Oberweis Asset Management

OBERWEIS INTERNATIONAL OPPORTUNITIES FUND (OBIOX) MARKET COMMENTARY

1Q 2022

The Quarter in Review

During the first quarter, interest rates rose significantly. For example, the US 10-year Treasury yield surged from 1.51% at the end of December to 2.34% at the end of March. In fact, rates increased to above pre-Covid levels. For our strategy, which seeks to own long-term structural winners with strong cash flows expected for many years into the future, this provided a stylistic headwind as valuation multiples of long duration assets tend to face above-average rates of compression in such environments. We thus experienced a quarter in which the portfolio's valuation contracted considerably even though the underlying fundamentals and earnings growth of our portfolio companies continued to be strong. Overall, during the quarter the International Opportunities Fund returned -17.77% vs. -11.53% for the benchmark, the MSCI World Ex USA Small Cap Growth Index.

Thankfully, since the start of the first quarter in which Covid started to meaningfully affect the markets, as measured since 12/31/19 – and even though rates have actually increased since then, as the US 10-year was only 1.92% on 12/31/19 – the strength of the underlying fundamentals of our portfolio companies and the resulting healthy earnings and cash flow growth have more than overcome the aforementioned stylistic headwind. As a result of which the Fund has significantly outperformed since 12/31/19, returning a strong cumulative +35.96% vs. +18.36% for the benchmark.

Thus, notwithstanding the fact that the Fund has recently given back some of its strong Covid era outperformance, returns over the entire Covid period have remained high even in the face of stylistic headwinds. This illustrates an important insight: Whereas market sentiment and therefore valuation multiples for different segments of the market may oscillate in the short-term (such as a year or two), over the long-run share prices are largely determined by the underlying fundamentals and cash flows of a business. The assessment of which is our expertise and main focus, and which is why over the long-term – since inception on February 1st, 2007 – the Fund has returned a very strong cumulative +279.56% vs. +115.43% for the benchmark.

Ultimately, the key skill in investing is the ability to stay focused on the long game without succumbing to the short-term oscillations of market sentiment and short-term volatility. While this may be emotionally difficult to do for most investors in the short-term – which is why they are willing to sacrifice long-term performance in order to lower short-term volatility – it is precisely that behavior of the herd that creates and makes it a key source of long-term alpha for those select few investors that are able to maintain a level head through the ups and downs of the sentiment cycle: The only way to capture strong long-term alpha is to be a steadfast long-term investor.

As Empirical Research Partners (ERP) noted[1] long ago, based on a paper conducted by researchers at MIT, "the common practice of measuring performance monthly is counterproductive for investors who have multiyear horizons. The problem is that autocorrelation in monthly returns can hide big cycles in performance that play out at long horizons."

As a result, "it's really important to use a measuring stick that matches your investment horizon; don't measure a journey of miles with a pocket ruler". "These days it's de rigueur to measure the performance of investment strategies monthly, despite the fact that the goals of asset owners are typically dimensioned in decades [...] the average institutional equity mandate lasts for about seven years, so it's important that any performance metric accurately reflects a multiyear horizon."

We note that over said time frame of seven years, the strategy has outperformed 100% of every single 7-year rolling period since inception. We are proud of such attractive statistics for long-term investors and very much appreciate our clients who have also chosen to focus on maximizing long-term outcomes over minimizing short-term volatility. In conclusion, "Patience isn't just a virtue; it's become the biggest alpha opportunity of our time."

[1]Empirical Research Partners, "Stock Selection: Research and Results August 2014"

AVERAGE ANNUAL TOTAL RETURNS ***(as of March 31, 2022)***							
	QTD	**1 Yr**	**3 Yr**	**5 Yr**	**10 Yr**	**Since Inception 2/1/2007**	**Gross/Net Expense Ratio***
Oberweis International Opportunities Fund (OBIOX)	**-17.77%**	**-15.75%**	**13.05%**	**9.86%**	**12.36%**	**9.20%**	**1.77%/1.60%**
MSCI World ex-US Small-Cap Growth Index	-11.53%	-5.63%	10.37%	9.05%	8.40%	5.19%	

Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate, so that you may have gain or loss when shares are sold. Current performance may be higher or lower than quoted. Unusually high returns may not be sustainable. Visit us online at oberweisfunds.com for most recent month end performance.

The Oberweis Funds invest in rapidly growing smaller and medium-sized companies that may offer greater return potential. However, these investments often involve greater risks and volatility. Foreign investments involve greater risks than U.S. investments, including political and economic risks and the risk of currency fluctuations. There is no guarantee that the Funds can achieve their objectives.

Before investing, consider the fund's investment objectives, risks, charges, and expenses. To obtain a copy of the prospectus or summary prospectus containing this and other information, please visit our website at oberweisfunds.com or call 800-323-6166. Read it carefully before investing.

**Audited data as of December 31, 2021. Oberweis Asset Management, Inc. (OAM), the Fund's investment advisor is contractually obligated through April 30, 2023 to reduce its management fees or reimburse OBIOX to the extent that total ordinary operating expenses exceed in any one year 1.60% expressed as a percentage of the Fund's average daily net assets.*

The Oberweis Funds are distributed by Oberweis Securities, Inc. Member: FINRA & SIPC.

The MSCI World ex-US Small-Cap Growth Index (Net) is a free float-adjusted market capitalization weighted index that is designed to measure the performance of small cap growth developed markets excluding the UIS, with minimum dividends reinvested net of withholding tax.

The Quarter in Review (continued)

For the first time in two years, Covid has not dominated the headlines. Russia's invasion of Ukraine instead took center stage. It is not hard to see why. Vladimir Putin has more nuclear warheads at his disposal than any other nation and, however one evaluates the probability of a military conflict between Russia and NATO, it feels like its probability has increased since the start of the year. Away from Armageddon scenarios, another threat to the investing status quo is the cost, or possibly in the case of Germany, the availability of energy. Energy futures markets indicate a war in Ukraine that will be measured in months rather than years, but even if this is proven correct the near-term price shock is material and has a number of commentators asking whether the global economy will now consequently tip into recession.

Additionally, many of the underlying challenges in recent quarters have continued and are yet to show clear evidence of diminishing. Wage growth is the highest it has been in four decades, suggesting that inflationary pressures will remain for some time. The tightness of the US labor market is mirrored by tightness in the housing market with vacancy rates and inventories at or near all-time lows. Supply chain disruptions remain and do not appear to be coming to an end. In short, costs are going up and it is no surprise that longer-term yields increased over the quarter.

However, the strength of the global economy remains robust and the business cycle has in effect ensured that rising input costs have not as yet translated through as a cost squeeze in the aggregate (clearly this is not the case for all companies). On the contrary, the December quarter showed a majority of both companies expanding margins on a year-over-year basis as well as management teams expressing confidence that cost pressures can continue to be passed on or mitigated in some way. In essence, thus far corporate revenue growth has outstripped costs.

Indeed, Empirical Research Partners have done research[2] on this topic, and have concluded that "for the market in aggregate the inflation pass-through so far has been impressive [...] One of the reasons for that is that top-line growth usually subsumes everything else. We took a look at seven decades of aggregate revenue and cost growth for the S&P 500 and found that when costs are rising revenues are usually rising faster still. After all, one firm's costs are another firm's top-line." "That's not to say we should be dismissive of cost pressures, but what we really care about isn't cost in isolation, it's the differential between revenue growth and cost growth." "We think the moral of the story is that it's easy to fixate on the cost line and forget that the top-line is usually the bigger determinant of what happens to margins." "Equities are more of an inflation pass-through than they're being given credit for."

OUTLOOK

We consider it likely that this dynamic continues throughout 2022. With labor markets tight, higher wages have the propensity to drive top-line growth in a system with high operating leverage. Moreover, consumer savings coming out of the pandemic remain high, providing a potentially powerful tailwind to economic activity. However, as of April 11th, the U.S. 10-year yield sits at 2.78% and the average 30-year fixed-rate mortgage at 5.06% is over 1 ½ points above the rate embedded in the stock of mortgage debt outstanding; in percentage terms this differential is the widest in 40 years. Likewise, housing affordability is close to the worst level since the financial crisis. The collective implication of these points is that rates may be close to a level that leads to a deceleration in the U.S. and (by extension) developed world economy. Indeed, the yield curve has inverted, a clear sign that the market expects the tightening schedule telegraphed by the Fed to eventually have an impact.

If the economic consequences of the Ukraine crisis prove to be short-term, we expect the market to return its focus to inflation and the rate sensitivity of the economy. Per the above there are countervailing forces in play: the consumer is in a strong position and the underpinnings of the current wage growth are clear, while we have reached a long rate in the U.S. that can reasonably be expected to produce a slowdown in the economy, with housing the primary channel through which that might occur.

Whether this argues for a "growth" or "value" tilt to the portfolio may be an interesting discussion, but it is not our primary concern. We continue to look for companies whose fundamental earnings power is under-appreciated by the market. Irrespective of what happens with inflation and interest rates, over any meaningful time periods for long-term investors share prices will be substantially determined by the fundamental performance of companies, which, as mentioned, is our expertise and main focus. After a quarter during which fundamentals and earnings continued to increase while multiples compressed, the portfolio's valuation certainly looks attractive to us for the expected long-term growth.

In essence, in recent months investor capital has poured aggressively into resources, banks and energy sectors, perceived to be beneficiaries of higher inflation. Our strategy has always had less exposure to these low-growth, highly cyclical (and therefore fundamentally more risky) and capital-intensive companies, preferring to concentrate the strategy's capital in high quality, smaller companies that have superior growth prospects and high returns on capital at scale, underpinned by competitive advantages and attractive business models. Recent market value declines imply that our companies are now far less valuable than they were just three months ago, despite their earnings power remaining strong. We have no doubt these precipitous declines will not prove to be reflective of long-term, intrinsic value. Accordingly, we have not exited any key positions. Periods of temporary underperformance are an unavoidable part of high conviction investing, and based on our long-term track record, we have high conviction that our strategy will continue to deliver outsized compounded returns over the long-term.

There is no doubt that fear and uncertainty in markets are currently at elevated levels. All one has to do is turn on the news to understand why. In times like this, staying invested can feel uncomfortable, especially if the market value of one's investment has declined in the short-term – even when it is up considerably over both the medium and long-term. Yet, short-term focus and "stopping out when the going gets tough is alpha-destructive in the long-run" .

Although of course it would be silly to say that the Fund has a tough going when it has delivered fantastic absolute and relative performance over the last 24 months, returning a cumulative +81.18% vs. +58.08% for the index; when it has, as of the end of the quarter, beaten its benchmark over every single multiyear horizon – such as 2-year, 3-year, 4-year, etc. all the way up to 15-year and since-inception..

Finally, the upside of this current fear and consensus negativity is that many companies, especially in our sweet spot of structural growth, are presenting very attractive buying opportunities. These situations serve as a good reminder that for long-term investors, short-term market volatility can lead to wonderful opportunities to acquire companies at even more compelling valuations. Over the strategy's existence, we have been in such situations before, every time they were temporary, and every single time the strategy delivered strong long-term returns afterwards.

[2]Empirical Research Partners, "Portfolio Strategy February 2022"

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Fund Highlights

At quarter-end, the Fund was invested in 72 stocks in 16 countries. Our top five country weightings (portfolio weighting versus the MSCI World Ex USA Small Cap Growth Index) at the end of the quarter were the United Kingdom (17.3% vs. 14.7%), Canada (16.4% vs. 9.8%), Japan (13.9% vs. 24.6%), Australia (10.8% vs. 9.9%) and the Netherlands (9.4% vs. 1.7%). On a sector basis, the Fund was overweight financials (12.7% vs. 4.3%) and underweight health care (3.5% vs. 9.1%).

Organization Update

There are no changes to the International Opportunities team or strategy.

Investment Philosophy

We believe that investing in smaller companies driving revenue and earnings growth in excess of expectations results in superior investment performance over long periods of time. We believe that innovation is the key to economic growth and wealth creation and are committed to investing in companies at the forefront of innovation – smaller company stocks that offer the potential for extraordinary revenue and earnings growth.

The entrepreneurial spirit is alive and well at these companies. Many are nimble and uniquely address the needs of their customers with patented new products and services. Successful investing, however, demands more than finding companies with good growth prospects. We must also buy these stocks for our clients at prices that make sense. By paying careful attention to companies' valuations in relation to expected earnings growth rates, we seek to purchase stocks when they still have considerable appreciation potential.

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