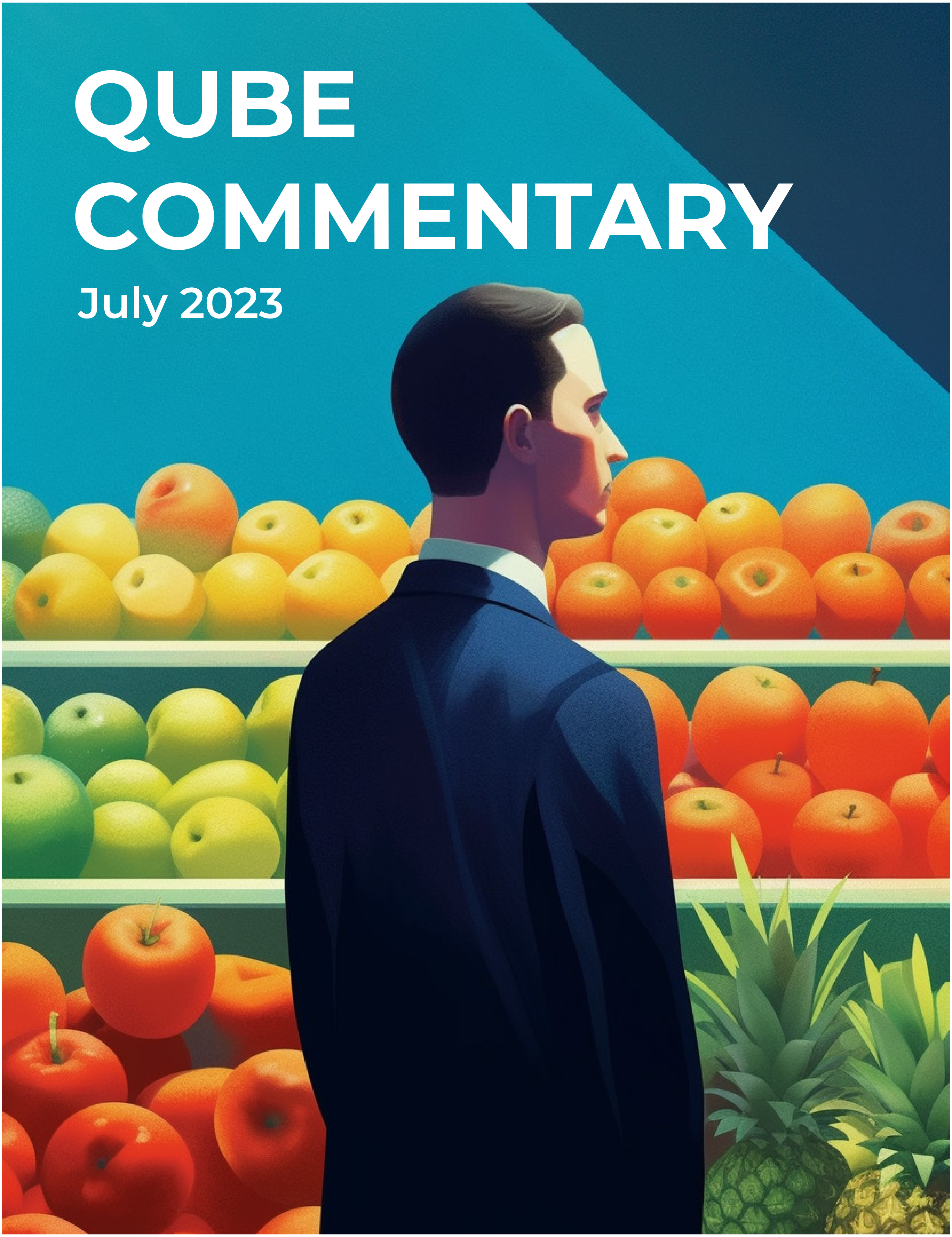
QUBE COMMENTARY

July 2023



CONTENTS

2 Letter From the Editor

4 Glossary

6 Kaleo Portfolios

7 Picking the Right Ingredients

13 Capturing Global Exposure

17 How to Lose $1.5M

22 The Birdwatcher’s Guide to Dividends

27 Stock Spotlight: HCA Healthcare Inc.

30 Stock Spotlight: Generac

35 Qube Insights: Equity Research Traffic Lights

50 How We Keep in Touch

Page 7

Page 17

Page 30

Letter From the Editor
Maxine Brodeur

Our Semi-Annual Commentary is always an opportunity for us to reflect on the goings-on of the previous six months. We're happy to report that Qube has achieved some significant milestones since January.

First and foremost, Qube's Owner and Senior Portfolio Manager, Ian Quigley, has recently obtained his CBV (Chartered Business Valuator) designation. This accomplishment marks a new chapter in Qube's offerings; we now offer private valuations for those looking to tell their business's story from a financial perspective. This new service underscores our commitment to Qube's continuing evolution.

We also want to share that Mackenzie, formerly our Lead Student Equity Analyst, has successfully "graduated" from the Qube Analyst Program and joined us as a full-time employee. Typically in the summer, we bid farewell to some of our student equity analysts, who take on exciting new positions across Canada upon graduation. However, Mackenzie's work and leadership capabilities proved to be exceptional. He now joins Karlen Daschuk as a Planning Analyst, working on the skills necessary to join our Portfolio Management Team.

Further, as we embrace growth and change, we are thrilled to welcome new students to our team. Their fresh perspectives and willingness to learn will undoubtedly contribute to our collective expertise and benefit our investment strategies.

There are also changes afoot with the more seasoned staff, as Michael Baker will assume the role of Chief Compliance Officer for Qube, relinquishing Ian of the position. This change will take effect on August 1st. The CCO is responsible for managing Qube's day-to-day compliance with securities law. With Michael taking on this responsibility, Ian will be able to dedicate more time mentoring and overseeing the research program.

Clients will find that this edition of Qube's Commentary seeks to elucidate our investing philosophy: the inner workings of why we take positions in certain companies and not others. Starting us off, Michael explains how having a few carefully selected companies in the Kaleo portfolios is better than a menagerie of showy stocks.

Then, we discuss a rampant mischaracterization when it comes to geographic diversification. Additionally, our team provides you with instruction on how to potentially lose out on over a million dollars. (We would not recommend this!) And we go on to analyze the pitfalls of investing solely in high-dividend-yielding companies.

Finally, we have two stock spotlights which outline companies currently included in our Kaleo portfolios: HCA Healthcare and Generac. Both have long-term growth potential and fit the proprietary metrics we use to find undervalued companies for our clients.

The Qube team thanks you for your continued trust and confidence. We remain committed to navigating the markets with prudence, leveraging our expertise, and providing you with an unparalleled client experience. Our dedication to making your wealth matter, coupled with the progress we've experienced so far in 2023, sets the stage for a future that we can be comfortably optimistic about.

Glossary of Terms

One of our core tenets that allows us to make your wealth matter is **financial literacy.** Throughout this commentary, you may run across a particular word or phrase you're not familiar with. Don't worry; we have you covered.

basis points
-Equal to 1/100 of one percent, often used as a more precise unit of measurement in the financial industry

benchmark
-The standard against which portfolio managers compare their portfolio's performance

compound annual growth rate (CAGR)
-An investment's annual growth rate over a period longer than one year, used for accuracy when calculating potential returns

constant currency basis
-Wherein exchange rates are used to account for fluctuations in currency values when reporting financial figures

dividend
-The distribution of profits from a company to its shareholders

free cash flow
-The remaining cash available after a business has paid its typical operating expenses and reinvestment needs

index
-A portfolio of stock or bonds created as a reference to a broader financial market or a region's economy

index fund

-A portfolio of stocks or bonds made practical, which allows investors to buy a reference index

mental accounting

-The subjective attribution of value to different sums of money, frequently driven by various cognitive and emotional biases

multinationals

-A corporation which operates in several countries

signalling theory

-The idea that an asymmetry in the availability of information between a company's management and its shareholders exists and may lead to mispricing by investors

If what you read in the following articles sparks a thirst for further insight into our world, visit the Qub[Ed] library on our website. Launched in February 2022, it's an ever-growing collection of financial resources written by our expert team.

Kaleo Portfolios: Past Performance

	YTD	2022	3-Year	5-Year	Inception
Kaleo A	16.7%	-15.7%	12.1%	10.8%	12.3%
Kaleo Full	14.1%	-17.1%	9.3%	9.2%	12.3%
MCSI World Index	12.5%	-12.4%	11.1%	9.2%	11.5%
S&P TSX	5.7%	-5.8%	12.4%	7.6%	6.4%
50% TSX / 50% MSCI World Kaleo Benchmark	9.1%	-9.1%	11.8%	8.4%	8.9%

Note: All returns reported above for periods in excess of 1-year are reported as annualized returns. Composite returns represent past performance and should not to be treated as an indication of future results. All returns are reported as net of trading costs, but do not account for management expense fees. All rates reported above correspond to the period ending June 30, 2023. Kaleo inception of January 2011.

Kaleo

Kaleo consists of a portfolio of stocks that are selected using an investment approach that applies company-specific fundamental analysis, and strategic macroeconomic positioning. The model invests in a mix of both domestic and international equities, with geographic weighting subject to change intermittently.

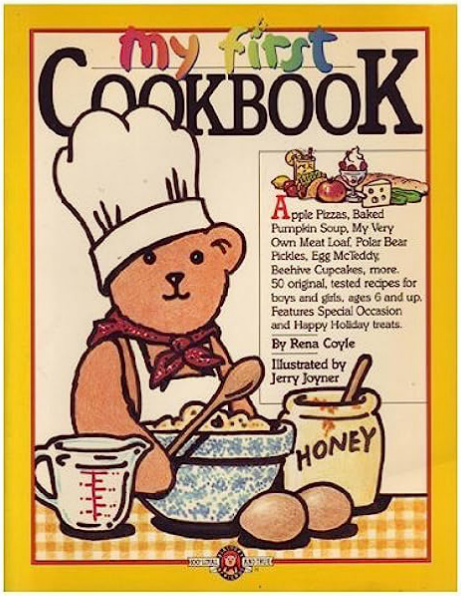
For clients with invested funds in the $250K to $1M range, we offer a subset—called Kaleo A—of our Kaleo model, consisting of fewer stocks in order to reduce brokerage fees. Returns since inception for both Kaleo Full and Kaleo A are similar by design.

We currently aim to hold a stock for 3-5 years in our Kaleo models. This means that we have an average portfolio turnover of 25%.

We purposefully chose our benchmark to more accurately represent the broad geographic diversification of our holdings in Kaleo. Our benchmark for Kaleo is defined as 50% of the MSCI World Total Return Index and 50% of the S&P TSX Total Return Index.

Picking the Right Ingredients

By Michael Baker, MBA



I have always had a passion for cooking and food. Food is universal; it's a medium over which memories are made and relationships formed. I remember the first cookbook I received as a child, conveniently named *My First Cookbook* by Rena Coyle and Jerry Joyner. The recipes were simple but delicious.

As I became more interested in cooking, I stumbled upon the Food Network, Bon Appétit, and Julia Child. The recipes became more time-consuming; the ingredients harder to source; and, ostensibly, the outcomes more worthwhile.

Yet sometimes, it seems a recipe is complex just for the sake of it. Did I need to set a dish with agar? Or would cornstarch work? Will my palette notice the difference between saffron and paprika or prickly pear and watermelon? Often, what is perceived as "gourmet" may not necessarily add to a meal. It's an excuse to make a splash with a recipe or charge more on a menu.

Back to Basics

When I watched the Netflix series "Chef's Table," I was introduced to Massimo Bottura: the chef and owner of Osteria Francescana, the two-time winner of the best restaurant in the world. The success of his recipes often came down to execution rather than extravagant ingredients. Bottura took the foods he grew up with in Italy and ensured they were done to perfection.

Although his restaurant still has some meals with unique ingredients, such as foie gras and truffles, his most famous recipes are simple, including "Five Ages of Parmigiano Reggiano" and "Oops! I Dropped the Lemon Tart." By transforming everyday ingredients into world-renowned dishes, Bottura demonstrates that sometimes simple is better—the philosophy we also use to manage the Kaleo portfolios.

Setting the Table

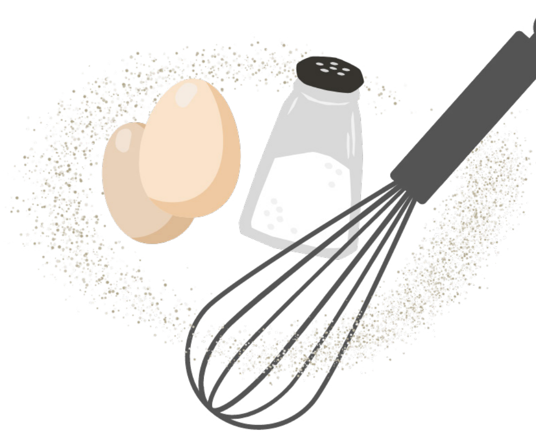
In developing our in-house research program, we aim to hold 40 companies (35 currently) that we believe the market has mispriced. Since becoming a portfolio manager in 2011, Qube has purchased 121 unique companies. We intend to hold companies for 3-5 years when buying them. It is the length of time we feel it takes for our investment thesis to play out.

When deciding to buy or sell, we pick new ingredients for Kaleo. Despite our ideal holding period, we know that sometimes the market doesn't agree. For clients who have been with us for a while, you may have noticed that we've bought and sold a few companies multiple times—General Mills and Disney, for example. Some companies have been in Kaleo for over five years (Microsoft), and some for less than a year, like eBay or Zoetis.

The truth is that we can't predict with certainty how the markets will react or how companies will change and evolve. Despite our best intentions, sometimes we pick the wrong ingredients. As the chef building a portfolio, it's a balance of selecting the right ingredients that, when combined, are enough to meet the criteria of a well-diversified portfolio.

All in the Technique

Eggs, flour, water, and salt can be combined in countless permutations: crepes, bread, pastry, etc. Quality investing combines ingredients to make the best purchase or sale decision possible with the information at hand. This is our Information Ratio (a measure of active management performance) in portfolio science, which is a function of the Information Coefficient (skill in predicting results) multiplied by the square root of breadth (the number of decisions). We aim to make the best portfolio possible with the least ingredients.



For us and other investors, that means assessing company financials, quarterly earnings releases, and external data about the industry. With the same information, we may differ from the market in believing a company is over or undervalued. We want this because stocks and markets would be efficient if everyone agreed on a stock price. Yet we see many instances where they are not.

The last few years have been marked by economic uncertainty leading to heightened market volatility. Companies and the market, in general, have swung wildly based on headlines rather than subtly responding to nuance.

Consider Netflix. In October 2021, while much of the world was in lockdown at home, the stock reached a high of $690/share. Then, by June 2022, it had cratered to $174/share. In the time between the high and low, did Netflix materially change as a company? No. But news of slowing subscriber growth and password sharing restrictions resulted in the stock price crashing.

Now a year later, in June 2023, the stock is back to around $400/share. The market realized it likely oversold the bad news. On its way to $690/share, Netflix was like the latest superfood making the rounds on social media. We all know those trendy ingredients like avocados, quinoa, and sourdough starters. They become the focus of every recipe then, only months later, are left spoiled in the back of the fridge.

Twice now, Qube has looked at Netflix for inclusion in Kaleo. The first time was in May 2021 with a then-price of $487/share. At the time, we believed that the growth rate was unsustainable; Netflix was losing market share due to competitors entering the streaming space, and their profitability was declining as they were spending more and more on content to attract subscribers. Ultimately, we passed on the investment. Despite our opinion, for the rest of 2021, it kept growing to $690/share.

Some investors bought the stock, presumably seing something we didn't. However, in retrospect, we can now see we were right. But there were times when the analyst who looked at the company brought up Netflix as a possibility we should revisit. In 2022, we did review Netflix again after its share price crashed, and there was only a soft recovery. In our opinion, the intrinsic value came in at $393/share.

As a portfolio manager, we aim for a high information coefficient. (This coefficient is a measure of how close our predicted return is to the actual on a scale of -1 to 1.) We didn't buy Netflix because there was too much uncertainty in forecasting how the password sharing crackdown, international expansion, and the increased focus on other market segments would impact the company.

Ultimately, we needed to include too many exotic metrics for Netflix to work in our analysis. Instead, in 2022, we chose different tech companies for inclusion in Kaleo, namely Amazon and Alphabet.

Limiting our pantry to 40 equity positions requires a strong conviction on each buy. We could hold many more positions, but as we add more and more companies to the portfolio, we begin to lose out on meaningful diversification gains. When you make a recipe with limited ingredients, each one perceptibly adds to the dish. However, the more you add, the less each one matters.

Conversely, it remains essential to have enough ingredients. A one-stock portfolio isn't a portfolio; rather, it's a high-risk investment. Your investment could bring financial ruin if that one position is the wrong choice. Portfolio management remains a trade-off in balancing conviction with risk management objectives.

The research into each company is cumbersome by design; it takes time to perfect our recipe. Sometimes, these carefully selected ingredients work out great, like PayPal (595% holding period return) or Accenture (455% holding period return). Or they're busts, like BlackBerry (-44% holding period return) and Avon (-40% holding period return). The issue with overcrowding a gourmet recipe is that it doesn't always add to returns or improve a portfolio.

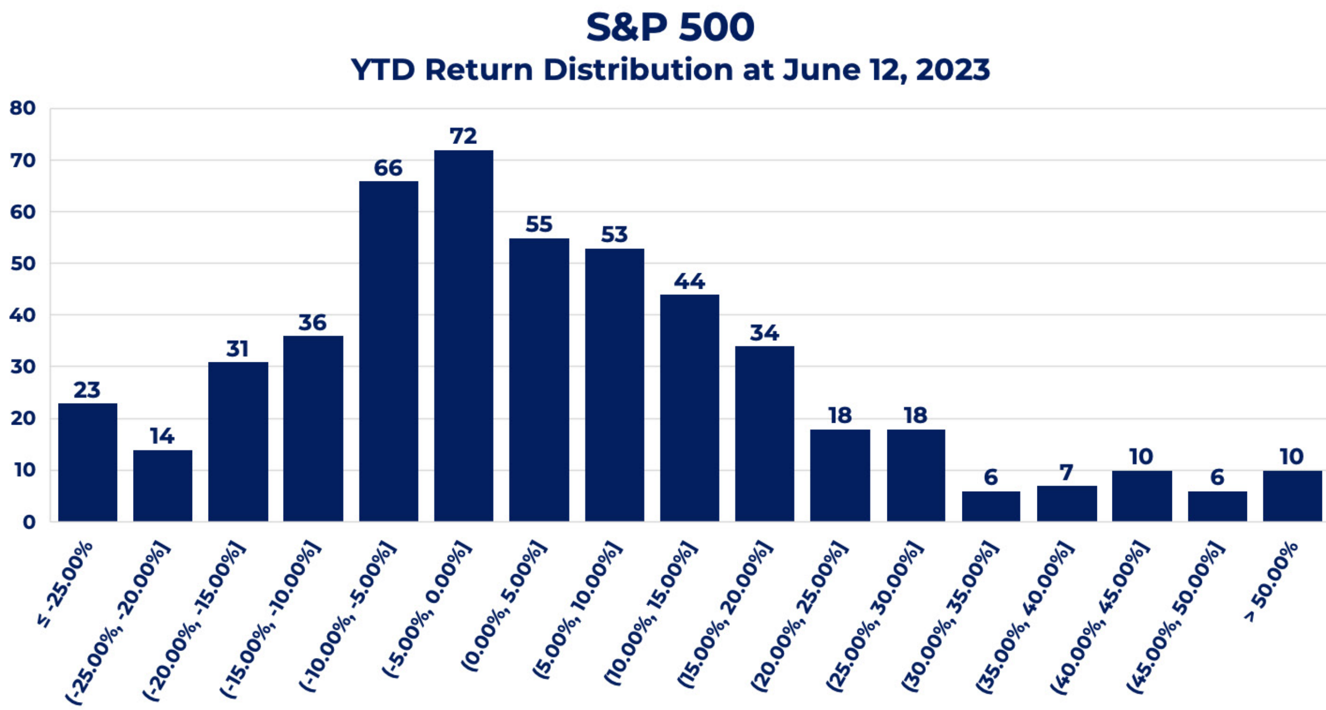
Feature Dish

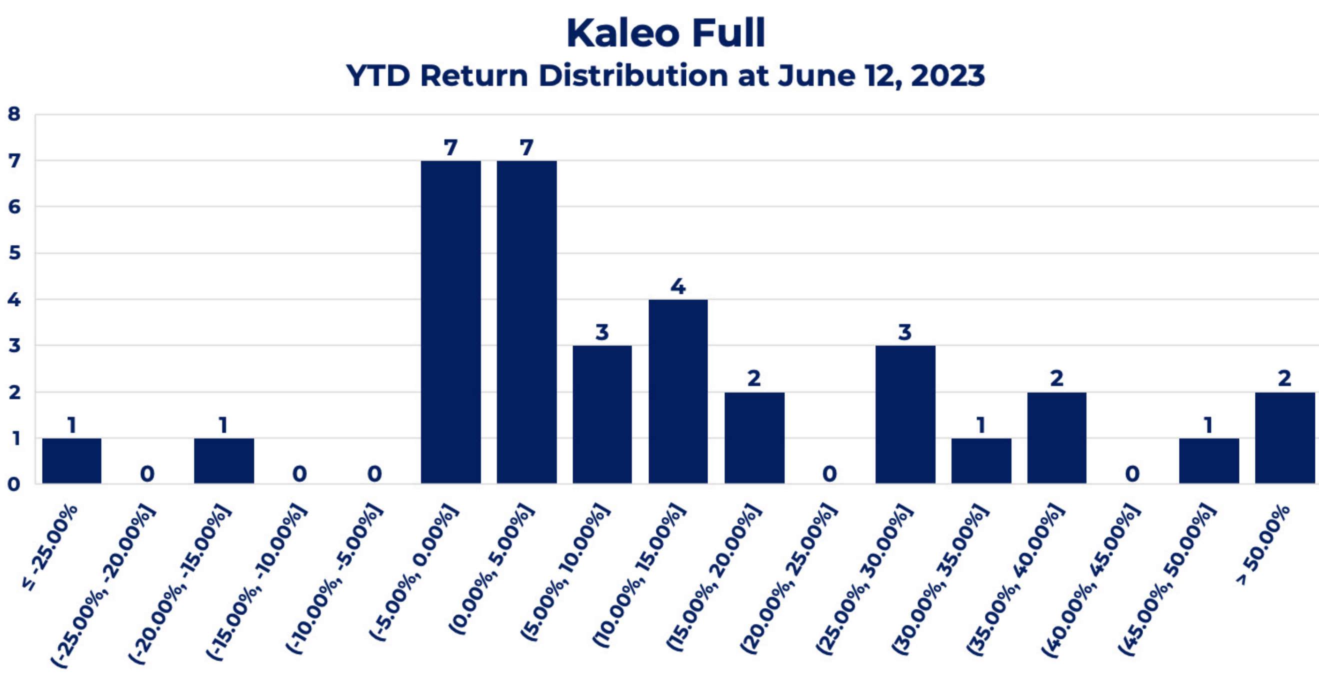
As of June 12, 2023, the S&P 500's year-to-date performance was 14.35%. Of the 503 companies in the index (three were removed and added), 45.9% are down (25.7% for Kaleo), and only 23.6% had returns above the average (31.4% for Kaleo). This means 76.4% of companies are pulling down returns this year. Of the companies bringing up the average, two of the top 5 performers are in Kaleo (Meta at number two and Advanced Micro Devices at number four).

Unsurprisingly, holding the right companies drives portfolio returns. We're seeking to hold these companies in our actively managed portfolio. Kaleo Full has been beating our benchmark by 500 **basis points** this year and 340 since 2011.

We pick stocks that we perceive have a good chance of providing positive returns for clients. We want more of the companies that bring up returns rather than ones that drag them down.

Despite having more positives than negatives this year, performance is subject to change, as are the moods of markets. Kaleo has been fortunate in that this year's worst performer is Hanesbrands at -29.57%. That performance is still better than 14 S&P 500 positions. The next worst is Tyson Foods at -20.76%, faring better than 31 S&P 500 holdings. And Kaleo's third worst is Empire Company at -5.01%, doing better than 170 of the S&P 500's positions. Most of our positions in 2023 have been helping to drive performance.





With Kaleo, in the charts above, we're skewed more to positive returns at 2.18 than the S&P 500's 1.93, with our average return being 14.57% against 3.81%. There are ten of our positions driving the average up.

	S&P 500	Kaleo Full
Average	3.81%	14.57%
Median	0.78%	7.05%
SD	21.25%	28.05%
Skew	1.93	2.18
Kurtosis	10.13	6.14

Figure 1— Kaleo Full against the S&P 500 from January 3 to June 12, 2023

The Right Ingredient

The fact that a few well-selected companies can drive returns and beat a benchmark is eminent in a review of the Nifty Fifty. As history can teach us, sometimes having the right ingredient truly does make the dish.

In the 1970s, there was a group of stocks called the Nifty Fifty. Although there was no formalized list of stocks comprising the list, the premise was to create a portfolio of 50 buy-and-hold-for-life stocks. The belief being that they were worth buying, no matter their valuation. Two institutional managers, Morgan Guaranty Trust and Kidder Peabody, published their proposed Nifty Fifty. For example, both lists included Xerox, which traded at 49X earnings at the time.

As with many slick investment ideas, the list was more hype than substance. Of the 24 companies on both managers' lists between 1972 and December 2001, their average return was 9.58% compared to the S&P's 12.01%. On Peabody's list, only ten companies managed to beat the S&P 500 (with Walmart doing exceptionally so at an average of 29.96%). If all other stocks on the list had gone to zero, Walmart's compounding alone, as 2% of the portfolio, would have outperformed the S&P 500, growing $2 to $5,191 compared to the S&P 500 growing $100 to $3,004.

Sometimes conviction in the correct position is all that matters. Part of our process is re-rating our portfolio companies semi-annually to keep our conviction in check. We want to ensure that a company still has a place in the portfolio with its perceived mispriced upside.

Order Up

When we're cooking with 40 ingredients, it takes a lot to replace one in our pantry. The research team puts in an average of 40-50 hours before presenting it to Qube's steering committee, who then vote on its inclusion in Kaleo. For us, research is the test kitchen. There are many ingredients and recipes to experiment with, but only a few will ever be enjoyed by diners.

We could toss in many companies, growing Kaleo into an elaborate banquet. But then we'd be going beyond nourishment, becoming performative. We'd be sacrificing our craft and, likely, our clients' returns. If the best chefs in the world can make wonders from a few simple ingredients, there is no reason we can't continue to drive returns for clients with 40 great companies.

Capturing Global Exposure

By Ty Adolph

Building a portfolio is never easy. There's a reason Qube employs in-house analysts who spend most of their time looking for new opportunities. It was even harder before the 1970s—when data was found in libraries and spoken across trading room floors in New York. But, in 1979, John Bogle released the Vanguard 500, largely credited as the first **index fund.**

Since then, the S&P 500 index fund has become one of the most actively traded index funds.[1] Index funds were widely adopted by retail investors due to the low fees and accompanying passive investment approach. Many investors think, "I can invest and get exposure to the U.S. economy and pay low fees—all with no active management?"

Well, my answer would be a resounding: "Yes, but no."

A Misleading Characterization

First, consider that the S&P 500 is created based on where the company is headquartered instead of where they are conducting business. A publicly traded company needs to be based in the United States to be included in the S&P 500, irrespective of where they generate their revenues. From a diversification/risk perspective, it shouldn't matter where a company's headquarters are, should it? An investor should be concerned about the locations of operations and sales because that is where the majority of the risk lies.

For example, Qualcomm Inc. (one of Qube's recent inclusions in the Kaleo portfolios) is considered an American company as it's headquartered in California, but only 3.4% of their revenues are generated in the United States. In reality, the majority of the company's revenues are generated in China. There is a strong argument to be made that Qualcomm has more exposure to China's economy than the U.S. economy.

Another example: Apple currently has the largest market cap of companies within the S&P 500, but only two-fifths of their revenues are generated within the United States. This poses quite a large problem when an investor is trying to exclude or limit international exposure. As of October 2022, approximately 40% of S&P 500 revenues are generated

[1] Despite its name, the S&P 500 actually holds 503 of the largest publicly traded companies in the United States.

outside of the U.S.[2]

A recent report called "Geographic Investing: Stock Return Indexes Based on Company Operations" written by Bernard Dumas, Tymur Gabuniya, and Richard Marston addresses the same problem we have encountered. The report noted a disconnect between companies held within the S&P 500 and the strength of their relationship to the U.S. economy.

Expectation-Maximization Index

In the paper, stock returns were explained by the risks of the countries of operation, regardless of headquarter location. If a U.S. company primarily operates in Brazil, why are they not categorized as a Brazilian firm? The current flaws and misrepresentation of exposure within traditional index funds are more accurately presented through what is called the expectation-maximization index. The EM index incorporates all information from revenues and stock returns, presenting several benefits compared to the widely adopted traditional index.

For starters, because it is based solely on where revenues are generated, the EM index has the advantage of increased accuracy in reflecting country-specific business risks.

Consider a U.S. company with most of its operations in Japan. If a tsunami hits Japan and wipes out several production facilities, the "American" company's stock would be negatively affected, despite the disaster occurring outside the States. The U.S. company might be be categorized as having Japanese exposure within the EM index, considering its heavy reliance on Japanese operations. In this way, if a country has high growth prospects and high institutional risk, an investor can obtain exposure by investing in a company operating within one country but headquartered in another.

Traditional indexes commonly fail to account for how business activity (selling goods) affects multiple countries' indexes. The clarity on operations versus headquarters provided by the EM index helps resolve this oversight.

[2] https://www.globalxetfs.com/sector-views-sp-500-sensitivity-to-global-factors/

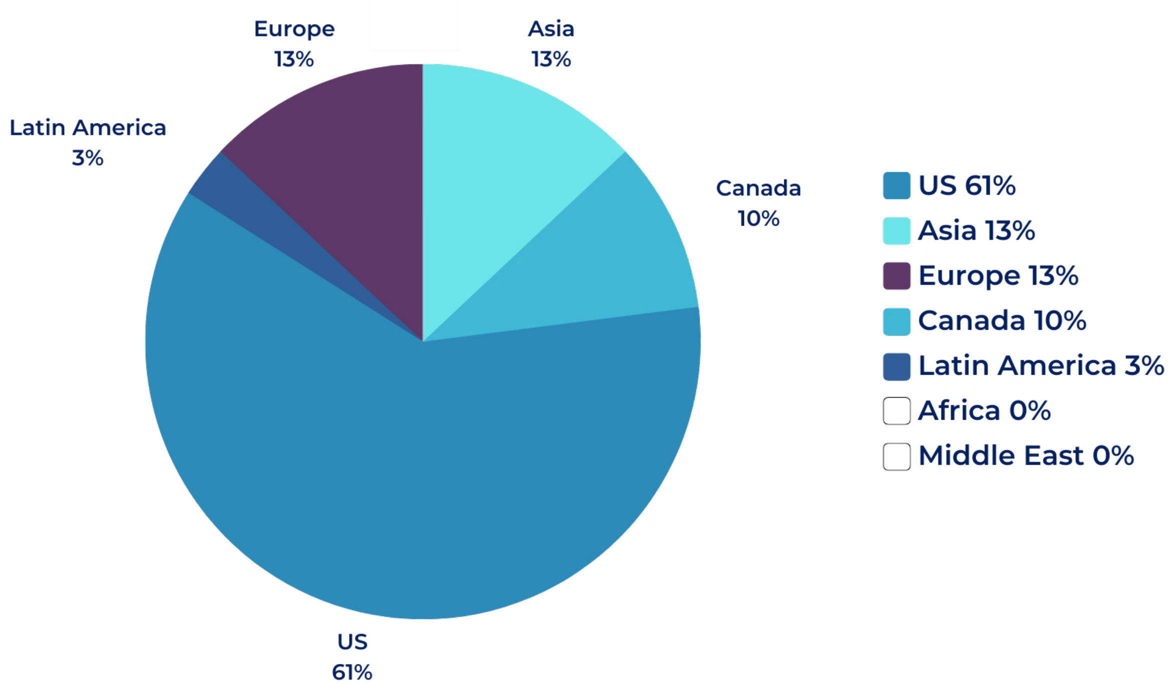
With traditional indexes not accounting for where revenue is generated, a portfolio's typically reported geographic exposure differs greatly from its actual exposure.

Dumas, Gabuniya, and Marston ran a regression on the S&P 500 and the FTSE 100 in their research to test how the EM may solve this dilemma. They found that the EM index reflects 94% of the geographical revenue exposures, whereas traditional indexes only explain 73% of revenues. This highlights the success of creating an index such as EM to capture foreign influences on stock returns accurately. The EM foreign country index better explains company revenues than the traditional foreign index.

How Kaleo Defines Diversification

Qube uses a 50% MSCI World Index and 50% S&P TSX Composite Index **benchmark.** Why would we use that as a benchmark when roughly 90% of Kaleo consists of American companies? As a matter of fact, Qube has been following a similar approach to an EM index in defining diversification for years. Qube's diversification is based on where revenues are generated instead of a company's country of origin.

Kaleo Full's Geographic Exposure Based on Revenues



The MSCI World Index represents large and mid-cap companies within 23 developed countries across the world. This makes sense as a benchmark when looking at Kaleo's geographic revenue dispersion.

Qube also bases their benchmark from 50% of Canada's market: S&P TSX. Qube aims to be reflective of how most Canadians invest, which is achieved by including the S&P TSX in our benchmark. Kaleo's current holdings are consistent with a benchmark of roughly 90% S&P 500 and 10% S&P TSX.

Beyond the S&P 500

When an investor is counting on the strength of the U.S. economy, investing in the S&P 500 is not the most relevant play. Again, with about 40% of the S&P 500 revenues generated internationally, one is exposed to more than just the U.S. economy. The increasing role of foreign **multinationals** in other countries emphasizes the importance of indexes which accurately capture this activity. With a steady decline in the percentage of domestic firms selling within their country of origin, the shortcomings of traditional indexes should continue to concern investors.

How to Lose $1.5M

By Karlen Daschuk

Those familiar with the butterfly effect are aware that a few good (or bad) decisions today can make a tremendous impact later in life. For instance, buying Microsoft (MSFT) at $0.10 a share in March of 1986 would have netted you a 333,760% return by June 1, 2023. Meanwhile, buying Koala Corporation (KARE) in September 2000 would have seen you net a -99.99% return by June 1, 2023.

But in a world where winning lottery tickets and time machines are few and far between, perhaps some of our focus should be placed on avoiding those losing scenarios. This is easier said than done, considering our brains are hardwired to feel far more emotion toward pain than pleasure. However, if we know what fallacies we may fall victim to, maybe we can find a way to overcome them.

Prospect Theory and Market Mania

This predisposition towards fearing pain more than seeking joy is often referred to as **loss aversion.** Coined in 1979 by Nobel Prize-winning economist Daniel Kahneman, this theory suggests that people have asymmetrical feelings towards losses and gains. More simply, losses are twice as painful as the pleasure of an equivalent gain. Most people would rather avoid a $1,000 loss than take a chance at a $1,000 gain.

We see this behaviour emerge in all aspects of life, but especially during market downturns. At the first sign of red, like lemmings to a cliff, markets turn to mania, and a mass of investors rush to sell their holdings to prevent any further losses. As you would expect, this can push markets even further down, causing a feedback loop. But eventually, rationality returns, and the market corrects itself—until the cycle repeats in another few years.

The emotions felt by a person trying to avoid losses are abstract. However, the financial impact of habitual panic selling is concrete and scrutable.

And so, we ask:

What would a skittish investor's portfolio look like compared to one of a steadfast investor after 60 years in the market?

The Verage Twins

Let's explore the tale of twins Alfred and Suban Verage, born in 1945 in post-WWII Canada. Growing up in the echoes of the Great Depression and a post-war boom, they were raised on bootstraps, opportunity, and frugality. They heard countless stories from their parents about Depression-era life and the markets, yet each of the brothers took different lessons from these cautionary tales.

In 1965, at the age of 20, each had built up a sizable bank balance and was ready to start investing. Each of the twins went to a broker and invested $10,000 in the U.S. stock market, vowing to contribute $200 every single month until the day they retired in 2010.

Alfred had a career as a railway conductor: straight and narrow, always focused on what was ahead. With few people to chat with in his line of work, he rarely heard about the stock market.

Meanwhile, Suban (Suba, to his friends) was a taxi driver, weaving in and out of dense traffic and constantly chatting with his passengers. Highly charismatic—and perhaps too trusting of strangers' sentiments—Suba had his finger on the pulse of the market.

Where Alfred rode the ups and downs of the stock market (certain it would eventually recover), his brother was quite the opposite. Suba would sell his stocks the day after a market downturn and move to the sidelines until things smoothed out, for fear of losing the shirt off his back. Thankfully, there were only 20 truly grievous market days: days where returns were -5.5% or worse.

Fast Forward to 2023

Now octogenarians, Alfred and Suba regularly meet for coffee. On one of these occasions, they got on the topic of their retirement accounts. Suba was aghast to find out his brother—with his similar wage and identical contributions over the exact same timeframe—was $1.5 million richer!

But this difference in retirement savings wasn't the result of a lottery ticket, different spending habits, or a really hot stock tip. It came down to how Alfred responded to market downturns. The twins reminisced over the 10, 20, and 40 worst days in the market over the last six decades.

Alfred suggested to his brother that they trade passwords to each other's trading accounts and explore the differences. After a few days of pouring over statements and transaction histories, the brothers met up again to compare notes.

> *Reading from a small notebook, Alfred began. "In essence, every time the market hit a bump, you moved to cash and locked in your losses. Sure, there were **20 – 40 bad days,** but you ended up missing **73 – 292 trading days** by staying on the sidelines for months."*
>
> *Suba pulled a carefully folded piece of paper from his pocket. "But there've been **14,703 trading days** since we started. What's the big deal in waiting for things to cool down on less than 1% of days? No way those days made a substantial difference."*
>
> *"Would you believe me if I said that **22 of the best days** happened **within 15 days** of the **40 worst days?** Suba, by missing those phenomenal days, your annualized returns were **0.58% to 1.30% worse."***
>
> *"You're saying my returns being 1.3% lower per year means I have **$1.47M** less than you? Twenty-two days made that much of a difference? Seriously?"*

Alfred closed his notebook. "Seriously."

Assumptions

- Each scenario has a starting balance of $10,000 with a $200 contribution made on the first trading day of every month;
- Projections use the historical USD return data of the S&P 500 from 1965-01-04 until 2023-01-04;
- For the 10, 20, and 40 worst days, we assume the investor sells their positions and moves entirely to cash at the end-of-day price, and re-enters the market on the 1st trading day of the month following the sale.

	Ending Account Balance	Annualized Returns	Dollar Loss Attributed to Panic Selling	Annualized Percentage Loss Attributed to Panic Selling	Days out of the Market
Buy & Hold	$ 2,939,438.25	10.23%	$ -	0.00%	0
10-Worst Days	$ 2,158,909.93	9.65%	$ (780,528.32)	-0.58%	73
20-Worst Days	$ 1,469,599.58	8.93%	$ (1,469,838.67)	-1.30%	175
40-Worst Days	$ 2,048,198.71	9.55%	$ (891,239.53)	-0.68%	292

	Best Days	Return	Worst Days	Return		Best Days	Return	Worst Days	Return
1	2008-10-13	11.58%	1987-10-19	-20.47%	**21**	1998-09-08	5.09%	2009-01-20	-5.28%
2	2008-10-28	10.79%	2020-03-16	-11.98%	**22**	1970-05-27	5.02%	2008-11-05	-5.27%
3	2020-03-24	9.38%	2020-03-12	-9.51%	**23**	2001-01-03	5.01%	2008-11-12	-5.19%
4	2020-03-13	9.29%	2008-10-15	-9.03%	**24**	2018-12-26	4.96%	2020-03-18	-5.18%
5	1987-10-21	9.10%	2008-12-01	-8.93%	**25**	2020-03-10	4.94%	1987-10-16	-5.16%
6	2009-03-23	7.08%	2008-09-29	-8.81%	**26**	1987-10-29	4.93%	2008-11-06	-5.03%
7	2020-04-06	7.03%	1987-10-26	-8.28%	**27**	2008-10-20	4.77%	2001-09-17	-4.92%
8	2008-11-13	6.92%	2008-10-09	-7.62%	**28**	2000-03-16	4.76%	2009-02-10	-4.91%
9	2008-11-24	6.47%	2020-03-09	-7.60%	**29**	1982-08-17	4.76%	2020-03-11	-4.89%
10	2009-03-10	6.37%	1997-10-27	-6.87%	**30**	2011-08-09	4.74%	1986-09-11	-4.81%
11	2008-11-21	6.32%	1998-08-31	-6.80%	**31**	2002-10-15	4.73%	2011-08-04	-4.78%
12	2020-03-26	6.24%	1988-01-08	-6.77%	**32**	2011-08-11	4.63%	2008-09-17	-4.71%
13	2020-03-17	6.00%	2008-11-20	-6.71%	**33**	2020-03-02	4.60%	2008-09-15	-4.71%
14	2002-07-24	5.73%	2011-08-08	-6.66%	**34**	1974-10-09	4.60%	2009-03-02	-4.66%
15	2022-11-10	5.54%	1989-10-13	-6.12%	**35**	2010-05-10	4.40%	2009-02-17	-4.56%
16	2008-09-30	5.42%	2008-11-19	-6.12%	**36**	2001-04-05	4.37%	2011-08-18	-4.46%
17	2002-07-29	5.41%	2008-10-22	-6.10%	**37**	2009-01-21	4.35%	2020-02-27	-4.42%
18	1987-10-20	5.33%	2020-06-11	-5.89%	**38**	2008-09-18	4.33%	2011-08-10	-4.42%
19	2008-12-16	5.14%	2000-04-14	-5.83%	**39**	2011-11-30	4.33%	2020-04-01	-4.41%
20	1997-10-28	5.12%	2008-10-07	-5.74%	**40**	2008-10-16	4.25%	1988-04-14	-4.36%

nth Best Day	nth Day Return	Ending Account Balance	Annualized Return	Dollar Loss Attributed to Missing the Best n Days	Annualized Percentage Loss Attributed to Missing the Best n Days
0		$ 2,939,438.25	10.23%	$ -	0.00%
1	11.58%	$ 2,635,705.51	10.03%	$ (303,732.74)	-0.21%
2	10.79%	$ 2,380,278.74	9.83%	$ (559,159.51)	-0.40%
3	9.38%	$ 2,176,100.18	9.67%	$ (763,338.07)	-0.57%
4	9.29%	$ 1,991,177.08	9.50%	$ (948,261.17)	-0.73%
5	9.10%	$ 1,845,063.03	9.36%	$ (1,094,375.22)	-0.88%
6	7.08%	$ 1,723,569.96	9.23%	$ (1,215,868.29)	-1.00%
7	7.03%	$ 1,610,314.42	9.10%	$ (1,329,123.83)	-1.13%
8	6.92%	$ 1,506,665.22	8.98%	$ (1,432,773.03)	-1.25%
9	6.47%	$ 1,415,632.15	8.86%	$ (1,523,806.10)	-1.37%
10	6.37%	$ 1,331,268.38	8.75%	$ (1,608,169.87)	-1.49%

The Best of Days

As a butterfly flaps its wings and changes everything, let's rewind the lives of the Verage twins to see how the best days in the market would impact their portfolios.

Although not logical, assume in this version of the universe that Suba is now one of the unluckiest people in the world. This time, he isn't selling right after a bad day in the market and sitting on the sidelines. Worse, he has the supernatural ability to sell everything the morning of the market's best days, miss the run-up, and then re-invest in the market the following morning.

Based on the previous charts, if Suba misses even just the **5 best days** in the market, he would end up **$1,094,375 poorer** at the end of 60 years! The more days he misses, the worse off he becomes.

By choosing to sideline themself following market volatility, an investor makes two things certain:

1. Their losses are locked in.
2. They are more likely to miss out on a rebounding correction than an investor who held out.

The long-term benefits of buying and holding are the sum of irregular great days, frequent average days, and occasional bad days. Although you can't control when market losses happen, you can control how you react to them. If you are going to make behavioural mistakes, it's far better to err on the side of optimism and indifference, rather than pessimism.

The Birdwatcher's Guide to Dividends

By Thomas Channon

In 600 BC, a Greek storyteller named Aesop unknowingly distilled the core principles of investing into a simple fable: "A bird in the hand is worth two in the bush." It's an overly simplistic view, maybe, but a great place to start.

As investors, we have to ask… When do we think the birds will come out of the bush? How many birds do we think are in the bush? How uncertain are we of these answers? And if we could answer all these questions with absolute certainty, what would we answer?

Responsibility Takes Flight

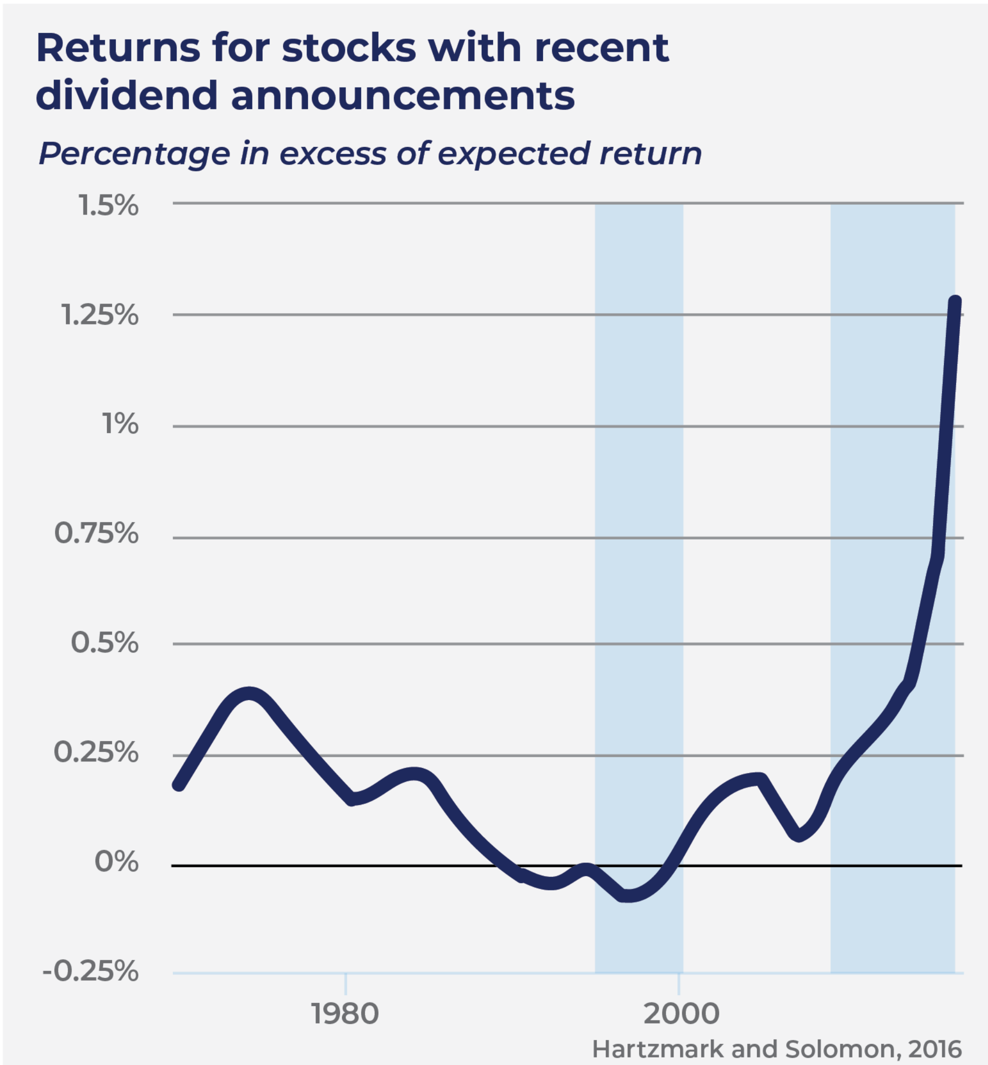
A company's decision-makers—in a way, investors themselves—abide by Aesop's fable when deciding how to allocate shareholders' capital. They strive to allocate funds in a way that will generate a positive return and grow the business. Ideally, they would locate a bush with as many birds as possible, with the greatest amount of certainty. Their budgeting decisions are a function of a trade-off between risk and return.

The weight of responsibility is made simpler when a **dividend** is paid out. Decision-makers no longer worry about the allocation of those funds. It becomes the investor's duty to take up the search for ways to earn further positive returns. And the investors are less equipped to handle this venture, as they lack the capital and resources of a typical mid-cap company.

Therefore, there are pitfalls to chasing high dividend yields. Dividends must be sustainable, and capital allocation must be prudent in order to truly maximize returns.

Deceptive Plumage

In the markets, dividends are not taken at face value. Investors mistake dividends as the markings of a firm's future profitability. This is known as **signalling theory.** The markets assume that managers are prudent enough to set the dividend at a level that is sustainable into the future. Therefore, dividend increases are viewed as validation of the sustainability of the current level of earnings. Over time, investors have placed more weight on positive dividend announcements.



Chicago Booth's Samuel Hartzmark and University of Southern California's David H. Solomon coined the term "free dividend fallacy." The researchers described the free dividend fallacy as the tendency for some investors to see a dividend as an income stream wholly separate from the price appreciation of a stock. This is a flawed approach–a misidentification–because, on average, the price of a stock will drop by the amount of the dividend.

Researchers argue another effect of this fallacy is that investors in dividend stocks tend to hold onto their investments for longer. They concluded that this was due to **mental accounting;** these investors did not consider the total return on their holding. They only saw the stock price appreciation (or lack thereof) and decided to keep holding on to their stock until it reached levels of capital appreciation consistent with their other holdings.

Clipped Wings

Some believe that the dividend is a way of keeping a leash on managers who are too frivolous with their capital allocation. Renowned economist Michael Jensen makes a similar argument. According to his free cash flow hypothesis, managers are held to a higher standard of care by larger debt levels, forcing them to make interest and principle payments, hence lowering the amount of free cash flow that is available for abuse by the management. This high debt burden has a similar effect as dividends in reducing free cash available for managers.

The exclusive "dividend aristocrat" club, reserved for companies that have raised their dividend each year for 25 years in a row, can also cause suboptimal managerial decisions. Raising a dividend without the necessary funds to support it can cause detrimental effects. A company's credit rating could be lowered, making it more difficult for them to reinvest in projects that generate a fair return for shareholders.

The ever-common dividend reinvestment program, or DRIP, is also an inefficient use of capital for investors. The transfer of dividends is value for value. The money is transferred from the company's retained earnings account to your investing account.

The problem is because stocks typically trade above book value, any reinvestment is made at a higher multiple, such as two times book value. The return on a dividend reinvestment program is only higher if a company trades at a discount to book value. This is common in businesses that don't generate a return on their capital greater than their cost of capital.

Below, you will find a table showcasing the compounded annual returns over a span of 20 years. These calculations assume that 40% of earnings are paid out and there is a 5% return on capital. The price-to-book ratio reflects the premium at which the company is currently trading in relation to its book value. For instance, a P/B ratio of 2 signifies that the company's equity is trading at twice its book value.

P/B Ratio	Company A DRIP	Company B No Dividends
0.5	6.5%	5%
1	5.0%	5%
2	4.3%	5%
5	3.8%	5%
10	3.7%	5%

As previously mentioned, when a stock is trading above book value, the returns of a dividend reinvestment program lag behind internal reinvestment. This effect becomes particularly pronounced when a 30% tax on dividends is applied.

P/B Ratio	Company A DRIP	Company B No Dividends
0.5	5.6%	5%
1	4.6%	5%
2	4.1%	5%
5	3.7%	5%
10	3.6%	5%

Case Study of a Mockingbird

Dividend yield is calculated by the current annual dividend per share divided by the share price. In many market conditions, but especially in times of low yield on fixed-income products (such as government bonds, corporate bonds, and GICs), investors will flock to stocks that have a high dividend yield.

The danger investors face in chasing the high dividend yield is best demonstrated by Algonquin Power. Algonquin has been the choice of many Canadian investors looking for a business in a stable industry with a high dividend yield.

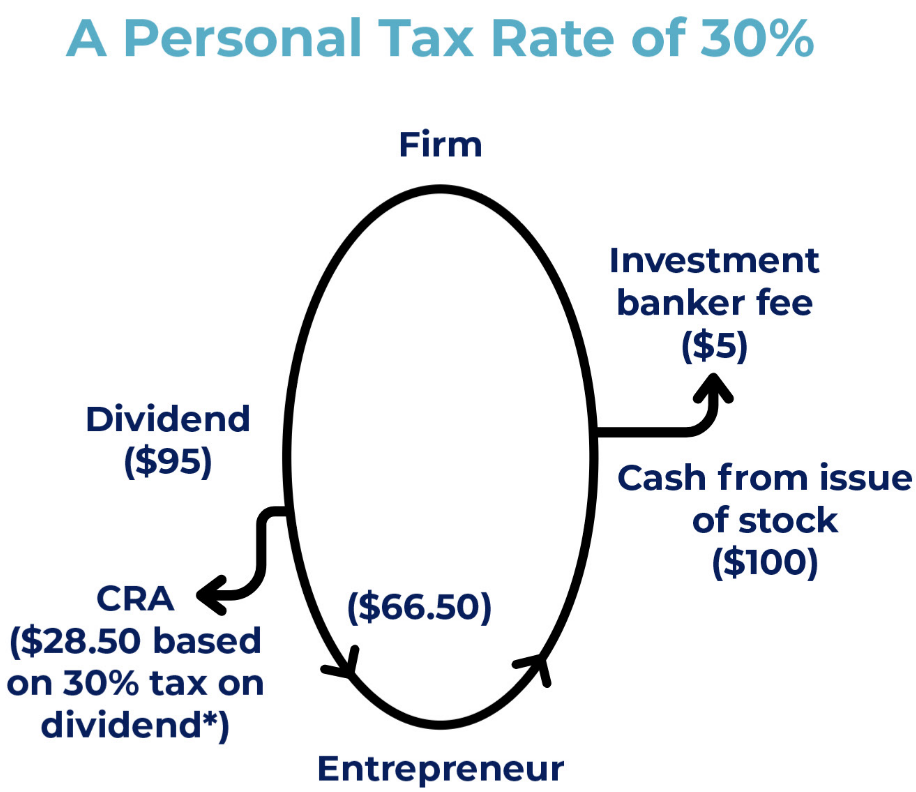
In September 2022, Algonquin Power's investors thought they were buying into one of the most popular dividend stocks on the Toronto Stock Exchange, with over 30 years in business and an exceptionally high dividend yield to boot. Investors were probably also elated to receive the highest regular dividend in Algonquin Power's history.

Unfortunately for them, Algonquin Power lacked the funds for their dividend payout, announcing in January 2023 that their dividend would be cut by 40%.

Diligent investors would likely have been scared off if they noticed that the dividend was being funded by share issuances over the previous couple of years. Since 2011, only two complete fiscal years show that the company's dividend exceeded the amount of share issuances. Algonquin Power's dividend had been—for the most part—completely financed by the capital raised by the issuance of shares.

In other words, the return that investors were receiving from the company in the form of dividends had been vastly outweighed by the **dilution of the ownership interest** in Algonquin. As far as inefficient forms of capital allocation go, this is pretty high up there.

The figure below provides a clearer picture:



*Thirty percent tax for illustrative purposes

In the no-tax and no-investment-banker case, the entrepreneur receives the $100 in dividends that he gave to the firm when purchasing stock. The entire operation is a wash; it has no economic effect. With taxes and an investment banker fee, the entrepreneur receives $95 in dividends and must pay $28.50 in taxes to CRA. The entrepreneur loses and the CRA gains when a firm issues stock to pay a dividend.

When companies issue stock for the purpose of paying a dividend, they are taking investor money, paying the investment banker's fee, paying the CRA, and giving back a reduced payout. Not a very wise long-term choice from the perspective of capital budgeting and shareholder return. Managers choose to stake claim to a bush they say holds four birds, knowing there are, in fact, only three.

The Golden Goose

As investment counsellors, we would ideally like managers to continually find good reinvestments for our clients' capital. If this is not the case (a common occurrence in businesses that have reached maturity and now lack opportunities), we will settle for a sustainable dividend payout that still enables managerial flexibility should an exciting investment opportunity come up.

Stock Spotlight: HCA Healthcare Inc.

By Mackenzie Saunders

The health care industry is a thriving ecosystem, manifested as a living entity—a legion of interconnected beings, each contributing to its collective strength, resilience, and growth. Qube took a position in HCA Healthcare Inc, an exemplification of health care's vitality and adaptability, back in September 2020 for the price of $120.40.

The Living Foundation

At the heart of the health care ecosystem lies HCA Healthcare. Founded in 1968, HCA is a leader in the for-profit health care industry, providing a basis upon which the entire system thrives. Its unwavering commitment to care, compassion, and excellence establishes a solid core which nurtures the success of the ecosystem.

Interconnectedness

HCA branches out through its myriad of hospitals and care facilities. These channels direct the resources provided by the organization into high-quality care for patients. Embracing the uniqueness of each facility, they address the distinct needs and challenges of their respective communities—all united in the shared pursuit of providing exceptional health care services.

HCA's expansive network encompasses 182 hospitals and approximately 2,000 sites of care, including surgery centres, urgent care centers, and physician clinics in 21 states and the UK. Through this extensive reach, HCA betters the lives of approximately 37.2 million patients, delivering vital services such as diagnosis, treatment, consultancy, nursing, surgeries, and medical education.

Nurturing Growth

Health care, by necessity, must embrace growth and adaptation. HCA Healthcare grows by incorporating cutting-edge medical advancements, innovative technologies, and transformative treatments. Through these endeavours, HCA expands the boundaries of care, responding to the evolving needs of patients and cultivating a system capable of continuous progress.

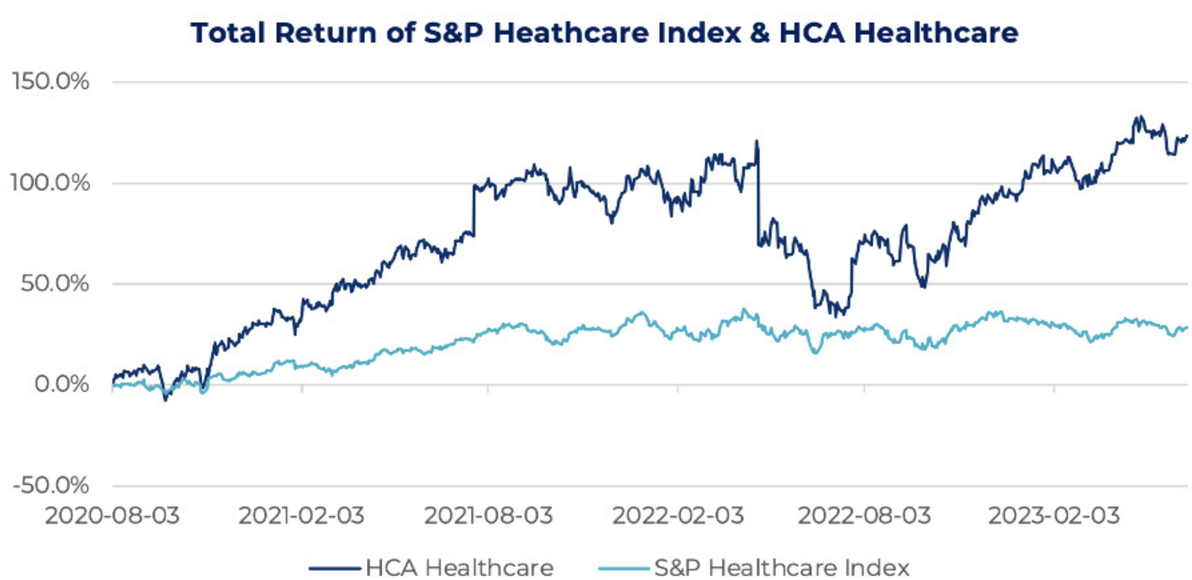
Resilience and Ethical Stewardship

Adversity breeds strength, and HCA demonstrates remarkable leadership in prioritizing sustainability and environmental impact. At the core of this initiative is the commitment to reusable, recyclable, and energy-efficient practices with the goal of creating healthy communities. The organization is dedicated to reducing its carbon footprint and supporting environmental initiatives. To build an ecologically and socially responsible future for health care, they are constantly exploring new ways to reduce energy consumption and waste .

In March of 2023, HCA was named one of the World's Most Ethical Companies for the 13th time by Ethisphere, once again officially recognizing the organization as a global leader in defining and advancing the standards of ethical business practices.

The Fruits of HCA's Dedication

Qube's August 2020 decision to take a position in HCA capitalized on the organization's strength and dominance in the industry. This move came after a significant decline in the share prices of most health care stocks in March of 2020 due to the uncertainty brought on by COVID-19. However, HCA was able to survive due to its strong foundation and dominance in the hospital market. The company used the weakened environment as an opportunity to strengthen its position in the industry, creating sustainable long-term growth prospects.



The previous chart shows HCA's total return (from stock appreciation and dividends) relative to its comparable S&P 500 Healthcare Index, which contains both HCA and other top health care organizations in the United States. Qube's total return on HCA is approximately **123.5%** as of June 12, 2023, which is equivalent to an annualized return of approximately **43.2% per year.**

Weathering the Storm

Alternatively, an investment in the Healthcare Index would have resulted in an annualized return of 9.9% per year and 13.2% per year by investing in the entire S&P 500 index. HCA's excellent return is nothing short of exciting, especially when the health care industry is generally considered to be a lower risk (and therefore a lower return) sector.

All industries face their share of challenges, and health care is no exception. However, HCA adapts and recovers from numerous threats; rising health care costs and external economic pressures pose threats to stability.

In recent years, health care costs have risen at double-digit rates, both in the U.S. and around the world. High rates of inflation and associated interest rates have made it even more difficult for health care providers to remain efficient. HCA's commitment to health care quality, innovation, and operational efficiency is part of what helps it sustainably grow while remaining financially stable. While rates continue to rise, HCA will continue to be able to deliver high-quality care at a reasonable price, helping patients stay healthy and reduce their out-of-pocket costs.

In the grand symphony of health care, HCA Healthcare emerges as a testament to the power and resilience of the health care industry. As the organization extends its reach, its strong position in core markets promises accelerated post-pandemic revenue growth. With each passing day, HCA Healthcare permeates further throughout the health care ecosystem, nurturing the well-being of individuals and igniting hope for a healthier future, along with returns for Kaleo investors.

Stock Spotlight: Generac

By Eric Weidmann
& Patrick Choi, CFA

Qube took a position in Generac (GNRC) on May 18, 2023 at a price of $116.41. The company manufactures batteries to store solar power, commercial generators, and—the crux of our narrative—residential generators.

In the month following the stock purchase, the company has produced a total, cumulative return on investment of -2.7%, on a **constant currency basis.** While the stock is currently sitting at a slight loss from our initial purchase price, we believe that Generac can still provide outsized gains over the length of our typical 3-5 year holding period.

These gains will likely come from society's increased need for more complex power management solutions, especially in the face of worsening climate crises. Generac currently holds the leading position in this area.

Spurred by Extreme Conditions

Two significant, interlinked factors are driving the continued growth in power management.

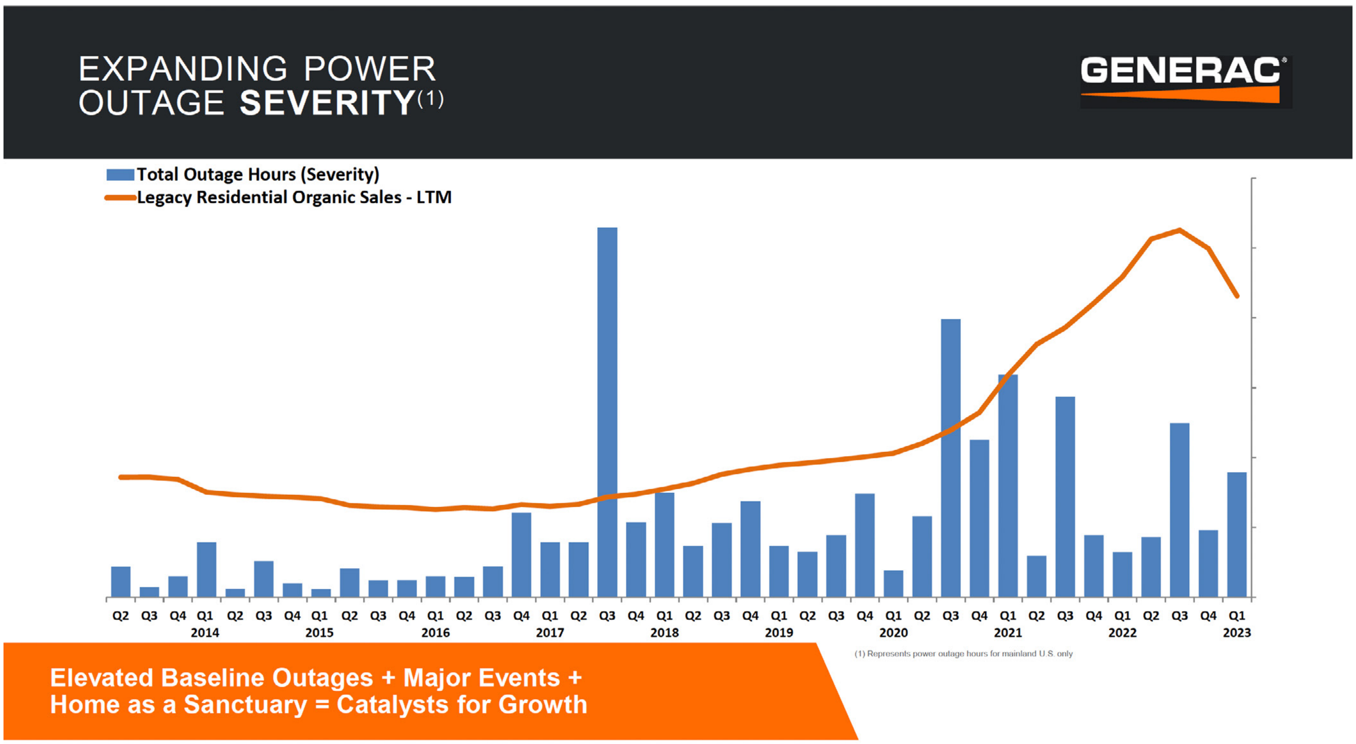
The first is **climate change:** an ongoing hardship with widespread impact. There is evidence to suggest that climate change has led to an increase in the number and severity of floods, storms, and wildfires, in turn contributing to the increased number of power outages seen throughout North America.

"Power outages in the US caused by weather-related events increased by 64% in the last 10 years compared to the previous decade," according to reporting from NBC 10 in 2022. Given recent findings from the Intergovernmental Panel on Climate Change (IPCC) regarding the pace of climate change, we believe it is fair to predict both a greater number and more severe power outages in the future.

Major power disruptions have historically been a critical driver of consumer demand for generators.

In fact, the longer and more frequent the outage, the greater the immediate demand. With every subsequent outage, awareness of the availability of residential generator options grows. One of Generac's base models would run you about $2,500, which is nothing to a family who recently experienced an outage and is in dire need of this peace of mind.

For example, aging infrastructure and severe winter storms in 2021 left more than 4.5 million Texan businesses and residences without power. In the aftermath, there was an uptick of residential generator sales, nearly doubling exposure in the state. In past years, a residential generator in routinely storm-stricken areas was not seen as a necessity. That could be about to change. We can see, in the graph below, this positive correlation over time between increased and more severe power outages and increased sales.



In addition to its impact on power outages, climate change has also galvanized countries around the world to **invest in renewable power sources** like solar and wind. This is the second significant factor helping drive Generac's growth.

The shift away from fossil fuels and towards renewable energy has the short-term effect of increasing intermittency of energy supply. The winds don't always blow, and the sun doesn't always shine.

We suspect that, in the near future, North Americans could see lower and more sporadic electricity supply relative to demand. This foray on less reliable power sources will compound with climate disasters, predictably resulting in even longer and more frequent outages.

These developments further impair the reliability of electricity at a time when demand is starting to meaningfully increase. With the electrification of a wide range of consumer and commercial products such as in transportation, HVAC systems, and major appliances, comes associated frustration and worries.

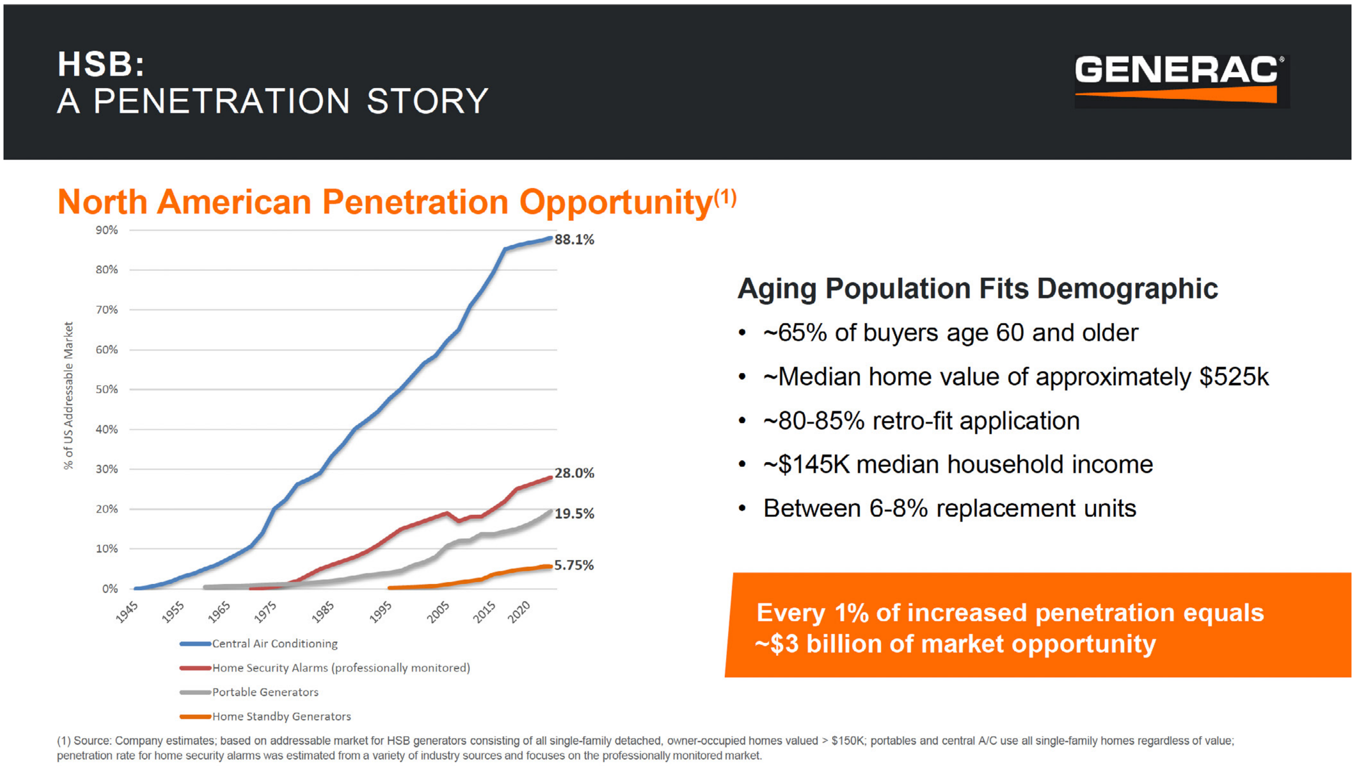
A generator purchase post-disaster is reactive. However, smart technology integration is driving proactive purchases. If a smart home goes down, many of its features will not work, so having a residential generator already in place becomes an appealing proposition.

Room to Grow

The increased future demand is highlighted by the low market penetration for power management products. Focusing specifically on automatic backup power solutions, Generac's largest product segment, there is only approximately 5.75% penetration within the addressable market of homes in the United States (defined as single-family detached, owner-occupied households over $150,000 in value).

Generac plans to break into new regions. Untapped states include Texas, Florida, and California—all coastal states that unfortunately battle extreme weather conditions. They have also indicated international growth to countries with large coastal regions such as Mexico, Brazil, and others in Latin America.

As Generac continues to expand their distribution network, develop new products, and increase marketing efforts, we believe they can readily take advantage of the end demand increase.



The market for power management solutions is competitive. Competitors in Generac's residential and commercial segment include companies like Kohler, Tesla, Briggs & Stratton, Google, Caterpillar, and Honeywell, among others. Many of the competitors are larger and better capitalized than Generac; at the same time, they suffer from a lack of focus towards this one segment. For a company like Google or Tesla, power management solutions are of secondary or even tertiary importance, relative to the cloud or electric vehicles.

For Generac, power management solutions represent approximately 90% of the company's business. These solutions come predominantly in the form of power generators. However, the company's energy storage, monitoring, and management products have also seen substantial growth in recent years. In fact, Generac is the only significant market participant with a primary focus on power equipment. We believe that this focus will allow the company to maintain a competitive advantage in both manufacturing and product innovation.

From our research into numerous reviews and recommendations, Generac's products consistently rate among the best solutions available when it comes to power management. Our analysts and investment counsellors interpret this as real-time affirmation of Generac's competitive advantage.

Valuation Details

Again, Qube's view is that end demand for Generac's products will accelerate soon, relative to historical demand. To that end, we have modelled out revenues to grow at a compound annual growth rate (CAGR) of approximately 9% for the next 10 years.

This is actually a little slower than the past 10 years, which grew at a CAGR of 13%. We believe this slight deceleration in the company's growth rate lands somewhere between pessimistic and appropriate. It takes into account the larger size of Generac's current business, relative to historical size, and the anticipation of stronger competitive forces as the industry grows.

For operating margins, our analysts are forecasting an average of around 18% for the next 10 years, which is consistent with the results from the past decade. We also believe margins will progressively improve to 20% by the end of 2032, as the company can use their larger size to become more efficient.

In terms of reinvestment requirements, we anticipate the company to have similar needs as in the past. The largest components to reinvestment are working capital (e.g., inventory); property, plants, and equipment; and R&D, in that order respectively. Historically, the company has needed to reinvest $1 for every $0.85 of additional sales. We carried this ratio through in our modelling for future years.

Qube's model has other input variables, but those mentioned are some of the most important which tie in directly with our narrative. After inputting all appropriate variables, our calculated intrinsic value for Generac comes to approximately $174. At the early June price of $116.41, we maintain there is an upside potential of approximately 50%.

Impending Results

If the entirety of what we laid out holds true, then we should see the following scenario play out in full as time passes:

Worsening Climate Change

↓

More Renewable Energy Initiatives, More Power Outages from Natural Disasters, and Intermittent Energy Supply

↓

End Consumers Renovating Their Homes and Businesses With Power Management Solutions From Generac

Of course, our team acknowledges the beginnings of this thesis are already underway. Once future financial results for the company confirm our thesis, the market should be more willing to reprice the equity for the company to be more in line with our intrinsic value calculations.

Equity Research Traffic Lights

Balancing traditional research techniques with modern portfolio science allows our team to find companies that demonstrate and maintain solid investing fundamentals. We look for less volatile and proven earnings combined with long-standing stable dividend policies. Share prices need to be justified on a combination of current earnings and reasonable earnings growth possibilities. Quality financial statements, coherent management and an operational business plan need to be in place before we rank a company "green."

Company	Sector	Current Status
ALPHABET INC CL-A	Communications Services	✓ ○ ○ ○
DISNEY WALT COMPANY	Communications Services	✓ ○ ○ ○
META PLATFORMS INC CL-A	Communications Services	✓ ○ ○ ○
ELECTRONIC ARTS INC	Communications Services	○ ○ ○ ✗
SHUTTERSTOCK INC	Communications Services	○ ○ ○ ✗
NEWS CORP-CLA A	Communications Services	○ ○ ○ ✗

Company	Sector	Current Status
CAMPING WORLD-A	Consumer Discretionary	
PULTEGROUP INC	Consumer Discretionary	
MARINEMAX INC	Consumer Discretionary	
ALIBABA GROUP HOLDING	Consumer Discretionary	
AMAZON COM INC	Consumer Discretionary	
HANESBRANDS INC	Consumer Discretionary	
LEAR CORP	Consumer Discretionary	
WILLIAMS-SONOMA	Consumer Discretionary	
THE BUCKLE INC	Consumer Discretionary	
YETI HOLDINGS INC	Consumer Discretionary	
SKYLINE CHAMPION	Consumer Discretionary	
BATH & BODY WORK	Consumer Discretionary	
HIBBETT INC	Consumer Discretionary	
CANADIAN TIRE-A	Consumer Discretionary	
JB HI-FI LTD	Consumer Discretionary	
BRP INC	Consumer Discretionary	

Company	Sector	Current Status
D.R HORTON INC	Consumer Discretionary	✓ ○ ○ ○
WHIRLPOOL CORP	Consumer Discretionary	○ ○ ○ ✗
GUESS? INC	Consumer Discretionary	○ ○ ○ ✗
H&R BLOCK INC	Consumer Discretionary	○ ○ ○ ✗
CRACKER BARREL	Consumer Discretionary	○ ○ ○ ✗
ACADEMY SPORTS	Consumer Discretionary	○ ○ ○ ✗
VAIL RESPORTS	Consumer Discretionary	○ ○ ○ ✗
DICK’S SPORTING	Consumer Discretionary	○ ○ ○ ✗
AUTONATION INC	Consumer Discretionary	○ ○ ○ ✗
B&M EUROPEANS	Consumer Discretionary	○ ○ ○ ✗
KINGFISHER PLC	Consumer Discretionary	○ ○ ○ ✗
TAPESTRY INC.	Consumer Discretionary	○ ○ ○ ✗
BOOKING HOLDINGS INC	Consumer Discretionary	○ ○ ● ○
THOR INDUSTRIES	Consumer Discretionary	○ ○ ○ ✗
PENSKE AUTOMOTIVE	Consumer Discretionary	○ ○ ○ ✗
CHILDREN’S PLACE	Consumer Discretionary	○ ○ ○ ✗

Company	Sector	Current Status
VISTA OUTDOOR	Consumer Discretionary	○ ○ ○ ✗
ADIENT PLC	Consumer Discretionary	○ ○ ○ ✗
PVH CORP	Consumer Discretionary	○ ○ ○ ✗
FERRRARI N.V.	Consumer Discretionary	○ ○ ○ ✗
PLANET FITNESS-A	Consumer Discretionary	○ ○ ○ ✗
SIGNET JEWELERS	Consumer Discretionary	○ ○ ○ ✗
CHEWY INC-CL A	Consumer Discretionary	○ ○ ○ ✗
KRISPY KREME INC	Consumer Discretionary	○ ○ ○ ✗
CROCS, INC	Consumer Discretionary	✓ ○ ○ ○
HALEON-ADR	Consumer Staples	○ ◐ ○ ○
GENERAL MILLS INC	Consumer Staples	✓ ○ ○ ○
KROGER CO	Consumer Staples	✓ ○ ○ ○
TYSON FOODS INC-CL A	Consumer Staples	✓ ○ ○ ○
SAINSBURY PLC	Consumer Staples	○ ◐ ○ ○
SPROUTS FARMERS MARKET INC	Consumer Staples	○ ◐ ○ ○
HOWDEN JOINERY GROUP PLC	Consumer Staples	○ ◐ ○ ○

Company	Sector	Current Status
CLOROX COMPANY	Consumer Staples	✓ ○ ○ ○
COLGATE PALMOLIVE CO	Consumer Staples	✓ ○ ○ ○
LAMB WESTON HOLDINGS INC	Consumer Staples	✓ ○ ○ ○
WALMART INC	Consumer Staples	✓ ○ ○ ○
COSTCO WHOLESALE CORP	Consumer Staples	○ ○ ○ ✗
CHURCH & DWIGHT CO INC	Consumer Staples	○ ○ ○ ✗
DARLING INGREDIENTS INC	Consumer Staples	○ ○ ↻ ○
EMPIRE CO CL-A NV	Consumer Staples	○ ○ ↻ ○
TARGET CORP	Consumer Staples	○ ○ ○ ✗
KRAFT HEINZ CO/T	Consumer Staples	○ ○ ○ ✗
JPMORGAN CHASE & CO	Financials	✓ ○ ○ ○
CITIGROUP INC.	Financials	○ ↻ ○ ○
BANK OF AMERICA CORP.	Financials	○ ↻ ○ ○
ROYAL BANK OF CA	Financials	✓ ○ ○ ○
TORONTO-DOMINION BANK	Financials	○ ↻ ○ ○
BANK OF MONTREAL	Financials	○ ↻ ○ ○

Company	Sector	Current Status
NATIONAL BANK OF CANADA	Financials	
BANK OF NOVA SCOTIA	Financials	
CANADIAN WESTERN BANK	Financials	
CANADIAN IMPERIAL BANK OF COMMERCE	Financials	
PROGRESSIVE CORP OHIO	Financials	
S&P GLOBAL INC	Financials	
CHEMED CORP	Health Care	
AMERISOURCEBERGE	Health Care	
ACADIA HEALTHCARE	Health Care	
PROGYNY INC	Health Care	
DAVITA INC	Health Care	
HCA HEALTHCARE INC	Health Care	
UNIVERSAL HEALTH SERV -B-	Health Care	
QUEST DIAGNOSTIC	Health Care	
JOHNSON & JOHNSON	Health Care	
CARDINAL HEALTH INC	Health Care	

Company	Sector	Current Status
MCKESSON CORP.	Health Care	
LABORATORY CP	Health Care	
QUIDELORTHO CORP	Health Care	
WEST PHARMECEUT	Health Care	
CORVEL CORP	Health Care	
MERCK & CO	Health Care	
SONIC HEALTHCARE	Health Care	
CVS HEALTH CORP	Health Care	
OWENS & MINOR	Health Care	
HOLOGIC INC	Health Care	
VERADIGM INC	Health Care	
EDWARDS LIFE	Health Care	
IDEXX LABS	Health Care	
THERMO FISHER	Health Care	
WATERS CORP	Health Care	
TELEFLEX INC	Health Care	

Company	Sector	Current Status
ZOETIS INC	Health Care	○ ○ ○ ⊗
MARAVAI LIFESC-A	Health Care	○ ○ ○ ⊗
HARMONY BIOSCIE	Health Care	○ ○ ○ ⊗
ENCOMPASS HEALTH	Health Care	○ ○ ○ ⊗
TAKEDA PHARMA-ADR	Health Care	○ ○ ○ ⊗
SANOFI-ADR	Health Care	○ ○ ○ ⊗
MEDTRONIC PLC	Health Care	○ ○ ○ ⊗
NOVARTIS AG-ADR	Health Care	○ ○ ○ ⊗
ROYALTY PHARMA-A	Health Care	○ ○ ○ ⊗
R1 RCM INC	Health Care	○ ○ ○ ⊗
BIO-TECHNE CORP	Health Care	○ ○ ○ ⊗
INCYTE CORP	Health Care	○ ○ ○ ⊗
HALOZYME THERAPE	Health Care	○ ○ ○ ⊗
ENSIGN GROUP INC	Health Care	○ ○ ○ ⊗
GSK PLC-ADR	Health Care	○ ○ ○ ⊗
SYNEOS HEALTH IN	Health Care	○ ○ ○ ⊗

Company	Sector	Current Status
BIONTECH SE-ADR	Health Care	✕
ABBOTT LABS	Health Care	✕
PFIZER INC	Health Care	✕
DANAGER CORP	Health Care	✕
SHOCKWAVE MEDICA	Health Care	✕
MODERNA INC	Health Care	✕
ATRICURE INC	Health Care	✕
REPLIGEN CORP	Health Care	✕
OPTION CARE HEAL	Health Care	✕
HORIZON THERAPEU	Health Care	✕
IRONWOOD PHARMAC	Health Care	✕
TENET HEALTHCARE	Health Care	✕
TEVA PHARMA-ADR	Health Care	✕
ICU MEDICAL	Health Care	✕
COOPER COS INC	Health Care	✕
ALIGN TECHNOLOGY	Health Care	✕

Company	Sector	Current Status
INTEGRA LIFESCIE	Health Care	
KONINKLIJKE P-NY	Health Care	
AMRYT PHAR-ADR	Health Care	
PERKINELMER INC	Health Care	
ALCON INC	Health Care	
OLYMPUS CORP-ADR	Health Care	
BIO-RAD LABS-A	Health Care	
BECTON DICKINSON	Health Care	
DENTSPLY SIRONA	Health Care	
BEAM THERAPEUTIC	Health Care	
TELADOC HEALTH I	Health Care	
AVANTOR INC	Health Care	
COLLEGIUM PHARMA	Health Care	
INSULET CORP	Health Care	
DEXCOM	Health Care	
KORN FERRY	Industrials	

Company	Sector	Current Status
U-HAUL HOLDING C	Industrials	
FERGUSON PLC	Industrials	
GRIFFON CORP	Industrials	
GENERAC HOLDINGS	Industrials	
WESCO INTERNATIONAL INC.	Industrials	
MASCO CORPORATION	Industrials	
SIMPSON MFG	Industrials	
MUELLER INDS	Industrials	
ADVANCED DRAINAGE	Industrials	
AURIZON HOLDINGS	Industrials	
WATSCO INC	Industrials	
OLD DOMINION FRT	Industrials	
UNITED RENTALS	Industrials	
ROBERT HALF INTL	Industrials	
TFI INTERNATIONAL	Industrials	
KADANT INC	Industrials	

Company	Sector	Current Status
UFP INDUSTRIES I	Industrials	
TEREX CORP	Industrials	
TRINET GROUP INC	Industrials	
STERLING INFRASTRUCTURE INC.	Industrials	
BOISE CASCADE CO	Industrials	
EAGLE BULK SHIPP	Industrials	
CSX CORP	Industrials	
GFL ENVIRONM-SUB	Industrials	
UNIVAR SOLUTIONS	Industrials	
BUILDERS FIRSTSO	Industrials	
CAN NATL RAILWAY	Industrials	
TOROMONT INDS	Industrials	
NORFOLK SOUTHERN CORP	Industrials	
UNION PACIFIC CORPORATION	Industrials	
UNITED PARCEL SERVICE	Industrials	
WASTE MANAGEMENT INC	Industrials	

Company	Sector	Current Status
RYDER SYSTEM INC	Industrials	
GOLDEN OCEAN GRO	Industrials	
VERITIV CORP	Industrials	
ENCORE WIRE	Industrials	
ARCBEST CORP	Industrials	
DOVER CORP	Industrials	
FORTUNE BRANDS I	Industrials	
TRANSDIGM GROUP	Industrials	
WILLSCOT MOBILE	Industrials	
KNIGHT-SWIFT TRA	Industrials	
CNH INDUSTRIAL N	Industrials	
APPLIED INDU TEC	Industrials	
ENPRO INDUSTRIES	Industrials	
EXPONENT INC	Industrials	
HERC HOLDINGS IN	Industrials	
QUANTA SERVICES	Industrials	

Company	Sector	Current Status
PENTAIR PLC	Industrials	
TRANE TECHNOLOGI	Industrials	
API GROUP CORP	Industrials	
REGAL REXNORD CO	Industrials	
SITEONE LANDSCAP	Industrials	
CLEAN HARBORS	Industrials	
BOMBARDIER INC-B	Industrials	
CANADIAN PACIFIC	Industrials	
OWENS CORNING	Industrials	
BALCHEM CORPORATION	Industrials	
ZURN-ELKAY WATER SOLUTIONS	Industrials	
ATS CORP	Industrials	
GENCO SHIPPING	Industrials	
STAR BULK CARRIE	Industrials	
ABB LTD-ADR	Industrials	
AAR CORP	Industrials	

Company	Sector	Current Status
AVIS BUDGET GROUP	Industrials	
SAIA INC	Industrials	
CARGOJET INC	Industrials	
TRINITY INDUSTRIES	Industrials	
AZUL SA-ADR	Industrials	
SKYWEST INC	Industrials	
ROLLS-ROYCE HOLD	Industrials	
SUPER MICRO COMPUTER INC	Information Technology	
ADVANCED MICRO DEVICES INC	Information Technology	
MICRON TECHNOLOGY INC	Information Technology	
QUALCOMM INC	Information Technology	
MICROSOFT CORP	Information Technology	
NUTRIENT LTD	Materials	
SUPERIOR PLUS CORP	Utilities	

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At any one point in time, the composition of the Kaleo model may change. Currently, the focus for our models (Kaleo A and Full) is to invest in a globally diversified portfolio of liquid stocks with a minimum market capitalization of $1 billion. Our diversification strategy is to have similar industry weightings between our Kaleo models A and Full, which in turn will have similar weightings to the S&P 500. Our investment mandate is to not have any one industry sector or sub-group exceed 2.0 times the percentage weighting assigned to that group by the MSCI Index unless the sector or sub-group composes less than 5% of the total index. Please refer to your Investment Policy Statement (IPS) for more details.

Index comparisons are based on the total return index defined by 50% of the MSCI Index and 50% of the S&P TSX Total Return Index. All index returns are inclusive of dividends, adjusted to the Canadian currency, and, similar to the modeled portfolio, determined via the IRR method. Please note that, as total return indices are not actual portfolios, these returns do not include the cost of management and/or trading fees.

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