EMPIRICAL
ASSET MANAGEMENT

Market Comment Q1 2023

If the stock market were a horror movie in the first quarter of 2023, the marquee outside the theatre would scream in the largest letters available: "FAANG IS BACK!" No, FAANG is not some reincarnation of a saber-toothed tiger, it's an acronym coined by Jim West of *The Street* and co-opted and made famous by the 21st century P.T. Barnum, Jim Cramer of *CNBC*. What FAANG stands for are five market-dominating tech stocks – *Facebook* (now calling themselves the cool name *"Meta"*), *Apple, Amazon, Netflix,* and *Google* (now known as *"Alphabet"* perhaps as a tribute to the fact that everything in the world has gone to initials).

For some time now, with a capitalization of $7 trillion as of Q1 last year (roughly 19% of the S&P 500), where these 5 stocks go, the market follows. Don't forget the S&P 500 is a "cap- weighted" index meaning the larger the company the more impact it has on the index. For example, during the 2018 market rally from the lows of February to the highs of August, these five stocks accounted for 40% of the broad market index's gain. Remember there are 505 stocks in the S&P 500. When the bottom fell out of the market in November of that year, sending most Tech stocks down into "bear" market territory (-20%), FAANG stocks lost more than $1 trillion in capitalization. In the quarter just ended, just two stocks – *Apple* and its more mature big brother *Microsoft* – accounted for 13.3% of the S&P 500 – the greatest domination by two companies over an index comprised of more than 500 stocks since the Phoenicians coined money.

Last year many investors felt that the FAANGs were getting long in the (saber) tooth. As of roughly the mid-point of last year, *Apple* and *Alphabet* were up +175% over the last 5 years and that made them pikers; *Meta* was up +185%, *Netflix* +450% and *Amazon* was a "5 bagger" – up 500% over the last 5 years. Investors were rightly nervous; as the old German proverb says, "Baume wachsen nicht in den Himmel!" – trees don't grow to the sky.

And those investors were right to a degree. 2022 was a year fraught with volatility as Federal Reserve observers played a high stakes game of "will he or won't he?" Inflation was the enemy and investors would go on a selling spree whenever Jerome Powell raised rates or indicated that he was going to do the same, promising to give the economy the inflation-fighting medicine it deserved come hell or high water.

Conversely, when better inflation numbers were announced or the bulls decided the tea leaves were indicating the Fed would soon be done with its exercise in rate hikes, buyers would flock to the market sending stock prices soaring. In both instances, right out in front leading the parade were the FAANG stocks. As all market participants know by now, 2022 turned into a horror story for stocks, with the broad market index, the S&P 500, losing -18% and the NASDAQ, the home of all the FAANG stocks, down a whopping -33%. *Apple*'s performance fell between the two, down -27% and that was the success story in the bunch. *Amazon* shed more than half its value, down -51%. And that left *Netflix* (-60%) and *Meta* (-65%) investors green- eyed with envy. What good news could arise in 2023 to change the trend?

Of course, the answer was right in front of our nose – a banking crisis. To be fair, stock prices had headed north the first week of trading in 2023, but the salient event of Q1 2023 was the fall of *Silicon Valley Bank (SVB)*.

SVB was a victim of its own success – and a potent mixture of hubris and rank stupidity. Early on, many fellow regional bankers secretly felt it couldn't happen to a nicer band of inflated egos until the "idiosyncratic" risk that these hotshots were revealed to have taken threatened to expose "systemic" risks that could take the whole industry to its knees.

It all started in what seemed to be a salutary way; every start- up tech company and the myriad venture capital firms that fund them decided how great it would be to stash their cash in the local regional bank of record, *SVB*, while they awaited their goldrush, the Initial Public Offering (IPO). As a result, at the end of 2022, *SVB* had assets on the books of $209 billion of which deposits accounted for $175.4 billion – much of which had arrived in the last twelve months. That cash was deposited by an estimated 36,000 local concerns, but here was the foreshadowing that Hitchcock would have introduced with three descending notes – dun, dun, dah: 97% of those deposits were above the $250,000 FDIC insurance threshold, the highest rate in the country. (Your idiosyncratic risk.)

And here's where a good, dog-eared edition of *Banking Risk Management 101* would have come in handy because the first caveat is this: "Don't borrow short and lend long!" If you think about that it only makes sense given that someday the depositors are going to want their money back. (Hadn't anybody over there ever seen *It's a Wonderful Life*?)

Here's another little curveball: if you paid attention to the mortgage crisis of 2008, you'll remember that institutions got themselves into trouble by either lending directly to, or owning the bonds of, some person or entity who had no wherewithal to pay back said loans under any kind of duress including one as simple as the end of a bull market in real estate. (How these people got loans is a whole other discussion.) This is the embodiment of credit risk.

In finance, there exists only one issuer who is thought to have zero credit risk and that's the U.S. Treasury. The government's guarantee is as good as gold (so far). But what every banker should know is that sentence only captures half the dimension of risk.

Yes, you can go to bed confident that the government will be there to return your money (plus interest along the way). However, you've contracted to let them hold it for 2 years, or 10 years or 30 years. What happens if you want it back today? Treasuries are the most liquid market on Earth, so you can typically sell them in the open market, but you may get more or less than the principal invested depending on where interest rates have gone since you bought them. This is called "interest rate" or "duration" risk and it's the reason that Wall Street's "swaps" and "swaptions" market does a brisk business with banks every day as they hedge their duration exposure. Every rookie banker just out of banker's school should know this like brushing their teeth.

The rest of the story is well-known and entirely predictable. With the way these start-ups burn through cash, it should come as no surprise that some would need their money back sooner rather than later, especially in this poor IPO environment. *SVB's* $21 billion Treasury portfolio had a duration

(roughly the equivalent of maturity) of 3.6 years and, bought before the Fed's dramatic interest rate hikes, a +1.79% yield. Unfortunately, at that time the 3-year Treasury Note was yielding +4.7%. How do you get investors to buy your lower yielding bonds? You discount them in a fire sale; that's how you lose $1.8 billion in the Treasury market.

On Thursday March 7, *SVB*'s chief executive announced they would seek to raise $2.3 billion in the equity market (diluting current stockholder's equity) to restructure its portfolio by investing in short-duration Treasuries and floating swaps – a classic case of locking the barn door. Their stock would be wallpaper by Monday.

Here is where *SVB* was hoisted with their own petard. The darling of Silicon Valley was crushed by the new tech world. In the olden days when people were fixing to have a run on the local bank, everybody grabbed their pitchforks and a whole mess of torches and headed on down to their local branch. Nowadays, as *SVB* found out to their chagrin, the modern bank run is accomplished through a Reddit page and a banking app. Nobody was fooled by leadership's pronouncement; the next day an astonishing record $42 billion in deposits were withdrawn as everyone in the valley realized that the $250,000 FDIC insurance made for a small fig leaf given their massive exposure. The holding company's stock lost -61% on the day of the announcement and those who exited then were the bright ones. By Friday, the FDIC had seized the bank and closed its doors. A stock that had traded as high as $578.63 in the last 52 weeks was now worth 1 red cent.

There's an old Wall St. saying, "Pressure breaks pipes!" It quickly became apparent that the pressure of nine interest hikes (including an unprecedented four of 3/4 of a percent) in the last 12 months, combined with reckless risk management, had snapped the pipes at *SVB*. Two open questions were on everyone's lips: 1) would this ripple through the industry or even cripple the entire market, and 2) who was next?

It was pretty easy for the pitchfork set to figure out who was next; all they needed to do was look down the list of who had the greatest percentage of uninsured deposits. *SVB*, at 97%, had led the league. In second? A medium sized regional bank in New York called *Signature Bank*.

Signature Bank was a nice regional bank with assets under $100 billion. It had been founded in 1999 with backing from Israel's biggest lender *Bank Hapoalim* and gone public in 2004. Its bread and butter was providing banking services like escrow accounts to law firms and realtors, catering to the wealthy families of New York, and financing taxicab medallions.

Over the last ten years, *Signature* had spread out to the west coast seeking new horizons to make profit. In 2018, some bright bulb came up with the idea of becoming a standout player in a burgeoning corner of the marketplace where speculation was the name of the game – cryptocurrency. Their $16.52 billion exposure to that market (which came under extreme duress when *FTX* collapsed in 2022) represented nearly 19% of their deposit base. Investors and auditors alike questioned how good those reserves really were.

Like *Avis*, *Signature* was #2 (and trying harder) on the list of uninsured deposits. Of their roughly $88 billion in deposits more than $79 billion (90%) were above the $250,000 FDIC threshold – naked as a jaybird.

On Sunday, March 12, the FDIC shuttered the bank and looked to the Federal government to devise a bailout for depositors which (as in the case of *SVB*) they did, leaving investors in a stock that had been as high as $365.71 on January 7, 2022 with a loss of 99.95% of their capital.

With 68% of its deposits uninsured, the next victim on the pitchfork list was *First Republic Bank (FRC)*. The bank's exposure to $4.18 billion in unrealized losses in its bond portfolio (at the end of 2022) wasn't helping matters. The Federal Reserve saved the day by tapping $70 billion from their Bank Term Funding program to stave off closing the bank's doors.

The Feds, growing wary of backstopping every bank that even looked shaky, instead insisted that a cabal of the bank's largest and strongest peers put some skin in the game, so *JP Morgan Chase, Bank of America* and other larger and more diversified entities chipped in $30 billion of uninsured deposits to keep the bank on life support. (They took it out of petty cash.)

The problem is this: leadership at the firm is fighting to stay alive and independent but, like Sisyphus pushing the rock uphill, it may not be possible. Currently, the bank has black marks on its exterior walls from being touched with 10-foot poles. No financial entity wants to purchase a vessel with water over the gunnels even for a fire sale price like $0.00 due to the fact that such a transaction would push the $4+ billion of unrealized losses into the realized column. They have canceled their preferred dividends, even – God forbid – cancelled executive bonusses, but in the end, the handwriting may be on the wall. Look at the bright side: this gem of an investment is only down a scant 93.15% from its November 2021 high of $219.05. (The bad news is that 85% of that was in the month of March.)

On Wall St. you often hear the slogan, "Bad news is good news!" Here's the perfect case to explain how this can happen. While the smaller players and anybody with a halfway-cautious brain were fretting the fact that the US banking system had a gross of $680 billion in unrealized Treasury losses, the sharpies on Wall St. immediately grasped the silver lining in this report – that for two reasons the Fed will be forced to cut short its draconian rate policy: 1) the banks and consumers had the stuffing scared out of them so they were going to do the Fed's work for them and 2) so far they've been lucky; if they keep up the pressure the whole system may break. So, traders tripped over themselves jumping into the FAANG stock pool.

When the smoke cleared, they had made quite a wave, especially in the NASDAQ where FAANGs dominate. For the quarter, the S&P 500 was up a healthy +7.5% with +3.67% of that coming in the month of March. But most of the fun was on the NASDAQ side where, at +16.8%, traders chalked up their strongest quarter since June 2020. The even narrower NASDAQ 100 was up +20.8%, boasting its best return since 2010, led by the two "techiest" sectors: Communications (+20%) and Tech (+21.5%).

And, of course, all the usual suspects had a lot to brag about. *Apple* and *Amazon* were up over +20% but they were left in the dust by the likes of *Meta* and *Tesla* each up over +60% for Q1. Many of the cautious folks in the bond market were a little more excited, pointing out that a rare inversion had occurred where the 1-3 year Treasury ETF moved up 2 standard deviations in recent days. This has occurred only four times in history: 1) March 2020

in the wake of the pandemic, 2&3) August 2007 and September 2008 in the midst of the Great Financial Crisis, and 4) October 2002 at the end of the bear market resulting from the Dot-Com Bubble burst. In each case, the Fed moved quickly to cut interest rates.

Finance uses variance (called volatility) often measured by standard deviation, as a proxy for risk. The wider the range of outcomes – meaning how high the top of the rollercoaster differs from the dip at the bottom – the more risk that roller- coaster represents. (That's why there's a kiddie rollercoaster called the bond market.) Another proxy for risk is "Beta" which shows how risky a certain stock or portfolio of stocks is compared to the overall market (its benchmark). A portfolio that theoretically carries the same risk as the market is said to have a Beta of 1.00.

At its core, Empirical Asset Management is a rules-based investment firm. We believe emotions get in the way of successful investing, so we strive to keep them out of the process by sticking to our tried-and-true rules. Many of our rules seek to screen a portion of the risk out of the market by avoiding the most volatile stocks. Typically, a stock that is down -65% last year and up +60% this quarter just won't pass our volatility screens. Last year our flagship portfolio, *Sustainable Equity (SE)*, exceeded its benchmark, the S&P 500, by +9.61% while taking 81% of the risk as measured by Beta. We just don't want any clients thrown from the rollercoaster.

The multi-asset class ETFs we use to construct our asset allocation portfolios allow us to do some of our best work in risk management. We are believers that the low-hanging fruit of the traditional 60/40 portfolio benefited from 40 years of a declining interest rate environment that created a natural hedge for dips in equity indices.

Now that rates have bounced up from zero, we think the same old methods won't bring the desired results; the current inclining rate environment calls for introspection and creative thinking. Given that we had foresight on this eventuality, we have been setting the table to take advantage of this sea change in risk management by adding asset classes and ETFs that aren't reliant on declining rates to succeed.

As a result, we are pleased, not just of the fact that our AA portfolios have won numerous awards over the last couple of years, but also that every AA portfolio has a lower Beta than its custom benchmark, driving positive Alpha (market-adjusted excess return). Last year, our five AA portfolios exceeded their benchmarks by at least +4.38% and by as much as +6.01%.

The above is not intended to be investment advice and, although all data is from reliable sources, EAM cannot guarantee the accuracy of any information found therein.