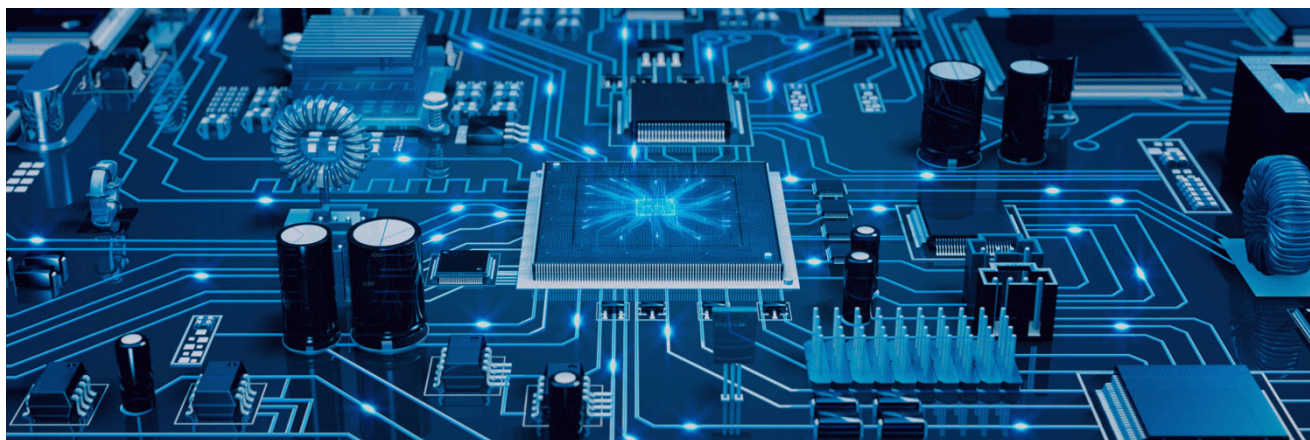


CRYSTAL WATERS PARTNERS

Market Outlook

April 2021

Long the Shortage



In the face of rising inflation, investors continue to rotate from growth stocks to passive index funds and dividend stocks. However, we think the future is not an either-or choice between growth vs. value. Instead, we see a market where growth and value will rise together, although maybe not at precisely the same time. We have increased our exposure to rising interest rates and more cyclical companies but remain primarily committed to long-term high-growth companies. Our view remains that chasing short-term rotation requires perfect timing and runs the risk of missing one of the most significant transformational shifts and investment opportunities currently underway in technology, energy, and healthcare. We are encouraged to continue to see that several limited partners agree with this by making additional investments in April to take advantage of the pullback.

All of the macro-economic indicators are suggesting the second half of this year and next year are setting up for a 'goldilocks' market. We expect several of our positions with important near-term catalysts will outperform during the second half and next year.

Market Moves

The market continues to go through a transition with investors moving money from growth stocks into value stocks. April trading data shows two surprises: an increase in dividends, and huge inflows into equities that are even stronger than the first three months of the year. Overall dividend payout for the S&P 500 will increase 5% in 2021. That would mean a payout to investors of about \$515 billion, up from \$483 billion in 2020. Exchange-traded funds (ETFs) started the year just short of \$6 trillion in assets under management, and inflows have continued on a consistent basis every month in 2021. An extra \$55 billion was put into equity ETFs in April, for a year-to-date total of \$258 billion in equity inflows. As the economy reopens in the coming months, households will be primed to spend more of the savings they built up during the pandemic. According to the US Bureau of Economic Analysis, personal saving amounted to about \$6 trillion in March, up by nearly \$5 trillion from February 2020, the month before the pandemic shut down large parts of the economy. The take-away here is that investors, particularly millennial investors, are returning to work, have less time to play 'stock market at home', and are returning to traditional investing principles with a cash hoard unseen in previous recessions.

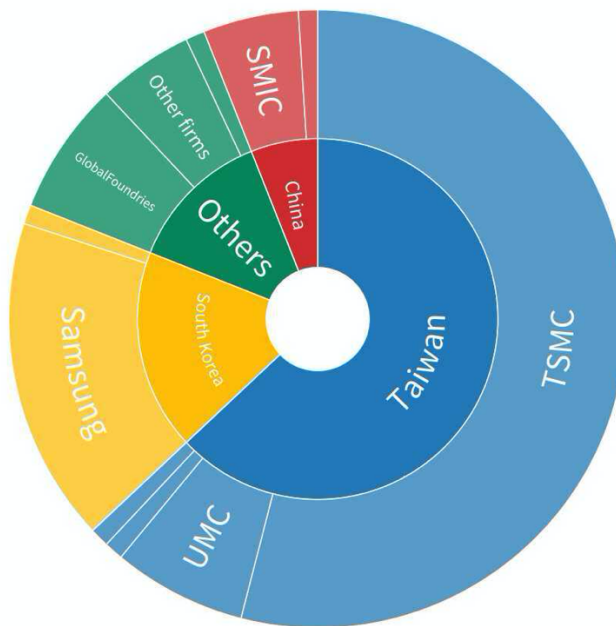
Initially, this looked like a typical selloff of overpriced growth stocks and inflation fears but has revealed itself as a rebalancing of portfolios with a mix of growth, value and income generating stocks being bought mostly in passive ETFs. Overall, this rebalancing is very healthy for the stock market and the economy as a whole.

While the market will leap from one fashionable idea to another, Crystal Waters Partners remains focused on the biggest long-term trends, with a minimum of a 3-year holding horizon and keeping turn-over as low as possible to receive the most favorable tax treatment. The fund has recently received new investment capital from existing limited partners, further expanding our ability to grow the fund for all LPs. The charts below show how we have not been tossing holdings out to chase the latest fads, we have remained consistent with our outlook on the whole portfolio.

Long the Shortage



- Why We Have a Semiconductor Shortage
- The Role of Hoarding & Double Booking
- Who's Impacted the Most?
- Response to the Shortage



What Caused the Shortage?

Globally, semiconductors are in short supply and the effects are being felt by almost every industry. The COVID-19 pandemic has placed enormous pressure on supply chains, especially for consumer electronics like laptops, video game consoles and smartphones, as it forced people around the world to find new ways to work and play. The auto industry temporarily shut down plants at the beginning of the pandemic, incorrectly forecasted lower demand due to COVID-19, and consequentially cancelled chip orders which sent semiconductor supply into a downward spiral.

Taiwan Semiconductor (TSM) is the world's largest manufacturer of semiconductors of all types. When the auto industry cancelled orders, TSM shifted their manufacturing to maximize production of chips for smart phones, laptops, and game consoles because all those devices were experiencing a huge surge in demand. When demand for cars and trucks rebounded, the auto industry swamped the chip industry with orders, only to find that chip manufacturers couldn't respond fast enough. The result has been automobile factories operating at reduced levels or shutting down completely because there aren't enough chips to complete the vehicles.

Hoarding

China's Huawei Technologies was the world's largest buyer of semiconductors until the U.S placed Huawei on a blacklist, prohibiting the sale of chips and other technology to the company. To counteract the ban, in 2019 Huawei began stockpiling semis, especially those from its main supplier, Taiwan Semiconductor. One additional factor that resulted from the China-US trade war/tech war was "double booking" of chip orders by many companies. Double booking is when a company order twice as many chips as it needs for current production. TSM says they can identify double booking and puts a priority on sales to customers with current needs and normalized order flow.

Impacts

The chip shortage impacted the auto industry first, mainly due to the large number of chips used but also because of the variety of chips a modern vehicle requires. The chip shortage then spread to consumer electronics, laptops, gaming consoles and other devices that already had tightened inventories. The lack of chips is expected to impact the production of 1.3 million cars and vans globally, according to research firm IHS Markit. UK carmaker Mini suspended a production line for three days, while Ford warned that the shortfall would cut its output by over 1 million vehicles this year. Nvidia CFO Colette Kress said, "Overall demand remains very strong and continues to exceed supply while our channel inventories remain quite lean...we expect demand to continue to exceed supply for much of this year." Nvidia is a Crystal Waters portfolio holding. Apple reported last month that the shortage will incur a cost of \$3 billion to \$4 billion in its financial third quarter. Whirlpool China said chip deliveries fell short of its orders by about 10 per cent in March.

Response

TSMC produces about 80 per cent of the chips used in autos. TSMC said it would invest \$2.87 billion to expand production. Intel announced early May that it would invest US\$3.5 billion to expand its wafer fab in the US state of New Mexico, on top of multibillion-dollar investments at its Arizona, Oregon, Ireland, and Israel facilities. Every manufacturer of semiconductors and their customers are all talking about significantly expanding capacity, onshoring more production, and securing greater supplies of critical components and equipment. However, no one is saying the shortage will be solved this year or even next year, and we're looking at a 2-3 year shortage that will forever change how and where semiconductors are made.

Economic Outlook

Broadly, we are seeing a heavy sell-off of the tech-stocks that saw a big runup last year and earlier this year. As shareholders, this is painful in the short-term, but the pendulum always swings too far in either direction, and the market in our opinion, is overdoing it on the tech sell-off. We are long-term investors, which simply means that we take a minimum 3-year outlook on an investment to get the best tax treatment and to allow enough time for a mega trend to unfold. These growth stocks are not 'all-season' stocks that work in any environment, especially not in times when bond yields are rising. We now have broad accelerating growth and the prospect of some inflation, rising rates, and bond yields, which changes the mindset for short-term investors. When these investors think about inflation and see rising bond yields, they tend to move away from tech and into dividend paying stocks that provide a safety position against inflation.

Long-term structural changes and the digitization of business have created permanent shifts in how we will live our lives more digitally. CWP owns many of the leaders in this shift and we are confidently patient that the bull-market in tech will return. Financials, energy, materials, and industrials all benefit from increasing inflation, and we have various holdings to ensure we have adequate exposure. Ultimately, we are a long-term growth fund, which tilts us towards emerging mega-trends that are predominantly in technology and healthcare. The primary concern for us is that inflation might get out of hand and the market could put the brakes on all sectors. Until we see inflation rise and sustain levels that are above the Feds target, we are still very much of the mind that we are in the very early stages of a new growth cycle.

Our view is that Powell is correct that higher inflation is temporary, and the Federal Reserve and the Biden Administration do have several tools at their disposal to keep inflation in check. Biden can remove tariffs, expand mining, increase shipping capacity, and provide incentives for transportation workers, all to expand supply. Within economic theory lies the '[Technology Productivity Paradox](#)' which describes how the relationship between technology and productivity is known but not well understood. In the productivity paradox, economists can measure increases in technology investments, but haven't seen the expected increases in productivity, suggesting that either they are measuring productivity incorrectly or technology simply doesn't deliver increases in productivity. What is understood are the deflationary effects of technology which occur when workers are displaced by technology which reduces their spending power, temporarily, while at the same time technology increases productivity by a smaller number of workers, making companies more efficient at delivering goods and services at lower prices.

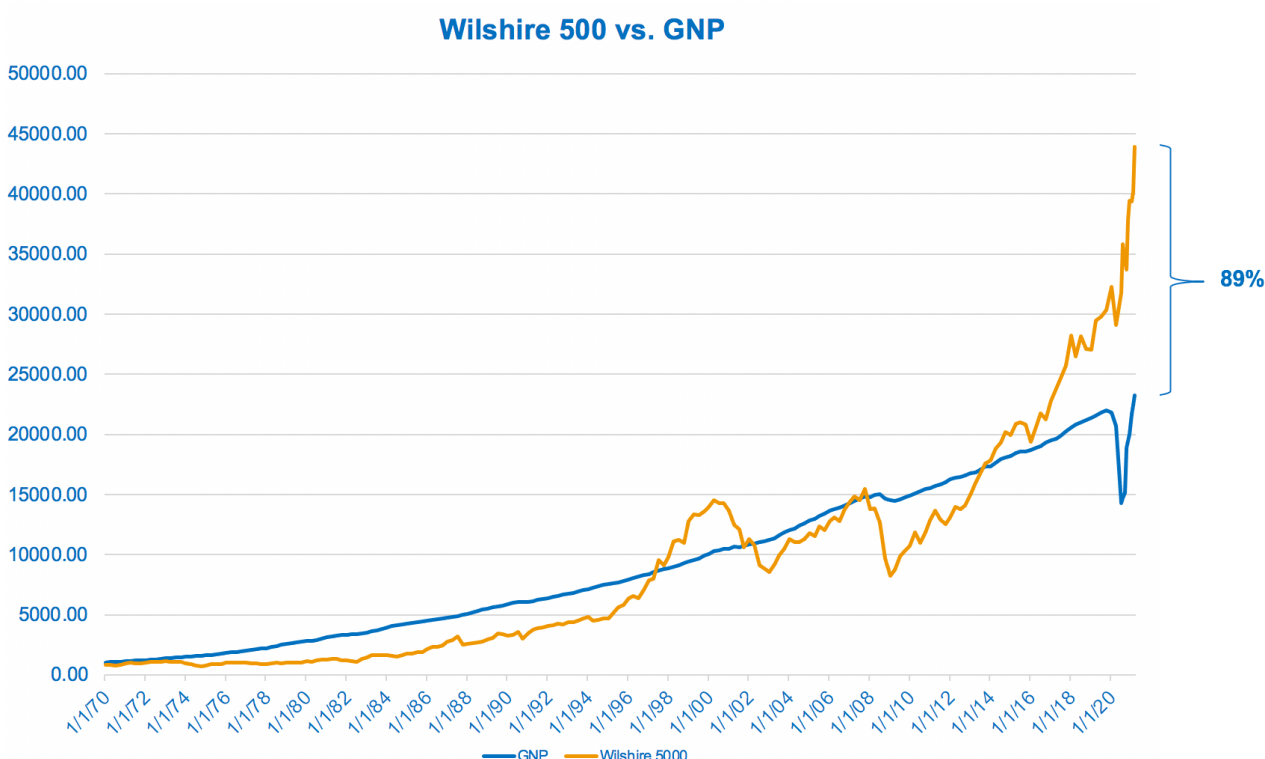
Since all the mega-trends we're invested in are technology focused, the effects of these mega-trends will lead to lower inflation, not run-away inflation akin to the 1970's.

Market Valuation

While we deliberately don't invest in the broader market, it is important to keep understand since many of the fund's limited partners have great exposure and any movement does to some extend affect individual holdings in the fund.

All indexes rose in April, although we saw growth stocks declining sharply and while value-stocks had significant gains. Investors were buying large-cap, dividend-paying value stocks in the Dow and small-cap value in the Russell 2000. A lot of money flowed out of growth stocks into value stocks, but additional money previously held in cash also came into the market, which drove overall indexes higher.

The Wilshire 5000 is now **89%** higher than the US GNP, which compares to a **90%** divergence last month, so by traditional measures, we are still in overvalued territory.

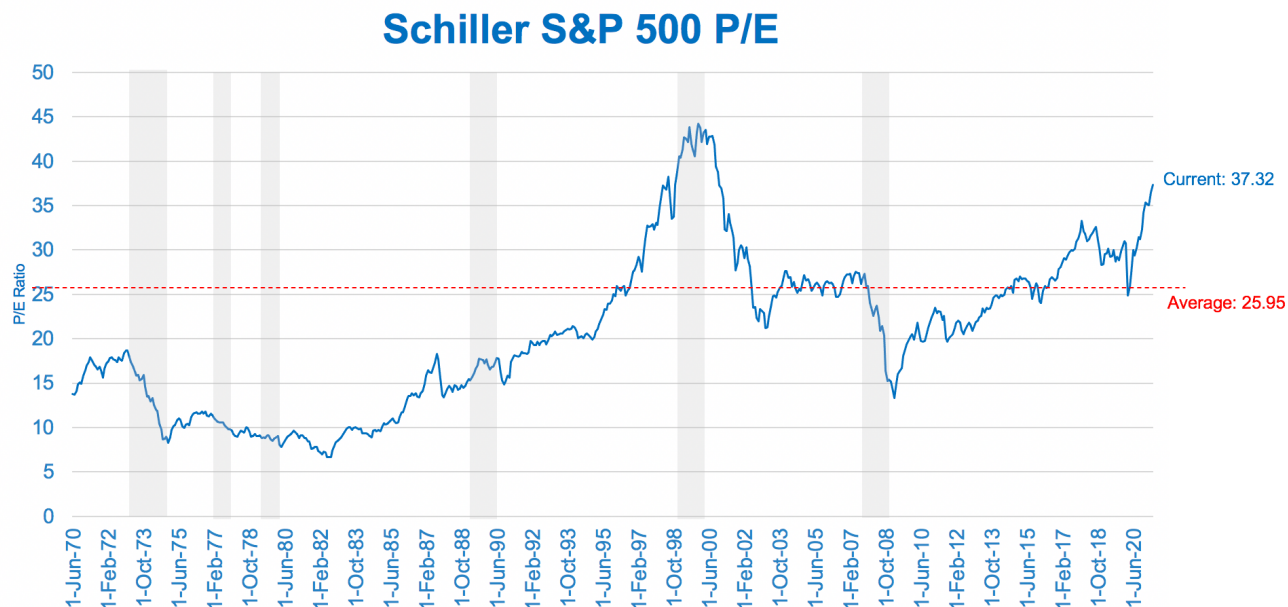


JP Morgan Chief Global Strategist said GDP grew 6.4% in the first quarter and an inventory rebound could set the stage for a double-digit surge in real GDP in the second quarter. Morgan Stanley is projecting gross domestic product is now expected to grow by 8.1% on a fourth quarter by fourth quarter basis. Economists at Goldman Sachs raised their GDP growth expectations for the U.S. economy to 8% for 2021. Goldman also said, *"But we expect inflation dynamics to mirror those last*

cycle, and therefore expect this forecast to translate to only 2.1% core PCE inflation in 2023." U.S. GDP growth of 8% is not unprecedented, but the economy has grown at 8% in a year since 1951.

That said, a drastic rise in inflation and an about-turn by the Federal Reserve on keeping interest rates low could trigger a more extensive correction, and we monitor these key macro-economic indicators with priority.

As a second perspective on valuation, we always use price-to-earnings. The Shiller P/E Ratio adjusts earnings for inflation and interest rates, which allows us to accurately compare earnings over periods with differing interest and inflation rates. Times of low rates and low inflation have warranted higher valuations, so normalizing the ratio is essential for historical comparisons. The average adjusted P/E ratio since 1970 is ~26, a level we hit in March last year. Since then, the ratio has been moving up and is now at 37.32, over 40% above the average, confirming what the Wilshire 5000/GNP shows.



Expectations for the next couple of years are that aggregate earnings will grow significantly given the economic tailwinds. We would like to see the direction of the ratio plateau or begin to decline. However, for that to happen, earnings will have to grow faster than equity market prices which is in fact what we saw in Q1 and is likely to continue in Q2.

What Excites Us

Economy Reopening

Many of the fund's positions stand to benefit as the economy reopens. While we are thrilled with the short-term growth, we remain focused on the tremendous growth ahead as our major themes continue to unfold. With 70% of the economy dependent on consumer spending, reopening is an essential catalyst for growth.

Growth at Reasonable Prices

Technology stocks in cloud software and semiconductor spaces are coming down to more reasonable prices and earnings are increasing above expectations. We see tremendous opportunity in several positions where our downside risk is minimal, and the upside could be enormous. The recent decline in chip stocks presents new opportunities in a large growing market that cannot currently meet demand. All the most significant growth sectors rely on semiconductors. There are overlooked parts of the market where significant growth remains to be captured. Fertilizer has outperformed oil. Tractors have outperformed autos. Copper has outperformed every major commodity and is poised to continue; but at some point, the red metal will just stop when demand slows.

Amount of Money Still on the Sidelines

Many investors are still sitting out in the current market. Last month there was still roughly \$5 Trillion sitting in cash accounts. This is over 30% more than the 10-year historical average, and for many institutional investors, earning 1% or less on cash isn't a long-term option. Investors are rightfully careful, but with low interest rates and GDP on the mend, this cash will be invested to the benefit of current investors who are already fully invested. We expect to see significant amounts of idle cash flow into the stock market via individual traders, institutional investors, 401Ks, and pension funds during the second half of 2021.

What Keeps Us Up at Night

Cyber Security

The attack on the 5,500 mile long Colonial Pipeline by Russian hacker group DarkSide has finally brought this threat out in the open. Many companies just pay the ransom to the hackers and move on. This time the hackers disrupted the largest pipeline in the U.S. and threw the entire fuel distribution network on the east coast into chaos. Knowing that the TSA oversees pipeline security is doubly worrisome. This seems like a task for the NSA.

Global Conflicts Impact on U.S. Interests

Two things cause the most upheaval in markets and increase inflation, 1) Interest rate hikes, 2) Wars. According to the Global Conflict Tracker at <https://www.cfr.org>; there are 5 critical Conflicts, 12 significant conflicts, and 9 limited conflicts that all have a direct bearing on U.S. interests.

Inflation

We discussed why we don't think inflation will get out of control and cited major analysts who believe inflation will remain around the Fed's target of 2% - 2.5%. However, inflation is a major risk to the markets, and we remain focused on the macro factors that could lead to rising inflation. The fund owns holdings that benefit from rising treasury rates and rising inflation as protection against those risks.

The Pace of Vaccine Distribution

Last month we cited our concerns at the rate of vaccine distribution and that only 20% of the U.S. population was vaccinated. We are now at 32% fully vaccinated and about 45% have received one shot. That is a big accomplishment in 30 days. The numbers are not as impressive when we look state-by-state, or more specifically at rural vs suburban and at border areas where vaccination rates drop significantly.