Old West Investment Management, LLC

January 11, 2019

Our Time Has Come

Dear Investor,

We founded Old West Investment Management slightly more than ten years ago, in November of 2008, right in the middle of what is now known as The Great Recession. The stock market reached its bottom on March 9, 2009, and what followed was one of the longest and strongest market runs in history. In past letters I have repeatedly bemoaned the fact that trillions of dollars have flooded into market index funds with little or no regard for valuation.

The reason this letter is titled "Our Time Has Come," is because the next five to ten years will be entirely different than the past five to ten years. As we saw this past December, trillions can be lost in just a matter of weeks. I believe valuation does matter, and company fundamentals and financial analysis make or break the outcome of an investment. At Old West, our sweet spot is rigorous financial analysis of companies, and sourcing investment ideas based on stocks trading at significant discounts to their intrinsic value. If you contrast this with blindly buying the overall market in an index fund, there is no question in my mind which is safer. I predict we will outperform the market by a wide margin over the next several years, and we are excited to watch this unfold. Value investing has been out of favor during this bull market, but it is about to become very popular. The growth versus value debate is not new, and over the long run value investing is the clear winner. We at Old West are reluctant to be labeled growth or value because we are attracted to both strategies. We have little interest owning a company that doesn't have high prospects of growing revenue and earnings, and simultaneously we have a hard time overpaying for a company. Who doesn't love a bargain?? Warren Buffet said that for him, growth and value are joined at the hip. We agree.

Coming out of the Great Recession the Fed began what is now known as Quantitative Easing, where the central bank prints money out of thin air and competes in the open market buying government bonds. This artificial excess demand for bonds drove up bond prices, and hence lowered interest rates to all time lows. In July of 2016, the U.S. 10-year treasury bond yielded 1.35%, which was the culmination of a 35-year bond bull market. The end result of this artificially cheap money was record high prices in the stock market, bond market, real estate, bitcoin and collectibles.

When I say the next five to ten years will be different in the markets, one way will be the lack of corporate stock buybacks. The U.S. stock market gained $8.6 Trillion over the past ten

years. It is estimated that nearly half this amount was due to companies buying back their stock in the open market. Think about this: since 2011 earnings per share increased 67% yet profit only increased 23%. The difference is the reduction in shares outstanding due to buybacks. Once again, the Fed manipulating interest rates to artificially low levels encouraged companies to take on debt and use these funds to repurchase shares. But here is the bad news: corporate debt has now reached an all time high as a percentage of gross domestic product. Total corporate bonds outstanding has grown from $3.8 trillion in 2008 to $8.8 trillion. A big percentage of this debt is rated BBB, which is one level above "junk" rating, which means companies will be severely restricted from issuing more debt. The spigots will be turned off to buying back more shares in the future.

Beginning in 2018, under new Fed Chairman Jay Powell, the field has been reversed, with the Fed now selling those bonds they previously purchased resulting in now what is known as Quantitative Tightening. Basically, the punch bowl has been taken away, and the era of easy money has subsided (at least for now). For the past several years a rising tide has lifted all boats, and now a sinking tide needs to be dealt with. Last month was a real eye opener for millions of investors. There are a lot of young professional investors who have never experienced such a sudden market selloff. It reminded me of the 1987 Black Monday crash where the market fell 23% in a day, but this crash lasted a whole month. It was a stark reminder that the stock market is risky, and blindly investing in index funds can have dire results. Although our portfolios also suffered, we have experienced a sharp recovery in most of our stocks, and we are very well positioned going into 2019. It now comes down to "blocking and tackling," by doing fundamental research in individual companies, something that has become a bit of a lost art in recent years.

We are not at all pleased with our performance in 2018, but we are giddy over the prospects of the companies we own. We realize that a recession could come in the not too distant future, and everything we own has been scrutinized with that in mind. We intentionally have little exposure to economically cyclical industries, and we are confident our portfolios will shine regardless of the economic cycle. In all of my letters we highlight one or more companies, and in this letter, we have chosen four to write about. From curing pancreatic cancer, to children watching cartoons on iPads, to producing clean energy, you'll see why our team is so excited about the prospects of these outstanding investment ideas.

Old West Co-founder Joe Boskovich Jr. writes about two of our holdings.

DHX Media (DHXM)

We detailed DHX Media in last quarters Q3 Investor Letter, and our optimism has continued to strengthen. As you may recall DHX Media Ltd., is a global children's content and brands company, recognized for such high-profile properties as Peanuts*,* Teletubbies,

Strawberry Shortcake, and many others. One of the world's foremost producers of children's shows, DHX Media owns the world's largest independent library of children's content, at 13,000 half-hours. It licenses its content to broadcasters and streaming services worldwide and generates royalties through its global consumer products division. Through its subsidiary, WildBrain, DHX Media also operates one of the largest networks of children's channels on YouTube, which has the potential to be a significant growth catalyst in the coming years. In fact, we believe that WildBrain may be worth more than DHX Media's entire market capitalization.

DHX Media launched WildBrain 6 years ago to make YouTube content for DHX's large global content library. The company's large and leading library allowed WildBrain to test at scale numerous genre formats and subjects across hundreds of demographics and territories and provided them key insights as to how to optimize kids experience in the advertising-video-on-demand (AVOD) space. WildBrain's success has not only been beneficial for its own IP, but many third-party titles have turned to WildBrain to manage their AVOD content as well. An example of WildBrain's success that management highlighted during its last call was the introduction of new characters, The Tiddlytubbies, which launched in 2018. The response has been tremendous, and this new WildBrain content has driven growth by 139% to over 29 mm views in its Q1 2019 and increased watch time by 127% to 98mm minutes. These numbers speak to the opportunity that WildBrain is just beginning to capture.

Another exciting new development at DHX Media was the December announcement that Apple was acquiring the rights to new Peanuts content as part of its $1 billion in announced spending for its new streaming service to be launched this year. As part of the agreement, DHX will create series, specials and shorts featuring iconic characters such as Charlie Brown and Snoopy. The Peanuts-Apple deal is the largest content agreement in DHX Media's history and aligns with the company's focus on premium content. We expect this agreement to provide DHX Media steady EBITDA contribution for a number of years, with Apple essentially becoming an anchor customer in keeping DHX's animation studio at near full capacity. The Apple deal is only on new Peanuts content, so Peanuts Worldwide will continue to retain all consumer products rights. As new Peanuts content rolls out over the coming years, this will help engage a new audience of kids and families on the brand and drive growth in Consumer Products globally.

On DHX's last quarterly call, one of the analyst questions was about CEO, Michael Donovan's, stock compensation package. When Donovan returned to DHX as the CEO several months ago, a significant part of his compensation was in stock options. These options don't begin to vest until the stock price reaches $10 per share, or roughly 330% above today's closing price. We view this as a huge vote of confidence on the part of management as to where the company is headed. Michael Donovan concluded his answer to the analyst question by saying "I'm completely comfortable with this and that's how it should be. I don't want to be in this for $1 and $2, but for $40 and $50."

Rafael Holdings (RFL)

Rafael Holdings (RFL) was spun out of IDT Corporation on March 2018 with two primary assets; a portfolio of commercial real estate properties and interests in two promising pharmaceutical companies, Rafael Pharmaceuticals and Lipomedix, all backed by a strong balance sheet providing strategic flexibility. Rafael Holdings most exciting and promising asset is its majority stake in privately held oncology venture, Rafael Pharmaceutical.

Rafael Pharmaceutical was founded in the late 1990's based upon a ground-breaking science known as Altered Metabolism of cancer cells, which is the scientific study that cancer cells produce energy differently than healthy cells. Based on this work, Rafael scientists developed its lead molecule, CPI-613, which targets enzymes that are involved in cancer cell energy metabolism and are located in the mitochondria of cancer cells. Rafael is the only oncology company in the United States with five orphan drug designations, and CPI-613 has achieved multiple and lasting remissions from some of the most devastating types of cancers. The company is currently conducting clinical trials for treatment in AML Leukemia, MDS, Pancreatic Cancer, Burkitt's Lymphoma, and T-Cell Lymphoma. Rafael has initiated pivotal phase III trials in both Pancreatic Cancer and AML, and these trials are expected to be completed by 2020. To date, over 300 subjects have received one or more doses of CPI-613, and the drug has exhibited excellent response rates.

One such example of CPI-613's effectiveness is its groundbreaking results in treating Pancreatic Cancer, which is the deadliest cancer worldwide and has limited treatment options. The average life expectancy of a patient diagnosed with Stage 4 Pancreatic Cancer is 2-6 months. In Phase I clinical trials at Wake Forest Baptist Medical Center, Rafael dosed 18 patients with CPI-613 in combination with a common Pancreatic Cancer chemotherapy regimen, Folfirinox. Of the 18 patients dosed, 3 experienced Complete Remissions and 8 others had Radiographic Responses, so an Overall Response (Complete Remission or Partial Remission) rate of 61%. As a comparison, treatment with Folfirinox by itself has a Complete Remission rate of less than 1% and an Objective Response rate of 31.6%. Due to these immensely promising results, Rafael has been given permission to skip Phase II trials and initiated Phase III trials to examine CPI-613 in 500 stage IV pancreatic cancer patients.

Rafael Pharma has experienced exciting results in multiple clinical trial treatments for other cancers, and management believes that it's science will ultimately lend itself to the treatment of all cancers. Some of the greatest minds in the field of medicine are working for and with Raphael, and the company has developed several external collaborations with academic institutions such as Memorial Sloan Kettering Cancer Center for Lymphoma and New York University and Jefferson University for Pancreatic Cancer. Rafael Holdings' current market cap approximates the value of its cash, cash equivalents and marketable securities ($41 million) and property ($50 million), providing abundant upside potential with near term potential catalysts. Public comparisons for oncology focused companies with ongoing phase III clinical trials suggest significant upside optionality.

Old West partner and portfolio manager Brian Laks writes about two exciting opportunities.

Virtu Financial (VIRT)

Virtu is a financial services firm that provides trading and execution services, making markets in over 25,000 securities in 36 countries. The company first came on our radar in early 2017 when we noticed several large insider purchases and saw the founder and chairman, Vincent Viola, owned over 70% of the stock. It had a history of profitability and a track record that was truly remarkable. The IPO filings revealed that in the six years of operating history since its founding, the company had only lost money on a single trading day.

The shares had fallen since the IPO a few years earlier as the subdued volatility environment weighed on trading volumes, a situation we thought was likely to reverse. During times of heightened volatility, trading volumes typically increase as investors grapple with uncertainty over the future direction of markets. We thus view VIRT as a "defensive" long position, since the company is quite profitable during periods of normal volatility but extremely profitable when volatility rises (as is often the case in market declines).

As an example of the countercyclical nature of their performance, from October 3rd to December 24th the S&P fell roughly 20%. Over that same time period VIRT shares rose by 17%, as investors likely anticipated that increased volatility would positively impact trading volumes and profitability. This was subsequently confirmed in the recent Q4 estimate provided by the company in which net income was guided to more than triple from the year earlier.

Insider ownership remains strong with the CEO, Doug Cifu, owning over $100m worth of stock. In 2017 Bob Greifeld, former chairman and CEO of Nasdaq, was appointed chairman and participated in a transaction leading to his controlling nearly 40% of the stock as well. Other prominent shareholders include Temasek, the sovereign wealth fund of Singapore, with a 15% stake. We are big fans of these "toll road" types of businesses, less exposed to the direction of traffic and more tied to the volume of it. Our belief is that the period of low volatility that we experienced over the last few years was an anomaly, and we will see a return to normalcy that will greatly benefit VIRT's business.

Uranium

When searching for companies trading at attractive valuations, we are often drawn to areas of the market that have underperformed and where sentiment is poor. In recent years these areas have been few and far between, as the decade-long bull market stretched valuations in large swaths of the market to extreme heights. Although the outcasts have been harder to

find, we have been able to identify several areas where investor pessimism is elevated and valuations are depressed. Many times these conditions are warranted, such as cases of industries in secular decline. Other times, however, temporary dislocations in companies or industries can offer opportunistic entry points where catalysts on the horizon signal brighter times ahead.

We believe the uranium industry is just such a situation. Uranium is the fuel used in nuclear power plants, which generate over 10% of the world's electricity. In the US the number is higher, at roughly 20%, and in countries such as France over 70% of electricity comes from nuclear power. The industry has been in a severe downturn since 2011, as Japan took their entire fleet of reactors offline for safety measures following the Tohoku earthquake. With roughly 50 reactors (over 10% of the global fleet), the demand withdrawal was significant, and led to a period of oversupply and declining prices that persisted until only recently.

Whereas in most commodity industries a price decline would lead to supply cutbacks, the uranium producers were largely insulated from short term movements due to the existence of long-term contracts that locked in higher prices for extended periods. However, as is often the case in these situations, "low prices are the cure for low prices". Contracts signed in the last cycle are rolling off, leaving producers exposed to current price levels. Large mines have been shuttered, development projects deferred, and exploration spending is at a standstill. Over the last 18 months, close to 20% of global supply has been taken offline.

Meanwhile demand continues to be strong. One of the main attractions of nuclear generation is that it doesn't produce carbon dioxide, increasingly important in an era of alarm over climate change and greenhouse gas emissions. Anyone who has seen pictures of the severe air pollution in places like China and India can comprehend their desire to shift away from hydrocarbon fuel sources. Understandably, these two countries are leading the push in new reactor development as their demand for electricity grows. Currently there are 55 reactors under construction worldwide, with many more planned or proposed. The steady increase in demand combined with substantial curtailment of supply is leading to a situation not seen in over a decade, where fears of shortages led to prices rising dramatically as utilities scrambled to secure supply.

At its heart, the investment thesis boils down to two very simple economic premises. Demand is greater than supply, and price is less than cost. These two situations cannot coexist in perpetuity. Excess demand will need to be met with new supply, yet suppliers will not develop new resource until the price rises to at least their cost of production. Thus, our view is the price must rise to give an incentive for new production to find its way to the market. Currently it sits just below $30 per pound, down from $70 in 2011. The average cost of new production is estimated to be in excess of $40-50 per pound, which means the price would need to rise roughly 50% before miners will commit to new projects.

We own a number of uranium producers across our various funds, including **Cameco (CCJ)**, and **Energy Fuels (UUUU)**, as well a handful of developers with promising

projects such as **NexGen Energy (NXE)**. The positive fundamental outlook for the industry stands in such stark contrast to the current sentiment and equity valuations that we launched a new fund last year, our first in nearly a decade, to take advantage of the situation. We welcome the opportunity to discuss the idea at length with current and prospective investors.

As you can tell from the tone of this letter, our team is excited to see our investment ideas produce healthy returns in 2019 and beyond. Thank you for your loyalty and support, and we wish you a healthy and happy New Year.

Sincerely,

Joseph Boskovich, Sr.
Chairman and Chief Investment Officer