To my limited partners:

Christmas - New Year holiday period is the best time to read if you have no travel plans, and January 2017 was the first time I checked out a copy of *The Intelligent Investor: The Classic Text on Value Investing* by Benjamin Graham from Multnomah County Library. I must admit that I did not fully understand it, the concept of value investing and margin of safety were foreign, when the US stock market was on a roaring recovery since the 2008 financial crisis low, at the time it seemed any stock can go up anytime you buy.

Fast forward to December 2022, I read the book (revised edition) for the third time, the S&P 500 had gone down nearly 20% from its 2021 high, and value investing made perfect sense - Anyone who invested in technology companies during the 2021 boom could relate to the examples of technology companies during the dot-com bubble in Jason Zweig's commentary, there is no "no price is too high" - After all, Benjamin Graham coined value investing after great loss of investment during the Great Depression.

Value Investing

In simple terms, value investing is about buying good companies run by good managers at an attractive price. I often think of my mom as the greatest value investor in grocery shopping. She would go to the supermarket every day and buy things on sale, provided that they are quality items and within the expiration date. If beef is on sale that day, we'd have steak for dinner, if pork is on sale, we'd have pork. If something she really likes is not on sale, she would prefer to wait for a few days and buy them on sale. Over time, she accumulates so much knowledge that she knows the fair price of each meat, vegetable, and fruit. The same strategy can be applied to buying stocks, or rather shares of companies. Of course, just like grocery shopping, the stock market is not on discount most of the time, but unlike grocery shopping where you have to constantly buy staple food and toiletries even during high inflation periods, you are not forced to buy anything in the stock market when the price is too high or you don't understand the company.

A good company is able to produce high return on invested capital, a better company not only produces high return on invested capital consistently, but also can grow profit by reinvesting a portion of the profit back to the company without taking on too much additional debt. So far this sounds all too quantitative, as if a mathematical model can deterministically find the best value investment without introducing human psychological errors. The qualitative factors are most important in determining how long a good company can continue to exhibit such characteristics, or in other words, how wide the moat is. Questions I often ask in this category include "What is the company's business model", "What is the company's competitive advantage", "Why does the company have such competitive advantage while competitors do not", "Is the management incentive aligned with shareholder's interest", "Does the company reinvest its profit wisely". Compound interest is most magical when it can compound over a long period of time.

Investments

The S&P 500 went up 24.23% (26.44% with dividends) in 2023, ending the year almost reaching its all-time high in December 2021. It was a full recovery for many stocks, and the media started to advertise The Magnificent 7 technology stocks, which went up an average of 105%. Meanwhile, the short-term treasury bills yield steadily went up from 4.3% to 5.2%, and 10-year treasury bond yield averaged above 4%.

The combination of recovery of the stock market and high interest rate in 2023 did not leave many opportunities for bargain hunters. Nevertheless, there are two moments in 2023 that we found stocks with attractive prices.

The first such moment was banking failures in March. The crisis started just a few miles from my home with a bank run and later collapses of Silicon Valley Bank, followed by Signature Bank, First Republic Bank, and a few others. It was such a main financial event of the year that Warren Buffett had a dramatic revealing of Available For Sale and Held-To-Maturity signs during the second half of the Berkshire Hathaway annual shareholder meeting. The story is cyclical. Companies can elect different accounting methods for their assets, including bond, mortgage, loan, land, equity, and so on. When a bank has unrealized losses in its assets, different accounting methods may have non-trivial impact to its balance sheet, on top of that, if it has leveraged with high asset-to-equity ratio, the resulting book value may be less than unrealized loss, at this moment it's in deep trouble. For example, if a bank has $100 billion in asset and asset-to-equity ratio is 20:1, 5% unrealized loss on its asset wipes out its entire book value of $5 billion.

The market reacted by marking down almost all stocks in the banking and insurance industry, including Berkshire Hathaway, which we all know doesn't use the above-mentioned accounting tricks and financial leverages. One insurance company was marked down more than 15%, with market cap below its book value while the unrealized losses were already accounted for in its balance sheet. It's a wonderful founder-led small-cap company with a combined ratio around 30% and estimated worst case of 70%, it operates in a regulated sector which requires a license to run. We confidently purchased stocks in this insurance company as well as in Berkshire. It's a rare opportunity to buy stocks of quality companies below book value, we don't expect to see this often.

The second moment of the year was in October, when the Fear & Greed Index went from extreme greed in June and July to fear in September, and extreme fear in October. The market went down for seemingly no obvious reason, it was a time to be greedy when others are fearful.

We had previously studied Visa Inc. and W. W. Grainger Inc., both are dominant players in their respective industries, they have high ROIC, and they can effectively grow their profit by reinvesting without much debt, most importantly they have wide moats. Payment networks naturally have network effects, Visa is the second largest payment network in the world, second only to UnionPay, it has 40% of the global market share. Visa processed 212 billion transactions with a total of 12.3 trillion payment volume in FY2023, which is equivalent to 11.7% of global GDP. Grainger is a household name as MRO distributor in the United States, almost every

physical business needs to order and restock maintenance, repair and operations supplies repeatedly. MRO distribution space is much more fragmented than payment networks, still, Grainger has 7% of the market share as the largest MRO distributor in North America. Grainger helps 5000 suppliers to distribute 2 million products to 4.5 million customers. When Grainger was started in 1927, the original catalog - called the MotorBook - had 8 pages, by 1940 the 129th edition had grown to 99 pages, today the latest Grainger Catalog 414 has over 3000 pages. Both Visa and Grainger are quality large-cap companies in S&P 500, and most of the time such companies are overvalued. We waited to purchase these two stocks at reasonable prices during this time, and we expect to hold them for a very long time.

Another purchase worth mentioning was not in stock but in high-yield bond, or junk bond. Diversified Healthcare Trust is a REIT consisting of mostly senior living communities and medical office buildings across the United States. DHC was a profitable company until 2019, and COVID-19 pandemic made it unprofitable due to higher cost and lower occupancy. Its stock was trading below $1.00 starting November 2022, and it received a warning from NASDAQ for delisting due to low stock price. The market was worried that DHC had no ability to repay its debts with cash in hand. We found that DHC's book value was almost never below $10 per share, and it could easily sell off a few buildings to repay the debts. It may be reluctant to do so since it was managed by RMR group, which has a history of maximizing management fees from its managed companies and employing tactics such as bankruptcy or M&A to consolidate its managed companies. Despite this, DHC had been consistently selling its properties since 2017. We also found that DHC was owned mostly by institutional investors, and its founder does not have controlling or blocking voting power. The founder is unlikely willing to see DHC go bankrupt, because bankruptcy court would liquidate the buildings and repay the debt. If DHC gets merged with or acquired by another RMR company, the debt is going to be either paid off or refinanced or remain in the new company's balance sheet. So in the worst case, we will still have our claim paid. We made purchases of its May 1st 2024 4.75% unsecured senior note at an average of 91 cents on the dollar, or about 14.9% annualized return, which looks attractive given the short term treasury bill yielded 3.5%. After a little over one month of the bond purchase, DHC stock went back to $1 and again to over $3 in June. Later DHC had a failed attempt to merge it with another RMR company - OPI, which was blocked by a major shareholder before voting. In January 2024, the bond was called. We don't know why it was called 3 months prior to maturity, but we were happy to take the return and close the position. We could have made 300% return if we had invested in DHC stock instead of bond, but this arbitrage had risks that did not provide us with sufficient margin of safety.

Nvidia

Nvidia was one of the best performing companies in S&P 500 in 2023. Thanks to the AI wave, its trailing revenue was up 57% and net income up over 217% compared to the previous year. The stock price also skyrocketed to a peak P/E ratio over 140 and around 80 at year end. We think the moat of Nvidia is the software - CUDA and HPC SDKs - it's rare to see any other GPGPU framework in wide adoption, but we don't know how wide this moat is, it's very difficult to predict the future of software.

We made our first purchase of Nvidia stock in 2016, when its annual revenue was less than half of today's quarterly revenue. It was not a value pick (before I picked up *The Intelligent Investor*) nor AI stock at the time (OpenAI was just getting started), but over time it has become the best performing stock in our portfolio. We reduced our position in Nvidia because it became too expensive, but it surprises me quarter after quarter with its never stopping growth of net income, this may end up being our second biggest mistake of the year.

Results

2023 was the first year that the partnership selected all its new investments based on value investing and keeping a margin of safety, so we only include securities purchased in this year, excluding any previous purchase such as Nvidia.

Year	Partnership	S&P 500[1]
2023	21.81%	26.44%

Our partnership's results did not beat S&P 500 in 2023, and this is within our expectation. We think it takes at least 3 to 5 years to evaluate the performance. Value investing may lag behind during a bull market, the real test is whether the partnership can generate better return in a bear market. We strive to produce better annualized returns than S&P 500 over a long period of time.

Berkshire Hathaway

Charlie Munger left us in 2023. Munger was a man of wisdom, and he sought worldly wisdom through lifelong learning. Munger was a role model in today's capitalist society combining virtue, moral, and truth-seeking.

I was not able to attend Berkshire Hathaway annual shareholder meeting to see Charlie Munger last year, this was the biggest mistake of the year. This year I've already booked the tickets to Omaha to see Warren Buffett. I hope to see you there too!

He Zhao
January 30, 2024

[1] Dividend included.