

July 26, 2021

Dear Partner:

The Greenlight Capital funds (the "Partnerships") returned -2.9%¹ in the second quarter of 2021 compared to 8.5% for the S&P 500 index. Longs contributed 5.3% in the quarter while shorts detracted 4.6% and macro detracted 3.3%.

For the better part of nine months, it felt like we had the wind at our backs, driven by value stocks outperforming growth stocks and inflation expectations and Treasury yields rising. In the final two weeks of the quarter, the market narrative shifted to deflation, Treasury yields fell and growth stocks outperformed value stocks. Well, that was deflating.

It didn't matter that inflation, no matter how you measure it, is running at the highest rate in decades and substantially above the Federal Reserve's target of 2% or a little bit more per year. The Fed has declared that the elevated inflation is "transitory" (without defining what that means) driven by "base effects" (easy comparisons) and "bottlenecks."

The majority of investors accept the Fed's premise and believe that inflation is topping and the Fed has the situation under control. If anything, the Fed may begin to reduce its rate of bond buying "sooner than expected," which would reinforce the deflationary narrative. The consensus view is that even the slightest adjustment to monetary policy will suffice to keep inflation in check. The recent market reversals reflect that view. We remain positioned on the other side, as there are – and we believe there will continue to be – too many dollars chasing too few goods and services.

To be sure, some of the inflation has been caused by genuine bottlenecks associated with the economic re-opening. One example is lumber. Pre-COVID, lumber had spent the last decade between about \$200 and \$650 per contract on the Chicago Mercantile Exchange. Just before COVID started, it was around \$460. When COVID hit, the price collapsed to \$260 before beginning a sharp recovery.

Initially, the lumber mills, fearing the worst, shut down. But then surprisingly, COVID prompted a huge demand for home remodeling and new construction. This drove lumber prices to all-time highs. With prices high, distributors feared a sell-off and did not want to get caught with too much inventory, so they allowed channel inventories to fall. But despite record prices, demand further accelerated. With channel inventories already drawn down, it was difficult to get lumber at any price. In May, lumber traded over \$1,600, about 5x the price from the prior May and about 2.5x the prior all-time high.

Was the inflation of lumber prices caused by Fed policy? Of course not. When an individual price goes parabolic while most other things don't, it has to do with the individual item. We

¹ Source: Greenlight Capital. Please refer to information contained in the disclosures at the end of the letter.

don't have 500% inflation. Fortunately, in the case of lumber, there was no structural shortage and the cure for high prices was high prices. The market functioned to correct the imbalance. There are plenty of logs and there is plenty of sawmill capacity. Additional supply took just a few weeks to come on-line and work through the system, which caused prices to normalize all the way back to \$634 as of July 23. There are bottlenecks in other areas and they, too, will likely prove to be "transitory."

That said, we believe that the bottlenecks are isolated and broader inflationary pressures extend beyond bottlenecks into areas where we now have structural shortages. Certainly, public policy (both fiscal and monetary) is inflationary by design. For years, central bankers have complained that it was difficult to achieve enough inflation to hit their targets, and adopted emergency and unconventional policies to try to create inflation. Large fiscal stimulus, combined with the wealth effect of rising stock prices and home values, has made household incomes and balance sheets stronger than at any time in recent memory. The improvement has been so rapid that consumers have been slow to consume all the gains, and the savings rate has expanded dramatically. Those savings represent substantial dry powder for future consumption.

We believe that in many areas, unlike lumber, it is not possible to rapidly increase supply. So prices will need to move *much* higher – enough to reduce demand. While the discussion has been focused on the public policy drivers of the economy, the capital markets have made it difficult for goods-producing companies and their raw material suppliers to expand.

Prior to 2008, we had an industrial boom. We over-expanded in housing, basic industry, mining, intermediate goods, carbon-based energy extraction and manufacturing. The over-investment led to poor returns on capital that were exposed during the Global Financial Crisis (GFC). Since then, cheap equity has been hard to find in these industries and there has been limited capacity expansion. Investors have been willing to grant nearly unlimited cheap equity to the constituents of the Goldman Sachs Non-Profitable Technology Index (up 99.7% in the last year), but hardly any for companies that make things and their suppliers.

Traditional industrial companies receive such low valuations and their implicit cost of equity is so high, that investors have demanded dividends and buybacks rather than expansion. Prior experience and policy makers suggest that higher prices are "transitory," so it will take sustained higher prices and higher pricing expectations to induce the needed investment to satisfy the increased demand in the post-COVID recovery. The result, we believe, will be continued underinvestment leading to sustained higher prices in a number of industries and rising profits for industry participants. Our long portfolio is stacked with companies that are poised to benefit.

Here are some examples:

Single Family Detached Housing

From 1960 through 2002, an average of 1.1 million single family homes were constructed in the U.S. per year. During the bubble years of 2003 to 2007, that grew to an average of 1.5



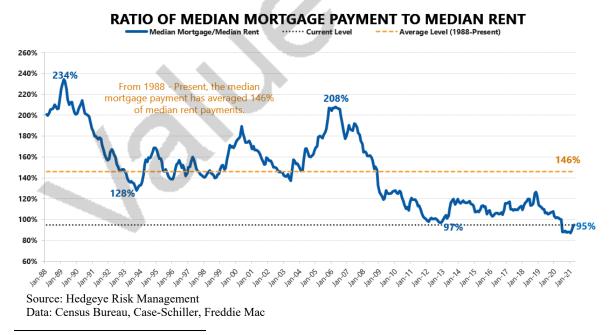
million. So, if average demand is 1.1 million, an extra 2 million houses were constructed over those 5 years. It was a bubble.

Post-GFC, construction has averaged just 700,000 new homes a year. Over a dozen years, the reduced construction helped absorb the 2 million extra houses and created a housing deficit of a similar amount, assuming no long-term change in the demand for single-family housing despite a growing population.

COVID exposed the shortfall. Average house prices are up about 20% year-over-year and there are record low inventories. It will be difficult for the industry to catch up. First, zoning and land development have become much more difficult, time-consuming and expensive. Second, land developers and homebuilders are not being showered with cheap equity capital to expand rapidly to take advantage of strong market conditions and reverse the shortfall. In fact, on a national basis, there are 17% fewer active homebuilding subdivisions than there were a year ago.

While many investors are worried that demand will wane and home prices will fall, as evidenced by awarding builders single digit P/E multiples on earnings estimates that are likely to be dramatically exceeded,² we think it is much more likely that the inability to satisfy demand will persist and lead to even higher prices.

The following graph illustrates that despite the recent increase in home prices, home ownership in the U.S. remains historically attractive relative to the cost of renting:



² A couple months ago, bearish housing analysts were falling over themselves highlighting the possible impact of rising lumber prices on homebuilder margins. Since lumber prices have subsequently reversed, we haven't seen a word written about the positive impact on margins that will likely flow through later this year. In fact, we have seen analysis that argues that falling lumber prices are bad for homebuilders, because they signal reduced housing demand. We disagree. We believe demand is very strong and currently limited by lack of supply.



We haven't even begun the process of higher home prices begetting additional demand as homeowners commence cash-out refinancing and use the appreciation from existing homes to move into more expensive homes. Rising prices will also attract current renters, who come around again to the notion that owning a home is an attractive lifetime investment. Further, we expect the Biden Administration to possibly turbocharge an already tight market by attempting to expand home ownership opportunities.

A small tweak in monetary policy isn't going to resolve the decade-long underinvestment in housing. Green Brick Partners (GRBK), our largest investment, is poised to benefit from this dynamic. It trades at around 7x this year's consensus earnings estimates.

Air Freight

COVID caused a dramatic reduction in passenger aviation. Passenger planes often carry freight in their bellies. With planes grounded, capacity came out of the industry. At the same time, freight demand expanded both due to the recovering economy and growing ecommerce, which often emphasizes air shipments. While there has been some recovery in passenger aviation, airlines are emphasizing narrow-body planes, which carry less freight than wide-body planes. Compared to 2019, current air freight demand is about 10% higher and capacity is about 10% lower. The result is that cargo rates have exploded.

Supply will be slow to come on-line. Some passenger planes are being converted to freighters, but conversion capacity for wide-bodies is limited and the aggregate impact of this will be modest. Meanwhile, air freight companies trade at tiny multiples of what investors assume to be peak profits. The implied cost of equity is quite high, which makes it difficult to justify adding assets. As a result, air freight companies are in no rush to order new planes, and in any case, new orders would take several years to build. The result is rates and profits are likely to be higher than expected for quite some time.

We own Atlas Air Worldwide (AAWW), which is poised to benefit. It trades at around 5x this year's consensus earnings estimates.

Copper (and other basic materials)

The last boom in mining ended badly in 2009. The result is that mining companies have been loath to develop new mines over the last decade. The current development pipeline of new copper mines is down 60% from what it was in 2008. While a few mines are set to come online in 2022 and 2023, by mid-decade, supply is expected to start shrinking. It takes about 8 to 10 years to develop a copper mine.

Meanwhile, the electrification of the automobile industry and expansion of green energy will create substantial new demand for copper. Prices are up some already, but it is difficult to see why they won't be much higher a few years from now.



We own Teck Resources (TECK), which is one of the few copper miners that are poised to expand to take advantage of this dynamic as it has a new mine coming on-line in 2022. TECK trades at 7x this year's consensus earnings estimates that obviously don't include contribution from the pending new mine. We presented this thesis more fully at this year's Sohn Conference.³

Titanium Dioxide

Titanium dioxide is the chemical that makes coatings and plastics white or opaque. There was substantial capacity added in China between 2011 and 2013, but little since. In fact, some Chinese capacity has been shuttered for economic and/or environmental reasons. The last plant built in the U.S. came on-line in 2016 and added 2.8% to global capacity. There had been no Western capacity built for many years prior to that, and presently, no Western company has announced plans to build new plants. The post-COVID construction boom (possibly followed by an infrastructure boom) has left the world structurally short titanium dioxide. Spot pricing is up substantially this year in the face of supply shortages.

We own Chemours (CC), which is one of the few industry players with some spare capacity and is poised to benefit from higher prices and volumes. It trades for around 10x this year's consensus earnings estimates.

Cement

A new greenfield cement plant hasn't been built in the U.S. since 2009. The permitting is nearly impossible. Again, we are in the early stages of a construction boom (possibly followed by an infrastructure boom). It is a concentrated industry, with local oligopolies. Prices have risen steadily over the years (47% since 2011), and the latest inflation data showed a 1.8% monthly increase. Anecdotally, we have heard that supply in many markets is tight and prices are poised to rise further. High shipping costs make imports less competitive.

We own Buzzi Unicem (Italy: BZU), which is an Italian company with a global footprint, although it generates about half of its EBITDA in the United States. BZU will likely end 2021 with net cash on its balance sheet and currently trades at around 10x current year consensus earnings estimates.

Thermal Coal and Natural Gas

ESG investing is inflationary, as green energy is simply more expensive than hydrocarbons. Hydrocarbon energy companies are starved for capital and are being told to change their ways. The result is less exploration and drilling. Even with benchmark oil prices surging over the last year, companies are loath to drill more. Normally, the cure for high prices is high prices. With ESG in the proverbial driver's seat, we might need much higher prices still in order to increase investment to meet demand.

³ You can see the full presentation here: https://www.greenlightcapital.com/d/?T6B6ZL

There is almost nothing less popular than thermal coal. From 2011 to 2020, U.S. coal production declined by 51%. U.S. demand has fallen as we've shifted to alternative sources of electricity. As unpopular as coal is though, it still makes up about 20% of U.S. electricity generation. Globally, coal demand is growing modestly as China and India add power generation capacity faster than the West is reducing it. Even so, reduced oil and gas drilling has caused natural gas prices to advance and coal prices are following. Seaborne thermal coal prices are up 140% year-over-year and at the highest levels since 2011, and Northern Appalachia thermal coal prices are catching up, rising 23% in the last month alone.

We own CONSOL Energy (CEIX), the lowest cost, most efficient miner in Appalachia, which is poised to benefit from rising coal prices. It trades at 12x consensus earnings estimates that look stale to us, as they do not reflect recent coal price gains.

We also own Gulfport Energy (GPOR), an Appalachian natural gas driller that recently emerged from bankruptcy and is poised to benefit from higher natural gas prices. Currently, there are no analyst estimates for GPOR.

Paperboard

The U.S. has added so little paperboard capacity that the average mill in this country is over 30 years old. The industry operates at around 93% capacity and demand is growing both with consumption and due to ESG-driven substitution of paper packaging instead of plastics and Styrofoam. The industry is consolidated with just a few players, capable of exerting pricing power. We don't expect anyone to build a new plant anytime soon.

We own Graphic Packaging (GPK), which is the lowest cost producer with the largest market share and is poised to benefit from rising prices. It trades at 13x consensus earnings estimates.

The point is, we believe we have reached a structural change in inflation. Part of that is driven by public policy, but part of it has been driven by capital markets and ESG mandates. The enormous emphasis on investing in often money-losing businesses in disruptive areas like technology has left traditional industries starved for growth capital. The result is they haven't grown capacity and now they cannot meet demand. The more these "value" stocks are starved of capital, the higher prices are likely to go and the longer the inflation is likely to last.

And this doesn't even begin to address the rising cost of labor. Currently, there is a labor shortage and there are approximately 9 million open jobs according to the latest government data. In the coming months, unemployment benefits will be cut. This will drive some of the unemployed back into the workforce. Deflationists believe it will be enough to end the labor shortage. However, since people can collect benefits without being required to look for work, it is unclear how many benefit collectors are happy to receive benefits, but have no plans to rejoin the labor force. It will take time to determine how much of the labor shortage is structural.



We know what the President wants – if you are having trouble finding enough labor, "pay them more." Sounds like a wage inflation policy to us.

As for the Fed policy response, the market seems to think that by simply noticing inflation and, perhaps, making modest changes to monetary policy, inflation will be brought under control. But what if what's needed isn't merely tinkering? Reported inflation last month annualized at a double-digit rate. What if the need is an immediate end of quantitative easing and a rapid increase in rates? The so-called Taylor rule⁴ says the correct Fed funds rate today would be about 5%.

We think the answer is, if that is what is needed, it won't be done. Chairman Powell is committed to remaining very accommodative for a long time and then only gradually tightening. We believe he will find whatever excuse he needs to do so, no matter what the data shows.

The result, we believe, is that inflation won't be aggressively addressed. So, the risk is to the upside. In our macro book, we hold inflation swaps and gold. The former will benefit from reported inflation being higher than the market expects. The latter should benefit as the market realizes the Fed is behind the curve and has no plans to catch up.

During the quarter, we had a loss in the preferred stocks of Fannie Mae and Freddie Mac ("GSE preferreds"). We had bought them in 2014, partially hedged by shorting common stock. Our thesis was that we could do well if the companies were recapitalized and released from conservatorship, and that shareholders had valuable claims against the U.S. government, which had unilaterally changed the deal and essentially nationalized the companies right as they were about to recover. We believed that under the Trump administration, there was substantial interest in settling the lawsuits and releasing the companies.

In January, the GSE preferreds fell when it became clear that the Trump administration had left without putting the GSEs on a clear path to being released. Nevertheless, we remained optimistic about the legal case, which had reached the U.S. Supreme Court. In the lower courts, Democratic-appointed judges had tended to support the government and Republican-appointed judges had tended to support the shareholders; so we were surprised in June when the Supreme Court ruled in the government's favor in all the important aspects of the case. This caused the GSE preferreds to collapse. In the earlier years, the position had been quite profitable and we reduced it at favorable prices. While we achieved a low double-digit IRR over the life of the position, it was a loser in 2021.

The recent change in market narrative away from inflation and away from the companies we own has interrupted what was otherwise a favorable environment for us. We suspect that this is a hiccup. It is hard after 40 years of generally falling inflation and a decade of rewarding bets on deflation for the market to change its view. If we are correct, the data will refute the consensus view.



⁴ https://www.investopedia.com/terms/t/taylorsrule.asp

On May 7, we celebrated our 25th anniversary with a staff happy hour over Zoom. It was a nice opportunity to catch up and reminisce. It's been a remarkable quarter-century. Thank you for being part of it. This letter is our 101st quarterly letter. It's still fun writing them.

On June 7, Garrett Jones and his wife, Nadia, welcomed their daughter, Charlotte Esme ("Charlie"). Congratulations to Garrett and Nadia!

At quarter-end, the largest disclosed long positions in the Partnerships were Atlas Air Worldwide, Brighthouse Financial, Change Healthcare, Green Brick Partners and Teck Resources. The Partnerships had an average exposure of 127% long and 68% short.

"I don't think anybody thought we had actual orders. That's just not the nature of this business."

- Steve Burns, Former CEO of Lordstown Motors

Best Regards,

Greenlight Capital, Inc.

Greenlight Capital

P.S. Bucks in 6.

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All exposure information is calculated on a delta-adjusted basis and excludes "macro" positions, which may include, but are not limited to, government debt, currencies, commodities, credit default swaps, interest rate swaps, volatility indexes, credit indexes and derivatives on any of these instruments. However, equity indexes and derivatives on such instruments are included in long/short exposure. The largest disclosed long positions represent individual issuers to which the Partnerships have the highest exposure. Greenlight, in its discretion, may exclude from this list any position that has not been disclosed but would otherwise be included, and instead include the Partnerships' next largest position. All weightings, exposure, attribution and performance contribution information is inclusive of positions held both directly and indirectly through the master funds, reflects the weighted average of such figures for investments by Greenlight Capital, L.P., Greenlight Capital Offshore Qualified, Ltd., Greenlight Capital Investors, LP, and Greenlight Capital Offshore Investors, Ltd. (excluding any gold backing), and are the result of classifications and assumptions made in the sole judgment of Greenlight. All exposure calculations include the impact of month-end redemptions and subscriptions as of the first day of the following month.

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