



Dear Friends and Investors,

The Massif Capital Real Assets strategy returned 15% net of fees in the first quarter of 2022. The quarter marked a milestone in our firm's evolution as we switched from running separately managed accounts to standing up a fund structure on March 1<sup>st</sup> on the heels of an investment from a family office. The family has seeded the fund and taken a stake in the management business, which provides us with significant operating capital to continue growing and strengthening the firm's durability. Leading up to the launch, we are pleased to have a cohort of institutional capital committed to matching the seed.

We're thrilled to welcome our new L.P.s on board. Despite incurring a tax liability, all managed account investors made the transition with us. We appreciate their continued support and look forward to sharing the strategy and product we have been developing over the last several years with a broader market of potential investors.

Our fund remains open for the time being. All interested accredited investors are welcome to inquire further about our firm's investment management services.

## **ATTRIBUTION**

The outperformance of the material sector in our portfolio continued in the first quarter, contributing 8.2% to performance. This was followed by energy, which contributed 4.2% (including utilities), and industrials, which contributed 2.6%. Despite the fact that the overall outperformance of the materials sector, the portfolio's largest contributor was Europe-focused E&P Equinor, followed by Lithium Americas and diversified streaming and royalty company Altius Minerals.

## **TRANSITION FROM SMAs TO FUND**

The transition to the fund structure in March was more challenging than anticipated. We planned to transfer our securities in kind from managed accounts to the fund to minimize the tax liability and administrative burden on our investors. Ultimately, bound by service provider constraints, we liquidated the accounts and re-established positions in the fund.

Many of our positions appreciated significantly over the last year. Several approached our price targets. The decision to sell and/or hold stock in a normal operating environment can be tricky. As this occurred coincident with the transfer to the fund, we were faced with whether to re-initiate positions that had 5–15% upside remaining, by our estimation.

Some will say that you are always either buying or selling a stock. Every morning you wake up, if you choose to hold a position in a portfolio, you are functionally deciding to buy it. That can be a helpful mental model to hone an investment thesis over time; the process of re-affirmation is necessary for conviction, and it is essential for developing a process by which you can learn from mistakes. But holding a position is, perhaps obviously, not the same as initiating a position.

Through the first quarter, and as part of the transition to the fund, we exited our positions in Lucara Diamonds, Ivanhoe Mines, Altius Minerals, and Africa Oil. We cut our exposure to Equinor and RWE by 50% (by re-establishing the positions in the fund at 3% of total assets per firm), and we started two new positions in Siemens Energy (ENR) and Centaurus Metals (CTM). More detail on our exited positions and new entrants can be found in the second half of this letter.

Consequently, as of early April, we have a heavy cash balance of 35%. In light of market conditions, we are not rushing to deploy this capital but expect to be back above 100% gross exposure by the middle of the summer. Diversified metals & mining holds just over 20% of the portfolio today, with roughly 10% exposure to gold mining. Exposure to integrated oil & gas has fallen to under 4%, renewable electricity and independent power producers have grown to close to 20%, and industrials have grown to above 10%, principally comprised of maritime freight and heavy electrical equipment.

## **THE CURRENT LANDSCAPE**

*"We believe we may be at the precipice of a global energy crisis. This matters because the drivers of that crisis are unrelated to COVID constraints and traditional economic inflation expectations. Whether we revert back to a pre-pandemic world or not, the structural undertones that are defining this energy crisis will persist" – Q4 2021 Letter to Investors, January 2022.*

Persist, indeed. The first quarter threw gas on this thesis. In part, highlighting the importance of getting the sequence of energy decarbonization initiatives correct and illuminating possible pathways toward a multi-polar world. Investing is conditional: "If this, then that." It's a game of building frameworks and heuristics that allow you to navigate complexity. We are quickly entering the conditional state of: "If this; then I have no idea." The number of possible future outcomes is expanding quickly.

Russia ranks 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, respectively, in global export of natural gas, oil, and coal. Russia accounts for 50% of U.S. Uranium imports. It supplies about 10% of the world's aluminum and copper and about one-fifth of the battery-grade nickel. Together with Ukraine, they are the largest and 5<sup>th</sup> largest wheat exporters and account for ~12% of the total calories traded globally.

Agriculture markets may see the worst disruption to wheat supply since 1918. The Middle East, Africa, and Asia depend heavily on Black Sea wheat. The food price spikes we saw a decade ago (which were a key catalyst in the Arab Spring) may look tame compared to what is to come. Lenders, insurers, and shipping firms are not making deals to transport products. The Black Sea is becoming functionally equivalent to a no-go zone for commercial shipping. There is a growing possibility that about 75% of Russia's 7–8 million barrels per day of crude may fail to reach the market, representing about 5% of

the global supply. Gazprom has stopped gas supplies to Bulgaria after the country refused to pay for gas in Rubles. Europeans are in the process of finding a fundamentally new source of energy.

U.S. shale producers have some capacity to make up the difference, perhaps a million barrels, but it is not enough, even if they could find steel pipe and cement necessary to expand production, which they often cannot. Nor do we have LNG infrastructure to support such a switch in a reasonable time frame. China may feel this acutely as energy flows that used to be directed east from West Africa will start to go north to Europe. Depending on the further U.S. and E.U. sanctions (or Russia's responses), we may see a new normal of oil prices at \$150 per barrel.

As Russian crude falls off the map, does America expose its citizens to a global price that will tip the economy into recession? Does the Administration decide to halt U.S. exports? We don't think that's likely, particularly as it would impose a significant re-tooling cost on the U.S. domestic refining sector. However, we also did not foresee — nor think it was wise — for the Administration to sign off on the most significant SPR oil release in history a few weeks ago and can only make sense of the decision through the lens of political expedience, at all costs. It's not hard to see how this gets protectionist quick. The state will play a directive rather than merely regulatory interventionist role over capitalist market economies.

For the last 30 years, markets and economies have been fueled by three trends: lower and lower interest rates, cheap energy, and globalization. There is now evidence that these long-run themes are slowing or changing directions. These trends have often been in place with investors for their entire lives. Adjusting to the new reality, resetting the bias, will take time and be a volatile process.

We are beginning to feel the consequences of capital-starved commodity markets with no inventory buffers, shocks such as China's zero-tolerance COVID policy, the reemergence of nation-on-nation conflict, and failures of energy policy guided only by environmental concerns. Capital restrictions and environmental policy have lowered the supply of hydrocarbons, forcing pricing up. The market solution to this imbalance — higher prices, driving capital investment — is occurring now during a period of tightening central bank liquidity and growing stagflation concerns.

Markets are sensitive to the trajectory of growth. A "non-recessionary slowdown" has been a dominant narrative for several months. That is not the case anymore. In the U.S., real consumption growth has declined since April 2021 and now sits at a fraction away from contraction. The Fed plans to hike into this environment. The rate-based solution to inflation only focuses on the demand side. The central bank can do very little, if anything, about supply.

Inflation is almost certainly going to contract. We do not envision many scenarios in which inflation (measured as a rate of change) will continue to expand. That says nothing of the permanent shift in specific commodities prices nor continued and shifting frictions within supply chains. There is likely a level of structural inflation that is underestimated and under-accounted for, driven by the apex of globalization (moving towards a multi-polar world), the fiscal initiates supporting the energy transition, and a supply chain redundancy prerogative that is elevated to a national security level.

If true, we better hope for real economic growth. If we miss on that, we are laying the foundation for stagflation. If interest rates were to remain low, and if global trade remained, rising energy costs could theoretically be easily handled. Increasing energy prices as a primary input into all things would create some inflation, but in the presence of easy money and a stable trade structure, it would probably be tolerable. Geopolitical events, though, inclusive of the pandemic, are stretching the logic of the overly finely tuned global trade system.

It is extremely challenging for us to envision a scenario in which interest rates have begun a secular uptrend — the debt servicing costs of outstanding debt become astronomical across the board by 5% — but we may have entered a world where what we think is possible and the heuristics we use to judge possibility may not be the variables that matter on the margin moving forward. If our experience managing a global portfolio heavily exposed to a diversity of world economies has taught us anything, it is that acting with great certainty regarding macro issues where the tipping points are not definable is problematic.

## **CHECK YOUR BIASES AT THE DOOR, PLEASE**

We have two rough conclusions as we sort through this complexity.

1. The range of possible outcomes is getting wider
2. Noisier signals are incentives for greater investor herding

As George Soros notes in his book *The Alchemy of Finance*, “financial markets are always wrong in the sense that they operate with a prevailing bias.” The inherent bias in market participants matters greatly as it defines the marginal buyer’s actions. A few days after Russia invaded Ukraine, we participated in a round-table on energy hosted by our friends at SumZero. The call ended with the moderator asking each panelist what the big surprise for the remainder of the year would be. The answer from the panelists was relatively uniform and called for the price per barrel of oil at \$150 to \$200 oil. Our answer was sub \$85 per barrel.

A surprise, a significant risk, is something that could happen, but it is not widely appreciated. Something that is not prevalent in the prevailing bias, hence why surprises are dangerous for portfolios. They are unforeseen events that produce unexpected second and third-order effects. Admittedly, in October and November of last year, answering that same question with \$140 to \$150 a barrel of oil would have been a huge surprise.

At a price per barrel of \$110 or \$120 when all eyes are on oil, when all eyes are on a geopolitical event that risks turning the taps of one of the world’s three largest producers of oil off, sky-high oil prices are not a surprise; they are the bias powering trend in stock prices. A price of \$200 per barrel is a risk because, historically, the chances of an economic recession are high at that price. The conditions that *create* a price per barrel of \$200 may be considered a risk. But we don’t need to stretch our imagination to get to \$200 per barrel. The fundamentals are there. The significant risk or surprise would not be that the price of oil goes \$200 per barrel, but rather that it goes to \$30 per barrel.

This logic applies elsewhere. The surprise in copper markets would not be that copper

doubles in price due to underinvestment in supply; we already know there is significant underinvestment occurring that could cause prices to spike; the surprise would be that we find substitutes or increase material efficiency such that the underinvestment reality is meaningless.

In a 2021 paper, researchers in England and Netherlands found a positive and significant association between institutional herding and political uncertainty. When information signals become noisy, fund managers will choose to mimic trades of their peers, either due to inadequate processing skills or because they believe peers are better informed. Mimicking high-quality peers also emits an image of competence and safeguards career prospects. This is expected more so in the presence of negative news with the association to a greater potential for losses. In doing so, they sideline their private signals and give rise to informational cascades.

It is not unreasonable to expect we are in such a period today. Increasing herding coupled with a widening of potential outcomes feels dangerous to us. A wide spread of possible outcomes means research needs to focus on what those outcomes might be, not necessarily refining valuation targets.

## **CONTINUING TO REFINE OUR CRAFT**

One of the significant challenges with investing is being very clear about what will make a particular investment move. Many investors call themselves value investors; they focus on the fundamentals of a business and hope to buy it at a discount to the value of a discounted stream of future cash flows. We agree with this concept; it is critical to our process, but we have started to view it differently in what we hope is a more nuanced fashion. Very rarely do we think about buying a company just because it is trading at a discount to future value. Fundamentals are not always what move markets or individual stocks.

As a principal, buying firms trading at a discount to the present value of future cash flows makes sense. Particularly if you are buying the entirety of a company, it makes sense when you are taking over a company because you are accumulating a stream of cash into a bank account that you purchased at a discount to the value of that stream. Equities sometimes have that quality, especially if they have a strong capital return element. But for this situation to be the case, the capital return needs to be sufficient. If the capital return is insufficient to invest on that basis, it makes more sense to think of equity as a derivative of company ownership rather than company ownership.

We would agree that "thinking like owners" is a helpful framework, but the degree of capital return impacts how functionally accurate that outlook is. High levels of capital return make you a direct owner of a business, and capital appreciation of the equity is a secondary benefit. Low degrees of capital return make equity a derivative of corporate ownership that rises and falls based on some variable arising from a mess of decisions made by market participants.

Again, in *The Alchemy of Finance*, Soros's philosophically heavy, Karl Popper-informed take on investing, he highlights that: "People base their actions not on reality but on their view of the world, and the two are not identical...since people's decisions are not based

on knowledge, outcomes are liable to diverge from expectations.”

Human bias plays a critical role in price formation, and that bias may tilt towards fundamentals or hinge on other variables. The challenge is that although, eventually, reality cannot sustain expectations, eventually is a very indeterminate period of time. Shorting stocks is difficult because, famously, the market can stay irrational longer than you can stay solvent, but the long side suffers from that same predicament. The market can remain irrational far longer than you can tolerate the opportunity cost of poorly allocated capital.

If the above is true, how are we supposed to situate fundamentals in our pricing and valuation of stocks? As we have continued to evolve our thought process over the last six years, we have increasingly moved towards a philosophy in which equities are situational derivatives, which is to say, they are financial instruments that derive their price movement from the in-vogue expectations bias of buyers. This bias has roots in either some yet-to-be-determined facts/fundamentals about a business or the investment yield.

In this context, fundamentals are the critical variable determining and underpinning a robust capital return situation or the essential foundation upon which expectations are constructed.

We are attempting to get better at avoiding investments based on a single positive thesis about the future. Instead, we are focusing on investing in situations where we are betting on a spread of possible positive future outcomes. We do not know which outcome will occur, but there are multiple different routes to positive outcomes. We view our investments as the deployment of capital into a context with significant positive optionality. If things go wrong, we have the value of the business to fall back on, but that is not the basis of the investment alone. Value, in our opinion, is necessary but not sufficient for investment. This seems an approach well suited for the macro-economic environment we have entered. While we like to think like business owners, owning stock is not functionally the same as owning a business, especially as a minority owner.

## **PORTFOLIO REVIEW**

We have done a lot of work in the first quarter that may set the stage for deploying our cash reserves this year. Areas of interest include the sustainability of agricultural pricing, plastics in South Asia, commodity exchange-related risks, and yielding infrastructure assets. On the latter, we are finding a number of businesses that sit in a solid but not necessarily growing environment and have a reliable cash flow stream that is passing straight through to shareholders.

We are also looking at several situations where there is an argument that company assets will grow in strategic value over time (politically and on national security grounds), but it is not clear how management translates that increasing geostrategic value into cashflow. We don't know how to express or underwrite “strategic value” yet, but we have an impression that it is not dissimilar from option value, as defined by the discussion above, or just option arithmetic which rewards volatility. We also note that high dividend-yielding strategies tend to outperform broad equities by more than 7% in late-cycle markets. We anticipate that 20% or more

of our portfolio may be made up of capital return investments by summer.

## NEW POSITIONS

### Centaurs Metals (CTM)

Our latest addition to the portfolio, CTM, is an Australia-listed mining exploration company focused on developing a nickel sulfide project in Brazil. Initial geological results and mine construction plans suggest that the project is one of the world's most significant high-grade, undeveloped nickel mines. It is on track to be an efficient 20,000 ton per year producer by the end of 2024. They have a good team in place and their asset is in an excellent jurisdiction. If we cut current nickel prices in half, add a 20% increase to estimated build costs, and value the business at only 80% of the asset's net asset value, we think CTM is worth about A\$3.5 per share, a ~150% increase from the current price.

In the fullness of time, it is not unrealistic to believe CTM trades north of A\$7 per share if nickel prices remain elevated.

There are two critical elements to CTM:

- **The quality of their resource.** This is our downside protection. This is, in part, how we think about the margin of safety. We feel confident that the quality of the resource suggests it is likely the mine will be built. Many things can go sideways with the market, commodity prices, management execution, and currencies. But CTM has a hard asset on their balance sheet that we believe can be monetized in a value-accretive way. This is far from our base case scenario, but it is very helpful for contextualizing some floor price of security you may purchase.
- **Timing.** CTM is in a narrow part of its development lifecycle that we have had great success investing in. We believe CTM is closer to free cash flow than the market is pricing in. It's not a rare occurrence in mining firms, but it is not frequent either. The market is somewhere between 6 months and two years behind where the mine is in development. We feel we have positive asymmetry here and believe we can measure it.

### Siemens Energy (ENR)

We allocated 3% of the portfolio to Siemens Energy AG. Siemens Energy went public in September 2020 on the Frankfurt exchange as a spin-off of the gas & power segment of Siemens AG, along with a 67% equity stake in Siemens Gamesa. Siemens Energy covers the entire energy value chain, from conventional generation to renewables to transmission. The gas & power segment has the largest market share of gas turbine production globally, is a top-three player globally in oil and gas process compression, holds the top spot for electricity transmission infrastructure, and has a growing "new energy" segment comprised mainly of hydrogen electrolyzer technologies. The firm's 67% equity stake in Siemens Gamesa gives it exposure to the global leader in offshore wind turbine manufacturing and the third-largest onshore wind manufacturing.

Broadly, it has the opportunity to leverage several significant trends over the coming years in energy demand growth, decarbonization, digitization, and the decentralization of generation. The current business plan offers



top-line renewable growth with margin improvement potential. Relative to data released in 2019 before their separation from Siemens AG, forecasts suggest a 50% earnings growth and a double of EPS by the end of 2023.

Specifically, we think the potential for thermal gas is underestimated, with significant baseload applications in both emerging and developed markets on the horizon. On hydrogen, the company has substantial scale advantages and, more importantly, expertise as it has already engaged with large-scale industrial hydrogen via working relationships with Bayer, Shell, and BASF. We do not place much weight on the near-term value of a developing hydrogen business — there are too many unknowns regarding what market would accept such technology at scale — but, should it gain traction, we think Siemens Energy captures quite a bit of that value.

ENR went public at €22.0 per share, and we have established an initial position at a cost basis of €20.9 per share. If the company executes, we believe they are easily within reach of a €35–€45 valuation. They are a large business, with a presence in 90+ countries, under two years from splitting off from their parent and with an equity stake in a wind turbine manufacturer that has very weak margins, to put it generously. It has meaningful cleanup to do on its balance sheet. Still, we think this story simplifies considerably over the coming years and will be viewed as a leading industrial conglomerate with strategically important assets. Our 3% position is a toe in the water. We hope to build to a 6% position in due time but think that the market may give us an opportunity to buy cheaper.

## **CLOSED POSITIONS**

### **Lucara Diamonds (LUC)**

We have been invested in Lucara Diamonds since 2016. At the time of sale, it was the only remaining position from the initial portfolio that Massif Capital started with six years ago. It is also the only mining position we've exited with a loss during our six years of operations. Since inception, we have invested in 15 mining firms, of which we have exited positions in 10.<sup>1</sup> The average holding period on exited positions is more than a year, with an average return of 110%. Inclusive of the loss on Lucara, which amounted to -48%.

It is difficult to identify exactly what went wrong with Lucara. It appears to be a combination of issues. It would be easiest to point to diamond pricing as the primary issue; we invested at the top of a diamond pricing cycle, an amateur resource investing error. The subsequent slide in diamond prices severely impacted the firm's cash flow and ability to pay a dividend. It seems clear that diamond prices played a role in the position's underperformance, perhaps even the primary issue.

Our investment in Lucara seems instructive in two regards. First, as we frequently highlight, investing in commodity producers/development is not the same thing as investing in a commodity. There can be a number of idiosyncratic risks and opportunities for a producer that are not related to the commodity price. This works in both directions.

There is a more important lesson, though: Lucara is a single asset producer of a niche commodity; the asset is located in Botswana; it has few catalysts before they turn on an underground mine extension later in the decade, and are undersized by today's market



standards (299 CAD million market capitalization). Who is the marginal buyer? What is going to cause the stock to go up?

The answer to the first question, who is the marginal buyer, is very difficult to answer. We decided it was likely only niche mining-focused investors, a limited group with limited ability to generate meaningful capital flows into the stock. The other marginal buy is investors who follow the Lundin family, another limited group. Additionally, the underground extension will only extend the life of the mine and current production rates. Earnings don't grow unless diamond prices go up. As minority shareholders, that's not a good spot for us to be in.

We decided that although the firm has a strong management team, a unique asset, and great ownership, it was likely dead money for a considerable time with an annual expected return since the position's inception insufficient to justify a position in the portfolio.<sup>ii</sup>

Lucara is also a great demonstration of the role of emotions that come with managing a portfolio. In the fullness of time, we may regret this decision to exit LUC due to events in Ukraine. At the same time, we have to be honest about our understanding of what we are betting on and what is causing those bets to play out as we thought they would or not. Failure to do so is what causes the churn of emotions and behavioral bias impact on returns.

Events in Ukraine have prompted significant disruption to the global diamond market. Russia is the source of approximately 33% of the world's rough diamonds, the vast majority of which are produced by Alrosa. Alrosa is effectively state-controlled via a direct 33% interest by the national government and another 25% owned by various local authorities. The disruption to the diamond market is being caused by banks, and especially Indian banks, refusing to process payments associated with the sale of rough diamonds to cutters and jewelers from Alrosa. Alrosa, which has around 10 diamond sales a year, was expected to hold its next sale in the next few weeks, but at this time, it seems unlikely there will be any buyers attending that sale.

The long-term loss of 33% of the world's diamond supply could produce a significant repricing of diamonds, which could be a catalyst that prompts investors to return to the industry producing the type of capital flows that lift the price of LUC. We will regret the sale if LUC benefits from this, but that regret will be misplaced. Although one should always accept gifts from the market when it offers them, it is critical not to confuse market gifts with earned returns. Being on the right side of a trade for reasons other than you foresee is the same as saying your analysis is wrong, but you got away with it anyway. One should not regret missing such a win, but we are all human.

### **Ivanhoe Mines (IVN)**

We started our position in Ivanhoe Mines in March 2020 at an average price of 2.39 CAD. We trimmed the position later that year, taking some profits at 5.02 CAD, and closed the position out in February of this year at 11.54 CAD for a total return of 349% over roughly 24 months, a return that more than met our annualized hurdle rate. In March of 2020, IVN was an easy buy, so easy that it was concerning, although the COVID sell-off alleviated some of that concern. The firm has one of the world's great copper assets and was turning it on in less than two years when we made our first buy. The fact that it had sold

off 40% YTD when we purchased added to the ease of purchase in the context of solid fundamentals.

Since our purchase, everything has gone well for the firm. Not only has copper appreciated nicely, but they have executed on the development of the asset. Operations have kicked into gear and production is ramping. Looking into the future, though, we have trouble seeing where the next value-accretive opportunity will come from. IVN will turn on two other mines this decade, and while attractive assets in their own right, within the context of an asset portfolio that includes one of the world's great copper mines, they produce relatively little value.

With IVN trading at or around 12.0 CAD this quarter, we found ourselves holding a position that had become a directional bet on copper prices. Admittedly, some incremental value would be created by new mines, the market is unlikely to recognize that value, in our opinion, and there is an option on a potential second world-class copper asset; it is such an early stage deposit that we were not comfortable valuing it. We have a positive outlook on copper, but our ability to forecast commodity prices is limited, and while we do have a positive outlook on copper, it is not without its holes.

As with many commodities, copper looks primed for not only strong price action for the foreseeable future, but a meaningful reset in what can be considered a stable long-term price. At a very high level, this outlook is based on two factors: a lack of new mine supply coming online and a green transition that produces significant new incremental copper demand. In short, the thesis is stable or decreasing supply and growing demand — a good thesis. The challenge with these types of macro theses is that they are inherently inductive and depend on patterns, trends, and relationships holding (put another way, the thesis depends on all else being equal). Complicating matters further is that expressing a commodity thesis through equities is, in essence, taking a derivative position on commodities, making the importance of stable relationships between variables even more critical to the eventual payoff.

Besides these theoretical complications, it is not as if the lack of new mine supply/green investment thesis is without its shortcomings, and some of the holes in the thesis are glaring. If we want to discuss copper prices, we cannot have the discussion without talking about China.

According to Bloomberg, in 2021, China consumed 12.3 million metric tons of copper, roughly 54% of global demand. Chinese demand has grown at an average annual rate of 5% going back to 2010. In all but two of the past twelve years, all the world's incremental copper growth has come from China, meaning all the world's demand outside of China has shrunk. Since 2009, global copper demand, excluding China, is down 5% on an absolute basis.

China is the marginal buyer of copper. If China sneezes, the copper market gets a cold.

According to BNEF, copper demand will grow roughly 10% by 2030, or about 1% per annum, when they made that forecast. Over the last decade-plus, China's average copper consumption growth has been more than 5x the expected incremental growth from a green transition. All the world's E.V.s and batteries, renewables, and green transitions don't necessarily translate into absolute growth in copper demand if China's

economy falters. The point is not that a bullish copper thesis is wrong, but that having high conviction is problematic because conviction depends on having clear insights into the future of Chinese demand. All the E.V. and battery demand growth forecasts are meaningless if you get China wrong.

Returning to IVN, given that we believe our fundamental basis for owning the business had been reduced to only a commodity price tailwind, it was time to sell. Although we are optimistic about the future of copper, it's too easy to poke holes in commodity price forecasts to wager capital on them via equities.<sup>iii</sup>

### **Africa Oil (AOI)**

The AOI story is similar to IVN. The fundamental basis for owning the stock ran its course, and we were left with a directional (derivative) bet on commodity prices. When we first purchased AOI, management was in the process of trying to buy a significant stake in several offshore Nigerian oil and natural gas assets. Even though the assets were producing, the market failed to recognize much in the way of value. To this day, it is unclear that the market has identified any of the value creation by AOI; it seems likely, based on the chart, that the stock has simply appreciated with oil prices. This is not our goal when we make investments, but it happens. In the case of this position, it seems that our analysis of the fundamentals did not matter; it was simple exposure to oil at the right time (an oil "factor," if you will) that made the difference.

Regardless of the reason, AOI has appreciated significantly since our initial purchase and, more importantly, reached our most recent probability-weighted value (PWV) estimate from October of last year (2.14 CAD). This PWV represents a significant downward revision of our first PWV calculation. This downward drift in value resulted from decreasing confidence (and thus the probability) of the firm's core Kenya development asset being turned into an operating asset. The shift in sentiment arose from both a growing lack of confidence in the partners (specifically Tullow) and rising skepticism that oil firms will sanction many large frontier market fields with significant infrastructure needs (heated pipeline) unless they represent quick return monetary slam dunks, which this field is not.

The resurgence of concern about energy security in the wake of Ukraine and the apparent fragility of the global energy system in transition may have changed that situation. However, it still seems too early to tell. Demand from Europe for hydrocarbons will increasingly be met by imports from the U.S. and West Africa, and although the Kenya project could export via an east coast port with ready access to the Suez, the development of the asset appears likely to depend on securing an Asian (Chinese) partner.

This is speculation on our part, but few Western firms appear eager to open up new fields in undeveloped locations with significant infrastructure needs, and China is a substantial investor in Kenyan infrastructure. In our conversation with management this quarter, they noted that Tullow was looking to bring in a fourth partner to spearhead the build and operation of the asset. This effort has been underway unsuccessfully for longer than has been publicly acknowledged in our estimation.

We note this because we estimate that, at \$75 per barrel, the Kenya project has a total NPV (not just AOI's interest) at a 20% discount rate of roughly \$6 billion, is mostly permitted, and was already producing in small quantities that were being trucked to port. We

may be incorrect, but it seems unlikely that this field will ever get built, despite these positives. Which is to say, even decent economics are not enough at near \$100 oil to get major oil and natural gas projects sanctioned. If that is the case, AOI, as an asset, has little in the way of cash flow value beyond its Nigerian assets and optionality value in the form of several J.V.s besides the Kenya project.

After we sold our position, it continued to trade with oil and even hit a local high of 3 CAD a share. We failed to capture this additional price momentum, a not uncommon experience for us but one we are always trying to think through how to capture more of it.

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As always, we appreciate the trust and confidence you have shown in Massif Capital by investing with us. We hope that you and your families stay healthy over the coming months. Should you have any questions or concerns, please do not hesitate to reach out.

Best Regards,



WILL THOMSON



CHIP RUSSELL

## ENDNOTES

i In pursuit of fully transparency, we are currently underwater on two of the mining positions in our portfolio, so if we were to close out the fund today, we would have a track record of 12 wins and 3 losses in mining investments over the course of six years. Despite this our average return would be higher because of our investment in Lithium Americas.

ii At the start of investment we determine how long we can hold it for, that time period is determined by the probability weighted value of the investment and how many years, compounding at 14%, it takes to reach that value. If an investment reaches that time limit but has not appreciated, the fact that on a forward looking bases it may double, does not matter, because it now fails to meet the hurdle rate of a position in the portfolio. Investments must be judged on the basis of their entire life, not just the forward looking basis.

iii We have been told that we miss the point of betting on commodity prices via equities, that the point is that equities are levered bets on commodities. Our response to that claim is to point out that a direct bet on commodities via futures (the only way to really express a directional commodity price thesis) is also a levered bet, and we have trouble seeing how the leverage to the commodity price that manifests itself in the price movement of a stock is anywhere close to the leverage offered by futures. Successful investing is not just about the underlying thesis, its also about finding the right way to express that thesis in the market, equities seem a poor way to express a commodity price thesis.

## DISCLOSURES

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