

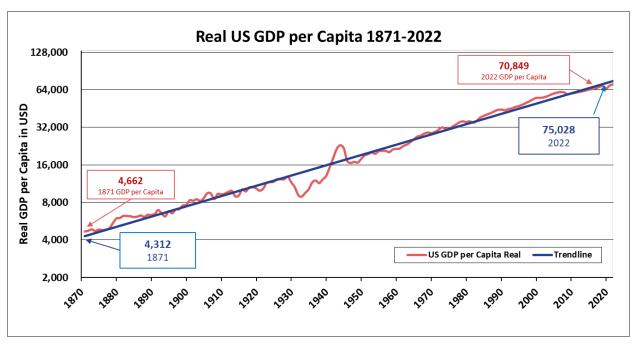
Great Disruption Ripple Effects

The bubbly markets of 2020-21, during which the S&P 500 returned 52.4%, on top of a historically strong decade from 2010-2019, finally came to a halt in 2022, with the S&P 500 posting a total return of -18.1% and the NASDAQ -32.5%. An even more historic secular bull market in bonds recently came to an end. Its inception can be traced back to September 1981, when the 10-year US Treasury yield peaked at 15.8%. Its official demise will likely be recorded on August 4, 2020, when the 10-year yield bottomed at 0.52%. However, 2022 will likely be the year that ends up living in bond market infamy. The Barclays Capital US Aggregate Bond Index returned -13.0%, its worst annual performance ever (dating back to its inception in 1976). Normally, yearly results don't interest us much, as the time frame is generally too short to be meaningful. This year, however, could mark a longer-term turning point across the asset-class spectrum of stocks, bonds, private equity, and real estate. ACR strategy results can be found at https://acr-invest.com/strategies/.

Whether a longer-term turning point has been reached remains to be seen. What we know today is that the past few years have been filled with disorienting economic extremes: crashes, bailouts, bubbles, inflation, real progress, and reversals. Despite a pandemic and severe, but record-quick, recession, a historic speculative wave swept over every major asset class in 2020-21. Today we live in its wake. Who will be the poster child for this epoch's excesses? The candidates continue to multiply as the tide goes out: WeWork, Nikola, Robinhood, SPACs, ARKK, Carvana, Crypto, FTX. ACR has always been a strident bubble avoider, and we remain unscathed by these debacles. Yet we are still charged with knowing what to pay for the earnings of sound companies in an economy fraught with economic head fakes. Understanding corporate profits, the key to stock and credit market success, has become trickier than ever, and is the main subject of our year-end commentary.

Our macroeconomic advisor, Professor Steve Fazzari, has referred to the pandemic and its aftermath as the Great Disruption. A brief recounting of events will help to characterize the period's disruptive nature and set the stage for a discussion of economic ripple effects. The US and much of the global economy abruptly shut down the first week in March 2020 due to the spread of a novel coronavirus. On March 27, less than 30 days later, Congress passed, and President Trump signed into law, the \$2.2 trillion CARES Act. The 14.7% unemployment rate registered in April marked the bottom of the shortest, deepest recession in the post-war era. The extremes were mind-bending: depression-sized GDP declines and unemployment one month, war-like fiscal spending the next. Fiscal stimulus rapidly filled the depression-sized economic hole. Record-low interest rates helped stabilize financial markets, but supported new asset bubbles. Lastly, flipping "On" a \$100 trillion global economy that had just been abruptly flipped "Off" created demand allocation and supply chain disruptions, which sealed the economic fate of higher inflation and rising interest rates. Today we are left to sort out what is real and durable, and what may vanish as quickly as Sam Bankman-Fried's genius.

First, what is real and durable: amidst the short-term turmoil is an economy that has been steadily marching upwards since the US Constitution was signed in 1789. One of our favorite charts, which was also in last quarter's commentary, shows US GDP per capita dating back to 1870.

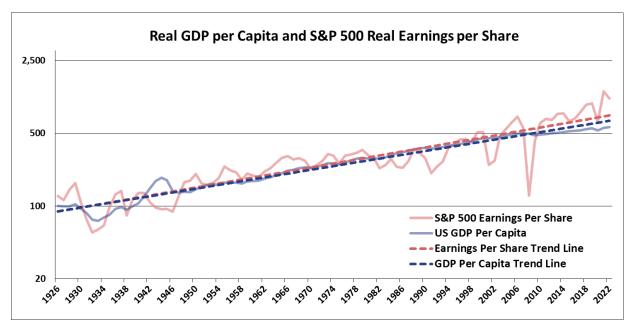


US Real GDP per Capita through April 2022 Source: The Conference Board Total Economy Database

The reason we frequently showcase this chart is that it represents the unprecedented human prosperity produced by our free enterprise system, undergirded, as it is, by a democratically determined rule of law. While past performance does not guarantee future results, the scientific and commercial innovation and well-developed rules that produced these results are tangibly observable and more advanced today than ever. One can debate whether certain factors—waning population growth, fewer groundbreaking technologies, or poorly designed policies—could result in some sort of break from the past. Yet, if the past 233 years is any guide, the result is more likely a future trend of 1%-2% real productivity growth than either no growth or something off-the-charts high. The long-term difference between 1% and 2% is still large—a 35% and 81% increase, respectively, in living standards over 30 years. The historical average since 1870 is near the higher end at 1.8% per year. A more pessimistic forecast consistent with near-term experience would call for a figure closer to 1%. Either way, tangible progress is a reasonable expectation.

With this foundation in place, the rise in corporate earnings is similarly durable, as profits are an integral proportion of GDP in a functioning free enterprise system. Consistent with Stein's Law—which states, Yogi Berra style, that what cannot go on forever will stop—corporate profits cannot grow faster than the economy forever. The impossible implication would be a perpetual decline in wages and taxes. Neither

can corporate profits decline forever, an untenable outcome in a capitalist system. The chart below quantitatively illustrates how GDP per capita and corporate earnings per share are joined at the hip.

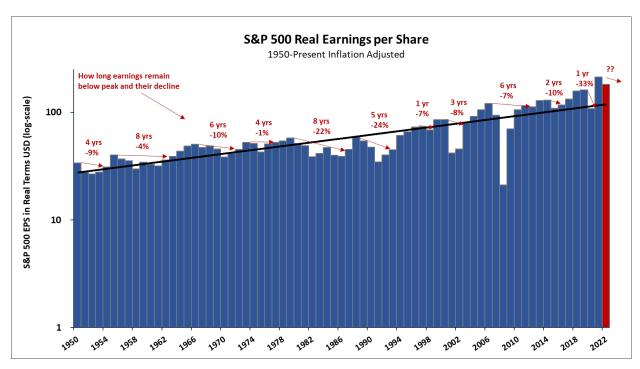


Note: US Real GDP per Capita through year-end April 2022. S&P 500 EPS for 2022 is as reported through December 2022.

Sources: S&P Dow Jones Indices; Robert Shiller - CAPE Data; The Conference Board Total Economy Database™; ACR Alpine Capital Research

The red and blue straight dashed lines reveal that the long-term trend in GDP per capita and S&P 500 earnings per share since 1926 practically overlap (at 1.8% and 2.3%, respectively). In contrast, the jagged red line represents annual S&P 500 earnings per share, showing how volatile earnings can be despite inherent stability in the long-term trend. Few mistakes throw investors off more than myopically focusing on the last 12 months of earnings. Properly valuing a company requires a reasonably accurate assessment of future long-term earnings. Investors who project growth based on annual earnings when significantly off-trend compound one mistake with another and get the entire future earnings stream wrong. Correctly assessing normalized earnings and growth is difficult under regular circumstances. Add shock waves from the pandemic shutdowns, a multi-trillion-dollar stimulus, and constrained supply, and you have a recipe today for very large miscalculations of earning power and valuations.

The following chart chronicles exactly how misleading annual earnings can be. It notes how long earnings remain below peak in each cycle and the total inflation-adjusted earnings decline at the end of the period. Also included is a trend-line, which helps to visually reveal deviations of yearly earnings from the long-term trend.



Note: The line represents an Ordinary Least-Squares Regression (OLS) trendline of S&P 500 Real Earnings Per Share (EPS) from 1950 to 2022. EPS data has been log-transformed. EPS as of December 31, 2022. Price as of December 31, 2022. S&P 500 EPS sourced from Shiller data through September 30, 2022. 4Q 2022 TTM data from Howard Silverblatt S&P 500 estimate as of January 6, 2023.

Sources: S&P Dow Jones Indices; Robert Shiller; BLS- CPI Data; ACR Alpine Capital Research

The average period below peaks was 4.4 years, and the average earnings decline at the end of the period was -12%. What does this mean for today? The recent past has been interesting, to say the least. Earnings peaked at \$161.63 per share in 2019 after over 10 years with no recession. Earnings then declined 33% to \$107.62 in 2020 during the pandemic shutdowns, only to soar to \$211.35 in 2021 on stimulus overdrive. With three quarters of reported earnings under our belt in 2022, it is safe to say S&P 500 profits will end up around \$180 per share. The peak year then is 2021. Given historical averages, real earnings would still be lower in 2025 than in 2021. Of course, no one knows what earnings will be in a few years, much less in the coming year. Yet, based on the historical data shown in our chart, we think it prudent to use the trend-line for this year of \$123.74 when valuing the equity market, which is the figure we use to estimate ACR's cyclically adjusted S&P 500 P/E at year-end of 32x. (Note that \$123.74 is based on EPS back to 1926, our measurement period for the ACR CAPE, which is a little higher than the 1950 inception period least-squares trendline of \$118.24 illustrated in the chart above.)

At ACR, the art of estimating recessionary earnings means calibrating for the inevitable rather than forecasting *when* recession will strike for trading purposes. Timing a recession is, in our opinion, difficult at best. In retrospect, someone will always get it right, but was this genius or the proverbial stopped clock? Most importantly, as long-term earnings is the substance of value, recession must be incorporated since it is practically guaranteed at some point. Fortunately, we find it easier (though not

at all easy) to normalize future earnings through the cycle than to forecast exactly when a recession will occur, which dominates most discussion on the topic.

Important to note, it is essential to distinguish between a pedestrian economic cycle and a historic imbalance. An example of the latter was the Great Financial Crisis ("GFC") of 2008. One could see this particular crisis brewing. The toxic combination of a debt-fueled housing boom and excessive financial institution leverage led us to deliberately avoid financials and housing in the mid-2000s (see our 2007 year-end commentary Same Story, Different Channel). While always on the lookout for economic imbalances, there is no guarantee that we will see the next crisis coming. The ultimate antidote to a historic downturn is to own a portfolio of companies with durable long-term cash flows and modest or low leverage, a first principle at ACR.

We do not see another GFC on the horizon today. Pockets of excessive leverage can be readily identified, yet there are no obvious systemic debt or production imbalances. Persistent inflation could cause the Federal Reserve to raise rates higher than expected in 2023, resulting in a more severe recession, but this is unlikely to be exacerbated by the fragility that afflicted the US financial system circa 2007. Moreover, while getting inflation below 3% may prove challenging, the alleviation of demand allocation and supply chain disruptions likely means that inflation peaked in 2022. Lastly, US Treasury debt may be historically high, yet an imminent crisis is unlikely. The debt ceiling is a political, not a credit, issue. Given still-negative real rates, the US government is in effect being paid to borrow. Even at a 2% real cost of debt, debt service would approximate 2% of GDP, not a cause for panic.

In our view, the systemic imbalance today can be found in the equity market. The deflating bubble of 2022 resembles 2000-2002. These are the only two bear markets in the post-war era from which the S&P 500 cyclically adjusted P/E declined from over 30. A higher price at the beginning of a bear market translates to a heightened risk of greater declines. Prices may seem less high to investors who do not adjust earnings for economic cycles, but we believe failure to make such adjustments is imprudent at best, and could be highly regretful at worst. A bear market, which starts with P/E multiple compression, could end with prices following earnings lower, a problem for investors who failed to adjust earnings and valuations for the cycle. We want to protect against both risks.

ACR mitigates P/E multiple contraction by seeking to own a portfolio of well-capitalized, growing companies at a far lower multiple than the overall equity market. The EQR strategy cyclically adjusted P/E stood at 9.2x at the end of 2022, a still extraordinarily wide gap compared to the overall market at 32x. The more challenging risk to protect against is overstating earnings and growth near an earnings peak. We have just illustrated a simple yet effective method for normalizing earnings at the overall market level. So just how do we go about incorporating economic cycles into our evaluation of individual companies?

Investing at the company rather than the market level means we get to make adjustments based on the economic characteristics of each company and industry. The nature of a company's business lines will determine how intertwined and volatile revenue, costs and profits are in relation to the macroeconomy

and its industry. Classic defensive business lines, in the healthcare and food industries, for example, may exhibit very little sensitivity and volatility and require little adjustment. Yet even these normally stable businesses were impacted by the pandemic. For example, elective surgeries were delayed when capacity was strained by Covid hospitalizations. Earnings had to be adjusted higher when volume plummeted, then lower after a wave of surgeries were completed post-pandemic.

Characteristically stable and growing leading technology companies experienced a surge in online activity and revenue during the stay-at-home phase of the pandemic, some of which has proven fleeting. Tech companies ramped up hiring in 2020-21 and are now cutting back. When PC sales rose well above normalized volumes early in the pandemic, we did not permanently adjust volumes and margins higher, nor are we having to decrease them now as PC sales pull back. Other industries, such as property and casualty insurance ("P&C"), largely operate in their own unique cycle somewhat divorced from the general economic cycle. Once again, the pandemic disrupted normal patterns. For example, we maintained higher normalized auto loss ratios than reported when miles driven plummeted early in the pandemic, only to reverse this adjustment as higher used car prices and normalized miles driven increased auto loss ratios above long-term averages.

At the other extreme is housing, one of the most cyclical of industries. Housing benefited from the pandemic dynamics of low interest rates and work from home, booming from 2020-2022. Yet in our opinion, the pandemic housing boom is fundamentally different from the GFC housing bubble. Consumer lending standards are tighter, major financial institution balance sheets are healthier, and leading builders are better capitalized. Today's housing contraction is therefore more likely to exhibit the characteristics of a normal cycle. We have developed models of household formation and new builds over the next decade, normalized housing sales at the builder level, and normalized gross margins, all at levels, well below that of the past year, yet the companies still appear cheap.

Autos and auto parts are another example of a cyclical industry whipsawed by the pandemic. In the case of autos, supply was constrained at recessionary levels while auto prices soared. Higher prices were great for manufacturers who reported excess margins on lower volumes, but bad for suppliers who are more leveraged to volumes. We continue to adjust our normalized earnings and margin estimates for our auto investments, but the task of getting future earnings correct in an industry that is also being disrupted by the advent of EVs is particularly challenging. This is where stock price matters. The stock prices of certain automakers and suppliers are so cheap that we have a significant margin for error in our estimates.

The brief excursion above, though it barely scratches the surface, gives a good sense for the kind of economic crosscurrents and resultant adjustments we consider when aiming to get normalized and future earnings right. We believe that our estimates properly account for economic contraction where warranted, while upward adjustments have been accorded for idiosyncratic, underearning businesses. Approximately half of the EQR strategy is non-cyclical and therefore less likely to be impacted by recession, while our normalized earnings estimates for the other half are, like the S&P 500, significantly lower than recent earnings, in some cases as much as 50%. Time will tell exactly how "right" we got it.

Turning to future returns, fixed-income investors have been riding a 40-year wave of lower rates, which has now ended. Yet, this pronouncement is less dramatic than it seems. Rates on fixed income today generally look reasonable. At year-end, 30-year US Treasuries were at 4.0%, 30-year mortgages 6.4%, investment-grade bonds 5.5%, and below-investment-grade bonds 8.9%. While fixed-income investors may not have a 40-year tailwind of declining rates ahead, there is little reason to believe that we are on the cusp of a new, rising-rate purgatory, like the 1960s-1980s. Today's yields are sensible given a long-term inflation rate of 2-3%. Whether central bankers will maintain these rate relationships is anyone's guess. The silver lining for ACR today is that reasonable average yields and a period of earnings volatility offer unique credit-market opportunities in individual holdings.

Equity-market investors—including public equities, private equity, and real estate—have been riding the same wave of lower rates. The current secular bull market in equities began in 2009 as the economy rebounded from the GFC. While earnings grew in alignment with long-term trends, the problem was that prices rose much faster than earnings (see our 2021 year-end commentary Pruning Risk, Creating Value). In this regard, 2022 may be a turning point. If rates decline, it will probably be due to a weakening economy and lower earnings. If rates hold or rise, equity-market inflows will likely be muted. A higher cost of debt would render leveraged private equity and real-estate returns less attractive, with valuations requiring downward adjustment. In short, a secular bear market may have begun in 2022, similar to the decade-long equity bear market that began in 2000. We are fine with such an economic climate since this is when our low-leverage, value-oriented strategy is likely to do best.

Regardless of the general equity and debt market conditions we face, our recipe for success is the same: buy one company at a time at the right price. Despite higher general equity-market prices today, there are enough companies selling at attractive prices to fill a portfolio, as there were in the early 2000s. Given that investment return is the mathematical relationship between price and profit, we look forward to reaping the profits generated by our portfolio companies via dividends, interest, and gains in the coming years.

The ACR team wishes you and yours a happy and healthy 2023.

Nick Tompras January 2023

End Notes

30-year US Treasuries, 30-year mortgages, investment-grade bonds, and below-investment-grade bonds are represented by the following: Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis, 30-Year Fixed Rate Mortgage Average in the United States, ICE BofA US Corporate Index Effective Yield, ICE BofA US High Yield Index Effective Yield.

IMPORTANT DISCLOSURES

ACR Alpine Capital Research LLC is an SEC registered investment adviser. For more information please refer to Form ADV on file with the SEC at www.adviserinfo.sec.gov. Registration with the SEC does not imply any particular level of skill or training.

All statistics highlighted in this research note are sourced from ACR's analysis unless otherwise noted.

It should not be assumed that recommendations made in the future will be profitable or will equal the performance of the examples discussed. You should consider any strategy's investment objectives, risks, and charges and expenses carefully before you invest.

This information should not be used as a general guide to investing or as a source of any specific investment recommendations, and makes no implied or expressed recommendations concerning the manner in which an account should or would be handled, as appropriate investment strategies depend upon specific investment guidelines and objectives. This is not an offer to sell or a solicitation to invest.

This information is intended solely to report on investment strategies implemented by Alpine Capital Research ("ACR"). Opinions and estimates offered constitute our judgment as of the date set forth above and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. There are risks associated with purchasing and selling securities and options thereon, including the risk that you could lose money. All material presented is compiled from sources believed to be reliable, but no guarantee is given as to its accuracy.

The investment outlook represents ACR's views on the economic factors that may affect the global capital markets. There can be no guarantee that these factors will necessarily occur as ACR anticipates, nor that if they do, they will lead to positive performance returns. There can be no assurance that any objective will be achieved.

The Equity Quality Return (EQR) Total Accounts Composite consists of equity portfolios managed for non-wrap fee and wrap fee clients according to the Firm's published investment policy. The composite investment policy includes the objective of providing satisfactory absolute and relative results in the long run, and to preserve capital from permanent loss during periods of economic decline. EQR invests only in publicly traded marketable common stocks. Total Return performance includes unrealized gains, realized gains, dividends, interest, and the re-investment of all income. Pure Gross returns are gross of all fees and do not reflect the deduction of transaction costs in wrap portfolios. Pure Gross returns are supplemental information. Net of ACR Fee returns are Pure Gross returns reduced by 1.0% per annum, which is the standard management fee for the Equity Quality Return strategy. Please refer to our full composite performance presentation with disclosures published under the Strategies section of our web site at www.acr-invest.com/strategies/eqr-advised-sma-composite.

The S&P 500 TR Index is a broad-based stock index including reinvestment of dividends and has been presented as an indication of domestic stock market performance. The S&P 500 TR index is unmanaged and cannot be purchased by investors. See EQR's full composite presentation at www.acr-invest.com/strategies/eqr-advised-sma-composite.