O'KEEFE STEVENS
ADVISORY, INC.

August 2, 2023

A few NVIDIA facts and my thoughts…

Dear Clients & Friends,

I wanted to share a few facts and share some of my thoughts about Nvidia, the most successful investment of my 43-year career.

As I've thought about the situation over the past few months, I keep coming back to the opening two lines in Charles Dickens classic A Tale of Two Cities. “It was the best of times, it was the worst of times”, and that is truly how I feel about Nvidia.

The enthusiasm surrounding Nvidia, and the significant price appreciation has created a wonderful opportunity. We plan to reallocate funds by selling an excessively valued, momentum investment into many of our deeply discounted value investments.

Our initial investment in Nvidia was in April of 2013, just over ten years ago. Nvidia, we believed was unloved and unwanted, so we were able to purchase the common stock at what we believed was a bargain price. The reason was due to the perceived slowing growth of computer gaming, Nvidia’s largest market. This disappointment was apparent in the stock price. It was down 68% from its high price of $39.68 per share, achieved on October 23rd, 2007.

I first became aware of Nvidia in October of 2008 when my niece’s husband Steve, a computer gamer, called me and inquired about the company. However, it was not until early 2013, when I read about legendary investor Marty Whitman’s “Third Avenue Value Fund” establishing a position in late 2012, that we chose to research the business.

We were delighted to find a business in strong financial shape with dominant market share, here's a few facts:

1. Nvidia invented the graphic processing unit or GPU and had a dominant and growing share of the GPU market.
2. Nvidia was in a strong financial position, with only $19 million in debt and $3.7 billion in cash.
3. Nvidia's profits after taxes had grown from $85.6 million in 2003 to $562.5 million in 2012.
4. Nvidia initiated a cash dividend in the fourth quarter of 2012.
5. Nvidia invested 25% of its revenues in research and development and the majority of its 7100 employees were involved in R&D.
6. Nvidia was repurchasing its common stock.

Many of the metrics we use to determine a business valuation looked inexpensive or as Marty Whitman would say "Cheap".

Throughout the next two years Nvidia was Justin's and my favorite investment. We purchased it for clients who had cash available.

In May of 2015, the annual report arrived, and I began to review. The report not only discussed its computer gaming chips but other areas as well. Among the quotes from the report were:

1. "At $100 billion, computer gaming is the world's largest entertainment industry, exceeding Hollywood, and professional sports. And continues to grow".
2. "We launched NVIDIA DRIVE, the world's most advanced car computer, which enables vehicles to be increasingly aware of the world around them and will pave the way to self-driving cars. DRIVE is a car supercomputer made possible with our Tegra X1 mobile chip".
3. "GPU computing continues to expand its reach. Researchers around the world are doing groundbreaking work in areas as diverse as preventing heart attacks and discovering the origin of galaxies. Nvidia GPU's have been broadly adapted in deep learning, a branch of the longstanding

> field of artificial intelligence. Deep learning has recently been ignited by three converging trends: the flood of data brought by the web service companies; recent algorithm breakthroughs, created by some of the brightest minds in computer science; and the ability to compute massive amounts of data with GPU's. GPU powered machines are used to deliver applications that make interacting with computers magical. It's nothing short of miraculous that you can ask your phone a question and instantly receive a spoken response. Speech recognition is just one application. Recognizing images is another. And they are just the tip of the iceberg".

Justin and I discussed the report, realizing we owned a very special investment, we began purchasing more shares for our clients at approximately $20 per share or 60% higher than our original purchases.

In addition, we began to listen to Nvidia's Quarterly Investor Calls with management, so that we could better understand the business. Each quarter was an amazing learning experience of improving financials and new product releases.

A significant turning point was the May 12th, 2016, call. Nvidia announced strong financial results for the first quarter: among the highlights were:

1. Revenue of $1.3 billion, up 13% from a year ago --growth across all platforms
2. GAAP earnings per share of $.33, up 38% from a year ago. Non-GAAP earning per share of $.46, up 39%
3. Sharply growing customer engagements in deep learning

In his press release CEO Jen-Hsen Huang stated:

> "We are enjoying growth in all of our platforms -- gaming, professional visualization, datacenter and auto." "Accelerating our growth is deep learning, a new computing model that uses the GPU's massive computing power to learn artificial intelligence algorithms. Its adoption is sweeping one industry after another, driving demand for our GPUs."

> "Our new Pascal GPU architecture will give a giant boost to deep learning, gaming and VR (Virtual Reality). We are excited to bring a new wave of innovations to the markets we serve. Pascal processors are in full production and will be available later this month," he said.

The O'Keefe Stevens Client Advisory Board just happened to be meeting a few weeks later, at the Roycroft Inn in East Aurora, New York and Nvidia's common stock had risen sharply to approximately $48 on the days preceding our meeting. Attending the meeting was longtime client Jerry and his wife Kris. I asked Jerry if he had checked the price of Nvidia, he responded he had and was amazed. I told Jerry "I think this could be a $300 stock"! We've been joking about the comment for the past 8 years, as it turned out to be the understatement of the decade. As, Nvidia closed last week @ $467.50 or $1830 adjusted for the four for one split.

Having appreciated by over fifteen times our initial purchase price, we made a partial sale of our Nvidia stock on October 5th,2017 at approximately $180 per share to reduce our position, as it become an outsized investment.

One year later in October of 2018 NVIDIA stock was now priced at over $290 per share.

Only one month later, Nvidia announced excess inventories due to the decline in crypto-currency prices. Crypto miners who used GPU's, were selling their chips on E-Bay and other websites. By Christmas Eve, the price of Nvidia common had declined over 50% and was trading under $130.00 per share. This event created an opportunity for new clients, who were not with us in 2013 or 2015 to establish a position in the company.

On March 11th, 2019, my son DJ's 12th birthday, Nvidia announced the acquisition of Mellanox. The company stated: "The acquisition would unite two of the world's leading companies in high performance computing (HPC). Together, Nvidia's computing platform and Mellanox's interconnects power over 250 of the world's Top 500 supercomputers and have as customers every major cloud service provider and computer maker".

My family and I chose to attend Nvidia's Annual GPU Conference in San Jose, California from March 17th-21st, 2019 to learn first-hand about many of Nvidia's technologies, including an autonomous car demonstration. An interesting fact was learned in a conversation with a venture capitalist who stated that "he knew of no AI (artificial intelligence) start-up that was using any chip other than Nvidia's GPU chips".

By mid-2019 Nvidia stock price began to rebound from the crypto-currency inventory issues.

In Nvidia's annual report released in early 2020 Jensen Huang stated:

> "Nvidia specializes in accelerated computing, solving important challenges beyond the reach of normal computers. We innovate at the intersection of computer graphics, high performance computing, and artificial intelligence, at our core we are a real time simulation company-simulating world's, physics, and intelligence".

During the 2020 year when COVID-19 gripped our attention, Nvidia's common stock rose from $235.32 at the end of 2019 to close the 2020 year at $525.84, a gain of over 120%.

NVIDIA's strong financials and common stock performance continued into the year 2021 and the company declared a 4 for 1 stock split effective July 21st, 2021. During 2021, the stock rose from $131.46 to $295.86 (split adjusted). Another outsized gain for the year of over 160%.

By late 2021 the investment world was becoming enamored with Nvidia, and the stock price hit a new high of $333.76 on November 29, 2021. A milestone was reached on my daughter Dallas's 16th birthday November 9th, when our first purchases made in 2013 became "100 Baggers", which means a 100-fold increase, with a $10,000 investment becoming worth $1,000,000. In uncharted territory, I purchased read Christopher Mayer's book "100 Baggers" to research the phenomenon.

I began 2022 by reading "Genius Makers the Mavericks Who Brought AI to Google, Facebook and the World" by Cade Metz. In reading this book, I learned a great deal about the history of artificial intelligence dating back to the 1950s and its numerous struggles to show any meaningful commercial opportunities.

While it's not incredibly important, I'm still proud to know the birth of artificial intelligence took place in Buffalo, NY. Frank Rosenblatt and his "Perceptron" was the first work done on neural networks. The research took place at Cornell Aeronautical Laboratory in Buffalo, New York.

The book discussed the numerous professors & computer scientists who made significant progress in neural networks and the companies formed to benefit from their discoveries. This knowledge would prove extremely beneficial to better understand the explosion that would begin in late November 2022 with the release of ChatGPT.

In late Spring the financial markets began to decline, particularly hard hit were major technology stocks. Nvidia's common was no exception. The decline did not end until October 13th, when NVIDIA hit bottom at $108.13, a decline of 67% from its high valuation less than 12 months earlier. On November 30th ChatGPT's newest version was released, within a few months it would give artificial intelligence a whole new level of enthusiasm.

The 2023 New Year began with a bang & the enthusiasm still has not stopped. First, on Monday January 23rd, Microsoft announced plans to invest as much as $10 billion into Open AI, the developer of ChatGPT. Microsoft also announced plans to begin integrating the technology behind ChatGPT into Bing it's search engine, hoping the AI upgrade can help it chip away at Google's dominance of the search market. Within two weeks Google responded with its own plans to begin integrating AI into its search engine. Over the next several months other technology companies such as Facebook, Apple, and others announce plans to invest in artificial intelligence.

During first quarter earnings reports numerous companies, such as Microsoft, Tesla and Google mentioned Nvidia chips as the foundation to the AI revolution.

On May 24th, Nvidia announced its first quarter financials and guidance for the 2nd quarter. Analyst's guidance too low when compared to results. This led to investor enthusiasm and significant increases in the price of Nvidia's stock.

On May 25th Nvidia's closed at $379.80 per share, rising $74.34 for the day and raising its market capitalization by $183 billion. The third largest one day increase in the history of U.S. financial markets. This increase represented an increase of twenty-three times our initial purchases.

The excitement continued with the June 13th closing, with Nvidia becoming the 7th U.S. company with a market capitalization above $1 trillion.

According to Barron's July 7th report stated that 86% of analysts covering Nvidia recommend buying the stock, with 12% recommending holding and none with a sell recommendation. Clearly, I'm in the minority with my sell recommendation of Nvidia.

No doubt, Nvidia is one of the world's best companies, with arguably the best technology. In addition, is the dominant semiconductor manufacturer, most likely to benefit from AI. However, I disagree with the other analysts on price, as I believe Nvidia's common stock valuation is extremely, extremely high.

Let me explain thoughts further:

In Howard Marks most recent memo "Taking the Temperature" dated July 10th, he discusses extreme behaviors of investors.

His memo referenced another memo "There They Go Again" from May 2005.

> There is a tendency of investors to **(a) ignore the lessons of past cycles, (b) fall for new developments, (c) pile into risky investments, guided by time-honored platitudes such as "this time is different,"** "higher risk means higher returns," or if it stops working, I'll just get out." Many of these logical errors were committed by investors in past market cycles, such as in housing when this memo was written in 2005.

With my sell recommendation, I'm attempting to avoid many of these mistakes and use my past experiences to guide my decision-making process.

Dr. Jeremy J. Siegel, a professor of Finance at the University of Pennsylvania's Warton School of Business and author of "Stocks for the Long Run" states valuation does matter. In commenting on stocks with high price to earnings:

> **"History has shown that whenever companies, no matter how great, gets priced above 50 to 60 times earnings, buyer beware."** Supporters of these valuations point to their fantastic growth and rosy prospects.

In my opinion the excitement generated by the artificial intelligence revolution is amazing, and there is no question Nvidia is leading the way. But this does not automatically translate into increased shareholder value. **Despite our buoyant view of the future, this is no time to discard the lessons of the past. This is especially true when it comes to the price valuation we place on a business.** Remember, we've being discussing artificial intelligence for many years, not something ChatGPT ignited for us.

Over the past 43 years, I've learned from my past successes and mistakes, here's a few:

We purchased Qualcomm (QCOM) in mid-December 1998 at approximately $52.00 per share. During the late 1990's Qualcomm's CDMA wireless technology was become the standard for the cellular phone industry. However, a battle developed, as Ericsson also claimed ownership of the CDMA standard. In March 1999, Qualcomm and Ericsson settled their lawsuit and this proved to be a pivotal turning point for Qualcomm and their stock soared from $52 to $800 by January 2000. (Adjusting for the stock splits of 2 for 1, 4 for 1, and 2 for 1 the price grew from $3.25 to $100). Qualcomm was being priced too optimistically and was an oversized position, so we sold most of our shares.

Earlier this week I spoke to Steve, a long-time client in Atlanta. He keeps meticulous records of his Qualcomm purchases and sales and, confirmed he sold 1000 shares @ $91.50 on 1-3-00 and 600 shares @ $75.35 on 3-31-00. The second sale was in direct response to my attending the Securities Industry Association event at the Wharton School presentation by Dr. Siegel regarding valuations of technology stocks.

The late great investor John Templeton stated "Bull markets are born on pessimism, grown on skepticism, mature on optimism and die on euphoria. The time of maximum pessimism is the best time to buy, and **the time of maximum optimism is the best time to sell."**

The optimistic view of Qualcomm, in 1999 and early 2000 was everywhere: analysts were constantly coming up with new price targets as Qualcomm's shares rose, the Value line report on Qualcomm stated "Next-generation technologies and new markets have potential to keep profits rising strongly well into the future. This quote was indeed accurate, as profits grew from $392 million in 1999 to $6.6 billion in 2016.

In the book "The Qualcomm Equation" by David Mock the forward of the book states "that an American company from San Diago called Qualcomm is the best technology in the world today."

Unfortunately, the stock was significantly overvalued in early 2000.

To give you an idea just how overvalued Qualcomm had become, is the fact that, in less than three years, from the year 2000 to 2003, Qualcomm declined from a high valuation of $100 per share on January 3rd, 2000, to a low of $11.60 on August 5th, 2002.

At O'Keefe Stevens Advisory, we repurchased Qualcomm seventeen years later June 16th, 2017, for $56.725 approximately 25% less than our sale price of $75 in March 2000.

Another example is from the 1950's, a research and development success story of a Rochester, New York company, that led to one of the world's greatest technological breakthroughs.

A small company named Haloid developed a technology that was able to make dry, good quality copies on ordinary paper with a minimum of trouble. In the book entitled "Business Adventures-Twelve Classic Tales from the World of Wall Street" by John Brooks, he stated that: **"some avant-garde philosophers took to hailing the process as a revolution comparable in importance to the invention of the wheel."**

The process was known as "xerography." Haloid later changed their name to Xerox and quickly became one of the most spectacular big-business successes of the nineteen-sixties. Anyone who bought its stock in Haloid in 1959 and held on to it until early 1967 would have found their holdings worth about sixty-six times their original price. By 1972, examining the Xerox's price chart, its high valuation was clearly a "100 Bagger".

In 1982, a husband and wife came into my office to sell the shares in Haloid which they had purchased in the late 1950's. By reviewing the Xerox chart, it appears in the 20+ years they held these Xerox shares, they rode it up to unbelievable heights and rode some of their shares to a tiny fraction of the high valuation. They were not happy!

On June 20th, 2023, billionaire investor Leon Cooperman was interviewed at the "Ben Graham 10th Annual Conference." He stated that: "We know that Nvidia's not going to end well. I've learned over the years that ultimately things change, and the fall from 200 times earnings is a lot harder than the fall from eight or nine-times earnings", referring to Nvidia's current valuation. He further noted that "former darlings like Cisco have never reclaimed the breathless highs they reached during the dot-com bubble."

Since our original investment in Nvidia we have seen a one-hundred-and-fifty-fold increase in the value of the investment. A $10,000 investment is now worth over $1,500,000.

As of Friday July 28th, Nvidia's common stock was priced at $467.50 with a market capitalization of $1.155 trillion.

While Nvidia has enjoyed outstanding growth in revenues and profits, I no longer believe Nvidia is reasonably valued.

Given our view, our plan is to reduce our Nvidia position and reinvest the proceeds in the many other outstanding opportunities we own such as Qualcomm, Lazard, Warrior Met, and BGC partners to name a few.

Thanks for the opportunity to be a steward of your wealth.

Sincerely,

Peter S. O'Keefe
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