50bps hikes and a 75bps hike in November of 1994. They followed this with one more 50bps hike in February of 1995, but only 155 days later, by July of 1995, they began cutting rates. If that unfolded this year, the Fed would do one more hike in July, and then they would have to start cutting by March of next year. That is not likely, but more possible than the consensus view in our opinion.

Comparison of 1994 75bs Hike to 2022

Date	Rate	Change	Time	Date	Rate	Change	Time
2/3/1994	3%			3/2/2020	1.625%		
2/4/1994	3.25%	0.25%	1	3/3/2020	1.125%	(0.50%)	1
3/22/1994	3.50%	0.25%	46	3/16/2020	0.125%	(1.00%)	13
4/18/1994	3.75%	0.25%	27	3/15/2022	0.375%	0.25%	729
5/17/1994	4.25%	0.50%	29	5/4/2022	0.875%	0.50%	50
8/15/1994	4.75%	0.50%	90	6/15/2022	1.625%	0.75%	42
11/15/1994	5.50%	0.75%	92	7/26/2022	2.125%	0.50%	41
2/1/1995	6.00%	0.50%	78	3/16/2023	Cut?		233
7/6/1995	5.75%	(0.25%)	155				
12/21/1995	5.50%	(0.25%)	168				
1/30/1996	5.25%	(0.25%)	40				
3/25/1997	5.50%	0.25%	420				
9/29/1998	5.25%	(0.25%)	553				

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BOND YIELDS VS GROWTH AND SERVICING THE RISING DEBT

Bond yields have retreated recently in the big risk-off trade. We have long thought that 10-year yields were not likely to reach the 4% level unless economic growth was incredibly strong. Typically, when recession fears grow, risk-off sentiment causes bond yields to look attractive and demand for the yield grows.

We do not see how bond yields can back up much further unless growth surprises to the upside and wonder if today's bond action is the beginning of a reversal.

Another important question to address is – how will the US government service all its outstanding debt if rates rise? The interest expense on the debt could grow to the point that it exceeds nearly all of the government's entitlements. There is some logic to the thought that the government not only wants, but needs lower bond yields, since massively reducing the deficit (and eventually debt) is incredibly unlikely, even if we get the now increasingly expected Republican rout in the mid-term elections. Today's rise in rates already implies future budget increases well into hundreds of billions servicing today's debt at higher rates. This will become a topic we read about more and more in the coming months.

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THE PAIN TRADE IS NEVER LOWER - WHAT WOULD BE MOST PAINFUL?

One of our least favorite phrases is "the pain trade is higher." We have always thought that is a phrase uttered by people who do not manage money.

Think of it this way: if the market goes down 20%, and you have 40% net exposure and are down 5%, you generated some alpha but lost a lot of money. That was painful.

If the market is up 20% and you are 40% net exposed and you are up 5% you had meaningful negative alpha.

In the first scenario, you get no bonus, have a high-water mark to catch up to next year, and your management fees are on a lower asset base. In the second scenario you get a decent bonus and have management fees on a higher asset base to nurse your disappointing alpha with. Which is more painful? It must be a Fed-watcher who made up that phrase.

We view the "pain trade" differently. Take the traditional hedge fund – by that we mean – 40 longs, 60 shorts, running some flavor of 120% long by 80% short (so 200% gross exposure and 40% net exposure). Then, ask yourself, what would be the worst scenario for this group of managers over the next six months? That is most likely what will unfold – and be maximally painful. In our judgment that is probably energy and materials continuing to beat the market (most traditional hedge funds have limited exposure to these sectors) combined with a short but meaningful rally in hyper growth stocks that begins right when most have lightened exposure and ends right when most have loaded back in, maximizing pain. Does that seem implausible?

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MARKET COMMENTARY AND BEARISH VS. RESEARCH AND BULLISH

It is always easier to do market commentary than research, and always easier to sound bearish than bullish. The easiest thing to do now is sit back and list of concerns and say you have been and remain bearish. Recently we saw an interview with a manager who with a hop in his step said he just bought AMZN for the first time now that it has retreated 40% in the last 12-months. Our first thought was "Can you victory lap that you missed the 40% down when you missed the first $1.9 TRILLION on the way up?"

It is not easy to be right in both directions, and there are a lot of conflicting data points that make today's landscape difficult. Our research shows that the S&P500 companies grow their earnings slightly above GDP, buyback stock, and the index is managed higher by the additions of new companies each year. That means a reasonable long-term return algorithm for the SP500 is 6-8% per annum. Since we previously had a strong run of equity returns, this year's retrenchment was not unprecedented or unfathomable. However, the magnitude and duration of the sell-off now means this is becoming extreme by historical context.

In aggregate, there is an uncomfortable tension – conditions are worse, estimates are too high, but the sell-off has been substantial. Taking it all in, we think this leads to some interesting stock opportunities.

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SEMICONDUCTORS – THE TRIPLE BREAKING PUTT

Over twenty years ago, semiconductor analysts greeted an announcement of higher capital spending with optimism. Higher capital spending means demand is strong and requires future capacity to meet that swelling demand. However, higher capital spending also means a higher depreciation on cost of goods sold, and when revenue softens this is decremental to profits. Over the next few cycles, capital spending announcements were immediately followed by the stocks underperforming, as the market grew increasingly anticipatory of the pending margin decline.

Fast forward to today's environment – it is a triple breaking putt. Near-term fundamentals are positive. It is still the case that consumption exceeds production, which normally is bullish for pricing. Book-to-bill ratios are generally still above 1.0. Procurement officers at many industrial companies could not access sufficient silicon to meet demand for their products during the last year. Wanting to avoid this mismatch in the future they signaled to their suppliers that they need product for quarters to come. Given there is no penalty for backlog cancellation in the industry, the incentive to signal you will want sustained demand is strong. Medium-term, they will cancel with no penalty, weakening the outlook.

The semiconductor index is down 36% year-to-date, as the market is extremely anticipatory of deteriorating fundamentals. Longer-term, the semiconductor industry is a crucial, above GDP-growing business. Many of the underlying companies have huge moats, pricing power and do not have perishable inventory. Examples include ASML, AMAT, KLAC, LRCX, CDNS, SNPS, TXN, and ADI (see our semiconductor playbook note), acknowledging it is challenging to perfectly get the speed and direction right on a triple-breaking putt.

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FAVORED INVESTMENT THEMES

1. **Buy energy:** Cheap stocks with upward revisions are favorable following rising oil prices. We see upward revisions, positive price momentum, and low ownership as positives.
2. **Buy copper and aluminum:** Expectations are for a decline in earnings, and most stocks are attractively valued even assuming much lower 2023 earnings. Long-term we see demand as steady, and supply is structurally constrained.
3. **Buy healthcare services:** CNC (just boosted outlook ahead of analyst day) and UNH are businesses we like. CNC benefits more from Medicaid, is cheaper, and is increasing shareholder return. UNH will perform well as long as there are not a lot of small and medium-sized businesses that close, as they have tremendous pricing power. Healthcare services companies are broadly underappreciated interest-rate plays.
4. **Buy biotechnology:** We think some innovation in the portfolio is prudent, and biotech, with all time low price-to-sales seems like a reasonable place to bet. Most never generate positive FCF, so the "terminal value" argument really is not accurate. Any safe and effective announcements may boost the group in the 2H of 2022.
5. **Buy semiconductors:** See previous page.

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DISFAVORED INVESTMENT THEMES

1. **Sell NFLX:** illustrative of our negative bias against junk work-from-home stocks. Also has high anti-correlation to beta-adjusted inflation basket. With macro and micro issues, and expensive on cash flow this is the kind of stock we would avoid.
2. **Sell profitless software:** Our work shows that following a growth stock sell-off, negative FCF and decelerating revenue lag.
3. **Sell machinery and capital goods:** Our analysis of industrial activity leads us to believe it is softening. Yet, machinery and capital goods estimates are incredibly optimistic through 2023. Valuations are elevated, implying a reset to expectations could result in significant underperformance.
4. **Expensive staples:** Many are over-earning and expensive. With a stronger dollar, rising input costs, and an increasingly strapped consumer, the recent relative weakness seems more of a start than the end of the trade.
5. **Sell regional banks:** This group seems inferior to the large cap banks, and likely lags if yields peak. We do not see how stagflation or recession fears are a relative positive.

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