Cidel
Asset Management

Looking Forward: Exponential Growth

cidel.com

By Arthur Heinmaa, CFA, Chief Investment Officer

During the first half of 2021, equity markets continued to outperform expectations. The only blemish on returns were bonds, which are down almost 3% year-to-date. It is the first time in quite some while that investors who sought the protection of fixed income have experienced losses. If interest rates continue to climb in the coming years, this will not be the only time we see negative returns. One of the notable features of the market has been the outperformance of value stocks compared to the growth stocks, which have lead the way for a number of years. The switching between different types of stocks highlights an issue that we have addressed a number of times in the past; short-term speculation vs. long-term ownership.

The most common question that we get is whether it is time to get out of the equity market. Essentially, people are asking if it is time to sell the businesses that they own. I cannot think of many business owners that change their views of their business each day based on how someone else perceives its valuation. If someone passes comment about the business being worth 10% less than it was yesterday, the management team doesn't just give up, draw the shades, put a cold compress on their head and give up. Similarly, a comment about the company being worth 10% more doesn't result in management spending money with wild abandon and stopping to worry about what the competition is doing. In both situations, the management of the company continues to focus and execute on its long term strategy. It is how the business performs over a long period that drives returns, not the day-to-day movement of what people think it is worth. To this end, it is the compounding of returns over time that will lead to extraordinary investment results.

A well-worn story about a woman watching a pond in her backyard serves to illustrate how powerful exponential growth can be, as compared to linear growth. Each day, she looked at the 1,000 square foot pond in her garden. One day, she noticed that a single, 1 square foot lily pad had grown in the pond. The pond's ecosystem was undisturbed so she decided to wait and see what would happen. Waiting seemed to have no downside. The next day, a second lily pad appeared covering 2 square feet of her pond. Again, she decided that there was nothing to worry about; at this rate, it would take about 1,000 days for the pond to be fully covered in lily pads – linear growth. On the third day, she awakened to find four lily pads on the pond. Thinking that she must have missed a day, she was not concerned because only 4% of her pond was covered with lily pads. Still not concerned, she decided to visit her sister for a week. While she was away visiting her sister, the lily pads continued to multiply with their number doubling each day; 4 lily pads grew to 8, 8 to 16, and so on. When the woman returned on the 10th day, she was surprised to see that half of the pond was now covered in lily pads. She was expecting to see 10 lily pads but instead, she saw over 500 covering her pond. As she went to bed, she thought that perhaps a few more would grow over night and she could deal with pulling out the excess lily pads during the next week. She awakened to find that her entire pond is now covered and the pond's ecosystem that she helped nurture was at risk. She kept expecting the growth to be linear but it turned out to be exponential.

There are a couple of important takeaways for investors from this story. First, the woman's opinion of the lily pads did not change the trajectory. Second, at the early stages of any growth trajectory, the difference between exponential and linear growth are indiscernible. Even if you graph the growth rates vs. time, the lines are on top of each other during the early stages. Third, identifying what is compounding vs. just growing allows time to work for or against you. Ultimately, there are limits to compounding and so, too, there are consequences for inaction. Let's look at each and see how these takeaways translate into investing.

Looking Forward: Exponential Growth

First, opinions do not change the trajectory. Anyone can argue that one year is an accident and it will never happen again. But, even if it happens it will not happen as quickly as people expect. It is the data that determines the ultimate outcome. At any point in time, you will always be able to find opinions that support your view. With social media, you can choose to block out all dissenting opinion and be inundated with articles and opinions that support your own biases. However, in the long run, it is the data that will win out. So, any investment opportunity must meet the tests of logic and data, not just an expression of an opinion. It is easy to miss a good investment because you are biased against something in the business or do not take the time to look at the data.

Second, at the early stages of growth, exponential and linear growth rates look the same. As humans, we are genetically engineered to interpret the world through a linear framework. Hunting an animal that is running at a constant speed is how we survived for thousands of years. When you identify a business that is compounding at a high rate, the growth provides a powerful tailwind to the financial results of the business. The temptation will be to jump in and out of the business because you will constantly tend to underestimate the growth rates, thinking that they will add a certain number of units rather than rate of the unit growth. There have been numerous examples where industries have grown at exponential rates and analysts have consistently underestimated the potential growth. From microwaves to colour televisions, washing machines, and, of course, cellular phones - in each case the adoption rates were faster than anyone imagined. For instance, in 1990 a leading consulting company forecasted the cell phone market to grow to 900,000 users by the year 2000. The actual number was 109 million. Even an error in valuation will be wiped out by the strong compounding rate within the overall industry.

Finally, just as there was a limit to the growth of lily pads in a pond, so too will there be a limit to the ability of a firm to compound its business. Consider the simple example of a colour television: Within about 15 years, just about every U.S. household had a colour TV. Once every household owns a TV, it is difficult to continue the expansion rate without either developing a new product or finding a new market. It will always be important to compare the growth rates and penetration rates against the total addressable market. However, these periods of growth can persist for a long time.

So, the burning question is, where are the exponential growth rates today? It seems as though the renewable energy/electric vehicle segment of the market are poised to grow more rapidly than the market expects. Adoption rates for wind/solar or electric vehicles have been rising but have been met with skepticism and a seemingly constant underestimation of growth. The International Energy Agency (IEA) estimates that an additional $10.5 trillion of incremental global investment is required to come anywhere close to limiting global climate change to 2 degrees Celsius. The combination of cheap capital, big technological advances and a receptive market have all the hallmarks of an industry that is poised to see higher growth rates during the next decade. But, as with all investment opportunities, one should temper their optimism with a healthy regard for risk management.

July 2021

*Cidel is an operating name of Cidel Asset Management Inc.
This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The information contained in this document has been compiled by Cidel Asset Management Inc. from sources believed to be reliable, but no representations or warranty, express or implied, are made by Cidel Asset Management Inc. as to its accuracy, completeness or correctness. The opinions expressed are as of the date of this publication and may change without notice and are provided in good faith, but without legal responsibility. Cidel Asset Management Inc., carrying on business as Cidel ("Cidel" is a registered trademark) is registered as a portfolio manager, investment fund manager and exempt market dealer in Ontario. Cidel is also registered as a portfolio manager and exempt market dealer in the provinces of Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island and Saskatchewan. In Quebec, Cidel is registered as a portfolio manager, investment fund manager and exempt market dealer. This document may not be reproduced, distributed or published by any recipient hereof for any purpose.