



## Q4 2014 Quarterly Letter

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*Anthony Josephson and Russell Silberstein 1/29/15*

After achieving strong returns in 2013 (+34%), our performance this past year significantly underperformed the S&P 500 and our own internal expectations. Our Equity accounts returned -1.43% for the year compared to a positive 13.7% return for the S&P 500, and our Balanced accounts returned -2.2% compared to a positive 10.0% return for the benchmark (which is weighted 50% S&P 500 and 50% Barclays Aggregate Bond Index). A majority of the underperformance can be attributed to our substantial exposure in oil and gas investments. As we will describe in more detail below, these holdings experienced stock price declines ranging from 28% - 63%. Absent these investments, our Equity accounts would have generated positive 6.6% returns for the year.

In last year's annual letter we wrote to you "that one great year does not indicate investment brilliance, nor does one bad year signify investment futility." Coming on the heels of strong performance that statement might have sounded like the boy who cried wolf; unfortunately, the wolf was very real in 2014.

We fully appreciate the emotional impact of negative short-term results and, understanding that misery loves company, you should know that the majority of our own capital is invested alongside you. However, you should also know that – in any given year – we expect our performance to vary from the overall market return (both positive and negative). The sequence of returns is impossible to predict. What's more important is whether or not the total return we earn over a long period of time more than compensates us for the risks we are taking. By that measure, we are still earning our keep.

Despite the bleak picture painted above, several investments in the portfolio performed exceptionally well during the year. The two key standouts were core holdings in Blackhawk Network (HAWK) and Level 3 (LVLT), which advanced 60% and 49% during the year, respectively. Blackhawk is a relatively new position that we first purchased in March and discussed at length in our first quarter letter. It's still early days, but the company continues to impress us with strong growth in its core gift card market and its high-quality management team. Level 3 once again delivered a solid year of top-line revenue growth, significant margin improvement, and announced the much anticipated acquisition of tw telecom. The company has been a core holding for many years and we couldn't be more pleased with the recent progress under the stewardship of CEO Jeff Storey.

After the market advanced during the first part of the year we were forced to sell several long-term holdings, including: Legg Mason, Microsoft, Sprint, and Crosstex. Each of these sales occurred because the current stock price approached our own appraisal of fair value. We were able to





replace these investments with three new positions (Blackhawk Network, SeaWorld Entertainment and Wesco Aircraft).

### **The Case for \$70+ Oil**

Much has been written over the past three months regarding the future prospects for oil. In fact, we discussed this topic at length in last quarter's letter, mostly as it relates to three core energy investments we own: Chesapeake Energy, Denbury Resources and Transocean. We won't restate our thesis for each of these investments, other than to say that they continue to be substantially undervalued at current market prices and have the wherewithal – both financially and operationally – to sustain a low commodity price environment for an extended period of time.

Instead, in this letter, we want to specifically address our own viewpoint for the long-term price of oil. This viewpoint is based on extensive research of individual companies and specific geological formations, as well as, many years of experience investing in energy related businesses. It's also a perspective that we challenged, analyzed and stress-tested over the past three months as the price of oil fell by more than 50%. We fully re-examined the thesis and valuations for each of the energy companies we own, in addition to, the very premise of \$70+ oil over the long-term.

In order to invest capital in energy related businesses nothing is more important than predicting the long-term price of the underlying commodity. The intrinsic value of any energy company consists largely of reserves in the ground that, at current production rates, will not be developed and sold for many years to come. Short-term commodity prices might fluctuate dramatically and prove challenging for overly-leveraged businesses. But for those companies with limited debt their real value will be determined by the price they sell their product far into the future.

On the one hand, it's easy to reach the conclusion that the price of any global commodity is impossible to predict – too many variables and too many unknowns. On the other hand, the fair (or equilibrium) price of any good or service is simple to calculate – it's the intersection where supply meets demand. It should come as no surprise that, in the case of oil, we believe the price can be reasonably estimated over a long period of time.

Based on our expectations for global supply and demand, coupled with a careful analysis of the marginal cost of production, we think it's reasonable to assume a long-term price of oil of approximately \$70 - \$80. With oil falling 50% from its peak in June to a current price of \$45, there are suddenly many pundits and so-called experts forecasting this price as the "new normal". In our opinion they are committing one of the cardinal sins of investing: extrapolating near-term data into a long-term trend (one of these Cassandras, whose names we will not mention, works at the same firm that called for \$200 oil as recently as 2007).

One of the best methods to stress test a deeply held viewpoint is to state, and then refute, the opposing position. As Warren Buffet is famous for saying, "if you are in a poker game and can't



figure out who the patsy is, you're the patsy." Below we present the three main bear arguments for a permanently low oil price along with our counter-argument.

1. *The discovery of vast new reserves, particularly in U.S. shale deposits, creates a permanent increase in global production*

According to the Energy Information Association (EIA), the global production of oil (including natural gas liquids) has increased at an annual rate of 1.9% over the past five years. This rate is slower than global GDP growth and comes despite the fact that the price of oil consistently fetched \$80 – 120 per barrel.

Furthermore, over 60% of the “global” increase in supply is due to growth in U.S. production. Excluding the U.S., the rest of the world was only capable of growing supply during this period 0.8% per year, even with relatively high oil prices incentivizing new production.

More importantly, the single biggest misconception regarding the production of oil is a phenomenon known as the “decline curve”. Unlike most businesses (and even most commodities) oil is a naturally depleting asset – meaning that an individual well will produce *less* oil in each successive year until the reservoir is fully depleted (this is due to declining pressure as the reservoir ages). The only way to grow production, or even keep it stable, is to drill for new wells (assuming you can find the oil).

Globally, the world produces approximately 93 million barrels of oil per day (including natural gas liquids) with a decline curve of approximately five percent; however, in the U.S., most shale fields experience first-year decline curves of 40-60% because of high pressure fracking. The implications of such a steep decline curve attached to the single largest source of new oil production are completely underappreciated by most analysts. With U.S. shale currently producing 4.5 million barrels of oil per day, we would need to find and develop over 2 million barrels of day in the U.S. and another 4 million outside the U.S. *each year* just to maintain current production levels. As we will describe below, that simply isn't feasible with \$45 oil.

2. *The cost of producing additional supply is getting cheaper and will continue to benefit from technological advances*

It is certainly true that improvements in technology over the past decade ignited growth in new oil production. We never subscribed to the peak oil theory because we firmly believe in the creativity and ingenuity of humans to adapt and invent. The question for us has always been – at what cost?

Geologists have long known about (or at least suspected) the potential for large oil reserves in places like the Brazilian pre-salt deep water region, U.S. shale deposits and the Arctic. The



advancements in drilling technology opened these regions to development; but, contrary to conventional wisdom, they did not lower the cost of development.

Although it's admittedly imprecise to generalize about exploration and production costs, it is fair to say that most of the incremental growth in recent years originated from unconventional wells with cost structures 2x – 5x that of older conventional wells. For example, the mature Ghawar field in Saudi Arabia (which is the world's single largest source of production) is estimated to have operating costs of just \$10 per barrel; whereas, some of the shale formations in West Texas and North Dakota cost more than \$40 per barrel to operate. The difference in operating cost is a direct result of the added burden of extracting oil from tighter shale formations onshore and deeper water depths offshore.

Finally, one of the most common inaccuracies cited in the cost debate is the confusion between "operating" costs and "finding and development" costs. Operating costs simply account for the on-going expense required to produce oil from an *existing* well. This does not include the cost to find the well (3D seismology, etc.) and drill the well (rig, casing, etc.), which could be as high as \$50 per barrel in some locations. Because of the nature of the decline curve mentioned above and the need to replace naturally depleting reserves, it's critically important to understand the total cost structure of *new* wells.

Based on our analysis of the total cost of production by region and play – including conversations with many publicly traded energy companies – we do not believe the world can continue to produce 93 million barrels of oil a day unless oil remains above the \$70 – 80 range per barrel. The majority of U.S. shale requires at least \$70 oil and most of the offshore deep water requires \$80 oil. While there are certain fields and acreage that might earn good economic returns at \$50 oil, there is simply not enough future production capacity in these areas to offset the decline curve.

3. *Global oil demand is growing at a much slower rate, if not declining, due to better efficiency standards, changing demographics, and slowing growth in emerging markets*

Approximately 70% of global oil consumption is used for transportation, so there is little doubt that improvements in fuel efficiency act as a major headwind to oil demand. In the U.S., for example, new vehicle fuel economy has improved 5.2 mpg compared to 2007 – which, in a vacuum, is reducing overall oil demand in the U.S. by 2% annually. Yet, despite these efficiencies, global consumption of motor gasoline is growing at annual rate of 1% because the growth in the number of global automobiles is growing at 3% per year. Volume is trumping fuel efficiency on a global basis.

There is also little doubt that the developed economies of the U.S., Japan and Western Europe have reached a plateau in total demand. Consumption in each of these regions peaked around 2007 in the face of a global recession, aging demographics, increased



preference for urban living, and the improved fuel efficiency mentioned above. Again, despite these headwinds, the overall global demand for oil has increased close to 2% annually over the past five years. Furthermore, this growth materialized even with consistently high oil prices acting as a natural deterrent.

We are certainly concerned that a slowdown in China and other emerging countries will impact demand. But we believe this will likely be a temporary phenomenon and rather short-lived. Over time these economies will require increasing amounts of oil to satisfy their growth.

It is frankly more difficult to forecast demand than supply because there are a variety of influencing factors at play other than just price. However, as patient, opportunistic value investors our job is to assess the risk and reward of each investment scenario and determine the likelihood, or probability, of that outcome occurring. Looking out into the future, and based on everything we know today, it's highly unlikely that the world will consume less than 93 million barrels of oil per day five years from now. Under that scenario, the only way supply can meet demand is if the price of oil is above the \$70 - 80 range, and perhaps substantially higher.

### **Annual Investor Meeting**

We will be hosting our Annual Investor Meeting at the Estancia Hotel and Resort on Thursday April 2, 2015 at 5PM. You will receive a separate invitation by email so please mark your calendars accordingly. We look forward to seeing you all there and sharing with you our thoughts for the year ahead.

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