QUBE

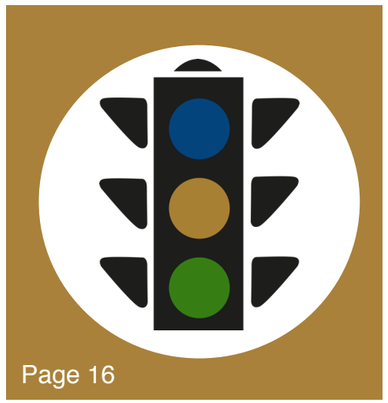
KALEO
MANIFESTO
2019

QUARTERLY

CONTENTS

Page 5

Page 10



Page 16

Kaleo & Qatalyst Portfolios: Past Performace

	YTD	2017	3-Year	5-Year	Inception
Kaleo A	-2.5%	14.0%	5.5%	9.7%	12.0%
Kaleo Full	-0.5%	17.4%	7.4%	11.5%	13.2%
Kaleo Benchmark	-4.9%	11.3%	6.1%	7.0%	7.6%
Qatalyst	-19.7%	17.8%	--	--	0.3%
Qatalyst Benchmark	-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 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 Dec 31, 2018. Inception for Kaleo is Jan 2011 and Qatalyst Jan 2016.

In this issue, we share with our clients our optimism about 2019. Intelligent investing is not about trading stocks, but about finding undervalued companies that we believe will regain full value within 3-5 years. While markets ended 2018 with little gains to show and much volatility to share, we challenge our clients to take a moment to consider what it means to be an investor. Our lead article presents Qube's manifesto of investing for 2019. We propose that financial markets today continue to offer humanity the nearest proxy of liberal ideals anywhere. Certainly closer than the state of most political systems. These liberal ideals provide each member of society equal opportunity for change. Further, a proportional share and participation in the spoils of that disruption. Disruption and change are what excites us as investors. New industries (e.g., cannabis), new technologies (artificial intelligence), new health solutions abound. Old markets including basic materials, mining and commodities bring new investment possibilities. Let us share in our excitement for value investing in 2019.

We are also excited to share our optimism in Qube. January 1st, Michael Baker joined our team to focus on operations management. Michael brings many years in team leadership to Qube, a recent graduate of the University of Alberta's MBA program. His entrance allows Noah Clarke to focus more of his time with investment counselling, retirement modelling, and product development. I am so excited about the growing team of professionals` at Qube. January also marked the launch of our management committee (Noah, Michael, and Patrick) who are tasked with the month-to-month operational decisions of the firm. This allows myself the space for a deeper dive within my passions: investment research & mentoring and tax strategy.

Best wishes from all our our team at Qube (Ian, Brenda, Nicole, Anya, Noah, Michael, Patrick, Apurva, Little Noah, Nick, Joseph, Hafiz) and thank-you for allowing us the opportunity to serve your wealth management needs.

Ian Quigley, MBA
Senior Portfolio Manager, Qube

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 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.

Our benchmark for Qatalyst is defined as 50% of the S&P 500 Total Return Index (in CAD) and 50% of the S&P TSX Total Return Index.

iA Fund Model: Past Performace

	Allocation	YTD	2017	3-Year	5-Year	10-Year
iA Dividend Growth	20%	-7.84%	6.82%	9.78%	5.64%	6.1%
Dynamic Global Dividend	35%	4.94%	21.81%	13.81%	12.38%	11.64%
BlackRock Int'l Equity	20%	-21.64%	31.32%	9.35%	0.96%	8.04%
BlackRock US Equity	25%	0.85%	10.09%	10.50%	11.29%	12.00%
Equity Portfolio		-1.7%	11.1%	4.9%	9.8%	4.7%
Bond Portfolio		-0.3%	0.9%	0.2%	1.6%	2.2%

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 Dec 31, 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.

THE QUBE MANIFESTO OF MONEY

2018 Edition

Ian Quigley, MBA & Noah Clarke, MA

Perhaps it's always been thus, but as 2018 came to a close, it was hard to shake the feeling that the world today is in a precarious spot. Classical liberalism – or the belief in open societies, free trade, individual freedom and a faith in human progress brought about by debate and reform – has been one of the fundamental pillars of Western democracy. But in recent years, this pillar has been gradually chipped away at by the resurgence of populist and nationalist agendas in the developed world.

At the turn of the century, populism was a blip on the horizon; but since then, the number of populists in power around the world has grown considerably. Most notably, this increase has not been isolated to countries in Latin America and in Eastern and Central Europe—where populism has traditionally been most prevalent. Instead, it has extended beyond emerging democracies, taking hold of systematically important countries in both North America and Western Europe. This is a troubling development; as are it's causes.

Though we are as a whole more prosperous today than at any period before, the persistent failure of governments across the Western world to bring about a credible vision of shared prosperity and security has led voters to doubt that the system works for them or that it is fair. No one can be surprised by this response.

In the wake of the 2008 financial crisis, Wall Street and its employees were spared the rod and inevitably bailed out with taxpayers' money, while Main Street suffered. Globalization was meant to create enough gains to help the losers, but many members of the middle class were left behind in the globalized, digital economy. Populist movements, whether from the far right or far left have capitalized on this condition, rising as the economic and social health of the middle class has waned.

Such issues underlying the resurgence of populism are not trivial, and there is no easy answer as to how we might fix the system. As a result, the current wave of populist nationalism is unlikely to wash away. This a real risk for the global economy, since populist leaders tend to promote policies which though popular amongst their support base in the short term, may not be in the best long-term economic, social or environmental interests of the country. Take for instance the beggar-thy-neighbour trade policies of Donald Trump, or the United Kingdom's pending withdrawal from the European Union.

In 2019, the risks associated with these short-sighted policies continue to build in the global economy. In October of 2018, the IMF warned, with specific reference made to the Trump administration's imposition of tariffs and "sugar-rush" tax cuts near the top of the economic cycle, that the world was now in "an environment where financial conditions could tighten suddenly and sharply." They urged countries "to advance policies and reforms - both multilaterally and at the country level - that extend the momentum and raise medium-term growth for the benefit of all, while building buffers for the next downturn." In the three months following this announcement, global stock markets fell precipitously.

In terms of building buffers, the US Federal Reserve, which maintains its independence from the political sphere, has increased interest rates eight times in the past three years. In comparison, the European Central Bank (ECB) has yet to initiate its first rate increase and will likely hold off on doing so until late 2019 due to the threat of a no-deal Brexit and Italy's fiscal troubles. In response to a weakening of its economy, China, the principal target of Mr. Trump's trade war, was forced to relax its monetary policy in December.

Economic conditions have not been as favourable outside of the US in recent years. In fact, European stock markets are still waiting to clear the highs they reached prior to the financial crisis – in stark contrast to the experience of the S&P 500 index which has nearly doubled over the same timeframe. This condition is likely to continue in 2019, with the IMF predicting slower non-US global growth in 2019. Investing can then become a tricky game of catching the waning hours of the American growth cycle while maintaining exposure in international markets for when they begin a long-awaited comeback.

While this is the conversation most investors are focused on, we propose it is a costly distraction from the business at hand. The social and economic risks associated with short-sighted populist policies should not bias us towards committing similar mistakes. President Trump's unwinding of the Clean Power Plan may have brought short-term benefits to his base, but it was not aligned with long-term energy market trends in the US away from coal and towards natural gas and renewable energy sources. We have no interest in stock market coal. Our purpose is to make money and grow wealth with a focus on long-term trends. This is the first premise of our Manifesto for Money in 2019.

Premise 1:

"We have no interest in stock market coal. Our purpose is to make money and grow wealth with a focus on long-term trends."

Second, we propose that financial markets, based on withdrawable individual assent, can provide for the democratic ideals we hold up – imperfect as they may be. Indeed, the aspirations we have for society are the same as that for the stock market: a place where constant invention and reinvention happens, where each investor has a say and influence, an open and transparent market where all things remain possible thanks to the collective efforts of all stakeholders.

Premise 2:

"We propose that financial markets can provide for the democratic ideals we hold up."

Here, allow us to propose our Manifesto of Money for 2019.

As professional investment managers, we don't just buy stocks for our client portfolios. We invest in companies with business plans that we believe are best suited to taking advantage

of growth and value creation opportunities. 2019, and beyond, will bring us exciting new opportunities in the stock market – new ventures with new innovations. All things are possible. Can anyone question such optimism? If so, we'd ask them to reconsider.

New Markets, New Investment Possibilities

Last year at this time, we were writing about the highly speculative growth prospects for Canada's cannabis industry. Out of what felt like nowhere, had grown a multi-billion dollar industry, which captured tremendous investor enthusiasm. Today, the trend towards cannabis decriminalization and high-profile achievements from some of the industry's emerging top contenders has continued to fuel interest. Though to date, we've not found a prudent investment thesis for this new sector, there are exciting opportunities to be found in the cannabis industry which 5-years ago was still just a pipe-dream.

New markets spur accelerated innovation, and we can expect to see considerable growth in activities outside of the traditional cultivation and transaction of the product. As the trend toward decriminalization progresses globally, the adoption of cannabis products for various medical applications including cancer, mental disorders, and chronic pain could drive sustainable long-term growth in this sector. As well, the need for technological innovations related to supply chain tracking, potency testing, and distribution management present additional areas for growth within the industry. Only time will tell whether such themes will move beyond current speculation, but if they don't, we know for certain that others will take their place. Markets are never static.

Data Monetization

Facebook proved that new cash-generating concept is possible, called data monetization. In their case, they built a business model on reselling client data to advertisers, thereby reshaping the entire ad business. In the wake of Facebook's success, companies from diverse industries spanning mining, financials, and energy have developed new products and services based upon this technological innovation. Today, this market remains underdeveloped and as such offers ample opportunities for future wealth creation. According to the International Data Corporation (IDC), "Data monetization" will become a significant source of revenues, as the world will create 180 zettabytes of data in 2025, up from less than 10 zettabytes in 2015. The associated revenue opportunity for this market is estimated at $3 trillion (up from $750 billion in 2015).

Of course, the early stages of innovation come with risks. In this industry, privacy concerns have recently dominated the headlines. The Royal Bank of Canada, along with Spotify and Netflix ran into trouble when it was discovered that the services they provided through integration with the Facebook Messenger app allowed them to view, edit and delete private messages between users who had used these services. The Weather Network is also facing legal action for reselling the location data of its users, who assumed location sharing was exclusively for local weather updates. Little did they know, it was also for local adverting.

Either way much is to be learned and gained from data monetization in the coming years.

Commodities Post-Super-Cycle-Corruption?

The last commodity cycle was considered a "super cycle" and was early in this century (2000-2010). It was a period when physical commodities including food, oil, metals, chemicals, and fuels rocketed due to projected demand from emerging economies (Brazil, Russia, India, China). Commodity cycles are classic and well documented in history. Prices rise, and speculators rush in. Reportedly, before 2000, only 5% of trading in commodities came from investors. In the peak of this super cycle, 30% of trading was from those looking for short-term profit.

We believe that these same investors continue to punish mining companies for the damaging mistakes of the last commodity super cycle, for overinvestment, overproduction, and the inevitable bust. A decade has passed, and the mining sector is reportedly transformed. We understand that there are new management teams who atoned for prior excesses with the introduction of capital austerity, moratoriums on investments in new mining capacity and reduction of leverage and debt through the sale of non-core assets. If this is true, we have new possibilities in 2019 for wealth creation and will dedicate more research time in the coming year to seek opportunities in commodity investing.

New Horizons in Healthcare

We have come a long way in the hundred years since the Spanish Flu killed as many as 100 million people, but according to the World Health Organization, in this interconnected world, the threat of a new pandemic is high if not inevitable. Despite enormous advances in medicine and scientific understanding, and the containment of recent pandemic threats such as severe acute respiratory syndrome (SARS), H1N1 influenza, and, eventually, Ebola, there is a growing consensus that governments around the world must allocate more funds towards preparing for the next global pandemic. It is the pharmaceutical industry who will benefit from and play a critical role in these efforts. Aside from this admittedly grim outlook, pharmaceutical and biotech companies are poised to benefit both society and investors due to recent advances in fields such as gene therapy and increasing adoption of technological innovations such as the recent shift towards virtual and mobile technologies.

Of course, the other long-term trend benefitting this industry is demographic. Today, Japan is the only country in the world where 30% of the population is over the age of 60. The UN's latest demographics report forecasts that, by 2050, this will be the case in 55 countries. This demographic shift is likely to spur an increase in spending on healthcare services and medicine, but also on innovation as further advances in healthcare technology will be required to mitigate the strain on public health systems.

Qube continues to see the healthcare sector as an attractive investment opportunity, with valuations for most companies in this industry not yet reflective of their strategic importance to global health and global financial markets.

Automous and Electric Vehicles

While still early in their development and adoption, autonomous and electric vehicles are rapidly advancing and appear poised to trigger an epochal transformation of the transportation industry. This breakthrough will provide a dominant source of sustained growth, not just for automobile manufacturers directly, but for semiconductor and software providers, lithium and cobalt producers (key components of lithium-ion batteries), manufacturers of camera lenses, sensors, and other items and so on down the line.

Future reversals could slow adoption of electric vehicles due to a determination to fight climate change and cut emissions, but it could also increase if the opposite holds.

Regardless, there is no stopping the rise of electric vehicles. It's no longer a question of if or when; it's a question of how fast. This presents an incredibly appealing investment opportunity.

Climate Change

Over the last 25 years, more than a billion people have lifted themselves out of extreme poverty, and the absolute rate of individuals living below the poverty line continues to fall. This is cause for optimism! However, as the global population expands and becomes increasingly prosperous, increased demand for energy, water and food will place an even higher strain on the finite resources of our planet. On the one hand, we cannot deny emerging economies the spoils of developed economies, but if everyone in the world decided to consume like Canadians, the Earth would not be able to bear it.

To sustain expanding standards of living for all inhabitants of this planet, we require advances in green production technologies. In Kaleo, we are currently looking to invest only in companies that promote long-term environmental sustainability. This is one approach to climate change investment, but future gains from green technology can't be fully realized through an extension of our investment philosophy. Instead, we're excited to find investment opportunities in companies that will directly benefit as the world works to manage and mitigate the impact of climate change.

Conclusion

We believe that the key to long-term wealth creation is disciplined research. Research that locates undervalued assets offering a strong rationale for revaluation. While many fret about global geo-stability and the long-term health of democratic-based capitalistic societies, we remain optimistic about opportunities for wealth creation and the reinforced principles of liberalism available in the financial markets.

2018 Year in Review, and 2019

Patrick Choi, CFA

2018 was a challenging year for both stock market returns and finding investable opportunities. When compared to previous years, the research team found little actionable investments throughout the year, and we believe part of the fault lies with both the market environment and the specific research universe we set up in 2018.

Since Kaleo's inception, our research efforts primarily focused on the more "blue chip" investments: companies which are widely recognized, well-established, and financially sound. Such companies are expected to show stable and reliable growth due to their ability to weather downturns and operate profitably during tough economic conditions.

We believe these are the types of investments which are most suitable for our client base who are saving for or are in retirement, and they make up the base of our "research universe."

2018 Year-in-Reivew

In 2018, we tried adding a bit more flavor to the Kaleo portfolio by changing our investment universe methodology to focus on companies which are smaller in size, less well known, and pay low-to-no dividends to shareholders--complete opposites to the typical blue-chip company. Although we found it difficult to find suitable portfolio investments, we are not discouraged.

Our research turned up companies and industries which we would never have thought to perform due diligence on, but were all highly interesting, and could be potential future investments. In hindsight, the change in our research universe methodology was poorly timed considering the current market environment.

The Death Care Industry

One potential investment idea, which we could later revisit, is the death care industry. This is an industry that not many of us think about, but of which all of us will someday become customers. Since everyone eventually dies, what could be a more assured investment than to bet on the certainty of death?

After researching the industry in greater detail, it turned out that while death is a certainty, the death care industry's revenues and profits were nowhere near certain. Each year, 20% of the revenues in this industry (and most of its growth) comes from the sale of cemetery lots, which are primarily sold on a pre-need (before death) basis.

During times of economic hardship, not only are these sales and profits challenged, as customers defer their purchases, the industry is also doubly hit from the decline in the trust fund's assets, which are used to fulfill their perpetual liability of maintaining the cemetery.

Despite these substantial negatives, we believe the death care industry has many positives underlying a potential investment including industry consolidation and an aging demographic.

The nail-in-the-coffin for this investment idea were the valuations present in the industry. At current prices, it trades at a similar valuation level to consumer staple companies, but without the associated stability during economic downturns. In our opinion, this makes the death care industry overvalued when compared to other alternatives.

US Residential Housing & TopBuild

Another intriguing investment idea we ran into was a company named TopBuild. They are the leading purchaser, installer, and distributor of insulation products to the US construction industry (primarily residential), based on revenue. Unlike actual home builders, such as D.R. Horton, TopBuild does not need to tie up substantial capital into owning land or half-finished homes. This should mean a safer, and easier to assess, balance sheet while still being able to participate in the upside of increased residential construction. Additionally, the American insulation industry has been undergoing significant consolidation.

Due to TopBuild's acquisitions, they are now twice the size of their next closest competitor (Installed Building Products). We believe there should be significant opportunities for TopBuild to create value from better economies of scale and higher average selling prices.

Unfortunately, the market believed the same. Since their spinoff from Masco in 2015, the company's stock price increased from around $30 to $80 at the time we performed our research. In the end, we felt that the price was too high to justify the risk and reward of the investment.

A simplified version of our thought process goes as follows. At the time of our research TopBuild was trading at a price-to-earnings multiple of approximately 19, which was higher than the S&P 500 multiple of 17, and in turn higher than D.R. Horton's multiple of only 11. Up against this higher valuation was our concern about the cyclical American housing industry and the high required growth rate to justify current prices. We estimated that the market was implying, at $80 per share, a growth rate of 10% for 10 consecutive years.

We felt that this growth was aggressive considering the length of the current economic expansion. Our concerns turned out to be valid as TopBuild is currently trading at a price of $44.91 at this time.

Current Research: Kaleo Holdings

For the past three months, our research team has been hard at work taking a deep dive into our currently existing portfolio. Our intention is to be prepared for any new opportunities that may come up on the radar in 2019.

Current Research: PepsiCo

One example of a potential sell in the near future is PepsiCo. PepsiCo is an American, multinational, food, snack, and beverage corporation, and is responsible for the manufacturing, marketing, and distribution of their products, which includes 22 iconic, billion-dollar brands sold across 200 countries around the world.

A sample of these brands includes Pepsi, Mountain Dew, Lay's, Gatorade, Quaker, Doritos, and Aquafina. Based on a 2018 Forbes ranking, PepsiCo came in 3rd for the world's most powerful, public food and beverage company (next to AB InBev and Nestlé). Based on a 2018 Forbes ranking, PepsiCo came in 3rd for the world's most powerful, public food and beverage company (next to AB InBev and Nestlé).

PepsiCo has been a part of the Kaleo portfolio since its inception in 2011. Since then, the company has produced a total, cumulative return on investment of approximately 117% on a constant currency basis. If we were to include currency appreciation, the total cumulative return jumps to 194%.

Our thesis on PepsiCo was, and continues to be, their scale, branding, and pricing power translating into consistent and stable operational results for the company. As with our previous examples in this article, the question came down to valuations. At current prices, the market is implying a perpetual 5% growth rate in earnings, which we feel is on the high end of what PepsiCo will be able to accomplish based on their historical results.

Furthermore, with Indra Nooyi stepping down as CEO, PepsiCo is now led by a relatively untested manager who must address a decades-old problem of selling their sugary and salty snacks and beverages to a more health-conscious consumer. Due to these concerns, we believe that the company is fairly valued, and we will be looking at opportunities to replace this investment in 2019.

Current Research: Nike

A second example of a potential sell in our portfolio is Nike. We first bought Nike in our portfolios in April of 2014 for $37.11. Since then, the company has produced a total, cumulative return on investment of approximately 92% on a constant currency basis. If we were to include currency appreciation, the total cumulative return jumps to 134%.

Our thesis on Nike is based on their leadership position in both technology and marketing. In our last newsletter (Q3 2018), we highlighted two recent examples we feel exemplify this leadership: introduction of their Vaporfly 4% runners and their endorsement of Colin Kaepernick. We continue to hold the belief that Nike will successfully connect and engage with their customers while delivering meaningful innovation. So long as this remains true, we feel that Nike should prove to be a profitable investment for years to come.

Our concern, no surprise, is with valuations. It is a fact of the business life cycle that companies, which have exhibited high growth in the past, will eventually mature into slower growing entities, and this is what we see happening for Nike. After many decades of double-digit growth, we see Nike slowing to a long term, sustainable, single-digit growth rate going forward. This high single-digit growth is also what the market is implying based on the current share price, and this makes the company fairly valued in our opinion. In addition to its naturally slowing growth, Nike has to deal with a resurgent Adidas, who has been taking market share away from the king since the introduction of their Yeezy and Ultraboost line of sneakers in 2015. These reasons make us believe that there may be better investment opportunities elsewhere.

2019 Research Plan

Our plan for 2019 is to complete the review of our current holdings in January, and then transition into performing due diligence on a re-filtered investment universe. Due to the current market environment, and our opinion on future trends, our investment universe in 2019 will focus on companies which are larger (high market capitalization), have relatively little to no debt, respectable dividend yields, stable debt-to-equity ratios, and high return-on-equity and return-on-assets.

The research team has high hopes of discovering new investment opportunities with this universe, and we look forward to updating you on our findings in future newsletters.

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.

Altaba

Kaleo Full

Altaba (AABA): We first bought Altaba (previously Yahoo!) for our Kaleo portfolios on Oct 22, 2014, at a price of $42.22. Since then, the company has produced a total, cumulative return on investment of approximately 34%, on a constant currency basis. If we were to include currency appreciation, the total, cumulative return jumps to 62%.

At the time of our purchase, our thesis hinged on a sum-of-the-parts analysis. Our calculations showed that the market value of Altaba's parts was worth approximately 44% more than what it was currently traded. We believed that as Altaba executed their plan to divest of non-core assets (i.e., divesting of everything but their Alibaba stock holdings), the gap between Altaba's underlying value versus market value would close. So far, the company's execution has proved our thesis correct.

In June of 2017, Altaba completed their Yahoo! divestiture to Verizon. For the next 18 months, the company worked to reduce the valuation gap through multiple divestitures: selling USD 220 million of secondary assets (including a minority equity interest in Snap); selling USD 13.8 billion of Alibaba shares from their internal holdings; and completely divesting of their Yahoo Japan position worth approximately USD 6.5 billion. The majority of these funds were used to repurchase their shares at a discount, and all told, Altaba's share count was reduced by approximately 40% from the time of our purchase.

The company has now become a much more simplified company than the one from just 18 months prior: 98% of their assets comprise of Alibaba equity plus cash on hand, and their risk has substantially decreased due to the resolution of multiple contingent liabilities from their Yahoo! days.

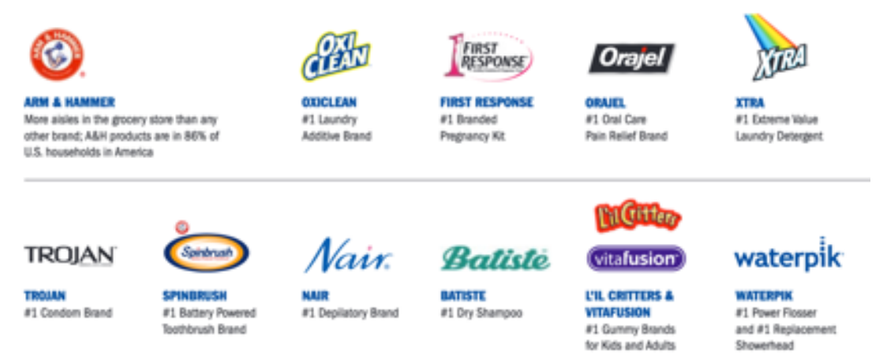
Despite the improvements made to close the valuation gap over the past year-and-a-half, Altaba's shares are still 23% discounted compared to their net asset value. We believe that avenues remain available for the company to close the gap further, and we expect that management will continue to evaluate and execute towards this goal. In the meantime, we can look forward to a new USD 5.75 billion share repurchase program, which represents approximately 14% of current share count.

Kaleo Full

Church & Dwight (CHD): We first bought Church & Dwight for our Kaleo portfolios on April 17, 2015, at a price of $42.60. Since then, the company has produced a total, cumulative return on investment of approximately 65%, on a constant currency basis. If we were to include currency appreciation, the total, cumulative return jumps to 82%.

In a world dominated by giants like Procter & Gamble and Unilever, it is rare for a small company like Church & Dwight to exist, much less thrive, on the same stage. For comparison, Procter & Gamble's 2017 revenues were approximately $67 billion USD in contrast to Church & Dwight's $4 billion. Usually, companies like Church & Dwight would have already been bought out or have long since ceased to exist due to better-funded competitors.

Despite its relatively obscure name, Church & Dwight has been around since 1846 and owns many well-known brands such as Arm & Hammer, Trojan, Nair, Batiste and First Response. The company's entire range of products are well diversified and includes regularly used household items like gummy vitamins, condoms, baking soda, and laundry detergent. Church & Dwight's defensive business model, well-known brands and a string of excellent management has resulted in 468 quarters of uninterrupted dividends, including dividends paid through two world wars and 22 recessions.



From a historical, financial performance standpoint, it is rare for us to see a company with such stable results, even within the Consumer Staples category. From our years of research in this space, we have seen companies blame Forex, Venezuela, changing consumer trends and even the weather for their poor performance in any given year. Meanwhile, Church & Dwight, for the most part, continues to churn out growth with a chart that starts from the bottom left and ends at the top right. In a world where investment risk remains abundant, a buy and hold of a "sleep-well-at-night" stock like Church & Dwight certainly make for a nice change.

Qube Insights: Equity Research Snapshots

Company	Sector	Current Status
Gentherm	Consumer Discretionary	
Lear	Consumer Discretionary	
Carnival Corp.	Consumer Discretionary	
Caleres, Inc.	Consumer Discretionary	
D.R. Horton	Consumer Discretionary	
E.W. Scripps	Consumer Discretionary	
Adient	Consumer Discretionary	
Nike	Consumer Discretionary	
Adidas	Consumer Discretionary	
VF Corporation	Consumer Discretionary	
Adtalem Global Education	Consumer Discretionary	
Aaron's, Inc.	Consumer Discretionary	
PepsiCo	Consumer Staples	
Calavo Growers	Consumer Staples	

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
Walmart	Consumer Staples	
Colgate Palmolive	Consumer Staples	
Church & Dwight	Consumer Staples	
Bunge Ltd.	Consumer Staples	
Vina De Concha Y Toro Sa Conchatoro	Consumer Staples	
Lancaster Colony Corp	Consumer Staples	
Chubb	Financials	
American International Group	Financials	
Marsh & McLennan	Financials	
Arthur J. Gallagher & Co.	Financials	
Baxter	Health Care	
Becton Dickinson	Health Care	
Medtronic	Health Care	

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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

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