MRP Themes: A Review of Our Change-Driven Themes

Market Viewpoint: December 23, 2019

Summary: A series of individual reviews for each active MRP theme.

MRP is all about recognizing change in the markets. Our entire focus is on identifying change that will shift the equilibrium and create investment opportunities. In our daily report, we focus on change affecting a group of publicly traded securities or commodities or currencies. Sometimes, however, a change in the Macro environment can dramatically influence the relative performance.

Indeed, there are very big changes in the election year ahead. For a host of reasons, 2019 was a year of slower economic growth, slower profits growth, subdued inflation, a continued strong dollar, and a reversal in the course of previously rising interest rates.

But the year 2020 should see dramatic change in virtually all the same variables. Indeed, it is likely to be a year of faster economic growth, an acceleration of profit growth, a pick-up in inflation, a weaker dollar, and a resumption of rising long-term interest-rates. With the Fed on hold, that would mean a steepening yield curve.

The past year has witnessed a surging stock market and dramatic rises in bond prices as well. MRP believes that the changing macro environment will result in still buoyant equity prices but falling bond prices… a pattern of divergence described in last month's viewpoint. We also expect to see a weaker Dollar in the year ahead, strengthening commodity prices, and outperformance of international markets over the US. Together, these trends will dramatically influence some of our existing favorite themes.

In the meantime, professional investors would be well-served to focus on themes. It is the identification of change-driven themes that is our mission at MRP. So, in the face of a rapid change and uncertainty in markets, a review is in order. A year-end update on all of MRP's current themes follows below.

Currently, we have a total of 14 that are active, but before we get into those, here's what's changed since our last update:

Recently, we added long US banks. Previously, we had initiated a short theme on brokers and asset managers, but it was closed on December 16, inspired by our belief that the era of zero-commission trading would hurt brokers' earnings while zero-fee ETFs would harm asset managers' bottom line. However, Brokers for instance are looking to offset increased costs in trading by generating more of their income from their banking business, particularly interest earned on client cash holdings. A halting of interest rate cuts, combined with strong growth in deposits has inspired us to flip this trade and initiate a long theme on US Banks.

While maintaining our call for $60-$80 WTI crude prices by year end, which came to fruition just last week, we adjusted our call on the energy sector to reflect MRP's view that refiners, not crude producers and oil service providers, would be the strongest performers through the end of the year and into 2020.

Joseph J. McAlinden, CFA, is the founder of McAlinden Research Partners (MRP) and its parent company, Catalpa Capital Advisors. He has 50 years of investment experience. Mr. McAlinden founded Catalpa Capital in March 2007 after leaving Morgan Stanley Investment Management where he had spent 12 years, serving first as chief investment officer and later as chief global strategist. During his 10 year tenure as chief investment officer, he was responsible for directing MSIM's daily investment activities and oversaw more than $400 billion in assets. As chief global strategist, he developed and articulated the firm's investment policy and outlook. Prior to Morgan Stanley, Mr. McAlinden held positions as chief investment officer at Dillon Read and as President & CEO of Argus Research.

In the Autumn, we pulled 2 short themes, Autos and Pharmaceuticals.

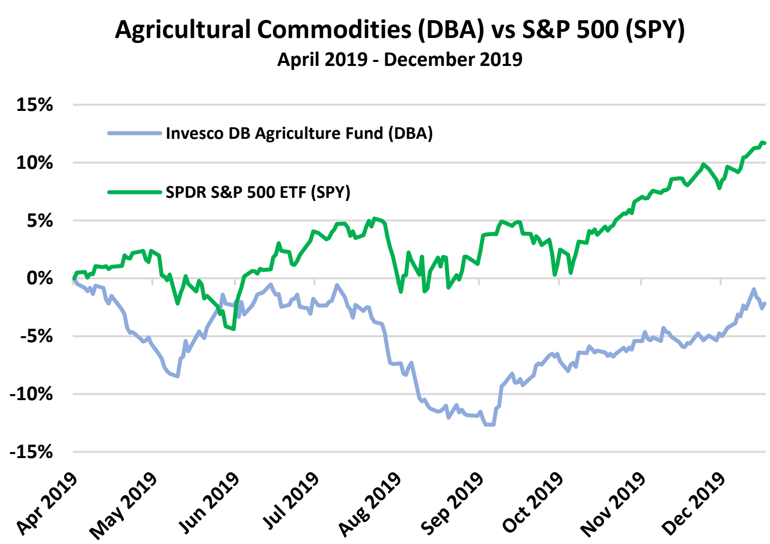
Each of them underperformed the S&P, but Short Autos, which we launched all the way back in October 2017, was one of our most successful themes in the last few years, as the First Trust NASDAQ Global Auto Index Fund (CARZ) declined as much as 30% from the inception of the theme as auto sales entered a continuous descent throughout 2018 and into 2019. However, an easing of short-term rates over the summer, combined with improving financial conditions for US automakers prompted us to suspend the theme.

The pharmaceutical sector was certainly suppressed by the weight of litigation from cases involving the opioid crisis, but a class action lawsuit composed of more than 2600 cases begun falling apart when a single, massive settlement for all cases could not be reached. Settlements worth nearly $50 billion fell through as infighting between state Attorneys General and lawyers representing local municipalities has fractured the consolidation. Smaller settlements of individual cases have been reached to avoid proceeding to trial and hundreds of other local governments may seek restitution on their own. The litigation remains ongoing but is no longer an imminent concern for the industry.

Long Video Games was suspended as hardware sales have slowed in anticipation of next-gen consoles coming in 2020.

Long 3D-Printing was also suspended, largely due to a broader slowdown in manufacturing and decreasing capex expenditures.

A more detailed dive into all of our active themes follows:



LONG Agricultural Commodities

MRP added Long Agricultural commodities to our list of themes on April 4, 2019 due to historic flooding that has devastated the Midwestern US's planting season, as well as African Swine Fever ripping through China's hog population.

Following a planting season that was delayed by massive flooding across the Midwest, harvesting of corn, soybeans and other crops has fallen even further behind in the last month as early winter weather has set in.

The USDA reports the corn harvest behind schedule across the northern farm belt, 43% complete in North Dakota, 83% complete in South Dakota, and 74% complete in Wisconsin and Michigan, compared with an average of 92% completion rate in the top 18 corn-producing states. For the entire US, about 84% of the harvest has been gathered at this point, well behind the long-term average of 96% at this time of year, historically. The general corn quality in 2019 is already below average, according to Aberdeen News, due to the record late planting and subsequent immaturity and incomplete grain fill. Immature corn has lower test weight, lower protein content, and poorer storability (resistance to mold invasion). Additionally, UPI notes that excess moisture from snow damages soybean pods, causing them to mold. A heavy snow pack could also smash the plants, making them impossible to pick up with a tractor.

The USDA now estimates 2019-2020 corn ending stocks at 1.91 billion bushels, 9.5% below 2.11 billion bushels in 2018-19. The USDA estimated soybean production at 3.55 billion bushels, down nearly 20% from 4.4 billion bushels in both 2018 and 2017. Wheat carryover is expected to fall 10%, from 2019, reaching its lowest in five years.

Futures for coffee and sugar have also been on the rise recently.

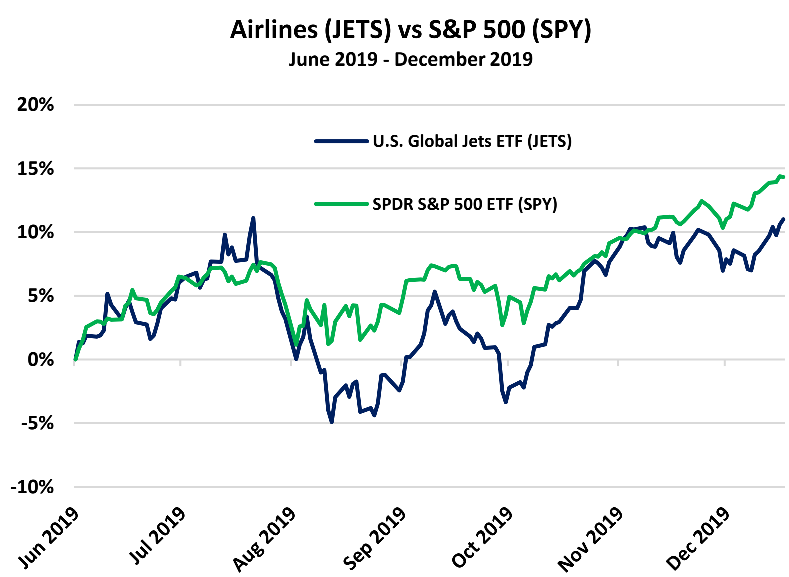
Meanwhile, the swine flu pandemic has now wiped out 40% of China's hog supply, which will eliminate 25% of this year's pork production, and, most likely, another 15% next year, according to Rabobank. As MRP had predicted would be the case all the way back in June, meats from other animals are benefitting from the pork shortage, with imports of beef and other proteins also rising substantially. Live hog prices have risen more than 120% in the past six months to 33 yuan ($4.70) per kilogram, forcing Chinese consumers to demand cheaper substitutes.

The Guardian has reported that China will soon be looking at a 24 million metric ton (mmt) shortage of meat, even if they managed to pull in all 8 mmt of global pork exports. October beef imports came in at 150,829 metric tons, a 63.2% increase from a year ago. Chicken imports are also up 64% on the year. The USDA projects China's beef imports to surge to 2.9 mmt in 2020 and pork imports of up to 3.5 mmt. Those estimates represent roughly 30% and 35% of total global imports for beef and pork, respectively. Chicken imports are also up 64% on the year.

China's growing protein shortage, expected to reverberate for years to come, might be playing a role in China's reported agreement to buy up to $50 billion in agricultural products from the US in 2020, as part of a phase-1 trade deal that both nations signed onto earlier this month. China has already lifted the ban on the import of US poultry that had been in place since January 2015, so an additional easing of tariffs on US pork, now a 60% punitive tax, would not be an unthinkable development.

SHORT Airlines

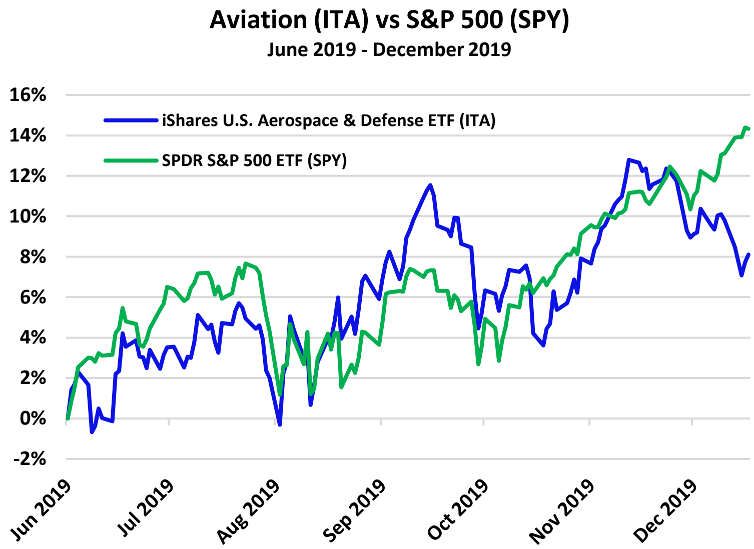
MRP added Short Airlines to our list of themes on June 4, 2019 due to the International Air Transport Association cutting the global air traffic industry's 2019 profit expectations by more than 21%. Compounding this pressure, airlines who were forced to cancel thousands of flights through early June, due to the grounding of Boeing's 737 MAX jets, have now extended those cancellations all the way to September for United and American Airlines, and October for Southwest Airlines. Each company is heavily dependent on the 737 MAX getting back in the air to return their fleets to full service. While American will attempt to help customers re-book those flights, many passengers may simply seek out other airlines or cancel their trips outright.



United Airlines Holdings Inc. has experienced a double-digit increase in operating costs on certain routes because of the continued grounding of Boeing Co. 's 737 MAX aircraft, the airline's finance chief, Gerry Laderman, told the Wall Street Journal last month. United's capacity-growth forecasts have been partially upended by the grounding of the jet, Mr. Laderman recently said. "We are not hitting that number, and there are routes that we cannot fly because of this. United expects to cancel about 75 flights a day in December, which would result in about 2,300 canceled flights for the month. Just last week, United extended cancellations for all scheduled MAX flights until June 4.

Southwest and American Airlines are both in a similar situation, having cancelled all flights on the 737 MAX through mid-April. Millions and millions of seats worth of capacity have been eliminated by the removal of MAX jets from schedules, and those losses continue to accelerate as the grounding drags on. Many airlines had added additional capacities to their schedule, expecting previously scheduled deliveries of new MAXs by this time. Since Boeing has now fallen behind schedule on production and deliveries of the new planes, delays could stretch beyond any potential end of the grounding. Ryanair, for example, expected 58 MAX jets to fill out their fleet by the summer of 2020, per CNBC. But, according to CEO Michael O'Leary, speaking on the company's Q3 earnings call, "It may well move to 20, it could move to 10, and it could well move to zero". The company recently cut its traffic forecast to March 31, 2021 by 1 million passengers.

As capacity becomes more restrained over time, the hundreds of millions worth of costs already incurred by airlines in the wake of the 737 MAX crashes are likely to intensify.



SHORT Aviation

MRP added Short Aviation to our list of themes on June 4, 2019 due to countries around the world grounding Boeing's 737 MAX jets following March 10, after a malfunction caused a second MAX to crash land less than 5 months removed from a previous, identical incident, leaving 346 dead in their wake. Now, 9 months later, no clear timetable exists for getting the 737 MAX back in the air and the FAA says no certification will be given before the end of the year.

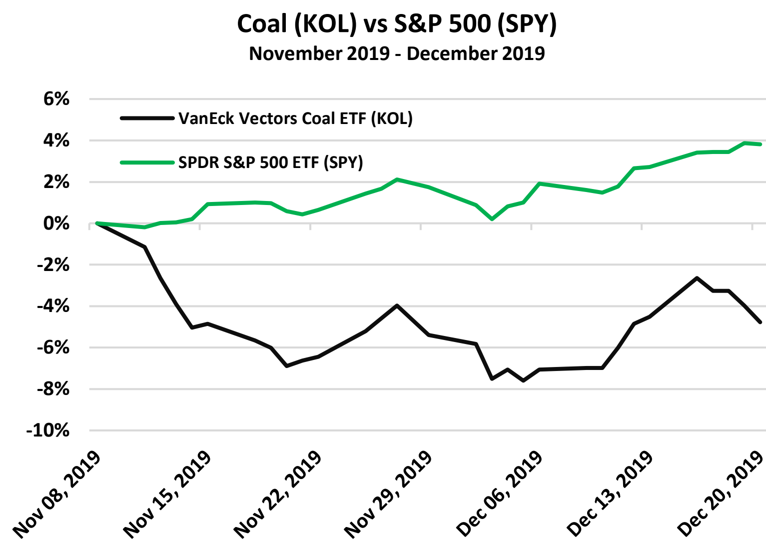
While Boeing has repeatedly given assurances that the MAX would be re-certified in short order, months and months have passed since they originally promised FAA certification by mid-May. This is when MRP realized this was not an acute issue, but something much more threatening to Boeing and airline passengers as a whole.

Boeing has faced near-constant scrutiny since last summer, and not only for its 737 MAX model. Issues with the construction and maintenance of other jets including the standard 737, 787, and 777X have circulated through the media as deliveries of the MAX slowed by 51% in November YoY. CNN reports orders for all Boeing planes, including the MAX, are down 66% this year. Now, Boeing is even has halted production of the MAX as a whole, until January. However, the shutdown could likely last until they have some clarity about when they can expect the FAA to re-certify.

That process might have just become a little bit more complicated, however, as it was revealed this month that the FAA was aware of the dangers surrounding the 737 MAX as early as November 2018, following the first crash of a Lion Air-owned MAX in Indonesia. The November 2018 internal Federal Aviation Administration analysis of the crash found that without agency intervention, the MAX could have averaged one fatal crash about every two or three years. Even worse for Boeing, former company manager Ed Pierson has told congress that he warned the company of issues affecting 737 MAX planes months before the first deadly crash.

Additionally, it isn't just up to the FAA to approve the 737 MAX for a return to commercial flying. Many independent regulatory organizations from Europe, India, and other countries have stated that they will require their own review of the MAX's certification criteria before allowing them to return to their airspace.

SHORT Coal



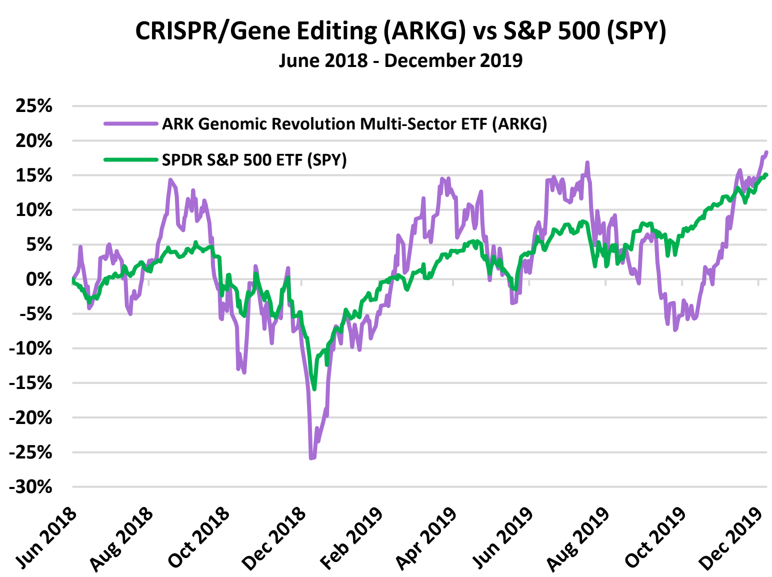
MRP added Short Coal to our list of themes on November 8, 2019 due to plunging renewable energy costs, rock-bottom natural gas prices, rising carbon credit prices, and insurers pulling back from underwriting coal-related anything. This will result in a continuation of widespread bankruptcies and plant closures.

New solar or wind-powered plants are now cheaper than building and using a new coal-fired generator. Unsubsidized new solar and wind power are now cheaper than new coal in most of the world. Nearly three-quarters of existing US coal plants are now more expensive to run than building new solar and wind generation. Across the pond, four in five coal plants in the European Union are reported to be unprofitable.

The average price of carbon credits in the EU has surged higher than €24 from €7 in just two years. Power plants and industrial manufacturers buy these credits to offset each ton of carbon dioxide (CO_2) they produce. Some European coal-fired power plants have been able to survive because they are still relying on credits purchased in the past when prices were low. Once those old supplies are used up, new carbon credits will have to bought at the current higher market price. That alone could push more coal plants into the red and closer to financial failure.

According to Global Energy Monitor, Indonesia was the only country in Southeast Asia to add capacity this year. The Institute for Energy Economics and Financial Analysis reports that the number of Asian coal projects having secured financing has fallen 50-70% in the past three years, while the rate of plant closures has increased 50%.

LONG CRISPR



MRP added Long CRISPR (clustered regularly interspaced short palindromic repeats) to our list of themes on June 14, 2018 due to expanding successes and applications for the molecular gene-editing technology, which allows scientists and doctors to snip out undesired bits of genetic material and, sometimes, replace it with preferred DNA. Using CRISPR, researchers have been able to cure mice of deadly genetic conditions like hemophilia B, Lou Gehrig's disease, and Huntington's disease.

CRISPR has shown it can be a mass market treatment sooner than many analysts believed. Sales of Novartis' gene therapy for spinal muscular atrophy, Zolgensma, exceeded forecasts in the company's Q3 earnings results, treating about 100 infants in its first full quarter of commercial availability in the US. The treatment earned Novartis $160 million between July and September, a "big surprise" given some Wall Street predictions of just over $100 million, according to Evercore. Novartis aims to expand Zolgensma's approval with clinical data in two to five-year-olds.

The 4th quarter has been an especially exciting time for CRISPR.

The first attempt in the United States to use CRISPR against cancer seems safe in the three patients who have had it so far. A team of researchers from UPenn's Perelman School of Medicine, backed by Tmunity Therapeutics, procured T cells from three cancer patients—two with multiple myeloma and one with sarcoma—through a blood draw, and genetically modified the cells' DNA using CRISPR.

In October, MRP noted that CRISPR could potentially be used to counter a number of viruses, including Zika and Ebol, by a utilizing a Cas13 enzyme, as opposed to the traditional Cas9. Researchers also believe they could use the gene editing tool to immediately diagnose a number of viruses with just a single drop of blood.

In one of the most recent studies on CRISPR and HIV, Massive Science reported that scientists used artificially-created guide RNAs to treated mice with the infection by excising the viral DNA from their genome — actually "curing" the mice of the chronic disease.

The most exciting development in gene editing, though, has been the creation of a new CRISPR process called "prime editing". Prime Editing effectively allows guide RNA not only finds the DNA in need of fixing, but also carries a copy of the edit to be made. Therefore, instead of simply splicing the genetic material, it will be possible to insert fixes for broken strands of DNA.

As reported by STAT, Prime editing's inventors, led by David Liu of the Broad Institute of MIT and Harvard and postdoctoral fellow Dr. Andrew Anzalone, say it has the potential to correct 89% of known disease-causing genetic variations in DNA, from the single-letter misspelling that causes sickle cell to the superfluous four letters that cause Tay-Sachs disease.

LONG Electric Utilities

MRP added Long Electric Utilities to our list of themes on November 20, 2017 due to an ongoing explosion in power consumption.

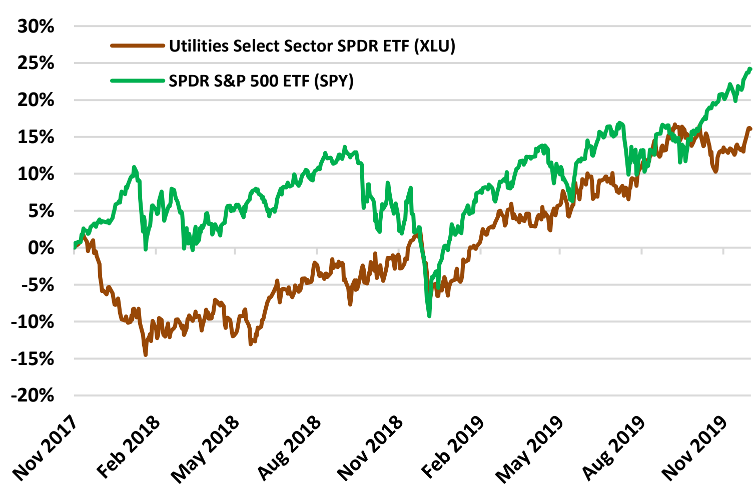
Long considered a boring and static industry, electric utilities have struggled with stagnant demand and an inability to engage customers dynamically as other businesses have. However, electricity consumption has begun to ride again in the wake of the proliferation of digital data from IoT and cloud computing, and advances in energy industry technologies. Annual US sales of electricity rose 3.6% from 2017 to 2018 alone, the largest annual increase in nearly a decade. The EIA expects world energy consumption will grow by nearly 50% over the next 31 years, pushing electricity demand 79% higher over the same period.

Data centers are a key example of IoT's rapidly-growing electric demands. Recent BloombergNEF research noted that data centers in Northern Virginia alone could make up 15% of Dominion Energy Inc.'s summer peak demand by 2024.

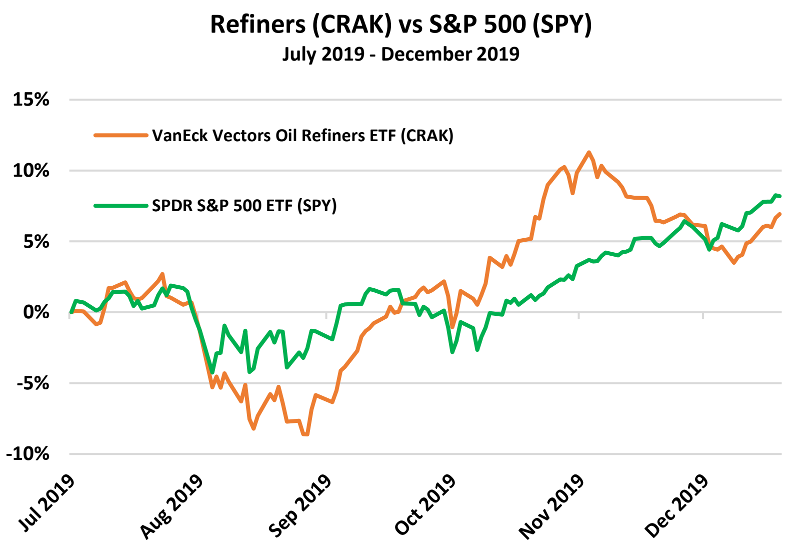
The electrification of transportation will also play a huge role in rising power demand as the EII-IEIA has said U.S. households with an electric car could see a 50% increase in its electricity usage.

2019 was a breakout year for EVs. Quartz reports automakers committed $225 billion to electrification in the coming years. Electric vehicles (EVs) grabbed 2.2% of the global vehicle market over the first 10 months of 2019 as a slew of new models hit the road.

Utilities (XLU) vs S&P 500 (SPY)
November 2017 - December 2019



The utility business has now gone from a no growth industry to one prepared to see sustained growth in coming years, as well as a re-rating of industry valuations.



LONG Refiners

[MRP added Long Refiners to our list of themes on July 3, 2019] due to higher gasoline prices, combined with OPEC's latest production cuts and the possibility of a widening in the crack spread, improving profit margins for all US refiners. Firming US growth should help prop up gasoline prices through 2020.

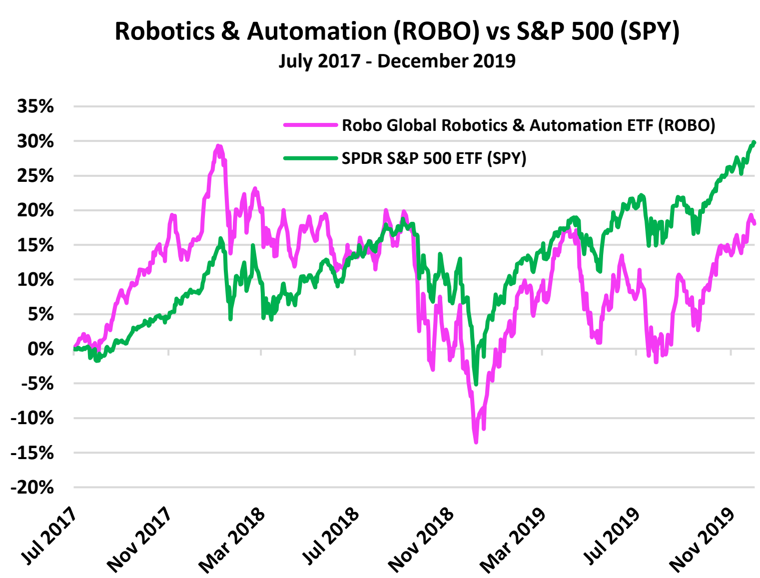
The next leg up for refiners is likely to be in improving the profitability of heavy and sour grade oil.

In fewer than two weeks, thousands of ships the world over will be forced to use fuel containing less sulfur in order to comply with global rules set out by the International Maritime Organization. Those who don't could face penalties and even imprisonment. To the benefit of refiners, heavy crude prices have eased in recent months, following a shortage in the summer. Reuters reports that most U.S. Gulf Coast refiners are able to process heavy crudes used to make IMO-compliant marine fuels and have spent heavily this year refurbishing distillation units and cokers to process cheaper, heavy grades. This should help improve margins through 2020.

LONG Robotics & Automation

[MRP added Long Robotics & Automation to our list of themes on July 20, 2017] due to wide-scale automation finally taking hold across several significant industries. According to International Data Corporation (IDC), 60% of the world's 2,000 largest companies will have deployed autonomous mobile robots by 2021.

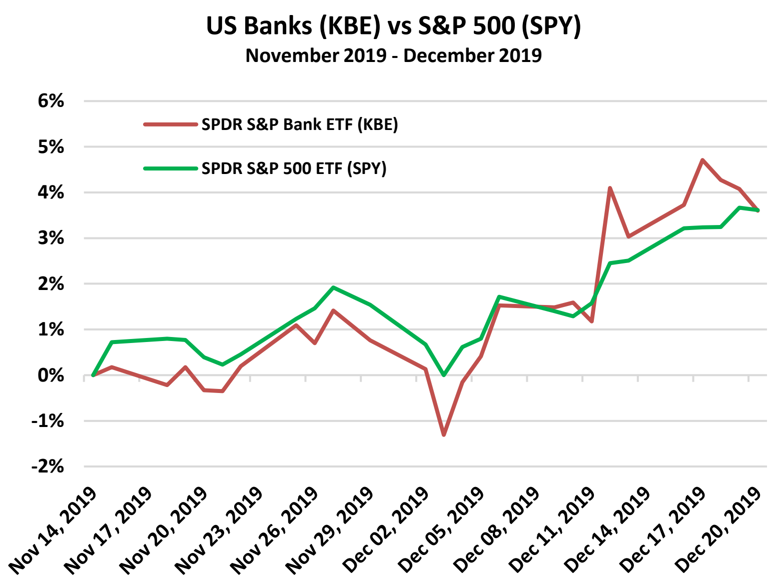
The industrial sector has, thus far, been the greatest beneficiary of automation technologies thus far. MRP has previously highlighted the impact of robots in [warehousing and manufacturing, as well as mining]. The International Federation of Robotics predicts that the market for warehouse and logistics robots worldwide will nearly quadruple to more than $22 billion by 2022, up from $5.7 billion this year.



However, robotics and automations most unlikely disruption has been in food service and delivery. Last year, Softbank entered talks with startup Zume, a fully automated pizza delivery service, offering a blockbuster investment of anywhere from $500 million to $700 million. Zume utilizes delivery trucks capable of cooking food while en route to customers and can reportedly prepare 370 pizzas in an hour and cut delivery times to anywhere from five to 20 minutes. Recently, Recode reported that Zume is in talks with investors to be valued at about $4 billion in a new round of fundraising. Similar projects by Yum! Brands, Pizza Hut, and Dominoes are underway.

Additionally, smaller-scale delivery bots, focused on prepared food and drink orders, have begun rolling down sidewalks across the country. Food and grocery delivery company Postmates was granted the first permit in San Francisco last summer to test sidewalk delivery robots, according to TechCrunch, paving the way for the company to test the Serve autonomous delivery robot it announced in December. After raising $40 million, bringing the startup's total funding to $85 million, Starship Technology will be moving out of the testing phase and preparing for a monster expansion across 100 US universities over the next 2 years.

Since the beginning of 2019, Amazon has been testing its autonomous "scout" bots in Seattle, covering the "last mile" of package deliveries.



LONG US Banks

MRP added Long US Banks to our list of themes on November 14, 2019 due to big tech coming in as an ally to the banks, boding well for the US banking sector.

For incumbent financial services firms like banks, which fear losing their primacy and customers, these types of collaborations are seen as a positive, at least initially. The attraction is that Big Tech will draw younger and more digital-savvy customers who are increasingly looking to handle more of their lives through online tools. Banks can also benefit from Big Tech's ability to work with huge data sets and turn those into value-add products.

Banks in the United States now get a historic proportion of their funding from deposits, the cheapest form of liability, versus bonds or short-term borrowing. Deposit growth has been accelerating at the largest banks. According to the Wall Street Journal, some 89% of large US banks' total liabilities are now deposits, the highest proportion since 1985, and representing a very cheap source of funding for banks to borrow from.

Additionally, a halt to short-term rate cuts, the steepening yield curve, and stabilizing economic growth all bode well for US Financials.

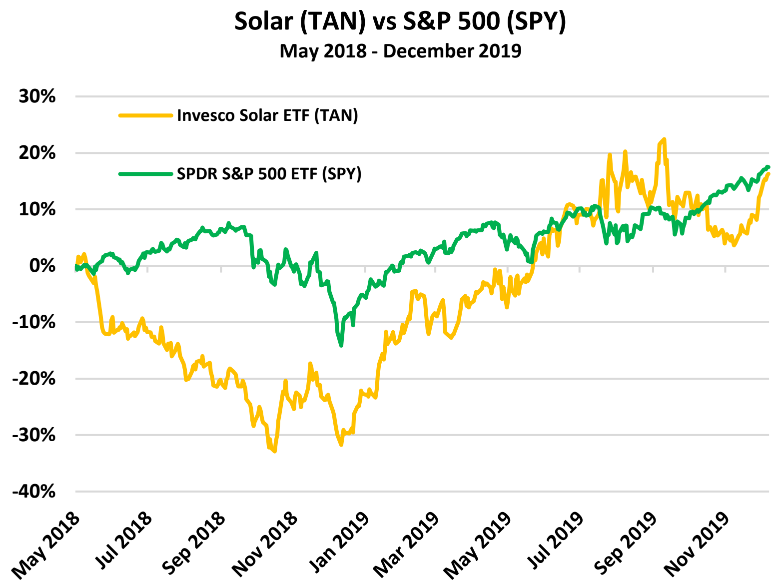
LONG Solar

MRP added Long Solar to our list of themes on May 14, 2018 due to continually strong deployment trends and improving cost-competitiveness.

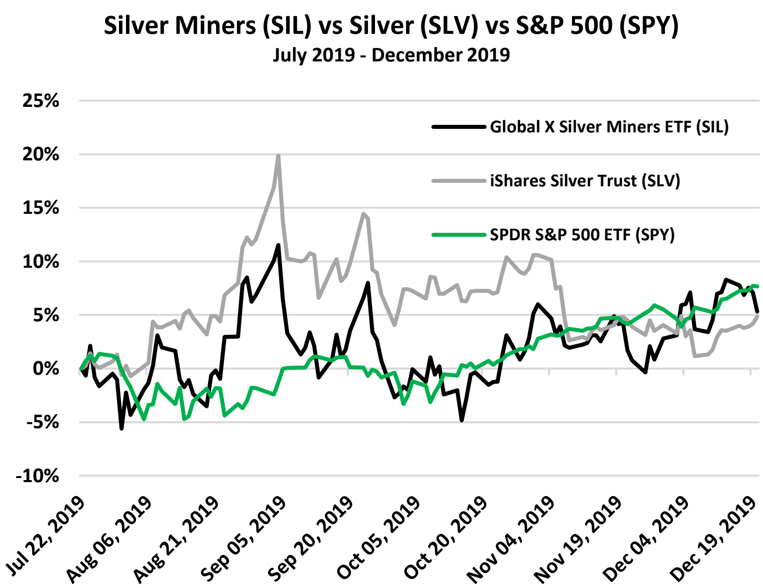
The solar market in the U.S. added 2.6 gigawatts of solar photovoltaics in the third quarter of 2019, up 45% YoY and 25% QoQ, with total solar capacity — which includes both photovoltaic and concentrating solar power — hitting 71.3 GW. For 2019 as whole, Wood Mackenzie is forecasting YoY growth of 23% and expecting 13 GW of installations. It was the best quarter ever for US residential solar as 712 megawatts were installed.

Cite Research notes that support for solar mandates which require all newly built homes to have solar panels installed is very high.

70% of Americans would support a nationwide law to this effect, similar to the one passed in California. Additionally, new data from Pew Research shows 46% of U.S. homeowners have now "given serious thought to adding solar panels at their home in the past year."



According to a separate WoodMac report, the average levelized cost of electricity (LCOE) for solar and wind power is became cheaper than gas-fired power in China this year, and will be competitive with coal-fired power by 2026. China Photovoltaic Industry Association (CPIA) expects 40 GW of new solar capacity will be added next year. While that is lower than the record 53 GW added in 2017, it will be at least double added capacity for this year.



LONG Silver & Silver Miners

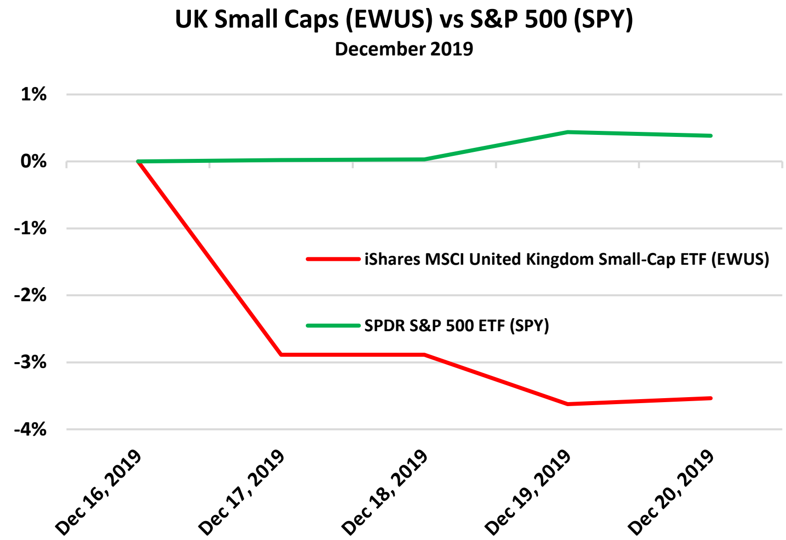
MRP added Long Silver & Silver Miners to our list of themes on July 22, 2019 due to precious metals lagging US equities over the last decade. But a shift in the global macro landscape, particularly the anticipation of rate cuts from the Federal Reserve, pushed gold and silver prices up this summer. MRP believes we are still at the start of a sustained precious metals rally and that the biggest winners will end up being silver and the silver miners.

Although silver has faded from its massive run-up in September, underlying strength in miners could lead a rally in the months ahead as the US Dollar continues to ease. Versus a basket of major currencies, the greenback has slipped 2% from its 2-year high in October and we believe a halt in monetary easing around the world will dampen the Dollar's appeal, while rising inflation in the US depresses US real rates. Additionally, silver remains very cheaply priced, compared to historical prices. Even at its 2019 peak of $18.40/oz, the price of silver bullion was still around 60% below its all time high near $50/oz in 2011.

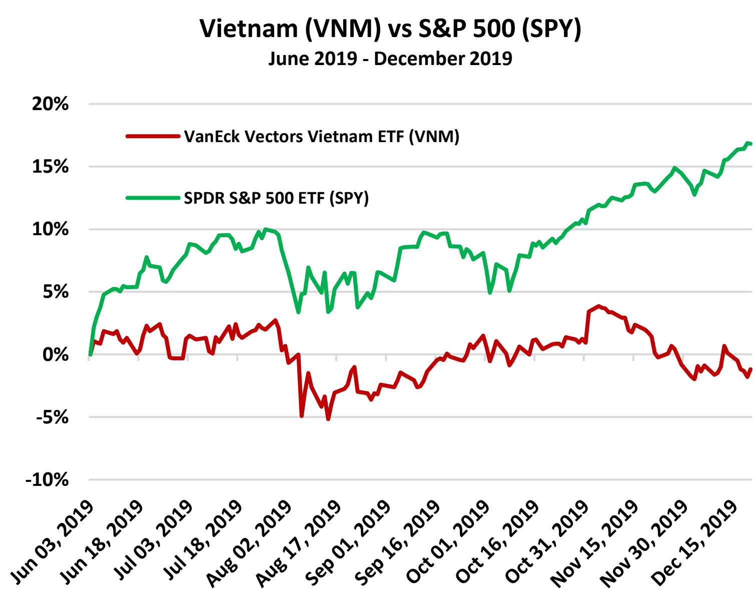
While the macroeconomic outlook has certainly firmed in the last month or so, political volatility brought on by the upcoming 2020 presidential will be the next major driver of safe haven assets like precious metals.

LONG UK Equities

MRP added Long UK Equities to our list of themes on December 16, 2019 due to renewed political and economic stability following the country's latest election, and the resulting Conservative Party majority. After capturing 365 of the 650 parliamentary seats in Thursday's vote, PM Boris Johnson's party now has the political firepower to move forward with Brexit. Britain's withdrawal process will no doubt come with complications that will inconvenience some companies and put others out of business, but Boris Johnson has sought to suppress any major disruption to GDP growth by pledging £100 billion ($128 billion) of investment into capital projects and the means to finance those with extra borrowing over the next five years.



Global funds have been underweight UK equities for three and half years on account of the Brexit-related political impasse that has led to a decline in business spending, capital flight out of sterling assets, and an economic slowdown. Recently, though the labor market has been robust and the unemployment rate, at 3.8%, has not been this low since the 1970s when it hit a record low of 3.4%. In fact, the employment-to-population ratio is at an all-time high. Inflation is below 2%, so the government has room to employ stimulatory measures.



LONG Vietnam

MRP added Long Vietnam to our list of themes on June 3, 2019 due to the country increasingly becoming an export powerhouse, intensified by a shift by manufacturers to new tariffs on US imports of Chinese-made goods.

In the first nine months of 2019, U.S. imports from Vietnam jumped 34.8% year-on-year, according to IHS Markit numbers. By comparison, U.S. imports from China shrank 13.4% during the same period. Vietnam's fastest growing export categories to the U.S. are computers, telephone equipment and other machinery; products among the U.S.'s top imports from mainland China, Mongolia and Taiwan in 2018, per CNBC.

Additionally, J.P. Morgan analysts said last month that they expect Vietnamese banks under the firm's coverage to deliver 15% to 21% return on equity over the next two years as they have "started making money on both sides of the balance sheet." The investment bank is overweight on Vietcombank, Techcombank and Asia Commercial Bank.

For MRP's research disclaimer, please go to www.mcalindenresearchparters.com/disclaimer.html