University of Richmond
ETF Fund

2019
ANNUAL
REPORT

University of Richmond
ETF Fund

UNIVERSITY OF RICHMOND

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Letter from the Managing Partner

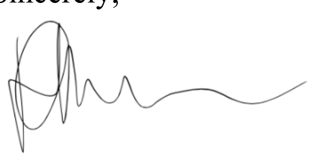
I joined the fund in 2017 when Benjamin Barad was the Managing Partner and could not have been more inspired by the intellectual curiosity of those in the fund. I remember applying to the fund my sophomore year the day before the application was due and was bothered by the fact that I had to write an essay as part of the recruitment process. I am so glad I put my emotions aside and wrote about my perspectives on the global economy, because I was given an opportunity that proved to be the most useful experience I have had in my undergraduate career at Richmond.

The ETF Fund taught me how to be an effective leader. As Managing Partner, I ran the fund just like a business and made sure we had organized meetings with everyone contributing equally. I made sure the people under me were keeping up with current events. In fact, I spent nights reading the news on every region we covered, just so I could test our managers the following day. I taught them all to pay close attention to detail when conducting their analyses and presenting visuals to professors, because even if your analysis is strong, no one will respect it if it doesn't look aesthetically pleasing. I also pushed our members to develop tools that can be used to analyze our investment ideas before making our rebalance decisions. We developed new risk models and automated all our portfolio analysis tools so we can fit in more than our top-down analysis in the fall semester. During my time running the fund, I made sure the university came to know us. Our fund's popularity grew immensely and when it came time to recruit next year's managers, we were only able to accept 15% of candidates.

With all this success, I must emphasize that none of this could have happened if I did not have a team alongside me that was dedicated to making the fund succeed. I am thankful of all the managers for following me to greatness this year despite all the market uncertainties we faced. Finally, Dr. Dolan and Dr. Stevens feedback kept us from slipping into typical investor mindsets and pushed us to think outside the box. This fund has some of the brightest students in the university who will all move on to do great things in their lives and I am grateful to have known each of them at a personal and professional level.

As I think about the future of this fund, I cannot even imagine how far students will take it. The tools we created and the culture we instilled will amplify and make the fund even stronger. We are an extremely unique group of individuals seeking to invest in a revolutionary investment vehicle. To those who will be in the fund in future years, I hope you all take a moment and appreciate the greatest minds around you who will push you to be your best. I am excited to see where the fund is headed and hope to be involved as an alum of the program.

Sincerely,



Hershal Chaddha, *Managing Partner 2018-2019*

Investor Policy Statement |

Portfolio:	University of Richmond Endowment (Richmond, Virginia)
Tax ID:	Tax Exempt
Initial Asset Value:	$25,000
Holdings:	Equity, Fixed Income, and Cash Exchange Traded Funds (ETFs)
Restrictions:	No holdings with leverage, inverse structure, or derivative exposure
Return Goal:	Outperform a Benchmark defined as 70% (MSCI's Global Equity Fund, Ticker: ACWI) + 30% (Vanguard's Total Bond Fund, Ticker: BND)

Portfolio Selection Guidelines: The ETF Fund performance depends on selected asset class performance, portfolio sector weights, and specific ETFs within asset and sector classifications. The student group tilts the equity, fixed income, and cash asset mix around the 70/30/0 long run target. Global exposures follow from macroeconomic themes likely to unfold over the 2-year investment horizon. Sector weights deviate from the weights in the passive index funds to reflect expected opportunities, given the macroeconomic thesis. Specific ETFs selected for the portfolio survive a rigorous screening process to find the best ETF within a classification.

Historically, stock assets offer higher rates of return along with greater volatility than fixed income or cash assets. The portfolio uses diversification to moderate risk and seeks the maximum return per unit of risk expected in the markets. The ETF Fund uses geographic diversification combined with efficient portfolio algorithms to construct the portfolio. Investments in exchange traded funds (ETFs) provides added diversification opportunities without holding large numbers of securities.

Investment Objectives:

- Enhanced return consistent with an intermediate time horizon of 2 to 3 years.
- Risk profile: Moderate with a tilt toward above market risk when warranted
- Short term liquidity needs: None
- Annual Rate of Return Expectation: 8% (based upon global equity and bond return expectations and pension fund actuarial assumption)
- ETF selections with minimal transaction costs.

Duties and Responsibilities Include:

- Annual reporting requirements with periodic updates for the Advisory Board. Ongoing weekly updates and consultations with faculty advisors.
- Selection of assets to achieve efficient diversification of risk and returns.
- Control trading costs with low turnover and screening to find lowest operating cost funds.
- Monitor all investments using prudent buy and sell discipline to minimize turnover consistent with a 2-year investment horizon.
- Trades executed through TD Ameritrade/Scottrade at the lowest available online commission.
- Annual and mid-year reports on holdings, trading activity, and change in value.
- Strictly adhere to investment restrictions.

History |

The University of Richmond ETF Fund began in 2014, originating from extending a long-standing experiential learning format prominent around many universities, in which students construct and manage a portfolio of stocks. However, the ETF Fund is unique because, unlike the typical student managed investment fund, it is composed entirely of exchanged traded funds (ETFs) and led by economics students. Unlike the common emphasis on "stock picking", the pedagogical focus on the ETF Fund is on developing a broad investment theme based on national and international macroeconomic factors. This analysis then guides the selection of ETFs to represent geographic regions and industrial sectors that are expected to "outperform" the global market over a one-year time horizon. The ETF Fund’s orientation around ETFs is forward-looking model, consistent with the phenomenal growth of ETFs over the last 25 years, whose market has increased to become one of the more prominent investment methods moving forward.

In its first two years of inception, the ETF Fund was an exercise conducted with only "virtual money". Eight economics students participated in the pilot group and guidance from academic supervisors Professor Robert Dolan and Professors Jerry Stevens. Unlike SMIF, which is a traditional stock picking fund that has existed in the university for over 25 years, the ETF Fund is focused on giving economics students the ability to use their unique skill set and practice investment methods that are more in line with their educational foundation.

With the support of University of Richmond’s Robins School of Business, the fund received its first investor, the University of Richmond Endowment, with a commitment of $25,000 in January of 2017. The first group positioned their holding across 24 ETFs. Since its inception, the fund has earned a 28 percent rate of return over the four semesters of investing. In addition, in March of 2018, the ETF Fund sent students to represent the university for the first time in the annual G.A.M.E conference in New York City sponsored by Quinnipiac University. The ETF Fund was also entered in a competition with other student funds from across the nation and won first place in the “Growth Portfolio” competition in 2018.

Although rate of return is the key practical measure of success, the value of ETF Fund to the university lies in its experiential learning virtues. Students present weekly to the professors and have presented annually to an advisory board of investment professionals to explain the rationale for the composition of their portfolio. The ETF Fund also provides an environment in which students have conducted quantitative analysis that incorporates arbitrage pricing theory and efficient frontier analysis. A co-authored student-faculty paper based entirely on the ETF Fund activity was published in the *Journal of Trading* in January of 2018.

The ETF Fund has continued to evolve over the years, improving its analysis and portfolio review, and each year adds more aspects to the fund’s portfolio construction. It has also put a strong emphasis on selecting the most successful students and improving diversity and representation on campus. Students have overwhelmingly enjoyed the fund and are proud to continue to represent its long history of successful academic, economic, and financial success.

ETF Fund Managers 2018-2019

Faculty Advisors

Dr. Robert Dolan

Dr. Jerry Stevens

Managing Partner

Hershal Chaddha

Managers

Naman Agarwal

Jessica Conway

Rishabh Jain

Devika Jhunjhunwala

Sheldon McMeans

Elizabeth Mejia-Ricart

Toan Nguyen

Atul Vyas

ETF Fund Process

With a focus on our top-down analysis and a strong desire to beat the benchmark, the group started this year with a region outlook on our four main regions (North America, Asia-Pacific, Europe/Middle East, and Latin America/Africa), with two-three managers assigned to each region. In our region analysis we focused on economic factors such as growth prospects, interest rates, labor markets, inflation rates, demographic shifts, trade policy, currency strength, balance of payments, spreads, commodity risks, political risk and more. Each manager prepared a write-up on the countries in the region analyzed/presented to the group and professors. We ranked the countries and gave each country a grade, and eventually conducted a roundtable where we decided on how much of our portfolio to allocate to each region of the world.

After deciding on the countries and regions we were most interested in, the managers then analyzed sectors to find the most appropriate industries to invest in. This is also a time where managers often discover the limitations of the market's ETF offerings, with some regions only having ETFs based on a country's overall economy, and others having ETFs focused on specific sectors within the entire region. The managers reviewed key drivers, catalysts, and risks for each sector, as well as asset class mix, and the interconnectedness among industries. The managers assembled a write-up on five prominent sectors in the region and presented their finding to the entire group. We held another roundtable to decide what regions and sectors are most attractive to look over during the ETF selection stage.

In the final ETF selection phase, managers screened for ETFs that are in line with our investment thesis. In addition, they had to abide by limitations such as average volume requirements of over 20,000 and a low bid/ask spread. Managers pitched their ETFs to the group and met as a group without the professors and decide on our ETF selection and the weights for each ETF. We looked at our current holdings to see which investments do not have a change in outlook and created a correlation matrix to ensure that we were diversifying our portfolio to the best of our abilities. Finally, the managers present the final rebalance decisions to the professors, who review them and make the final trades.

In the second part of the year, managers focused on analyzing the portfolio. The group emphasized financial modeling, including attribution models, correlation matrices, value-at-risk models, and a Markowitz Efficient Frontier. This year, we also focused on developing special projects such as automating our portfolio analysis models for future groups and adding new models to analyze risk in our portfolio. We also updated our website that showcases our work and recruit managers for the following year.

Portfolio Overview

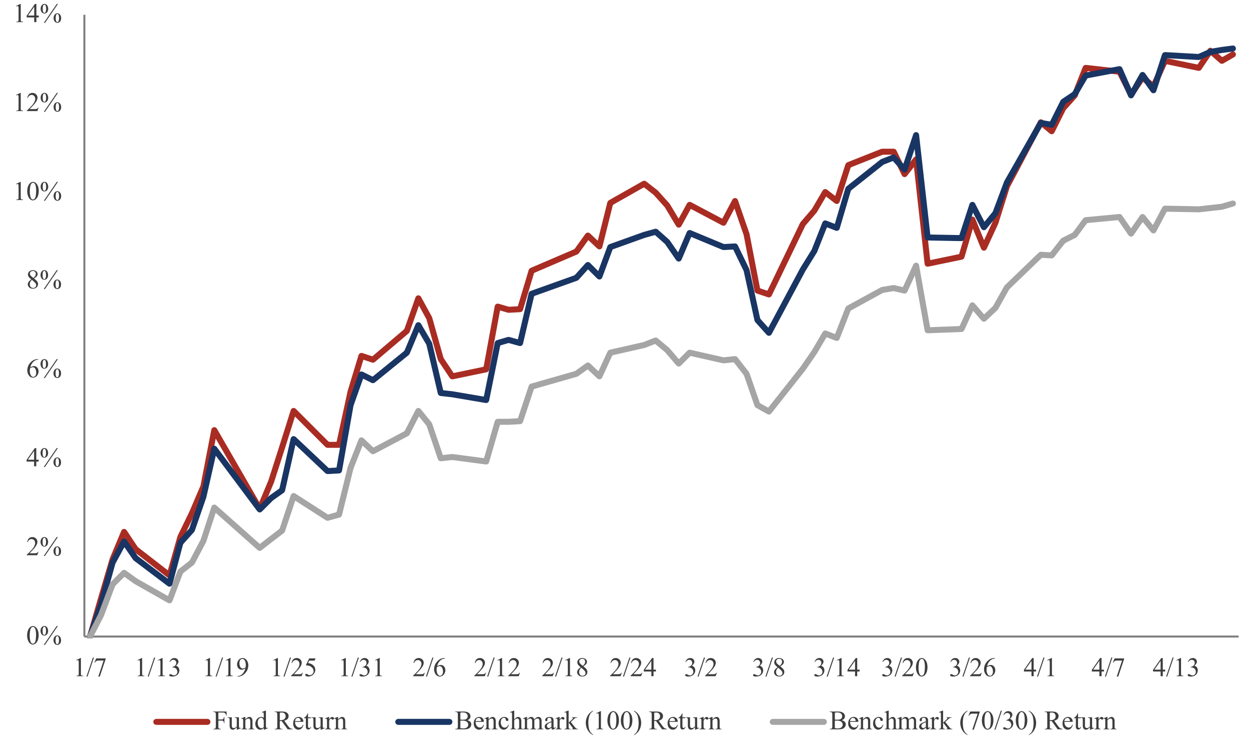
Performance Overview

As of April 18, 2019, the fund's AUM was $30,161.19, up a total 13.10% from the portfolio of previous group which ended on January 7, 2019. We have currently 16 holding in our portfolio. Our 70/30 equity/fixed income benchmark was up 9.75% in the same period. Thus, we outperformed our benchmark by 3.35%. Additionally, we decided to only invest in equities because our analysis showed little benefit from taking fixed income positions. Thus, we also compared ourselves to a 100% equity benchmark for a more equal reference. However, given that we took a very conservative approach when deciding our portfolio allocations, we decided to invest sectors that can weather a financial storm. The pure equity benchmark was up 13.24%. This brings out total return since inception to 20.62%, while our benchmark has been up 19.08% in the same period. Thus, our total return over the benchmark since inception is 1.54%.

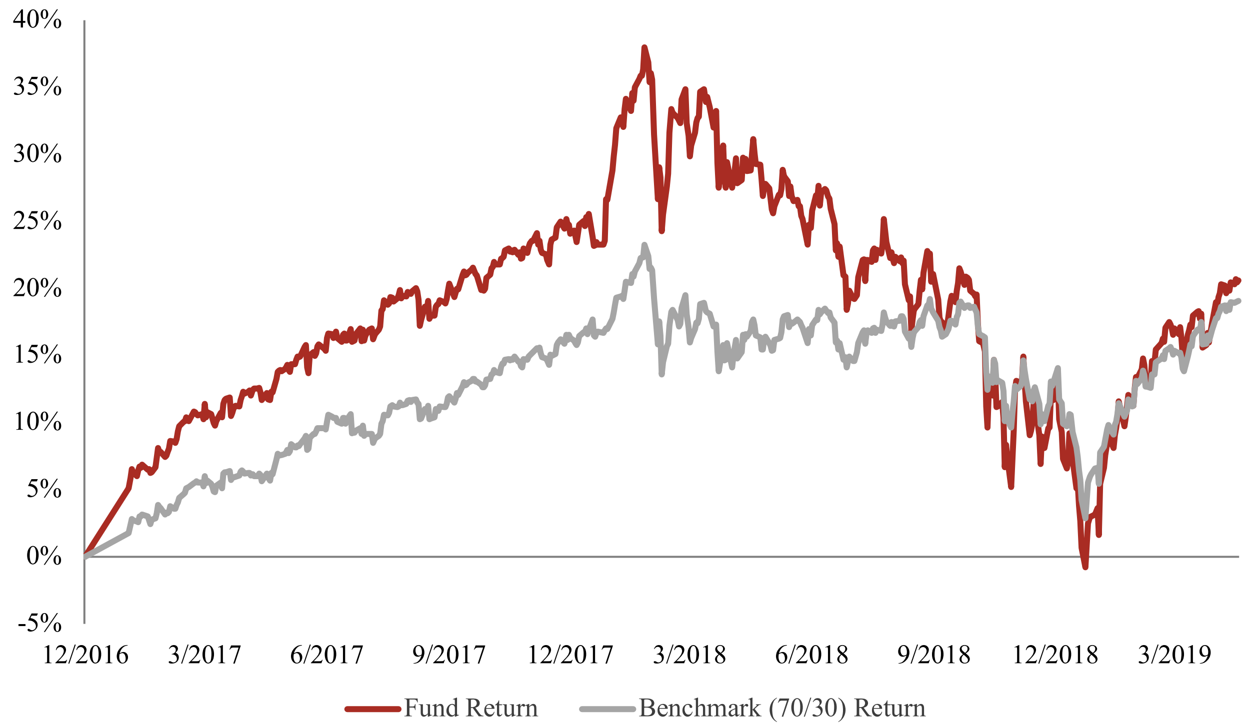
The following is our ETF holdings individual performance:

Ticker Symbol	Name	Total Value	% Weight	% Total Return for Portfolio
FINX	Global FinTech	$ 1,704.95	5.65%	27.05%
ITA	US Aerospace and Defense	$ 1,645.28	5.45%	13.13%
KIE	Insurance	$ 1,484.42	4.92%	12.60%
ICLN	Global Clean Energy	$ 1,710.28	5.67%	10.12%
XLP	Consumer Staples	$ 2,047.32	6.79%	9.55%
HEWJ	Japanese Equities	$ 1,449.92	4.81%	9.07%
VPU	Vanguard Utilities	$ 1,147.86	3.81%	8.63%
IHI	U.S. Medical Devices	$ 1,505.00	4.99%	7.64%
BOTZ	Robotics and AI Tech	$ 3,374.35	11.19%	5.73%
EWN	Netherlands Equities	$ 2,504.00	8.30%	4.72%
HEWG	Currency Hedged German Equities	$ 2,650.56	8.79%	4.15%
UUP	USD Index Bullish	$ 1,332.63	4.42%	2.47%
EWZ	Brazilian Equities	$ 1,254.26	4.16%	2.09%
ECH	Chilean Equities	$ 2,444.20	8.10%	10.55%
EMQQ	Asia Internet and E-Commerce	$ 2,296.09	7.61%	10.96%
INXX	India Infrastructure	$ 1,326.45	4.44%	23.59%

The following is our performance graph since our most recent rebalance:



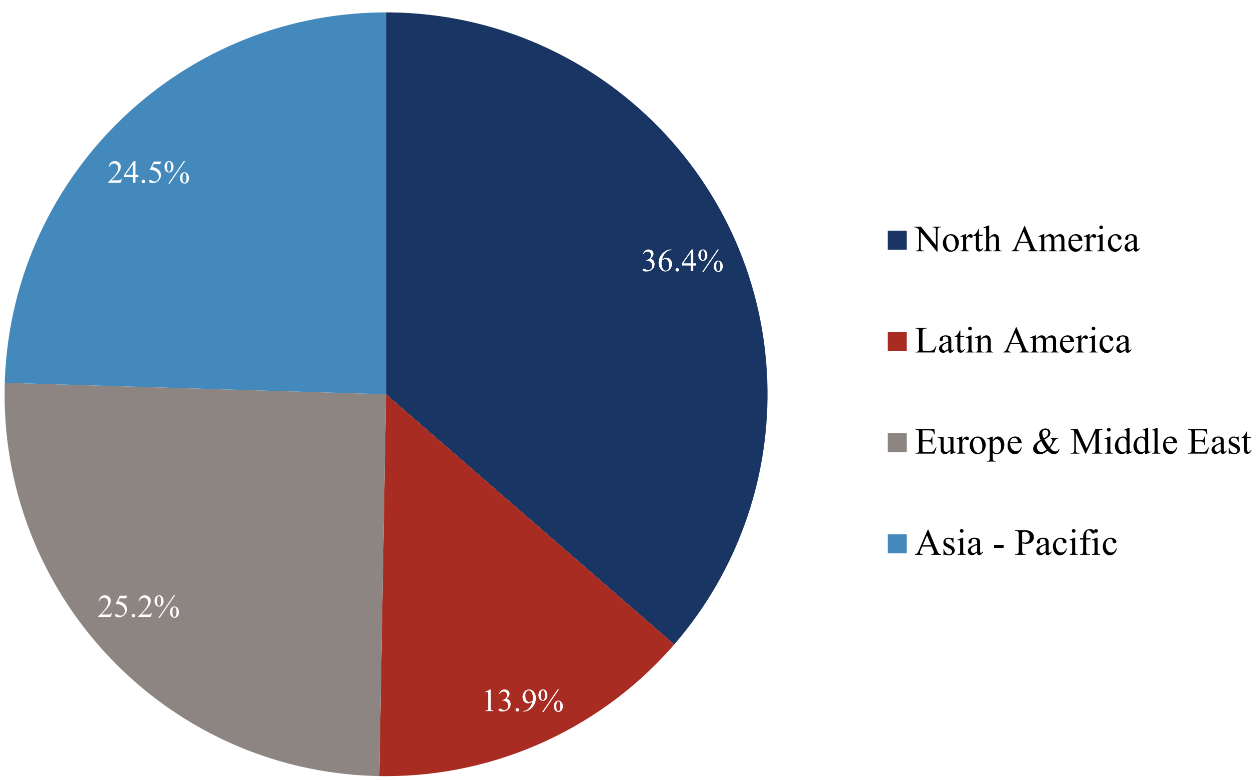
The following is our performance since the fund's inception:



As seen below in our region exposure graph, our analysis indicated that the region with the most opportunistic macroeconomic environment is North America. We wanted our portfolio to be very conservative in risk this year given our outlook on the global economy. We allocated the most to North America because there is a greater variety of ETFs available. We were easily able to invest in non-cyclicals, healthcare, insurance, and medical devices because the region simply has the optionality that others do not. Emerging Markets especially are facing heat as global growth slows. Therefore, we expanded our exposure in North America and allocated 36.4% to the region.

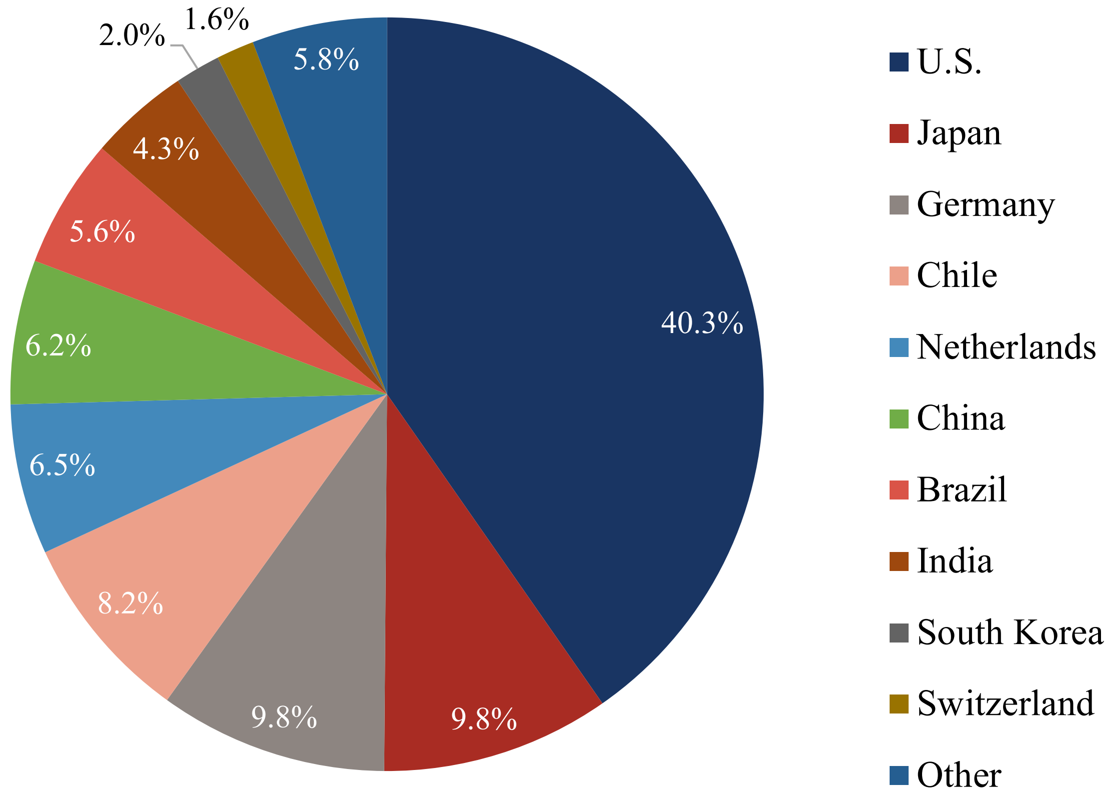
Asia-Pacific and Europe/Middle East received nearly equal weights in our portfolio. Both regions have strong fundamental characteristics but political uncertainty and upcoming elections have caused a downturn. Therefore, we kept these at nearly equal exposures given their similarities. We allocated the least amount to Latin America this year because of political uncertainty and slowing growth in the region. Latin American countries recently recovered from a recession but GDP in many countries are missing estimates. However, we believe there is potential in Brazil and Chile and therefore allocated 13.9% to the region.

The following is our current region exposure:



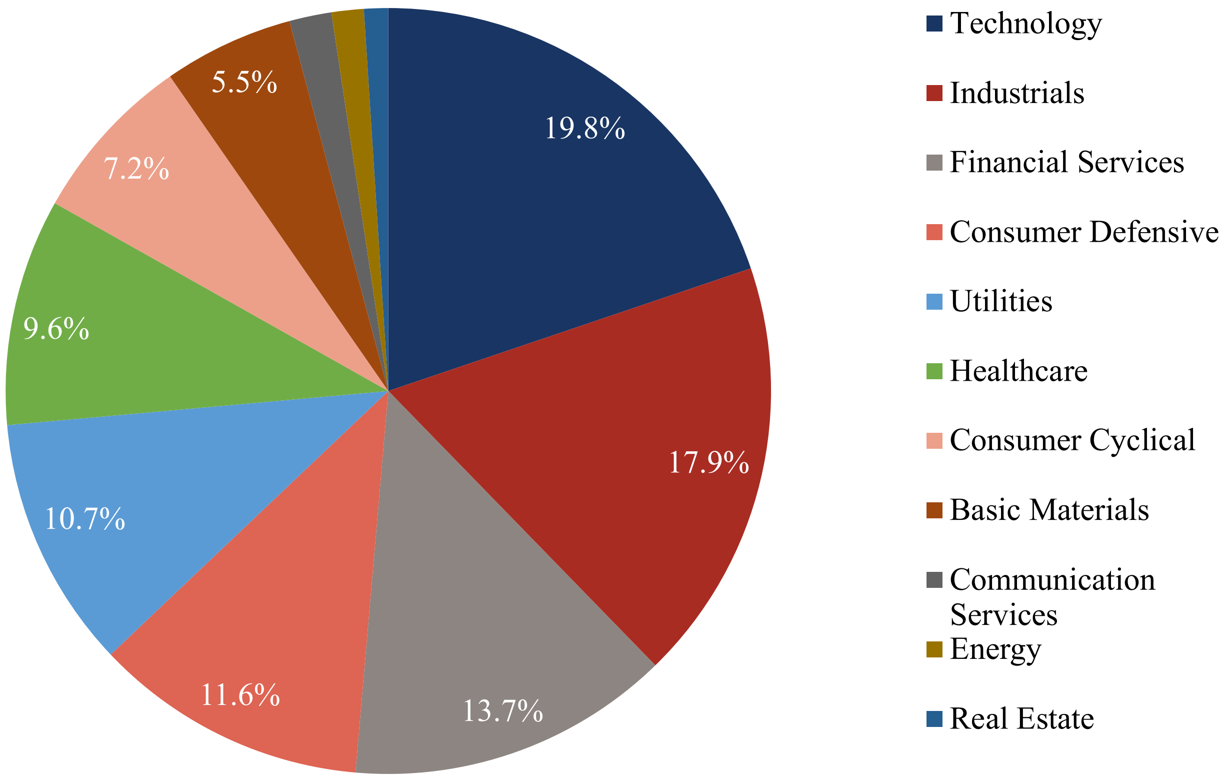
As seen below in our country exposure graph, we wanted to invest most prominently in countries centered in the regions above. As such our highest holding was centered on the United States with 40% of our holdings, somewhat because many ETFs, even those not centered on North America, include companies that are in the United States. Our second, third, and fourth largest holdings are Japan, Germany and Chile, with 9.8%, 9.8%, and 8.2% respectively. This is because we believe these countries present the best opportunities moving forward in their respective regions. We also hold a 6.5% stake in Netherlands because we believe it is one of the best performing European countries. We have smaller positions in China, Brazil, and India with 6.2%, 5.6% and 4.3% because while we know Emerging Market countries are prone to a higher downturn in a slowing economic environment, these countries possess characteristics that can withstand these climates.

The following is our top 10 country exposure:



As seen below in our industry exposure graph, our analysis showed that the sector that showed the most opportunity is technology. Specifically, we felt that global robotics and artificial intelligence, and global financial technology presented excellent investment avenues. Furthermore, Technology in Asia also presented an excellent opportunity as the industry is still growing at high rates, has significant governmental support, and large populations that have not yet accessed the internet's full capabilities. Since we are being conservative in our portfolio construction, we made sure our weight in technology did not significantly overpower other industries. Our exposure to technology does not consist of FAANG stocks and is more specialized towards less volatile technology firms. The next largest sectors were industrials, financial services, and consumer defensive. We also have exposure to other defensive industries including utilities and healthcare. Furthermore, the diversified portfolios of ETFs also led the group to hold positions across various industries. As such, our portfolio has exposure to basic materials, communication services, energy, and real estate.

The following is our current sector exposure:



It is important to note, that due to the very nature of ETFs across the globe and some regional limitations on ETF selection and specific industries, the fund is forced to take positions in ETFs that are very diversified even across sectors that we do not think are great opportunities. This could cause our region, country, and industry exposure to be slightly different than what the group originally intended. As the ETF market grows and more selections are available, we hope to select more specific ETFs that give us exposures that directly correlate with our views.

North America

Region Analysis

Region Analysis – North America

Analyst: Sheldon McMeans **Region Recommendation: B** **Date: 09/19/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
United States	4.20%	2.00%	3.05%	3.90%
Canada	1.90%	3.00%	2.41%	5.87%
Mexico	2.04%	4.90%	4.43%	3.34%

Summary:

- U.S. fiscal stimulus providing solid short-term boost to domestic firms. However, perceptions of increased wealth and political risk may neutralize the stimulus's longer-term effect.
- The United States is renegotiating NAFTA with hard ball being played on both sides. A breakdown of this deal will likely affect Canada more than the United States, especially if Trump executes his threat of a tariff on Canadian automobiles.
- The trade dispute between the U.S. and China has caught headline attention and caused market volatility. While combined tariffs have totaled $260B in the past week of this report, fears have eased of a full-blown trade war.
- The U.S. Federal Reserve is on track to normalizing its interest rates. It is doing so at a faster rate than other developing economies who also had historically low rates after the financial crisis. Increasing interest rate differentials, paired with solid growth and future increased deficits, are likely to cause an appreciation of the U.S. dollar up until mid-to-late 2019.
- Energy reform and a shift away from carbon-based sources in Mexico is a noble pursuit, however, corruption and a new executive is likely to hinder its execution.

Trend #1 – U.S. Tax Stimulus, "Tax Cuts and Jobs Act"

U.S. President Donald Trump signed the "Tax Cuts and Jobs Act" into law on December 22, 2017, the largest tax overhaul since 1986. The tax rate is effectively a stimulus to U.S. corporations, as it establishes a single corporate tax rate of 21%, down from the previous top corporate tax rate of 35%. With this tax cut, the statutory rate for the United States, including state and local taxes, is 26.5%. This figure is significant because the weighted average tax rate for European Union countries is 26.9%, likely reducing the incentive for U.S. firms to transfer their tax regimes abroad. In addition, the tax law requires the repatriation of overseas profit for U.S companies at a rate of 15.5% for cash and 8.0% for reinvested profits. This is speculated to increase the strength of the U.S. dollar relative to other currencies. However, according to the Brookings Institution, about 95% of foreign profits are held in USD currency, which do not need to be exchanged in the forex market, translating to this effect likely being minimal.

The positive effects of the tax law are likely to be short-term albeit real. **Attachment #1** and **Attachment #2** demonstrate the positive earnings results of S&P500 companies after the Tax Cuts and Jobs Act. **Attachment #1** is an index of earnings surprises of S&P500 companies, and **Attachment #2** details the year over year increases in earnings per share (influenced by capital structure and tax regime). The positive trend in **Attachment #1** and the significant increases in EPS also reflects the strength of the U.S. consumer. According to the Tax Policy Center, a middle-income household on average should save $980 in taxes, making individuals in effect feel richer. In addition, Congressional auditors say that 30 million people in the U.S. had their income tax liabilities under-withheld. This will result in those 30 million individuals having to pay a larger tax bill in spring 2019, which could partially offset the boost in consumer spending gained in 2018. In addition, the U.S. midterm elections pose a risk to the fiscal stimulus delivered by the tax law. Currently, the Democratic party is forecasted to take seats in the House of Representatives, which given that 0 Democrats in both the House and the Senate voted for the passing of the Tax Cuts and Job Act, a swing in the House could be detrimental to the future of the law.

Trend #2 – North American Trade Woes, NAFTA Stalemate

The North America Free Trade Agreement is in its thirteenth month of negotiations. Currently, negations are at its apex between Canada and the United States, with Mexico and the U.S. already having agreed on a preliminary deal. Currently, negotiations are ongoing, but concern of the deal being scrapped has diminished slightly. The U.S. has backed down from its Buy American demand for lucrative procurement projects. This would have prevented Canada and Mexico from bidding on American government infrastructure projects. An externality of these negotiations may be renewed interest in U.S. infrastructure investment. The Buy American demand is cited to be a cause of dispute between the Canada and the U.S. Donald Trump has threatened the Canadian automobile industry with tariffs if Canada does not meet its demands in renegotiation. Other core issues are dairy and panel disputes. Despite these issues, Canada is the number one buyer of U.S. exports, and some form of a renegotiated deal is likely. Also, the U.S. Congress has permitted a trilateral deal – it is not certain that a Mexico-only deal will be allowed.

Trend #3 – Tic-for-Tac Trade War

The trade war between the United States and China has dominated headlines and ensued market volatility. On September 19, the United States imposed a 10% tariff on $200B of Chinese goods. This action has a step-up feature – January 1, 2019, the tariffs will increase to 25%. In retaliation, as has been the mantra from Beijing, China imposed a 10% tariff on $60B of U.S. goods. This is relatively optimistic because China's choice of weighing levies on $60B of U.S. goods versus $200B and its choice of a 10% tariff as opposed to a 25% tariff is seen as an easement of a full-out trade war. In sum, the trade dispute between the United States and China is over the United States' disapproval of China's practices regarding U.S. intellectual property, the devaluation of their currency to make their exports more competitive, and government subsidies to dump goods in the U.S. Premier Li Keqiang said China won't devalue its currency, even after the latest exchange of tariffs, providing some optimism for future compromise.

Trend #4 – Monetary Policy and Interest Rate Differentials

The United States Federal Reserve is on a path to normalize domestic interest rates. Currently, the Fed has increased rates twice this year, and the market is currently expecting two more rate hikes in 2018 and three hikes in 2019 of likely 25 bps. While this is the largest hike in over a decade, rates are still historically low, and the Federal Open Markets Committee forecasts real GDP growth to be 2.8% in 2018 and slightly lower in 2019 at 2.4%. Currently, the Fed is targeting a Federal Funds Rate in the bounds of 1.75-2.0%. The latest Fed dot plot suggests a targeted Fed Funds Rate of 3.125% and 3.375% for 2019 and 2020, respectively. Given the strong labor market, and inflation approaching the 2% Fed mandate, the central bank is likely to execute hiking rates in 2018 to 2019. In addition to the United States strong economic growth in 2018 (GDP for 2Q18 was 4.2%) and future expected budget deficits, interest rate differentials are helping lead the appreciation of the U.S. dollar. U.S. sovereign debt is seen as a haven among investors, and the U.S. is a leader among developed economies regarding normalizing its interest rate to pre-recession levels. In comparison, the European Central Bank's key interest rates are 0.00%, 0.25% and -0.40%, and the Bank of Japan has set rates near zero percent. Currently, investors want to allocate to the United States, and it's showing in the value of the dollar.

Trend #5 – Mexico Energy Reform

Mexico is hoping to improve its energy sector. Mexico has ended its 75 year-long state-controlled oil and gas industry. If executed correctly, it will attract private capital and skilled labor to the industry. Mexico has significant oil and gas resources that are currently not exploited. According to Petroleos Mexicanos, a state-controlled energy company, there is an estimated total of 89B barrels of oil available for extraction. Despite this, Mexico's oil production has declined as well as oil exports from the weak commodity prices in 2014 and 2015. Reuters reported, "Oil Service and Mapping firms in Mexico are recovering from an industry recession and received $800 million in data sales to energy firms considering bidding for Mexican oil and gas blocks." These blocks are in the Gulf of Mexico and have received $61B in investment pledges. Energy reform may lead Mexican oil and gas industries out of a trough if successful. Per-capita energy use in Mexico is less than 40% of the OECD average, resulting in opportunity for growth. Mexico launched PRODESEN, a 15-year development program for the national electric system. From the years 2017 to 2031, PRODESEN estimates $110B in power related infrastructure projects. In addition, the plan's goal is to expand clean energy's share of power generation to 35% from 25% by 2024. While this plan looks promising, investors must continue with caution. Mexico's energy grid is weak and inefficient, a significant portion of the energy generated in Mexico is lost due to inefficiency and illegal usage. In addition, newly elected President Andres Manuel Lopez Obrador, has ambition goals but recently stated the current state of the nation's finances could limit what his government can accomplish. However, he also stated no campaign promises would be broken. Mexico's debt currently stands at 54% of its GDP, this is almost twice the long-run average from 1990-2017 of 27.94% of GDP.

Sectors/Industries to Keep an Eye On:

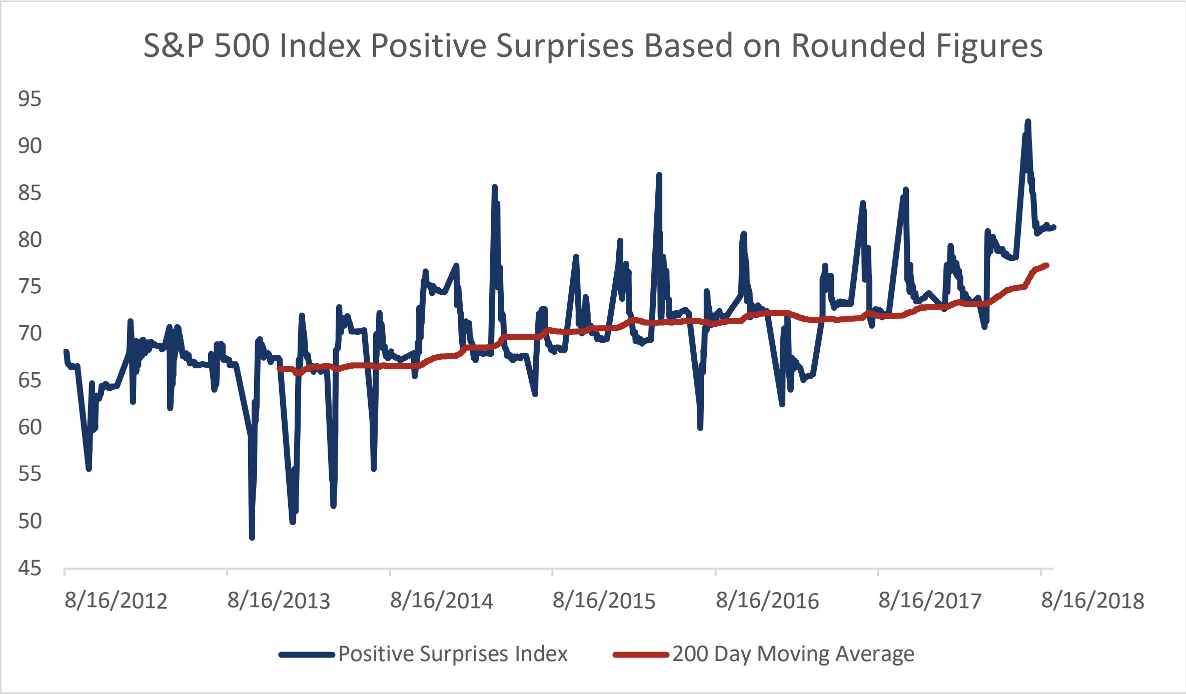
- **Technology** – The S&P 500 technology index has increased around 30% from a year ago. Cloud computing and artificial intelligence are attractive ideas that will certainly be prevalent in the future both in North America and globally. However, the growth potential comes at a cost. P/E ratios for the investable universe of S&P 500 technology companies have increased on a forward basis for the past 4 years. Current risk factors leave this sector vulnerable to a correction and will have to be taken into consideration going forward.

- **Infrastructure** – The American Society of Civil Engineers' most recent infrastructure report card grades U.S. infrastructure as a D+. Water pipelines are in serious need of repair. Water pipelines have a useful life between 75-125 years. Given the current replacement rate of about 0.5%, it will take about 200 years to turn over the current pipeline infrastructure. While this area is attractive given the critical nature and need for an infrastructure overhaul, the current political gridlock in the United States and the reluctance to direct serious capital to non-viewable improvements results in any expected timeframe for growth from an investment perspective to be elusive.

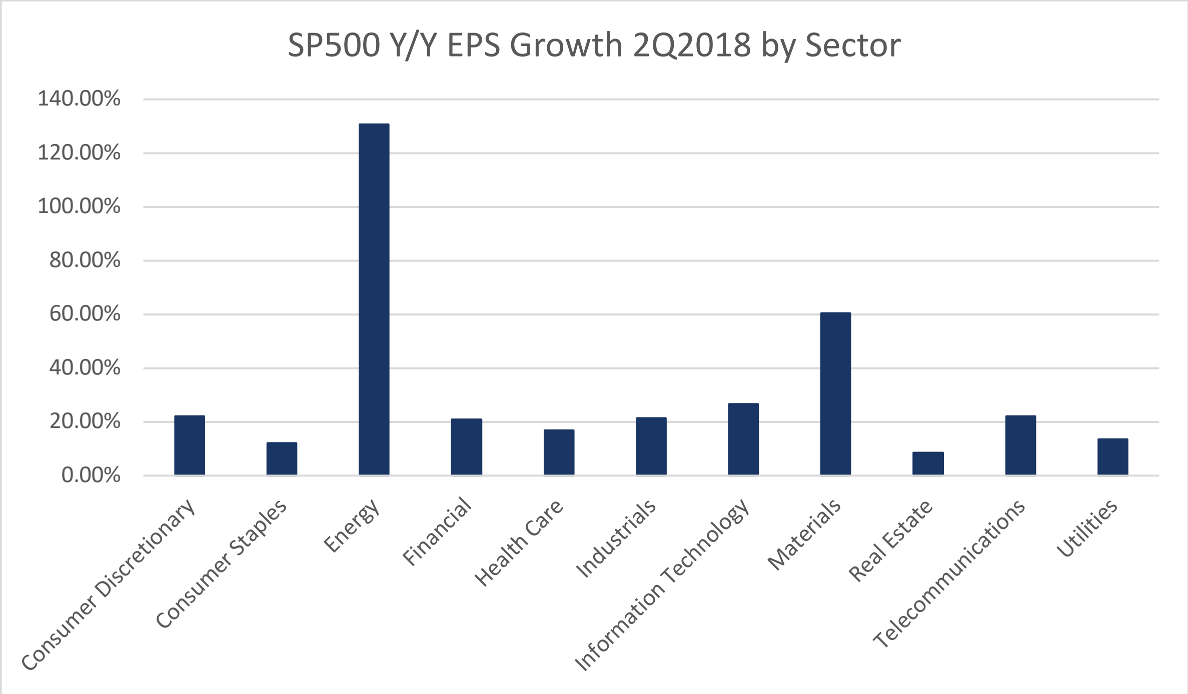
- **Insurance –** Insurance companies tend to fare well in rising interest rate environments and will benefit from the Fed normalizing rates. In addition, the 10-yr treasury has very recently broken out, surpassing the 3% mark. Peter Tchir of Academy Securities Inc said investors have gotten complacent regarding the Fed keeping rates low and the yield curve staying flat. The yield curve has been relatively flat and long-term rates could breakout further on the possibility of successful trade deal negotiations and continued solid economic growth. In addition to growth, diminishing pension fund demand for long-term Treasuries could help steepen the curve. Greater convexity in the yield curve would be beneficial for insurance companies. Also, the tax law has increased health insurance premiums, which may also help bolster insurance companies' earnings.

Appendix:

Attachment #1



Attachment #2



Region Analysis – North America

Analyst: Rishabh Jain **Region Recommendation: B** **Date: 09/19/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
US	4.20%	2.20%	3.07%	3.90%
Canada	0.70%	1.60%	2.42%	6.00%
Mexico	-0.20%	3.04%	8.06%	3.40%

Summary:

- Trade War with China and negotiations with Canada are a huge topic of discussion. Given current valuations and the rebounds we can say that markets are taking note of this, but maybe not weighing it completely.
- Fed is hawkish and thinks the economy could overheat. The 2% inflation target has been hit and unemployment is very low, so now the Fed needs to manage rate hikes carefully.
- Valuations are at all-time highs for US stock markets which makes it hard to find good industries.
- Bond yields are jumping back up given higher inflation. Plus, China could use its large holdings of US treasuries against US.

Trend #1 – Trade War

By far the biggest topic in the North American market is the trade war. US had been fighting with almost all trading partners about the trade deficit. For now, it has solved a lot of issues with the EU, and the unresolved ones are Canada and China.

US has approximately $250 billion worth of tariffs on China imports, while allowing exceptions for firms like Apple. China has also replied back with tariffs on US imports, especially on the products that would hurt President Trump's voter base. US has threatened China that it would put tariffs on $267 billion (remaining trade value with China) if China doesn't back down and agree to favorable terms for US, and China does not want to negotiate under threats. China has started a case against US in WTO.

Within North America, a favorable deal was struck with Mexico which was part of NAFTA, but negotiations are still going on with Canada. Trump is ready to move forward with just China but his representatives are not.

Overall, the US is trying to use its power as the major importer of goods to force countries to a deal in US' favor. A simple prediction would be that Canada will come through because Canada has a surplus, about C$5.35 billion (July 2018). This argument is also supported by the fact that representatives in Congress do not want a NAFTA without Canada.

Trend #2 – Hawkish Fed

The Fed has been bullish on the economy and has already raised rates twice this year, and according to markets, there are two more to come this year. Current target range is 1.75 – 2.00%, and by year end, it should be 2.25 – 2.50%. The Fed has two goals, create jobs and hit 2.00% inflation. Recent PCE (Personal Consumption Expenditure, a measure similar to CPI) reported was 2.40% which the Fed uses (not CPI) to measure inflation, and unemployment is at historically low levels of 3.90% which is considered full employment economically speaking. Bank of Canada is dovish in its approach and kept interest rates at 1.50% at its latest September meeting.

Business confidence has risen over time – even during trade wars – and stock prices are at all-time highs. The economy 'might' be overheating, which is at least what the Fed believes. Two theories: people are spending now because trade war will cause everything to be more expensive; deregulations and the TCJA (Tax Cuts and Jobs Act) are causing the growth. It's hard to say which one has provided a stronger boost in the short term, but in the longer term the deregulations should help the economy. To take advantage of the rates but also to be cautious, investment in financial sector might be a good choice.

Trend #3 – Valuations

Stock market has touched an all-time high this year. Growth strategies seem to be working far better than value ones. And current S&P 500 P/E is about 25x but historic mean is 15x. The valuations received a huge boost due to the TCJA because of record high of buybacks. Second quarter, 2018 buybacks totaled $436.6 billion, almost double of first quarter, 2018 buybacks worth $242.1 billion. Apple and Amazon broke through $1 trillion in market capitalization this year. The fact that high valuations can stay with the current volatile environment brought by trade wars and political risks is, in my opinion, ridiculous.

J.P. Morgan recently asked investors to reduce exposure to US equities due to risk of coming recession and put money in EM. But EM has recently been crushed by currency devaluations caused by the trade wars. In Turkey, the currency sell-off, down 40%, was obviously excessive and investors who realized that bought it at low levels and sold it when it rebounded. That's just an example of how fragile the market is. Investors will keep supporting growth and valuations will keep growing until they don't and there will be a correction of 10 – 20%. According to this analysis, short-term opportunities might arise and would be good to take advantage of. As for US, the best sector to be in would be consumer staples given its defensiveness.

Trend #4 – Bond Yields

The US 10-year Treasury recently broke through the 3% mark. For a while, the yield curve has been very flat and the spread between 2-year and 10-year note has reduced to its current level of 0.24%. After the 2008 crisis, when the interest rates essentially became zero, investors are now looking for higher yields. S&P small-caps has gained 14.32% YTD, and if you had held 5 – 10-year treasury, you would have made -3.14% (so you would have lost). Bond prices are going down for two reasons: one, investors are hungry for higher yields and are selling treasury to make room for corporate debt; two, sovereign wealth fund issues. In December 2017, Russia held $102 billion of US treasuries, and in May 2018 it had $14.9 billion. Russia sold them because of the sanctions put by US. Now, China holds $1.2 trillion of treasuries (Japan about $1 trillion) and China is realizing that it might not need US as badly as it thinks. China could sell US treasuries, which would cause a spike in bond yields. That surplus of supply would cause interest rates to skyrocket making it hard for US companies to borrow. Essentially, China could cause a major slowdown in US economy if it wished so. Current 3.00% yield on 10-year is a resistant number and it might be a while till that's broken, unless China and/or Japan intervene(s). However, it would not be wise for China to sell US treasuries since that would cause the devaluation of dollar, making US look better for imports.

Sectors/Industries to Keep an Eye On:

- **Financials** – Rising interest rates are great for financial companies, like lenders or insurance companies as they earn a higher return.
- **Consumer Staples** – Consumers have access to a ton of credit and consumer spending has been on a rise. But consumer savings are almost nonexistent, meaning if something breaks down, discretionary spending will go down.
- **Real Estate** – Known as "inflation hedge." REITs are great liquid investment and pay a ton of dividends. They are very resilient and always make it back up, historically speaking.

Sector Analysis

Sector Analysis – North America

Analyst: Sheldon McMeans **Date: 10/23/2018**

Sector	Countries Affected	Position
Consumer Staples	United States, Canada, Mexico	Buy
Insurance	United States	Buy

Consumer Staples – Buy

Consumer staples sector is home to essential products characterized by inelastic demand and therefore stable profits throughout the business cycle. After the financial crisis of 2008, North America and particularly the United States (US) has experienced a significant albeit relatively slow recovery. According to the National Bureau of Economic Research, the US experienced its trough from the crisis in June 2009. Beginning in the postwar period to 2009, the average duration of trough from previous trough of recessions is just under 70 months with the average expansion lasting 58.4 months. This average expansion of the US business cycle has increased steadily since first measured in 1854 due to what is termed as the "Great Moderation," which began in the 1980s. History is not always indicative of future results, however, the US is in its second longest expansion in history and the consensus is that the US is in late cycle.

The consumer staples sector is defensive in nature, providing low correlation relative to other sectors in the domestic economy as seen in **Attachment #1**. When GDP growth is strong, the desirability for the defensive sector dwindles. According to the Brookings Institute, global trade accounts for about 25% of global GDP and the research group stated that the trade dispute between China and the US is "Likely to have significant contagion effects around the world." In October, the International Monetary Fund (IMF) downgraded global GDP growth from 3.9% to 3.7% for 2018 as well as cut its outlook for 19 countries citing the trade dispute between US and China as a headwind. The IMF held its outlook for 2018 US GDP at 2.9%, however, forecasts a slowdown in growth in 2019 due in part to the diminishing effect of President Donald Trump's tax cuts. If this slowdown materializes, demand for the consumer staples sector will increase. In addition, the low correlation and defensive nature of the sector amidst global risk is attractive from a diversification and portfolio management perspective.

The appreciation of the US dollar (USD) is a headwind to the region's consumer staples sector as many of the players in the space are large multinational firms who rely on exports. However, staples firms have been able to support their sales through aggressive cost cutting. Recently, the USD has strengthened as seen in **Attachment #2**. This has been due to a variety of factors including strong domestic growth and interest rate differentials. Currently, the real 10-year Treasury yield in the U.S. is 0.89% compared to -0.43% in the Eurozone area using respective core CPI data. The European Central Bank is expected to hold off on raising its key interest rate until mid-2019, which paired with a likely slowdown in domestic growth, may cap further appreciation of the USD, providing a boost to the sector in 2019. In addition, the conductive mergers and acquisitions environment from historically low interest rates and competition in the industry has provided staples firms with increased synergies. Consumer staples sector is a "Buy."

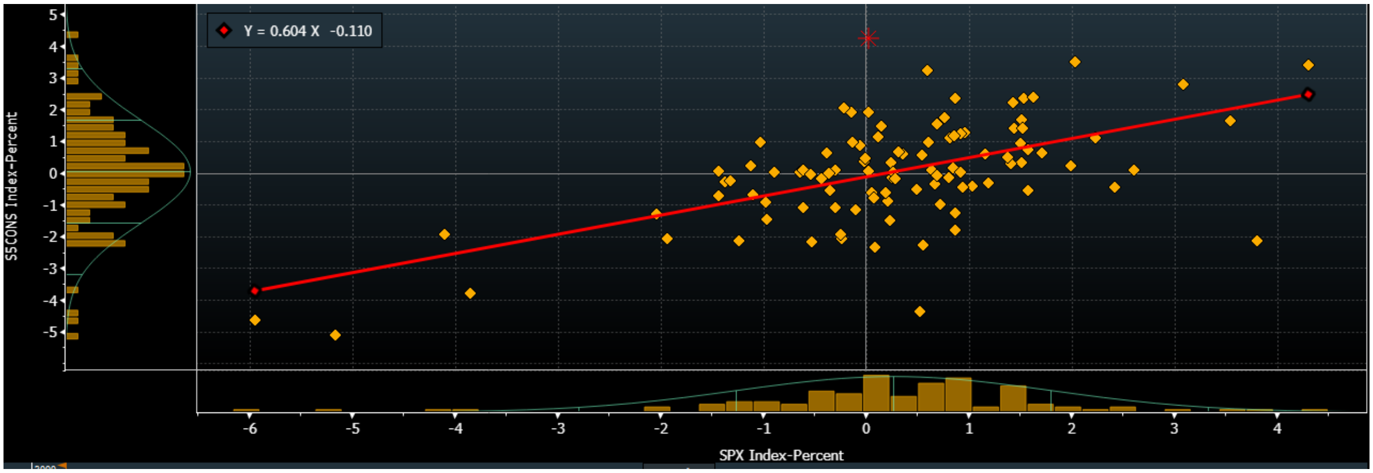
Insurance – Buy

The US Federal Reserve (Fed) is in the process of normalizing interest rates in the economy. Most recently, the Fed raised its benchmark rate, the Federal Funds Rate (FFR) to a range of 2-2.25% through decreasing liquidity in the economy by a monthly rate of $50B. The Fed is projected to raise the FFR one more time in 2018 and three more times in 2019. Insurance companies tend to perform better in rising rate environments due to their dependence on fixed-income investment. In addition, insurance companies benefit from convexity in the yield curve, which may increase from diminishing pension fund demand of long-term Treasuries.

In addition to a more favorable environment from higher yields, insurance companies are making technological advancements that will revolutionize the industry. Insurance companies are heavily investing in InsurTech investments which defined by Investopedia is "The use of technology innovations designed to squeeze out savings and efficiency from the current insurance industry model." Investment is expected to rise in this area as seen in **Attachment #3**. The investment in robotics process automation (RPA) and cognitive intelligence (CI) will automate costly processes in the underwriting process and provide more individualized and unique insurance solutions. These investments will cut costs for insurance companies as well as have the potential to increase insurance penetration. Deloitte in their "2018 Insurance Outlook" stated that a large insurer that automated basic tasks in underwriting "Realized a productivity gain of 68%, coupled with improved accuracy and compliance." In addition, in a preliminary study published by Deloitte University Press estimated that the "US insurance industry could potentially free up between 54 million and 285 million hours of their workforce time annually, amounting to potential cost savings between $1.7 billion and $8.9 billion, within five to seven years." While this analysis is contingent on levels of investment, the savings will either be passed on to shareholders or reallocated to value-added pursuits. Insurance companies are investing in this technology through both R&D and acquisitions as seen in **Attachment #4**. The outlook for InsurTech acquisitions remain strong. A 2017 survey from Insurance Business UK reported, "Nearly half of global insurers recently surveyed expect to make deals over the next three years to acquire new technologies, and 14 percent of those expect to make more than one acquisition." Technological investment will change the industry going forward, providing cost-saving potential and greater market penetration. Insurance sub sector is a "Buy."

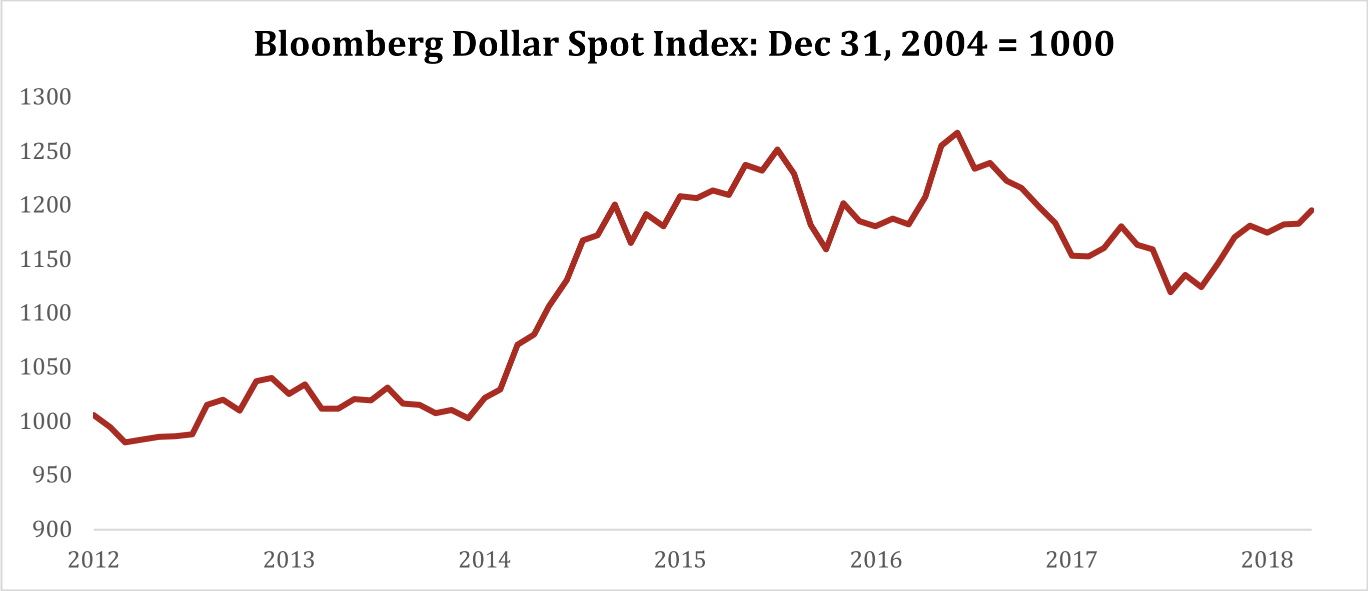
Appendix:

Attachment #1

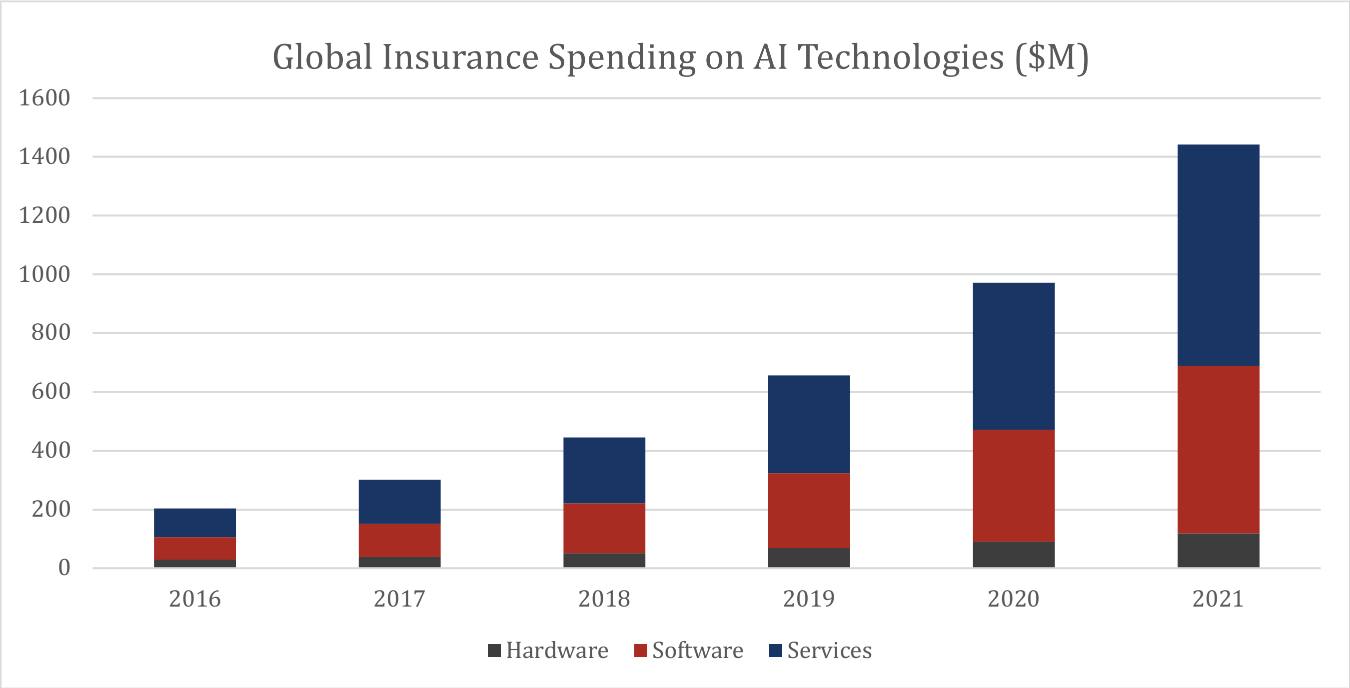


Note: SPX = Independent variable, SP500 Consumer Staples Sector = Dependent variable

Attachment #2

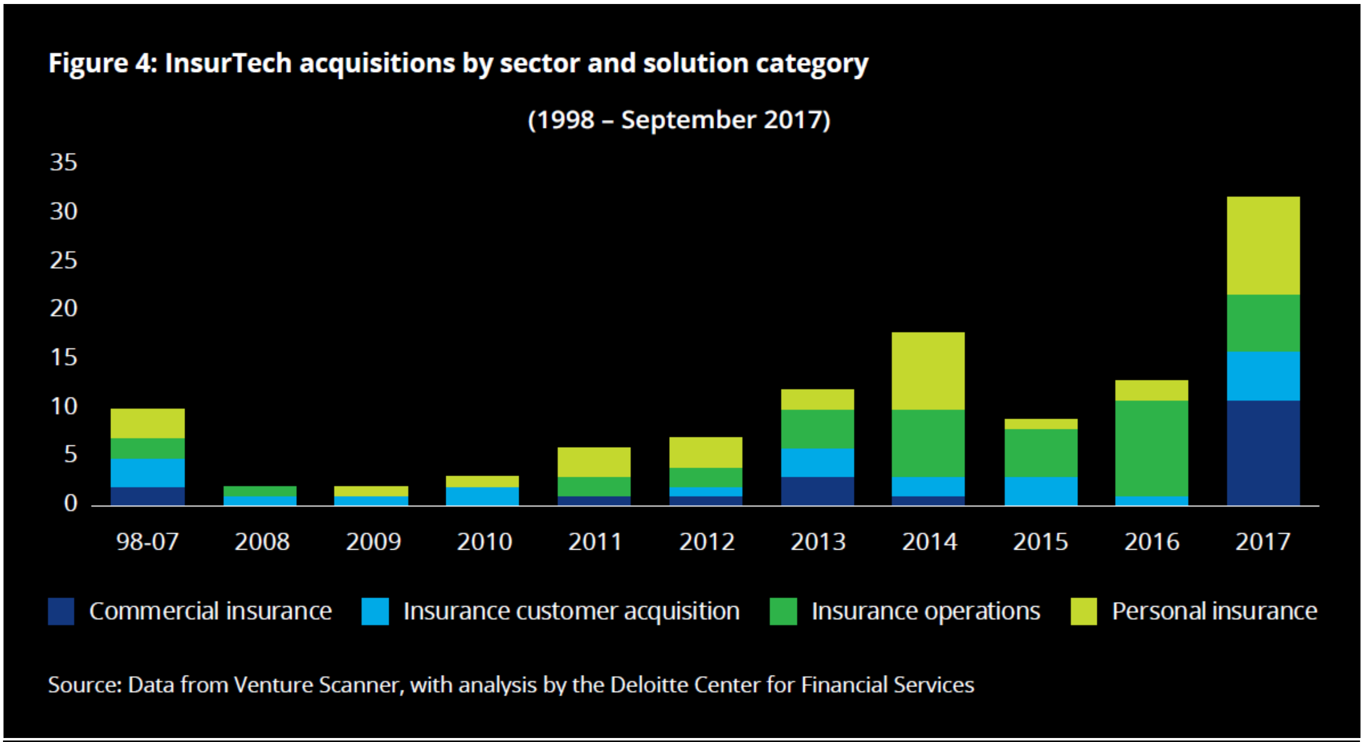


Attachment #3



Source: "IDC Worldwide Semiannual Cognitive Artificial Intelligence Systems Spending Guide" and Deloitte

Attachment #4



Sector Analysis – North America

Analyst: Rishabh Jain **Date: 10/22/2018**

Sector	Countries Affected	Position
Medical Supplies & Equipment	United States	Buy
Life & Health Insurance	United States	Buy

Medical Supplies & Equipment - Buy

Two key trends in this industry are "Aging Population" and "Drug & Technology Advancements." The key demographic calculation of "Seniors as % of Population," where seniors are of age 65 and above, the proportion has been increasing consistently. In 2016, the number was 15.6% and is expected to grow to 20.6% by 2030 as baby boomers join the class. That is a CAGR of 2.1% approximately. An impact of this shift is the rising demand of medical supplies and equipment that keep people alive, like durable medical, respiratory, feeding, and voiding equipment.

Other health care sector trends like advancements in drugs, and growth in biotechnology, life sciences tools and services are major drivers. New equipment is in demand as patients prefer less invasive treatments and diagnostic products; and new pharmaceuticals and data driven approaches increase expectancy and diagnose people faster. Given the advances in biotechnology and life sciences, requirement of new innovative equipment and supplies has increased and will continue to increase in demand because of the nature and current situation of the industry.

Life & Health Insurance - Buy

"Health Care Costs," "Life Expectancy," and "Interest Rates" are the key trends that are affecting life and health insurance industry. In general, a rise in interest rates helps insurance companies to make greater returns on their investments. In 2018, Fed has increased rates three times, with another probable in December of 2018; and three more hikes are expected in 2019 which will certainly help push up yields on bonds, a major asset for insurance companies.

Health care costs are on a rise due to development of orphan drugs (treat a small population, like acute lymphoblastic leukemia). Orphan drugs fetch higher prices due to their specialty and are expected to have double-digit growth and become a major part of pharma companies' revenues (about 20%). Advancements in biotechnology and life science tools and services also contribute to this cost, and will be a headwind to the industry. However, the rising rates should help offset the challenges by providing greater investment income. It would also depend on the industries' ability to pass costs to consumers. IBIS World estimates that health insurance industry revenues will increase at 1.1% CAGR till 2023 to $991 billion.

Lastly the increase in life expectancy will provide insurance companies with additional time to payout insurance claims, and in some cases, collect premiums for longer periods. Current economic and demographic trends also support the health and life insurance industry. Employees usually get insurance as benefits; and with a tight labor market, firms are buying group insurances to attract and retain talent.

Two statistics: 81% of employees say that retirement benefits make up a major portion of a job search; 83% of employees say health insurance is very or extremely important in deciding whether to stay in or change jobs.

Europe & Middle East

Region Analysis

Region Analysis – Europe & Middle East

Analyst: Jessica Conway **Region Recommendation: C** **Date: 09/20/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
Turkey	4.40%	11.40%	24.00%	11.00%
Saudi Arabia	1.70%	3.70%	2.50%	6.00%
UAE	2.00%	4.20%	2.25%	4.00%
Iran	4.00%	12.10%	18.00%	12.00%
Qatar	2.60%	3.90%	5.00%	1.00%
Israel	3.30%	0.70%	0.01%	4.00%
Egypt	5.20%	20.10%	16.75%	12.00%
Pakistan	5.60%	5.00%	7.50%	6.00%
Kuwait	1.30%	2.50%	3.00%	2.00%
Azerbaijan	2.00%	7.00%	10.00%	5.00%
Bahrain	3.00%	2.90%	2.25%	4.00%

Summary:

- Inflation continues to be a problem for countries in the Middle East as Turkey, Iran and Pakistan suffered strong currency devaluation at the start of 2018. Questions regarding the stability of Turkey's central bank arise as inflation hit 18% at the start of the year.
- United States sanctions on Iran and other countries pose threats to oil production as well as Iran's overall economic stability.
- Political instability and conflict continue to be a driving factors of economic insecurity in the region, affecting growth, investment and consumer confidence.
- Decreasing oil power in the field of energy due to COP21 and shale will likely lead to long term effects on the oil market, posing a threat to large OPEC nations like Saudi Arabia and the United Arab Emirates (UAE).
- In Pakistan, foreign investment from China as part of their Belt and Road initiative will increase opportunity and risk for Pakistan's economy in the future but will open political opportunity for China in the region.
- The technology sector in Israel continues to grow as start-up revenue increased by 9% from 2016 to 2017 (See attachment 2).

Trend #1 - Inflation and Currency Depreciation

In part prompted by the United States' increase of interest rate, currencies in the Middle East have begun to depreciate at concerning rates. In Turkey, the central bank raised rates by 500 points in an attempt to combat the 18% drop in the lira at the start of this year. In August, inflation hit a 15 year high of 18%, raising serious concerns about the competency of the central bank. Against international investors plea for the central bank to dramatically increase interest rates, President

Recep Tayyip Erdogan has consistently held is stance against this hike. Without proper and careful proceeding, Turkey faces a real challenge of economic crisis in the near future.

Similarly, in Iran, the rial experienced a severe plunge in July. This dip has led to decreased consumer purchasing power and, along with continuing conflict with the US, overall economic instability and decreased confidence. A similar problem is being faced in Pakistan as the rupee reached an all-time high of 69 US dollars in June. This trend has led to high inflation rates throughout the region and raises real worries about the stability of the economies in the area.

Trend #2 - Political Conflict and Instability

Political instability has plagued the Middle East for the last few decades, and unfortunately, we have seen signs that these will not go away soon. In Egypt, 75 people were recently sentenced to death after being arrested when violent political protests broke out in 2013. Human rights activists have noted that not a single police officer has been reprimanded for the killing of 900 people during the protests. This clear act of political injustice demonstrates the amount of progress Egypt must undergo to sustain a fairer political climate. In Saudi Arabia, authorities are recommending the death penalty for 3 prominent Sunni Clerics after disputes between relations with Qatar broke out last year. This move raises questions about the power of the Monarchy specifically that of Crown Prince Mohammed bin Salman. Lastly, in Pakistan, out of their 200 million inhabitants, roughly 0.5% paid any form of taxes. On top of their failed tax collection, Pakistan was hit with backlash for failing to prevent the financing of terror factions. With the initiation of Prime Minister Imran Khan in 2018, who was elected after the former Prime Minister was arrested on corruption charges, it will be interesting to see whether he can break the cycle of corruption and bring Pakistan more political security. Although politically and economically more stable, Israel has plans to increase defense spending to 6% of GDP as conflict with Palestine continues.

Trend #3 - Iran Sanctions and Trade Tariffs

As Trump’s trade war frenzy continues, it is not surprising the Middle East has been dragged in. After the detention of American pastor Andrew Brunson by the Turkish Government, The United States imposed new tariffs on steel and aluminum from Turkey. Turkey has responded with their own tariffs on a variety of US goods. However, this dispute comes at a dubious time for Turkey as they are experiencing some of the worst inflation and depreciation in the region. Further, with Trump’s recent leaving of the Iran nuclear deal, followed by the imposition of crippling sanctions, such as restrictions on US dollar Banknotes and trade in precious metals, Iran is faced with severe economic instability. The sanctions are likely to impact the oil and energy sector, as well, posing implications for the overall supply of oil in the market.

Trend #4 - Energy Sector and Oil

With the potential partial privatization of Saudi Aramco, the oil industry will be an important figure to watch for this region. While the sale of up to 5% of the company has been in discussion for some time now, questions regarding whether it will actually happen remain unanswered. This deal has the potential to internationalize and diversify Saudi Arabia’s economy away from oil, which may prove fundamental given the uncertainty in the future of the oil industry. Sanctions in Iran are set to decrease the supply in the market, causing a possible price hike in the short term. However, COP21 and shale pose threats to the sustainability of the industry and hint at a possible long term decrease in oil demand. The International Energy Agency predicts that demand for oil could decrease by over 100 billion barrels in the next few decades. Furthermore, the trade war with China may lead to a decrease in the Chinese oil demand, leading to an even further potential price drop. This would have devastating implications for the Middle Eastern economy, where oil has long been the most fundamental source of growth. (See attachment #1)

Trend #5 – Chinese Foreign Direct Investment

With the introduction of Pakistani Prime Minister Imran Khan, energy and infrastructure plans with China put in place by the former Prime Minister are up for discussion. The Chinese Pakistan Economic Corridor (CPEC), a $62 billion plan to link China’s western region with Pakistan's port of Gwadar, poses the potential to drive investment into Pakistan. On the other hand, this investment will likely bring a burden of debt to the country. Thus far, it appears Khan will continue with the CPEC plans but reopen negotiations. In general, as Middle Eastern countries are looking to diversify their economies away from oil, they are welcoming the idea of Chinese investment and their “Belt and Road” initiative. Talks about opening CPEC to investment from other countries in the region who are also part of the Belt and Road initiative have arisen in the last few days.

Sectors/Industries to Keep an Eye On:

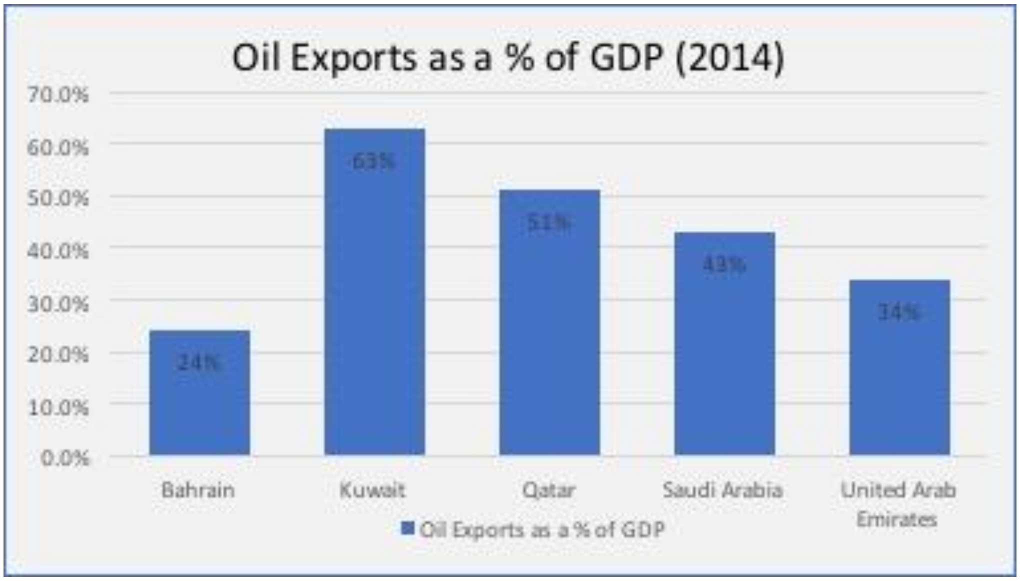
- **Energy -** Changes in oil prices and the energy sector will be important to watch in the next few years. Uncertainty regarding sanctions and demand pose challenges, but the possible sale of Saudi Aramco could have positive implications.

- **Technology** - Israel’s high technology sector continues to grow, even as political conflict poses a real threat to the region. Israel has one of the highest percent of GDP spending on research and development (R&D) (see Attachment 2). With increased revenues from startups and a growing global investment in high technology, this sector will be an interesting one to watch.

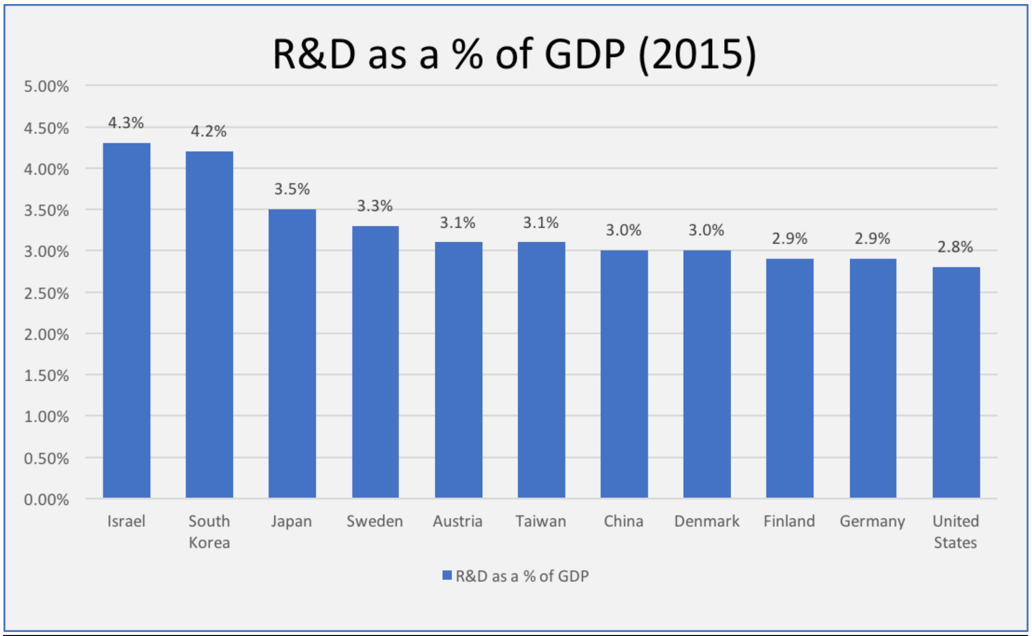
- **Leisure and Travel -** Qatar is set to host the 2022 World Cup, which will likely lead to an increase in travel and tourism in the area. Perhaps this world event will lead to sustained increase in tourism in the region.

Appendix:

Attachment #1



Attachment #2



Region Analysis – Europe & Middle East

Analyst: Atul Vyas **Region Recommendation: B -** **Date: 09/25/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
Poland	5.10%	2.00%	1.50%	5.90%
Czech Republic	2.40%	2.50%	1.25%	3.10%
Romania	4.10%	5.10%	2.50%	4.20%
Greece	1.80%	1.00%	0.00%	19.10%
Hungary	4.80%	3.40%	0.90%	3.60%
Ukraine	3.80%	9.00%	18.00%	9.70%
Slovakia	4.20%	2.80%	0.00%	5.50%
Bulgaria	3.40%	3.50%	0.00%	5.70%
Croatia	2.90%	2.10%	2.50%	8.60%
Belarus	3.90%	5.00%	10.00%	0.40%
Slovenia	3.80%	1.82%	0.00%	7.90%
Lithuania	3.80%	2.10%	0.00%	8.20%
Serbia	4.80%	2.60%	3.00%	11.90%
Latvia	5.30%	2.80%	0.00%	7.70%
Estonia	3.70%	3.60%	0.00%	5.10%
Bosnia and Herzegovina	2.00%	1.80%	3.69%	35.73%
Albania	4.45%	2.20%	1.00%	12.90%
Malta	5.90%	2.40%	0.00%	4.40%
Macedonia	3.10%	1.50%	3.25%	21.10%
Moldova	5.20%	3.20%	6.50%	3.00%

Summary:

- Political instability is on a rise in many countries in Eastern Europe. With Hungary under the radar for possible censure by the EU and mounting criticism of Poland's new right-wing government is creating tussle between the EU and the rising nativist and right-wing politics across the bloc.
- With increasing perceived Russian and Turkish aggression, the defense industry is on a boost all over the region.
- Retail sales and consumer spending are on an increase in many countries in the bloc, especially in Romania and Russia, signaling a healthy rise in the GDP in these countries. Tightening labor market and a labor shortage is, however, taking some of that sheen away.
- Sanctions on Russia has forced the ruble to lose value, increasing the profits of Russian oil companies.

Trend #1 – Rising tussle between the EU and the right-wing politics

Our outlook on the overall business environment in many major economies in Eastern Europe is not very favorable due to the rise in differences between the Germany-led EU and the rising right-wing politics in countries in the region, especially Poland and Hungary. Countries throughout the region are experiencing the rise of right-wing parties. These parties stand for national sovereignty, stronger borders, greater limits on migration, and fighting against radical Islam. This rise is fundamentally changing the fabric of the left-minded European Union.

In addition to the sprouting of illiberal governments, countries like Poland (under the party Pis) and Hungary (under Prime Minister Viktor Orban) are steering towards authoritarianism. Rising autocratic rule in these countries has brought their governments into loggerheads with the EU, which enshrines democratic rights in its constitution and requires every member country to adhere to them. With Hungary currently under possible censure and Poland under constant criticism, uncertainty is arising in the business environment there. If the EU does decide to take any actions against both the countries, Poland and Hungary could lose a big share of their EU funding; harming investments in their economies. This is not a good sign as Poland and Hungary are one of the biggest economies in the region.

Trend #2 – Increasing security crisis and the defense sector

Tensions in Eastern Europe are rising about the increasing instances of Russian aggression in the region following the crisis in Crimea and eastern Ukraine. As a bulwark against this threat, the US is planning to establish a $2 billion permanent military base in Poland, as a joint facility for the militaries of both the countries. On a similar note, Turkish hostilities in southern Europe are causing concerns in Greece and at the US Air Force base in coastal Turkey. To continue having a strong stance in the ongoing Syrian civil war and to curb Turkish aggression, the US is expanding its military footprint in Greece. Lastly, as Russian engagement in the Syrian civil war got more convoluted due to the downing of one of their planes, Russia is expected to gear up its engagement in Syria in the coming time.

Keeping all these scenarios in mind, the defense sector in Eastern Europe will get a big boom. Czech Republic, Russia, Ukraine, and Bulgaria already have a very robust export-oriented defense industry, which will be further boosted by the increase in defense spending by countries around the region.

Trend #3 – Sanctions and Oil

Being the biggest economy in the block, Russia's thriving oil and natural gas sector is giving a positive outlook for the domestic economy and the economy of the whole region. After the US imposed more sanctions on Russia this year, the Russian ruble has fallen more than 22% since the start of the year against the Greenback. This precipitating fall in the ruble and rebounding oil prices have increased the profits of Russian oil companies drastically. As the ruble depreciated, Russian oil became cheaper in the international market, and pulled Russia to a higher level of oil production this year. If this streak continues, Russia could experience a peak oil production in the coming few years.

Along with oil, Russia is also extracting record quantities of natural gas to feed the increasing demand for the gas in Europe. This sector will be further boosted when the new expanded gas pipeline Nord Stream 2 is opened in the coming years. This pipeline is being constructed to increase the export of Russian natural gas to Europe. Since the ruble has depreciated considerably and the Euro has remained stable against the dollar, Russian gas is now cheaper for its European customers; fueling their economic growth and lowering their financial burden. Smaller gas bill will help reduce the high fiscal deficits in many European countries.

Trend #4 – Rising consumer spending and GDP growth rate

While political uncertainty is making our outlook in some major economies in Eastern Europe dismal, rising consumer spending and high GDP growth rates is making it favorable in others. Consumption is increasing beyond expectations in Russia, Romania, and Croatia, with Russia beating investor estimates and clocked-in a 2.8% increase in retail sales in Q2 of 2018. With the Czech economy growing at 2.4%, and the Romanian economy at 4.1% in Q2 of 2018, these countries are outperforming many other European countries in the EU as well.

A tightening labor market, plagued by labor shortage, however, is dampening the GDP growth forecasts in the future for these countries. Labor force in Romania is decreasing by 1.1% y-o-y, leading to labor shortages. Moreover, the rise of populist governments in these countries is preventing migration from other countries, which could fill up the gap in labor supply.

Sectors/Industries to Keep an Eye On:

- **Defense** – As defense spending increases in the US, Russia, Turkey, and Ukraine, due to the various conflicts going on in different places, the robust export-oriented defense industry in countries like Czech Republic is going to get a boost.

- **Oil and Natural gas** – Russian oil and natural gas sector is booming, thanks to a dipping ruble against the dollar and rebounding prices. This has led to increased profits for Russian oil and natural gas companies, and the sector is bound to grow even more in the coming years.

- **Automotive** – Increasing uncertainty over post-Brexit trade policies has run jitters across the robust UK automotive industry. With increased tariffs, the industry might shift to the continent to avoid losing their competitive advantage. Since Germany’s automotive industry is embroiled in legal and regulatory problems, British automakers could shift their production to the many Eastern European countries that already have a strong automotive industry base, such as Slovakia, Hungary, etc.

Region Analysis – Europe & Middle East

Analyst: Toan Nguyen **Region Recommendation: A-** **Date: 09/19/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
Germany	2.00%	2.00%	0.00%	3.40%
United Kingdom	1.30%	2.70%	0.75%	4.00%
France	1.70%	2.30%	0.00%	9.10%
Spain	2.70%	2.20%	0.00%	15.30%
Italy	1.20%	1.60%	0.00%	10.40%
Portugal	2.30%	1.20%	0.00%	6.70%
Netherlands	2.90%	2.30%	0.00%	3.80%
Sweden	2.50%	2.00%	-0.50%	6.10%
Switzerland	3.40%	1.20%	-0.80%	2.40%
Belgium	1.40%	2.20%	0.00%	6.20%
Denmark	0.50%	1.00%	-0.70%	3.90%

Summary:

- Although projected to still be in the positive, the EU's GDP growth will likely slowdown in the next two years.
- Political instability with Italy, the US's foreign trade policies and the rise of populism adds to uncertainties in the future.
- The European Central Bank (ECB) will likely keep interest rate as is and will end its quantitative easing program at the end of 2018.
- No deals have been struck over Brexit so far, which could bring along serious negative economic impact to both the EU and the UK after the UK leaves the bloc in March 2019.
- The EU has been continuing/creating new trade deals with Iran and Japan to alleviate the impact of US tariffs and the looming global trade war.

Trend #1 – Slower Economic Growth Projection

The EU's GDP growth in the second quarter of 2018 reached 0.4% over the previous quarter, compared to the average quarterly growth of 0.7% in 2017. On an annual basis, the EU's GDP growth is expected to be 2.2% for 2018, and 1.8% for 2019, both weaker than growth of 2.8% in 2017. The sluggish pace was likely driven by weak exports and subdued domestic demand amid lower confidence, higher inflation and reduced global trade. The top four economies that contribute about 50.0% of economic output to the EU include Germany, France, Italy, and Spain. Within this group, Germany and France both have strong outlooks, with high GDP growth driven by increases in domestic demand. Spain and Italy have positive growth projection, but at a weaker rate than desired. Both economies are subject to weak domestic demand on top of subdued demand from the EU as a whole.

In short, the Eurozone economy is expected to grow considerably this year and next, albeit at a lower rate than last year. Tailwinds from accommodative monetary policy, a tightening labor market and positive sentiment remain in place; however, rising inflation, a firm euro and concerns over geopolitics are expected to dent momentum somewhat.

Trend #2 – Political Instability

The EU is exposed to political risk on multiple fronts: Italy, the US, and the rise of populism in several European countries.

Italy's current new government has recently proposed to cut income taxes and provide a basic universal income for every citizen, which makes Italy become extremely risky for investors since it is the second-most indebted country in the EU. This proposal also risks breaking the EU's fiscal rule and have government officials butting head with the EU in the future.

The recent foreign trade policy imposed by the Trump administration also poses a challenge for the economy of the EU. The two sides have recently agreed on a trade truce with US on July 27th, meaning no more tariffs will be levied and that the two would work together to reduce trade barriers. But Trump reiterated a threat of imposing tariffs on the European automobile sector on August 22nd. An escalation of tit-for-tat tariffs could further dent confidence and activity in both economies, while spillover from the ongoing trade dispute between the U.S. and China is also weighing on sentiment in the Eurozone.

Finally, populism is on the rise in Europe, especially in Italy, Germany and Netherlands, but not as much in France, Spain, and Greece. This new political movement is mostly driven by fear over immigration and the accompanying problems including assimilation, welfare, and violence.

Trend #3 – ECB's Monetary Policy

The ECB delivered no surprises at its September 13th monetary policy meeting, leaving its main interest rates unchanged and reaffirming its commitment to winding down asset purchases related to its quantitative easing (QE) program by the end of the year. Accordingly, the Bank left the refinancing rate at 0.0%, the marginal lending rate at 0.3% and deposit facility rate at minus 0.4%. In addition, the ECB emphasized its plans to halve its asset-buying program to EUR 15 billion per month in October and to wrap it up entirely at the end of December—provided that incoming data plays out as expected.

Looking ahead, the ECB is expected to keep monetary policy conditions accommodative, proceeding slowly with a gradual normalization of monetary policy. Although the end of QE will be viewed as de facto monetary tightening, Draghi reiterated the ECB's intentions to reinvest the principal payments from maturing securities "for an extended period of time." Moreover, low interest rates will keep conditions accommodative for the foreseeable future.

Trend #4 - Brexit

So far, Brexit has some effect on UK, even though these indicators could also be affected by global trade tensions, especially between US and China. Overall, trade deficit rose to second highest on record, the pound sterling devaluated against USD and euro, and wage growth decreased despite low unemployment.

Given that the UK will officially leave the EU in March 2019, both sides are trying to craft up an agreement to alleviate any negative impacts from the separation as no deal has been struck so far. The EU's chief Brexit negotiator, Michel Barnier, repeated his offer to re-write his blueprint for avoiding a hard border between the U.K. and Ireland -- the issue that has held up progress in negotiations since March. The British premier initially rejected Barnier's original plan as "unacceptable" because it involved keeping Northern Ireland in the EU's customs territory. The two parties will gather again on September 20th, 2018, and both sides are thinking about setting up an official deadline for negotiation in November.

Without an agreement with the EU, some possible changes that the UK would face include customs checks and tariffs on goods as well as longer border checks for travelers.

Trend #5 – The EU's Trade Agreements

President Trump decided to withdraw the US from the Joint Comprehensive Plan of Action (JCPOA), the Iran nuclear deal on 8 May as well as to reinstate all previously lifted sanctions under this agreement. However, the EU's 'Blocking Statute' entered into force early on 7 August to mitigate their impact on EU companies doing business in Iran, sustaining trade and economic relations between the EU and Iran.

On the other hand, EU and Japanese leaders signed a landmark free trade agreement Tuesday, removing nearly all tariffs paid by EU companies exporting to Japan and sending a clear message against protectionism. The EU-Japan free trade agreement (FTA) is the largest trade deal ever negotiated by the EU. It will create a trade zone covering 600 million people and nearly a third of global GDP. These actions could be one of the EU's first response to the tariffs on steel and aluminum imposed on the majority of the world by the US, as well as EU's reaction to the threat of a potential large-scale trade war between US and China.

Sectors/Industries to Keep an Eye On:

- **Industrial Goods & Services –** Even though subjected to tariffs and global trade tensions, Europe's comparative advantage is advanced machinery and industrial goods manufacturing with high skilled and lower labor cost. This sector could benefit from any trade agreement between the Eurozone and other countries in Asia to offset the negative effect of the US's foreign trade policy.

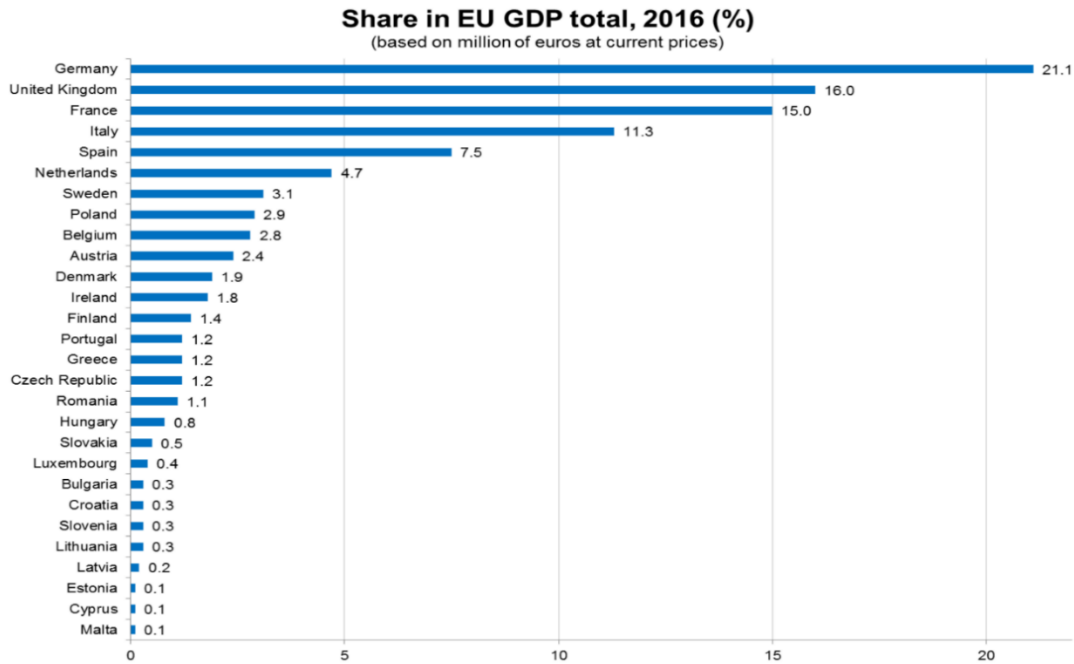
- **Forestry & Paper** – European countries are rich in this resource, which would also be largely unaffected by trade tensions or any potential tariffs, which are mostly aimed at industrial products.

- **Leisure and Travel** – A combination between a strong global economy, strong wage growth and a rising Chinese middle class, the most extravagant group of tourists with a high preference for Europe tours, shows a lot of growth prospect for this industry, which should be largely unaffected by trade tensions.

Appendix:

Attachment #1

Attachment #2



Sector Analysis

Sector Analysis – Europe & Middle East

Analyst: Jessica Conway **Date: 10/09/2018**

Sector	Countries Affected	Position
Manufacturing	Germany, Netherlands, and France	Hold
Technology	Germany, Israel, and the United Kingdom	Buy
Energy	Russia, Netherlands, Saudi Arabia, Qatar, and Iran	Buy
Automotive	Germany, United Kingdom, Belgium, and France	Hold

Manufacturing – Hold

Current PMI in Eurozone is 53.2, which indicates an expanding manufacturing sector. However, this number indicates the slowest growth since 2016 due to slow job creation as well as increases in steel and oil prices. Consumer confidence in this region has also decreased due to trade concerns with major European trade partners, specifically the US, as Trump declined a proposal to bring down auto tariffs. While trade and input prices pose threats, the manufacturing sector is still clearly experiencing expansion overall. The effects of trade are likely to slow this expansion within the next year, but as deals resolve, it is predicted that manufacturing will continue to grow at a healthy rate in the next few years. In the Netherlands, the PMI reached 59.8 in September as export orders increased and job creation accelerated. Although input prices increased, it did not appear to have much effect on the overall health of Netherland's manufacturing sector. In Germany, however, PMI was 53.7 in September 2018; a sharp decline since 2016. A decrease in export orders as well as concern regarding US and China trade has led to slower predicted manufacturing growth over the next year. This slow growth will not likely persist after trade deals conclude. Therefore, the outlook for manufacturing is a "Hold".

Technology – Buy

In the Q1 of 2018, a total of $19.3 billion were invested in European fintech companies; an increase from $4.3 billion the prior quarter. Also, over the past 12 years there has been an increase in revenue from technical consumer goods in the IT sector in Germany, one of the largest economies in this region. Further, there has been a huge push towards digitalization by German banks, who plan to increase spending in this area in the next few years. By 2020, the top 50 lenders plan to spend up to $7 billion developing these projects. This strong push toward digitalization, a trend throughout the Eurozone, will likely lead to overall growth in the technology sector in the next few years. In the Middle East, while Israel's high technology sector is experiencing strong growth with $5.2 billion dollars being raised in revenue by startups in 2017, a 9% increase from 2016, concerns regarding the overall productivity of the country create worries about the sustainability of this growth and the future of the overall economy. Currently, Israel ranks 23rd out of 35 nations on OECD's productivity scale. However, this low productivity has yet to slow down growth as cybersecurity startups climbed 33% and AI investment 17% in 2017 alone. However, without certainty in improvement in overall technological education and domestic demand, there are still many risk factors in this region. Overall, technology has been labeled a “Buy”.

Energy – Buy

We have seen strong increases in natural gas and oil prices in 2018 after a dip in 2016. These prices are predicted to continue increasing over the next three years, indicated by changes in supply and demand. The International Energy Agency (IEA) predicts that global gas demand will grow around 1.6% a year over the next few years. Moreover, Chinese gas demand is likely to grow almost 60% by 2023, further increasing potential demand for the European energy sector. Russia is the largest exporter of oil and natural gas to the European Union, which has benefited from this change in price. Norway, as well, supplies almost 20% of Europe’s gas demand. With the increasing natural gas prices, we can expect the energy sector in both Russia and Norway to grow in the next few years. In the Middle East, Iran and Saudi Arabia are large producers of oil, which has seen an increase of price from around $40 in 2016 to $75 per barrel in 2018. However, overall instability, specifically in Iran, creates investment risk in the region. In the long term, oil prices are threatened by shale production and environmental regulations imposed by COP21. However, these factors will likely not affect prices within the next 5 years. Therefore, the outlook on Energy is a “Buy”.

Automotive – Hold

Automotive sector growth in Europe has been steady over the last few years. In Germany, automotive sector revenue has shown a steady increase from €351.3 billion to €432.7 billion over the last 7 years. The automotive industry makes up almost 20% of Germany’s economy, and as Germany’s economy prospers, it is predicted that the automotive industry will continue to grow. Further, with increased investment in technology in Germany as well as all of Europe, it is likely that these developments will spill over into improvements in efficiency in this sector. Moreover, in the long run, environmental regulations in Germany and France are likely to alter future production. A shift towards the creation of more environmentally conscious vehicles will be necessary in order to comply with regulations set in these countries in the next 10 to 20 years. While this could initially hurt production on other cars, it will allow Europe to remain competitive as global demand for electric and alternative fuel cars increases. However, US tariffs on steel and aluminum pose threats to the industry in the near future. Increasing input prices and more costly trade will negatively impact the industry in the next few years. While growth in this sector will likely recover, it could take time to fully rebound from this predicted slow growth. Therefore, the automotive sector is a “Hold”.

Sector Analysis – Europe & Middle East

Analyst: Atul Vyas **Date: 10/09/2018**

Sector	Countries Affected	Position
Tourism	Poland, Russia, Austria, Czech Republic	Buy
Automotive	Czech Republic, Slovakia, Hungary	Hold
Oil and Gas	Russia	Buy
Manufacturing	Poland, Hungary, Czech Republic	Hold

Tourism – Buy

Tourism is a major industry in many Eastern European countries. In Austria, it contributes 15% to the GDP, while the number goes as high as 25% in the case of Croatia to a low of 4.5% in Poland. In monetary terms, tourism contributes $62.5 billion to the Austrian economy, $75.7 billion in case of Russia, and $23.6 billion in Poland.

With increasing dispensable income all around the world and a strengthening dollar, tourism could see a boost in Eastern Europe. Economic boom in Western Europe, especially Germany and the Netherlands, the US, and in China would be the main contributors to this growth in tourism. These countries are top contributors to the number of tourists in Eastern Europe. Additionally, rising incomes in the booming major Eastern European countries of Poland, Hungary, and Austria is also fueling tourism in the neighboring countries as well. Talking about the risks, the recent US sanctions on Russia have not affected the tourism industry in Russia significantly. Since US is not the main contributor of tourists in Russia, these sanctions have failed to hurt the sector. Tourism sector is a "Buy".

Automotive – Hold

Automotive industry has always been prominent in Eastern European economies. Large portion of cars in many developed Western European countries come from countries like the Czech Republic, Slovakia, Slovenia, and Hungary. 20% of Hungarian and Czech exports come from their automotive sector and more than 85% of automobiles produced there are exported to the EU. In fact, Czech Republic and Slovakia have the highest number of cars produced per capita in the world; further highlighting the industry's prominence in their respective economies.

This industry is going to get a boost from Brexit in the coming months. With the onset of Brexit, the cost of making automobiles in the UK is projected to increase significantly; directly eating into the profits of automotive companies. This has forced British automotive companies to look for alternative places of production, and some have found Slovakia and Hungary to be the right places to produce. Jaguar has moved most of its production out of the UK and is going to soon start producing most of its cars in Slovakia in a brand-new factory. As the political and economic uncertainty lingers around Brexit, many more companies might move production to these prominent Eastern European countries.

Talking about the risks to the sector, the consequences of the current trade war between the EU and the US for the industry in Eastern Europe is quite uncertain. This is because most of the automobile output from Eastern Europe is geared towards the EU, and not China or the US. Additionally, labor in Eastern Europe is still cheaper than in many developed countries, even after the current tightening of the labor market. Overall, outlook for the industry looks promising moving ahead, but it is advisable to wait and see what the trade war has in it for this industry in Eastern Europe. Automotive sector is a "Hold".

Oil and Gas – Buy

Russia is gearing to become the biggest oil producer in the world in the coming years. Supported by a surge in the oil price and a sharp depreciation of the ruble, Russian oil production is projected to peak in 2020. Depreciating ruble has made the Russian oil producers to earn extraordinary profits, boosting their defense against the sanctions. Russian natural gas firms like Gazprom are also facing increasing demand for natural gas from Western Europe, boosting its production despite the sanctions. Moreover, Russia has recently geared up its efforts to search for oil in the Arctic, of which it owns the largest share in the world.

The sanctions imposed on the Russian oil industry on August 2nd, 2018 have failed to have much of a negative impact on the industry. Sanctions on the industry were first put in 2014 and since then the industry has figured its ways through those sanctions to emerge unscathed. All major Russian oil companies are focusing more on developing their own technology, instead of relying on Western ones. Moreover, state-owned banks are supplying the necessary funds, replacing Western banks. The industry has internalized the harmful effects of these sanctions and proved its resilience.

Keeping in mind the scale of the industry, its resilience in the wake of global sanctions, increasing demand from Western Europe, and the upscaling of its oil searching projects in the Arctic, the outlook for the sector is very good soon. Oil and Gas sector is a "Buy".

Manufacturing – Hold

Eastern Europe is the manufacturing hub for the rest of Europe. Availability of cheap labor, superior infrastructure, and its geographical advantage of being in the middle of Europe, makes the region an ideal place for manufacturing. Poland, Hungary, the Czech Republic, Austria, and Slovakia are the main manufacturing hubs.

Due to declining population growth and rising nativism and xenophobia in these countries, labor markets are tightening throughout the region. Higher GDP growth rate and increasing FDI are increasing the demand for labor, which is pushing the wage growth to exceptional levels. Wage growth in the region averaged around 7% in 2017, which could negatively impact the manufacturing sector soon.

With the tightening labor market and an acute shortage of labor, which was the very base of the manufacturing boom in the region in 1990s, the outlook is not very ideal for the sector. Manufacturing sector is a “Hold”.

Sector Analysis – Europe & Middle East

Analyst: Toan Nguyen **Date: 10/09/2018**

Sector	Countries Affected	Position
Automotive	Germany, France, Italy, United Kingdom	Hold
Manufacturing	Germany, Netherlands, Spain, France, Italy	Hold
Tourism	United Kingdom, Spain, Italy	Buy
Aerospace & Defense	Germany, Spain	Buy
Technology	United Kingdom	Buy

Automotive – Hold

While Germany would be the biggest loser if the United States levied higher tariffs on EU cars, it would not be the only one. Many products are not really "made" in a single country anymore, and carmakers rely on parts and services provided by several countries linked by complex supply chains. The European single market contributes to this situation, because auto parts move within the European Union without paying any tariffs. Therefore, any major disruption to the European automotive sector could create a ripple effect and negatively influence the performance of the sector in the entire region.

Since automotive sector is a major contributor to greenhouse gas emission, major European countries have been trying to take several green initiatives: Germany will ban gas cars in 2030, while France and UK will follow suit in 2040. Given this upcoming regulation, the European automotive industry is trying to revolutionize itself and invest more into sustainable, alternatively energized vehicles. This will give the European automotive sector a head start in the global race towards vehicles with reduced emission and could represent an opportunity in the medium term. The rating for the European automotive sector is a “Hold.”

Manufacturing – Hold

For the European economy, manufacturing capacity utilization has constantly increased for the last two years, following a steady rise in new orders. The trend is positive, but also brings its own set of challenges by putting stress on company supply chains. A direct consequence of growing pressure on capacity utilization has been an increase in hiring. The increase has been evident across the European Union, where the manufacturing PMI employment index has risen from 50.7 in March 2016 to 56.9 in February 2018. Across sectors, technology equipment has seen the strongest employment growth over the last two years, also recording its best performance since records began (in January 1998) in February.

However, given the concerns over whether the EU could continue growing as robustly as it has going forward due to uncertainties with the global trade tension, many major European economies have shown signs of contraction in the manufacturing sector. Italy, Spain, France and Germany all saw their respective manufacturing PMI decreased in September 2018. In addition, even if the EU could somehow set aside concerns about trade tension and expand its manufacturing sector, there will not be much room for growth given the thinly-stretched supply chain of the manufacturing sector. In conclusion, the outlook for Europe's manufacturing sector is a "Hold."

Tourism – Buy

The total contribution of Travel & Tourism to the EU's GDP was €1,848.6 billion in 2017, or 9.9% of GDP. This figure is expected to grow by 2.7% to €1,898.6 billion, or 10.0% of GDP in 2018. In 2018, tourism activities were up in most European countries relative to the same period a year ago, with major travelers' origin being 84% from European countries and 16% from the rest of the world.

A positive economic outlook within most European source markets, as well as in international source markets such as US, Canada and China, has allowed foreign travel to thrive. The expansion of the global economy in 2017 has greatly boosted the amount of disposable income in most countries, allowing more people to spend on travel and leisure purposes. In the developing economies of Asia, the number of people enjoying the levels of wealth necessary to facilitate long-haul travel continue to grow at a considerable rate. Overall, a combination of these tailwinds should create a strong growth opportunity for inbound travel to Europe in the next few years. The rating for the tourism sector in Europe is a "Buy."

Aerospace & Defense – Buy

With the U.S. accounting for about 70 percent of the North Atlantic Treaty Organization (NATO)'s overall defense expenditure, Washington has been pressing allies for years to contribute more. Trump's move into the White House with his "America First" agenda heightened the political tensions, particularly at a NATO summit in May 2018 when the president refused to offer an explicit endorsement of NATO's collective-defense clause and instead demanded fellow leaders to pay more for defense. In response to this, NATO members pledged to spend at least 2 percent of their GDP on defense by 2024. The target will be met by eight NATO countries in 2018 and by at least 15 alliance members by 2024

Going forward, the Transatlantic alliance is expected to continue bolstering its abilities to address a range of security threats including Russian meddling in eastern Europe, Islamic terrorism and cyber-attacks. In fact, most European countries have already started ramping up on defense spending since 2014, when the complication between Russia and Ukraine over Crimea broke out. With the geopolitical environment not substantially improving in 2018, there is no doubt that most countries in Europe will keep expanding its defense budget to ensure national security as well as to meet the defense spending target laid out by NATO. The rating for Europe's aerospace and defense sector is a "Buy."

Technology – Buy

Europe has long suffered from the perception that its markets are fragmented and over-regulated, which makes it considerably challenging for start-ups to scale effectively. Consequently, the technology sector in Europe is not as developed compared to the scene in North America or

Asia. However, soaring valuation of technology companies in Silicon Valley and China in general makes Europe a very attractive destination for global venture investors. In fact, most venture capitalists have already started taking action, with the region set to receive $19B in investment from various sources: US (Apple, Google Venture, Facebook), Chinese (Tencent), and Japan (SoftBank). In 2017, the technology sector led in performance, delivering a 20% return to investors.

In addition, the European technology sector is also diversified with developments into various spaces such as artificial intelligence, business technology, large-scaled 3D printing, cloud computing… From the workforce perspective, the region has a highly educated labor force and has more programmers than even in the US. From the capital flow perspective, more investments are being made to Europe as investors seek high return in developing market for technology. A combination of these factors makes a strong outlook for the European technology sector in general, and the rating for this sector is a "Buy."

Asia Pacific

Region Analysis

Region Analysis – Asia Pacific

Analyst: Thin Yee Mon Su **Region Recommendation: A-** **Date: 09/25/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
China	6.70%	2.30%	4.35%	3.83%
Macau	6.00%	3.30%	2.25%	1.80%
Hong Kong	3.50%	2.40%	2.25%	2.80%
Japan	1.00%	0.90%	-0.10%	2.50%
Malaysia	4.50%	0.90%	3.25%	3.40%
Cambodia	6.90%	2.96%	1.40%	0.30%

Summary:

- US-China trade war is affecting global equities, currencies and prices but new market opportunities will open up in some Asian countries.
- Housing market in ASEAN countries grows during Hong Kong's new tax policy on vacant property and expected drop in real estate prices.
- In the last quarter, Asia-Pacific accounts for two-fifths of global GDP share with China, India and Japan representing 70% of the region's GDP. Unemployment rate has been either stable or decreasing.
- Inflation rate illustrates an increasing trend while Japan's aggressive monetary policy failed to bring positive inflation rates.
- Cloud market predictions show expansion in technological sector in the region. India continues to attract tech companies.
- Despite strong economic conditions in Hong Kong, the changes in its real estate market could bring significant impact on the economy while ASEAN areas show growth in its sectors that are worth investing in.

Trend #1 – Consequences of the Trade War

The ongoing US-China trade war creates major concerns for investors as Asia's economic conditions face uncertainty at this point. US has imposed tariffs on more than $250 billion worth of Chinese goods, resulting in a decline of Chinese equities and depreciation of the Chinese Yuan. US also plans to increase its tariffs on automotive imports by about 10 times, leaving Japanese economy at a risk since automobile accounts for 80% of US deficit with Japan.

The impact of the trade war has been significant across Asia-Pacific countries, keeping commodity prices, currencies and global equities low. Indian rupee and Indonesian rupiah have plummeted. If currencies continue to fall, we could expect interest rates to increase, further causing possible financial stress and poor economic performance in the region. We expect economic dynamics in Asia-Pacific to change with disruption in global supply chains and price instability. On average, stock indices in Hong Kong, Japan and Australia have been ending low for the past months since the trade war. Yet, trade war could bring positive light to some ASEAN countries. Following uncertainty in China's economic situations, some companies in the fashion industry have already invested and established a spot in Cambodia and Vietnam's markets. With tensions between US and China, Hong Kong also sees a chance to begin developing a new market relation with other ASEAN countries. In fact, trading within Asia has strengthened over the years as China and South Korea advance to develop strong trade relations with ASEAN areas and India respectively.

Trend #2 – Uncertainties in the Real Estate Market

Hong Kong, Japan, Australia and New Zealand have long been main contributors to the rise in real estate prices. Urbanization in the region, especially India and China, has also driven housing demands up. In Hong Kong, real estate is normally viewed as an attractive asset investment. Yet, going forward in 2018, we could expect some change in dynamics of Asia's housing markets. Hong Kong house prices are predicted to plummet as interest rates will fall in the near future. Hong Kong's government also aims to increase supply and address the steep real estate prices by issuing a tax on vacant properties, targeted towards newly built apartments. We could predict investment in Hong Kong to see a drop after the tax comes into effect. This is a major drawback for many investors, especially those from China. As a result, investors would turn to other Asian property markets to diversify their investments. Vietnam's property market is a hotspot for investors, especially due to its low housing prices, alongside Cambodia, Philippines and Malaysia. The market is already in high demands from Hong Kong and Chinese investors. The tremendous growth in ASEANs housing market seems to be heading in the right direction but we need to watch out for a potential market crash as well as short-term changes in interest rates within the region.

Trend #3 – Promising Economic Growth

In PPP terms, Asia-Pacific region takes up 40% of global GDP shares with its global output rising to 42.6% in the last quarter. China, India and Japan economies made up 70% of Asia-Pacific global GDP share. Overall unemployment in most parts of the region have declined, showing promising signs on the labor force. Japan kept a low unemployment rate at 2.2%. Despite a decrease in GDP growth compared to last year and tensions due to the trade war, Japan economic conditions appear promising. The economy is witnessing more demand from its domestic market. Import rates increased at a rate of 3.9% in the last quarter and at a rate of 0.8% for exports. The country continues to see an increase in real consumer spending and business investment at annual rates of 2.8% and 5.2% respectively.

ASEAN countries such as Cambodia are also growing relative to other years with a steady GDP growth rate and unemployment rate. Hong Kong economic conditions stood out as well. After a slight drop in GDP growth in the latest quarter, Hong Kong's growth rate is expected to improve as its merchandise exports tripled since last year. Adjusted unemployment rate also reached the lowest at 2.8% over the past 2 decades. Within the years, Hong Kong remained in the strong strategic position worldwide, proving itself as one of the largest exporters of services and merchandise, and investor of FDI stock. Trade war is expected to open more markets and new opportunities for Hong Kong economy.

Trend #4 – Inflation Trends

Inflation in Asia-Pacific region has been increasing, especially driven by soaring food and gas/fuel prices. China's CPI stood at a record of 2.3% as pork prices climbed sharply due to the trade war and supply shock from African swine fever. On average, inflation rates in ASEAN countries have been kept within the range of 2.5 to 3%. Japan's short-term interest rate has been maintained at -0.1% for an extended period of time. Last year, the country applied aggressive monetary policy in an attempt to stimulate inflation. Alongside negative interest rates, the Bank of Japan (BOJ) has purchased massive assets. Yet, inflation rates have still been low in the country. In the following years, monetary easing is expected to continue, further promoting economic activity in the country. Japanese bond yields as well as yen have fallen within the months as BOJ continues to keep bond yields under 0.1%. Within the next few years, we expect to see no or little adjustment in the current monetary policy as Japanese economy strives to reach its targeted inflation rates.

Trend #5 – Rise in Technology

The digital economy in Asia-Pacific is blooming with a drastic increase in internet usage such as e-commerce, online media and cloud marketing. However, information technology stocks have dropped this year compared to the previous year in Asia excluding Japan. Yet, Japan's IT shares are advancing with stock demand for videogames companies such as Sony and Nintendo. Asia-Pacific countries such as China, India and Singapore have also been major hotspots for data centers later in the year. Within 3 years, public cloud growth in China could reach up to $2 billion while 25% growth rate is expected in India's local cloud market. India's mobile phone market is one of the fastest growing markets, attracting many multi-billion tech companies such as Samsung Electronics. This South Korean company has invested in a manufacturing phone factory in India, showing promising future in the technology industry in the country. As many Asia-Pacific regions transition rapidly into the world of technology, investment in this sector could open more doors and bring favorable results.

Sectors/Industries to Keep an Eye On:

- **Housing** – New opportunities are opening up in ASEAN housing markets due to low prices and uncertainty from a major Asian real estate market in Hong Kong

- **Technology** – Data centers are becoming a hot topic in Asia-Pacific countries while cloud market has grown over the years with more expected growth in the next few years.

Region Analysis – Asia Pacific

Analyst: Devika Jhunjhunwala Region Recommendation: A- Date: 09/19/2018

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
Mauritius	4.00%	1.00%	3.50%	7.10%
Philippines	6.00%	6.40%	4.00%	5.40%
Singapore	3.90%	0.60%	5.33%	2.10%
Taiwan	3.30%	1.53%	1.38%	3.69%
Thailand	4.60%	1.62%	1.50%	1.00%
Vietnam	6.79%	3.98%	6.25%	2.01%

Summary:

- Vietnam, Thailand, and Singapore stand to benefit from the U.S.-China trade war
- Infrastructure investments in Mauritius, Philippines, and Thailand are accelerating growth
- Healthy growth in tourism in Mauritius, Singapore, and Thailand
- Consumer spending in Asia, with a big push from China, is an increasingly important economic driver for the region.

Trend #1 – U.S. - China Trade War

Among the most trade dependent economy in Asia, Vietnam could stand to benefit from U.S.-China the trade war. Due to the higher wage costs in China there had been a natural shift of production to other countries that the trade friction is now accelerating. Facing cost pressures created by U.S. trade tariffs, Chinese manufacturers are starting to shift production away from the mainland into cheaper Asian locations such as Vietnam and Bangladesh. South Korean, Japanese and Taiwanese firms are already invested in Vietnam. Though the supply chain and capability in Vietnam will take time to build, Vietnam will be cheaper than China in the long-run. FDI inflows in Vietnam have been very strong and have been providing good balance of payment support for Vietnam. Vietnam received an estimated $11.25 billion in FDI in the January to August 2018 period, up 9.2% from the same period a year earlier. Though Vietnam has the sixth highest trade surplus with the U.S., most of Vietnamese exports include low end garments and footwear. Moreover, Vietnam is one of the countries with the freest trade deals, which also assists their efforts to improve infrastructure.

The Thai government agrees that the seafood sector will win amid the U.S.-China disputes, with those goods being targeted on both American and Chinese tariff lists. Thailand makes up about 21% of China's fruit imports, so that market stands to gain against U.S. competitors that hold an almost 8% share.

China's retaliation to the latest tariffs could have a negative impact on Taiwanese suppliers and manufacturers that make chips for the U.S. technology companies such as Apple Inc., Nvidia Corp., and Qualcomm Inc. China would pursue its own strategic goal of reducing its reliance on foreign suppliers.

In Singapore the trade-related sectors, which were the main engines of growth in the first half of 2018, are expected to see slower expansions for the rest of the year. The manufacturing sector continued to grow at a robust pace, with sustained strong momentum in the electronics sector. The negative spillovers stemming from global trade frictions, coupled with the gradual maturing of the global economic and tech cycles, could weigh on Singapore's trade-related industries. Nevertheless, growth will still be led by the electronics sector, albeit at a slower pace, as global electronics production is underpinned by rising semiconductor usage in an increasing range of consumer and corporate tech products.

Trend #2 – Asian Infrastructure

Mauritius' economic growth is expected to accelerate next year, driven by railway, road and other infrastructure projects. Mauritius' government is spending $453 million in 2018 on capital expenditure to develop infrastructure including more than 3,000 social-housing units, buildings for the police and new Parliament and Supreme Court buildings. Growth in this island country could even accelerate further if the government's ambitious public infrastructure program gathers pace and stimulates more private investment.

While Philippines is in a negotiation with China to share oil and natural-gas resources in the disputed waters of the South China Sea, China has offered billions of dollars in infrastructure investment to the Philippines. The newly implemented Tax Reform for Acceleration and Inclusion (TRAIN) law, which is aimed at raising funds for Duterte's infrastructure projects, has worsened inflation, hurt ordinary citizens, and rattled investors, who are facing increased taxes. To keep up the strong momentum, Duterte will have to improve law, reassess its new tax policies and shun abrupt policy decisions.

Scaling up public investment in Thailand can help spur domestic demand and make growth more inclusive. An infrastructure-based fiscal stimulus can bring in private investors and raise long-run growth prospects by adding to the capital stock.

Trend #3 – Tourism/Hospitality

In 2017, Mauritius attracted 8.8 billion rupees of FDI in real estate in luxury villas and residences closer to the sea. Tourism revenue is the country's biggest source of foreign exchange, and one of the main drivers of growth. In Singapore, healthy growth in visitor arrivals boosted the accommodation segment. Strong growth in tourism is expected to continue to sustain Thailand's growth momentum in 2018 and 2019. For Thailand, tourism is a key driver of growth and of the large current account surplus, which stood at 10.6% of GDP in 2017. More than 34 million tourists visit Thailand yearly. A boom in tourism is good news for the economy, but the gains—concentrated in a few select tourist hotspots—have yet to benefit other sectors of the economy.

Trend #4 – Consumer Spending

Consumer spending in Asia, with a big push from China, is an increasingly important economic driver for the region. With the global trade frictions escalating, it remains a question whether the momentum can continue. The outlook for consumer spending in Asia, a region which accounts for 60 percent of the world's population, remains bright overall, according to Daiwa Capital Markets in Hong Kong. Optimism is driven by factors such as an overall relatively young and growing population, an expanding middle class and increasing wealth. Trade risks could dampen individual income growth and dent consumer confidence, leading to reduced private spending. Though tariffs are likely to impact consumer prices and inflation, Asian consumer spending is likely to avoid major disruption.

Sectors/Industries to Keep an Eye On:

- **Manufacturing –** Vietnam, Thailand, and Singapore could benefit from the U.S.-China trade war
- **Tourism –** Mauritius, Singapore, and Thailand could benefit from the expanding middle class and increasing wealth.

Region Analysis – Asia Pacific

Analyst: Naman Agarwal **Region Recommendation: B+** **Date: 09/25/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
India	8.20%	3.69%	6.50%	3.52%
Indonesia	5.27%	3.20%	5.50%	5.13%
Bangladesh	7.30%	5.48%	6.00%	4.20%
South Korea	2.80%	1.40%	1.50%	4.20%
Australia	3.40%	2.10%	1.50%	5.30%
New Zealand	2.80%	1.50%	1.75%	4.50%

Summary:

- The increase in U.S. interest rates along with trade wars between U.S. and China put downward pressure on emerging market currencies.
- Despite the emerging markets rout, macro fundamentals of most Asian countries remain strong with steady inflation and high GDP growth rate.
- Asia is witnessing a rapid growth in mobile and internet penetration which has increased the prospects of e-commerce.
- There is an increase in domestic demand and consumption due to an increase in middle and affluent class.
- Mr. Moon’s government is planning to reverse the slowdown in the South Korean economy by increasing its spending by $420 billion

Trend #1 – Currency Crisis in Emerging Markets

The trade wars between United States and China coupled with the Fed’s rate hike have cajoled global investors to chase greenbacks instead of emerging market currencies. The currency crisis began in Turkey and Argentina but spread to Brazil, India, South Africa, Russia, Indonesia, and Philippines. The Indian rupee plummeted to an all-time low of 72.97 against the USD and has lost 13 percent of its value. Since April 2018, the Reserve Bank of India (RBI) has spent around $25 billion along with increasing interest rates by 25 basis points in a futile attempt to stabilize the currency. Depreciating rupee and rising oil prices have widened the current account deficit which is further expected to widen to 2.5 percent of the GDP. Depreciating rupee has also dented market sentiments. The S&P BSE Sensex fell 500 points below its crucial support placed at 38,000 while the Nifty dropped 100 points to fall below 11,400. The Indonesian rupiah slumped to the lowest level since the 1998 Asian Financial Crisis. Against the dollar, the rupiah dropped to 14,933 and lost 9% of its value. The benchmark Jakarta Composite index fell 3.8% to 5683.5, its biggest one-day drop since November 2016. Having said that, India and Indonesia have many instruments to stabilize their currencies. The RBI is expected to have two more interest rate hikes. Furthermore, it has an excess of $400 billion in reserves. According to a State Bank of India report, the RBI can sell an additional $25 billion to curb the currency fall. Finance Minister Jaitley said that the government will take measures to reduce 'non-necessary' imports and ease overseas borrowing norms for the manufacturing sector. These measures should stabilize the Indian rupee. Indonesia has also taken several steps in response to the market rout. Bank Indonesia has increased interest rates four times by a total of 1.25% and has drained foreign reserves by almost 10%. The government has also taken steps to curb imports and maintain a current account deficit of 3% of GDP. It has decided to postpone or restructure its $25 billion 35,000-gigawatt electricity project which relies on imported components. This move would save around $8-10 billion in import costs. Moreover, the government has ordered mining companies to repatriate their export earnings to bolster the country's dollar supply. The IMF has backed Bank Indonesia's policy measures saying that they were appropriate to reduce volatility.

Trend #2 – Strong Macro Fundamentals in Asia-Pacific

Countries in Asia have showcased strong macro fundamentals despite the appreciating dollar. In the April-June quarter of 2018, India's GDP grew at 8.2% surpassing China's growth figures. India became the fastest growing major economy as it attained its highest growth rate since the 2016-17 fiscal year. Despite the weakening rupee, India's inflation was below RBI's medium-term target of 4 percent with a band of +/- 2 percent. Retail inflation reduced to a 11-month low of 3.69 percent in August from 4.17 percent in July. This was due to positive slowdown in food inflation to 0.29 percent against 1.37 percent in July. Debasish Bhaduri, a Senior Representative of IMF, has lauded India for maintaining a low inflation rate and has called it a 'big structural reform.' Moreover, 99.3% of demonetized currency is back in the system and the Goods and Services Tax has been effective in bringing down tax evasion. A weakening rupee also means an increase in exports. India's exports rose by 19.21% in August due to healthy growth in petroleum and pharmaceuticals sectors. India is expected to sustain its GDP growth and maintain strong fundamentals. Indonesia is experiencing healthy inflation levels and steady GDP growth. Its inflation is 3.20% and GDP growth reached 5.27% in the second quarter of 2018 which is the highest since 2014. Indonesia witnessed 12.5% increase in tourist arrivals in the first 7 months of 2018 as the government wants to bolster the hospitality and tourism industry to reduce the current account deficit. The government also wants to improve bilateral relationship with South Korea and increase trade to $30 billion by 2022. Australia's GDP growth jumped to 3.4% in the June quarter surpassing economists' expectations of 2.8 percent. Domestic demand which increased 0.6 percent for the quarter accounted for over half the growth in GDP. Bangladesh's per capita income rose to $1,751 and GDP growth reached 7.86 percent this fiscal year. The manufacturing sector witnessed a 12.06% growth rate. The government aims to establish 100 economic zones on 30,000 hectares of land by 2030. Despite the emerging markets rout, Asian countries have strong fundamentals which make them reasonable investment targets. The Asia Pacific region accounts for two-fifths of the share of global GDP in PPP. The three largest economies in Asia Pacific: China, India, and Japan account for more than 70 percent of the region's GDP at PPP.

Trend #3 – Rapid Disruption of Technology

The rapid disruption of technology and internet penetration has led to an enormous growth in the number of smartphones users in Asia. Two in three Twitter users in Asia browse on mobile devices and make mobile payments. India is the second largest smartphone market in the world and accounts for 10% of global smartphone sales. The number of smartphones users in India is expected to grow by 15.6% to 337 million in 2018. Smartphone adoption in Indonesia is expected to hit 67% by 2020. Furthermore, Indonesia has 130 million internet users with growing accessibility of mobile internet. The growth in mobile usage and penetration is due to the emergence of a more affluent middle class. This has enabled retail e-commerce to grow 31.1% in 2017 to $1.349 trillion. India is the fastest growing e-commerce economy with a growth rate of 129.5% and it is expected to grow at 75.8% to $200 billion by 2026. Having said that, Indonesia has great prospects for e-commerce as well. 41% of goods and services bought in Indonesia are purchased online. Furthermore, the country expects the market to grow at an annual rate of 50% to $130 billion. The government sees huge upside potential in this space and now permits 100% foreign ownership of e-commerce businesses. The increased penetration of mobile phones and internet coupled with a growing middle class make e-commerce a very favorable sector in Asia.

Trend #4 – Emerging Middle Class

The global middle class is on the rise. It is expected to increase to 3.2 billion by 2020 and 4.9 billion by 2030. Asia is expected to represent 66% of the global middle-class population and 59% of middle-class consumption with more than two-thirds coming from India and China. According to a BCG report, the middle and affluent (MAC) population in Bangladesh will nearly triple to 34 million. In the last five years, Bangladesh witnessed 17.3% growth in Ultra High Net Worth Individuals making it the fastest growing in the world. In Indonesia, the MAC growth-rate is 38 percent. The developing world's "emerging middle class" is a critical economic and social actor because of its potential as an engine of growth, particularly in the largest developing countries such as China and India. Transforming this emerging middle-income group into a stable middle class could provide a solid foundation for economic progress by driving consumption and domestic demand.

Trend #5 – South Korea Stimulus

The South Korean government is planning a $420 billion budget increase next year amid a stagnant economy. The country's unemployment rate hit an eight-year high of 4.2% in August. Moreover, consumer confidence plunged to a 17-month low in August due to a sluggish job market. The country's GDP expanded 0.6% in the April-June quarter. Goldman Sachs downgraded South Korea's growth prediction to 2.7% from 2.9%. Moreover, the approval rating of Mr. Moon fell to

56%. In order to boost the economy and restore confidence, the government is planning a $420 billion (471 trillion won) spending next year. A record 24 trillion won will be used for job creation. According to the Bank of Korea, the business survey index (BSI) rebounded in September 2018 after a 19 month-low of 73. The index for chemicals manufacturers gained 10 to 97 while automakers' sentiment gained 4 to 66. There is increasing confidence since the stimulus announcement. However, the confidence is still very low as the index is below 100.

Sectors/Industries to Keep an Eye On:

- **Technology –** Very high smartphone adoption rate in India and Indonesia. E-commerce performing well as it grew at a rate of 31.1% last year.

- **Manufacturing –** Manufacturing Index is up 6.2% as manufacturers in Southeast Asia ramp up production to take advantage of increasing labor costs in China.

- **Healthcare –** The healthcare industry in Asia is expected to grow by 11.1% in 2018 and contribute 28% of global healthcare industry revenue.

Sector Analysis

Sector Analysis – Asia Pacific

Analyst: Thin Yee Mon Su **Date: 10/9/2018**

Sector	Countries Affected	Position
Infrastructure	Japan, Hong Kong, China	Buy
Robotics	Japan, China	Buy
Healthcare	Japan, China, Malaysia	Buy
Automobile	Japan, China, ASEAN countries	Hold

Infrastructure – Buy

Southeast Asian countries are pouring over $320 billion into infrastructure spending as building and expansion of rails, roads and airports have been planned in 2018. Japan 2020 Olympics is expected to generate $18 billion worth of major construction projects ahead of the event. Construction projects targeted to facilitate accommodation, sports events, electricity and water systems are underway. The government has also been actively expanding healthcare facilities for the aging population as well as infrastructure resources to meet the high demands of increasing tourism. Tourism has risen by around 14.0% in first seven months of 2018 relative to that in 2017. Overall, construction has been expanding very rapidly in Japan, indicating a positive outlook in the sector.

Within 2018 to 2022, Hong Kong's infrastructure will see a 1.8% in real growth annually. This growth is triggered by major construction projects on expansion of railroads and airport related projects. Transport projects are centered to improve infrastructure not only within Hong Kong but also with its neighboring regions such as Macau. Many more infrastructure developments have been planned in the next few years as the country saw tourism growth at 9.4% in the last quarter. China's "Belt and Road" initiative has continued to expand gas/oil pipelines and other transportation projects to strengthen trade relations among countries across Asia, Africa and Europe. China has already poured $900 billion into this initiative, significantly increasing infrastructure expenditures in the region. The momentum from this initiative has led to construction projects such as Malaysia-Singapore high speed railroad. With these key events going on in the region, investment in this sector is highly recommended.

Robotics – Buy

In 2017, Asia-Pacific region saw a surge of robotics in manufacturing industry, accounting for 65.0% of the world's total industrial robot usage. This growth in artificial intelligence is forecasted to continue with China, Japan and Korea leading the technological wave in the region this year. In 2018, China's industries see a huge dependence on robots in semiconductor and battery efficient goods, pushing robotics demand forward at an increasingly rate within the next few years. The growth in demand for industrial robots in the country was 58.0% in 2018. Usage of robots in manufacturing and services will boost the total sales up to $6 billion relative to previous year. With artificial intelligence becoming a hot topic across many Chinese companies, robotics industry has a very promising future to drive up economic growth and productivity in the country.

In Japan, technological developments are blooming ahead of the Olympics as drones and robots are taking control over tightening security services throughout the event. Industrial robot demand in Japan reached $2.6 billion in 2016 with an expected double in increase within the next three years. With China being Japan's main robotics export partner, the country's robotics production is expected to grow by 10.0%, reaching $9 billion in 2018. Japan now contributes to 52.0% of the world's supply of industrial robots. Asia, overall, has the highest robot density this year with Korea, Singapore and Japan being global leaders in this category. These technological advancement in the region are opening up more opportunities in the Asia-Pacific robotics market.

Healthcare – Buy

With the technological advancement, medical industry in Asia-Pacific is expected to see a 11.1% growth this year. The region's healthcare expenditure reached $230 billion in 2016, with more resources being poured into R&D of clinical devices and techniques going forward in 2018. The growth in the industry will reach up to $517 billion in the year as Asia's economy addresses shortages in hospital facilities and workers. There is a growing opportunity to invest in the hospital sector of the healthcare industry, especially in China. 25.0% growth in healthcare industry in China has been predicted going forward in 2018. Consumers' spending on healthcare services have generally been rising across the region. Medical industry in Thailand, Malaysia and Japan are rapidly expanding with more foreigners seeking for better medical treatment and care in these countries. Local demands are pushing more expansion and improvement in the industry. Japan's healthcare expenditure is expected to rise with technological development in healthcare infrastructure particularly for the aging population. Digitalization in the industry is a key driver to the growth of healthcare by 20.0% in the overall region throughout the on-going year. With changes in the dynamics of the Asia's population, the outlook in the healthcare industry seems promising.

Automobile – Hold

Asia's vehicle sales saw a 2.0% increase in Q2 2018 compared to that in Q2 2017. China and Japan continue to lead in the region's automobile industry. Within the next few years, China's electric and hybrid vehicles will continue to dominate the automobile market with an expected growth of 40.0% and total sales of 2 million by 2020. However, with China's economic growth slowing down since 2017, automobile sales and exports also face uncertainties in the midst of the trade war. Due to possible tariffs from the US, outlook in Japan's automobile industry appears less promising. The 80.0% of automobile for US deficit with Japan means the country will be highly targeted for tariffs. The sales of new vehicles in the country saw a year-on-year decrease of 2.0% in 2018 as opposed to previous year. On the other hand, purchasing power on auto vehicles across ASEAN countries has been dramatically rising over the past year with vehicles sales expected to boost as economic conditions improve in most part of the region.

Sector Analysis – Asia Pacific

Analyst: Devika Jhunjhunwala **Date: 10/09/2018**

Sector	Countries Affected	Position
Manufacturing	Thailand, Vietnam Singapore, Taiwan	Buy
Infrastructure	Thailand, Vietnam	Buy
Tourism	Thailand, Vietnam	Buy
E-Commerce	Vietnam	Buy

Manufacturing – Buy

Factory activity plunged from Asia to Europe in September, reflecting how few countries are left unaffected by a U.S.-led shake-up of international trade policies. Chinese manufacturers said output took a hit amid the worst contraction in export orders since 2016, leading similar trends across Taiwan, Vietnam, and Indonesia.

Thailand's manufacturing sector was unchanged in September, showing some signs of deflation. The Nikkei Thailand Manufacturing Purchasing Managers' Index, or PMI, stood at 50.0 in September, slightly higher than 49.9 in August. A reading below 50 points toward contraction, and a reading above 50 indicates economic expansion. While output fell, new orders including exports rose adding pressure to operating capacity. Firms raised staff numbers for the first time in 20 months, however input costs fell in September after a year of rising pricing, suggesting a start of deflation. Factory activity in Q3 was largely stagnant owing in part to weak sales. Business confidence slipped further, with Thai manufacturers mostly neutral towards future output in the year ahead.

Vietnamese manufacturing growth slowed to its lowest level in 10 months in September but business confidence pointed to a rebound in the coming months amid rising fears over the fallout from the US-China trade war, according to an industry gauge. The latest Nikkei-Markit Vietnam Manufacturing PMI fell to 51.5 last month, from 53.7 in September, although still above of the 50-point mark separating expansion from contraction. The PMI reading, while marking the thirty-fourth straight month of growth, reflected slower rises in output, new orders and employment. Company plans and expected growth of new orders supported optimism that output will increase over the coming year.

Singapore's factory activity grew at a slower pace in September, with fewer new orders and new exports. After a brief bounce in August, Singapore's PMI returned to slower growth last month by dipping 0.2 point to 52.4. The main drags on the overall PMI were mostly broad-based and arose from lower new orders, new exports, output, order backlogs, inventory, stocks and imports. Meanwhile, the employment index rose for the manufacturing sector but fell for the electronics industry. Still, this was the 25th straight month of expansion in manufacturing. The trend of slowing growth is expected to continue. Part of the reason is that industrial production expanded by more than 14% in both September and October last year, setting a high base for year-on-year comparison in the coming months.

Taiwan manufacturing output fell for the first time in 14 months as confidence remained weak against the backdrop of the ongoing US-China trade dispute. The latest Nikkei-Markit Taiwan Manufacturing PMI was 50.8 in September, down from 53 in August. Factory output fell amid reports of relatively subdued demand across key markets with new orders from abroad decreasing at the quickest clip since February 2016. Business confidence, though higher than August, was hit by concerns over the impact of the US-China trade war and a potential slowdown in the domestic economy. ING analysts noted that the sector's growth could slow even further if the trade dispute between the world's two largest economies starts to hit the global electronics supply chain, given that Taiwan's economy is heavily skewed towards manufacturing.

Despite the recent decrease in the PMI data, the 10-economy ASEAN bloc is seen as a natural magnet for new factories, thanks to low production costs and improving infrastructure. The region was the top choice for about one-third of the more than 430 American companies in China that have moved or are considering moving production sites abroad amid the trade tensions, according to a recent survey by Bloomberg. Additionally, China's economy is shedding low-end manufacturing labor as wages rise, the workforce contracts and consumption, services and technology dominate the domestic scene. Vietnam and Bangladesh are among the biggest beneficiaries. Vietnam may be the last big industrial labor market after China, according to the managing director of Baker & McKenzie in Ho Chi Minh City.

Infrastructure – Buy

Thailand intends to set up a second infrastructure fund worth as much as 50 billion baht ($1.5 billion) in early 2019, following the launch of the long-delayed Thailand Future Fund this September to finance road building. The Thailand Future Fund is a key tool for the government to raise funds for infrastructure projects without adding to public debt. The fund due this year, expected to have assets of about 45 billion baht, is likely to attract strong demand from the public given it offers potential annual returns of approximately 5%, according to the director general of the State Enterprise Policy Office. Additionally, Thailand will seek bids in Q4 for a 180 billion baht ($5.5 billion) high-speed rail project that's part of a wider plan for a train network to China. The bidder will build the first half of the network in Thailand. Once the bidding starts in the fourth quarter, the Transport Ministry will step up the design process for the next phase, which has a contract value of 171 billion baht for the portion of track that runs 355 kilometers through Thailand to the border of Laos. Thailand is in talks with China for a loan to fund the project and is negotiating terms such as the interest rate and a contract for rolling stock worth 8 billion baht. In addition to the project with China, construction for Thailand's 490 billion baht joint high-speed rail project with Japan is scheduled to start in 2020. The initial study for half of the 672-kilometer line from Bangkok to Chiang Mai is already complete, and the Thai and Japanese governments are negotiating the investment model. The downside to an investment in Thai infrastructure is that the general election is expected next year, raising the question of whether a civilian administration will support or jettison the military government's flagship projects. Thailand's military government has prioritized infrastructure projects to broaden the drivers of economic growth and generate employment opportunities.

Vietnam's plans for building and expanding airports and seaports have attracted the interest of companies in the U.S. and Japan, specifically in the Long Thanh International Airport and high-speed north-south railway. Vietnam is focusing on five areas of transport infrastructure: roads, aviation, waterways, railways, and network connections to boost logistics. One of its national infrastructure projects is the north-south expressway measuring over 2,100km in length, of which 650km will be built in 2017-2020 under the PPP model. Additionally, with the country's railway network being obsolete, there is need for an upgrade to both its long-distance and inner-city railways. Furthermore, the Vietnamese government recently approves a $921 million investment plan to boost the performance of its investment parks form now till 2020. This plan focuses in 8 specific zones, all on the coast, in order to attract both foreign and domestic investors. The developments also aim at inviting private investors to consider Vietnam for the building of new technological hubs and industrial parks. Because of all the investments, both on Vietnam's behalf and the future private ones that will come along, Vietnam aims at improving their economic and competitive position in respect to their neighboring South East Asian adversaries.

Tourism – Buy

Travelers from China to Thailand slid 12% in August, the biggest drop in more than a year, keeping the overall pace of visitor growth near a 16-month low. The tourism industry makes up about a fifth of the economy and Chinese travelers contribute close to a third of 2.09 trillion baht ($65 billion) in foreign tourism revenue. A number of things prompted this drop– a tour boat accident off Phuket in July that killed dozens of Chinese holidaymakers, a dengue outbreak, the strength of the baht and, most recently, a viral video of an airport guard apparently punching a Chinese tourist. Having said this, the tourism sector has a history of bouncing back from setbacks. The Bank of Thailand expects arrivals to improve and anticipates over 38 million visitors this year. The tourism slowdown and the impact of global trade disputes is expected to cut the Thai economic growth to 4.2% next year from an estimated 4.5% in 2018, according to the chief economist at Kasikorn Securities Pcl in Bangkok. The Stock Exchange of Thailand Tourism & Leisure Index is down 14.5% this year (as of October 3), compared with a 0.1% climb in the overall stock market. Overall arrivals continue to expand– Bangkok is the world's most visited city, and the beach resorts of Krabi and Phuket lure travelers from all over the world. The percent change in the number of travelers to Thailand from 2008 to 2016 on a year-on-year basis can be seen in Attachment #1 in the Appendix.

International travelers to Vietnam grew by 22.9% year-on-year during the first three quarters of 2018. 11.6 million international tourists entered Vietnam during this time, with more than nine million visitors coming from Asian countries, rising by 27.2%. Chinese and Korean tourists accounted for over two-thirds of the country's total arrivals. Vietnam welcomed 3.8 million Chinese tourists, up 29.7% and more than 2.56 million Korean travelers, surging by 49.6% over the January-September period. The Asian market makes up a large market share in Vietnam due to the region's geographical proximity to Vietnam and its large tourist source. The data also indicated that the number of European and American tourists to Vietnam increased modestly over the January-September period. Over 1.53 million European travelers arrived in the country, up 9.8% year-on-year, while American arrivals amounted to 528,600, rising 14.1% against the same period last year. The percent change in the number of travelers to Vietnam from 2008 to 2016 on a year-on-year basis can be seen in Attachment #1 in the Appendix.

Tourism is an attractive sector for investment in both the countries; however, because of the heavy reliance on Chinese and Korean travelers, we should use a hold position. Trade tension may be taking a toll on Chinese tourists, hurting a key engine of growth for Thailand and Vietnam.

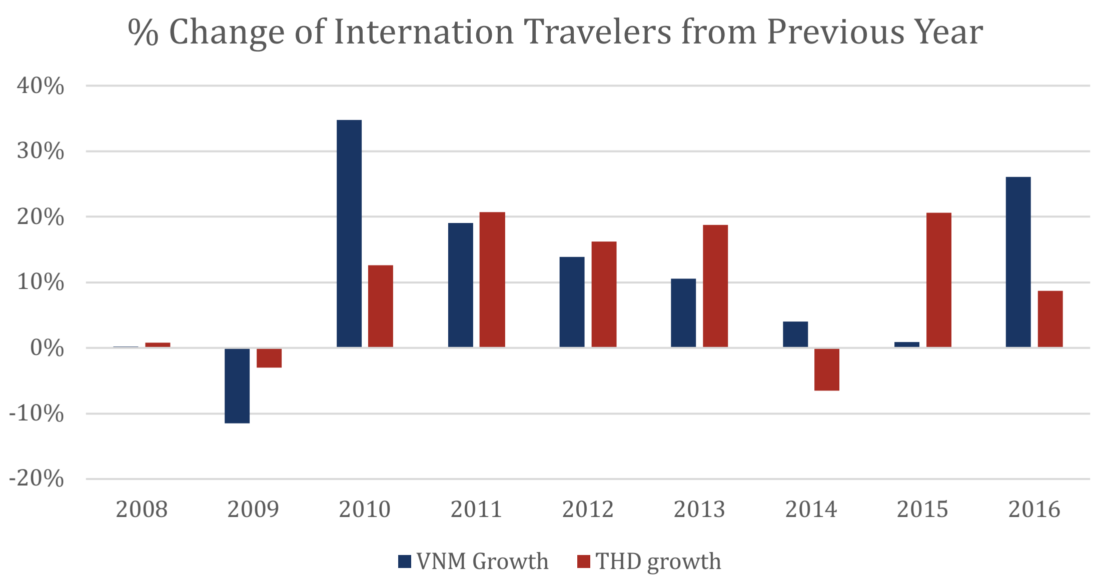
E-Commerce – Buy

Southeast Asia's internet economy is estimated to exceed $200 billion by 2025 from an estimated $50 billion in 2017, according to a Google-Temasek report published in December. The increase in internet penetration rate in Southeast Asia can be seen in Attachment #2 in the Appendix. While the ASEAN middle class continues to grow, there is even faster growth in the ranks of the affluent. In ASEAN's four most populous nations of Indonesia, the Philippines, Thailand, and Vietnam, the number of consumers is growing at 8% annually. Boston Consulting Group projects that by 2030, another 78 million consumers in these four countries will be considered affluent. The rise of the affluent means surging demand for affordable luxury goods such as cosmetics and high-end consumer durables, as well as non-tangible products such as restaurant dining and overseas travel. Another major trend is urbanization, which is accelerating beyond major metropolises into tier-two and tier-three cities. Alongside urbanization comes a growing demand for convenience and the on-demand economy, with goods and services delivered to consumers' doorsteps.

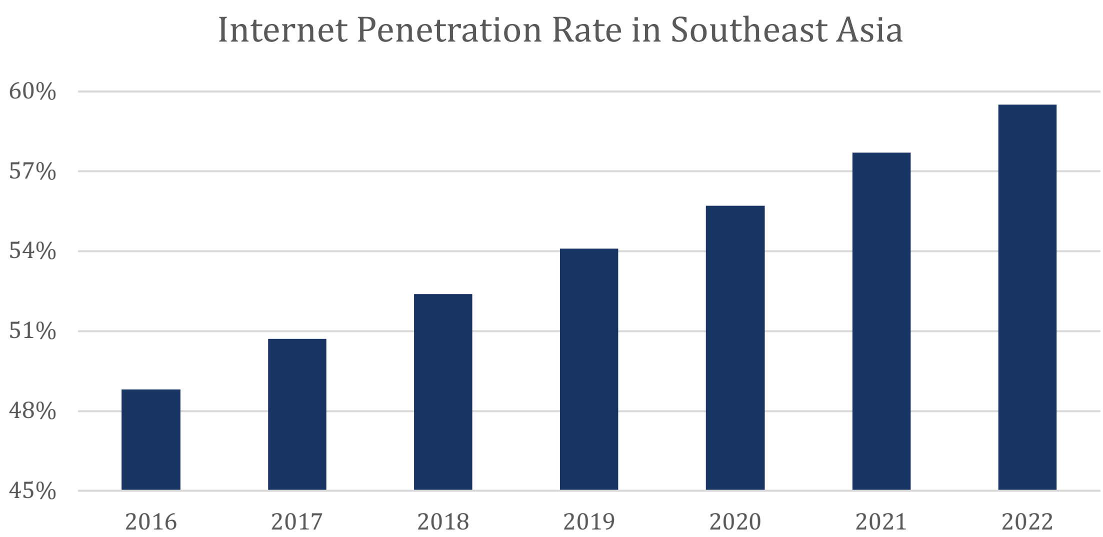
In Southeast Asia's markets, the digital penetration and digital influence rates– engagement in digital technologies for purchasing goods– are far higher than the market share of e-commerce, which remains underdeveloped. Yet, e-commerce is set to grow swiftly. In Vietnam e-commerce revenues are projected to leap from US$400 million in 2015 to US$7.5 billion by 2025, and in Indonesia from US$1.7 billion to US$46 billion over the same period. Much of the region also seems poised to leap from cash to digital payments, skipping credit and debit cards. The next step is to use this trend to drive digital sales, for instance by partnering Chinese players such as Alipay or regional challengers like GrabPay or Paytm.

Appendix:

Attachment #1:



Attachment #2:



Sector Analysis – Asia Pacific

Analyst: Naman Agarwal **Date: 10/09/2018**

Sector	Countries Affected	Position
Renewable Energy	India, Indonesia, South Korea, Australia	Buy
E-Commerce	India, Indonesia, Australia	Buy
Healthcare	India, Indonesia	Buy
Manufacturing	India, Australia, Bangladesh	Buy

Renewable Energy – Buy

Asia-Pacific has emerged as one of the world's fastest-growing economic regions. It accounts for two-fifths of the global GDP in PPP. Sustainable and affordable energy will be a crucial factor for the region's development in the coming years. The US Energy Information Administration projects a 28.0% increase in world energy use by 2040. Meeting this growing demand through fossil fuels is unsustainable. The renewable energy sector will have an important role to play and has tremendous growth prospects. All major countries in the Asia-Pacific region are taking substantial steps to transform their energy industries and adopt renewable energy.

India has immense growth outlook for the renewable energy sector. India's energy demand is increasing at 6.0% p.a. and is projected to increase further. It is expected to account for 11.0% of global energy consumption by 2040. The Indian Ministry of Power has taken a favorable position on renewables and has set a target of adding 175 GW renewable energy capacity by 2022. Over the last four years, the renewable energy sector attracted over $42 billion in investments. Furthermore, over 50.0% of its power generation capacity will come from renewables by 2030. Meanwhile, Indonesia's energy demand is expected to triple by 2030. The country has started adding more renewables to its energy mix and is set out to achieve 23.0% renewable energy use by 2025. South Korea is planning to gradually phase out coal power plants and expand renewable energy to 20.0% of power generation by 2030. Renewable energy will provide one-thirds of Australia's energy market needs by 2020.

Economics is driving the renewable energy boom. Photovoltaic panel costs have fallen 83.0% since 2010 and could fall another 37.0% by 2025. Moreover, wind turbine costs have fallen 32.0% and lithium ion battery costs have fallen 80.0% since 2010. The cost of power from photovoltaic power station is expected to fall below the cost of power from coal and oil plants in the next decade.

Rising demand, increasing share of renewables in countries' energy mix, decreasing capital costs of renewable power plants, and governments' favorable policies are the key characteristics for a positive outlook on the renewable energy sector.

E-Commerce – Buy

Rapid mobile phone adoption and rising internet penetration have had a positive effect on Asia's e-commerce industry. E-commerce users in Asia are expected to exceed the 2 billion mark by 2022. Furthermore, strong economic growth, rising middle class, and increasing consumer confidence will lead to a growth in e-commerce sales.

In India, the e-commerce market is expected to grow by 20.2% per year and reach $52 billion by 2022. This is largely due to the growth in India's internet users which are expected to increase to 829 million by 2021 from 446 million in 2017. The government also helped propel this growth. Since 2014, it has launched Digital India, Skill India, and Make in India initiatives which have positively impacted the e-commerce sector. In Australia, a record $21.4 billion was spent on online goods in 2017, an 18.7% increase over 2016. By 2020, one in every 10 items is expected to be purchased online.

The outlook for the e-commerce sector in Indonesia is also very positive. Smartphone adoption in Indonesia is expected to hit 67.0% by 2020. Furthermore, Indonesia has 130 million internet users with growing accessibility of mobile internet. The growth in mobile usage and penetration is due to the emergence of a more affluent middle class. This has enabled retail e-commerce to grow 31.1% in 2017 to $1.349 trillion. 41.0% of goods and services bought in Indonesia are purchased online. The country expects the market to grow at an annual rate of 50.0% to $130 billion. The government sees huge upside potential in this space and now permits 100.0% foreign ownership of e-commerce businesses.

India ranked first in the Global Consumer Confidence Index in Q1 2018 with 130 points. Indonesia finished third on the Global Consumer Confidence Index with 127 points. The index is seen as a strong indicator of future consumer spending. India's GDP/Capita increased by 12.7% while that of Indonesia increased by 4.0%.

The increased penetration of mobile phones and internet coupled with a growing middle class, increasing consumer confidence, and favorable government policies make e-commerce a very favorable sector in Asia.

Healthcare – Buy

The global healthcare industry will witness a stable growth rate of 4.8% this year. Having said that, the healthcare industry in Asia Pacific is expected to grow at 11.1%. Advancements in technology, growing population, and rising healthcare expenditures and investments make Asia an attractive market for the healthcare industry. The Asian healthcare market is expected to grow from $1835 billion in 2016 to over $2660 billion by 2020.

Sustained economic development in Asia has led to a rise in incomes, increasing healthcare spending and the consumer base of those who are willing to pay for healthcare. Additionally, an increasingly aging population and an urbanized lifestyle has led to a rise in chronic diseases. They account for approximately 70.0% of the disease burden in the region and will increase the demand for access to healthcare. In Indonesia, healthcare spending amounted to $30.29 billion in 2017 and is projected to rise to $47.1 billion by 2022. It will also gradually increase as a percentage of GDP, rising from 2.9% in 2017 to 3.3% by 2027. In India, healthcare spending as a percentage of GDP is expected to rise to 2.5% by 2025 from 1.2% in 2017.

The highly lucrative medical tourism is expected to grow by approximately 15.0% in the next two years. In India, medical tourism accounts for 25.0% of private hospitals' revenue. The country attracted 4 million medical tourists in 2016 generating $3.5 billion in revenue.

Growing population, rising chronic diseases, and increasing consumer expenditure and medical tourism will have a positive impact on the healthcare industry in Asia.

Manufacturing – Buy

Asia has become a global manufacturing hub. Robust demand, favorable government policies, cheap labor, and foreign investments have benefitted several companies in this sector.

Australia's manufacturing sector is on a growth trajectory driven by robust demand from civil engineering, commercial building and residential construction firms. The Australian PMI climbed 2.3 points to 59.0 points reflecting strong growth across the sector. It has now indicated two years of uninterrupted expansion, which is the longest run of growth since 2005. An improving economy, along with infrastructure, defense, renewables, and mining projects continue to support demand for manufacturing products. The manufacturing sector has been the key to Bangladesh's incredible growth. The sector is estimated to grow by 13.0% in 2018. The index of small and medium manufacturing firms has been growing at a rate of 11.0% p.a. over the past 4 years. Furthermore, the technology adoption rate is increasing, which would improve productivity significantly.

Manufacturing has emerged as one of the high-growth sectors in India and the country is expected to become the fifth largest manufacturing country by 2020. The Government of India has taken several initiatives, such as Make in India' to promote this sector. Under this initiative, the government aims to increase the share of manufacturing to 25.0% of GDP from 16.0%. India's PMI is witnessing a 14-month expansion streak and recorded 52.20 last month. The growth has particularly been stellar in India's automobile manufacturing industry. The automotive manufacturing industry comprises the production of commercial vehicles, passenger cars, three & two-wheelers. In the past five years, the number of automobiles produced increased by 24.0%.

Asia will continue to remain a global manufacturing hub due to supply of cheap labor, favorable policies, technology adoption, and robust demand. The outlook for the manufacturing sector is positive.

Latin America & Africa

Region Analysis

Region Analysis – Latin America & Africa

Analyst: Hershal Chaddha **Region Recommendation: B/C** **Date: 09/25/2018**

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
Brazil	0.20%	4.20%	6.50%	12.30%
Chile	0.70%	2.60%	2.50%	7.20%
Costa Rica	2.60%	2.20%	5.00%	8.70%
Panama	3.10%	1.10%	1.40%	6.10%
Paraguay	4.10%	3.90%	5.30%	7.60%
Peru	2.50%	1.10%	2.80%	6.10%
Uruguay	2.50%	8.30%	9.30%	7.80%
South Africa	1.50%	5.30%	6.50%	27.90%
Kenya	5.50%	4.80%	9.00%	11.50%
Egypt	5.20%	20.10%	16.80%	11.10%
Ghana	6.30%	8.70%	17.00%	2.40%

Summary:

- Economic recovery continues to be strong for many countries in Latin America, however, Argentina and Brazil have dragged overall economic outlooks lower given political and economic uncertainty
- Argentina has entered a financial crisis again despite outlooks being promising, and the country is facing extreme currency devaluation against the dollar and citizen unrest
- Africa has shown signs of improvement but still seems like a poor investment area given the volatility in the region
- China is influencing both Latin America and Africa with aid gifts and increased investment in infrastructure, energy, and telecommunications
- Renewable energy continues to be a promising space given Latin America's commitment to investing in solar and wind energy technology
- Inflation continues to rise throughout the region and interest rates for that reason are spiking as well

Trend #1 – Economic Recovery in Latin America with Some Exceptions

Many of the countries within Latin America experienced consistent economic growth coming out of the recession. Chile, Colombia, and Peru particularly strengthened with growth hitting multi-year highs thanks to surging investment and solid household spending. Generally, higher commodity prices, recovering private consumption, and a solid economy supported growth in the quarter. Much of the economic growth is coming through trade opportunities and increased foreign direct investment. Colombia is experiencing a significant rise in consumer confidence with inflation falling and oil prices rising.

However, Argentina, Brazil, Venezuela floundered compared to the rest of the region. Previous outlooks claimed that Argentina's GDP was expected to prosper in the next few years. However, elevated inflation, a crippling drought, and IMF austerity caused Argentina's outlook to worsen. President Macri increased interest rates to a world record high of 60% to fight spiking inflation and the country is heading back into a financial crisis. Brazil and Venezuela are continuing to tumble with political uncertainty. While Venezuela's situation seems unresolvable, Brazil's future prospects depend on the upcoming election in October. Uncertainty resides in investors given Brazil's history with political corruption.

Trend #2 – Political Instability in Latin America but Calming in Africa

As mentioned previously, many of the larger Latin American countries have surrounding political uncertainty. For most of 2018, Brazil's front-running presidential candidate, Lula da Silva, was sitting in jail for political corruption charges. While Brazilian courts have officially banned him from running, Brazilian citizens are not pleased, and violence has spurred. Economic outlook for this reason has been downgraded for Brazil and its prospects. Venezuela's dictatorship and potential military coups continue to characterize the volatility that presides in that nation. President Macri of Argentina may also be voted out of office as polls suggest Argentinian citizens are very unhappy with how he has handled the current financial crisis.

However, South Africa and Kenya see a rise in political stability with women rising to power, increased consumer confidence, and $60 billion in aid from China calming economic tensions.

Trend #3 – Inflation Rises in Latin America

Overall, revealed that inflation rose. Pass-through from a weak peso caused inflation to spike in Argentina, while Brazil also saw higher price pressures due to electricity price hikes, a weak real, and higher gas prices. In addition, higher energy prices caused inflation to build in the remaining economies as well. However, a preliminary estimate for August revealed that inflation was broadly stable at 6.1%.

Following the peso's downward spiral, policymakers in Argentina raised interest rates to an all-time high in August to stem the currency's slide. Elsewhere in the region, rising interest rates in the U.S. have also eroded space for monetary easing as central bankers try to prevent capital flight. Policymakers in Peru left interest rates unchanged in August after they had paused the easing cycle in March. Regional inflation excluding Venezuela is seen rising by the end of the year, coming in at 7.1%. The forecast was revised up 0.6 percentage points from last month's projection, largely due to upward revisions to Argentina and Brazil's inflation projections because of weaker currencies. Chile, Mexico and Uruguay's inflation forecasts were also revised up. In 2019, inflation is seen ending the year at 5.3%. Venezuela is experiencing an episode of hyperinflation and is not included in the aggregate.

Trend #4 – Chinese Influence in Latin America and Africa

Potential relationships are being built as China increases its investment and aid to Latin America and Africa. China has sent $60 billion in aid to African nations, promising that there are no political ties to this source of funding. However, China is seeking to build key relationships with these regions to hedge their risk with a potential trade war with the United States.

China has increased its foreign direct investment into infrastructure, energy, and telecommunications into Latin America as well. This investment has more direct political implications and is steering countries in the region to lean toward Chinese stances. For example, Panama declared that Taiwan is now a Chinese country rather than a sovereign country, displaying a shift from United States stances. Infrastructure investment will boost economic growth in the Latin American region and serves as a potential trade hedge with tariff uncertainty with the United States. If China stops importing soy from the United States, it can now turn to Latin America for the crop.

Trend #5 – Latin American Renewable Sector Continues to Flourish

Most of Latin America is continuing to set itself apart by investing heavily in renewable energy. Uruguay is 100% renewable and Colombia hit 70% this month. Chile's government aims to produce 90% of its energy from wind and solar by 2050 and the entire region hopes to make strides on carbon neutrality. Investing in renewable energy is Latin America's way of diversifying itself to achieve economic growth. While Argentine renewable projects are at risk, the rest of the region continues to foster the renewable mission.

The growth in the renewable sector is attracting companies as well. Google announced that it is expanding its data center in Chile because of its renewable resources. This expansion will add more jobs to the country and will assist in Chile's economic growth. Additionally, oil companies in Brazil, including Petrobras, are now diving into renewable energy production in order to diversify their portfolios. Petrobras is expected to announce future renewable projects in the coming months.

Sectors/Industries to Keep an Eye On:

- **Infrastructure** – With Chinese influence in Latin America rising, increased investment infrastructure is expected to prosper.
- **Renewables** – This area continues to grow in the region given FDI increasing and increased attention from oil companies
- **Agriculture** – Latin America's new trade relationships can help boost agricultural exports given that the region can substitute the U.S. in that regard

Region Analysis – Latin America & Africa

Analyst: Elizabeth Mejia-Ricart Region Recommendation: B/D Date: 09/19/2018

Country	GDP Growth Rate	Inflation	Interest Rate	Unemployment Rate
Argentina	2.00%	22.70%	60.00%	8.00%
Bolivia	4.00%	3.50%	3.19%	4.00%
Colombia	2.70%	3.50%	4.29%	9.20%
Ecuador	2.50%	1.00%	7.63%	4.30%
Peru	2.50%	1.07%	2.75%	6.10%
Belize	0.90%	0.50%	2.50%	9.00%
Cuba	1.60%	6.90%	2.25%	2.50%
Dominican Republic	5.50%	4.40%	5.50%	5.10%
Guatemala	3.20%	4.20%	2.75%	2.30%
Honduras	3.50%	4.70%	5.50%	5.60%
Nicaragua	4.90%	4.95%	1.25%	3.30%
Algeria	3.00%	7.40%	3.75%	11.20%
Angola	0.70%	18.50%	16.50%	20.00%
Egypt	5.20%	20.10%	16.75%	11.10%
Ghana	6.30%	8.70%	17.00%	2.40%
Kenya	5.50%	4.80%	9.00%	11.50%
Morocco	3.10%	1.40%	2.25%	9.50%
Nigeria	2.10%	14.00%	14.00%	18.80%
South Africa	1.50%	5.30%	6.50%	27.90%
Sudan	3.70%	43.50%	13.40%	18.60%

<u>Summary</u>:

- Many of the largest economies in Latin America and Africa are experiencing a decline in their currencies against the dollar, decreasing their ability to repay their debt in dollars.

- Overall, we observe high inflation, causing a tightening in monetary policy particularly on behalf of South American Banks, decreasing consumer spending in these countries.

- As elections approach in both Latin American and Sub-Saharan countries, political uncertainty has reduced consumer sentiment in these countries, while others have experienced a decrease in political uncertainty, busting their economies.

- Oil prices have increased, causing mixed feelings in Latin America and Africa, as they contain countries that import and export oil.

- The increase in commodity prices has helped most of the countries included in this analysis, as they are notable for exporting commodities.

- U.S. policies have had a mixed impact in the region, some of them have incentivized the economy, while others have the potential of cutting back output.

- We would suggest a bearish investment approach to some of the major economies in Latin America, such as Argentina and Brazil, whose economies could also affect other countries dependent on them.

- We would suggest a bullish approach to oil-dependent countries in Sub-Saharan Africa.

- We would suggest a bullish approach to Central America and the Caribbean, who have presented overall more stable economies and greater benefits from US economic growth.

Trend #1 – Currencies in the Region are Falling Against the Dollar

The policies led by the Federal Reserve of the United States have caused the strengthening of the United States dollar, thereby decreasing the value of emerging market currencies against the dollar. The Fed is increasing interest rates in an effort to tighten monetary policy to control for the steadily rising inflation and it has expressed a willingness to continue to tighten monetary policy. This has caused a wave of emerging markets' currencies selloff, affecting at least six of the countries in Latin America and Africa. Attachment 1 shows that the Argentine peso and the Brazil real, two of the region's strongest economies, have had stellar rates of depreciation against the dollar. Attachment 1 and 2 display other currencies in the region whose currencies have weakened against the dollar.

The main problem that results from this trend is that most of these countries have large debts as a ratio of their GDP, making it harder for them to repay their debt, which are mostly in US dollars. As a result, investment has declined in these countries as investors fear that these countries will not be able to pay their debt. This situation has been particularly bad in Argentina, where as a result of a falling currency, the president asked the IMF to accelerate the disbursement of a $50 billion stand-by arrangement. This has sent many investors fleeing as the fiscal problems in Argentina have become more apparent.

Trend #2 – Rising Inflation in Latin America and South Africa

Partly as a result of the broad sell-off of emerging markets' currencies, as well as higher energy prices for importers, price pressures have been placed upon some of the countries analyzed in the region. The rise in oil prices is expected to continue throughout this year. Brazil, Argentina and South Africa are cases in point of greater price pressures mainly due to weak currencies. On the other hand, as a net importer of oil, both South America and Central America have experienced greater inflation due to increases in oil prices. In both cases, greater inflation has resulted in an increase in interest rates on behalf of Central Banks, which disincentivizes consumer and household spending. One of the most extreme cases happened in Argentina, where new fiscal reforms have greatly increased interest rates up to 60% to control for its outstanding inflation of almost 30%. It is presumed that Argentina has likely entered a recession.

Exceptions to this increasing inflation trend include Dominican Republic, Belize, Guatemala, Colombia and most of Sub-Saharan Africa. In these countries, consumer confidence and consumption have gone up. In Sub-Saharan Africa, the increasing oil prices have benefited many oil-exporting countries, and good weather has increased agricultural production, easing food prices. In this last sub-region, Central banks have loosened monetary policy to support economic activity. Thus, we would expect increasing consumption in most of Sub-Saharan Africa.

Trend #3 – Political Uncertainty

As elections approach in some Latin American and African countries, political uncertainty has reduced business and consumer sentiment. The most notable cases are Brazil, Nicaragua, Nigeria and Guatemala. In Brazil, Latin America's largest economy, the former presidential front-runner, Lula Da Silva, was banned from running given that he is imprisoned for corruption allegations. The current front-runner, Jair Bolsanaro, was stabbed during one of his presidential campaigns by one of Da Silva's supporters. Meanwhile, Nicaragua has experienced a political turmoil as a protest against the government's policy cutting Social Security benefits ended in repressive measures and killings. A political resolution for the latter conflict does not seem to be in the horizon.

Conversely, countries such as South Africa, Colombia and Kenya have experienced greater political stability, improving business and consumer confidence and supporting these countries' economies.

Trend #4 – Mixed Attitudes Towards Increases in Energy Prices

Recently, oil prices have gone up. This means great news for Latin American and African countries dedicated to the extraction and exportation of oil, such as Nigeria, Angola, Ghana, Kenya and Colombia. In these countries, we observe an increase in investment in the extraction sector and solid export growth, all leading to greater economic output. In contrast, most countries in Latin America have been negatively affected by oil prices, since this region is a net energy importer. The increase in international oil prices has contributed to the overall rise in inflation in Latin America.

Trend #5 – Benefits from Increase in Commodity Prices

The recent trend concerning higher commodity prices has helped Latin America and Sub-Saharan Africa, who are primarily exporters. Sub-Saharan Africa had experienced a growth slump driven by slow commodity prices. Now that commodity prices are rising, this region gains traction, accompanied by a healthy global demand and improved agricultural output as a result of more favorable weather. These factors have enhanced the region's overall economic performance.

Trend #6 – United States' Policies have Bittersweet Consequences

The United States is experiencing economic growth, and as a result is buying exports, tourism and remittances in Latin America, particularly in the Caribbean and Central America. This increase in U.S. demand is expected to be powered on by its latest fiscal stimulus, even offsetting Central

America's imported fuel bill. This increase in U.S. consumption has been particularly felt in the Dominican Republic and Belize, countries that are popular touristic destinations.
In contrast, as it was mentioned before, tightening monetary policies implemented by the Fed have strengthen the dollar and weakened emerging markets' currencies, causing increasing concern of government default in debt posed in US dollars (which is the majority of the debt in this region). Lastly, stricter U.S. immigration policy, if enacted, could upset a recent surge of remittance inflows (money sent by foreign workers in the US to their home countries) in Central America.

Sectors/Industries to Keep an Eye On:

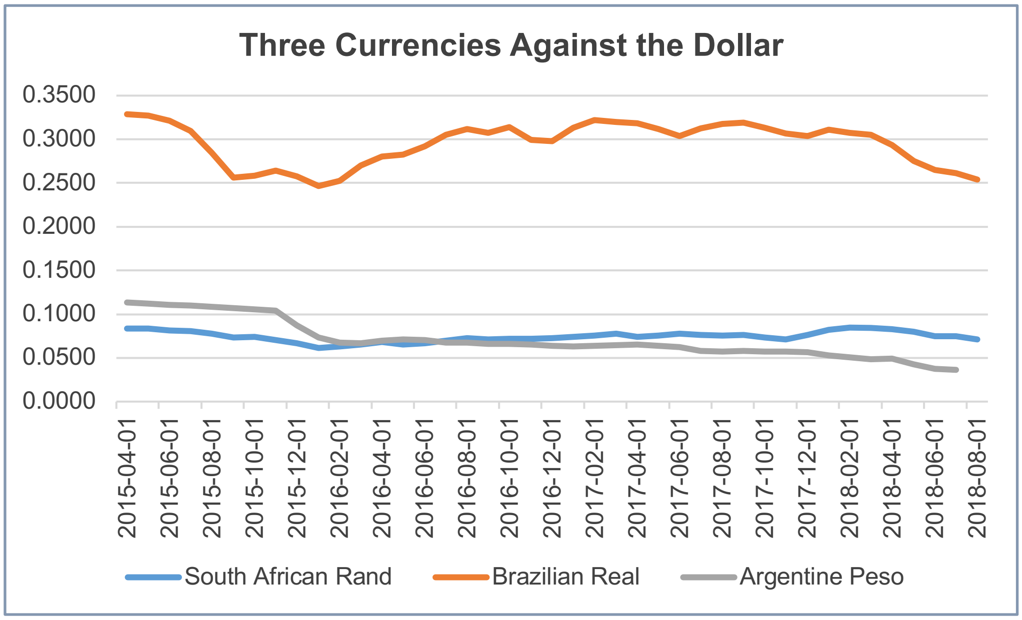
- **Commodities** – As prices of commodities are expected to continue rising, we would expect that the region's countries will continue investing in commodities production and exportation.

- **Oil Extraction** – As energy prices have increased, we would expect that countries that rely on exportation of oil will invest more in the extraction of oil. These countries are mainly located in Sub-Saharan Africa and few instances in Latin America.

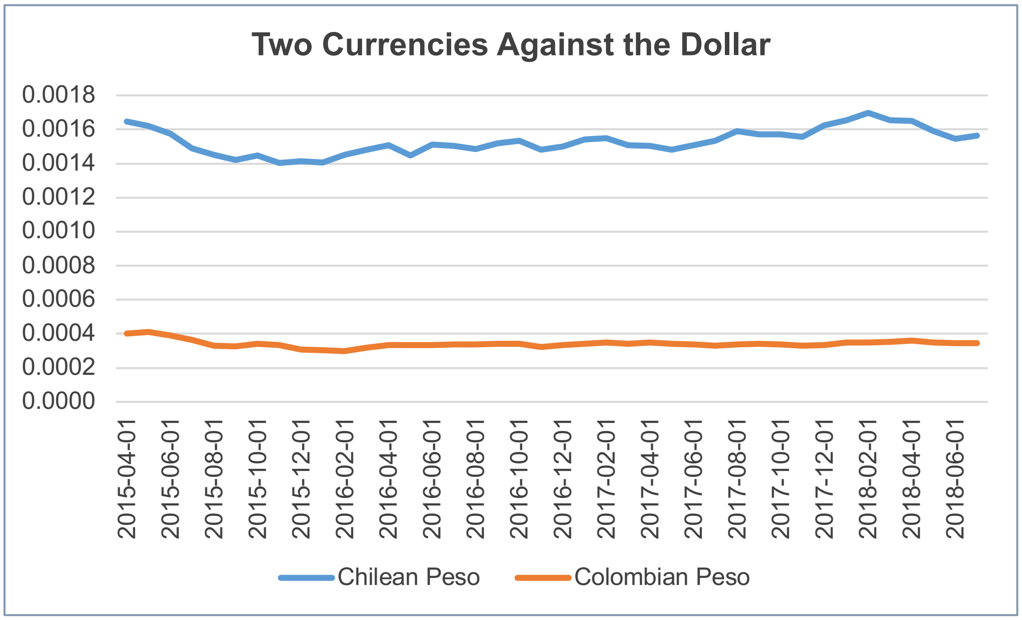
- **Leisure and Travel** – As the U.S. economy continues growing, and the fiscal policy continues to incentivize consumption on behalf of Americans, we would expect greater expenditures in leisure and travel in places such as the Caribbean and Central American, which are popular touristic destinations for this group.

Appendix:

Attachment #1



Attachment #2



Sector Analysis

Sector Analysis – Latin America & Africa

Analyst: Hershal Chaddha **Date: 10/23/2018**

Sector	Countries Affected	Position
Agriculture	All LatAm Countries	Buy
Metals & Oil	Chile, Brazil	Hold
Renewable Energy	Uruguay, Brazil, Peru	Buy
Infrastructure	Brazil, Argentina, Chile, Colombia, Most LatAm Countries	Hold
Technology	Argentina, Brazil, Chile, Peru	Buy

Agriculture – Buy

The agricultural sector has seen an immense sell-off in the Latin American region ever since it experienced its worst drought of the century. This caused Latin American countries to miss output goals and trade partners disappointed. However, prices are beginning to pick up and given the trade uncertainty, Latin American countries are expected to prosper. China is already signing on contracts to export soybean from Brazil and other agricultural products. Soybean used to be a commodity that China purchased from the US, but that is no longer the case. More importantly, weather forecasts are positive and global demand is strong, so with improved output, Latin American countries will be able to experience synergies for their economy.

Therefore, this sector is rated as a "Buy" given that tariffs are not going to impact this region and is expected to primarily experience benefits from any trade uncertainty.

Renewable Energy – Buy

Foreign Direct Investment for renewable energy has increased exponentially in the last 5 years. Before, approximately 6% of total FDI was sent towards renewable energy, but now it is up to 18%. Uruguay leads in having effective renewable energy systems placed within the country. 95% of it runs on multiple forms of renewable energy including solar and wind. Brazil is conducting research and looks to start creating renewable energy in cars, in order to be more competitive in the market. Since FDI as a whole is going down for non-renewable energy, it is spiking up for alternative forms of energy that are renewable. Chile is also a front-runner in the renewable energy frontier. They are heavily investing in this technology and after their elections, they are expected to come out of their stagnating economic cycle back into a booming one according to World Finance. Renewable energy is leading to the increase in employment rates in Latin America. Approximately 2 million jobs in the region are associated with renewables and the rate is expected to grow. Renewable energy is also associated with infrastructure building. Governments in Brazil and Uruguay are working to make the power grid as green as possible, leading to increased jobs and overall growth. An important aspect to keep in mind about renewable energy is that it may not be prevalent in our time horizon, however, as more technological innovation in the space occurs, there is great potential.

Infrastructure – Buy

There is increased investment in infrastructure expected to occur in Latin America as economies begin to kick-start after being in a recession. Brazil is expected to ramp up infrastructure investment in the telecommunications space, in order to advance the country's technological scope. Uruguay is building windmills and dams in order to make their country "greener." Colombia has a $70 billion plan that will extend to 2035 in which thousands of roads, railroads, and airports will be built. This is so the country becomes more interconnected with major cities. This will lead to Colombia better able to mobilize its trade and become a more attractive country. Peru also has a $1 billion plan to have potable sewage systems for the entire country. Finally, Chile's new president, Sebastian Pinera, has made it his agenda to improve infrastructure within the nation. This includes building new roads, bridges, telecommunication towers, and schools. The country has already seen a subtle decrease in unemployment rate and more is expected under the Pinera administration.

Money also continues to pour into Latin America from China and private equity firms. China hopes to increase its influence on the region as trade relationships fall apart with the US. China has increased its infrastructure investment by 20% in the region and is accredited for financing high-profile projects such as the Nicaragua Canal. China aims to do this because they would like to further develop trade relationships with Latin America given the possibility of a trade war with the US. Along with China, private equity firms are seeing an influx of investors coming to them with money to put into infrastructure. Equities are no longer enough to get yields and private equity investors are looking for creative ways to find returns. Infrastructure funds are launching every month with KKR being one of the latest with a $3 billion fund launched in early September 2018.

This sector is given a "Buy" rating because as the region begins to emerge from a recession, infrastructure is top-of-mind for Latin American countries. This will lead to improved employment rates, technological innovation, and overall well-being for the region due to competitive edges emerging.

Technology – Buy

Argentina has lifted a tariff on technology which used to make the country the most expensive place to buy an iPhone. FDI for technology has been steadily increasing along with renewable energy. FDI coming into the region is aimed to focus on telecommunications enhancements. Brazil is expected to increase investment into telecom infrastructure in 2018. Brazil is actively integrating technology into its manufacturing and automobile services. Brazil is heavily investing research into automobiles in order to gain a competitive edge. Trade prospects are opening up for the region with NAFTA falling apart, deals with Europe in place, and the Pacific Alliance gaining dependence on each other. With heavy investment expected in technology, Latin America is rated a "Buy" for the sector because competitive edges will form.

Sector Analysis – Latin America & Africa

Analyst: Elizabeth Mejia-Ricart **Date: 10/19/2018**

Sector	Countries Affected	Position
Agricultural Commodities	Whole Region	Buy
Energy Commodities	Colombia, Argentina, Mexico, Brazil, Venezuela	Hold
Metal Commodities	Chile, Peru, Brazil, Argentina	Hold
Leisure and Travel	Caribbean and South America	Buy
Infrastructure	Mexico, Argentina, Brazil, Peru and Colombia	Buy

Agricultural Commodities – Buy

As it is observed in Attachment #1, there has been a general decrease in agricultural products' prices since 2011. However, since 2016, these prices have increased slightly and are expected to gain 2.2% in the coming months and 1.3% in 2019. This is a result a healthy global demand and improved agricultural output as a result of more favorable weather.

In terms of the US-China trade dispute, we see a generally positive outlook for Latin America. China is the largest importer of soybeans, buying 60% of the global crop and the largest purchaser of US soybeans and agricultural commodities. As a result of the trade dispute, China has halted soybean purchases from the US and is now buying record volumes of Brazilian soybeans for fourth quarter shipments, that is, 12 to 14 million tonnes of soybeans. Moreover, the implementation of additional tariffs or sanctions would only be expected to change the outlook for commodity prices in the short-term. Over the medium-term, the tariffs would have no impact as producers and consumers find new distribution channels, export markets or sources of finance. Thus, the outlook for Latin America's agricultural sector is "Buy".

Metal Commodities – Hold

Although Attachment #1 shows that metal commodities in general have experienced a price increase since 2016, there are specific metals that present potential risks to this commodity's outlook. In May of 2018, President Trump announced his intention to pose steel and aluminum import tariffs. This announcement brought attention to the Brazilian and Argentinian government. The first is the number-two steel exporter to the United States, with a $3 billion value. The final agreement consists in quotas on steel and aluminum shipments from Brazil and Argentina. At the same time, US put a 25% tariff on steel imports and a 10% tariff on aluminum imports from Mexico, Canada and the EU. This suggests that although the general outlook for metal prices is strong now, a decrease in US demand for Latin American steel and aluminum could change this outlook.

Furthermore, Chile and Peru's exposure to China can affect the outlook of these Latin American countries' copper production. China is already the primary trading partner for both Chile and Peru, largely due to the Asian importer's unabated demand for copper. Chile earned $34 billion from copper exports in 2017, while Peru received $13.8 billion, but any dip in prices has a magnified effect. Copper prices dropped below $3 per pound after Trump's first riffed about higher tariff but they have since risen to around $3.07 per pound. As we see in Attachment #2, copper prices have been very volatile this year, presenting short ups and downs. From this trend, it is unclear what their outlook is going to be. Because metal prices are rising overall in real terms, but there are potential risks from the China-US dispute, the outlook for Latin America's Metal Sector is "Hold".

Energy Commodities – Hold

As it is shown in Attachment #1, energy prices have experienced a steady growth in the past two years. Strong oil demand and greater-than-expected compliance by the 22 OPEC and non-OPEC producers to their agreed production cuts helped reduce inventories in the second half of 2017. Rising geopolitical concerns, especially about prospects for renewed sanctions on Iran, and tensions between Iran and Saudi Arabia in Yemen, bolstered prices in late March and rose further to $74/bbl in April. This trend was predicted to continue throughout the next year. Crude oil prices are expected to average $65 per barrel (bbl) in 2018 (up from $53/bbl in 2017) and remain at $65/ bbl in 2019.

An increase in energy prices is beneficial for Latin American countries dedicated to the extraction and exportation of oil, such as Colombia, Argentina, Mexico, Brazil, Venezuela. In these countries, we observe an increase in investment in the extractive sector and a solid export growth, all leading to greater economic output. Still, there are some indicators that make me bearish in this sector. One of them is the possible response of non-conventional crude production in the US to price changes, which could cap a price surge in oil. At the same time, there is a trend of worldwide insurers divesting from coal companies. In Europe alone, 17 of its large insurers have already divested from this sector. Moreover, while oil prices seem stable now, energy prices' fluctuations are very frequent and hard to predict. At the same time, Latin American countries are increasingly investing in the exploration of renewable energy sources, which could lead to further divesting in oil extractions. Because the outlook in oil seems positive but there are many risks to this outlook, we have labeled the sector as a "Hold".

Leisure and Travel – Buy

As the US economy continues growing, and the fiscal policy continues to incentivize consumption on behalf of Americans, we would expect greater expenditures in leisure and travel in places such as the Caribbean and Central American, which are popular touristic destinations for this group. Moreover, other factors have increased the number of visitors in these two regions. First, the region has improved, as it is coming out of a recession that took place in 2015. As a result of a stronger global and regional economy, countries like Mexico, Peru, Colombia, Chile and Argentina have made new investments, and new international travel players, such as Norwegian Airlines, are emerging in the region, contributing to the positive outlook in the sector.

In 2017, travel accounted for almost 9% of Latin America's GDP, where international tourist arrivals increased by 7%, according to the World Tourism Organization (WTO). Furthermore, as Attachment #3 shows, the contribution of travel and tourism as a share of most Latin American countries GDP has grown substantially in the last year, a trend that is expected to continue. The decrease in political instability in the region has greatly contributed to the region's attractiveness to tourists. In the face of political and security crises in other parts of the world – from Trump's election in the USA to terrorism in Europe – Latin America has become even more attractive to travelers. Thus, the outlook for Latin America's leisure and travel sector is "Buy".

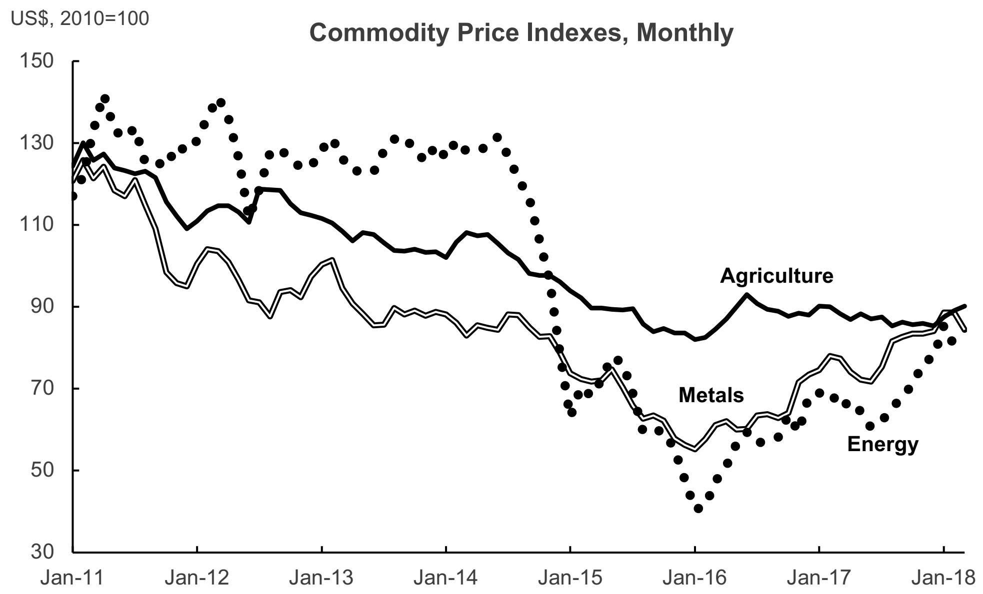
Infrastructure – Buy

There is a huge gap in infrastructure development in Latin America, which implies there are many opportunities in this area. While investment in infrastructure has been stagnant in Latin America, there is a positive outlook for the following years. There has been an increase in commodity prices and positive political changes in the region, which favor pro-investment, particularly in Argentina, Brazil, Peru and Chile. Peru's reconstruction policy to rebuild the north coast is one such example. Also, Brazil's infrastructure project '*Crescer*', which involves port terminals, highways and railways, is being funded through public-private partnerships (PPPs), as is Argentina's program to develop motorways.

Moreover, there are multiple renewable energy projects underway, which will require large investments in infrastructure. At the same time, here has been a clear move in countries such as Argentina, Brazil, Peru and Colombia toward the promotion of foreign investment as a means of overcoming serious infrastructure limitations. Mexico is another case in point, which through its energy reform enacted in 2013, has opened its energy sector to foreign investment resulting in major investments by foreign entities in gas pipelines, power plants and upstream oil and gas activities. Additionally, the role of private equity funds is becoming more relevant as they are actively investing in infrastructure projects. Private equity deals in infrastructure-related sectors accounted for almost half of total regional investment in 2016, with more than US$3.7bn invested in energy, telecoms, transportation and logistics infrastructure. Because of large investments in infrastructure projects on behalf on private, public, national and international entities, the outlook on Latin America's infrastructure sector is "Buy".

Appendix

Attachment # 1



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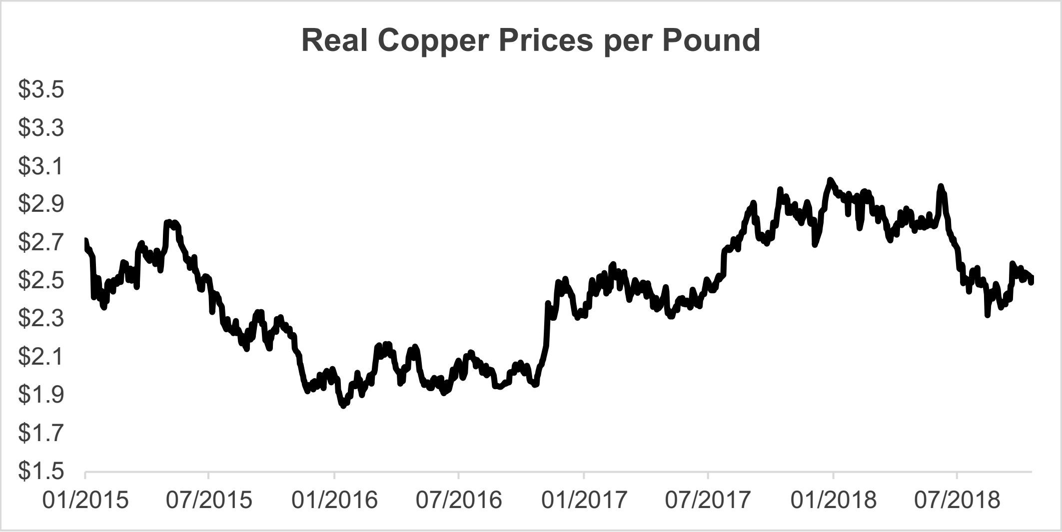
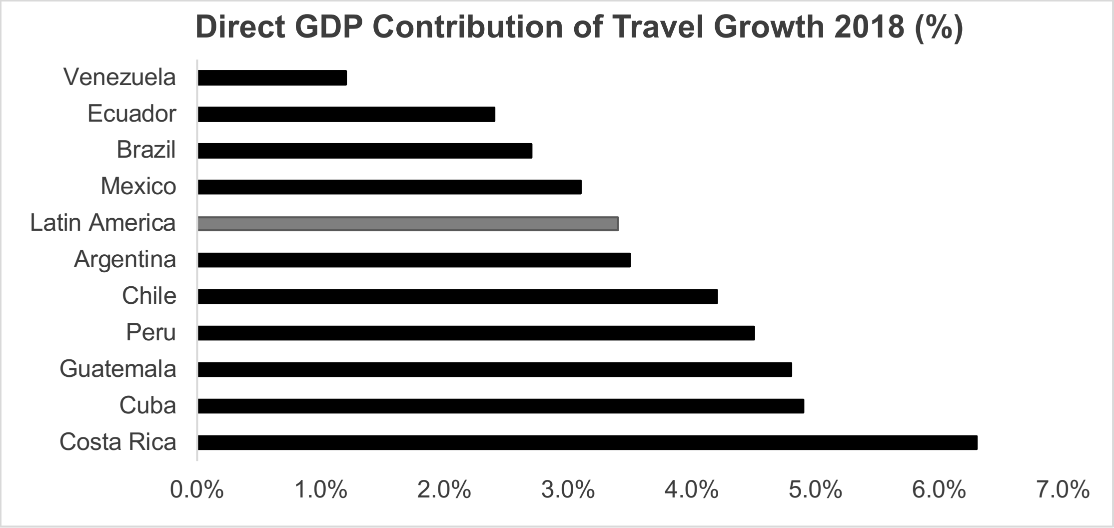


Attachment #3



ETF Selection

Global X Robotics & AI – BOTZ

Recommendation: Buy **Current Price: $19.35**

ETF Data (As of 11/27/2018)	
Ticker	BOTZ
52 Week Price Range	$18-$27
MSCI Index YTD Return	4.03%
YTD Return	-18.35%
1 Year Return	-23.97%
3 Month Return	-15.35%
Beta	1.10
Expense Ratio	0.68%
Bid-Ask Spread %	2.70%
Average Volume	970K
50 Day Moving Average	$20.79
200 Day Moving Average	$22.61
NAV	$19.18

1 Year ETF Price Graph

ETF Description:

The Global X Robotics and Artificial Intelligence ETF (BOTZ) seeks to invest in companies that potentially stand to benefit from increased adoption and utilization of robotics and artificial intelligence (AI), including those involved with industrial robotics and automation, non-industrial robots, and autonomous vehicles.

Country Breakdown:

- Japan – 43.66%
- United States – 32.95%
- Switzerland – 10.49%
- United Kingdom – 3.47%
- Finland – 3.07%
- Israel – 1.88%
- Canada – 1.70%
- Germany – 1.17%
- South Korea – 1.04%

Sector Breakdown:

- Technology – 45.18%
- Industrials – 38.72%
- Healthcare – 14.59%
- Energy– 1.51%

Region and Sector Outlook:

Artificial intelligence was valued to be a $2.42B market in 2017, and it is forecasted to grow exponentially in the coming years. As many technology companies face decreased differentiation and increased competition, they have turned to artificial intelligence to propel them into the future, keeping their brands relevant. Artificial intelligence and robotics have an incredible amount of applications, and as the technology is perfected and advanced, these will only increase. From defense applications to commercial trucking and manufacturing applications to every day consumer uses, this industry and its applications will only grow.

Upside Catalysts:

- **Revenues from licensing:** The majority of revenues in this industry come from licensing. Once these companies are able to perfect their projects, other industries will want to implement their technologies to differentiate themselves from their competition. This can be a very lucrative business given the high barriers to entry due to R&D in the industry.

- **Room for growth:** Because of the unlimited potential of these technologies, this market only can grow from here. The industry is expected to grow at a CAGR of 28.73% between 2018 and 2023. Getting into this market now will lead to incredible returns, should these forecasts come to fruition. Robotics & AI are a disruptive force that's not limited to industrial manufacturing. The holdings of this ETF are some of the biggest players in the AI industry who will likely see proportional growth.

- **Movement to task-specific robots:** The concept of a single robot that can do anything is compelling to both robot manufacturers and to robot purchasers. Yet limitations in engineering, artificial intelligence, and costs, have led to the rise of task-specific robots. It is simply much easier and cheaper to develop a robot that can do one thing really well. By leveraging proven technologies, these robots are designed to be low cost, reliable, and easily integrated into existing business processes. In doing so, they lower the barriers to adopting robotics and expand the range of industries that can utilize robots in their everyday functions.

- **Increasing labor costs:** Labor costs are expensive and rising, which is a particularly challenging prospect for competitive industries like manufacturing. While many businesses turned to offshoring such jobs, many companies are finding robots to be even more cost efficient. One analysis found that offshoring jobs could save a firm approximately 65% on labor costs while replacing workers with robots can achieve an estimated 90 % in savings.

Downside Risk:

- **Regulation:** Because these technologies are so new, regulation is lagging behind. Uber's recent incident in Arizona where one of its self-driving cars hit a pedestrian brought up some of these potential issues. How do you handle ethical issues or place blame on a machine? Will the company be punished? Because everything in this industry is so new, we are not able to understand what regulation could look like down the line.

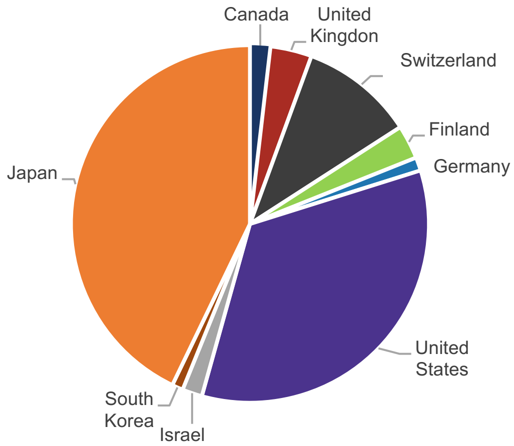
- **Dependence on pace of R&D:** These holdings success will be very dependent on the success and pace of their research and development. Therefore, this may be a better fund to hold in the long term. This is an up and coming market with a lot of runway, but it may take a period of time to become profitable. However, the ETF has been performing very well, and I do not believe this should be something to turn us away.

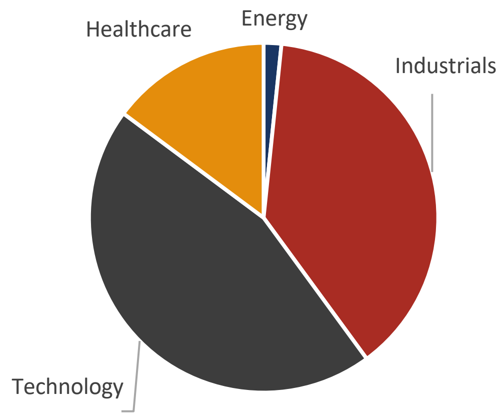
- **China:** As wages in China continue to rise, firms are increasingly looking elsewhere for new sources of low-cost labor. In response, China has made massive investments into robotics to maintain its pole position in global manufacturing. In 2017, the country was the largest market for industrial robotics and saw its purchases of robots increase 58% year-over-year. Ultimately, China will likely be both a major purchaser of robotics as well as an emerging competitor to existing firms, making it a true x-factor for the industry.

Investment Thesis:

We rank BOTZ as a "Buy" rating. The ETF presents an opportunity to invest in robotics and AI companies in Japan and the US. It has a lot of potential and could be a very lucrative industry to hold. With economic growth looking stable for Japan in 2019, this ETF can allow us to capture solid returns.

Appendix:





iShares MSCI Japan – HEWJ

Recommendation: Buy **Current Price: $31.31**

ETF Data (As of 11/26/2018)	
Ticker	HEWJ
52 Week Price Range	$30-$35
MSCI Index YTD Return	-5.86%
YTD Return	0.87%
1 Year Return	-3.73%
3 Month Return	-4.74%
Beta	0.62
Expense Ratio	0.49%
Bid-Ask Spread %	0.03%
Average Volume	1.10M
50 Day Moving Average	32.16
200 Day Moving Average	32.29
NAV	$30.67

1 Year ETF Price Graph

ETF Description:

HEWJ tracks the investment results of MSCI Japan 100% Hedged to USD Index, mainly including stocks traded on the Tokyo Stock Exchange.

Country Breakdown:

- Japan – 97.77%
- United States – 1.69%
- Switzerland – 0.47%
- South Korea – 0.07%

Sector Breakdown:

- Industrials – 20.52%
- Consumer, Cyclical – 18.67%
- Financials – 12.09%
- Technology – 10.04%
- Consumer, Non-Cyclical – 8.45%
- Healthcare – 8.14%
- Communications – 7.34%
- Basic Materials – 5.77%
- Real Estate – 4.10%
- Utilities – 2.06%
- ETF Cash Component – 1.61%
- Energy – 1.15%

Region and Sector Outlook:

Overall, in the first two quarters of 2018, Asia Pacific showed strong economic growth, including potential and rapid growth of ASEAN emerging markets. With the trade tensions surrounding China and the United States, the Asian countries encounter growing yet slow economies. Currency depreciation and an increase in interest rates as well as inflation and employment rates are some of the main trends in the region. With China and Japan being the largest economies in Asia Pacific, the trade war is resulting in a decrease of exports and manufacturing activities, further contributing to economic slowdown. However, policies to improve the economic conditions are underway and these strong economies are expected to rise in the short-term. Japan, for example, is implementing fiscal measures to address the issue of decreasing domestic demand. In terms of sectors, technology (or robotics), healthcare, infrastructure and consumer related industries show promising signs. Business investment and consumer consumption in these sectors are expected to grow, fostering more economic growth in the region.

Upside Catalysts:

- **Recovery from Natural Disasters:** Natural disasters in Japan this year resulted in slowdown of the economy in Q3 due to decrease in household spending and disruption in production activities. Yet, recovery is expected to be speedy as Japan houses strong resources to rebuild growth. Business investment shows promising growth as production related to robotics manufacturing and other infrastructures continue to expand. Going forward in 2018, the country is likely to see an increase in government expenditure as the government focuses on strengthening infrastructures after the disasters.

- **Potential Growth in Domestic Demand:** The government is implementing fiscal measures such as a 5 percent reward-point rebate and tax cuts for automobile owners to keep private consumption and retail sales high. This will potentially lead to an increase in domestic demand which accounts for a large portion of the country's gross domestic product.

- **Aging Population:** Japan's aging population has been pushing public spending forward on healthcare resources. Digitalization continues to play a key role to provide better healthcare services with increases in R&D as well as other medical technology. Japan will not only see a higher local consumer spending on healthcare but also attracts foreign patients with its advanced medical treatment.

Downside Risk:

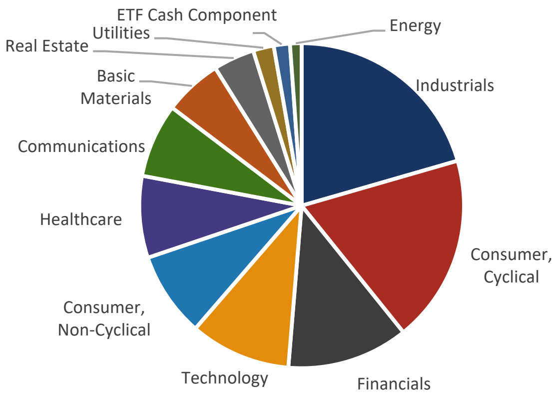
- **Consumption Tax:** The economy will see an increase in consumption tax from 8% to 10% ten months from now. The previous consumption tax in 2014 resulted in a huge decrease in domestic demand, eventually leading to an economic recession. But Prime Minister Shinzo Abe is dedicated to policy changes that would prevent a similar trend from occurring.

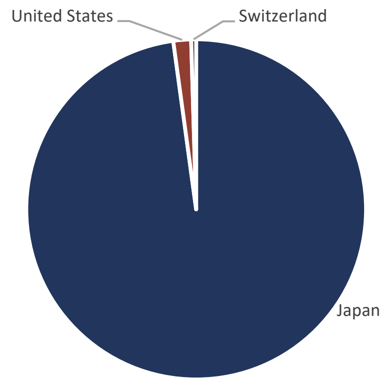
- **Decrease in Global Demand:** Trade war uncertainties continue to exist as supply chain is disrupted, resulting in Japan's manufacturing slowdown and drop in exports. The United States' potential tariffs on Japan's automobiles is also leading to a slow growth of the industry and manufacturing in general. Overall, the effect of the trade war on Japan's major export partners such as China is causing a decrease in its global demand.

Investment Thesis:

We rank HEWJ as a "Buy" rating. Despite current slowdown in economic growth, Japan's policy measures and strong macroeconomic trend will rebuild its economy. This ETF is almost entirely exposed to Japan and its sector exposure remains diverse, covering most of Japan's strongest sectors such as industrials, healthcare and consumer focused industries. Looking at one or two years from now, we see Japan as a great investment opportunity and this ETF in particular will yield strong returns.

Appendix:





iShares MSCI Chile – ECH

Recommendation: Buy **Current Price: $43.03**

ETF Data (As of 11/23/2018)	
Ticker	ECH
52 Week Price Range	$41 - $57
MSCI Index YTD Return	-19.33%
YTD Return	-18.86%
1 Year Return	-17.16%
3 Month Return	-13.89%
Beta	1.08
Expense Ratio	0.62%
Bid-Ask Spread %	42.95
Average Volume	454K
50 Day Moving Average	43.68
200 Day Moving Average	48.29
NAV	$41.52

1 Year ETF Price Graph

ETF Description:

ECH is an ETF that seeks to track the investment results of a broad-based index composed of Chilean equities.

Country Breakdown:

- Chile – 99.94%
- United States – 0.06%

Sector Breakdown:

- Utilities – 24.41%
- Financials – 17.44%
- Materials – 16.55%
- Consumer Discretionary – 11.30%
- Energy – 8.83%
- Consumer Staples – 7.55%
- Industrials – 6.35%
- Real Estate – 2.64%
- Telecommunications – 2.54%
- Information Technology – 1.54%
- ETF Cash Component – 0.06%

Region and Sector Outlook:

Latin America as a whole is experiencing economic growth, as it is being benefited by greater commodity prices and a healthy global demand for its exports. Because of sustained higher oil prices, Latin America has experienced an increase in inflation. However, most Central Banks' efforts have been effective in monitoring this inflation. As elections have taken place in some of the major economies, like Brazil, political uncertainty has decreased substantially, making investors more optimistic in this region. However, due to some currency issues in one of its major economies, Argentina, many investors have been cautious to invest in other Latin American countries and emerging markets in general. Nevertheless, strong economic indicators such as GDP growth, foreign direct investment and strong output in sectors such as agriculture, make us optimistic about the region.

The sectors with the best outlook in the region include financials, infrastructure, materials and telecommunications. With a great gap in infrastructure and the opening of foreign direct investment as a way to finance projects, we expect investment in infrastructure and telecommunications to gain traction in the years to come. Moreover, the healthy global demand for commodities makes us optimistic on materials, and the diversified financial system in countries like Chile give us a positive outlook regarding this sector.

Upside Catalysts:

- **Strong Economic Growth:** Chile is forecasted to have an economic growth of 3.8% this year, an increase from the previous forecast of 3%. This growth is partly attributed to an increase in domestic demand. The Chilean economic growth has consistently outpaced other countries in the region, including its two biggest economies, Argentina and Brazil. Proof of this economic growth is that Chile is the only South American member in the OECD.

- **Transparent Country:** Chile is the second-best country in Latin America in terms of transparency, according to the Corruption Perception Index of 2017. In a scale from 0 to 100, 0 being highly corrupt, Chile scored 67, while most Latin American countries are around 40 and 30 points. The availability of transparent information in this country contribute to a consumer sentiment and a safer investment environment.

- **No Sign of Currency Crisis:** The Chilean peso has not experienced great depreciation compared to other emerging markets, which suggests a lower risk of investing in the country.

- **Political Stability:** In a long-term outlook, Chile has been subject to prolonged political stability compared to other emerging and frontier markets. Political power has alternated between center-left and center-right governments, and there is consensus within the mainstream political establishment in favor of free trade and a robust private sector. Both ideological wings plan to continue building a global network of free trade agreements and the diversification of export industries.

Downside Risk:

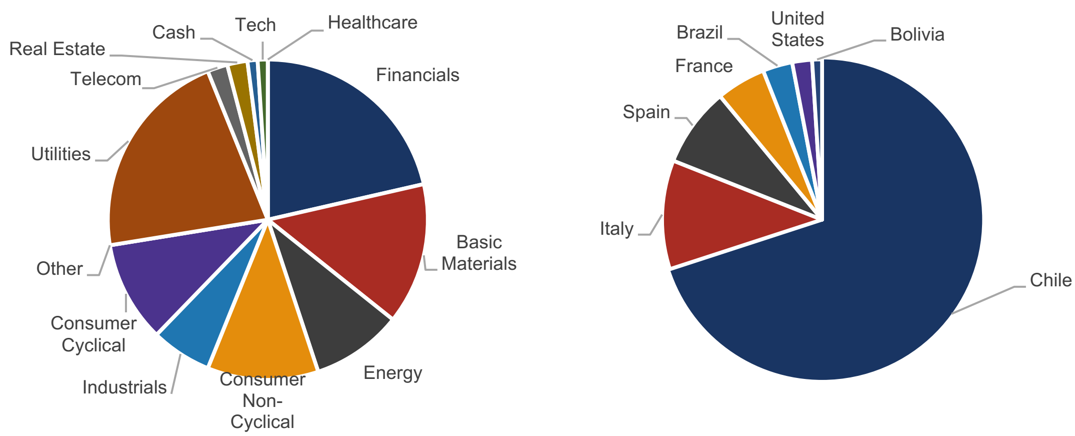
- **Trade War and Copper Prices:** The main risk to Chilean economy is the impact of the trade war on copper's prices, since Chile is heavily dependent in this exporting sector. However, the trade war between the global economic powers is only expected to have a short-term impact on the price of copper.

- **Emerging Markets Currency Sell-Off:** Even though Chile presents strong economic indicators and upward catalysts, the negative consumer sentiment in emerging markets as a whole could motivate investors to divest from Chile.

Investment Thesis:

We rank ECH as a "Buy" rating. The ETF offers the advantage of diversification from the US and other developed markets, while being one of the most promising developing countries to invest in. Moreover, we are confident in the main sectors exposed by this ETF. The financial sector in Chile is large and well diversified. In particular, mandatory pension funds have grown at a remarkable rate in the last decades, pulling in their wake most of the financial system. Consumer cyclicals also present great potential returns since Chile is experiencing positive GDP growth. Lastly, we are confident in utilities because we expect interest rates to keep rising, and, as regulated monopolies, utilities present a lower-risk to this environment.

Appendix:



iShares MSCI Brazil – EWZ

Recommendation: Buy **Current Price: $38.70**

ETF Data (As of 11/23/2018)	
Ticker	EWZ
52 Week Price Range	$43-$72
MSCI Index YTD Return	4.03%
YTD Return	0.87%
1 Year Return	0.12%
3 Month Return	18.68%
Beta	1.25
Expense Ratio	0.62%
Bid-Ask Spread %	2.75%
Average Volume	35.10M
50 Day Moving Average	67.86
200 Day Moving Average	59.89
NAV	$39.40

1 Year ETF Price Graph

ETF Description:

EWZ is an ETF that seeks to track the investment results of an index composed of Brazilian equities.

Country Breakdown:

- Brazil – 91%
- Belgium – 3%
- France – 2%
- Spain – 2%
- United States – 1%
- Italy – 1%

Sector Breakdown:

- Financials – 31%
- Basic Materials – 18%
- Energy – 12%
- Consumer Non-Cyclical – 9%
- Industrials – 6%
- Consumer Cyclical – 5%
- Other – 5%
- Utilities – 5%
- Communications – 2%
- Real Estate – 1%
- Healthcare – 1%
- Technology – 1%
- ETF Cash Component - 1%

Region and Sector Outlook:

Latin America, overall, is seeing an emergence in their economies. The region was in a recessionary period where political uncertainty, inflation, and interest rates had overwhelmingly depressed the region. However, the International Monetary Fund and other economic institutes are beginning to see an upswing. The region as a whole is emerging from the recession. In terms of the macro-environment, inflation is falling faster than expected, and GDP growth is increasing. Political uncertainty was one of the biggest issues for the region; however, Brazil and Argentina are actively handling cases of corruption. Foreign direct investment is also increasing in the region for renewable energy because Latin America is leading in these initiatives. Chile in particular is seeing one of the strongest growths in the region. Their sectors are amongst the strongest in analyst outlooks.

Overall sectors that look promising for the region include financials, telecommunications, renewable energy, infrastructure, and technology. These areas are facing increased foreign direct investment and focus by governments because they will create jobs and boost economic growth.

Upside Catalysts:

- **Market-Friendly President:** Investors wanted Jair Bolsonaro to win the election in October because of his market-friendly stances. Brazil is in the midst of a pension crisis that needs serious reforms. Bolsonaro aims to privatize the industry, displaying that his ideas are pro-deregulation.

- **Trade Prospects:** Pacific Alliance is seeming to gain strength since the US and China are in a trade war. China also is aiming to replace the US when exporting certain commodities and is turning to Brazil for its needs. With large exposure to materials, Brazil can see an upside with increased trade opportunities with Mexico. There are also talks for trade of soybeans and other grains in Europe as well. Relationships with Asia remain strong in terms of trade.

- **Strong GDP Growth Prospects:** With economic growth expected to rise to 1.7% in 2018 from the current rate of 0.20%, Brazil is the fastest growing economy from the recession in Latin America. Inflation is falling which lowers costs for financial institutions. Interests rates have been cut for the last few months, but since inflation is falling faster than expected, Brazil is expected to ease on cutting interest rates which should assist with margins for financial institutions.

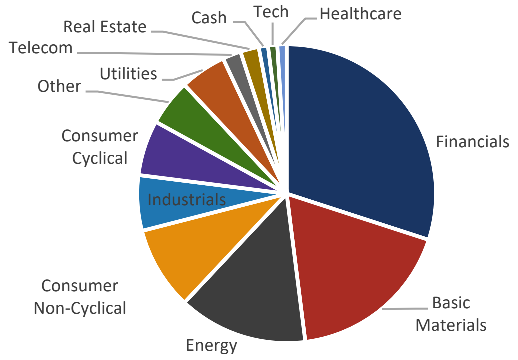
Downside Risk:

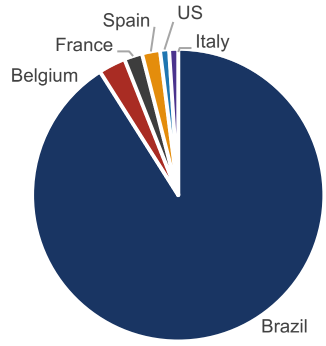
- **Political Uncertainty:** Despite Bolsonaro being perceived as a market-friendly president, his other stances make his leadership questionable. He strongly believes that Brazil should be run like a dictatorship and believes violence is the answer when being faced with opposition. Given his leadership style, it is hard to predict what he may say that can disrupt the Brazilian economy. However, this risk does not seem substantial because of Brazil's strong judiciary system and the existence of checks and balances
- **Prolonged Emerging Market Sell-Off:** Emerging market countries are being sold rapidly, and their currencies against the dollar are depreciating. While the fundamentals are strong, the outlook that global growth is slowing as well as rising interest rates are causing investors to fly out of riskier regions. Therefore, even though the outlook on Brazil is bullish, a broader market downturn is a risk.

Investment Thesis:

We rank EWZ as a "Buy" rating. The ETF presents an opportunity to invest in larger-cap companies within Brazil. These companies have international exposure, as well, and can provide diversification in that way. With economic growth looking strong for Brazil in 2019, this ETF can allow us to capture solid returns.

Appendix:


Healthcare
Tech
Cash
Real Estate
Telecom
Utilities
Other
Consumer Cyclical
Industrials
Consumer Non-Cyclical
Energy
Basic Materials
Financials


US
Spain
Italy
France
Belgium
Brazil

iShares Global Clean Energy ETF – ICLN

Recommendation: Hold **Current Price: $8.65**

ETF Data (As of 11/23/2018)	
Ticker	ICLN
52 Week Price Range	$7.87-$9.95
MSCI Index YTD Return	-1.86%
YTD Return	-11.78%
1 Year Return	-10.77%
3 Month Return	-10.98%
Beta	1.04
Expense Ratio	0.47%
Bid-Ask Spread %	1.38%
Average Volume	99K
50 Day Moving Average	8.47
200 Day Moving Average	9.07
NAV	$8.11

1 Year ETF Price Graph

ETF Description:
ICLN is an ETF that allows one to invest in global clean energy on a broad scale both in the United States and abroad.

Country Breakdown:
- United States – 32%
- China – 19%
- New Zealand – 10%
- Germany – 8%
- Brazil – 8%
- Canada – 7%
- Denmark – 6%
- Austria – 4%
- United Kingdom – 3%
- Hong Kong – 2%
- France – 1%

Sector Breakdown:

- Utilities – 50%
- Industrials – 29%
- Technology – 18%
- Energy – 3%
- ETF Cash Component – 1%

Region and Sector Outlook:

As global climate change becomes a direr international problem, investment in alternative energy will become necessary. The signing of the Paris Agreement in 2016 marked the start of a unified global effort in this area. However, within the last year, politically driven discontent with this agreement, stemming from the United States, has created short term risk. These risks are significantly reduced by the inevitably decreasing costs of alternative energies, specifically with respect to wind and solar power, which make up the majority of ICLN's holdings.

Upside Catalysts:

- **Global Climate Pressure:** As damages from fossil fuel extraction build and reserves shrink, global pressure to find alternatives will only increase in the long term. With rising oil prices comes greater incentive to invest in renewable energy forms.

- **Decreasing Costs:** The prices of wind and solar power have decreased dramatically in the last 10 years, and the International Renewable Energy Agency predicts that they will compete with fossil fuels on a cost level by 2020.

- **International Agreements:** Although the United States backed out of the Paris Agreement, there still exists strong international support for climate regulation and the possibility that a shift in politics in the next few years could drive the United States back into the agreement or another one like it.

Downside Risk:

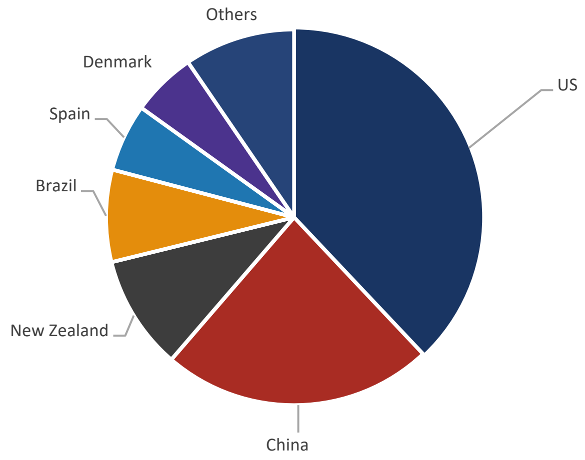
- **Political Uncertainty:** Pro fossil fuel presidents in the United States and Brazil, which together make up 41% of the ETF, could slow investment in alternative energy in these countries. However, because these risks are short term political risks, they may not have significant long-term effects on the ETF's performance.

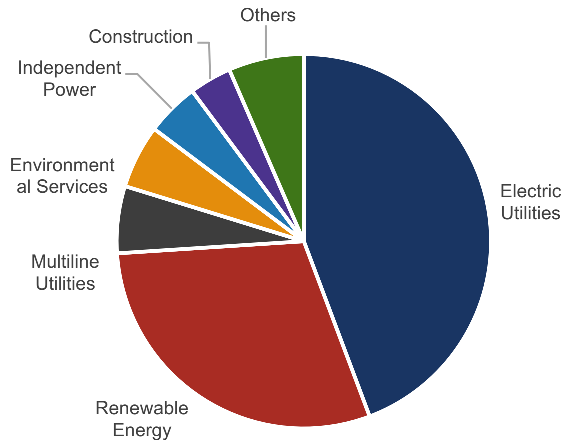
- **Global Economic Uncertainty:** With many developing countries facing slowed growth and currency crises, international investment in alternative energy in these areas may fall. As alternative energy is not a current necessity, decreased economic growth could be a risk factor for this ETF. However, this risk is minimized as the majority of holdings are located in developed countries.

Investment Thesis:

We rank ICLN as a "hold" rating. This ETF presents an opportunity to invest broadly in the field of alternative energy through large solar, wind and other renewable energy companies. Because the 2017 outlook was long term oriented, and the short-term risk is temporary, holding on to ICLN will allow for maximum returns. With the rapidly decreasing costs of solar and wind energy, this ETF will allow us to capture future growth in this area.

Appendix:


Others
Denmark
Spain
Brazil
New Zealand
China
US


Others
Construction
Independent Power
Environment al Services
Multiline Utilities
Renewable Energy
Electric Utilities

Global X FinTech – FINX

Recommendation: Buy **Current Price: $23.23**

ETF Data (As of 11/23/2018)	
Ticker	FINX
52 Week Price Range	$105-
MSCI Index YTD Return	4.03%
YTD Return	14.53%
1 Year Return	4.81%
3 Month Return	-18.29%
Beta	1.34
Expense Ratio	0.68%
Bid-Ask Spread %	0.03%
Average Volume	137K
50 Day Moving Average	$26.03
200 Day Moving Average	$25.76
NAV	$25.19

1 Year ETF Price Graph

ETF Description:

VPU is an ETF seeks to track the performance of the MSCI US Investable Market Utilities Index

Country Breakdown:

- United States – 68.00%
- Australia – 7.65%
- Brazil – 2.86%
- Denmark – 2.80%
- Germany – 8.16%
- Switzerland – 6.24%
- UK – 1.38%
- Other – 2.91%

Sector Breakdown:

- Technology – 62%
- Financials – 20%
- Industrials – 18%

Region and Sector Outlook:

US has seen strong GDP growth in 2018[1] and going forward the deregulation will provide growth for the economy. One cause of concern for equities is the interest rate environment which is significantly affected by the Fed. Actions by the Fed have contributed to volatility in the stock market in 2018 as they have decided to increase the Federal Funds Rate. As interest rates go up, investors prefer bonds and large amount of money moves out of stocks causing a sell-off. Rising rates would also cause a firm to be discounted at a higher Weighted Average Cost of Capital[2]. The US economy is reaching a peak in the current economic cycle and credit standards are now tightening[3]. However, there is still room to grow before the peak is reached as the average HY spread is 1.52%.

FinTech industry has several growth catalysts for the foreseeable future and investors have high expectations. Technology is the hottest sector in 2018 with innovations in AI, Big Data, Machine Learning, etc. These technologies have potential to change the future landscape. FinTech is essentially using those technologies and providing solutions to consumers around the world, may it be with payments, insurance, mortgages, etc. The shifting consumer preferences and the demand for efficiency by financial firms will push innovation in the FinTech world which is why we believe that FinTech is a great industry to enter now, especially after the recent volatility.

Upside Catalysts:

- **Demand for Efficiency:** The new technology is capable to improving margins. They enable faster processing, automation, and risk management for financial firms. There are also improvements in the investment management space. Applications like Acorns, StockPile and Robinhood are helping investors by either managing money, allowing to buy partial shares, or make free trades.

- **Demographic Preferences:** The new consumers, millennials prefer to interact with a screen and put in significantly less effort than the earlier generations. Large and small, both types of transactions are now mostly being completed electronically. FinTech also allows consumers to apply for credit cards, insurance, etc. and get results back very quickly.

- **Innovations:** With the advent of AI and Big Data, firms have a ton of information to work with. New technologies allow in-depth research to find trends and figure out what works and what does not.

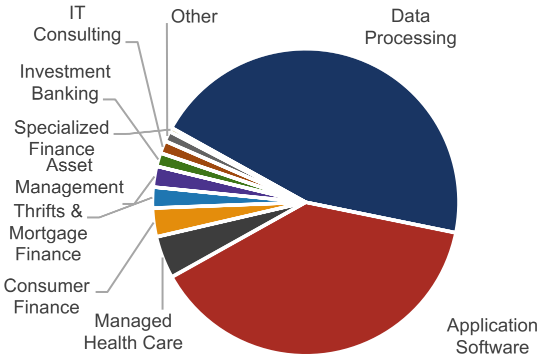
Downside Risk:

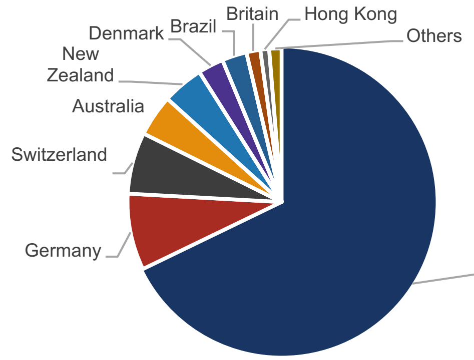
- **Valuation:** FinTech is still relatively a new industry. There are multiple trends supporting the firms, but investor expectations are sky high which has caused very high valuations. From the price chart above, we can see that the ETF significantly declined in times of volatility in late 2018. Keeping that in mind, even though the correction helped, we still believe this is a cause of concern.

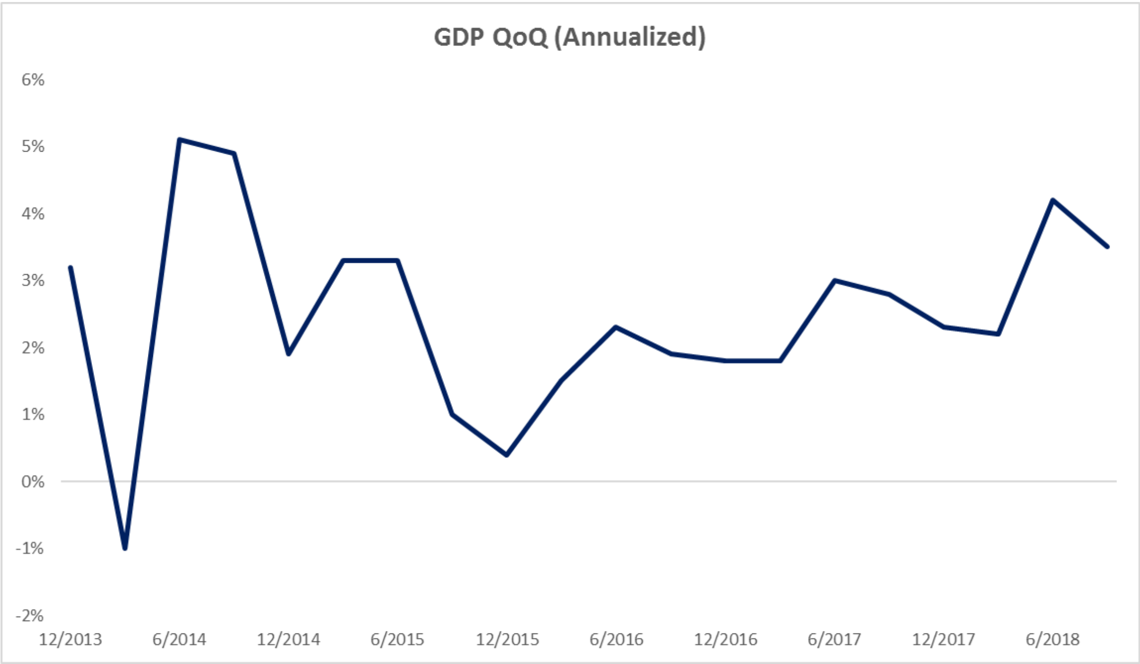
Investment Thesis:

I rank FINX a "Buy" rating. It was one of the best performing ETFs for the fund last year however, it experienced severe devaluation because of volatility. The FinTech industry has strong catalysts for growth and consumers adaptation is one of the signs that this technology is here to stay. With valuation as the only risk, which has somewhat subsided due to the correction, I believe we can this ETF to perform well for the next year.

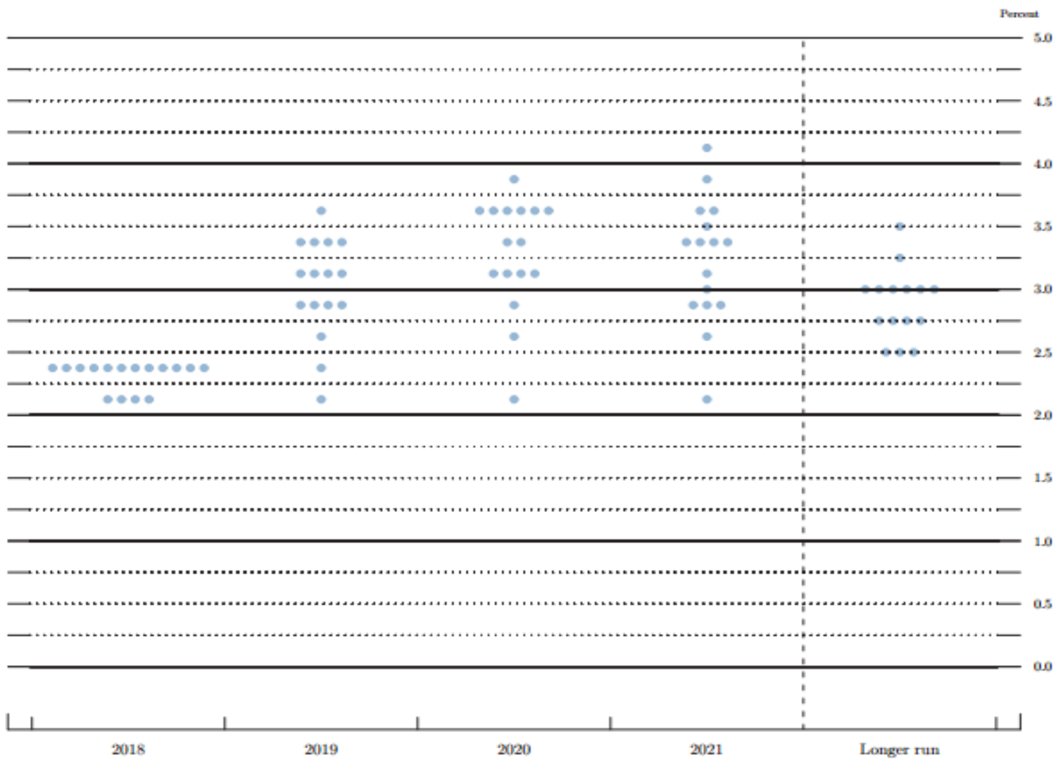
Appendix:



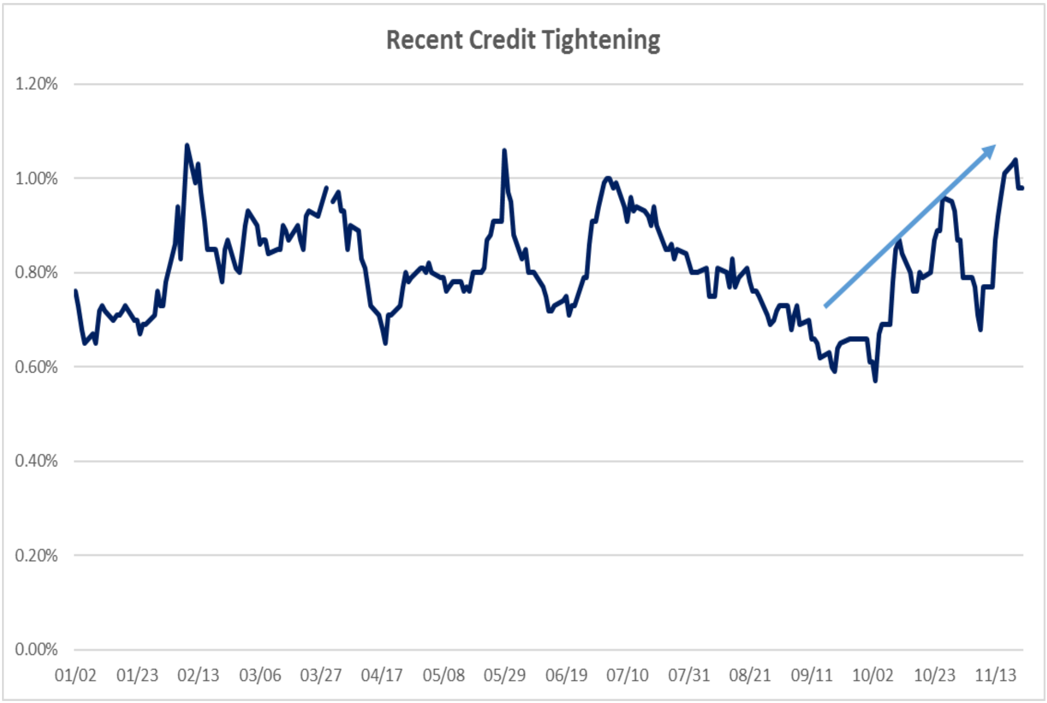




GDP Growth 2018



Fed Dot Plot



Recent Credit Tightening (High Yield Spread, HY – IG).

iShares US Medical Devices – IHI

Recommendation: Buy **Current Price: $206.24**

ETF Data (As of 11/23/2018)	
Ticker	IHI
52 Week Price Range	$170-$228
MSCI Index YTD Return	4.03%
YTD Return	19.04%
1 Year Return	15.97%
3 Month Return	-4.66%
Beta	1.07
Expense Ratio	0.23%
Bid-Ask Spread %	3.72%
Average Volume	123K
50 Day Moving Average	212.95
200 Day Moving Average	202.32
NAV	$205.31

ETF Description:

IHI seeks to track the investment results of an index composed of US equities in medical devices sector.

Country Breakdown:

- United States – 100%

Sector Breakdown:

- Healthcare – 100%

1 Year ETF Price Graph

Region and Sector Outlook:

US has seen strong GDP growth in 2018[1] and going forward the deregulation will provide growth for the economy. One cause of concern for equities is the interest rate environment which is significantly affected by the Fed. Actions by the Fed have contributed to volatility in the stock market in 2018 as they have decided to increase the Federal Funds Rate. As interest rates go up, investors prefer bonds and large amount of money moves out of stocks causing a sell-off. Rising rates would also cause a firm to be discounted at a higher Weighted Average Cost of Capital[2]. The US economy is reaching a peak in the current economic cycle and credit standards are now tightening[3]. However, there is still room to grow before the peak is reached as the average HY spread is 1.52%. To stay on the defensive side, it would be wise to pick sectors that are going to be needed.

The IHI ETF provides the perfect mix of industry and defensive play that is needed for the current economic forecast. Medical Devices is a growing industry and is not going to be significantly affected as provides a much-needed service to the pupils of the economy.

Upside Catalysts:

- **Aging Population:** The US demographics swiftly changing course. According to Population Reference Bureau, the number of Americans ages 65 and older is projected to more than double from 46 million today to over 98 million by 2060, and the senior population as a percent of total population will increase from 15% to 24%. An aging population would increase demand of medical devices that keep people alive and prevent diseases.

- **Technological Advancements:** The medical devices industry is quickly growing and adapting. There are wearable devices already that can monitor heart rates however, there are other technologies in development that could measure blood-sugar levels and alarm the wearer and possibly someone else. Due to the preventative power of medical devices, hospitals and consumers are sure to adopt these in the future. There is also general advancement in biotechnology and life sciences industry which will push the breadth of devices in the future.

- **Consumer Healthcare Spending:** There is an increasing trend in healthcare spending in US. This is due to Medicare and Medicaid, one of the largest expense items for the US government, which are part of the mandatory spending for the government[4]. And according to research by CMS.gov, the national health spending is projected to grow with an average rate of 5.5% p.a. from 2017 – 2026.

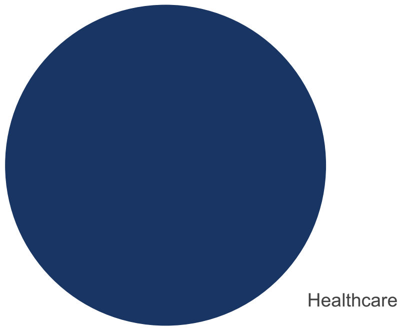
Downside Risk:

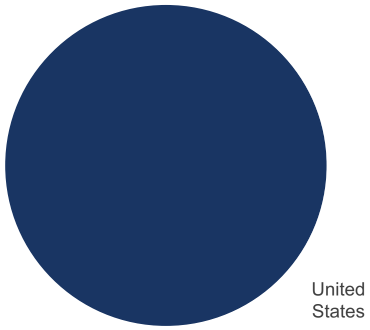
- **Political Risk:** Healthcare sector is somewhat sensitive to the political climate in US. President Trump criticized Pfizer in 2018 over large increases in drug Pfizer and the firm acted and reduced prices. However, recently Pfizer just announced price increases for some of its drug portfolio. Overall, the increases are not as significant as the firm had originally planned. The healthcare sector is also closely tied to health insurance which is also affected by the political climate and the part in power.

Investment Thesis:

I give IHI a “Buy” rating. This ETF is an excellent way of diversifying the portfolio and providing exposure into healthcare. Having the political risks in mind as a possible headwind, I still believe the medical devices industry is poised for growth and innovation for the foreseeable future because it is supported by powerful catalysts.

Appendix:



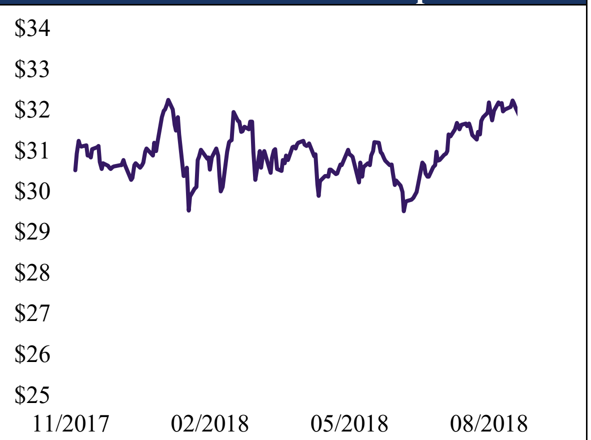


SPDR S&P Insurance – KIE

Recommendation: Buy **Current Price: $30.54**

ETF Data (As of 11/23/2018)	
Ticker	KIE
52 Week Price Range	$29-$33
MSCI Index YTD Return	4.03%
YTD Return	-0.97%
1 Year Return	0.95%
3 Month Return	-4.65%
Beta	.80
Expense Ratio	0.35%
Bid-Ask Spread %	0.07%
Average Volume	360K
50 Day Moving Average	30.75
200 Day Moving Average	31.01
NAV	$30.03

1 Year ETF Price Graph



ETF Description:

KIE is an ETF that seeks to track the investment results of the S&P Insurance index which includes brokers, life & health, multi-line, property and casualty, and reinsurance.

Country Breakdown:

- United States – 100%

Sector Breakdown:

- Financials – 100%

Region and Sector Outlook:

US has seen strong GDP growth in 2018[1] and going forward the deregulation will provide growth for the economy. One cause of concern for equities is the interest rate environment which is significantly affected by the Fed. Actions by the Fed have contributed to volatility in the stock market in 2018 as they have decided to increase the Federal Funds Rate. As interest rates go up, investors prefer bonds and large amount of money moves out of stocks causing a sell-off. Rising rates would also cause a firm to be discounted at a higher Weighted Average Cost of Capital[2]. The US economy is reaching a peak in the current economic cycle and credit standards are now tightening[3]. However, there is still room to grow before the peak is reached as the average HY spread is 1.52%.

Insurers are going to rejoice in the coming climate as higher interest rates provide them with extra income. Insurance firms make investments in long-term assets like bonds and notes that will provide them with higher interest income. Consumers are also changing preferences and as the insurance accessibility increases through innovation, premiums should increase which are the main source of revenue for firms in this industry.

Upside Catalysts:

- **Rising Interest Rates:** The short-term interest rates in US have been depressed since the 2008 crisis when Fed reduced the Federal Funds Rate. The long-term rates were also brought down due to quantitative-easing as the Fed thought it necessary to push more money into the economy to provide stimulus. As for the current environment, there have been multiple rate hikes in 2018 and more are targeted for 2019[2]. That environment will be tough for small businesses and borrowers but should provide additional income for large insurers due to the nature of the business.

- **Consumer Preferences:** Consumers are increasingly moving towards insurance services. Significant moves are expected in life and health insurance. Several research findings have indicated that better insurance benefits to employees have helped retain employees and also that workers are weighing benefits in their decision to select a workplace.

- **P&C Fundamentals:** According to CFRA research, P&C premiums should pick up pace in 2019 growing close to 5%. The premiums should rise by 7 – 10% in catastrophe prone areas.

- **RPA Investments:** RPA stands for Robotic Process Automation. This is a field that insurers have been nervous (Deloitte) and excited about. Using InsurTech, technology increasing efficiency in insurance industry, will improve margins by reducing costs.

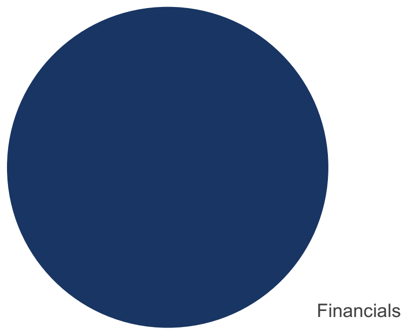
Downside Risk:

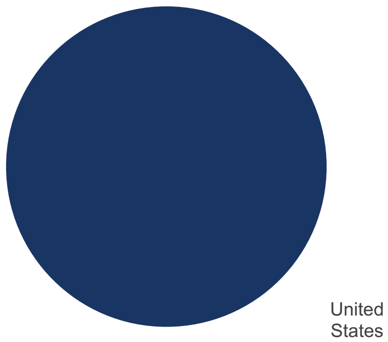
- **Political Risk:** Insurance is a heavily regulated industry. It usually experiences slow changes, but the polices enforced can have significant long-term effects. This remains to be a headwind to the industry.

Investment Thesis:

I give KIE a "Buy" rating. The ETF provides a good defensive play for the fund. Given the expected interest rate environment and technological advancement in this sector, KIE should provide a good defensive play.

Appendix:





Vanguard Utilities ETF – VPU

Recommendation: Buy **Current Price: $120.95**

ETF Data (As of 11/23/2018)	
Ticker	VPU
52 Week Price Range	$105-$125
MSCI Index YTD Return	4.03%
YTD Return	6.28%
1 Year Return	1.73%
3 Month Return	2.12%
Beta	0.19
Expense Ratio	0.10%
Bid-Ask Spread %	0.13%
Average Volume	168K
50 Day Moving Average	$120.03
200 Day Moving Average	$115.48
NAV	$120.92

1 Year ETF Price Graph

ETF Description:

VPU is an ETF seeks to track the performance of the MSCI US Investable Market Utilities Index

Country Breakdown:

- United States – 100%

Sector Breakdown:

- Utilities – 98%
- Other – 2%

Region and Sector Outlook:

Overall, the world is experiencing a trend of unsynchronized growth with the United States emerging as a leader. Despite strong labor and growth fundamentals so far in 2018, the domestic equity markets have experienced relatively high volatility due to political factors and downwards revisions of global growth in the third quarter. GDP growth in the second quarter was strong at 4.2%, followed by above-consensus third quarter growth of 3.5%. The fiscal stimulus delivered through the US "Tax Cuts and Jobs Act" provided a boost to consumer spending in the second and third quarter, however, there is concern this will only have short-term effects that may be neutralized in 2019 by an IRS withholding error. The wealth effect may also have been hurt by the 2018 October market correction. In addition to unsynchronized global growth, varied post-crisis recoveries resulted in a disconnect in monetary policies among developed economies' central banks. US sovereign debt yields significantly higher than other developed economies due to the Fed raising interest rates and slightly higher inflation expectations. A hawkish Fed, coupled with superior economic growth resulted in an appreciation of the dollar in 2018. Currently, the Fed is expected to raise rates three times in 2019, and two more times in 2020. If the Fed stays disciplined in economic data, this is likely to come to fruition. However, amidst recent market volatility is concern that the Fed is reducing liquidity too rapidly and raising rates too quickly. If the Fed is dovish in their June 2019 meeting, the USD may depreciate. For these reasons, I also give a "Buy" rating to Invesco DB USD ETF, which is a long-dollar play to reduce currency risk in the portfolio that portfolio diminished returns in 2018. The recommendation is to hold the currency hedge for one rebalance period, liquidating ahead of the June 2019 Fed meeting.

Utilities is an attractive sector in the current market environment, due to their outperformance during late-cycle. In addition, utilities are in a solid position to modestly expand margins with synergistic M&A, higher base rates, and lower input prices. Utilities is an industry that is heavily regulated, allowing for protection from major market downturns. Thus, it is a desirable investment during periods of economic decline and high political risk. Due in part to predictable cash flows and relatively low growth expectations, utilities pay a modest dividend which is attractive during the tough fixed-income environment. While increase rate increases may negatively affect the ETF, a portfolio that contains insurance exposure will offset some of this affect. In addition, the increased desirability of the defensive sector will also support prices. Valuations in the utility sector could potentially increase if the Fed is more dovish than expected in 2019 as a result of less favorable economic fundamentals.

<u>Upside Catalysts:</u>

- **Post-Clean Power Plan M&A:** M&A before the Clean Power Plan resulted in acquisitions that were more focused on meeting regulatory demands. With the new administration, who is against the plan, M&A going forward is likely to be related synergistic goals and business needs.

- **Forecasted Cold Winter:** The relative warm February of 2018, along with slight equity weakness, hurt utility companies. Current projections predict a cold 2019 winter, which will result in increased utility consumption and profits.

- **Lower Fuel Prices Amidst Rate Increases:** Lower natural gas prices coupled with increases in base rates will bolster margins heading into 2019.

<u>Downside Risk:</u>

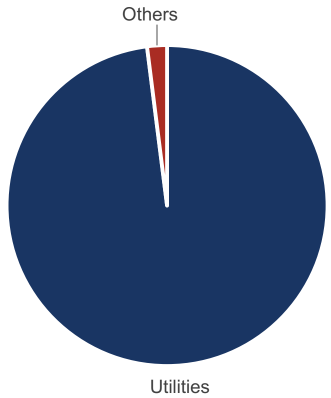
- **Lower Customer Growth:** Lower customer growth has been an issue in the utility sector. However, base rate increases offset these effects.

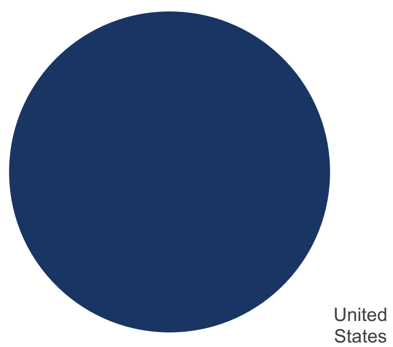
- **Higher Natural Gas Prices:** Higher natural gas prices are negative for the sector. However, utility companies are able to pass most of these costs through to customers.

Investment Thesis:

We rank VPU as a “Buy” rating. The ETF presents an opportunity to invest in the regulated utility sector of the United States. Regulation, and the ability to pass on input price increases make utilities a relatively safe play. In addition, the 3.06% yield of VPU provides income in line with US sovereign debt will allowing the opportunity for capital gains. In addition, the defensive nature of this sector is likely to benefit if the market experiences a correction. Overall, VPU is a good complement to the globally exposed portfolio.

Appendix:





SPDR Consumer Staples Select – XLP

Recommendation: Buy **Current Price: $54.79**

ETF Data (As of 11/23/2018)	
Ticker	XLP
52 Week Price Range	$48-$59
MSCI Index YTD Return	4.03%
YTD Return	-1.72%
1 Year Return	2.76%
3 Month Return	1.93%
Beta	0.031
Expense Ratio	0.13%
Bid-Ask Spread %	2.75%
Average Volume	17.4M
50 Day Moving Average	54.65
200 Day Moving Average	52.93
NAV	$54.79

1 Year ETF Price Graph

ETF Description:

XLP is an ETF that seeks to track the investment results of an index of large-cap consumer staples equities

Country Breakdown:

- United States – 100%

Sector Breakdown:

- Consumer, Non-Cyclical – 100%

Region and Sector Outlook:

Overall, the world is experiencing a trend of unsynchronized growth with the United States emerging as a leader. Despite strong labor and growth fundamentals so far in 2018, the domestic equity markets have experienced relatively high volatility due to political factors and downward revisions of global growth in the third quarter. GDP growth in the second quarter was strong at 4.2%, followed by above-consensus third quarter growth of 3.5%. The fiscal stimulus delivered through the US "Tax Cuts and Jobs Act" provided a boost to consumer spending in the second and third quarter, however, there is concern this will only have short-term effects that may be neutralized in 2019 by an IRS withholding error. The wealth effect may also have been hurt by the 2018 October market correction. In addition to unsynchronized global growth, varied post-crisis recoveries resulted in a disconnect in monetary policies among developed economies' central banks. US sovereign debt yields significantly higher than other developed economies due to the Fed raising interest rates and slightly higher inflation expectations. A hawkish Fed coupled with superior economic growth resulted in an appreciation of the dollar in 2018. Currently, the Fed is expected to raise rates three times in 2019, and two more times in 2020. If the Fed stays disciplined in economic data, this is likely to come to fruition. However, amidst recent market volatility is concern that the Fed is reducing liquidity too rapidly and raising rates too quickly. If the Fed is dovish in their June 2019 meeting, the USD may depreciate. For these reasons, I also give a "Buy" rating to Invesco DB USD ETF, which is a long-dollar play to reduce currency risk in the portfolio that diminished returns in 2018. The recommendation is to hold the currency hedge for one rebalance period, liquidating ahead of the June 2019 Fed meeting.

The consumer staples sector is defensive in nature, providing low correlation relative to other sectors in the domestic economy as seen by the ETF's low beta. When GDP growth is strong, the desirability for the defensive sector dwindles. According to the Brookings Institute, global trade accounts for about 25% of global GDP and the research group stated that the trade dispute between China and the US is "likely to have significant contagion effects around the world." In October, the International Monetary Fund (IMF) downgraded global GDP growth from 3.9% to 3.7% for 2018 as well as cut its outlook for 19 countries citing the trade dispute between US and China as a headwind. The IMF held its outlook for 2018 US GDP at 2.9% but forecasts a slowdown in growth in 2019 due to the diminishing effect of President Donald Trump's tax cuts. If this slowdown materializes, demand for consumer staples will increase. In addition, the low correlation and defensive nature of the sector amidst global risk is attractive from a portfolio management perspective.

<u>Upside Catalysts:</u>

- **Cost-Reduction Efforts:** Consumer staples companies have conducted aggressive cost-cutting to improve margins. In addition to consumer staples companies having relatively stable revenues throughout the business cycle, these cost-cutting measures provide further defense to downside risks, notably foreign exchange risk and rising input prices.

- **Rising International Middle-Class Population:** While XLP includes only companies in the United States, large cap consumer staples companies are often multi-national firms due to the attractive opportunities in Asia-Pacific and emerging markets. The rising middle-class population in Asia-Pacific results in more consumers of these products over domestic alternatives.

- **Slowdown in Global Growth:** As a defensive sector, investments in consumer staples companies become more desirable during periods of market volatility or slower global growth. The defensiveness of the sector is attractive after the downgrade in global GDP growth.

Downside Risk:

- **Foreign Exchange:** Due to their international exposure, consumer staples firms are affected by currency risk. The appreciation of the dollar is a headwind to these exporting firms; however, firms have been able to offset this negative effect with streamlining manufacturing costs.

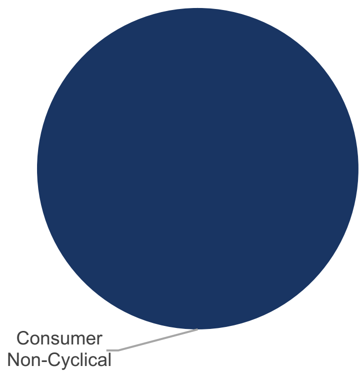
- **Rising Input Prices:** Rising input prices have been a headwind for consumer staples companies, particularly in the first quarter of 2018. Further rises in input prices will be negative for margins going forward.

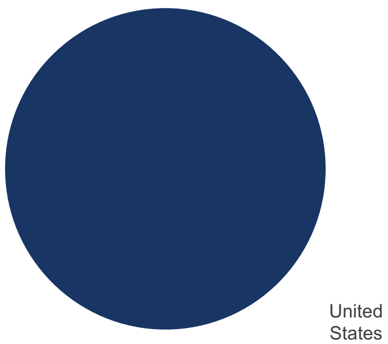
- **Lower Population Growth:** Consumer staples firms benefit from an increased population. Slower population growth throughout the world will slowdown future customer acquisition growth.

Investment Thesis:

I rank XLP with a "Buy" rating. The ETF is a desirable place to weather market volatility and the forecasted lower-growth environment. The low correlation with other sectors provides diversity to the portfolio. In addition, the dividend yield of 2.73% will provide income comparable to US sovereign debt with opportunities for capital gains. With global risks going into 2019, it is prudent to have exposure to XLP.

Appendix:



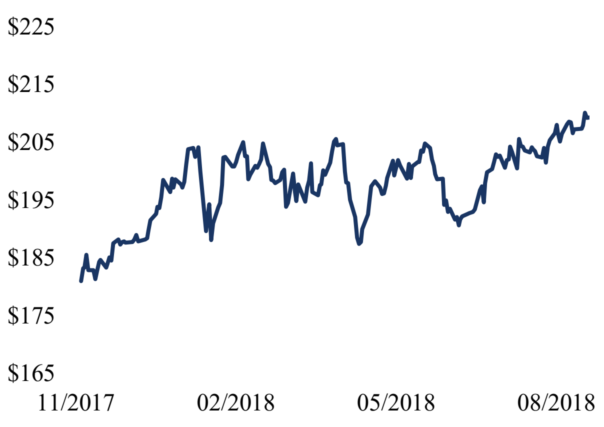


US Select Aerospace & Defense – ITA

Recommendation: Reduce Weight **Current Price: $188.51**

ETF Data (As of 11/23/2018)	
Ticker	ITA
52 Week Price Range	$180-$219
MSCI Index YTD Return	4.03%
YTD Return	1.0%
1 Year Return	5.35%
3 Month Return	-7.92%
Beta	0.95
Expense Ratio	0.43%
Bid-Ask Spread %	0.05%
Average Volume	269K
50 Day Moving Average	202.97
200 Day Moving Average	201.15
NAV	$188.32

1 Year ETF Price Graph



ETF Description:

ITA is an ETF that seeks investment results corresponding generally to the price and yield performance of the Dow Jones US Select Aerospace & Defense Index

Country Breakdown:
- United States – 100%

Sector Breakdown:
- Industrials – 98%
- Consumer Cyclical – 2%

Region and Sector Outlook:

Overall, the world is experiencing a trend of unsynchronized growth with the United States emerging as a leader. Despite strong labor and growth fundamentals so far in 2018, the domestic equity markets have experienced relatively high volatility due to political factors and downward revisions of global growth in the third quarter. GDP growth in the second quarter was strong at 4.2%, followed by above-consensus third quarter growth of 3.5%. The fiscal stimulus delivered through the US "Tax Cuts and Jobs Act" provided a boost to consumer spending in the second and third quarter, however, there is concern this will only have short-term effects that may be neutralized in 2019 by an IRS withholding error. The wealth effect may also have been hurt by the 2018 October market correction. In addition to unsynchronized global growth, varied post-crisis recoveries resulted in a disconnect in monetary policies among developed economies' central banks. US sovereign debt yields significantly higher than other developed economies due to the Fed raising interest rates and slightly higher inflation expectations. A hawkish Fed coupled with superior economic growth resulted in an appreciation of the dollar in 2018. Currently, the Fed is expected to raise rates three times in 2019, and two more times in 2020. If the Fed stays disciplined in economic data, this is likely to come to fruition. However, amidst recent market volatility is concern that the Fed is reducing liquidity too rapidly and raising rates too quickly. If the Fed is dovish in their June 2019 meeting, the USD may depreciate. For these reasons, I also give a "Buy" rating to Invesco DB USD ETF, which is a long-dollar play to reduce currency risk in the portfolio that diminished returns in 2018. The recommendation is to hold the currency hedge for one rebalance period, liquidating ahead of the June 2019 Fed meeting.

The aerospace & defense industry provides opportunities going into 2019. Growing geopolitical risk throughout the world and potential threat from North Korea will provide continued motivation for US government spending in the sector. In addition, Europe is beginning to recognize their military shortcomings and with pressure from Donald Trump to increase defense spending, will likely increase expenditures in this area. This is corroborated by Polish Prime Minister Mateusz Morawiecki statement, "We would like Europe as a whole to strengthen its military potential, but at the same time today we emphasize that the only real guarantor of security in Europe, including the eastern flank of NATO, is the US." Beyond physical threats, cybersecurity is an increasing need as shown by recent data scandals, and the sector is in a position to benefit from this trend.

Upside Catalysts:

- **Current Administration:** US President Donald Trump is an advocate of a strong military, which provides support to government budget allocations to this industry. In addition, Trump is providing pressure to NATO member countries to increase defense spending to 2% of annual GDP.

- **Geopolitical Environment:** The current administration focuses on an "America First" approach to policy. This has resulted in international tensions between the US and foreign countries, with the most threatening likely being North Korea and Iran.

- **Emerging Markets and Europe:** Europe is experiencing mass immigration and potential threats coming from the east. Europe has stated a desire to form a domestic military force to reduce its dependence on the US military. Increased spending in this area will provide opportunities for revenue growth.

Downside Risks:

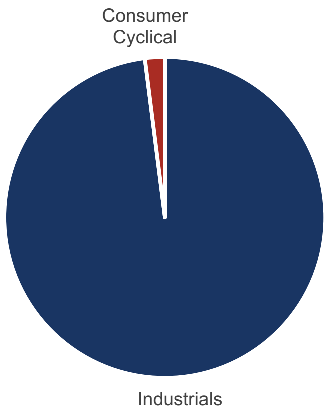
- **Political Uncertainty:** The United States House of Representatives flipped to Democratic control after the 2018 elections. In some past administrations, Democrats preferred a nimbler military, which may be an issue in future budget proposals and if it results in less than forecasted spending in the industry.

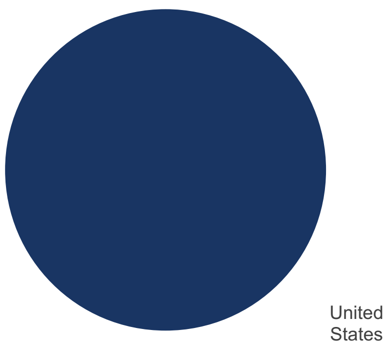
- **Tight Supply Chains:** There is concern that the aerospace & defense sector may be negatively affected by tight supply chains. The concerns stem off manufacturers being unable to provide parts in a timely manner to companies such as Boeing. However, this supports the idea of strong downstream demand.

<u>Investment Thesis:</u>

I rank ITA with a "Hold" rating, recommending to reduce exposure due to its increased allocation in the fund as a result of strong performance. The ETF allows an opportunity to benefit from factors that are often risks to other industries, providing diversification without the sacrifice of low expected returns. In addition, the defensive nature of this industry is attractive from a diversification and portfolio management perspective.

<u>Appendix:</u>





iShares MSCI Netherlands – EWN

Recommendation: Buy **Current Price: $28.26**

ETF Data (As of 11/26/2018)	
Ticker	EWN
52 Week Price Range	$27-$34
MSCI Index YTD Return	4.03%
YTD Return	-10.32%
1 Year Return	-8.89%
3 Month Return	-9.06%
Beta	0.95
Expense Ratio	0.49%
Bid-Ask Spread %	0.04%
Average Volume	230K
50 Day Moving Average	28.93
200 Day Moving Average	30.95
NAV	$28.06

1 Year ETF Price Graph

ETF Description:

EWN is an ETF that seeks to track the investment results of an index composed of Dutch equities.

Country Breakdown:
- Netherlands – 91%
- United States – 9%

Sector Breakdown:

- Consumer Non-Cyclical – 29%
- Technology – 20%
- Financials – 18%
- Industrials – 11%
- Basic Materials – 9%
- Healthcare – 6%
- Communications– 2%
- Energy – 2%
- Real Estate – 1%
- Consumer Cyclical – 1%

Region and Sector Outlook:

After seeing the economy rising to positive-zone growth in the past two years, Europe is expected to continue delivering growth in the next year. However, finding a suitable investment option for the region is challenging, due to country-specific risks that a lot of the major economies face. Specifically, France faces multiple labor strikes and sluggish domestic demand; Spain deals with one of the highest unemployment rates in the EU, a structural unemployment that would require a long-term solution; Italy became the second-most indebted country in the region, and sends negative sentiment to investors as its current government is seen as fiscally irresponsible. Between these options, the Netherlands rises as one of the more stable economies within the developed countries in Europe. The Dutch economy faced uncertainty from the global trade tension in the past year, and yet still delivered a strong economic performance in 2018.

Notable sectors in the region are aerospace and defense and technology. Aerospace and defense is poised to increase as European countries attempt to reach their target NATO defense contribution while technology development in various aspects has become a race around the world.

Upside Catalysts:

- **Strong Economic Fundamentals:** Household expenditure picked up pace and resilient growth in goods exports contributed positively to economic growth despite accelerating import growth and lingering global trade tensions. Looking at the final quarter, consumer confidence edged down in October but remained elevated. This, coupled with low unemployment levels, bodes well for the continuation of healthy household expenditure growth.

- **Strong Domestic Demand:** The Dutch economy is likely to continue growing at a robust pace for the rest of 2018 and into the next year, driven by solid domestic demand. Private consumption is strong and residential investment remains very dynamic. Favorable financial conditions have supported both consumption and business investment growth. However, the contribution of net exports is expected to moderate on higher oil prices and slower world trade.

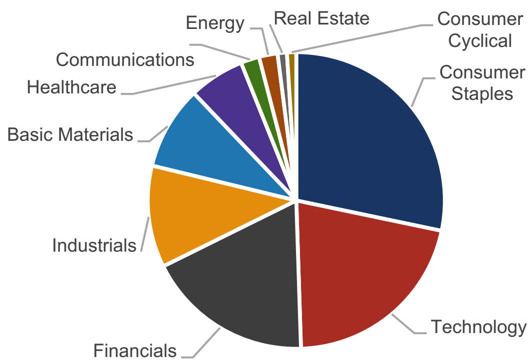
Downside Risk:

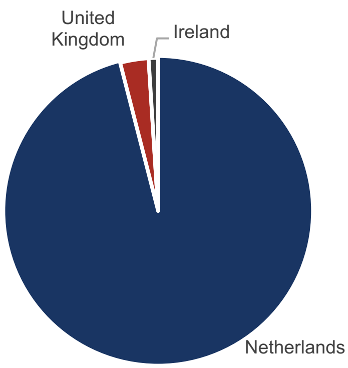
- **Eurozone Downturn:** Exports play an important role in the economic growth of the Netherlands. Therefore, any macro trend that hurts the global economy would be a considerable headwind for the Dutch economy. Currently, uncertainty regarding the future trade relationship between the EU and the United Kingdom from Brexit remains a downside risk as is a possible increase in tensions between the EU and the United States.

Investment Thesis:

We rank EWN as a “Buy” rating. The ETF presents an opportunity to invest in larger-cap companies within the Netherlands. Europe is an economically developed region with a lot of attractive investment options, but currently, most countries are facing specific challenges of their own, those that would make them risky investment options. The Netherlands is one of the more developed economies in the region without any notable issues, both economic and political, that could hinder economic growth. This ETF will give us exposure to the European region and allow us to capture returns without facing riskier investment options from other countries in the region.

Appendix:


Energy
Real Estate
Consumer Cyclical
Communications
Consumer Staples
Healthcare
Basic Materials
Industrials
Technology
Financials


United Kingdom
Ireland
Netherlands

iShares MSCI Germany – HEWG

Recommendation: Buy **Current Price: $25.55**

ETF Data (As of 11/26/2018)	
Ticker	EWZ
52 Week Price Range	$25-$30
MSCI Index YTD Return	4.03%
YTD Return	-10.41%
1 Year Return	-10.73%
3 Month Return	-9.23%
Beta	0.94
Expense Ratio	0.53%
Bid-Ask Spread %	0.04%
Average Volume	236K
50 Day Moving Average	26.20
200 Day Moving Average	27.58
NAV	$25.10

1 Year ETF Price Graph

ETF Description:

HEWG is an ETF that seeks to track the investment results of an index composed of German equities.

Country Breakdown:

- Germany– 98%
- United States – 1%
- Netherlands – 1%

Sector Breakdown:

- Consumer Cyclical – 18%
- Financials – 16%
- Industrials – 14%
- Technology – 12%
- Healthcare – 11%
- Basic Materials – 10%
- Communications – 7%
- Consumer Non-Cyclical – 4%
- Real Estate – 3%
- Utilities – 3%
- Other – 1%
- ETF Cash Component - 1%

Region and Sector Outlook:

After seeing the economy rising to positive-zone growth in the past two years, Europe is expected to continue delivering growth in the next year. However, Europe's economic growth projection has been subdued due to the global trade tension that comes from the US foreign trade policies. This serves as a headwind for the economies of the region going forward since the US is one of the most important trading partners of European countries, where most automobile products are exported to the US. To address the issue, the EU has taken steps to ensure it does not rely heavily on the US by signing new trade agreements with Japan and other Asian countries. On the political front, far-right parties are gaining traction, with notable examples being Brexit and the rise of the far-right party in Germany as Angela Merkel will not re-run for the chairwomanship of her party in 2021.

Notable sectors in the region are aerospace and defense and technology. Aerospace and defense is poised to increase as European countries attempt to reach their target NATO defense contribution, while technology development in various aspects has become a race around the world.

Upside Catalysts:

- **Strong Economic Fundamentals:** Fundamental indicators of the economy all point towards a strong, if not steady, performance. Despite both domestic and global uncertainties, Germany still sees positive growth in the next few years. Major factors that support this trend is a decreasing unemployment rate and higher consumer confidence that helps to boost spending.

- **Strong Domestic Demand:** GDP growth is driven by domestic demand, with private and public consumption and fixed investment expanding. This factor is extremely important because the current global economic uncertainty has slowed down a lot of major economies, so a strong domestic demand acting as the main driver of economic growth will be vital to Germany's economic performance in the next year.

Downside Risk:

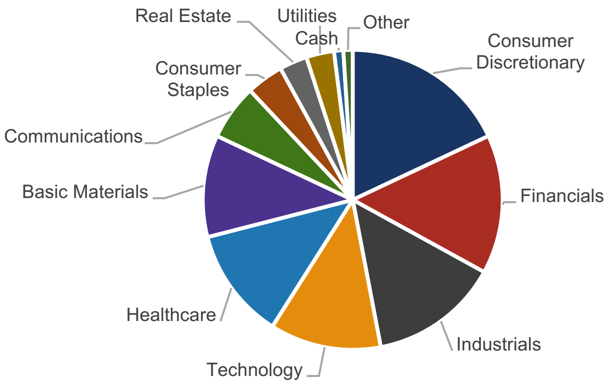
- **Global Trade Tension:** US foreign trade policies have been creating uncertainty for the global economy as we head into 2019. As a result, consumer confidence around the world has somewhat subdued, hurting Germany's exports, especially automobile products – one of the most important export goods for Germany. A prolonged global uncertainty could further hurt German's exports and pose a considerable headwind to the economy going forward.

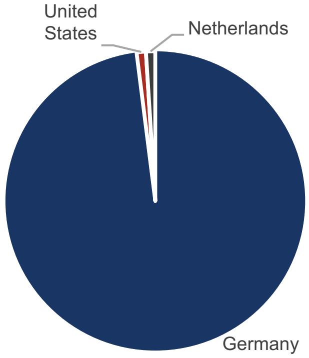
- **Political Instability:** The political scene in Germany, and in Europe as a whole, could be shaken up in the near future due to Angela Merkel's departure as the chairwoman of her party's coalition in 2021. The German political scene is divided right now, with the far-right party gaining traction in the past year. Given Germany's great impact on other countries in the region, a trend towards nationalism in Germany, coupled with Brexit, could further spark nationalistic sentiments in other countries, which could prove to be detrimental to the economy.

Investment Thesis:

We rank HEWG as a "Buy" rating. The ETF presents an opportunity to invest in larger-cap companies within Germany. Europe has been seeing economic recovery in the past few years, and Germany is best positioned to capture the economic growth of the region in the near future while at the same time is exposed to less country-specific risks compared to other major European economies.

Appendix:


Real Estate
Utilities
Cash
Other
Consumer Discretionary
Consumer Staples
Communications
Basic Materials
Financials
Healthcare
Technology
Industrials


United States
Netherlands
Germany

Emerging Markets Internet & E-commerce ETF – EMQQ

Recommendation: Hold **Current Price: $28.73**

ETF Data (As of 11/23/2018)	
Ticker	EMQQ
52 Week Price Range	$29.5-$43.5
MSCI Index YTD Return	4.03%
YTD Return	-26.80%
1 Year Return	-24.08%
3 Month Return	-21.34%
Beta	1.44
Expense Ratio	0.86%
Bid-Ask Spread %	0.10%
Average Volume	108K
50 Day Moving Average	29.28
200 Day Moving Average	35.32
NAV	$27.94

1 Year ETF Price Graph

ETF Description:

The Emerging Markets Internet & E-commerce ETF seeks to provide investment that correspond to the performance of the EMQQ index. The EMQQ Index provides diversified exposure to the Internet and E-commerce sectors of Emerging and Frontier markets in Asia, Latin America, Africa, the Middle East and Eastern Europe.

Country Breakdown:

- China – 63%
- South Korea – 11%
- South Africa – 8%
- Argentina – 7%
- Russia – 7%
- Germany– 3%

Sector Breakdown:

- Financials – 3%
- Industrials – 6%
- Consumer Cyclical – 5%
- Other – 3%
- Communications – 2%
- Technology – 1%

Region and Sector Outlook:

The rapid disruption of technology and internet penetration has led to an enormous growth in the number of smartphones users in Asia. Two in three Twitter users in Asia browse on mobile devices and make mobile payments. Rapid mobile phone adoption and rising internet penetration have had a positive effect on Asia's e-commerce industry. E-commerce users in Asia are expected to exceed the 2 billion mark by 2022. Furthermore, strong economic growth, rising middle class, and increasing consumer confidence will lead to a growth in e-commerce sales. The global middle class is on the rise. It is expected to increase to 3.2 billion by 2020 and 4.9 billion by 2030. Asia is expected to represent 66.0% of the global middle-class population and 59.0% of middle-class consumption with more than two-thirds coming from India and China. The developing world's "emerging middle class" is an engine of growth, particularly in the largest developing countries such as China and India.

Upside Catalysts:

- **Booming Internet Economy:** Google predicts a $200 billion internet economy in the Southeast Asia region by 2025. Southeast Asian countries are on a solid foundation for accelerated digital growth. Southeast Asia's internet sector has generated value surpassing the gross domestic product of more than 100 countries in the world in just three years. Furthermore, 350 million internet users are living in the region. Investor confidence is also on the rise as Southeast Asian tech companies managed to raise $24 billion since 2015.

- **Untapped Markets:** Emerging countries in the Asia Pacific region, such as Indonesia, Vietnam, Thailand, Malaysia, and the Philippines still have relatively low internet penetration compared to Japan or South Korea. For instance, smartphone adoption in Indonesia is expected to hit 67.0% by 2020. Indonesia also has 130 million internet users with growing accessibility of mobile internet. Thus, there is still plenty of room for the technology/E-commerce industry to grow and gain market share as infrastructure is improving in these countries. These countries are also growing rapidly supported by better global trade demands, which leads to growing middle class segment. As people have more disposable income, E-commerce/technology industry in Asia Pacific has a positive outlook.

- **Changing Lifestyle:** We all realize that nowadays everyone wants quicker and simpler methods. People in China and India prefer to shop online rather than waiting in queue for hours to shop. Mobile payments are providing people with more efficient and quicker ways to pay for their purchases. Also, people feel safer and more secure by not carrying cash in their pockets.

Downside Risk:

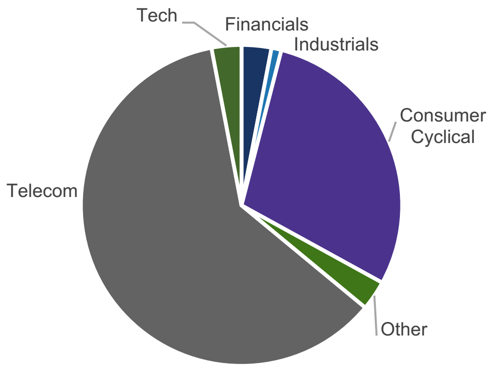
- **Sluggish Economy:** Although this industry is stealing market share from traditional retailers, it is still vulnerable to an economic downturn. The ongoing US-China trade war creates major concerns for investors as Asia's economic conditions face uncertainty at this point. US has imposed tariffs on more than $250 billion worth of Chinese goods, resulting in a decline of Chinese equities and depreciation of the Chinese Yuan.

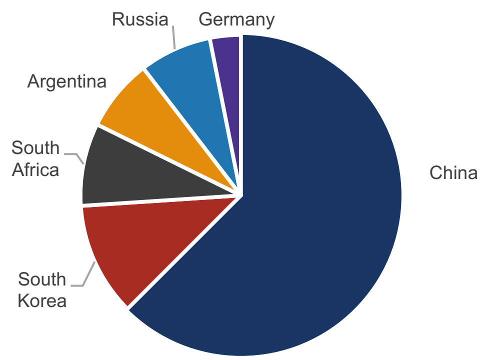
- **Consumption Downgrade:** China experienced its slowest growth rate since the Financial Crisis. Analysts say that the country is going through 'consumption downgrade' as consumers are spending less than what they used to. Having said that, we believe this is overblown due to trade-war pessimism.

Investment Thesis:

We rank EMQQ as a "Hold" rating. The ETF presents an opportunity to invest in emerging markets e-commerce and technology companies. The internet economy is booming in Asia and is expected to rise till 2025. There are concerns around trade-wars but the pessimism will not be permanent. China has a growing middle-class population who will continue to consume domestic and foreign goods.

Appendix:



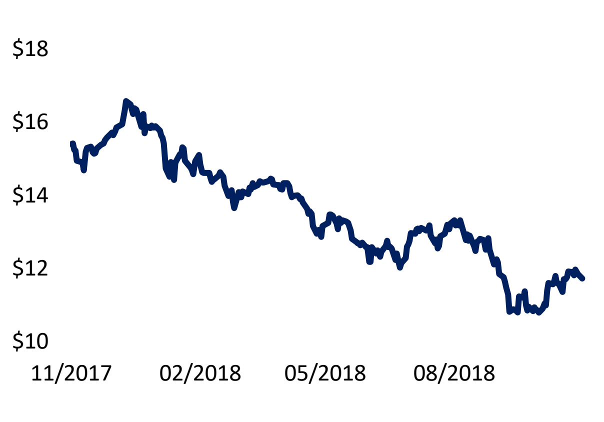


Columbia India Infrastructure – INXX

Recommendation: Hold **Current Price: $11.76**

ETF Data (As of 11/26/2018)	
Ticker	INXX
52 Week Price Range	$10.74-$16.79
MSCI Index YTD Return	4.03%
YTD Return	-30.54%
1 Year Return	-28.95%
3 Month Return	-15.88%
Beta	1.36
Expense Ratio	0.76%
Bid-Ask Spread %	1.35%
Average Volume	7K
50 Day Moving Average	11.55
200 Day Moving Average	13.02
NAV	$11.14

1 Year ETF Price Graph



ETF Description:

INXX seeks investments that correspond to the Indxx India Infrastructure Index. The index is a 30-stock free-float adjusted market capitalization-weighted index designed to measure the market performance of companies in the infrastructure industry in India.

Country Breakdown:

- India – 96%
- United States – 3%
- Germany – 1%

Sector Breakdown:

- Basic Materials – 33%
- Industrials – 24%
- Utilities 19%
- Communications – 12%
- Consumer Cyclical – 4%
- Energy – 3%
- Other – 2%
- Real Estate – 1%
- ETF Cash Component – 1%

Region and Sector Outlook:

In the second quarter of 2018, India's GDP grew at 8.2% surpassing China's growth figures. India became the fastest growing major economy as it attained its highest growth rate since the 2016-17 fiscal year. Infrastructure will play a vital role in India's growth narrative, primarily due to the rapid population growth. The government is keen on improving roads and highways, especially in the underdeveloped northeast region. Additionally, the upcoming General Elections is a huge positive as governments tend to take on massive infrastructure projects before election. That being said, Indian rupee and Indian equities are highly volatile. The former is highly correlated to oil prices and was one of the worst preforming currencies when oil prices were on the rise. However, the Indian rupee now looks stable due to falling oil process.

Upside Catalysts:

- **Government's Top Priority:** Narendra Modi, the current prime minister of India, puts a lot of focus on infrastructure projects. The government seeks to develop better domestic reach and connectivity to improve economic growth. It is expected to invest heavily in the infrastructure sector, mainly highways, renewable energy, and urban transport. Additionally, the government allocated $92.22 billion for the infrastructure sector in the 2018-19 Union Budget.

- **Key Sector for Economic Growth:** Infrastructure is one of the key drivers for long term sustainability and high economic growth. The increased spending in this sector has a multiplier effect on overall economic growth as it necessitates industrial growth and manufacturing.

- **Upcoming Elections:** Governments tend to take on massive infrastructure projects before elections. Looking at historical data, INXX has performed well during the year of elections and this trend is expected to continue. On November 19, India's Ministry of Home Affairs announced a $35 billion project for constructing roads and buildings in Arunachal Pradesh and Sikkim

Downside Risk:

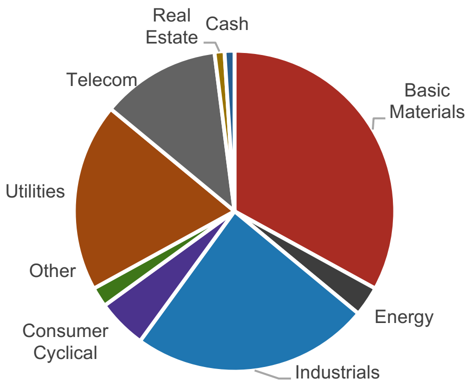
- **Muted Private Sector Investments:** Private capex continues to be muted in the past few months. This is mainly due to reduction in sentiments because of impending elections and emerging market uncertainty. Having only the public investment cylinder firing is not good enough. Accelerating private sector investments is an essential complementarity.

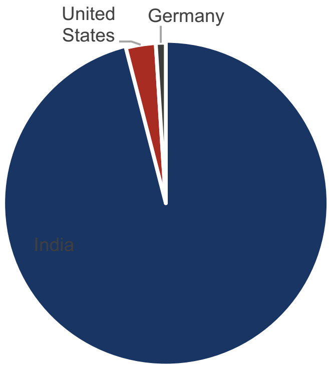
- **Market Uncertainty:** There is a lot of uncertainty in Indian markets primarily due to parliamentary and state elections. Moreover, the Indian rupee was one of the worst preforming currencies, but low crude oil prices are expected to limit any weaknesses in the rupee. That being said, political uncertainty coupled with capital outflows from emerging markets can put a downward pressure in the rupee.

Investment Thesis:

We rank INXX as a "Hold" rating. The ETF presents an opportunity to invest in infrastructure companies within India. The Government of India is keen on improving infrastructure in India and will take on infrastructure projects before the elections. Furthermore, the Indian rupee has strengthened due to falling oil prices. Having said that, private investments remain muted due to uncertainty in equity markets.

Appendix:


Real
Estate
Cash
Telecom
Basic
Materials
Utilities
Other
Energy
Consumer
Cyclical
Industrials


United
States
Germany
India

Portfolio Analysis

University of Richmond ETF Fund

Attribution Model |

An attribution model is one that attempts to explain the performance of a portfolio over a benchmark. As investors in the ETF space, we make a lot of decisions that will have our performance differ from our benchmark, including the asset, region, and sector allocation, as well as the ETFs we select.

To construct this model, we looked up each ETF in our portfolio on ETF Database and figured out the region and sector breakdown. It is then possible to multiply the region and sector breakdown by the value of the ETF and sum them up, to get the total value of our region and sector. Thus, we can use our weightings and returns for each region and sector, and compare them to the benchmark, which as a reminder, was the broad-based ACWI Equity ETF.

Below are the attribution model results:

Attribution Model											
Benchmark											
Returns	Equity	Fixed Income									
	13.76%	1.66%									
Asset Weight	Equity	Fixed Income									
	70%	30%									
Equity Sector Weight	Basic Materials	Consumer Cyclical	Financial Services	Real Estate	Communication Services	Energy	Industrials	Technology	Consumer Defensive	Healthcare	Utilities
	4.80%	11.13%	18.57%	2.93%	3.91%	6.55%	10.07%	17.89%	8.91%	12.05%	3.19%
Return on Sectors	Basic Materials	Consumer Cyclical	Financial Services	Real Estate	Communication Services	Energy	Industrials	Technology	Consumer Defensive	Healthcare	Utilities
	11.91%	15.02%	11.05%	3.84%	11.94%	11.12%	15.61%	24.34%	10.17%	0.61%	6.26%
Region Weighting	North America	Latin America	Europe	Asia - Pacific							
	57.73%	1.47%	20.96%	19.84%							
Return on Region	North America	Latin America	Europe	Asia - Pacific							
	14.12%	0.26%	11.44%	9.83%							
ETF Fund Portfolio											
Return	13.35%										
Asset Weighting	Equity	Fixed Income									
	100%	0%									
Equity Sector Weight	Basic Materials	Consumer Cyclical	Financial Services	Real Estate	Communication Services	Energy	Industrials	Technology	Consumer Defensive	Healthcare	Utilities
	5.42%	7.24%	13.71%	1.02%	1.76%	1.34%	18.22%	20.34%	11.43%	9.20%	10.34%
Return on Sectors	Basic Materials	Consumer Cyclical	Financial Services	Real Estate	Communication Services	Energy	Industrials	Technology	Consumer Defensive	Healthcare	Utilities
	5.66%	11.83%	11.15%	8.40%	6.98%	7.23%	16.88%	21.87%	11.06%	14.24%	9.54%
Region Weighting	North America	Latin America	Europe	Asia - Pacific							
	36.57%	13.80%	25.18%	24.45%							
Return on Region	North America	Latin America	Europe	Asia - Pacific							
	15.58%	2.44%	15.07%	15.18%							

Passive return (70/30 index return)	9.75%
Active return (our portfolio)	13.26%
Excess return	3.51%

Passive return, passive asset allocation (70/30)	9.75%
Passive return, active asset allocation (100% equities)	13.24%
Excess return due to asset allocation	3.50%

Passive return, active asset allocation, passive region allocation	13.24%
Passive return, active asset allocation, active region allocation	10.46%
Excess return due to region allocation	-2.78%

Passive return, active asset allocation, active region allocation	10.46%
Active return, active asset allocation, active region allocation	13.26%
Excess return due to ETF Selection	2.79%

As depicted in the previous section, and displayed in the first box, our performance above the benchmark thus far is 3.51%. We then proceed to determine where that excess return is coming from. Whether is it from overweighting one sector or region or is our research into individual ETFs that is paying off. The following boxes show that our asset allocation weighting contributes 3.50% to our excess return over the benchmark. This is most likely caused by our high weighting in equities this year, together with the low yield environment for fixed income globally. Our region allocation contributes -2.78% to excess return. This is likely driven by our overweighting in emerging markets compared to the benchmark. The emerging markets experienced a tough time last year when most developing markets, especially Argentina and Turkey, were exposed to country-specific risks that later spiraled into a negative investor sentiment that caused a dip in valuation across all Emerging Markets. Lastly, the difference between our active sector weight using passive returns and the actual ETF Fund returns, isolates our actual ETF selection contribution. This part of our analysis contributed an excess return of 2.79%, which is very encouraging and shows the group overall selected effective ETFs.

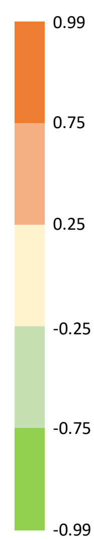
Correlation Matrix

To evaluate how the portfolio's ETFs are related, below is our portfolio's correlation matrix. This analysis helps the fund get insight on how correlated our ETF holdings are. One fundamental problem with ETF investing is the high correlation between securities as ETFs are inherently baskets of individual stocks and some are bound to have similar stocks within them, even if the portfolio is geographically diverse. Even an ETF focused around the Netherlands was found to include some relationship with Latin America, and vice versa. This could be a result of globalization and increased inter-relationship of global financial markets. While it is impossible to avoid these issues completely, a correlation matrix can enable us to reveal if one ETF is highly correlated with our other holdings, and thus is redundant.

The correlation matrix was constructed using daily returns beginning with February 28, 2014 and ending with February 28, 2019. One thing that immediately stands out about the matrix is that ACWI (our benchmark) has the most consistently high correlations with the rest of the ETFs in the portfolio. This explains why our portfolio in the charts in previous sections track it very well. While this is not a glaring problem, as we aim to track global returns, it gives a good challenge to isolate small opportunities to gain excess return over ACWI. In the last rebalance, we have decided to further diversify our portfolio by adding several ETFs that are focused on low-volatility sectors, such as utilities and consumer staples, after recognizing our sizable exposure to the technology sector, which is rather volatile in nature. In addition, we also decided to invest in a US Dollar ETF (UUP) to reduce the negative impact that comes from a strengthening US Dollar given our portfolio's considerable exposure in the emerging markets.

Below is the portfolio's correlation matrix:

	ACWI	EWZ	ECH	BOTZ	EMQQ	HEWJ	INXX	EWN	HEWG	ICLN	ITA	FINX	XLP	KIE	VPU	IHI	UUP
ACWI	1.00																
EWZ	0.42	1.00															
ECH	0.52	0.63	1.00														
BOTZ	0.89	0.16	0.43	1.00													
EMQQ	0.76	0.42	0.45	0.80	1.00												
HEWJ	0.65	-0.04	0.21	0.67	0.48	1.00											
INXX	0.41	0.32	0.37	0.33	0.42	0.20	1.00										
EWN	0.85	0.33	0.50	0.79	0.74	0.60	0.41	1.00									
HEWG	0.70	0.12	0.27	0.66	0.51	0.66	0.36	0.73	1.00								
ICLN	0.70	0.48	0.61	0.54	0.69	0.38	0.47	0.64	0.50	1.00							
ITA	0.78	0.21	0.37	0.76	0.57	0.56	0.13	0.60	0.57	0.48	1.00						
FINX	0.81	-0.12	0.19	0.83	0.68	0.52	0.10	0.66	0.49	0.43	0.72	1.00					
XLP	0.55	0.30	0.24	0.41	0.34	0.27	0.26	0.52	0.37	0.35	0.39	0.35	1.00				
KIE	0.74	0.19	0.21	0.63	0.44	0.65	0.24	0.65	0.54	0.44	0.75	0.55	0.47	1.00			
VPU	0.20	0.16	0.11	0.23	0.03	-0.02	0.29	0.21	0.10	0.24	0.08	0.23	0.55	0.23	1.00		
IHI	0.76	0.14	0.20	0.76	0.56	0.48	0.35	0.62	0.58	0.50	0.65	0.79	0.48	0.58	0.26	1.00	
UUP	-0.32	-0.51	-0.40	-0.43	-0.39	0.20	-0.20	-0.31	0.22	-0.28	-0.07	-0.29	-0.13	-0.07	-0.05	-0.18	1.00



Markowitz Efficient Frontier |

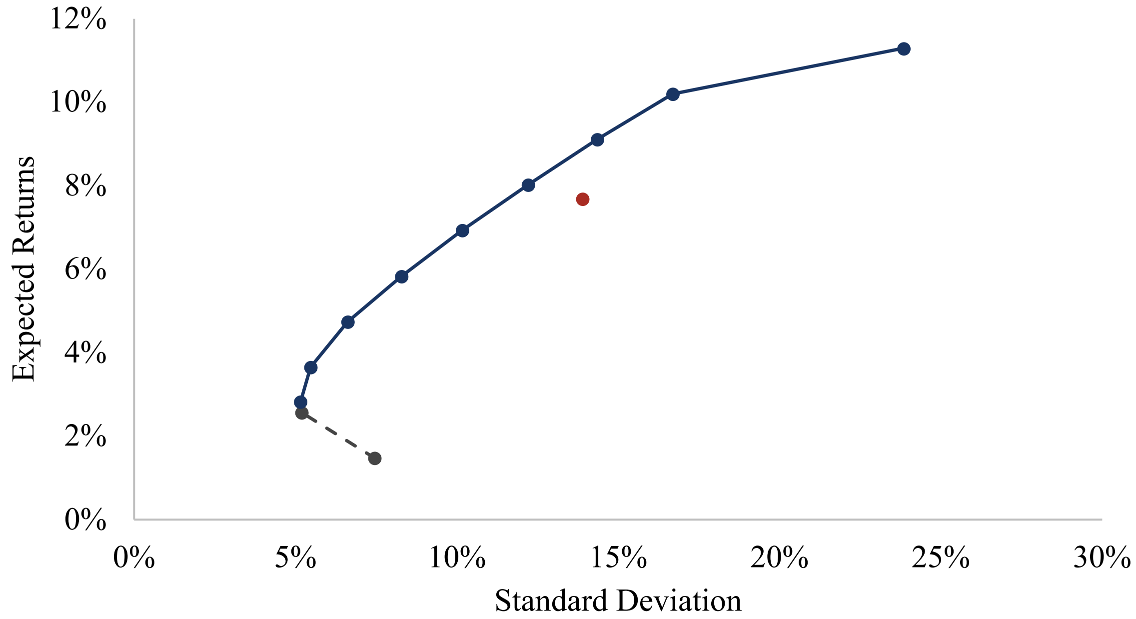
A Markowitz Efficient Frontier is another model the fund applies to gain insight into how much return the portfolio achieves relative to the amount of risk we are taking on. This is a back-testing method; monthly returns were calculated for 16 of our ETFs of which data was available from February 28, 2014 to February 28, 2019. Standard deviations and average returns were calculated given this data and thus the frontier could be constructed.

The frontier is constructed using the solver tool in Excel. It solves for weights in a hypothetical portfolio that minimizes the standard deviation to achieve a set amount of expected return. Thus, the portfolios on the frontier are dubbed "efficient." As seen from the graph, the ETF fund's portfolio is fairly close to the frontier, with the magnitude of the difference between the optimal return and the actual return being approximately 1%.

Given the amount of risk the fund is taking, there is a portfolio that exists that could give us about a percent more expected monthly return. Additionally, if we wanted to achieve the same amount of expected return, there is a portfolio that exists that would get us that return with about a lower percent of annualized standard deviation.

There are vital limitations to the model. As noted above, this is a back-testing method that goes three years in the past to construct the frontier. The past does not always predict the present, but there are good insights that can be made from looking at how the efficient portfolios could be constructed.

The following is our Markowitz Efficient Frontier:



Special Projects

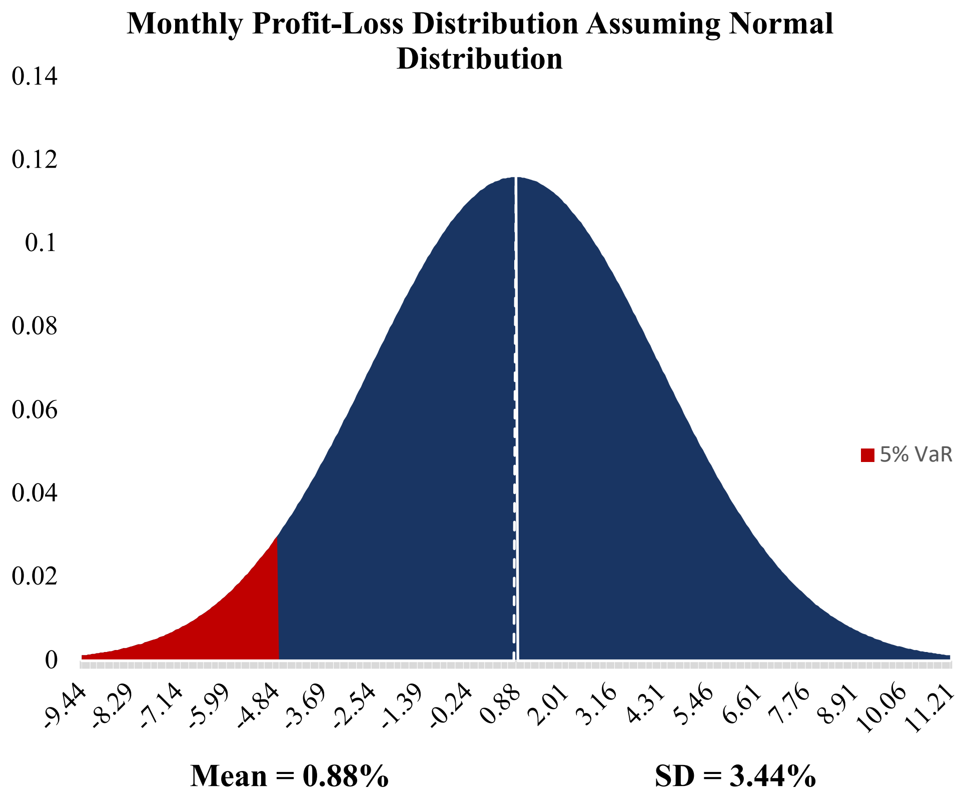
This year, we focused our efforts on strengthening our portfolio's risk assessment. We attempted to appropriately address the concerns raised by the advisory board during past annual presentations. The method chosen for this evaluation is an automated portfolio Value-at-Risk (VaR) model, which estimates the expected maximum loss with a given confidence, making different assumptions about the profit-loss distribution of the portfolio returns. This project was developed after the portfolio's rebalance in December 2018 to provide a quantitative analysis of the risk taken and use this information moving forward when deciding on investments.

Various measures corresponding to VaR were used in order to provide a complete assessment of the portfolio. The first one was the monthly VaR of the portfolio alongside each ETF's contribution to the overall measure. These figures represent the additional risk provided by each item in our portfolio in absolute terms. Secondly, we analyzed the percentage contribution of each ETF to the overall portfolio VaR and contrasted each ratio against the ETF's weight in the portfolio. We made a note of those ETFs which contributed a greater percentage of risk to the overall portfolio than their corresponding weight. Going forward, this measure will be useful in determining the ideal percentage allocation to each component, considering that one of our goals is to minimize risk exposure while accentuating returns. These estimations were obtained by fitting a distribution (through Maximum Likelihood Estimations) to the observed profit-loss returns of the portfolio based on historical data and using 95% as our confidence level. Moreover, all of these results were compiled into tables for easier analysis, organized from greatest to smallest contribution to Value-at-Risk.

One of our most successful endeavors with respect to this project was the ability to turn these results into a visual representation of the portfolio profit-loss distribution, as seen in the figures below. After calculating the mean and standard deviation of the portfolio holdings and assuming normality, we graphed the corresponding profit-loss distribution and pointed out the loss percentage corresponding to VaR or maximum expected monthly loss. This has served as a visual guideline for both the members of the fund, and the attendees of the annual presentation, and has cleared some of the concerns regarding risk assessment.

Lastly, we have emphasized the necessity to reproduce similar analyses in the upcoming years. To this end, we have developed general code that will allow to update the dates of the results, add and remove ETFs, change the weights in the portfolio and automatically create VaR measures and tables summarizing the results. This automation will save us time and effort reproducing results in the future and will allow for the continued use of Value-at-Risk measures in order to quantitatively assess risk in our portfolio. Furthermore, data collection has been automized and self-developed software will be used to quickly calculate metrics to optimize our portfolio.

The following are the results from our VaR analysis:



5% Value-at-Risk			
Ticker	**Component Contribution**	**Percent Contribution**	**Portfolio Weight**
BOTZ	1.01%	20.13%	10.54%
EMQQ	0.57%	11.28%	6.95%
ECH	0.53%	10.58%	8.67%
EWN	0.47%	9.36%	8.15%
HEWG	0.39%	7.76%	8.48%
ICLN	0.31%	6.21%	5.62%
ITA	0.30%	6.07%	5.77%
FINX	0.30%	6.05%	5.55%
HEWJ	0.26%	5.24%	4.86%
IHI	0.25%	4.99%	5.43%
XLP	0.22%	4.36%	6.78%
INXX	0.21%	4.26%	4.01%
KIE	0.19%	3.86%	5.01%
VPU	0.05%	1.00%	3.87%
EWZ	0.00%	-0.08%	4.77%
UUP	-0.05%	-1.07%	4.56%
Portfolio VaR		5.01%	
Worst Monthly Loss (out of $25,000)		$1,252.50	

Future Rebalance

Future Rebalance

While the fund's second semester is typically focused on analyzing the portfolio and reviewing our previous decisions, we also spent time updating our macroeconomic research to account for any new events that we felt could impact our portfolio moving forward.

Since the initial analysis and the fund's first rebalance in January, several important events have occurred around the globe with the most prominent one to our current holdings being a change in monetary policy expectations, specifically in the United States. When our regional expectations were formed in October, the U.S. Federal Reserve was expected to continue its monetary tightening path. The Fed was expected to raise the Federal Funds Rate three times in 2019, and two times in 2020 in increments of likely 25 basis points. The Fed "Dot Plot" suggested a Federal Funds Rate of 3.125% in 2020, and 3.375% in 2021. However, persistently low inflation and slowing global growth has motivated the Fed to take a more dovish stance. Currently, the Fed is not planning on raising interest rates in 2019, potentially making a cut in the latter half of the year.

Our investment thesis for the U.S. insurance sector was partly dependent on higher interest rates that would improve profitability, as well as Insurtech, technological innovations designed to improve the current insurance industry model. While we still believe Insurtech will drive value in the industry, our financial technology (fintech) ETF gives us the exposure we want to technological innovations that will drive future efficiency and productivity in the U.S. The capital gained from the sale of the U.S. insurance ETF will be equally split in other current holdings, Vanguard Utilities ETF (VPU) and iShares Dow Jones U.S. Medical Devices ETF (IHI).

<u>As a result, the following were the fund's rebalancing decisions for this semester:</u>

- Sell our entire stake in U.S. Insurance (KIE)
- Increase our US Utilities ETF (VPU) position by 2.88% to 6.35%
- Increase our US Medical Devices ETF (IHI) position by 2.54% to 7.93%

As we considered these changes, we kept in mind that numerous adjustments could raise the funds expense ratio and thus only performed the most vital position trades.

Sources

Sources Used

In the ETF Fund, we only utilize sources that are free and those that are readily available to the entire campus. The following are the resources we utilize to conduct our analysis.

Finance/Economy Focused Websites:

Market Realist - http://marketrealist.com/

The Economist - http://www.economist.com/

Wall Street Journal - https://www.wsj.com/

Investopedia - http://www.investopedia.com/

Daily Shot - http://blogs.wsj.com/dailyshot/

Economy.com - https://www.economy.com/

Bloomberg Businessweek - https://www.bloomberg.com/businessweek

Bloomberg - https://www.bloomberg.com/

Forbes - https://www.forbes.com/

Market Watch - http://www.marketwatch.com/

Yahoo Finance - https://finance.yahoo.com/

Google Finance - https://www.google.com/finance

Barron's - http://www.barrons.com/

Planet Money - http://www.npr.org/sections/money/

Business Insider - http://www.businessinsider.com/

Blackrock Blog - https://www.blackrockblog.com/

Economist View - http://economistsview.typepad.com/economistsview/

Bloomberg TV - https://www.bloomberg.com/live

ETF Focused Websites

ETF.com - http://etf.com/

ETFDatabase - http://etfdb.com/screener/

DATA

IMF - http://www.imf.org/external/datamapper/

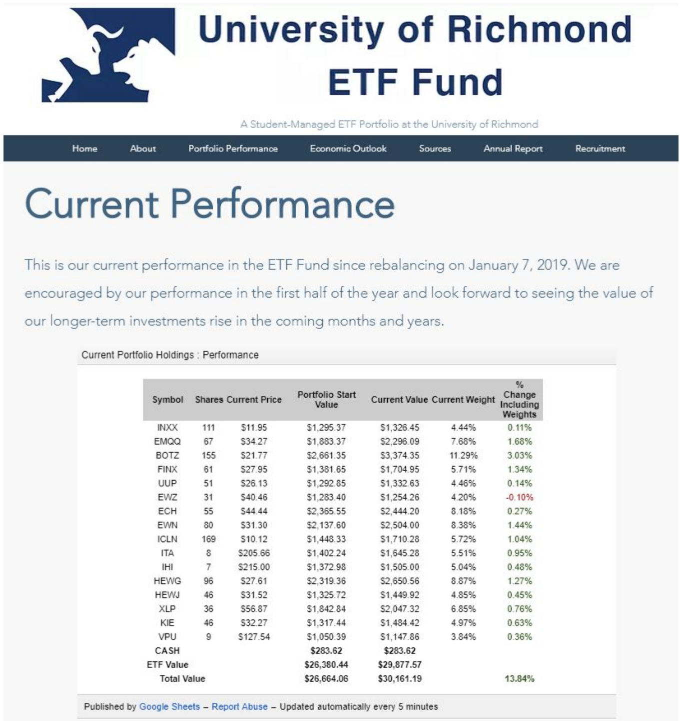
Bloomberg Terminals - Lessing Trading Floor

Website

Website

The fund recently launched a website to provide complete information about our research and analysis throughout the year. The fund's performance, macroeconomic analysis, published reports, and recruitment information can now be found in one central location, and all students can learn more about our process of selecting ETFs.

Please visit us at: **www.URETF.com**



University of Richmond
ETF Fund
A Student-Managed ETF Portfolio at the University of Richmond

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Current Performance

This is our current performance in the ETF Fund since rebalancing on January 7, 2019. We are encouraged by our performance in the first half of the year and look forward to seeing the value of our longer-term investments rise in the coming months and years.

Current Portfolio Holdings : Performance

Symbol	Shares	Current Price	Portfolio Start Value	Current Value	Current Weight	% Change Including Weights
INXX	111	$11.95	$1,295.37	$1,326.45	4.44%	0.11%
EMQQ	67	$34.27	$1,883.37	$2,296.09	7.68%	1.68%
BOTZ	155	$21.77	$2,661.35	$3,374.35	11.29%	3.03%
FINX	61	$27.95	$1,381.65	$1,704.95	5.71%	1.34%
UUP	51	$26.13	$1,292.85	$1,332.63	4.46%	0.14%
EWZ	31	$40.46	$1,283.40	$1,254.26	4.20%	-0.10%
ECH	55	$44.44	$2,365.55	$2,444.20	8.18%	0.27%
EWN	80	$31.30	$2,137.60	$2,504.00	8.38%	1.44%
ICLN	169	$10.12	$1,448.33	$1,710.28	5.72%	1.04%
ITA	8	$205.66	$1,402.24	$1,645.28	5.51%	0.95%
IHI	7	$215.00	$1,372.98	$1,505.00	5.04%	0.48%
HEWG	96	$27.61	$2,319.36	$2,650.56	8.87%	1.27%
HEWJ	46	$31.52	$1,325.72	$1,449.92	4.85%	0.45%
XLP	36	$56.87	$1,842.84	$2,047.32	6.85%	0.76%
KIE	46	$32.27	$1,317.44	$1,484.42	4.97%	0.63%
VPU	9	$127.54	$1,050.39	$1,147.86	3.84%	0.36%
CASH			**$283.62**	**$283.62**		
ETF Value			**$26,380.44**	**$29,877.57**		
Total Value			**$26,664.06**	**$30,161.19**		**13.84%**

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Past Managers

2015-2016

Samantha Shalom (GM)

Hunter Chambers

James Curtin

Divij Dugar

Alex Lawson

Langyue Liu

Austin Stahl

Scott Summers

Jay Tekwani

2016-2017

Alex Lawson (GM)

Benjamin Barad

Julia Campbell

Zezhong Chen

John Lawrance

Killian McGiboney

Si Thu Tun

Congxin “David” Xu

Sirui Zhou

Collin Zucker

2017-2018

Benjamin Barad (GM)

Caroline Cator

Hershal Chaddha

Arnanto Januri

Devika Jhunjhunwala

John Lawrance

Toan Nguyen

Tyler Pike

Collin Zucker

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THANK YOU!