

Economic & Market Outlook

Executive Summary

- ~ Almost every major asset class declined in value during the first half of 2022. Apart from commodities, nothing was spared.
- ~ The emergence of inflation has led to higher interest rates and a subsequent reset in asset valuations. Longer-duration investments (like unprofitable growth stocks) have been hit the hardest.
- ~ The good news is the outlook for future asset class returns has improved. Fixed income markets offer significantly higher yields and equities trade at more reasonable valuations across all sectors and geographies.
- ~ The historical odds favor investors willing to add to risk-assets in drawdowns like we are witnessing today.

First Half 2022

2022 is proving to be an extremely challenging year for investors. Losses in financial markets are to be expected, but rarely do we see losses accrue to all types of financial assets simultaneously. Simply put, we have been investing in a bear market with nowhere to hide. Global (and domestic) equities are down 20.0%, marking the worst start to a year since 1962. For most equity investors, the reality is far worse. The Nasdaq Index, loaded with popular technology stocks, has fallen 29.2%, and the losses on hyper-growth stocks are startling. Cathy Wood's infamous ARK Innovation Fund, a favorite among retail investors, has wiped out three-fourths of its peak value. Just to get back to breakeven it will have to return 289.1%. Many cryptocurrencies, an area we do not traffic in, are proving worthless, and worse, some of their offshoots, like certain stablecoins, appear to be Ponzi schemes. The holdings of many venture capital and private equity growth funds face dire straits, even though the funds' marks may not yet reflect that reality. Across the real estate industry, capitalization rates are moving higher, resulting in property valuations falling. But the most surprising results have stemmed from the fixed income markets. Investment-grade bonds, the "safety-net" for retail and institutional investors alike, have fallen 10.3% year to date. While this decline is less than that of other asset classes, it has no historical precedent, and it is a devastating blow for individuals counting on the predictability of fixed income returns in retirement. Our portfolios have weathered the storm better than the overall market because we avoided stocks and bonds trading at precarious valuations. We have also benefited from our investments in private markets, principally oil and gas, which have appreciated in value this year. That said, we have lost money this year and we find it hard to celebrate losing less than the market. Despite the challenging start to the year, there is reason to be more optimistic about the future.

		Q1	Q2	YTD
Global Stocks	<i>MSCI ACWI</i>	-5.3%	-15.5%	-20.0%
US Stocks	<i>S&P 500</i>	-4.6%	-16.1%	-20.0%
US Stocks (Tech)	<i>Nasdaq</i>	-8.9%	-22.3%	-29.2%
Int'l Developed Stocks	<i>MSCI EAFE</i>	-5.8%	-14.3%	-19.3%
Emerging Mkt. Stocks	<i>MSCI EM</i>	-7.0%	-11.4%	-17.6%
Investment-Grade Bonds	<i>Barclays Agg.</i>	-5.9%	-4.7%	-10.3%

Source: Annandale LLC

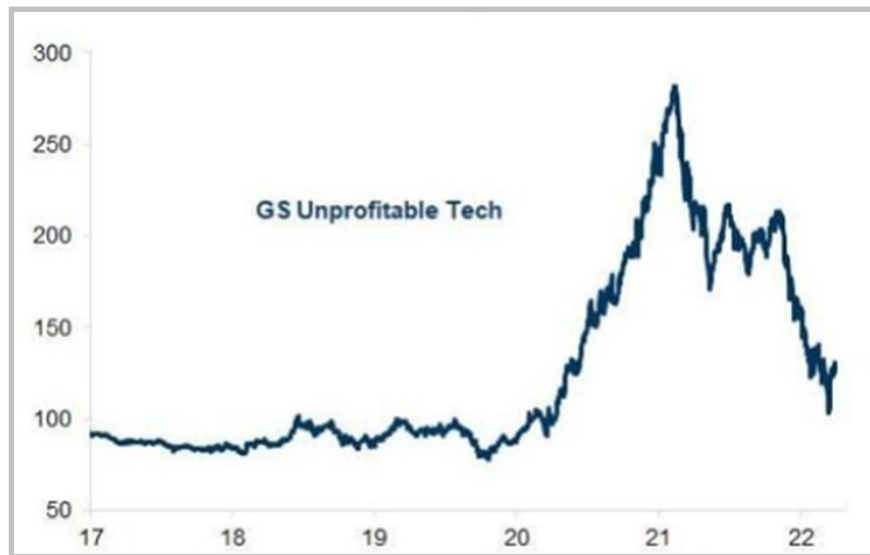
How Did We Get Here

Interest rates are a price. For instance, the interest rate on a corporation's debt is the price lenders/creditors demand to loan that company money. That price compensates the lender/creditor for two variables. The first is credit risk, the risk that the borrower will not pay back principal and interest in full. Second, and more germane to our discussion, is the time value of money. The idea is that a dollar received today is worth more than that same dollar received in the future,

and as a result, lenders will demand a higher price (more interest) the longer the tenure of the loan. The pain investors are experiencing today is the fallout from a decade of easy money, and more specifically, investors not appropriately pricing the time value of their money.

Look at the hardest-hit parts of the stock market. Software stocks are down 38.5%. Biotech is off 57.3%. Cathy Wood's ARK Innovation ETF is down -71.9%. The list goes on and on including Fin-tech stocks like Affirm, gig-economy stocks like DoorDash, and disrupters like Carvana. The common denominator is a lack of operating profits. For the last decade, venture capital, private equity, and public equity investors have encouraged companies to grow (revenue) at all costs and worry about profits later. We would argue the "grow at all costs" ethos became so pervasive that many companies forgot about profit goals completely and pursued business models whose unit economics would never work. This mindset only made sense in the context of low to near zero percent long-term rates. Investors could afford to wait several years (if not decades) to see a return on their investment when alternatives like a 20-year Treasury paid 1-2%.

Unprofitable Tech Stocks Hit Hard



Source: Goldman Sachs

When inflation reared its head in 2021 the paradigm began to change. The first major inflation shock came in April of 2021 when prices jumped 4.2%. From there matters steadily got worse, and as of this May, the annual rate of inflation stood at 8.6%. As you are aware, abnormally low interest rates and inflation don't mix. Who in their right mind would supply 10-year funds for 1.5% (10-year Treasury on 6/30/21) if they thought their purchasing power would erode at an even faster clip? Naturally, interest rates climbed as investors demanded greater compensation for the time value of their money.

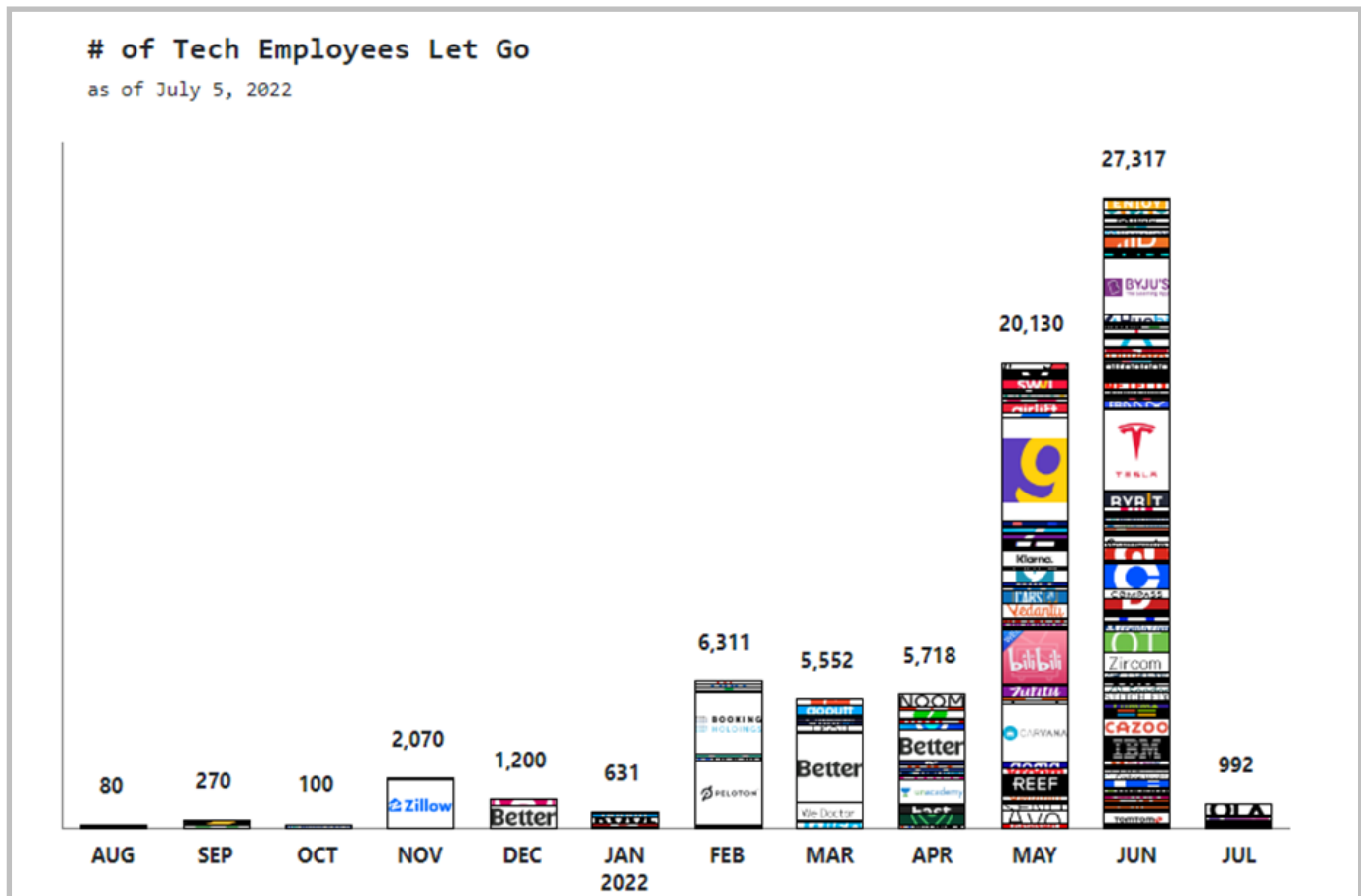
As a result, high-growth companies witnessed their cost of funds increase dramatically in the span of a few months. This posed a problem since these companies burned cash in their normal course of operations. To continue operations, these companies would have to raise additional capital (at much higher rates) and/or cut costs to achieve profitability.

To illustrate the sea-change that has occurred we have reprinted pieces of a letter the CEO of Uber sent to employees on May 9th. *It's clear that the market is experiencing a seismic shift and we need to react accordingly... We have made a ton of progress in terms of profitability, setting a target for \$5 billion in Adjusted EBITDA in 2024, but the goalposts have changed. Now it's about free cash flow. We can (and should) get there fast. There will be companies that put their heads in the sand and are slow to pivot. The tough truth is that many of them will not survive. The average employee at Uber is barely over 30 which means you've spent your career in a long and unprecedented bull run. This next period will be different... Meeting the moment means making trade-offs. The hurdle rate for our investments has gotten higher, and that means some initiatives that require substantial capital will be slowed. We have to make sure our unit economics work before we go big. The least efficient marketing and incentive spend will be pulled back. We*

will treat hiring as a privilege and be deliberate about when and where we add headcount. We will be even more hardcore about costs across the board... I've never been more certain that we will win. But it's going to demand the best of our DNA: hustle, grit, and category defining innovation. In some places we'll have to pull back to sprint ahead. We will absolutely have to do more with less.

Uber's letter to employees wasn't the first, and it won't be the last. Famed venture capital investors, like Sequoia and Y-Combinator, have pinned similar pieces for their portfolio companies, urging them to shore up balance sheets, get to profitability if possible, and be prepared to ride out a long storm. Perhaps most telling are the actions of the companies themselves. Tech companies that just a year ago were competing for talent are beginning to lay off their sales and engineering departments en masse.

The Number of Announced Tech. Layoffs Continues to Grow

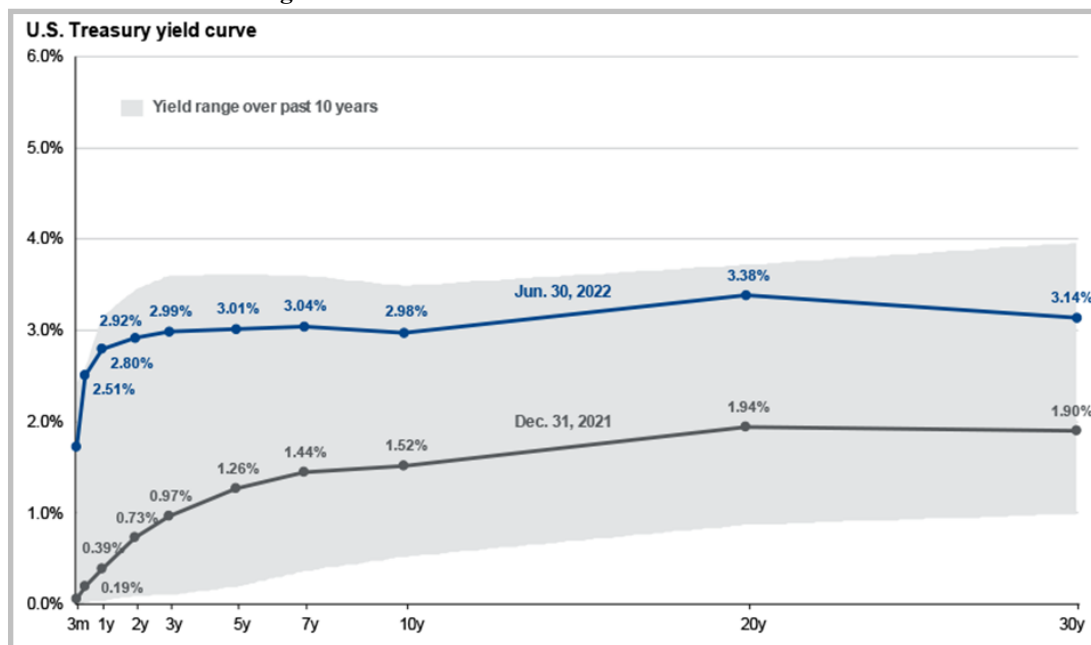


Source: trueup.io/layoffs

It's Not Just Hyper-growth Companies

The pain is most acute in the land of hyper-growth technology (particularly venture capital backed companies), but it doesn't stop there. Every financial asset is getting hit. We recently received an update on the state of the multi-family market from some knowledgeable partners. At present, not much is transacting, but the transactions they have witnessed suggest a reset in multi-family valuations of -15% to -25% from their peak. This is a notable decline given that multi-family is perceived to be one of the least risky forms of real estate, but it makes total sense given the move we have witnessed in risk-free interest rates. If you purchased an apartment at a 4.0% capitalization rate (NOI/purchase price) and interest rates rise by 1.0% then your expectation should be to sell that asset at a 5.0% capitalization rate, which equates to a -20% haircut. Luckily, the recent surge in single-family housing prices has given the industry room to raise rents (fueling additional NOI growth).

Higher Interest Rates are a Headwind for Valuations



Source: JP Morgan

Our broader point can be best summarized with a Warren Buffett quote, “interest rates are like gravity in valuations. If interest rates are nothing, values can be almost infinite. If interest rates are extremely high, that is a huge gravitational pull on values.” What we are experiencing today is a reset in the level of interest rates, and more specifically risk-free rates, which impacts the valuation of every financial asset. Before 2022, every asset was valued as if interest rates would remain low for some time, but the presence of abnormally high inflation has called that view into question, and the compensation investors demand for taking on risk is being repriced across the board.

The Million (or Trillion) Dollar Question

Where are interest rates going? We don't know and neither does anyone else including the Federal Reserve. If the current inflation rate of 8.6% persists, then nominal interest rates have a long way to run, and the investment climate will be less than ideal. If inflation proves transitory and resets back to the levels we witnessed post-financial crisis, then the forward outlook for interest rates isn't much of a concern and should even be a tailwind. At present, the market believes inflation will prove transitory with 5-year and 10-year breakeven inflation rates at 2.5% and 2.4% respectively. This is the widest spread we have ever witnessed between realized inflation (past) and the market's expectations for future inflation.

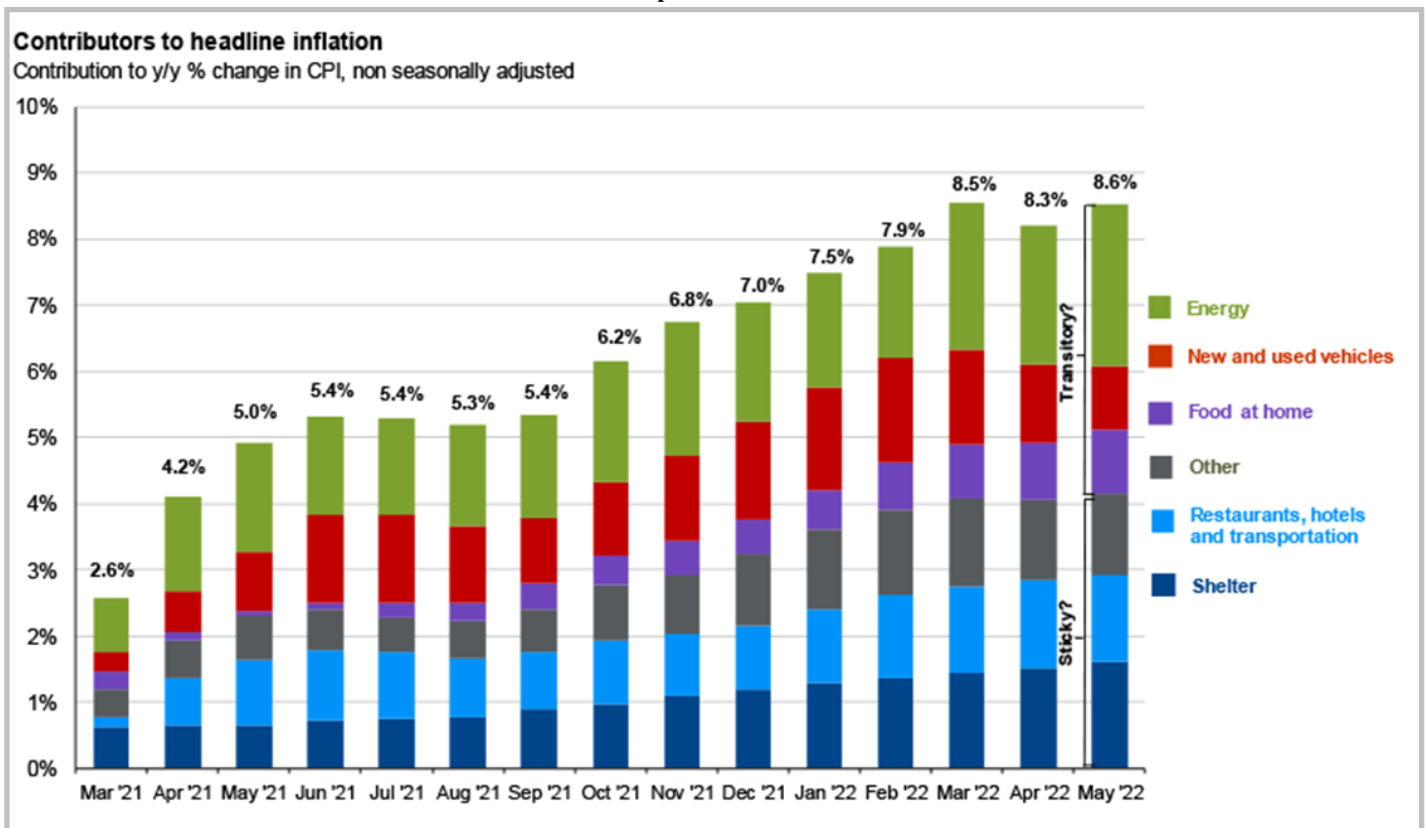
Realized Inflation (white) is Significantly Higher than Expected Inflation (yellow)



Source: Bloomberg

By all accounts, persistent inflation in the upper single digits seems unlikely, but we cannot be certain. In past commentaries, we have talked about the differences between supply and demand-driven inflation. Inflation caused by supply issues, like we are witnessing within the energy markets, tends to be transitory. Higher prices incentivize more production causing prices to level out or even reset lower (disinflation). We are already seeing this play out in select areas of our economy. Rig counts are increasing across the energy markets, albeit slower than expected, and slowly incremental production is coming online. We have already seen the prices of metals (like iron ore and aluminum) and agricultural commodities (like wheat and corn) fall considerably from their highs. We are also seeing signs that the housing market is beginning to cool, which should be expected given the impact higher home prices and mortgage rates had on affordability. The months' supply of new houses in the US has already reverted to levels last seen coming out of the financial crisis. If we had to take a guess, and a guess is all it would be, we would argue future CPI prints are set to cool. Those fearing a recession even think it is plausible we see a negative CPI print soon. Who knows?

The Components of Inflation



The Good News

It isn't fun to experience, but the broad-based repricing of risk is great news for investors.

The long-term nominal return for US stocks is just over 10%, but rarely does the market simply return 10% or some number even close to that level. There have only been 6 calendar years where the S&P's annual return came within 2% of that figure. The reality is market returns are highly volatile. Bear markets, arbitrarily defined as a -20% correction or worse, happen regularly. Over the last 75 years, we have witnessed 13 bear markets, which equates to such a correction about once every six years. For long-term investors, this volatility shouldn't be of concern. Since WWII, stocks have delivered positive annual returns 79% of the time. The longer you stretch your time horizon, the greater the probability of positive outcomes. Over 5-year horizons, the odds of positive returns have been closer to 94%. And there is no precedent in the US for negative returns over a 20-year span. Time is an investor's friend and the more an investor has, the easier it is to ignore the market volatility.

Market Returns After a –20% Decline

(1946-Present)	1-Year	3-Year	5-Year	10-Year	20-Year
Market Returns					
Average Return	12.5%	11.6%	11.5%	11.0%	10.6%
Median Return	13.4%	11.9%	12.0%	11.1%	10.2%
% Positive	79.0%	89.2%	93.0%	97.0%	100.0%
Market Returns After a -20% Drawdown					
Average Return	16.4%	14.9%	14.0%	13.5%	12.7%
Median Return	16.3%	14.6%	15.5%	14.9%	12.8%
% Positive	87.8%	95.9%	95.4%	100.0%	100.0%
Benefit (Cost) of Investing After a Drawdown					
Average Return	3.9%	3.2%	2.5%	2.5%	2.2%
Median Return	3.0%	2.7%	3.5%	3.8%	2.6%
% Positive	8.8%	6.7%	2.4%	3.0%	0.0%

Source: Bloomberg, Annandale LLC

The statistics, compelling on their own, are far better if you're starting in a bear market. Said differently, investors who bought equities when the market was down 20 percent (or more) have had meaningfully higher odds of a better outcome. Here are some highlights from the table above. The historical probability of positive returns a year later increases from 79% to 88%. Since WWII, there is no precedent for negative 10-year returns after a 20% drawdown. The size of the returns also increases. Compound returns over a 3-year hold are over 3% higher. Even over a longer 20-year horizon the compound returns have been meaningfully higher.

It's the Fundamentals

The historical market stats give us comfort, but the true source of our growing excitement is basic math. Right now, the market is allowing us to pay less for a dollar of cash flow be it a bond, stock, or private investment. This translates into a higher margin of safety for investments on a go-forward basis.

Consider the case of 2-year Treasuries. A year ago, the yield on 2-year Treasuries was 0.25%. At quarter-end, the same bond was trading at 3.0%. The superiority of today's offering is obvious but let's walk through the math to illustrate how the two bonds perform in a rising rate environment over a one-year horizon. Notice that when the 2-year traded hands at 0.25% it offered little cushion to rising rates. A small 0.25% rate rise was enough to wipe out a year's worth of returns. Today's Treasury is far better equipped to handle higher rates given its starting position. By our calculations, rates would need to rise an additional 3.2% (to 6.2%) over the course of one year before investors incurred any losses. And a rate shock of that magnitude seems unlikely.

How the 2-Year Treasury Handles Rates: Then vs. Now

	Starting Yield	1% Rate Rise	2% Rate Rise	3% Rate Rise	4% Rate Rise
6/30/2021	0.25%	-0.7%	-1.7%	-2.7%	-3.6%
6/30/2022	3.00%	2.0%	1.1%	0.2%	-0.7%

Source: Annandale LLC

The margin of safety associated with investing in riskier bonds, like corporate debt, is changing at an even faster clip. A year ago, investment-grade corporate bonds averaged a 2.1% yield-to-worst. At quarter-end, that figure had increased to 4.7%. The move in high-yield corporate bonds has been even more dramatic, jumping from 3.8% to 8.9%. Corporate bonds, unlike Treasuries, carry credit risk. There exists a probability the borrower will not repay the principal and interest owed in full. We can measure the price the market is exacting for credit risk by looking at the yield of corporate bonds compared to the yield of equivalent maturity Treasuries. The chart on the following page shows this

spread for the high-yield bond market. As you can see, the market went from demanding a 2.8% spread above equivalent Treasuries to 5.7% over the past 12 months. High-yield bond investors now have an additional 2.9% of buffer to protect themselves against the probability of default. Again, the opportunity set today is unequivocally better. Investors are receiving greater compensation for both interest rate risk and credit risk.

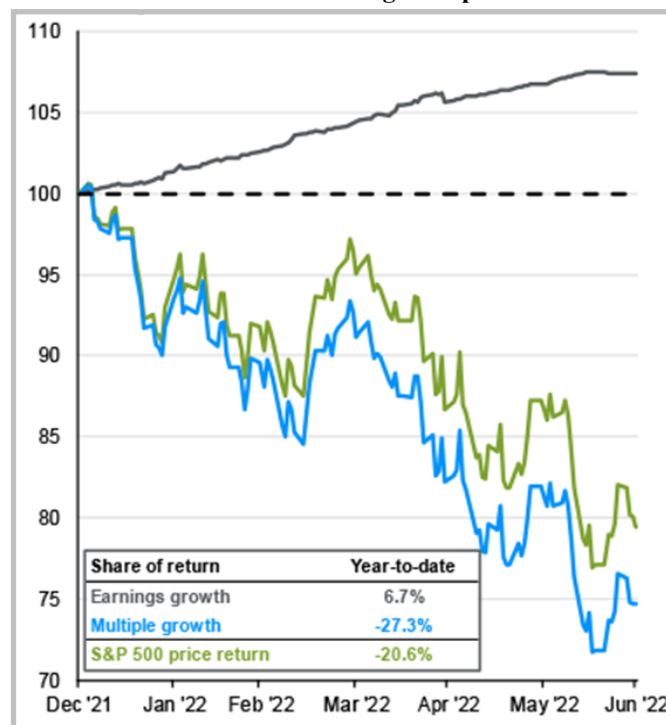
The Price of Credit Risk is Increasing Rapidly



Source: Bloomberg

The same can be said for stocks. Take a highly profitable company like Google. In 2021, it generated operating profits of \$79 billion but carried a \$1,807 billion enterprise value. Over the past 12 months, Google has generated operating profits of \$82 billion against an enterprise value of \$1,456 billion. The amount an investor must pay for one dollar of operating profits has fallen 22%. Equities in the US and abroad have fallen considerably from their highs. Look at the FANGM stocks. Facebook (Meta) is off -55.8% from its 1 year high. Amazon -39.2%. Netflix -73.5%. Google -22.2%. Microsoft -24.0%. Per Factset, S&P 500 earnings are up 6.7% year-to-date, but stocks are down -20.6%. This implies the amount an investor has to pay for a dollar of S&P earnings has fallen by 27.3%.

Stocks are Getting Cheaper



Source: JP Morgan

Conclusion

It is plausible that we are about to enter a recession. Business cycles are part of life and areas of our economy are already showing signs of stress. In a recession, corporate earnings will get hit. Some corporations (and other forms of borrowers) will find it hard to service their debt. The recent hit to equity prices and rise in credit spreads is, in part, the market discounting these possible outcomes. Risk assets, like equities and corporate bonds, may get even cheaper and the prospective opportunity set even richer. If such an outcome does occur, it will be an even greater time to deploy capital. Unfortunately, identifying the depths of a market bottom is impossible.

We went back and looked at all the times the market was down by -20% and asked a simple question. What if investors held out for an even larger dislocation? In other words, would investors have been better served by being slower to react? Since WWII, holding out for a -30% correction (as opposed to today's -20% correction) would have been beneficial only half of the time. Said differently, the holdouts would have missed large rallies that took the market back to breakeven, and often far higher, had they waited for a better entry. If you hold out for a -40% drawdown the statistics are even worse. You would have missed the market bottom 62% of the time.

The overarching message of this commentary is simple. The investing climate today is more attractive than it has been in some time. Things very well may get worse, but we don't know how much worse. The historical odds and market fundamentals support getting more constructive about taking on risk, even if it doesn't feel right. And if things get worse, your conviction about the forward opportunity should only grow.

As previously mentioned, our past conservatism is being rewarded. Our public holdings (across stocks and bonds) are down, but less than the market averages. Our decision to invest higher in the capital structure and/or avoid highly leveraged real estate investments has proven prescient. Lastly, we are seeing large and growing dividends from our investments in oil and gas minerals. Of course, this all could change, but we like how our portfolios are positioned. Every day the market offers up a menu of prospective investments. Our job is to seek out the investments that offer asymmetric risk and reward. If the current dislocation continues, we will have fertile hunting ground to deploy capital into.

Thanks for entrusting us with your capital. If you have any questions please do not hesitate to call us.

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