

December 2019

Elixir News



CREATING INCOME FOR EVERYDAY PEOPLE BY USING TECHNOLOGY
TO HARVEST VOLATILITY.



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HAPPY NEW YEAR!

elixir

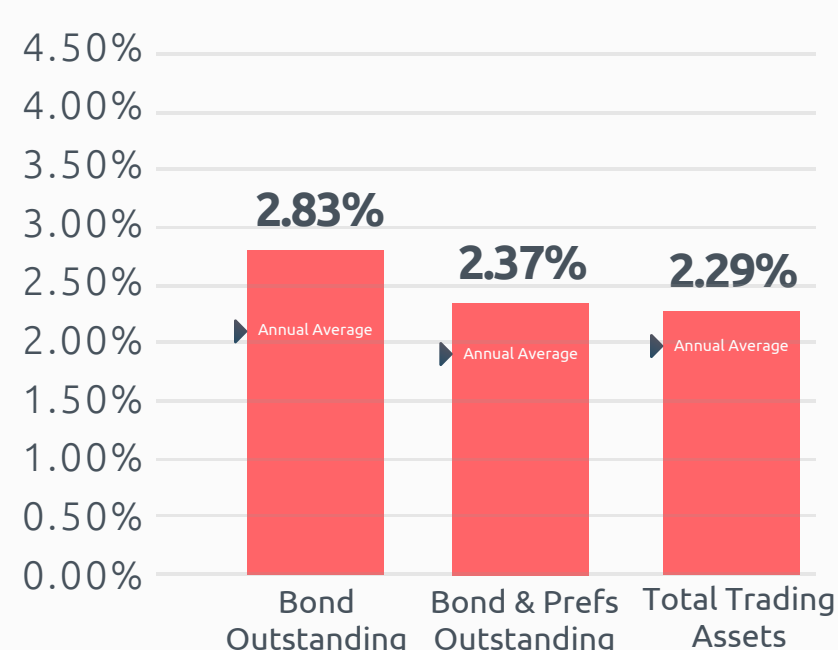
Hi, everyone,

I trust that you had a relaxing break during the December holidays. On behalf of everyone at Elixir Technology, I wish you and your family a happy, healthy, and prosperous 2020!

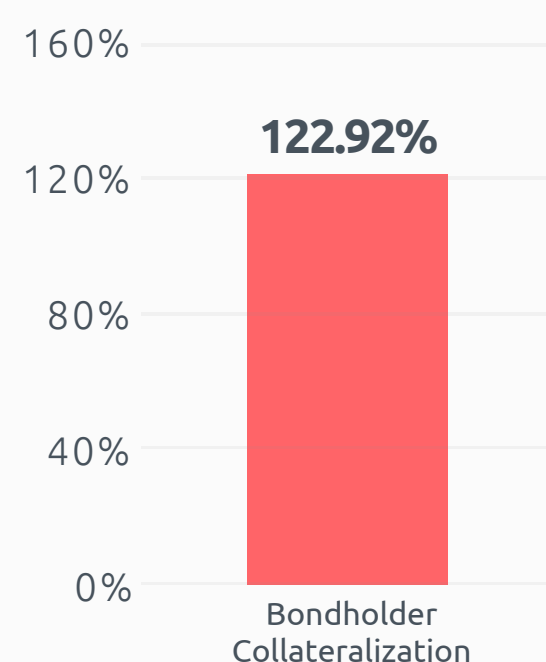
I'm pleased to say that Elixir's 2019 trading performance ended on a strong note. The following metrics charts provide a quantitative demonstration of our December and 12-month-average trading performance. For those who are interested, Elixir's historical performance metrics since inception (a 29-month track record) appear in an appendix at the end of this newsletter.

DEC 2019 TRADING PERFORMANCE

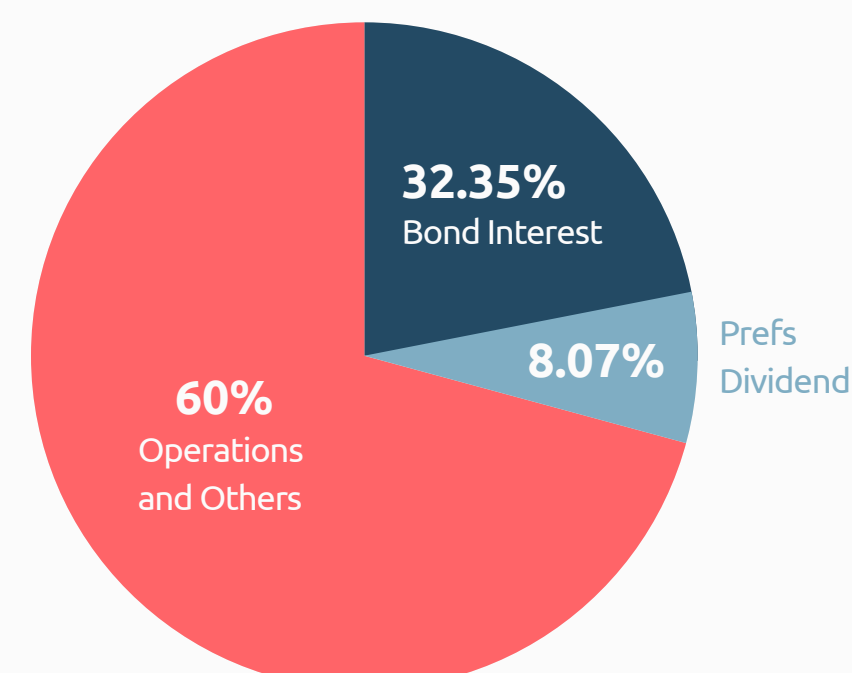
Trading realized gain as a percentage at the beginning of the month



DEC 2019 BONDHOLDER COLLATERALIZATION



DEC 2019 REVENUE ALLOCATION



DEC 2019 TRADING PERFORMANCE BY INVESTMENT

Non-exchange traded FX & Commodities

0%



As always, in this newsletter, I will explain our revenue composition and provide comments on the market events that caught my attention since I last wrote to you. Additionally, we will review the challenges, successes, and special moments that Elixir experienced in 2019, as well as share our vision and goals for 2020.

Together with everyone at Elixir, I would like to express my deepest gratitude for all our investors, especially those who joined our journey during its early stages. Elixir could not have realized its vision without investors' trust, confidence, and support. The year 2020 will be a period of amazing growth for Elixir. We are very excited!

Cheers,

Bill

William McNarland, CFA

Elixir Technology Inc.

Chairman of the Board & CEO

While December saw above-target realized revenue, it was revenue earned in a very difficult trading environment. We define “difficult trading environment” as having the following characteristics.

▶ LOW OVERALL VOLATILITY

The VIX (fear index) averaged 13.76 on the month, which was 30% less than the 20-year December average of 19.61.

▶ EXTREME OVERCONFIDENCE AMONG INVESTORS

According to Sentiment Trader, 87% of retail investors were extremely confident in December. Retail investors feel that there is little risk in investing right now.

▶ SMALL DAILY MOVEMENT IN THE MARKET

In December, there wasn't a single day on which the US stock market moved either up or down by over 1%.

That said, we did manage to produce satisfactory results in December. First, profits came from poorly constructed leveraged ETFs, primarily in the volatility ETF category. Second, we earned profits by catching volatility on December 2 and 3, when the China/US trade deal caused a brief scare in the market. Third, profits stemmed from traditional winter-time volatility in natural gas. You may have noticed that, in North America, the winter has been milder than usual. This mild weather created some volatility for us.

It's worth pointing out that while our algorithm identified these opportunities, the way we executed the trades ultimately allowed us to fully capitalize on them. Compared to where we were a year ago, our trading systems and strategies are much more efficient and can produce a much higher return per unit of risk.

Current Market Observation

As of the time of this writing (at the end of December), we expect volatility to be closer to average or above for the first few months of 2020. I am comfortable in predicting that we will return to achieving new monthly revenue records during the first quarter of 2020.



Other Interesting Observations

1 THE SWEDISH EXPERIMENT

I visited Sweden in February 2019. This trip confirmed my opinion that the Swedish Krona and Sweden's broad stock market (via ETF) are worth our investment. Since then, we've been in and out of Swedish Krona three times and have made a greater-than-1% profit each time. Sweden has been very good to Elixir.





That said, a recent development in Sweden has me intrigued—and somewhat concerned. While the country was the first in the world to set its interest rate to below 0 (this happened in 2015), on December 19, 2019, it also became the first to reverse its course and lift its interest rate back to 0. The Central Bank of Sweden justified its decision by listing three problems that its negative interest rate policy had created:

- 1. Citizens have been taking on too much debt.
- 2. Citizens have not been encouraged to save and have been taking out cash deposits to avoid paying interest to the bank.
- 3. Inflation is rising due to increased buying power from excess cash in the market. Inflation could go above the 2% target rate.

As I have often stated, negative interest rates represent a rare phenomenon in the history of world finance. Through Sweden, we are just now starting to see their short-term effects. The aftermath of reversing the course is unknown, as no historical reference exists for us to study. In the new year, we will have to keep a close eye on Sweden, not only because Elixir has investment interests in the country but also because the Swedish experiment will provide insight into what will happen in other negative-rate countries (Japan and Switzerland) and low-rate countries/regions (see the following chart) when these rate levels are no longer sustainable.

Summary of current interest rates of a large number of central banks

Name of interest rate	country/region	current rate	direction	previous rate	change
Swiss interest rate SNB	Switzerland	-0.750 %	↓	-0.500 %	01-15-2015
Japanese interest rate BoJ	Japan	-0.100 %	↓	0.000 %	02-01-2016
European interest rate ECB	Europe	0.000 %	↓	0.050 %	03-10-2016
Swedish interest rate Riksbank	Sweden	0.000 %	↑	-0.250 %	12-19-2019
Danish interest rate Nationalbanken	Denmark	0.050 %	↓	0.200 %	01-19-2015
Israeli interest rate BOI	Israel	0.250 %	↑	0.100 %	11-26-2018
British interest rate BoE	Great Britain	0.750 %	↑	0.500 %	08-02-2018
Australian interest rate RBA	Australia	0.750 %	↓	1.000 %	10-01-2019
Hungarian interest rate	Hungary	0.900 %	↓	1.050 %	05-24-2016
New Zealand interest rate	New Zealand	1.000 %	↓	1.500 %	08-07-2019
Bank of Korea interest rate	South Korea	1.250 %	↓	1.500 %	10-16-2019
Polish interest rate	Poland	1.500 %	↓	2.000 %	03-04-2015
Norwegian interest rate	Norway	1.500 %	↑	1.250 %	09-19-2019
American interest rate FED	United States	1.750 %	↓	2.000 %	10-30-2019
Canadian interest rate BOC	Canada	1.750 %	↑	1.500 %	10-24-2018
Banco Central interest rate	Chile	1.750 %	↓	2.000 %	10-23-2019
Czech interest rate CNB	Czech Republic	2.000 %	↑	1.750 %	05-02-2019
Saudi Arabian interest rate	Saudi Arabia	2.250 %	↓	2.500 %	10-30-2019

2 BAD BOY GOLDMAN SACHS

Marcus Goldman founded Goldman Sachs in 1869. Today, the investment bank has a market capitalization of \$81 billion USD. However, many people overlook, or are unaware of, the fact that since the year 2000, the bank has paid \$13.1 billion USD in fines to the U.S. government. This number could quickly increase to over \$15 billion USD. Why?

Goldman Sachs is negotiating a settlement (\$2 billion USD) with the U.S. government for its alleged involvement in the 1MDB (Jho Low) scandal, in which \$7.5 billion USD was embezzled from the people of Malaysia. Ironically, some of the stolen money was used to finance the movie The Wolf of Wall Street, which portrays the life of a Wall Street financier who steals money from his clients. If you are interested in reading about 1MDB’s outrageous fraud, I highly recommend the book “Billion Dollar Whale”.

Anyway ... back to Goldman Sachs. One must wonder what the bank’s value would be if it prioritized ethics and engaged only in ethical business deals.

3 SHORT SELLING IS BAD?


Elixir buys underpriced assets and sells them when their value increases. Additionally, we profit from overpriced investments that fall in value. This is called short selling. To execute a short-sell transaction, we must temporarily borrow the shares and pay a daily fee to the person who lends us those shares. The transaction is fair for both the lender and the borrower.

That said, there seems to be a new movement in which large institutions have determined that short selling is a moral hazard. For example, the world’s largest pension fund (the Government of Japan) has restricted its investment mandate to borrowing shares and short selling.

Perhaps some people view short selling as “looting a burning house” and, therefore, unethical. However, from a pure investment perspective, it is much more prudent and wise to short-sell when everything is overpriced in the market than to buy high and try selling even higher. My responsibility at Elixir is to protect the assets with which we have been entrusted. I don’t believe that there is anything unethical about the short-selling decisions that I have made in the past and that I will make in the future.

4 DAVID ROSENBERG ON 2020

David Rosenberg, Merrill Lynch Global Economist, is known for his 2008 prediction that the U.S. housing and credit bubble would cause a financial meltdown. Unfortunately, his employer didn’t listen. As a result, in September 2008, Merrill Lynch was on the verge of bankruptcy and had to be rescued by Bank of America. Rosenberg spent the last decade at Gluskin Sheff in Toronto.

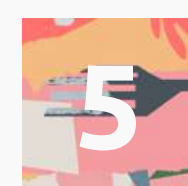


On January 1, 2020, he opened his own research firm, Rosenberg Research. Elixir is among the first 2000-plus subscribers to his research service.

In a Globe and Mail interview on December 18, 2019, Rosenberg commented that there is an 80% chance of a recession in Canada in 2020. His global economic outlook is, at the very least, “sluggish”. Following are quoted highlights of his rationale.

“It’s rather incredible that in this era of uber-low interest rates, Canadian households are spending 15 cents out of every after-tax dollar on servicing the debt, including principal,”

“We have a credit bubble of historical proportions in the household arena in Canada, where debt ratios are higher today here than they were at the peak in the U.S. in 2007. And in the United States we have the mother of all credit bubbles sitting on corporate balance sheets. You’re already starting to see spreads widening in the junkiest parts of the corporate bond market, which resembles very much the widening of spreads we were seeing in the worst part of the mortgage market back in 2007.”



LOW INTEREST RATE IS COSTING CANADA. PRICE TAG? CAD \$27.8 BILLION.

BNN Bloomberg noted that the Canadian Federal Government will have to set aside an additional \$27.8 billion over the next five years to support the pension obligations of federal employees. (The first announcement of \$19.7 billion came in March 2019 and was followed by the second announcement of additional funding in December 2019.)

The government must do this because, in the low-interest-rate environment, pension fund bonds are struggling to produce enough interest revenue. The government would have to budget more money to pay for expenses that pension plan interest revenue was supposed to cover. This costly budget decision would create a chain of negative effects, such as a possible increase in corporate and individual taxes and the cutting of budgets for other government programs. I share this observation because I believe that most people aren’t connecting the dots and realizing that a low interest rate is costing Canadians.



David Rosenberg

Overall, 2019 was a great year for Elixir. As chairman of the board, I congratulate the team on its achievements. The board will meet soon for a formal year-end review and will publish its official report, together with the audited year-end financials, to all shareholders at the annual general shareholders meeting. While we wait for the official statements, I would like to provide a general look back on the challenges, successes, and special moments Elixir experienced in 2019. As we head into the new year, I would also like to share our visions and goals for 2020.



Revenue and Trading Performance

2019 In 2019, we significantly improved our trading performance. Despite the challenges we faced with the capital market, our 2019 annual “Return on Assets” (based on monthly weighted average trading assets) is over 23%. More importantly, on the unrealized side, our unrealized loss as a percentage of 2019 year-end trading assets (drawdown) is only 3% compare to 2018 year-end at 11% and 2017 year-end at 22%.

This means that in 2019, Elixir created more income with fewer risks. We achieved this by focusing on four areas. First, we broadened our investment mandate to include ETFs, options, and individual stocks. This exposed us to more profit opportunities in the capital market. Second, we added a spread trading strategy to our mandate. For example, instead of shorting silver this summer, we shorted silver domiciled in British Pounds. This strategy allowed us to profit from the fact that silver fell and the British Pound increased in value. Third, we developed technologies that helped us capture profits we otherwise would have missed. And fourth, we improved our algorithms by adding more data inputs. This allowed us to more accurately identify profit opportunities.

I have two additional remarks about 2019 revenue. One is that we added an exciting new revenue line in 2019. We took on a software development project for an external client. The software is financial-technology related; therefore, aside from the revenue we earned from having developed the software, the final product could bring additional revenue and benefits to the firm.

Second, we learnt that “software as a service” did not generate enough revenue to justify the time and effort we spent managing the program. In fact, it created a drag on our proprietary trading performance. Therefore, the board terminated the program in October.

2020 In 2020, on the trading side, we will remain on the path of “reducing risks while keeping the return strong”. The target for drawdown is 2 to 4% and the average monthly return on trading asset is 2%. To achieve these targets, we are working on three things: adding more spread trading strategies, trading with higher frequency at Interactive Brokers through proprietary automation software, and adding custodians to further diversify our trading portfolio.

While proprietary trading income will remain our biggest contributor to revenue in 2020, we will spend some time diversifying our revenue sources. Currently, two projects are in the pipeline. One is the additional income from the software development project we are working to complete within the first quarter of 2020. We may also take on additional development projects in the new year if the right opportunities present themselves. Additionally, we are working to brand our ongoing research and analysis paper into a subscribe-able research product. Creating a monetary benefit for Elixir by sharing our research with the world is not a new idea but we feel that we finally have all the necessary resources to properly execute on it in 2020.





Capital Raising

2019 Capital raising in 2019 exceeded our expectations. At the end of 2018, I said that I would be happy if we raised six or seven million dollars in 2019. In fact, by the end of the year, we had raised over nine million dollars in bonds, preferred shares, and common shares, combined. Today, our cost of capital is much lower and our financing cost will continue to drop in 2020. In 2019, our preferred share and common share became registered-account-eligible and were offered through trustees such as Olympia Trust and ComputerShare. In addition, investors started buying bonds in US Dollars and Hong Kong Dollars.

2020 Our goal for capital raising in 2020 is to keep apace with our 2019 numbers and to continue lowering our cost of financing. This year, we will maintain our current strategy of raising capital from retail accredited investors. Additionally, with our 2019 audited financial statements and the financial statements from the first two quarters of 2020, we will start reaching out to institutions in the fall.



Technology Development & Cyber Securities

2019 2019 was a busy year for technology development at Elixir. In addition to our trading and research-related software, the technology team created back-office software, such as the Director Dashboard and Elixir Invest Platform, to improve our board oversight and workflow efficiency. To date, we've created more than 30 software programs to help us automate and better perform our work.

On the cyber securities side, we took a proactive approach in 2019. Management turned down a cyber security consulting firm at the proposal stage due to its lack of real value for Elixir.

While we are still looking for external expertise in this area, we have internally implemented a series of practices aimed at safeguarding our sensitive client and company information. These measures include setting up a private hardwire network for the head office, setting up an offline PC as cold storage, using an encrypted external hard drive as secondary data backup, and enabling multi-factor authentication for our trading servers.


2020 In 2020, our priority in terms of technology development is to create and/or advance our trading and research-related automation software. In addition, the technology team will focus on creating automation software that will enable the firm to re-open the software as a service program in 2021. Lastly, protecting Elixir from cyber threats will remain an ongoing project for the technology team.



Governance

2019 Highlights of Elixir's 2019 governance efforts include the following. Our Chief Operating Officer, Qian Zhang, completed her governance education, was awarded her designation, and took on additional responsibility to become the company's corporate secretary. Our custom-made Director's Dashboard was built, providing real-time financial and key metrics data to all our directors. This first-in-Canada technology-assisted governance tool allows our directors to govern Elixir with full transparency and confidence. Additionally, Janice Raven, Vicky Wong, and Mac Ma joined the board, bringing with them specialized backgrounds and skills in legal/governance, risk management, and financial accounting. As the company enters its fast-growth phase, their expertise will be invaluable.

One of Elixir's top achievements in 2019 was the receipt of national recognition for its governance efforts. We are extremely proud that we topped Royal Bank of Canada and won one of the 2019 Canadian National Excellence in Governance Awards ("EGAs"), in the category of Best Practices in Strategic Planning, Oversight and Value Creation by the Board!



2020 2020 will be an important year, as we will be preparing for public listing. Therefore, the board will require new people with specific skillsets and backgrounds. The sought-after expertise includes public company financial accounting, trading and investments, public company securities law, and information technology with a focus on cyber securities or SAAS sales. We invite all shareholders and investors to nominate suitable candidates.

To boost our research capacity, after a long recruiting process, we hired the most outstanding candidate, Ivan Chan, as our full-time research analyst. Ivan graduated from the University of Alberta in 2016 with a major in economics and is currently a level 2 candidate for the CFA program. Ivan will be based in our Cochrane, Alberta office and will work as my associate, assisting in research and articulating Elixir's current views on commodities, FX, ETF, and individual stocks.

The Elixir research product that I mentioned earlier will be an outlet for his work. Additionally, Ivan will work closely with the technology team to implement systems that automate our grassroots research.

The last highlight for 2019 is that we moved our head office to the new WeWork office in Metrotown. Our decision to move here stemmed from the fact that Elixir required a more professional and secure environment locally, at an inexpensive cost. Having a global office footprint with WeWork was another factor that we found attractive.

2020 Our goal for 2020 is to finish automating Elixir's back-office operations, with auditing being the only area requiring human interaction. The executive management team will continue to mentor our staff team and move all three staff members into senior positions in 2020. We will maintain our regular communication with current and potential investors through our monthly newsletters and various update meetings throughout the new year.



Operations


2019 I am proud of the operations-related successes that we achieved in 2019. As mentioned previously, because of the software we built, most of our back-office operations workflow was automated in 2019. Automation not only promotes efficiency and accuracy but also keeps down costs for the company, as we won't need to hire additional staff.

On the talent recruitment side, in April we invited Roger Jewett to join us as our chief financial officer. Roger works with Elixir as an independent consultant. His expertise and experience with public company accounting, auditing, and the general running of business have been highly valuable to Elixir. Additionally, later in the year, we engaged legal counsel with expertise in securities law and corporate taxes. Outside this external support, our young staff members matured tremendously throughout the course of 2019. They will take on more senior roles in the new year.





Elixir Historical Performance Metrics

<div>elixir</div>	TRADING PERFORMANCE <small>Trading realized Gain as a percentage at the Beginning of the Month</small>			REVENUE ALLOCATION			BONDHOLDER COLLATERALIZATION	TRADING PERFORMANCE BY INVESTMENT	
	Bonds Outstanding	Bonds + Prefs Outstanding	Trading Assets	Bonds Outstanding Interest	Prefs Dividend	Operations & Others		Non-exchange traded FX & Commodities	Exchange Traded FX, Commodities, & Individual Stocks
19-DEC	2.83%	2.37%	2.29%	32.35%	8.07%	60.00%	122.92%	0%	100%
19-NOV	0.78%	0.64%	0.61%	100%	0.00%	0.00%	119.91%	4%	96%
19-OCT	3.56%	2.92%	2.81%	22.13%	7.21%	71%	134.27%	13%	87%
19-SEP	3.29%	2.68%	2.93%	23.99%	8.12%	67.89%	141.00%	33%	67%
19-AUG	3.32%	2.70%	3.29%	23.70%	8.12%	68.18%	137.28%	52%	48%
19-JUL	2.60%	1.96%	2.13%	33.99%	14.51%	51.51%	197.63%	69%	31%
19-JUN	1.74%	1.52%	1.48%	50.20%	15.41%	34.39%	144.36%	100%	
19-MAY	2.79%	2.73%	2.86%	33.43%	7.00%	59.56%	134.50%	100%	
19-APR	0.50%	0.49%	0.47%	100.00%	0.00%	0.00%	120.14%	100%	
19-MAR	1.48%	1.44%	1.72%	69.09%	2.42%	28.49%	119.91%	100%	
19-FEB	1.17%	1.14%	1.30%	83.67%	3.11%	13.22%	105.22%	100%	
19-JAN	1.62%	1.56%	1.51%	63.49%	2.54%	33.97%	132.09%	100%	
18-DEC	1.96%	1.90%	2.24%	52.37%	1.87%	45.75%	127.52%	100%	
18-NOV	4.83%	4.65%	5.83%	25.21%	0.98%	73.81%	135.46%	100%	
18-OCT	3.01%	2.89%	3.52%	41.41%	1.67%	56.93%	106.89%	100%	
18-SEP	1.53%		1.57%	100.00%	0.00%	0.00%	213.49%	100%	
18-AUG	2.58%		2.55%	61.03%	0.00%	38.97%	102.70%	100%	
18-JUL	1.54%		1.43%	100.00%	0.00%	0.00%	104.32%	100%	
18-JUN	1.86%		1.94%	95.03%	0.00%	4.97%	88.03%	100%	
18-MAY	4.03%		3.98%	48.25%	0.00%	51.75%	104.10%	100%	
18-APR	1.98%		1.98%	100.00%	0.00%	0.00%	102.09%	100%	
18-MAR	2.50%		2.50%	90.21%	0.00%	9.79%	100.09%	100%	
18-FEB	2.69%		3.05%	82.52%	0.00%	17.48%	100.11%	100%	
18-JAN	1.81%		1.80%	100.00%	0.00%	0.00%	99.55%	100%	
17-DEC	2.00%		1.98%	100.00%	0.00%	0.00%	100.88%	100%	
17-NOV	1.21%		1.12%	100.00%	0.00%	0.00%	101.44%	100%	
17-OCT	6.22%		6.14%	41.15%	0.00%	58.85%	107.67%	100%	
17-SEP	2.60%		2.81%	98.51%	0.00%	1.49%	101.39%	100%	
17-AUG	2.02%		2.02%	100.00%	0.00%	0.00%	120.24%	100%	

