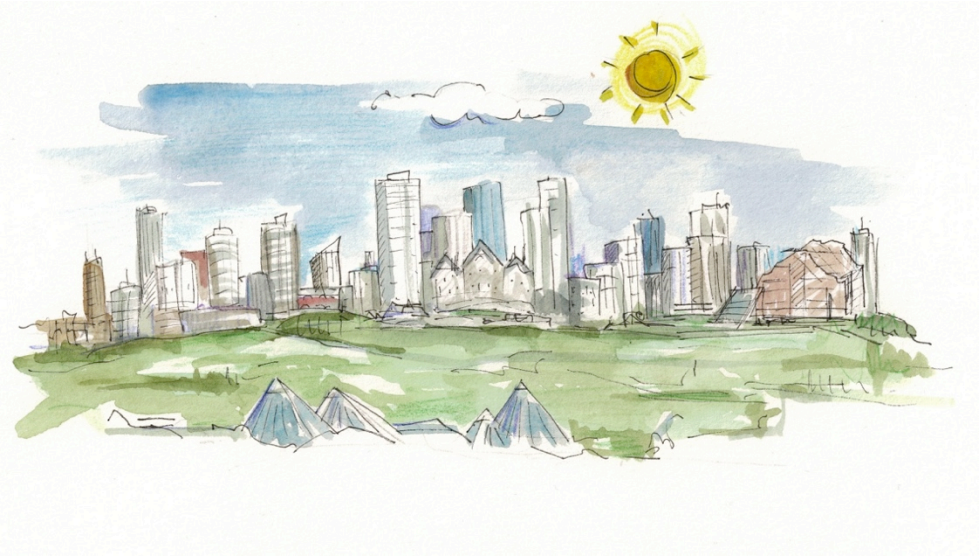
QUBE

Qube Quarterly

2016: Q1

2016: THE BEST OF TIMES

In this issue



Greetings from the Editor

Anya Tonkonogy, MA

2016 has brought many positive and exciting changes to Qube!

Not the least of which is our new and improved office space. The Kendall Building went through a rejuvenating facelift, and we're now sporting fewer walls and more common areas where the Qube Team works collaboratively on managing your investments!

This ties in well with our attitude of transparency at QIM. We are independent but not unaccountable. Our clients place their trust in our portfolio management, and therefore deserve transparency, responsiveness and customized service. This applies to everything we do - from the way we select the investments to our fees.

Proper stewardship of your investments also means we manage your portfolio risk by keeping in mind how the companies we invest in treat the world – how they govern themselves, how socially and environmentally responsible they are, and how engaged they are with their shareholders.

We are not just 'stock brokers' and we are not commission salesmen – everything we do and how we do it is motivated by what is most efficient for our client. This means we will not simply buy and sell and trade, to appear busy. We go out of our way to ensure your savings are managed with maximum tax efficiency, therefore maximizing your after-tax returns.

This newsletter is a way for us to reach out to you and share our perspectives. In turn, we love to hear from you, and welcome any feedback or comments you may have.

Thank you for your continued trust in us,

Anya Tonkonogy, MA
Client Service and Business Development

Qube Investment Management Inc. is a registered portfolio management firm in the provinces of Alberta and British Columbia.

We are proud to serve you from our offices headquartered in Edmonton!

The Greek meaning of Kaleo is: "to call, summon, or invite..."

It is our invitation for you, to invest with us!

At March 31, 2016

	YTD	2015	1-Year	3-Year	Since Inception (Jan 2011)
KALEO A	-2.5%	11.9%	2.4%	15.8%	14.1%
KALEO B	-3.8%	16.1%	5.1%	15.4%	13.5%
KALEO FULL	-3.6%	14.3%	3.5%	17.2%	14.4%
S&P 500 (US Benchmark)	-4.9%	21.0%	4.4%	21.5%	17.9%
S&P TSX (Canadian Benchmark)	4.5%	-8.4%	-6.6%	5.2%	3.1%
50% TSX / 50% S&P 500 (KALEO BENCHMARK)	-0.2%	6.3%	-1.1%	13.3%	10.5%

Kaleo is Qube's stock model, which is offered as follows:

Kaleo Full – currently a 43 stock + 2 index ETF model offered to clients with $1M+ positions

For clients with positions between $250,000 to $1M, we offer two subsets of the Kaleo Full model:

Kaleo A – currently a 24 stock + 2 index ETF model

Kaleo B – currently a 24 stock + 2 index ETF model

Our model portfolios were launched in January of 2011. They continue to report a lower risk metric (beta) and generate a superior return when compared to our performance benchmark of 50% of the TSX (CAN) & 50% of the S&P 500 (US) indexes.

We currently aim to hold a stock for 3-5 years in our Kaleo models. This means we have an average portfolio turnover of 25%. In other words, a quarter of our positions change each year on average. One goal with Kaleo is to generate income through dividends. An investor entering Kaleo at inception would have a dividend yield today of over 3.5%. Many of the companies in our portfolio increase their dividends each year, so an investor can therefore grow his or her dividend over time. An investor entering Kaleo today would see a starting dividend yield of about 1.5%.

In the management of our Kaleo model, we use both company specific / fundamental analysis and macroeconomics to determine our positions (what to buy/sell).

Our research universe refreshes each year and we currently track between 150 and 200 companies. To learn more about our investment philosophy, please see our investing brochure at www.qubeconsulting.ca.

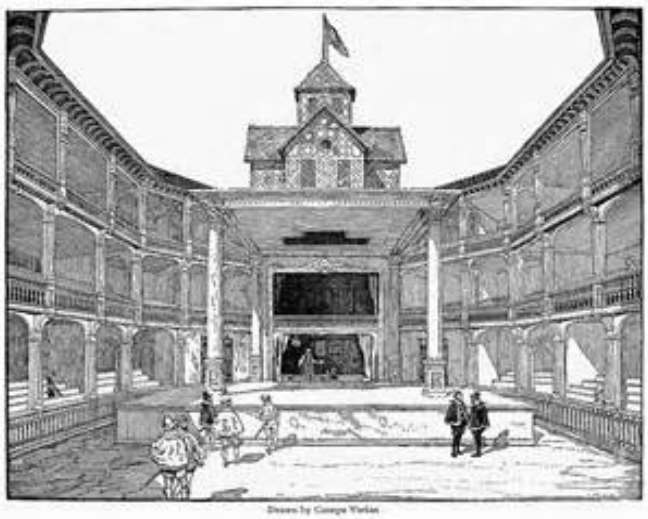
Also, please read our disclaimers on the last page of this newsletter.

Kaleo at a Glance

Patrick Choi
Ian Quigley, MBA

2016 - The Best of Times.

Ian Quigley, MBA



It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way – *Dickens 1859*.

It's a warm summer afternoon in 1600 A.D. and you are feeling a little naughty, so you decide to slip outside the city limits to catch a new play at the Globe Theatre. You grab a pint and sandwich at a market stall outside and head inside to join nearly 1500 other patrons. Last year the theatre opened with a play called "Julius Caesar", and today's premiere of "Hamlet" sounds promising (it is also performed by its author, who is apparently a pretty decent actor). You are going to have more than just a great afternoon; you will be sitting on the edge of history. Would you switch your life here in 2016 to be present there in 1600?

It's 1708 and a young Johann Sebastian Bach has just convinced the town government to fund an expensive renovation of its organ at St. Blasius's Church in Muhlhausen Germany. As a thank-you, he composed and will perform a festive cantata (Gott ist mein Konig BWV 71) for the town with his new bride/cousin Maria Bach in attendance. It is the beginning of his brilliant career and world history will change today. Would you trade your life in 2016 for one in 1708?

Would you switch your life today for a life in the past?

What about joining the Greeks or Romans in 500 B.C.? Or maybe you could live in Baghdad in the 1100s? Apparently, today's Iraq was the cultural center of the world at this time. A place where even common folk had reasonable lives, and the educated boasted to live better than anyone in Europe. Would you head to 1100 if you could? Or would you stay here in 2016?

While tempting, further contemplation would surely lead you to choose to remain here in 2016. Even though these epochs seem relatively happy, those who lived through them had far less time to enjoy the good times: life spans were much shorter then. A quarter of the population would not make it to their 5th birthday. Those that made it to 20 had a 1/100 chance of death each year thanks to bad food and bad hygiene. Even in the US in the 1800s life expectancy was only 39 years. Life expectancy only increased to 49 years in 1900 and to 68 years by 1950. In 1900, 1% of American women died in labor giving birth, while today the 5-year mortality rate for localized breast cancer is down to 1.2%. In other words, being pregnant 100 years ago was almost as risky as having breast cancer today!

I believe that today, 2016, is the greatest time to be alive in the history of the world. Further, it is also the greatest time to be an investor.

The average newborn today can expect to live an entire generation longer than his or her great-grandparents could: an entire second lifespan to fix

the mistakes of the first. In 1918, a flu pandemic infected 500 million people and killed nearly 100 million. Having the illness was like "someone hammering a wedge into your skull just behind the ears. The body aching so intensely that your bones felt like they were breaking." Today, a $10 flu shot prevents all of this.

When you research the greatest periods to be alive, the 1950s are commonly cited. Is it possible the 1950s were better than 2016? Maybe.

1950 might be the greatest period to be alive in world history, at least if you were a man.

Or, if you really liked to smoke.

In 1950, Popular Mechanics predicted a computer would someday weigh less than a ton. In 1950, people prepared for a nuclear attack that would kill millions (a probable event that never happened). In 1950, we were recovering from a war hangover, and struggling to heal from the loss of 60 million lives in the great world wars.

Battle deaths peaked at 300/100,000 in the 1940s to less than 10 in the 1980s. Today, less then 1/100,000 will die in a battle death. 2016 – a relatively peaceful time, wouldn't you say?

While global poverty is still a serious and curable problem, the global poverty rate has been cut in half in the past 20 years. Median household income (adjusted for inflation) has doubled since 1950 leading to the highest standard of living ever enjoyed on planet earth. We also work less today, with the average workweek being 34.8 hours. That's down from 66 hours in 1850!

Food also costs less, with the relative price of food to wages declining by more than 90% since the 19th century. In 1900, 44% of all American jobs were in farming. Today only 2% of our population farm, with many thousands of people able to contribute to society in other ways.

We are also living longer periods in leisure than ever before in world history (also called retirement). According to the US Federal Reserve, the number of years in retirement has risen from 11 (in 1870) to 35 years in 1990. Today, in 2016, we average nearly 40 years of retirement and we do it with great prosperity. The percentage of elderly Canadians today in poverty has dropped from 30%+ to less than 10%.

This, of course, assumes you are a lucky person who was born in North America, where only 4% of all humans get to live.

This is a place where an average house or apartment is still twice as large as one in Japan or Russia. North American kids start their careers with an average annual income of $34,000, making them the richest 1% of the world before they complete their first year of employment. If their parents earn $70,000 or more per annum, this puts them in the top 0.1% of earth's population.

Life in 2016: Summary

Despite the Syrian humanitarian crisis, ISIS, the income gap, Trump and global warming, today is clearly the best moment in the entire history of planet earth to be alive. We might not have Bach here to play for us, but we have an extra 40 years of time to listen to his recordings.

But what about investing? Is this also the best time in history to invest our retirement funds?

We have data on the financial markets back to 1872, so lets break the decision into short and long-term investing for context. Let's also use a well-diversified, blue chip portfolio (S&P 500) as our investment choice.

Short Term Investing (3 Year Rolling Returns)

A short-term investor might invest for 3 years at a time and there were 8 stretches that an investor, investing for 3 years, would have been rewarded with average annual returns of 10% or greater.

Period	Consecutive 3YR Periods over 10% per Annum on Average
1879-1882	4
1900-1905	5
1923-1929	7
1934-1937	4
1943-1947	5
1950-1965	15 (less 2 years)
1976-2000	24 (less 3)
2011-2016	5+

You can see in this table the great influx of wealth in the 1950s from post-war stability/baby boomers combined with the success of union pensions. Markets from here on became more mature and stable, thanks to modern portfolio management where even short-term investors were handsomely rewarded.

After the 15 year run from 1950-65, the markets slowed down for 11 years (still with largely positive returns), then the next strong run began which lasted 24 years (less 3) - many, many, 3-year periods where investors were well rewarded.

Then another pause happened from 2000-2011. The technology bubble burst in 2001 and then we suffered the financial market meltdown in 2008. Much disruption. It took 11 years, but returns did stabilize again in 2011 and have posted promising returns since.

Long Term Investing (10 Year Rolling Returns)

A long-term investor would invest for longer periods of time. Here we will look at 10 year rolling returns, meaning 10%/annum on average over a 10 year stretch.

From the start of our data (1871), there are no 10-year periods showing a negative return!

That can be hard to believe: what about the infamous crash of 1929? Well, this crash happened during a great economic boom, and even the worst 10-year period around that time ended in 1932 at +6.6%. Reason to see past the corrections!

What about Black Monday 1987? Again, this happened during a great bull market when the 10-year returns remained above 10% for 23 years.

The worst 10-year investing period in history ended in 2008, offering investors a +0.7% annual average return from 1998-2008. Prior to that, the worst 10-year return was +2.5% ending in 1974 and capturing the bear markets of 1966/69/73 and 74. That's a lot of bears.

The spans of 10%+ returns over 10-year periods are as follows:

Span	Consecutive 10YR Periods with over 10% per Annum on Average
1887-1888	2
1905-1910	6
1925-1936	12 (less 2)
1943-1945	3
1950-1969	20 (less 3)
1984-2006	23

2016: Best Time Ever to Be An Investor

Especially in recent decades, one can see that it is not uncommon for long-term investors to receive 20+ years of solid rolling 10%+ annual average returns. An investor has seen a 10% annual average return (or better) half of the time since 1872.

This same investor saw 10%+ returns over 68% of the time since 1950.

Why is 2016 such a good year for optimism? It has been 10 years (2006) since we have seen a proper reward for long-term investors. While 2015 was close (a ten-year return averaging 9.9%), we are certainly overdue for a stretch of healthy rewards.

If this is the greatest time in history to be alive, why wouldn't this also be the greatest time in history to invest?

Why shouldn't we expect another stretch of 20 years with handsome rewards for long-term equity investors?

Non-stop coverage of anxiety-rich material on CNN is conditioning us to think that our environment is strife with danger, decline and pending devastation.

Some men enjoy the constant strife,
Of days with work and worry rife,
But that is not my dream of life.

- James Weldon Johnson

Why Invest In Canadian Banks?

Patrick Choi

At one point during the quarter, Canadian banks fell as much as 25% over a 1-year period. If we combine this dismal performance with the general opinion that the Canadian economy will continue to underperform (due to the drag from the energy and resource sector) then it must seem like absolute madness for us to continue investing in 2 of the "Big Six" banks in Canada: Bank of Nova Scotia and National Bank of Canada.

Below, we will first explore why we even hold Canadian banks at all, and later on, why we hold these 2specific banks. There is a method to the madness!

Canadian Banking in General

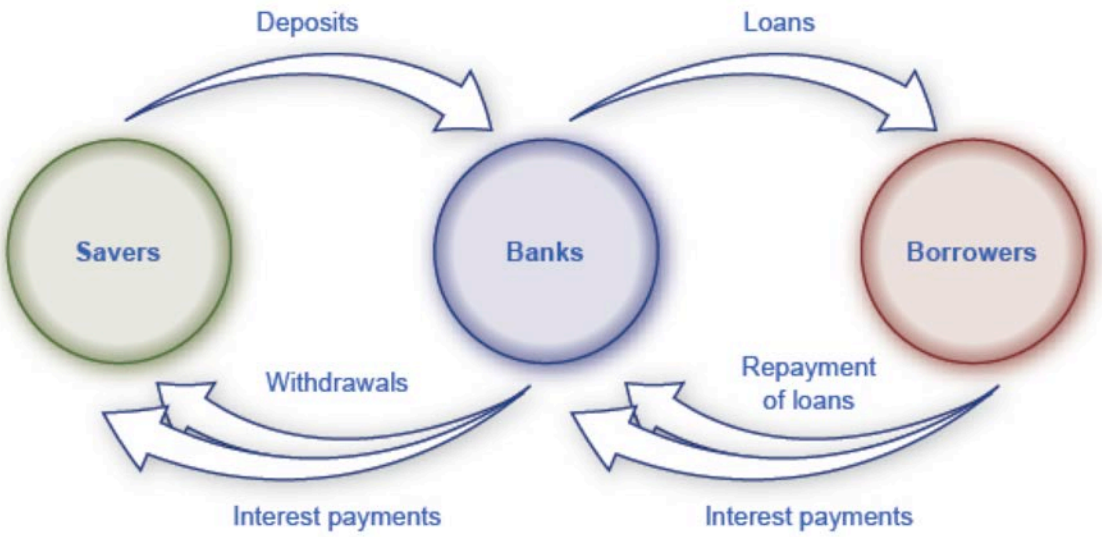
From a "big picture" standpoint, we have 3 main reasons for holding Canadian banks: relative size as a percent of the Canadian stock market, relative importance to the Canadian economy, and relative safety when compared to other banks in the rest of the world. These 3 points should provide comfort to the investor that the banks can continue to earn handsome profits at much lower risk than "lesser" companies, in addition to being appropriate from a portfolio management standpoint.

Size

The Financial Services sector represents 37% of the S&P/TSX Composite compared to the S&P 500's 16% representation. If an investor is looking to create a diversified portfolio, with an appropriate representation of the Canadian economy, they will have no choice but to include into their portfolio at least one of the "Big Five (Six)" banks in Canada. In our opinion, you cannot escape from investing into this sector.

Importance

A modern economy can only function on the back of a healthy financial system. At its most fundamental root, there has to be free flow of capital coming from savers to consumers, and then back to savers through a return on investment. Financial intermediaries such as banks, help to facilitate this essential flow of capital, which is the lifeblood of capitalism.



Most of us don't need to be reminded of how important financial institutions are to the wider economy. The memory of the 2008 subprime mortgage crisis is all too fresh in our minds, as its impact is still being felt today. While the crisis was initially caused by a decline in housing prices, the greater impact to the economy could

arguably be the derivative effect of also destroying the balance sheets of financial institutions. This created significant disruptions to the flow of credit to businesses and consumers, which helped contribute to the severe global recession at that time.

The bank's importance to the economy is why Canadian banks received $114 billion from the government, according to an analysis by CCPA (Canadian Centre for Policy Alternatives) senior economist David Macdonald. Instances such as this show that while shareholders of "lesser" companies have to always deal with the possibility of a 100% loss (bankruptcy), shareholders of large, "too-big-to-fail" financial institutions have the added protection of government intervention. This makes their maximum potential loss somewhat less than 100%. It's bad news for the taxpayers, but great news for the shareholders.

Safety

Canada is widely considered to have one of the safest banking systems in the world. In fact, the World Economic Forum, in their 2015 Global Competitiveness Report, ranked Canada number 1 in the category "soundness of banks" for the 8th year in a row. In contrast, the United States was ranked number 39 out of 140 countries. In corroboration with this data, Bloomberg has consistently included Canadian banks as part of their top 20 of "the world's strongest banks". All 6 of Canada's largest banks have made it into this ranking from Bloomberg at least once since 2011 (inception).

Canadian Banking with Specifics

Above, we considered banking in Canada as one homogenous unit; in reality, Canada has 28 domestic banks and over 300 credit unions. In the public markets, only 8 of these are available for purchase, including the "Big Six", plus Canadian Western Bank and Laurentian Bank of Canada.

A comparison of the 6 largest banks in Canada are given below:

General Comparisons:

Official Name	Brands	Assets (C$ bn)	Capitalization (C$ bn)	Employees
Royal Bank of Canada	RBC Royal Bank	$1,074.2	$108.3	78,000
Toronto-Dominion Bank	TD Canada Trust	$1,104.4	$101.1	85,000
Bank of Nova Scotia	Scotiabank & Tangerine	$856.5	$73.9	89,214
Bank of Montreal	BMO Bank of Montreal	$664.4	$49.9	47,000
Canadian Imperial Bank of Commerce	CIBC & President's Choice Financial	$463.3	$38.6	44,000
National Bank of Canada	Banque Nationale	$216.1	$13.9	19,764

Operational Comparisons:

	Geography			Profitability	
	Canada	United States	International	Profit Margin	Return on Equity
Royal Bank of Canada	63%	19%	18%	28%	19%
Toronto-Dominion Bank	70%	30%	0%	26%	13%
Bank of Nova Scotia	58%	6%	36%	30%	15%
Bank of Montreal	62%	33%	3%	23%	13%
Canadian Imperial Bank of Commerce	85%	6%	8%	26%	19%
National Bank of Canada	95%	5%		29%	17%

The general consensus that Canadian Banking is homogenous is not entirely incorrect. The "Big Five" all have very similar operations, similar geographic footprints, and very similar drivers to revenue. Rather than thinking of them as mere banks, we can describe the "Big Five" as international financial conglomerates, similar to their American counterparts like Citigroup and JP Morgan Chase (albeit to a much lesser degree). For the "Big Five", retail and commercial banking comprises just one of many parts of their business.

For example, all 6 of Canada's big banks have substantial retail operations (personal/commercial banking and wealth) that contribute greater than 70% of their annual revenues. Both Toronto-Dominion Bank and Bank of Nova Scotia are particularly vested in this area as they contribute 91% (or 84% in the case of BNS) of their

revenues. The difference between these 2 banks is in their geography. TD is more focused in Canada and the US, while BNS is expanding into Latin America.

On the flip side, the 4 other banks not mentioned (RBC, BMO, CIBC, National Bank) have higher percentages of revenue in Capital Markets. Similar to the case with TD and BNS, the differences between these 4 banks are in their geography. RBC and BMO have the most international exposure, while CIBC and National Bank are more domestic oriented.

Qube's Plan:

After completing our investment research this quarter, our plan for the Kaleo model is to maintain our investments in both National Bank and Bank of Nova Scotia. Our decision was based on a combination of factors: they passed our quantitative assessments, fulfilled the "size, importance and safety" criteria as per our discussion above, and completed the larger picture of diversifying the Kaleo portfolio. Specifically, both National Bank and Bank of Nova Scotia have heavy exposures in countries where we would like more focus (Canada and Latin America). Combined with an average dividend (cash) yield on these 2 companies of around 5%, perhaps the more appropriate question you should be asking us is, "Why aren't we investing *more* into these 2 companies?"

Private Foundations @ Qube

Ian Quigley, MBA

There are over 5000 private foundations in Canada, with over 650 in Alberta and 750 in British Columbia. They are also a growing phenomena - why?

- Contributions are eligible for a charitable donation tax receipt;
- The Foundation becomes a conduit for your family to make a difference in your community;
- People today want more personal engagement in their philanthropy;
- You can use the foundation to teach philanthropy and create a "giving legacy" to your family and/or employees;
- A private foundation allows you to direct and manage your foundation assets with a high degree of control.

Private Foundation – What?

Most private foundations are investment accounts with money held in trust for the betterment of society. A private foundation is also considered charity. The foundation can grant funds to other registered charities as it deems fit, or become active and engage in charitable activities itself.

A Private Foundation does not operate at arms length from its donors. Most private foundations receive the majority of funding from one source, or are operated by a family board. As such, they are regulated more closely than other charities. Foundations often aim to build an endowment or investment account that can fund a legacy of grants. Annually they are required to disperse no less than 3.5% of its investments to charitable purposes.

Private Foundation – How?

Registered charities exist with purpose and these charitable purposes need to be defined in the constating documents. The options are broad and can include the relief of poverty, the advancement of education, or religion, or other defined purposes beneficial to the community. Successful registration of a foundation will take at least 6 months. Registered foundations are publicly accountable to CRA. For example, all registered charities must file an annual Registered Charity Information Return (T3010), which includes financial statements. Provincial registration is also often required, as well as documentation of meetings & minutes. In return, the foundation can issue tax receipts to all donors. It's a lot of work, but don't worry - Qube is here to help you with all of this!

Raising the Bar – Private Foundations

A donation to an active charity puts 100% of your dollars on the front line immediately. A donation to a foundation only requires 3.5% of the funds to be put into action each year. Foundations often have a vision to build funds in reserve, to create a legacy or endowment and, as such, do not immediately benefit society at the same level as a direct donation.

Therefore, your foundation needs to be highly focused on efficiencies, vision and impact. Qube is here to help and we have 5 reasons why you want to work with us to take your foundation to a higher level.

Foundations @Qube – Reason 1 (Shared Vision)

We share your vision! We started our own foundation in 2015 and you are welcome to check it out at www.qubefoundation.ca. Our investment mandate will also offer your foundation a shared vision. We are leaders in the integration of corporate social responsibility with portfolio management. Your foundation's investment program should reflect core values that the world can change for the better. Check more of this out at www.qubeconsulting.ca.

Foundations @Qube – Reason 2 (Scholarships)

Scholarships encourage educational advancement and can be a high impact strategy creating an enduring social benefit. While your foundation would probably have to amend its charitable purposes, a scholarship program is entirely possible and Qube wants to help you make it happen.

Foundations @Qube – Reason 3 (Charitable Activities)

A private foundation cannot run a revenue generating business, but it can hire employees and offer charitable activities to society. There are so many things an entrepreneurial board could consider! Qube can help again, including the contemplation of grants that may be possible to support these activities.

Foundations @Qube – Reason 4 (Housekeeping)

There is much to do! CRA requires a lengthy annual information return (T3010) as well as provincial filings. Annual general meetings (AGMs) need minutes and resolutions and the generation of financial statements. No problem, we are here to help and will host your AGM at our offices with assistance if you like.

Foundations @Qube – Reason 5 (Fee Savings)

Housekeeping, consulting and investment management; these are the things we offer and we only charge for the investment management. Further, our investment management tends to be 25-35% less than bank owned wealth managers or mutual funds. Working with us will save your charity thousands of dollars per annum.

Call or Email:
Qube has the right team, experience, and values to take care of you as your wealth advisor. We look forward to being a part of your team and helping your foundation be a high impact, exciting extension of your values. Contact Ian Quigley, MBA for more information on your foundation. ian@qubeconsulting.ca | 780.463.2688

TRADES UNDER REVIEW

Fair Value, Fair Price?

Patrick Choi
German Michael III Martinez

Buy Marsh & McLennan (MMC)

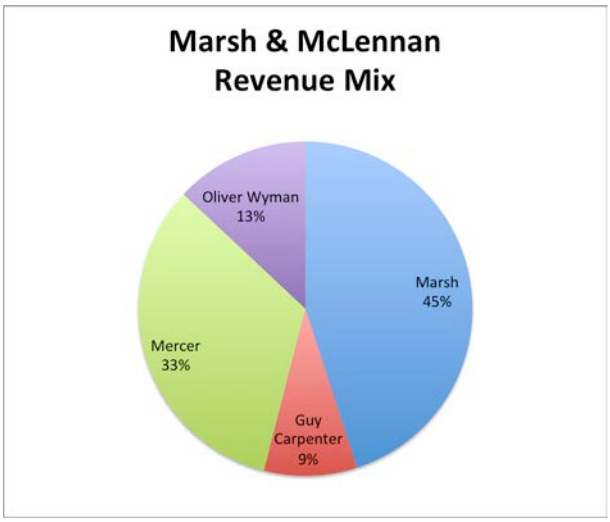
Marsh & McLennan (MMC), based on total revenues, is the largest insurance broker in the world. They operate in 130 countries, and as of the 2015 year-end, has revenues of approximately $13B. Their closest competitor is Aon plc, with approximately $12B in revenues, and also competes with MMC in other areas such as HR, Strategy, and Management consulting.

Insurance broking is a fragmented industry. The revenues from the top 2 brokers outweigh the next 18. In this environment, we believe there are certain advantages that MMC, as the largest insurance broker, can bring to their shareholders. This will be discussed further, later in this article.

In addition, a distinction has to be made on the fact that MMC is an insurance broker (selling the insurance) vs. an underwriter (holding the insurance and liable for any claims). This means MMC has no need to monitor capital requirements as directed by regulators, and has a smaller exposure to potentially tighter regulation on the underwriting industry. An investment into a broker would give us exposure into the risk management business (insurance), without exposing ourselves to regulatory risk.

Business Model:

The company's business is divided into 4 brands.



Marsh: MMC's risk consulting, alternative risk financing, and insurance brokerage arm of the business. Much of the competitive advantage for MMC, due to their size, is their ability to find counter parties willing to take on the insurance writing of both large (in terms of magnitude of the coverage) and unique risks. Marsh's advantage is not in selling the ordinary home, auto and life insurance policies (though these are still offered). Instead, Marsh has both the expertise and the ability to negotiate on multi-million, potentially multi-billion, dollar payouts on unique risks such as political risk (instability, nationalization, etc.); terrorism risk (sabotage,

violence, nuclear, biological, chemical, radiological, etc.); cyber risk, etc. These unique competencies help drive business for their other, more common, insurance brokerage business like property, receivables, financial, and professional liability.

Guy Carpenter: This is MMC's reinsurance brokerage and consulting business. In simple terms, they advise and sell insurance, to insurance companies. Since Guy Carpenter is not a competitor (insurance underwriter), they are able to provide unbiased views and advise on how insurance companies should manage their own book of liabilities going forward.

Mercer: Another of MMC's consulting arm. The focus for this brand is in providing research, guidance and execution on areas related to health and benefits, talent and compensation, wealth and investments, and mergers and acquisitions.

Oliver Wyman: This is the segment where MMC provides consulting on other parts of a business not covered by the other 3 brands. The areas include branding and identity; economic analysis on areas like regulation, public policy, litigation, etc.; business and organization transformations (e.g. turn-around strategies); pricing; sales and marketing; and technology.

Thesis – Why Marsh & McLennan?

Our thesis on the purchase of Marsh & McLennan is based largely on its Risk and (Re)Insurance business (Marsh & Guy Carpenter). This segment of the company in particular faces relatively inelastic demand, as uncertainty and risk are all facts of life. Today, the risks for businesses and governments around the world are low energy prices, the strength in the U.S. dollar, and unprecedented low (sometimes even negative) interest rates. Tomorrow, it may be something else. In order for these entities to thrive in such a dynamic environment, professional advice and solutions, as offered by MMC, will always be in demand.

In addition to the reason above, we also have the following reasons in our potential purchase of Marsh & McLennan:

Business Model:

MMC has a business model with high barriers to entry and "sticky" clients. On the client side, MMC's entire business model of providing consulting advice lends itself to a very sticky client base. If a client is satisfied with the services provided by MMC, it is very hard for a competitor to persuade them to leave due to high switching costs. With MMC's brand recognition, global presence, and diversity of consulting service, we believe it is easier for them, relative to competitors, to retain and attract new clients, as well as integrate smaller competitors into their fold.

Marsh and McLennan's insurance and reinsurance business also presents high barriers to entry for potential competitors. MMC's advantage is in their size and expertise dealing with unique risks, which allows them the opportunity to find the most appropriate terms and counter party willing to take on these risks. It is unlikely a smaller competitor (with the exception of Aon plc) would have the networks or the industry's trust, to provide a comparable service. This is especially relevant when the potential liability being insured can add up to a value in the billions of dollars.

Valuations:

On the back of such an enviable business model (large, globally diversified company offering services which have relatively inelastic demand across all economic cycles), the valuation of the company is comparatively inexpensive.

On a trailing 12 month, Price-to-Earnings basis, MMC is currently valued at 20 times, while the

S&P 500 is at 22.6x. MMC's multiples are also very similar to their 2 closest competitors Aon and Arthur J Gallagher.

In addition, over the past 5 years, MMC has shown very strong, double digit earnings growth due to continued margin improvements. As a result, the return on equity has increased from 17% in 2011 to 24% in 2015. We believe that these trends can persist due to further consolidation in the industry and management's continued focus on the bottom line.

Management:

In order to understand the management of this company, it is necessary to revisit the history of MMC. Prior to early 2008, MMC was plagued with a large number of lawsuits, high leverage, and low profitability. The situation degenerated to such an extent that shareholders were clamoring for a breakup of this 137-year-old company.

In early 2008, Brian Duperreault stepped in as Chairman and CEO of MMC. Even prior to his successful turnaround of MMC, this man was already well respected in the insurance industry for his contribution in turning a 50-employee boutique operation into a global insurance powerhouse with more than 9000 employees. That company's name is Ace Ltd. (now Chubb Ltd.), a current holding in our Kaleo universe.

At MMC, Brian quickly righted the ship by cutting costs and implemented more effective client segmentation (e.g.: he established a new subsidiary tailored specifically for small and mid sized business called Marsh & McLennan Agency). Over his 4 year tenure, leverage decreased, margins improved, and financial statements overall became much healthier and cleaner due to the decrease and eventual absence of lawsuits. On the way, Brian also managed to grow the business through regional and international acquisitions.

On Jan 1, 2013, Daniel Glaser succeeded Brian as president and CEO of MMC, and remains in the same position today. The reason why we discussed the details of MMC's past is because Daniel was handpicked by Brian to be his successor when he retired. Prior to the CEO role, Daniel was Chief Operating Officer (COO) for 17 months. MMC did not have a COO position prior to Dan. This basically telegraphed to everyone that he was specifically picked to learn the business for a year-and-a-half, and work closely with Brian, in order to prepare for his eventual role as CEO. Due to this smooth transition, we can expect (and it has already proven to be true), that Daniel would follow a very similar game plan to what Brian had already started in his turnaround of MMC. Specifically, there would be further improvements on the balance sheet, improved margins and more acquisitions.

Since Dan's tenure as CEO, MMC's balance sheet and margins have indeed continued to improve on the back of further acquisitions. From the conference call and annual report of the company, we see no reason to believe that there wouldn't be more of the same going forward.

Concluding Statement:

Taking into consideration our discussion on MMC's business model, valuations and management, we conclude that MMC is more or less fairly valued. We cannot prove that they are particularly cheap when compared to their peers and the overall market; however, it is also our opinion that they are not particularly expensive. We believe that this is the type of company where it might be appropriate to use the quote, "it is far better to buy a wonderful company at a fair price, than a fair company at a wonderful price".

QUBE INSIGHTS: Kaleo Holdings

Patrick Choi

Every quarter we will highlight some of the portfolio holdings and share with you our investment thesis (why we hold the stock) plus examples of news and activities we're seeing in the market that support or contradict that thesis. We'd like to give you some insight into our thought processes so you can understand why we hold or want to sell these companies.

Microsoft: According to the rankings on Forbes, Microsoft is the world's largest software maker by revenue, and outranks the 2nd largest company (Oracle) by more than two times on a revenue basis. For a technology company like Microsoft, we believe it is the impact of future products, like the below, that will help define the company's success going forward.

Kaleo Full, A

Microsoft Azure: It is not possible to talk about Microsoft, without speaking about Azure – Microsoft's cloud service offering, and currently the biggest growth driver for the company. Today, Microsoft has around 16% market share in a market that is estimated to be worth $16.5 billion according to Gartner. Due to the unique capabilities of Azure compared to competitors, we believe Microsoft can profit from both market share gains and overall growth in the total addressable market. From all indications, this thesis seems to be playing out, as last quarter, Azure revenue grew 140% year-over-year.

HoloLens: The HoloLens is Microsoft's answer for almost completely missing the mobile revolution. According to Microsoft CEO, Satya Nadella (and we agree with him), the HoloLens has the potential to reshape the way people work and play. Today, people perform computing tasks with a mouse, keyboard and a display. In the near future, we may instead be working using holograms, gestures and voice. The picture below highlights just one of the many use cases for a device like HoloLens.

Through Build, E3 and other conferences, we have kept track of Microsoft's upcoming products and services. What we have seen gives us confidence that Microsoft will continue to stay relevant in a constantly changing and evolving world.

QUBE INSIGHTS Continued: Kaleo Holdings

Patrick Choi

Kaleo A, Full

Nike, Inc: Nike is the largest seller of athletic footwear and apparel in the world. They are in approximately 190 countries and across 13 sport categories, which when added all up, amounts to billions of product units. Beyond the impressive numbers, Nike, at its heart, is a technology company with a well-funded and best-in-class marketing department. Through their complete offense in both technology and marketing, we believe Nike can continue to remain king in their category for the foreseeable future.

Marketing:

The success of Nike hinges, in part, on an umbrella of items we call "marketing". For Nike, this includes their slogans (e.g. "Just Do It"), their logos (e.g. "Swoosh"), and their multitude of sponsorships from national teams to individual athletes.

For fiscal year 2015, Nike's marketing budget was a whopping $3.2 billion – higher than the GDPs of some small third-world countries, and almost as large as Under Armor's annual revenue of $4 billion.

Technology:

Do you remember the Nike Air Mags Michael J. Fox wore in "Back to the Future"? On March 2016, Nike announced the HyperAdapt 1.0, a self-lacing system triggered when you place your foot inside the shoes. In other words, the self-lacing sneakers Marty McFly wore in the Science Fiction film, has now become a reality. Beyond the "cool" factor of self-lacing shoes, legendary designer Tinker Hatfield sees it as the perfect solution to individual idiosyncrasies in fitting preference, and the stepping-stone to making products come "alive". We believe Nike's continued push towards new boundaries in footwear & apparel will help them stay relevant for the future.

For a company like Nike, time is counted in the number of Olympics and World Cups. In 2016, investors will be able to see Nike's combination of marketing and technology in both the Olympics at Rio de Janeiro, and in the product launch of the world's first self-lacing sneaker.

Nike was ranked No. 1 as the most valuable apparel and fashion brand. Not footwear or athletic apparel brand, but the leading apparel (and fashion) brand ahead of Zara, Hermes, H&M, Louis Vuitton, Ralph Lauren, Hugo Boss, Gucci and Tommy Hilfiger. – Millward Brown, Brandz Top 100 Most Valuable Global Brands 2015

QUBE INSIGHTS: Equity Research Snapshots

Patrick Choi
Christopher Pu
German Michael III Martinez

Our equity research is guided by a proven value-based approach pioneered by Benjamin Graham.

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".

Do not hold

Considering a decision to hold

Considering a decision to sell

Hold

	INDUSTRY	Current Status
Chipotle Mexican Grill	Consumer Discretionary	
Darden Restaurants	Consumer Discretionary	
GameStop	Consumer Discretionary	
Garmin	Consumer Discretionary	
Genuine Parts	Consumer Discretionary	
Hanesbrands Inc.	Consumer Discretionary	
Johnson Controls	Consumer Discretionary	
Michael Kors	Consumer Discretionary	
Nike	Consumer Discretionary	
Nordstrom	Consumer Discretionary	
PVH Corp.	Consumer Discretionary	
Ross Stores	Consumer Discretionary	
Scripps Networks	Consumer Discretionary	
Signet Jewelers	Consumer Discretionary	

QUBE INSIGHTS: Equity Research Snapshots

Patrick Choi
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	INDUSTRY	Current Status
Walt Disney	Consumer Discretionary	✗ ↙ ↗ ✓
Thomson Reuters	Consumer Discretionary	✗ ↙ ↗ ✓
Time Warner	Consumer Discretionary	✗ ↙ ↗ ✓
TJX Companies	Consumer Discretionary	✗ ↙ ↗ ✓
Tractor Supply	Consumer Discretionary	✗ ↙ ↗ ✓
Transcontinental	Consumer Discretionary	✗ ↙ ↗ ✓
Viacom	Consumer Discretionary	✗ ↙ ↗ ✓
Yum! Brands	Consumer Discretionary	✗ ↙ ↗ ✓
Chubb	Financials	✗ ↙ ↗ ✓
Aflac	Financials	✗ ↙ ↗ ✓
Allstate Corp.	Financials	✗ ↙ ↗ ✓
Bank of Montreal	Financials	✗ ↙ ↗ ✓
Bank of Nova Scotia	Financials	✗ ↙ ↗ ✓
BlackRock	Financials	✗ ↙ ↗ ✓
CIBC	Financials	✗ ↙ ↗ ✓
CBRE Group	Financials	✗ ↙ ↗ ✓
CI Financial Corp.	Financials	✗ ↙ ↗ ✓
Cincinnati Financial	Financials	✗ ↙ ↗ ✓
Citigroup	Financials	✗ ↙ ↗ ✓

QUBE INSIGHTS: Equity Research Snapshots

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	INDUSTRY	Current Status
CME Group	Financials	✗ ↙ ↗ ✓
Crown Castle Int'l	Financials	✗ ↙ ↗ ✓
Franklin Resources	Financials	✗ ↙ ↗ ✓
H&R Block	Financials	✗ ↙ ↗ ✓
HCP Inc.	Financials	✗ ↙ ↗ ✓
Invesco	Financials	✗ ↙ ↗ ✓
Marsh & McLennan	Financials	✗ ↙ ↗ ✓
MetLife	Financials	✗ ↙ ↗ ✓
National Bank	Financials	✗ ↙ ↗ ✓
Northern Trust	Financials	✗ ↙ ↗ ✓
People's United Bank	Financials	✗ ↙ ↗ ✓
Power Financial Corp.	Financials	✗ ↙ ↗ ✓
Principal Financial Group	Financials	✗ ↙ ↗ ✓
Prudential Financial	Financials	✗ ↙ ↗ ✓
Royal Bank	Financials	✗ ↙ ↗ ✓
State Street Corp.	Financials	✗ ↙ ↗ ✓
Sun Life Financial	Financials	✗ ↙ ↗ ✓
T. Rowe Price	Financials	✗ ↙ ↗ ✓
Toronto Dominion Bank	Financials	✗ ↙ ↗ ✓

QUBE INSIGHTS: Equity Research Snapshots

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	INDUSTRY	Current Status
Unum Group	Financials	✗ ↙ ↗ ✓
Ventas	Financials	✗ ↙ ↗ ✓
Waddell & Reed	Financials	✗ ↙ ↗ ✓
Weyerhaeuser	Financials	✗ ↙ ↗ ✓
AbbVie	Healthcare	✗ ↙ ↗ ✓
Agilent Technologies	Healthcare	✗ ↙ ↗ ✓
Baxalta	Healthcare	✗ ↙ ↗ ✓
Baxter	Healthcare	✗ ↙ ↗ ✓
Becton Dickinson	Healthcare	✗ ↙ ↗ ✓
Biogen Idec	Healthcare	✗ ↙ ↗ ✓
Cardinal Health	Healthcare	✗ ↙ ↗ ✓
Celgene	Healthcare	✗ ↙ ↗ ✓
Edwards Lifesciences	Healthcare	✗ ↙ ↗ ✓
Gilead Sciences	Healthcare	✗ ↙ ↗ ✓
Medtronic	Healthcare	✗ ↙ ↗ ✓
Merck	Healthcare	✗ ↙ ↗ ✓
Mettler Toledo	Healthcare	✗ ↙ ↗ ✓
Valeant Pharmaceuticals	Healthcare	✗ ↙ ↗ ✓
Henry Schein	Healthcare	✗ ↙ ↗ ✓

DISCLAIMER: This is an internal report intended only for clients of Qube Investment Management Inc. The ideas presented within it form part of an overall portfolio management position and are not to be acted upon without coordination from your advisor.

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Commissions, management fees and expenses may be associated with investment accounts. Please read the simplified prospectus (if applicable), or investment management agreement before investing. Many investments are not guaranteed and are not covered by the Canada Deposit Insurance Corporation or by any other government issuer. There can be no assurances that an investment will be able to maintain its net asset value or that the full amount of the investment will be returned to you. Values change frequently and past performance may not be repeated.

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

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