Qube Quarterly

July 2018

CONTENTS

Page 5

Page 10

Page 14

MAKE IT MATTER

At Qube, we are inspired to "Make it Matter", because your investments mean more than just a rate of return. Although returns are an important barometer for success, there are many more facets to be considered. Your financial goals, whether they be related to retirement, the growth of your corporation, funding future expenses, or estate and succession planning, must drive the investment decisions we make and the wealth management services that we provide. At the end of the day (or year), a five, ten or fifteen percent return will mean something different to each of our clients. Context is paramount.

At present, the majority of investment assets that we steward are earmarked for retirement. As such, we will be stepping up our efforts to proactively ensure that your retirement plans are comprehensive and are being kept up-to-date. Planning for the future should never be treated as a "one and done" activity. Indeed, the roads to and through retirement are long and paved with taxes, inflation and volatility in the market. The underlying combination of complexity and consequences underscores the need for, and the value of, consisent engagement. As such, if it has been a few years since we reviewed your retirement plans, we will be reaching out to you in the next few months to open dialogue on the planning process.

It is my hope that this renewed inititative to meet with you and review your current investments in the context of your long-term plans, will allow you to focus on what matters most to you, and showcase what matters most to us: helping you to realize your financial goals.

As always, thank you for your continued trust in us,

Noah Clarke, MA Economics
Operations Manager

Kaleo & Qatalyst Portfolios: Past Performace

	YTD	2017	3-Year	5-Year	Inception
Kaleo A	3.6%	14.0%	10.8%	14.2%	13.4%
Kaleo Full	4.4%	17.4%	13.0%	16.1%	14.4%
Kaleo Benchmark	4.7%	11.0%	10.5%	13.9%	11.5%
Qatalyst	4.7%	17.8%	--	--	12.9%
Qatalyst Benchmark	7.5%	13.8%	--	--	13.5%

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, 2018.

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.

Our Kaleo Full model is composed of 35 stocks + 5 index ETFs. For clients with invested funds in the $250K to $1M range, we offer a subset 22 stocks + 5 index ETFs subset of this model (Kaleo A) in order to reduce brokerage fees. Returns since inception for each of our Kaleo models 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 S&P 500 Total Return Index (in CAD) and 50% of the S&P TSX Total Return Index.

Qatalyst

Qatalyst consists of a portfolio of stocks we believe to represent the best opportunity for positive returns within a 3-5 year investment horizon, regardless of short-term volatility. Companies are selected using an investment thesis that primarily includes the realization of a catalyst.

Qatalyst is a concentrated portfolio, oftentimes consisting of between 10 and 20 stocks. While we aim to offer diversification amongst various market and geographic sectors, it is not assured.

Due to the less conservative nature of the portfolio, clients are encouraged to also hold a mixture of fixed income investments, as well as our more diversified and less concentrated Kaleo model in order to moderate and match investor specific tolerance for risk.

The S&P 500 (currency adjusted) is applied as our benchmark for Qatalyst due to the higher relative concentration of US companies held in this model.

iA Fund Model: Past Performace

	Allocation	YTD	2017	3-Year	5-Year	10-Year
iA Dividend Growth	20%	0.4%	6.4%	4.9%	6.7%	4.1%
Fidelity NorthStar	10%	-0.3%	2.7%	2.5%	9.7%	5.8%
Dynamic Global Dividend	30%	6.7%	20.4%	11.6%	13.7%	6.8%
BlackRock Int'l Equity	10%	0.8%	13.5%	2.7%	7.8%	2.4%
BlackRock US Equity	30%	6.0%	10.1%	8.7%	14.3%	8.5%
Equity Portfolio		4.0%	11.1%	6.8%	10.8%	5.3%
Bond Portfolio		-0.4%	0.9%	-0.2%	1.0%	2.5%

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 rates referenced above correspond to the period ending June 30, 2018.

Qube Investment Management has over 15 years experience in managing both Individual and Group Savings fund models.

In our search for a carrier that met our high expecations, we decided upon Industrial Alliance Financial Group, which leads the pack in providing accessible, user-friendly and cost-efficient investment and retirement tools to their plan members. Through iA, individual investors have access to best in class 3rd party funds and institutional portfolio managers that are typically unavailable to retail investors.

Protected Interests Model

In contrast to the direct-stock-holding portfolios that we manage, for which we have sole discretion when it comes to the selection of equity holdings, our Seg-Fund models invest in fund managers contracted by iA. That is to say that while we choose which managed funds are included in our Protected Interest Model, we have no say in the specific holdings of these funds. As a result, our research must focus on evaluating each fund manager, based on their past performance, their investment strategy and their macro positioning.

Our 'Protected Interests' model was launched at the beginning of 2005. It has consistently added value for investors: A fact which we attribute to the well diversified set of fund assets that we choose to hold, as well as the active style of management that we provide.

These Five Days

I remember it was a lovely, warm morning. I was attempting to work from my home office and took a break to walk my daughter to school. We walked casually through a canopy of tree-lined streets, as she busily explained to me the complicated relationship between Arthur and DW, an early-morning cartoon that played before kindergarten each day. Making our way to the school, I looked up at the sky but noticed something was different. Our old community, Forest Heights, is below a flight path, and I had become used to watching planes land at the now closed, municipal airport. Today, however, something was off. Planes were landing at an abnormally fast rate. Where were all these planes coming from? Arriving back home, I found my spouse attached to the TV. By this point, Tower One was on fire. Minutes later, I witnessed Tower Two get hit, attentive to the reality of a terrorist attack in play. My phone rang next. A reporter wanted to know what I thought would happen to the global stock markets. I was numbed and unable to offer an intelligent response. Thousands of people were dying before our eyes. Why would anyone care about the stock markets at a time like this?

I looked recently at the data from 2001. The stock market halted trading that day and reopened on September 13th. $100 invested on this terrible day would have only changed by $0.10 on September 13th. By the end of the month, it would have still held to within $5 of the original investment ($95.32). Strangely, the stock market offered little reaction to these events.

March 26th, 2018, however, is a different story. On this day, Porn Star, Stormy Daniels went live about her affair with Donald Trump in a spicy CBS interview. In Hollywood, Black Panther became the highest grossing superhero film in America. Sadly, I missed both events, but what I didn't miss was the best daily stock market gain in 2018 at over 2.7%! What drove this gain? Most headlines pointed to a newly perceived willingness on the part of the United States to negotiate with China and avert a full-blown trade war.

March 1st, 2017 was the stock market's best recorded day last year, with a posted gain of 1.39%. Again this spike had nothing to do with fundamental improvements in the market. Instead, it can be attributed to skillful speech writing. The night before, in his address to congress, Donald Trump carefully avoided protectionist comments and set a conciliatory and "presidential" tone. This instilled confidence amongst analysts, who can in retrospect, be forgiven on the grounds of a "fool me once" ethos.

Best day of investing in 2016? On this day, the news headlines captured increasing hysteria over the Zika virus, while the GOP Presidential Candidates faced off in Iowa at another GOP debate. Donald Trump, notably, boycotted the event because he didn't like the Fox News moderator, Megyn Kelly. On this day, January 29th, markets closed reporting an intra-day gain of nearly 2.5%. It's difficult to decipher why this day stood out from the rest.

Let's, however, expand our scope, zeroing in on the best day of stock market investing since 1932. It was October 13th, 2008, a great day of trading which by no coincidence occurred on the back of 8 straight weeks of market losses. This was the bottom of the famous 2008 financial market meltdown, but what caused the apparent turnaround? News agencies only reported that the Bank of Scotland, and some other global central banks, had injected funds into their economies to stimulate a turnaround. In the absence of full information, many speculate that this day was a tipping point, where mass consensus came to an agreement that the worst of the market crisis was over. Sadly, history proved otherwise, and market suffering continued for many more months. Nonetheless, it was a great day for stock investing.

I took the aggregate daily close data on the S&P500 (USD) total return index (which captures dividends) and found that good days are few and far between.

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The Best of Days	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Best Day	11.58%	7.10%	4.40%	4.74%	2.50%	2.56%	2.42%	3.91%	2.48%	1.39%	2.72%
2nd Best	10.79%	6.37%	3.32%	4.65%	2.33%	2.20%	2.04%	2.52%	2.39%	1.09%	1.76%
3rd Best	6.93%	4.37%	3.18%	4.35%	2.06%	1.67%	1.96%	2.44%	2.22%	1.09%	1.74%
4th Best	6.47%	4.09%	2.96%	3.43%	1.99%	1.49%	1.78%	2.05%	2.03%	1.01%	1.68%
5th Best	6.35%	4.01%	2.95%	3.43%	1.92%	1.43%	1.53%	1.91%	1.96%	1.00%	1.61%

Maybe, one can liken it to a good day on the golf course? The above table lists the five best days in what was, for most years, a 252-day trading cycle. These five days represent less than 2% of the trading time in a year (5/252); nevertheless, they must be paid due reverence.

I often look at market data to illustrate the issues of the day. Today, we have Trump. Trump has steadily increased the stakes in his latest reality entertainment product called the US Presidency. Independent of your position on Trump, global investors seem near to another tipping point in my opinion. Trade wars, cold wars and real wars can impact the world economy and investor confidence. How do we prepare for a potential market dip in the ride ahead? How do we manage for the risks confronting us in 2018?

University finance programs teach about statistical risk metrics. Academics measure investment risk as the probability that a stock will fluctuate in value over any given period; i.e., risk from this viewpoint, is synonymous with relative volatility, which can be accounted for with market risk models, scenario planning, and other off-shoots of modern portfolio theory. Unfortunately, none of the above helped to predict or mitigate the financial market crisis in 2008. Risk, in all its forms, cannot be boiled down to the Greek letter sigma (measure of volatility).

Other forms of risk are apparent, and these are what we hear about most. Our clients tell us that they worry about three main things; first, they fear a negative return on their quarterly statement; second, that they will lose everything in an "Enron-like bankruptcy"; and, third, that their money will be stolen, or lost, in a Ponzi investment scheme. Let's address each of these concerns in turn.

1. Concern: Market Corrections

Expectations are important. Depending on the historical period under study, both the US and Canadian stock markets have delivered returns in the range of 9-11% per annum. Bond investors have generally enjoyed returns, on average, in the range of 3-5% per annum. Therefore, a 50/50 blend of stocks and bonds in a portfolio should bring expectations of 6-8% per year for most investors. If this conservative approach attracts long-term expectations of 6-8%, would it be reasonable for one to expect an occasional negative return?

Based on historical data for the period 1960-2017, a proxy portfolio designed to hold 25 percent of the S&P 500 Total Return Index (converted to CAD), 25 percent of the S&P TSX Total Return Index, and 50 percent of the DEX Canadian Bond Universe Index, had an annual average return of 9.8%. Problem is, this explanation tends to downplay the inherent volatility of the stock market. In truth, it's rare to see investors match the average historical return in any particular year. Some years will see large dips in the market, while other years will witness returns that far exceed the long term average.

1-Year Return: In the period since 1960 we found the best annual return for our proxy portfolio was 27.8%, and the worst was -17.6%. Negative one-year returns occurred in only 11 out of the past 58 years.

5-Year Annualized Return: In the period since 1960, the best 5-year annualized return was 18.8%, while the worst was 1.53% percent. There were no negative 5-year annualized returns on record;

10-Year Annualized Return: The best return was 14.8%, and the worst was 2.6%.

Investors deserted emerging Asian shares, including an overheated Hong Kong stock market. Crashes occur in Thailand, Indonesia, South Korea, Philippines, and elsewhere, reaching a climax in the October 27, 1997 mini-crash.

Time to Recovery: 3 Months

The Russian government devalued the ruble, defaulted on their domestic debt, and declared a moratorium on payments to foreign creditors. Global markets were sent reeling.

Time to Recovery: 3 Months

The Nasdaq Composite stock market index, peaked in value on March 10, 2000 before crashing. When the bubble burst, some companies, such as Pets.com, failed completely, while trillions of dollars were lost almost overnight.

Time to Recovery: 3 Years

When the real estate bubble burst, many borrowers were unable to make payments on their subprime mortgages. The resulting collapse devolved into a global financial crisis, and resulted in a number of bank failures and diving markets.

Time to Recovery: 18 Months

The Dow Jones fell 1,300 points from August 18–21. By Monday, August 24, world stock markets were down substantially, wiping out all gains made in 2015, with interlinked drops in commodities, such as oil, which hit a six-year low point.

Time to Recovery: 18 Months

1997	1998	2000	2008	2015

20-Year Annualized Return: Over the same investment horizon, the best recorded return was 13.6%, and the worst, 6.1%.

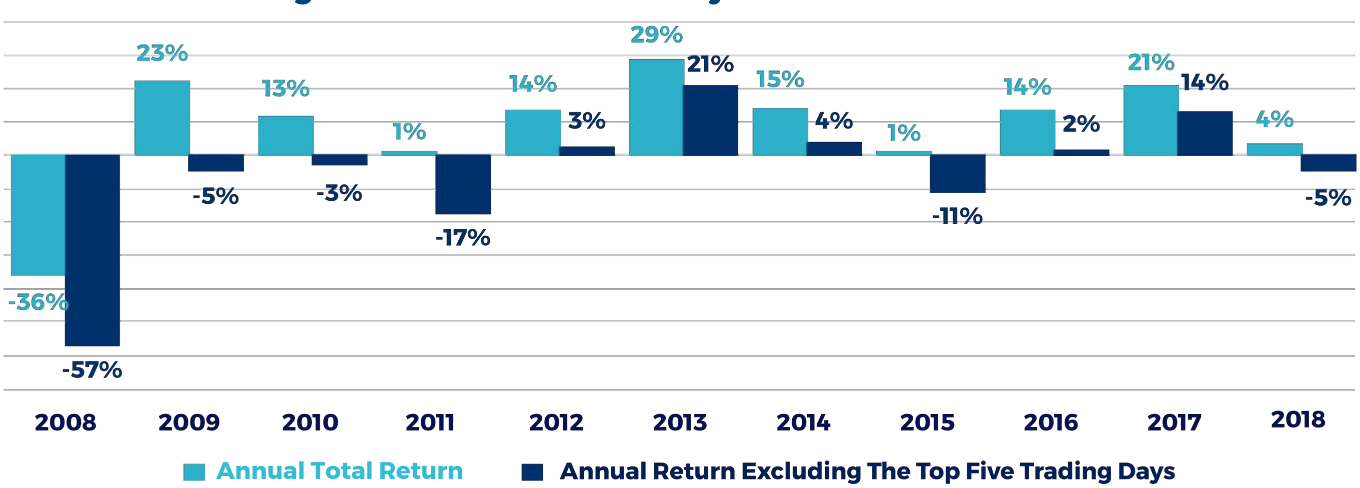
We can learn two things from this data. First, negative returns live within shorter periods of evaluation. This is logical, as investors must be rewarded over the long run or capitalism would fail. Second, negative one-year returns are expected to occur even on a conservative 50% equity, 50% fixed income portfolio.

Given time, even historically famous corrections become less noteworthy. All of the crashes depicted above tested the tolerance of market participants and caused investment managers to work overtime. In most cases, each of the terrifying corrections ended within a matter of months rather than years, markets healed, and post-correction growth resumed.

Recovery requires holding on and staying invested. The top five trading days represent far more than 2% of the annual return. Missing these five days would have caused the following impact on each of the past ten years:

In the first 130 trading days of 2018, having missed the top 5 days would reverse the 4% gain and convert it into a 5% loss. In 2009, missing out on the top 5-days would have turned the annual gain of 23% for this year into a 5% loss. Cumulatively, over time these 5-days per year translate to the difference between a growing portfolio and stagnating one. The only true solution to minimizing negative returns is to stay fully invested, letting time play its role, and being present when when key trading days happen.

The Cost of Missing Out On The Five Best Days



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2. Concern: Enron-Like Bankruptcies
Enron, in 2001, had 20,600 employees and a net income of $979,000,000. Despite the balance sheet reporting assets of $67,503,000,000, Enron filed for bankruptcy Dec 2, 2001. Enron had been regarded as one of the most innovative and best managed energy businesses in the United States. With its shocking and swift collapse, investors lost tens of billions of dollars. It was the largest bankruptcy in American history and was entirely missed by the rating agencies, analysts and banks. A traumatic experience that investors today continue to feel anxiety from.

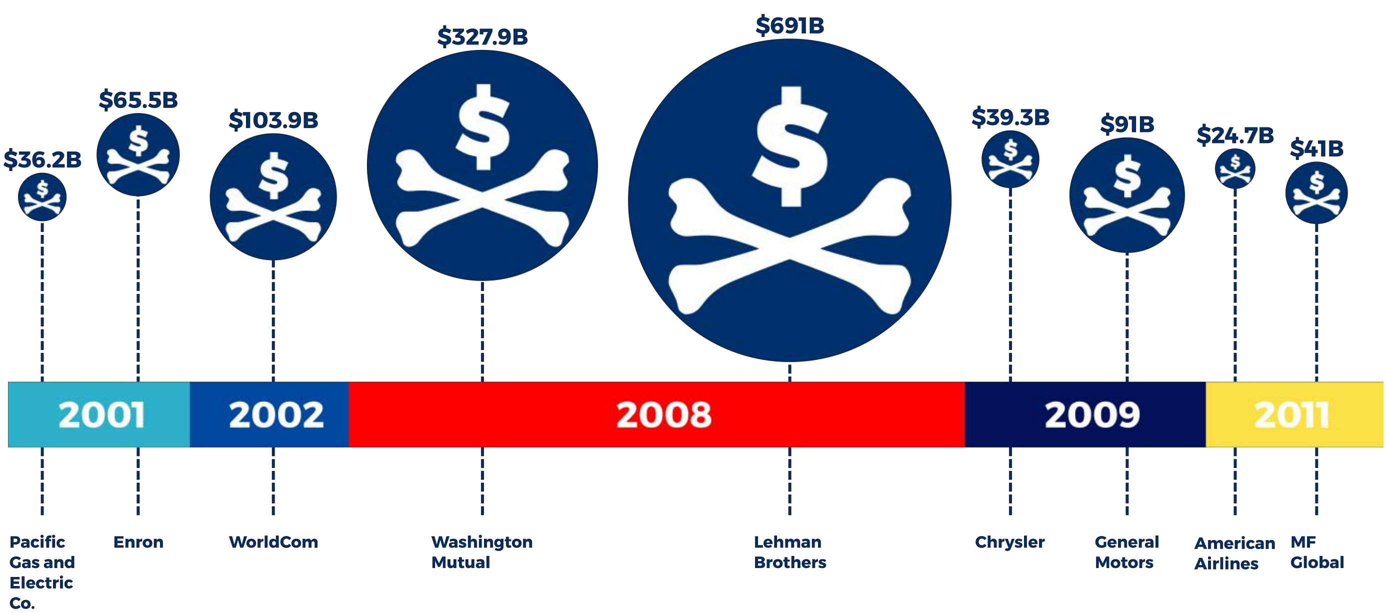
A multi-year probe turned up shocking failings by Enron's auditors, its lawyers, and most of all, its senior executives: deception, outrageous abuse, and fraud. Key investor safeguards, including the corporate board and audit firm failed. How can we reassure investors that other "Enron-Like" bankruptcies can be avoided? The short answer is that while we can reduce this risk, we cannot completely get rid of it.

Some of the tools and techniques that we are able to use to reduce this risk include:

Portfolio Diversification. We invest in companies from different economic sectors and geographic locations to protect our portfolios from non-systemic risk. While one sector or region may be experiencing trouble, another would hopefully be doing better. These positions are monitored annually based on macroeconomic conditions. For example, we divested Energy holdings two years ago based on our near and long-term outlook for carbon-based investing.

Stock Correlation Analysis. Regularly, our team will run what is called stock volatility back-testing. This mathematical exploration looks for opportunities of material risk reduction based on the uniqueness of a stock relative to others in the portfolio. For example, we were excited at the idea of publicly traded funeral homes. We were certain they would offer unique opportunities to what our portfolio already held. In the end, the math proved funeral homes were not dissimilar enough to other portfolio positions of lessor risk.

Quantitative Analysis. Analysts at Qube conduct a thorough review of the historical revenues, earnings potential, cash flows and implied growth rates of all investments. This type of analysis acts as a quality control process for ensuring basic financial viability before further time is invested in reviewing an opportunity. There is nothing speculative about the theses we develop and companies we choose to hold.



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ESG Analysis. Climate change impacts, sustainability, waste management, human rights, labor standards & relations along with the overall management, board and compensation are some of the main areas we consider in what is called ESG analysis. Specially trained analysts at Qube work to ensure environmental stewardship, social impacts and governance standards are appropriate and within minimum expectations.

These things help, but Enron-like bankruptcies can and do still happen.

3. Concern: Ponzi Schemes

A Ponzi scheme is an investment fraud where clients are promised a large profit at little to no risk. Companies that engage in a Ponzi scheme focus all of their energy into attracting new clients to make investments. This new income is used to pay original investors their returns, marked as a profit from a legitimate transaction. Ponzi schemes rely on a constant flow of new investments to continue to provide returns to older investors. When this flow runs out, the scheme falls apart.

Charles Ponzi was the man who is said to have started it all. In the 1920's, Ponzi promised investors a whopping 50% return in 45 days, or 100% in 90 days through a plan to buy and resell international postal coupons. He became a millionaire in just six months and was soon thereafter charged with 86 counts of mail fraud and sentenced to 5 years in jail. Since Ponzi there have been numerous other heisters including Bernie Madoff. Here in Alberta, we hear from time to time of investment schemes gone south including Crystal Wealth and Walton Limited Partnerships. Sadly, shady things still can and do happen to investors.

There are some key strategies to manage against Ponzi-style risk. First, ensure your investment professional is qualified and a signatory to the Association of Investment Management & Research's (AIMR) Code of Professional Conduct. Second, ensure your investments are in securities that you understand. Specifically, investments that you can perform a google search on to independently confirm and clarify. Finally, it's important to always use an independent custodian. All of the accounts managed by Qube are held by a seperate financial institution: National Bank Independent Network (NBIN).

Like a safety deposit box for your portfolio, the main purpose of the custodian is to safeguard your assets. NBIN regularly send out account statements seperate from the ones distributed by Qube and provides an independent evaluation of your portfolio positions. As a member of the Canadian Investor Protection Fund (CIPF), NBIN also provides an assurance that client assets are protected should the financial institution become insolvent. The coverage limit for CIPF is $1,000,000 for general accounts and another $1,000,000 for registered accounts.

Conclusion: The Other Days

Storing and stewarding wealth is a considerable responsibility as well as a privilege; neither of which are to be taken lightly. We take our charge seriously and understand the anxiety many clients have with investments. Protecting and preserving is a task conducted in tandem to taking calculated risk and harvesting a productive return.

Beyond the most productive 5 days are the 247 other days of trading. These also matter as other objectives need to be met. For example, how much of our return can we encourage from dividends? Cash dividends are great and can offer a base stability for the return and necessary funds for retirement needs.

Days lead to months and months into years. Client portfolios exist for reasons beyond the rate of return. They matter for educational funding, retirement income and legacies. Qube continues its quest in 2018 to determine from each client, why do your investments matter? What are your goals and aspirations that these funds support and how can we begin to quantify and track them? In the 365 days of your year, how can your investments make not just 5 of them matter, but all of them?

Investing In Death-Care

In this world, nothing is certain except death and taxes.
– Benjamin Franklin

Current projections suggest that as baby-boomers hit old age, the annual death rate in North America will climb from 8.3 per thousand today to 10.2 by 2050. As death is certain, this trend will translate to a steadily rising clientele base for the funeral and interment service industry (more succinctly, if not more sensitively, referred to as the death-care industry). With this in mind, pension funds and money managers have shown growing interest in the space. Last year the Ontario Teacher's Pension Fund bought one of Spain's largest funeral businesses for £117m and increased its ownership position in France's largest death-care company. The consensus is that the industry is highly predictable, uncorrelated with other industries, low-risk and high-margin.

Given the attention it has received, we thought to undertake our own review of the North American death-care industry and evaluate the investment thesis of a few key players in this space. We found that Benjamin Franklin was inevitably correct: Death itself is certain. Everything else about the industry is less certain.

Death and its Industry
The death of one man: that is a tragedy. One hundred thousand deaths: that is a statistic.
– Kurt Tucholsky

Every hour more than 300 people in North America die. These deaths bring grief to some, but profits to others. As of 2018, the for-profit funeral and cemetery business in North America consists of approximately 27,000 establishments that generate an estimated $20B in annual revenue on 3-million deaths.

The industry is divided into two segments: funeral homes and cemeteries.

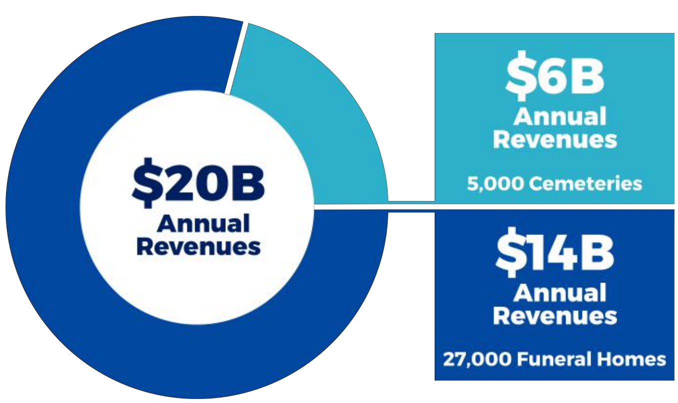
<u>Funeral Homes:</u>
Funeral homes in North America are dominated by many small, independently-owned operators. There are only a few large, commercial operators who operate on a national scale. Of the $20B in annual revenues, 80% of these revenues are derived from funeral services.

The main service funeral homes provide is to prepare the body for burial. This includes transportation of the body, registration of death, washing and dressing the body, embalming, cremation services, and coordinating funeral and memorial services. In addition to services, the funeral homes segment markets burial caskets, urns, cremation receptacles, flowers, and other service related products. This segment of the business is characterized by its (primarily) at-need business model (i.e.: services and products are sold as needed) and consumer staple-like activity, which provides steady margins and steady cash flow.

<u>Cemeteries:</u>
Cemeteries in North America are typically owned by religious organizations, municipal governments, other not-for-profit organizations, and commercial owners. Due to the large number of not-for-profit enterprises, cemetery services account for only 20% of the $20B for-profit, death-care industry.

The main service cemeteries provide is related to the actual burial of the body. This includes the sale of burial markers as well as burial lots, crypts, and niches, for burial. This business is characterized by its (primarily) pre-need business model (i.e.: services are sold prior to being needed), consumer discretionary-like activity, and real estate development strategy. Unlike the funeral segment, high barriers to entry exist due to zoning restrictions, lack of available cemetery-zoned land, licensed personnel, and significant capital requirements.

NORTH AMERICAN INDUSTRY BREAKDOWN
FUNERAL HOMES & CEMETERIES



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Death & Demographics:
In the long run we are all dead. – John Maynard Keynes

It should come as no surprise that the North American population is aging. The US Census Bureau estimates that the number of people between the ages of 65 to 84 will increase from 43 million in 2016 to 66 million by 2035. Furthermore, the number of people over the age of 85 will double from 6 million to 12 million over this same period. Combined, the number of people over the age of 65 is estimated to account for greater than 20% of America's total population (up from 15% in 2016) by the year 2035. While the above data is for the United States, Statistics Canada has highlighted a similar trend for Canada.

It is true that the aging population represents a tailwind for the death care industry; however this demographic shift is a multi-decade trend. To realize potential gains from this long-term trend, we could face holding a position in this industry for longer than the standard 3-5 year investment horizon for our portfolios.

Death & Cremation:
Earth to earth, ashes to ashes, dust to dust.
– Book of Common Prayer

The United States legalized cremation, as an alternative to burial, in 1876. Nearly 100 years later, in 1972, cremation rates in the United States still remained remarkably low at 5%, but have been on the rise in the years since Watergate. The number of cremations exceeded burials for the first time in 2016. Canada, by contrast, has been ahead of this trend for some time. In comparison, our domestic cremation rate for 2016 was 70.2%.

There are many reasons for this shift including costs and environmental concerns. Cremation burials can reduce the land usage, avoid the use of embalming chemicals, and cost much less than traditional burials. In consideration of these factors, the National Funeral Directors Association estimates that by 2030, America's cremation rate will reach 71.3%.

The increasing popularity of cremation represents a significant headwind for the industry. In the same manner that cremation reduces cost for the customer, it also reduces revenues for the cemeteries. In order to maintain the same profit margins, the industry will need to restructure their business to account for the lower prices.

Death & Perpetuity:
Nothing is lasting but change; nothing perpetual but death. – Ludwig Börne

The purchase of a burial space in North America comes with the guarantee that the property will be maintained in perpetuity. This makes sense, since this is a business where the future goes on and on. And on. To pay for this guarantee, cemeteries transfer a portion of their sales proceeds to a trust fund,

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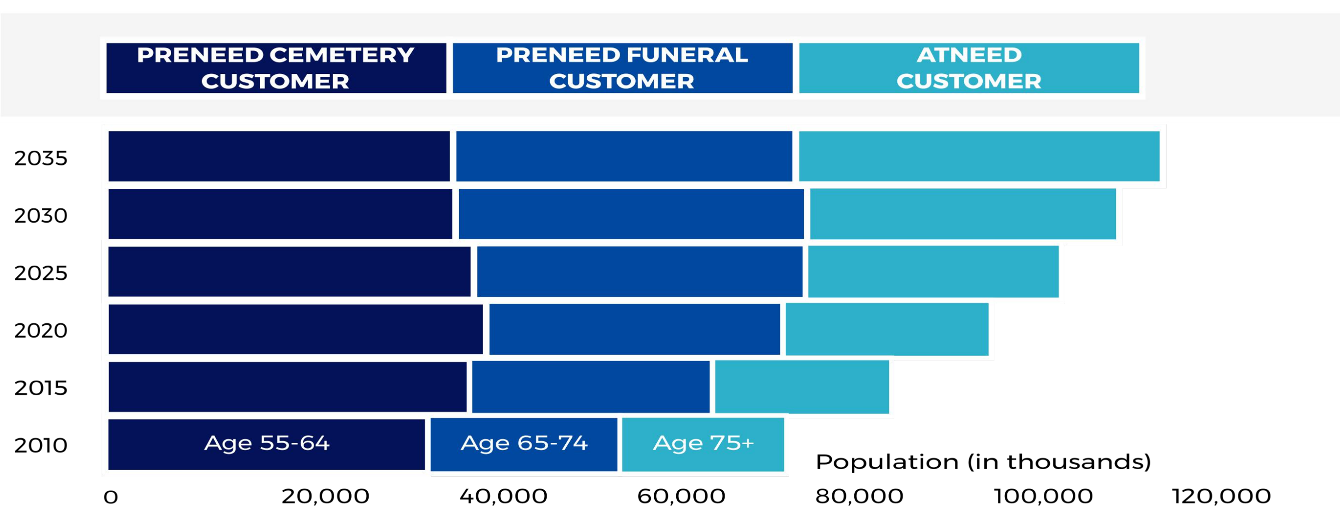

SOURCE: U.S. Census Bureau

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established specifically for maintaining the cemetery grounds and property in perpetuity. Future returns from this investment portfolio then help to pay for ongoing maintenance of the cemetery.

A 1955 Ontario law set out rules for maintaining burial sites and required that 40 per cent of the purchase price of a burial plot, 20 per cent of a cremation plot and 15 per cent of a columbarium niche be dedicated to perpetual care. At the time it was implemented, many small private cemeteries were forced into bankruptcy and were taken over by municipalities. Companies that are operating today pay greater attention to this liability. Since 1955, most other provinces, with the exception of Quebec, have followed suit with similar legislation. The same type of legal requirements have been in place south of our border since 1963.

There is of course an implied risk to these capital requirements. Companies in the industry can have a significant portion of their balance sheet tied to perpetual care trust funds, which in certain instances exhibit asset allocations set as high as 70% equity and 30% fixed income. Any decline in the fund's assets, due to market forces or poor investment decisions, can consequently reduce future profits for the entrusted company. The business cycle is therefore all the more impactful on companies in this industry.

Investing in Death: Park Lawn Vs. Service Corporation International

In the course of our research into North America's death care industry, we came across two potential investment opportunities: Park Lawn Corporation and Service Corporation International.

Park Lawn:

Park Lawn kickstarted our analysis of the funeral service industry. It is Canada's largest, and only, publicly traded funeral and cemetery provider. In 2013, the company appointed Andrew Clark as their new CEO. Since then the company has grown from 6 cemetery properties in Toronto, to a portfolio of 102 properties and subsidiaries operating across Canada and the US. Some of their larger brands include Saber Management, the Midwest Memorial Group, and Tubman Funeral Homes.

Park Lawn's strategy has been, and continues to be, the consolidation of the fragmented funeral and internment industry. They plan to continue growing by acquiring companies from within the industry, and operating these newly acquired companies in a more efficient manner by leveraging economies of scale. Based on this strategy, PLC has increased their annual revenue from $15 million in 2013 to $87 million in 2017. Over the same period, their outstanding share count has grown from 3.7 million to over 11 million.

Problem is, this strategy of acquisition based growth does not warrant the current share price of PLC. In the second quarter of this year PLC has traded within a range of 23.65 and 26.64. Over the past five years, and contrary to their plans on efficiency, adjusted operating earnings have remained flat at around $0.7 per share. Taken together, Park Lawn has a price-to-earnings multiple in the mid 30s, but has provided no evidence to support expectation of lofty future earnings growth. If we compare the current price of PLC with the S&P 500's trailing price-to-earnings multiple, the case against PLC becomes more compelling. The S&P 500 has a trailing P/E multiple of approximately 24, with consensus expectations for double digit earnings growth in 2018 and 2019. Since the S&P 500 has a lower price multiple, and higher expected earnings growth, investing in Park Lawn would therefore entail paying more for and getting less than an equivalent purchase of the S&P 500 index. Not the most attractive proposition.

Service Corporation International (SCI):

Service Corporation International is the largest funeral and interment provider in North America. The company enjoys a strong presence across the vast majority of U.S. states as well as most Canadian provinces. Its share of the North American funeral and cemetery market has remained steady thanks to consistent revenue growth since the financial crisis. According to SCI, their North American market share is approximately 15.5%. For comparison, the second largest death care provider (StoneMor) has a market share of 1.6%, while Park Lawn has a market share of less than 1%. While Park Lawn's growth thesis is two-staged: acquisitions and then efficiency; SCI's

Cont'd

current strategy, in consideration of their current size, is focused moreso on organic growth and improving operating efficiency.

Over the last 5 years, adjusted earnings per share for SCI have grown at a compounded annual growth rate of approximately 12%. Our quantitative models suggest that SCI can sustain less impressive long term EPS growth of approximately 8%. From a price-to-earnings-to-growth standpoint, SCI is currently trading at around 2.5; a multiple which compares to what we pay for consumer staple companies like Procter & Gamble, McDonald's, Colgate-Palmolive and Clorox. And yet, while SCI may be priced like a consumer staple, it lacks the stability inherent in these types of stocks. Take for example the period from from March 2007 to March 2009. During this time the S&P 500 dropped approximately 45%, but all consumer staple companies fell by far less than the general market. The share price for SCI on the other hand dropped far more than the general stock market. By March 2009, it was down more than 75%.

After accounting for the above information, we believe that SCI is too expensive, at current prices. A purchase of SCI would essentially mean purchasing a company growing at a similar rate to consumer staples companies and trading at staple-like prices, but without the staple-like protection.

In Summary:
Neither the sun, nor death can be looked at steadily.—
François de La Rochefoucauld

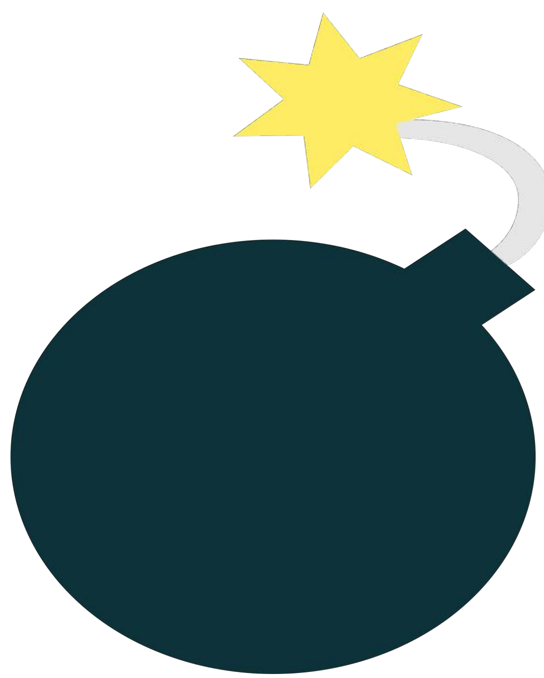
Our initial attraction to the funeral industry stemmed from two inevitabilities: the certainty of death, and North America's aging baby-boomer generation. Upon closer inspection, this investment thesis did not pan out. It turns out that while ageing and death are a certainty, the funeral industry's future revenues and profits are nowhere near certain or steady.

In the first place, expectations that industry revenues will show a marked rise in the short-term due to current demographic trends are unrealistic. So far, only around 18% of the boomer generation has reached 65; while the peak of the baby boom won't reach that age for another decade. It will then be another 15 years before this peak approaches average life expectancy.

Second, revenues could actually decline over the long-run with consumer preferences shifting to lower cost services. Boomers are taking a different, less expensive, approach to funeral rites than the preceding "Traditionalist" generation. This trend could actually offset the long-run gains from an ageing population.

Third, while waiting to see how these trends will play out in the long-run, the industry faces elevated risks year over year. Since 20% of the revenues in this industry comes from the pre-need sale of cemetery lots, during times of economic hardship, sales and profits fall sharply due to customers deferring purchases. Moreover, declines in the company's trust fund assets, strike a double blow to profits during these bear years. Past experience does not support assertions that the industry is uncorrelated with other industries and low-risk; instead, the opposite has shown to be true.

Ultimately, we do not believe that now is the correct time to be investing in this industry. Instead, borrowing from the famous misquote of Mark Twain, we find that reports about death, and the funeral industry's prospective rise have been greatly exaggerated.



QUBE TIPS

Beneficiaries for Registered Accounts at National Bank

When it comes to registered accounts, the CRA affords special tax privileges to spouses and common-law partners in the event of death. Where intended, it's important that you've taken advantage of this preferential treatment, by naming your spouse as either a beneficiary or successor holder. In the case that you plan to leave your estate to loved ones other than a spouse or common-law partner, important decisions still remain with varied tax implications and estate planning complexities. To help with these decisions, we've taken this opportunity to explain the ins and outs of beneficiary designations for TFSAs, RRSPs, and RRIFs.

Tax-Free Savings Account (TFSA)

Designation of a Successor Holder –

Only a spouse or common-law partner can be named a "successor holder." In this case, the value of the account at the time of death and any future growth can be transferred to the spouse/common-law on a tax-free basis into their TFSA. Even if the successor holder does not have contribution room, it will go into their TFSA without affecting their future contribution room or incurring penalties.

Designation of a Non-Spouse Beneficiary –

Anybody can be named as the beneficiary. The value of the account on the date of death goes to the beneficiary tax-free in cash, but all growth in the value of the account after death is taxable in the hands of the beneficiary. Since the investment funds are deregistered once the beneficiary transfer takes place, the beneficiary can choose to transfer the money to an RRSP or TFSA (if contribution room is available for either) or a non-registered account.

No Beneficiary Designation –

Your estate becomes the beneficiary if you name it directly, or you leave the beneficiary blank. Similar to the scenario above, the value of the account on the date of death goes to the estate tax-free, but all growth in the value of the account after death is taxable to the estate; however, depending on provincial jurisdiction, probate taxes may be paid on the full amount.

Retirement Savings Plan (RSP)

Designation of Spouse or Common-law partner as Beneficiary –

While RSPs are generally fully taxable on death, it is possible for spouses and common-law partners to leave RSP assets to one another on death in a way that defers taxes. In this case, the full amount of the RSP is rolled-over to the beneficiary's RSP or RIF, with taxes deferred until the surviving spouse withdraws money from the plan. Technically, the value of the plan at death is included in the surviving spouse's tax return for the year of the transfer, but the surviving spouse then claims a tax deduction to fully offset this income – it's called a 60 (l).

Designation of a Non-Spouse Beneficiary –

Anybody can be named as the beneficiary. If the beneficiary is not a spouse or common-law partner, the RRSP

Cont'd

of the deceased is collapsed and the value of the account on the date of death is fully taxable to the estate, though probate fees may be avoided. All growth after death is taxable in the hands of the beneficiary.

No Beneficiary –
Your estate becomes the beneficiary if you name it directly, or you leave the beneficiary blank. In this case, the will dictates who gets what and the amount becomes fully taxable to the estate and can be subject to probate. Naming a beneficiary can avoid probate but not taxes.

Retirement Income Fund (RIF)

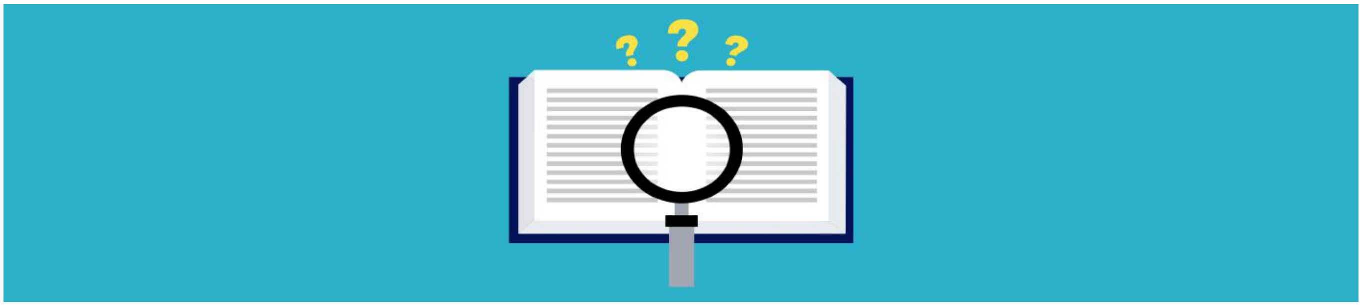
Designation of a Successor Annuitant –
Only a spouse or common-law partner can be named a "successor annuitant." This option essentially allows the surviving spouse to take over their spouse's RIF at death. Similar to the case of a spousal beneficiary, the value of the RIF rolls over to the successor annuitant tax-deferred. The difference is that the successor annuitant will automatically receive annual payments from the RIF that are set according to the mandatory withdrawal schedule of the deceased spouse. Taking over the RIF of a younger spouse would, therefore, slow down the process of depleting the plan since mandatory withdrawal rates rise with age.

Designation of Spouse or Common-law partner as Beneficiary –
Same as tax treatment for RSP.

Designation of a Non-Spouse Beneficiary –
Same as tax treatment for RSP.

No Beneficiary –
Same as tax treatment for RSP.

Of course, this summary isn't a complete estate planning guide. There are many details to consider. If you're unsure about how your accounts are currently set up, or should be set up, we're more than happy to review with you. In the interim, Nicole has been reviewing the beneficiary designations on all client accounts and will be reaching out to our clients if we have recommendations to offer.



Every quarter we highlight some of our Kaleo portfolio holdings and share with you our investment thesis (why we hold the stock). We also provide examples of news and activities we're seeing in the market that support or contradict that thesis.

Kaleo Full

Citigroup (C): We first bought Citigroup in our Kaleo portfolios on Jul 7, 2015, at a price of $53.80. Since then, and after averaging down our investment when the company was trading at $42, the company has produced a total, cumulative return on investment of approximately 34%, including dividends, on a constant currency basis. If we were to include currency appreciation, the total, cumulative return jumps to 36%.

We reviewed this company in 2016, and at that time, our two primary theses for purchasing and holding Citigroup were valuations and a turnaround story. We believe that these reasons are still relevant today, and continue to make Citigroup a compelling investment for the next three to five years.

Almost ten years ago on Nov 21, 2008, a FDIC (Federal Deposit Insurance Corporation) official wrote the following to his boss Sheila Bair, the then Chairman of the FDIC, "In short, I will characterize the liquidity and confidence situation [at Citigroup] as negative and deteriorating such that viability may be threatened without outside support." Three days later (because the 21st was a Friday), the government announced a massive bailout program for Citigroup, infusing them with $20 billion of fresh capital, and guaranteeing 90% of the losses from their loan and security portfolio.

The Citigroup of today is fundamentally different from when they were reviled as being "too big to fail". Since 2012, Citigroup has decreased their consumer and institutional markets by over 50%, shed off over $160B in assets, and reduced their headcount by approximately 15%. These initiatives have resulted in improved operating efficiency by over 600 basis points, and helped them pass the Federal Reserve's annual Comprehensive Capital Analysis & Review (CCAR) stress test since 2015. Citigroup's continued pass on CCAR laid the foundation for them to return $17 billion of capital to shareholders in 2017, with an additional $40 billion planned through to 2019. In other words, in the next 2 years, shareholders can expect an approximate 25% return on their investment from current levels ($170B market capitalization).

In terms of valuations, Citigroup currently trades at a price-to-book multiple of 0.93. This means that $1 at Citigroup is only worth $0.93 to the market, and implies that they are worth more liquidated than operating as a business: an absurd notion. For comparison, Bank of America has a price-to-book multiple of 1.2, and both JPMorgan Chase and Wells Fargo have price-to-book multiples of approx-imately 1.5.

We believe that this gap in value is mainly due to investor sentiment and poor historical returns, and this gap can be closed over time as Citigroup continues to improve on their fundamentals through organic growth and share buybacks. This should bring investor confidence back into Citigroup, helping to drive future returns for the stock.

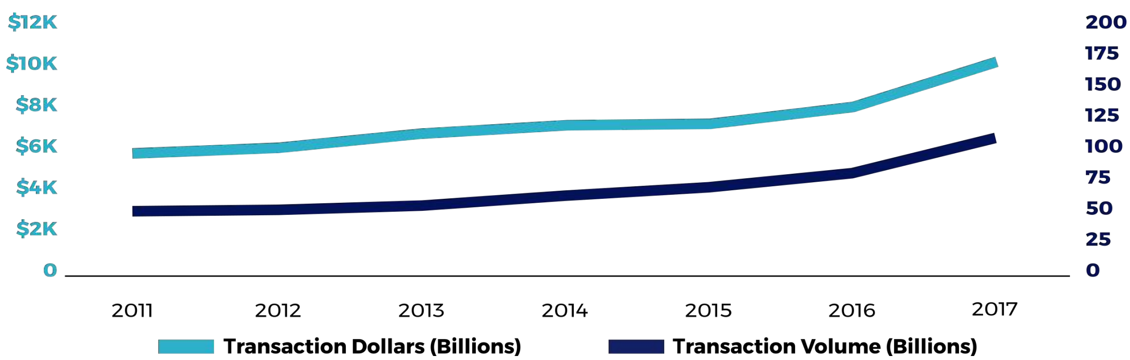
Kaleo A & Kaleo Full

Visa (V): We first bought Visa in our Kaleo portfolios on Nov 21, 2013, at a split adjusted price of $50.43. Since then, the company has produced a total, cumulative return on investment of approximately 173%, including dividends, on a constant currency basis. If we were to include currency appreciation, the total, cumulative return jumps to 249%. In our opinion, Visa will continue to be a beneficiary of the world's migration from cash to digital. Indeed, Visa's role in global commerce has become more important than ever, as evidenced by the year-over-year increases in volume over the Visa Network.
Source: Visa Annual Reports

Visa is an American, multinational, financial services corporation that facilitates electronic funds transfers throughout the world. Contrary to popular belief, the company does not issue cards, extend credit or set rates and fees for consumers; rather, the value Visa provides is in its brand name and platform, which links merchants and consumers to one of the largest payments processing network in the world (second to China's UnionPay).

According to MasterCard, the total, global payment flow in 2016 was approximately $225 trillion. These values include Personal Consumption Expenditures, Business-to-business, and Person-to-person. Of the $225 trillion, $86 trillion (38%) was still transacted through cash and cheque, $114 trillion (51%) through the Automated Clearing House, and only $22 trillion (11%) was through the carded networks. This disparity between the carded networks, and its alternatives, provides significant opportunity for Visa to expand their presence.

VISA NETWORK TRANSACTION VOLUME



In recent years, Visa has been investing into "push" payments through Visa Direct, a category that has traditionally been served through cash, cheques and ACH. In a push payment, the account holder "pushes" payments to the recipient, rather than having the funds "pulled" from their account, as in a traditional point-of-sale transaction. Some examples of push transactions include payroll payments, insurance payouts, and payments to suppliers. In Q4 2017, volume on Visa Direct grew 75 percent.

The migration from cash to digital payments have been accelerating. According to Visa, in 2017, global, digital payment volume exceeded cash for the first time in history. We believe that Visa's brand name, and constant innovations, make them well positioned to continue leading this digital transformation.

Qube Insights: Equity Research Snapshots

Company	Sector	Current Status
Imax Corp	Consumer Discretionary	
Deckers Outdoor Corp	Consumer Discretionary	
Callaway Golf Co	Consumer Discretionary	
TopBuild Corp	Consumer Discretionary	
Brunswick Corp	Consumer Discretionary	
Magna International Inc.	Consumer Discretionary	
TripAdvisor Inc	Consumer Discretionary	
Service Corp International	Consumer Discretionary	
Park Lawn Corp	Consumer Discretionary	
Rogers Sugar Inc	Consumer Staples	
National Beverage Corp	Consumer Staples	
SPX Corp	Industrials	
KBR Inc	Industrials	
Crane Co.	Industrials	
Knight-Swift Transportation	Industrials	

Qube Insights: Equity Research Snapshots

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
Spirit Aerosystems Holdings Inc	Industrials	
Canadian National Railway	Industrials	✓
Brookfield Business Partners	Industrials	✗
Toromont Industries Ltd	Industrials	✗
Western Digital	Information Technology	✓
FormFactor Inc	Information Technology	✗
Vishay Intertechnology Inc.	Information Technology	✗
Momo Inc	Information Technology	✗
Fabrinet	Information Technology	✗
Orbotech Ltd	Information Technology	✗
Barracuda Networks Inc	Information Technology	✗
Virtusa Corp	Information Technology	✗
Hollysys Automation Tech.	Information Technology	✗
Oclaro Inc	Information Technology	✗
Power Integrations Inc	Information Technology	✗
Sierra Wireless Inc	Information Technology	✗
DowDuPont	Materials	✓
Praxair	Materials	✓

Qube Insights: Equity Research Snapshots

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Company	Sector	Current Status
Glatfelter (P.H.) Co	Materials	○ ○ ○ ✗
Alcoa Corp	Materials	○ ○ ○ ✗
FMC Corp.	Materials	○ ○ ○ ✗
Barrick Gold	Materials	✓ ○ ○ ○
Western Forest Products Inc	Materials	○ ○ ○ ✗
Canfor Corp	Materials	○ ○ ○ ✗
American Campus Communities	Real Estate	○ ○ ○ ✗
Alexandria Real Estate Equities	Real Estate	○ ○ ○ ✗
CBRE Group Inc	Real Estate	○ ○ ○ ✗
BT Group PLC	Telecom	○ ○ ○ ✗
China Telecom Corp Ltd	Telecom	○ ○ ○ ✗
China Unicom (Hong Kong) Ltd	Telecom	○ ○ ○ ✗
Ameren Corp	Utilities	○ ○ ○ ✗
Avangrid Inc	Utilities	○ ○ ○ ✗
Chesapeake Utilities Corp.	Utilities	○ ○ ○ ✗
Nextera	Utilities	✓ ○ ○ ○
Hydro One Ltd	Utilities	○ ○ ○ ✗

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Qube Investment Management Inc. is a registered portfolio management firm in the Provinces of Alberta and British Columbia and was registered as a portfolio management firm on June 25, 2012. Any return period cited before this date was prior to QIM being

registered as a portfolio management firm. Inception was Jan 1, 2011 and all returns are for a modeled portfolio initiated at $500,000. Your actual returns may vary according to your individual portfolio. The modeled returns are calculated inclusive of dividends, adjusted to the Canadian currency, and are determined via the IRR (Internal Rate of Return) method. The gain/loss shown are simple (non-compounded) returns for periods up to one year. If the time since inception date is more than one year, then the return shown is an annualized return. For comparison purposes, the Kaleo model(s) are reported as gross returns before investment management fees. Individual investor level returns will differ as the fees agreed to in your Investment Management Agreement (IMA) are subtracted from the gross return.

At any one point in time, the composition of the Kaleo model may change. Currently, the focus for our models (Kaleo A, B 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, B 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 S&P 500 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 provided by Standard & Poor's for both the S&P/TSX and the S&P 500. 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.

Past performance is not indicative of future results and there is no assurance that our model portfolio will achieve its objectives or avoid significant losses

Qube Investment Management Inc.
200 & 300 Kendall Building
9414 -91 street
Edmonton, AB T6C 3P4
780.463.2688