## Alley Company Commentary Tapping into the Power of Compounding

Compound interest, commonly referred to as compound growth, is described in a phrase of disputed origin as "the eighth wonder of the world." This process of accumulating wealth is done by reinvesting gains - think of generating returns on already gotten returns, or reinvesting the income generated from an investment. The power of compounding is interrelated with the objective of investing which is to increase the purchasing power of capital. This means that the total return after taxes from the portfolio must exceed the inflation rate. How high this "real return" is, and how risky the means of achieving it, are what investing is all about. The process of increasing one's purchasing power or growing one's wealth is dependent upon appreciating the math by which money grows through compounding.

## Compounding and Long-Term Commitment

To illustrate, consider two hypothetical stock market investors. Joe, who is not a committed long-term investor, invests $\$ 1$ and each year it doubles he puts the $\$ 1$ profit under his mattress instead of reinvesting it. After ten doublings, Joe has a profit of $\$ 1 \times 10$ plus his original $\$ 1$ for a total of $\$ 11$. Mary, who is a committed long-term investor, also starts with $\$ 1$ and makes the same investments, but lets the profits ride. By contrast, and as a result of her letting the profits ride, Mary's $\$ 1$ becomes $\$ 2, \$ 4$, $\$ 8$, etc., for a total of $\$ 1,024$ after ten doublings. The following table shows the results after ten years:

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Joe | $\$ 2$ | $\$ 3$ | $\$ 4$ | $\$ 5$ | $\$ 6$ | $\$ 7$ | $\$ 8$ | $\$ 9$ | $\$ 10$ | $\$ 11$ |
| Mary | $\$ 2$ | $\$ 4$ | $\$ 8$ | $\$ 16$ | $\$ 32$ | $\$ 64$ | $\$ 128$ | $\$ 256$ | $\$ 512$ | $\$ 1024$ |

This is a dramatic example of the power of compounding as nobody actually doubles their money every year, but it serves the purpose of illustrating how generating returns on already gotten returns can compound wealth as was the case with Mary. The growth in Joe's wealth was diminished by not reinvesting the profits.

To take full advantage of the power of compounding there is a very important requirement besides selecting good investments, and that is a long-term commitment. Understandably, the road to the long term is not always smooth and sometimes may be downright rocky. But in order to allow good investments to work and reach their potential as compounding vehicles, an uninterrupted long-term view is beneficial. Further, for stock investors, management teams of great companies generally have a long view in running their businesses, so aligning one's investment timeframe with the corporate timeframe makes good sense.

## Compounding and the Impact of Dividend Growth

Academic research reveals that companies that pay attractive and growing dividends have been superior investments relative to companies that do not pay dividends. One of the reasons for this phenomenon is that companies that have the corporate culture and financial wherewithal to pay consistent dividends tend to have sustainable fundamental business prospects which bodes well for the long-term investor interested in compounding capital.

A great example of the power of dividend growth can be found in Berkshire Hathaway's investment in Coca-Cola. Between 1988 and 1994, Berkshire accumulated 400 million shares of Coca-Cola for a total cost of $\$ 1.3$ billion. In Berkshire Hathaway's 2010 annual report, Warren Buffett called out the significance of dividend growth when he wrote:
"Coca-Cola paid us $\$ 88$ million in 1995, the year after we finished purchasing the stock. Every year since, Coke has increased its dividend. In 2011, we will almost certainly receive $\$ 376$ million from Coke, up $\$ 24$ million from last year. Within ten years, I would expect that $\$ 376$ million to double. By the end of that period, I wouldn't be surprised to see our share of Coke's annual earnings exceed $100 \%$ of what we paid for the investment. Time is the friend of the wonderful business."

Based on Coca-Cola's current annual dividend rate of $\$ 1.84$ per share, Berkshire Hathaway received approximately $\$ 704$ million in dividends in 2022. When measured against the $\$ 1.3$ billion cost for CocaCola shares, this investment's "yield-on-cost" has grown remarkably to $54.15 \%$.

The concept of yield-on-cost is often overlooked as investors tend to focus on the current yield, which is the current dividend divided by the current stock price. But, for long-term investors, the current dividend divided by the original cost basis is the correct yield by which to characterize the yield accruing from the investment.

## Compounding and Total Return

The compounding effect of reinvesting dividends can also have a profound impact on total return. The following graph illustrates the total return of a $\$ 10,000$ investment in the S\&P 500 where dividends are reinvested vs. the S\&P 500 returns based on price only. The compounding effect of dividend reinvestment on the total return is striking to say the least.


[^0] guaranteed to outperform non-dividend-paying stocks in a declining, flat, or rising market. For illustrative purposes only. Data Sources: Morningstar and Hartford Funds, 12/22.

## Compounding with Quality

As previously mentioned, a long-term commitment is important in order to allow the power of compounding to work. Equally important is the selection of high-quality companies that are in businesses that have predictable levels of revenue and earnings growth and thus are able to produce financial results that support stable and growing dividends.

Further, companies that can produce consistent levels of dividend growth are also likely to achieve solid stock price appreciation. In the aforementioned example of Joe and Mary, we learned how returns generated on already gotten returns can compound wealth. In the Coca Cola example of Warren Buffet's dividend growth windfall, nothing was mentioned of the stock price appreciation over the years that has added to his total return in the stock. At year-end 2022, Berkshire Hathaway's investment in Coke was valued at $\$ 25$ billion compared to a cost basis of $\$ 1.3$ billion in 1994, a great example of compounding returns over 28 years.

As depicted in these examples, compounding is a powerful force in growing one's wealth when investors allow time to work on their behalf. Importantly, compounding can also play a key role in growing one's purchasing power over and above the rate of inflation, the ultimate objective of investing. It's no surprise that compounding in all of its various forms is called, "the eighth wonder of the world!"

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[^0]:    Past performance does not guarantee future results. Indices are unmanaged and not available for direct investment. Dividend-paying stocks are not

