

"Wisdom is knowing what to do next, skill is knowing how to do it, and virtue is doing it."
- David Starr Jordan

#### **TUESDAY, JANUARY 31, 2017**

Morning Summary: Market participants the past several years have talked about the trade having either a "Risk-On" or "Risk-Off" type personality, as of late however the market has had either a "Trump-On" or "Trump-Off" mentality. If the trade likes the new "executive order" or Trump tweet of the day we rally aggressively to the upside. If the trade becomes uncertain about the overall reaction of the latest Trump move market participants start to look for ways to reduce risk and exposure. The latest backpedal was obviously due to uncertainty surrounding President Trump's tightened immigration rules and travel bans from seven Muslim-majority countries. Google, Facebook, Salesforce, Microsoft and other tech giants have been highly critical of the move and worry it could have a negative impact on their employees and overall ability to "innovate". The Trump administration is said to currently be working at overhauling the work-visa programs, another issue they say could hit the tech industry hard claiming they rely on it to hire thousands of employees. I should also note that former President Obama has now joined those who oppose the views, speaking out openly against the latest Trump policy. Other Washington headlines talk about Trump signing another executive order that requires two federal regulations to now be cut for every new federal regulation implemented. I personally see no big shock or surprise as his moves continue to fulfill campaign pledges and promises. Yes, things are certainly moving rapidly in Washington and the trade seems a bit more uncertain about the fun and overall safety of the ride, but I still don't see Trump blindsiding anyone with his moves. Certainly people can disagree and are entitled to voice their opinion. And didn't the other half of the country disagree with many of Obama's early moves? This time around the "left" just seems to be much louder in voicing their disagreement. It is being reported that President Trump will name his Supreme Court Justice nominee this evening around 7:00pm CST, two days sooner than originally planned. A Washington insider told the media that the choice will be either Judge Neil Gorsuch of the 10th U.S. Circuit Court of Appeals in Denver or perhaps Thomas Hardiman of the Third Circuit in Philadelphia, both of whom were appointed to their respective seats under the Bush administration. For a while William H. Pryor of Alabama seemed favored to be the pick, but as of late I'm just not hearing as much about him in the headlines. I'm excited to see who Trump nominates and how the media and protesters respond! On the economic front, Federal Reserve officials begin their two-day policy meeting today, with their latest decision scheduled to be released Wednesday at 1pm CST. Insiders expect the central bank will leave policy unchanged while

probably making only minor revisions to their post-meeting statement. It's expected that they will change their inflation forecast, showing that headline inflation should reach 2% "relatively soon" rather than "over the medium term." However, just that minor change could make investors a bit more nervous about the pace of rate hikes this year. Japan's central bank meets today as well and will release their policy statement along with an updated quarterly outlook report. U.S. data for today includes the Employment Cost Index, the S&P Case-Shiller Home Price Index, Chicago PMI and Consumer Confidence. Some of today's more highly anticipated earnings releases will come from Apple, Electronic Arts, Eli Lilly, Exxon Mobil, Harley-Davidson, Mastercard, Pfizer, Sprint, UPS and Valero.

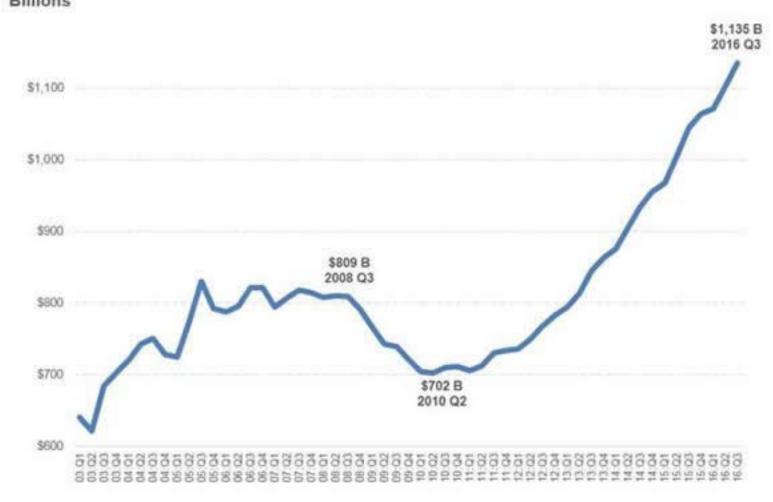
**IEA Head Warns Of Possible Oil Supply Gap:** The International Energy Agency (IEA) does not expect oil demand to peak any time soon due to rising consumption in developing economies, Director Fatih Birol said on Monday. Birol also warned that oil markets could enter a period of high volatility unless companies develop new projects after two years of sharp drops in investments sparked by low oil prices. "We do not see in the near and medium terms oil products can be substituted by other fuels. More than one third of growth comes from trucks in developing Asia... We do not subscribe to oil demand peaking anytime soon," Birol said. He warns that if oil companies do not develop new major projects this year, "it will be very difficult to see how we do not have turbulent times in the market in the years to come because of the growing supply gap." That is a view that he has previously expressed, most recently at the World Economic Forum in Davos, Switzerland. Birol does not believe the supply gap can be filled by shale oil. He's also cited concerns about the situation being exacerbated by the natural decline in output from large, mature fields in the Middle East. (Source: Rigzone)

Warren Buffet Said To Be Buying Up Stocks Since The Election: Bloomberg reports that Warren Buffett added to his stock portfolio at Berkshire Hathaway Inc. in a big way after Nov. 8. "We've, net, bought \$12 billion of common stocks since the election," he said in an interview with Charlie Rose that aired on Friday. Buffett didn't identify the securities that he picked. Read more at <u>Bloomberg</u>

Is China Preparing For Some Type of War With The U.S.? A disturbing article on the Chinese Army's website claims the Asian country is preparing for a potential military clash with the United States. A senior military official said that tensions around North Korea and the South China Sea are increasing the possibility of war. Ian Bremmer, a Stanford-trained political scientist and inventor of the global political risk index. commented that, "Chinese officials are preparing for the worst, and they expect to retaliate decisively in response to any U.S. policies they perceive as against their interests." Bremmer added that Beijing's moves to increase DF-21 missile tests and initiate casual aircraft carrier missions near Taiwan is asserting itself as a warning to Trump, rather than as a show of force. The South and East China Seas, and their accompanying territorial disputes, are just two areas where violence could erupt. Trump said the Monday after his inauguration that the U.S. would prevent China from taking territory in international waters in the region. An even more disturbing scenario would involve North Korea, who might possibly have nuclear-equipped intercontinental ballistic missiles. Last week, a senior North Korean military official who defected asserted that if the country's leader Kim Jong-Un sensed his dynasty was under threat, the dictator would "press the button" to launch a nuke. China is technically North Korea's only military ally, but the U.S. really needs China to keep North Korea and its erratic leader and his nuclear threats in-check.

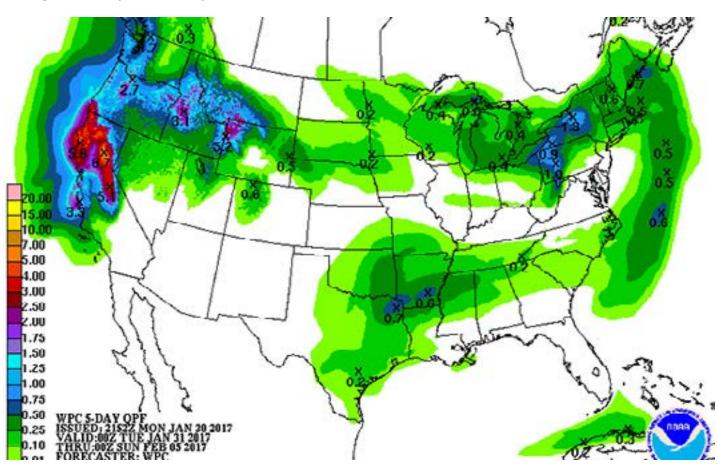
**Auto Loans Are Looking Kind Of Frightening:** The shining star of the 2009-2016 recovery has been auto sales. In the last boom, subprime mortgage lending peaked at \$44 billion per quarter. Subprime lending for cars peaked at \$42 billion! That's surprising given that the housing industry is so much larger... and you're buying an asset so much bigger than a car. In this current boom, the auto subprime loans exploded again, this time without mortgage loans for company. Subprime auto loans have hit as high as \$38 billion in Q2 2015, while subprime mortgages have been flat, around \$20 billion. From 2003-2007, auto debt rose by \$210 billion. From 2011-2016, it has surged more than twice as much, climbing +\$433 billion to \$1.135 trillion, higher than all credit card debt combined. And it's still rising rapidly. Now there are early signs that trouble is brewing and that the wheels are starting to come off the bus. Auto loan delinquencies are rising again. But this time around they bottomed at 3.2% and have risen to 3.6%. Last time they started at 2.0% and were at 3.2% in Q1 2008, when the recession started. They reached 5.3% in Q4 2010. So, they're starting higher and are expected to go much higher as well in the next downturn. (Source: Seeking Alpha)

# Much Bigger Auto Debt Bubble This Time



**Weather** is expected to be generally tranguil nearly nationwide for the first half of this week. In the Corn Belt, snow showers fell yesterday across the upper Midwest in conjunction with a low-pressure system arriving from the Canadian Prairies. Elsewhere, mild, breezy weather prevails west of the Mississippi River, while cold conditions cover the eastern half of the Corn Belt. On the Plains, a mild, breezy weather pattern is in place. Today's high temperatures should exceed 70 degrees F throughout the southern Plains, while winter wheat's protect snow cover is quickly melting or eroding across the northern High Plains. In the South, temperatures are rebounding to above normal levels from the Mississippi Delta westward. Looking forward, the late-week storminess should boost 5-day precipitation totals to 2 to 6 inches or more in northern and central California and 1 to 3 inches in parts of the Northwest. Most other areas of the U.S. will remain dry, except for frequent snow showers and squalls from the Great Lakes region into the Northeast. Elsewhere, much of the nation's mid-section will experience a turn toward much colder weather; below normal temperatures will persist across the interior Northwest; and warm weather will prevail in the Deep South. In Brazil, favorable conditions for maturing and harvesting soybeans are in effect in central Brazil and for filling soybeans and early harvest in southern Brazil. Soil moisture is also in good supply for planting double-cropped corn behind soybeans in central Brazil. Meanwhile, hot and dry conditions continue to affect soybeans prospects in the minor northeast growing area. In Argentina, southern growing areas, mainly La Pampa and western Buenos Aires, continue to experience episodes of high heat which is likely to affect production of double cropped soybeans, and possibly some corn. In central Argentina, a return to more seasonal temperatures and some increase in shower activity during this week should help maintain current yield prospects for corn and sovbeans.

**Little Rain For Midwest This Week:** 5 - Day Rainfall totals - Valid Tuesday, January 31 through Sunday, February 5.



**Corn** bulls continue to backpedal a bit on thoughts of possibly more extreme policy changes coming out of Washington and arguably improved weather forecasts for Argentina and portions of Brazil. There's also perhaps an increase in thoughts surrounding corn acres being planted by U.S. producers in 2017. Many sources inside the trade are pointing to the fact inputs and expenses have come down enough to make corn planting in 2017 more profitable than most had previously forecast. Ultimately this sparks more heated debate about planted corn acres in the U.S. perhaps once again topping +90 million? Exports and ethanol demand remain strong, but many wonder how much longer that will last? The ethanol margins have clearly shrunk as of late and supply seems to keep building. The fear in the export world is that we are simply one presidential tweet away from a more complex and bearish environment. Corn prices would certainly have to take a step back if relations with Mexico completely unravel. Remember, in today's world of investing and trading nothing bad has to actually happen, just the media printing the headlines that trigger the algorithms, quants and high frequency trading models. As both a producer and a spec, overall corn market volatility appears to be extremely inexpensive. Meaning if you where thinking about purchasing some options as a way to reduce or hedge risk this might be your opportunity? I don't know how far prices could ultimately drop, but it feels like the front-end of this market has been trapped in a range of between \$3.20 and \$4.00 per bushel for many months. Unless something dramatically changes I don't see us breaking out of this range anytime soon. I will continue to focus on the extent of logistical complications inside Argentina, second-crop weather conditions for Brazil, planting intentions for U.S. producers and the potential for trade disruptions attached to U.S. political repositioning.



**Soybean** prices are up a touch this morning but overall have tumbled as of late on a more recent "trump-off" type mentality by the funds and a slightly better forecast for what was viewed as troubled production areas inside Argentina and a small portion of Brazil. From what I understand Mato Grosso should have close to 20% of their soybeans harvested by this weekend. I don't see any major issues or cause for concerns, but the bulls are quick to remind us that last years major price rally in soybeans didn't hit the market until the "March-April-May" time period. Meaning it's perhaps still a bit too early to be waiving the "all-clear" flag and taking all weather related premium out of the current market price. On the flip-side the bears immediately argue this years set-up and market conditions are nothing similar to last year. Remember, last year the trade was leaning aggressively to the short-side. Just this past weekend the latest CFTC report showed the specs holding one of their largest net-long position in some time. In other words there was much more room to bounce higher last year when the bears were caught offsides. This year the only one who looks as if they could get caught offsides is the bull. To this point I've been an aggressive soy marketer and reducer of risk on the rallies. I understand the nearby traditional bearish fundamentals, but I've also learned to respect the power of "money-flow" and recognize the bigger players propensity and desire to be a longer-term bull in this space. As long as global demand remains this strong and the funds hold onto what appears to be a more bullish longer-term view of the macro's, I have to image this market will remain dangerous to the upside. As a producer I've made the sales and hedges I've wanted to make to this point and am taking a much more patient and longer-term perspective. I still hear most technical guru's looking for more major nearby support in the NOV17 contract between \$9.80 and \$10.00 per bushel. A close below that level would certainly make me do some reconsidering.

**Wheat** retreat continues as there is simply no fresh news in the headlines for the bulls to digest or to make the bears question their current stranglehold. Weather around the globe seems to be a "non-event," while the bulls remain eager to chase the possibility of complications here in the U.S. once the crop breaks dormancy. There's been some talk about a potential damaging "cold snap" in parts of Russia where significant snow cover is lacking, but it doesn't seem to be gaining much popularity. From what I understand, insiders report some 1.5 to 2.0 million acres could ultimately come into harms way in Russia, primarily southern Russia, if winter-kill conditions become overly extreme during the next few days. Unfortunately the market deems this to be a bit of a stretch and so do I with the more traditional market fundamentals showing a continued glut of supply. In simple terms, as long as the trade deems the market to be globally oversupplied, it's going to take more than a small fundamental hiccup to change the overall rhetoric. As I've been saying, it's going to take something unexpected or unforeseen to shake the bears. I believe in todays' world or rapidly changing headlines and new world order that becomes perhaps less of a long-shot.



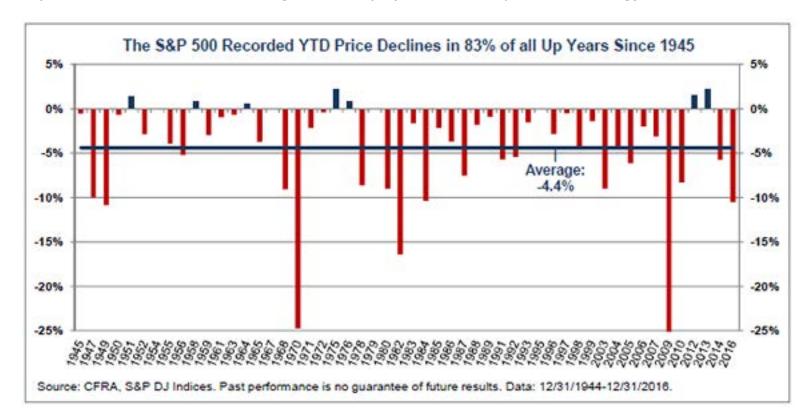
- > Floods Won't Hit Argentina's Soybean Crush: JPMorgan says the floods of early January reduced Argentina's soybean production potential by -4.3 million metric tons and correspondingly reduces its preliminary production forecast to 52 million metric tons. A tighter world market will continue to support the price, the bank says, lifting its price forecast for 1Q17 to \$10.25/bushel from its previous estimate of \$9.90. While Argentina's harvest will suffer, JPMorgan keeps its forecast for Argentina's soybean crush unchanged at 46 million metric tons, predicting that processors will compensate for the lost production by using up some of their inventories.
- > Russian Wheat Exports Up +4.5%: Russian wheat exports in the 2016-17 marketing year from July 1 to January 25 were up +4.5% year on year at 17.215 million metric tons, Ministry of Agriculture data showed Monday. Wheat exports from Russia have been slower than expected in the 2016-17 marketing year as farmers have been slow to let go of stocks onto the domestic market due to low prices. However, this year's projected exports are 3.46 million metric tons higher than last year's. Russian exporters have now also shipped 2.774 million metric tons of corn in the current marketing year, 41% higher year on year. (Source: Platts)
- > Pest In South African Corn Suspected To Be Armyworms: A larvae outbreak which has damaged corn in South Africa's Limpopo and North West provinces is "strongly suspected" to be the invasive armyworm that has attacked crops in neighboring countries, a scientist said on Monday. The infestation of fall armyworms an invasive Central American species that is harder to detect and eradicate than its African counterpart has erupted in Zambia, Zimbabwe and Malawi and follows a crippling El Nino-triggered drought which scorched much of the region last year. The impact varies: some farms have had minimal leaf damage, others have been devastated. South Africa is expected to have a maize surplus this season after a deficit last year when 7.5 million metric tons of corn was produced against national demand of 10.5 million metric tons. Industry sources have said while an armyworm outbreak would be unlikely to push the crop into deficit it could reduce the size of the expected surplus. (Source: Reuters)
- > Court Rules California Can Put Cancer Warning On Roundup: A judge tentatively ruled that California can require Monsanto to label its popular weed-killer Roundup as a possible cancer threat despite an insistence from the chemical giant that it poses no risk to people. California would be the first state to order such labeling if it carries out the proposal. Monsanto had sued the nation's leading agricultural state, saying California officials illegally based their decision for carrying the warnings on a report issued by the International Agency for Research on Cancer, a Lyon, France-based branch of the U.N.

World Health Organization. Monsanto attorney Trenton Norris argued in court Friday that the labels would have immediate financial consequences for the company. He said many consumers would see the labels and stop buying Roundup.

- > Monsanto Sees Prolonged Delays On GMO Permits In Mexico: Monsanto's week is not starting off so well. The company got bad news that Mexican court upheld a late 2013 ruling that temporarily halted even pilot plots of GMO corn following a legal challenge over its effects on the environment. "It's going to take a long while for all the evidence to be presented," Monsanto regional corporate director Laura Tamayo said in an interview. "I think we're talking years." The impasse comes as yellow corn imports are expected to rise by more than a fifth next season on higher production costs and a weak peso, from about 15 million tonnes in the 2016/2017 cycle that ends in March. While Mexico is self-sufficient in white corn used to make the country's staple tortillas, it depends on imports of mostly GMO yellow corn from the United States for its livestock. Several years ago, Monsanto submitted two applications for the commercial planting of GMO corn in Mexico. Both sought 700,000 hectares (1.7 million acres) in the northwestern state of Sinaloa, the country's largest corn-producing area. Both applications are still pending for Monsanto. (Source: Reuters)
- > Nigeria has A New Crude Oil Export Grade: A new Nigerian crude export grade has emerged in the past few months as Africa's biggest oil producer struggles to overcome the impact of militant attacks on one of the country's key crude blends in the Niger Delta. Called Forcados Light, the new crude is independent of the regular export grade, Forcados Blend, and is being shipped via a terminal at the country's 125,000 b/d Warri refinery. Loadings of the popular export grade Forcados, also commonly known as Forcados Blend, are normally carried out through the Shell-operated Forcados terminal in the Niger Delta. But they have been out for several months over the past year due to attacks in February and November leading to a declaration of force majeure on deliveries. The crude for the new grade comes from OMLs 4, 38 and 41 in the Delta State, operated by indigenous producer Seplat Petroleum. Traders said exports are currently around 10,000-15,000 b/d, with a cargo being exported every four to six weeks. One trader even said some cargoes have gone to the US and Europe recently. (Source: Platts)
- > Personal Income Rose Modestly In December: Personal income rose a moderate +0.3% in December with the wages & salaries component posting a slightly better gain at +0.4%. The savings rate, however, fell in the month, down -2 tenths to 5.4% which helped to fund a strong +0.5% gain in consumer spending. December's spending was centered in a +1.4% rise for durable goods, boosted specifically by autos, but included a +0.4% gain for services and a +0.2% for nondurable goods. The U.S. Personal Consumption Expenditure (PCE) price index rose +0.2% in December following a +0.1% increase the previous month with the annual increase strengthening to +1.6% from +1.4% previously. Excluding food and energy, prices rose +0.1% after a reading of unchanged for the previous month and the year-on-year rate was unchanged at +1.7% with the November reading revised higher to +1.7% from the original +1.6%.
- > China Clarifies Capital Controls: China's foreign exchange regulator has spelt out measures to encourage companies to keep their money at home or bring it back from overseas, in the latest steps designed to shore up the renminbi and staunch capital out-

flows. Data released in Hong Kong on Friday showed renminbi deposits in the territory fell at a record pace last month to their lowest level in more than four years. Deposits denominated in China's currency fell 12.9 per cent month on month to Rmb546.7bn (\$79bn) in December, according to the Hong Kong Monetary Authority. The next largest monthly fall, of 9.5 per cent, came in December 2008. The drop, coinciding with increased capital controls on the mainland, has depleted liquidity in the Chinese currency's top offshore trading center. The latest regulations posted by the State Administration of Foreign Exchange late on Thursday include requirements for additional documentation when foreign companies remit profits above \$50,000 from direct investments in China back to their home countries. The new regulations state that companies trying to move money into investments offshore will have to clarify the source of the funds and provide further details about their plans.

- > Iran has conducted its first ballistic missile test since Donald Trump took over as President, in another apparent violation of a United Nations resolution. As a result, the UN will hold an urgent meeting today at the request of the U.S. President Trump, who was a sharp critic of the Iran nuclear deal during last year's campaign and has suggested he may seek to renegotiate its terms.
- > Equity Market Declines In 83% of All Up Years: CFRA Research, in conjunction with S&P Global, recently published a report on the probabilities of a market pullback. A number of interesting data points are outlined in the report, including that during bull markets since 1945, the S&P 500 experienced a pullback (a decline of 5.0%-9.9%) once a year, on average, a correction (a 10% to 19.9% decline) every 2.8 years, and a bear market (-20%+) every 4.7 years. The data showed that the S&P 500 suffered a year-to-date price decline in more than 80% of all years in which the S&P 500 recorded a positive annual performance since WWII. Also interesting in the report is the fact that 70% of all year-to-date declines occurred in the first quarter of the year and approximately a third of all the year-to-date declines occurring in January. (Source: Disciplined Investing)





**Northwest Illinois -** Not much going on now as we put the equipment away in good order. Will be turning 65 next week celebrating my 45th year of farming. I currently have 60% of my corn sitting unpriced. I have been extremely unhappy with the marketing service I have been using for a number of years. The last three years have been poorly handled and I'm stuck with them for a bit longer. As hard as it is to believe, I was put into \$8.80 beans this past summer. I have determined that I can market that well myself and plan on doing so.

**Northern Iowa -** We do not have a lot going on right now. The production in 2016 was pretty good and we have a number of bushels to market at this point. We have had some corn on corn acres in the past but will try to limit those this year and going from a three to one relationship to see more of a rotation closer to 50/50. I think that it will help raise yields and beans are penciling better for us next year anyway. We did more non GMO corn acres last year and have many of those bushels to market. The 2016 corn production was not a record but very close. The beans were not as good as we thought they were going to be. We saw fields between 55bpa to 65bpa with the farm average of 62bpa. I heard that a lot of guys were making 70bpa and I had hoped we would be close to that. We did not put on any fungicide that we normally would do because there was not much disease around. I know that in 2015 we saw a 10bpa bump on fields that we applied fungicide to.

**Northwest Arkansas -** We have changed things up on farms over the past few years, with only rice, beans and milo. We have growing milo for over 20 years and like the way it can handle heat and stress throughout the year. We have been battling sugar cane aphids on the milo. They leave a glaze on the milo and do not let it go through the combine very good. With that glaze, it doesn't allow the combine to separate grain from the head, causing much to be discharged. You do have to spray it 3 or 4 times a year but besides that, it's not bad at all. We grow conventional soybeans all on irrigated land. Even with the irrigation we will only make 45bpa to 55bpa and not the 70bpa that they make to the south. We will start planting right around the first of March if the weather permits.



Mato Grosso Soybean Harvest Slowed By Rain For Second Week: The soybean harvest in Mato Grosso was slowed by wet weather for the second week in a row. The Mato Grosso Institute of Agricultural Economics (Imea) estimated that as of last Friday, farmers in the state had harvested 16% of their soybeans. Based on when the soybeans were planted and the maturity group of the soybeans, Imea had anticipated that 25% of the crop would had been harvested by this date. By the end of January 2016, 8% of the soybean crop had been harvested and the average for the end of January is 10% to 12%. Farmers have already reported problems with the quality of some of the soybeans that have been sitting in the wet weather for several weeks. Read more from Soybean & Corn Advisor.

China Headed For Glut Of Seed Corn As Well: Much has been made of the Chinese grain corn stockpiles, but the country is also heading for a massive glut of seed corn. Chinese corn seed production is booming at a time when the government is pushing to reduce grain corn plantings, which will push the stocks to use ratio to nearly 80% in 2016-17, according to figures from the US Department of Agriculture's Beijing bureau. Chinese corn seed production is at the second highest level seen in the last two decades, analyst CCM said. CCM saw the boom in production driven by a rise in the number of authorized seed varieties. "Secondly, the crop damage as a result of natural disasters has not been as critical as in recent years, allowing the much higher output of corn seeds compared to last year," CCM said. Read more HERE.

Why It Matters That Human Poker Pros Are Getting Trounced: Gizmodo was at the 20-day, 150,000-hand "Brains Vs. Artificial Intelligence" Texas Hold'em Poker tournament, where a machine named Libratus wass trouncing a quartet of professional human players. Should the machine maintain its substantial lead—currently at \$701,242—it will be considered a major milestone in the history of AI. Here's why. Given the early results, it appears that we'll soon be able to add Heads-Up, No-Limit Texas Hold'em poker (HUNL) to the list of games where AI has surpassed the best humans—a growing list that includes Othello, chess, checkers, Jeopardy!, and as we witnessed last year, Go. Unlike chess and Go, however, this popular version of poker involves bluffing, hidden cards, and imperfect information, which machines find notoriously difficult to handle. Computer scientists say HUNL represents the "last frontier" of game solving, signifying a milestone in the development of AI—and an achievement that would represent a major step towards more human-like intelligence.

An Enormous Crack Opened Up In The Middle Of The Arizona Desert: The Arizona Geological Survey is monitoring a 2-mile long crack that has opened up in the Arizona desert. Recent drone flights over the crack reveal that it has continued to grow both in length and width in Pinal County, to the southeast of Phoenix. Scientists are actively monitoring

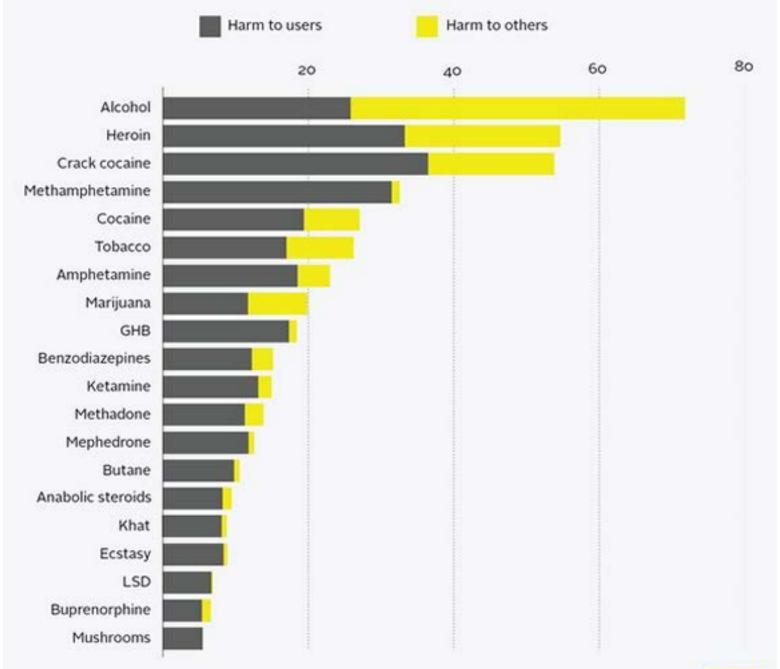
the crack and took drone video of the extent of the fissure as normal documentation of an area prone to large cracks in the Earth. The northern portion of the crack is older and partially filled in by eroding sediment and from collapse of the crack's edges. Meanwhile, the southern portion remains 25 to 30 feet deep and 10 feet across. The fissure tapers out toward each edge but the southern edge continues to grow in length and widen. The fissure is a surface expression of a larger open void underground, which ultimately is a result of desiccation due to aquifer drawdown from local populations and agriculture. Forbes has more HERE.

Scientists Might Have Been Mistaken About Turning Hydrogen Into Metal In Stunning Act Of Alchemy: The scientists who claim to have crushed hydrogen into a metal might have made one important mistake, according to experts. Two physicists claimed that they had finally succeeded in a feat that scientists have been attempting for almost a hundred years – crushing hydrogen and turning it into metal through an "alchemical" process. Such a discovery would potentially revolutionize technology and space travel, and has been hailed as one of the biggest breakthroughs in history. But experts have cast doubts on the claims of the two scientists, Ranga Dias and Isaac Silvera, both physicists at Harvard University. They might have mistaken something else for the important metal, a number of other scientists have said. But five different experts have told Nature's news reporters that they don't believe the claim and that it could be based on an error. One scientist told the news organization that the paper isn't "convincing at all". Read more about the scandal HERE.

The 3 Deadliest Drugs In America Are Legal: s America debates drug policy reforms and marijuana legalization, there's one aspect of the war on drugs that remains perplexingly contradictory: Some of the most dangerous drugs in the US are legal. he best available data from the Centers for Disease Control and Prevention (CDC), Drug Enforcement Administration (DEA), and National Institute on Drug Abuse (NIDA) shows tobacco, alcohol, and opioid painkillers were responsible for more direct deaths in one year than any other drug. One driver of tobacco and alcohol deaths is that both substances are legal and easily available. Other substances would likely be far deadlier if they were as available as tobacco and alcohol. And federal data excludes some deaths, such as drugged driving deaths. Deaths also aren't the only way to compare drugs' harms. Some drugs, such as alcohol and cocaine, may induce dangerous behavior that makes someone more predisposed to violence or crime. Other drugs, like psychedelics, may trigger underlying mental health problems or psychotic episodes. When evaluating the overall harm caused by drugs, all of these factors should be taken into account. Read more from Vox.

### The most dangerous drugs

Ranked by drug experts on damage to user, impact on crime, and socioeconomic effects





SOURCE: Independent Scientific Committee on Drugs, based on analysis of UK drug use, The Lancet, 2010



#### **Human-Pig Embryos Create Opportunities and Controversies**

Internet searches for the word "chimera" have spiked the past few days on news that scientists had successfully combined the DNA of two disparate species into one viable embryo. The resulting embryo, called a "chimera," lived to four weeks and represents a huge step for those with the goal of growing replacement human organs in the lab. The ultimate hope for this advancement lies in providing an unlimited source for human organs for those in need. Perhaps being able to grow a human organ inside a lab animal who simply acts as a host might eventually be of some merit. I've personally been against all of this most of my life, but perhaps this new technogly and way they are now going about it is worthy of reconsideration. In case you didn't know, scientists have been attempting for several years to grow the organs of one animal inside the body of another. This time around it might be a bit different... Creating the chimeric embryos takes two stages: First, CRISPR gene editing is used to remove DNA from a newly fertilized pig embryo that would enable the resulting fetus to grow a pancreas. This creates a genetic void. Then secondly, human stem cells are injected into the embryo. To be clear, the stem cells were derived from adult cells. Not embryonic. Again, adult tissue is used to get adult stem cells. From here, the human embryo should fill the genetic void left by CRISPR gene editing and allow it to grow a human pancreas. The embryo is implanted into the sow and allowed to develop to 28 days. It is hoped that the resulting pig fetus will have a human pancreas. From there the hopes is the same technique could be used to grow other human organs. Understand, they haven't created a full human pancreas in a pig. But it is the first time that human cells have grown inside a different species. It's also important to know that the development of the pig chimeras was stopped after four weeks in the womb, so the fetuses aren't take to full term. These are experiments that prove, in principle, that it can be possible to grow human tissue in a completely different species. From what I'm understanding, scientist would ultimately like to take stem cells from a patient needing a transplant, let's say a liver, inject them into a pig embryo which had the key genes deleted for creating a liver, add in the new, with the resulting organ being an exact genetic copy of the liver needed, just simply a much younger and healthier version. As I can imagine, "attempting to duplicate nature is not an easy endeavor," said Dr. Jun Wu, a staff scientist in the gene expression laboratory at the Salk Institute and first author of the research, "species evolve independently, and many factors dictating the developmental programs might have diverged, which makes it difficult to blend cells from one species to a developing embryo from another." Wu also said, "The larger the evolutionary distance, the more difficult for them to mix." In the past, human-animal chimeras have been beyond reach. Such experiments are currently ineligible for public funding here in the United States, so the Salk team has had to rely on private donors for their chimera project. Public opinion, has also hampered the creation of organisms that are part human, part animal. Ethical concerns lead the outcry from most opponents, "In particular, people were concerned about human cells populating the brain of the animal or the germline of the animal," said Carrie D. Wolinetz, the institutes' associate director for science policy. In the first case, the animal might be humanized; in the second case, the animal might pass human genes on

to its offspring. The is certainly going to be a tough debate moving forward and one I suspect gets extremely heated. On the flip side, data shows that every ten minutes a person is added to the "wait list" and every day twenty-two new individuals die while waiting for the organ they are in need of. Again, the goal of the project is that one day human done organs can be more readily available for all patients in need. (CNN, Merriam-Webster).



#### **Amazon to Start Collecting State Tax Tomorrow for Many States**

Many folks in government have been putting pressure for years on Amazon to start collecting "sales tax" in some of the smaller and more sparsely populated states where it doesn't have any distribution centers or corporate offices. From what I understand "state tax col-

lection" will begin tomorrow for online buyers in Mississippi, Missouri, Rhode Island, South Dakota and Vermont. It already started this month in Louisiana, Iowa, Nebraska and Utah, and begins in Wyoming on March 1st. For many years Amazon was avoiding the job of collecting taxes, by sighting a 1992 Supreme Court ruling that banned states from forcing out-of-state retailers to collect taxes if they didn't have a physical presence in the state. This will obviously be a big windfall of revenue for many states as Amazon's revenue is now in excessive of \$85 billion. From what I understand, the small state of Rhode Island is thinking they will collect an extra \$35 million next year in tax revenue now that



Amazon and a couple of other are finally deciding to collect and pay the state tax. Excluding states that don't have a sales tax, only six states remain where Amazon doesn't collect sales taxes or hasn't announced plans to do so. Amazon already collects sales taxes in the most populous states and has been for years, so expanding to the entire country probably won't hurt them in a major manner. Remember, the states without statewide sales and use taxes are Alaska, Delaware, Montana, New Hampshire, and Oregon, meaning Amazon will never have to collect in those states unless something dramatically changes with the states current structure. The seven states with no income taxes are Alaska, Florida, Nevada, South Dakota, Texas, Washington and Wyoming. The two states with limited income taxes are Tennessee and New Hampshire.

#### Is California Attempting To Leave The Union...Again?

Some of our readers might be cheering as some Californians have started a new campaign aimed at secede from the United States. Dubbed "Calexit" the proposal would ask voters to repeal part of the state's constitution that declares California an inseparable part of the U.S. The group behind the movement, the Yes California Independence, began gathering signatures last week. From what I understand they need around 600,000 to get the proposal on the November 2018 ballot. The measure would pass if 50% of registered voters participate and 55% of those voting approve of seceding. Organizers of the Calexit will probably need a few million dollars in order to hire professional signature gatherers, which are due by July 25. According to the Yes website, their motivation for leaving the union is due to the state being "culturally out of step" with the rest of the U.S. and that California pays more money to the federal government than it receives in spending. "In our view, the United States of America represents so many things that conflict with Californian values, and our continued statehood means California will continue subsidizing the other states to our own detriment, and to the detriment of our children." Even if they manage to get the necessary votes, it's legally a pretty grey area. David Carillo, executive director of Berkeley Law's California Constitution Center, says that there is no secession authority granted in either the U.S. or California constitutions. Carillo also points to something Supreme Court Justice Antonin Scalia once wrote, "If there was any constitutional issue resolved by the Civil War, it is that there is no right to secede." California would also have to receive approval of at least a majority of the states in the union and two-thirds of congress to secede. One of the organizers, Marcus Evans, doesn't seem phased by all the hurdles his movement will need to clear. In fact, he thinks that if the vote was held today, it would pass because "Most of America already hates California." Evan's cynicism aside, the Calexit movement really did start to gain momentum following Donald Trump's election as president. Trump only secured about one-third of the vote in California. While top officials in the state, like Governor Jerry Brown, have steered clear of the Calexit issue, they have been very vocal about saying they will fight Trump in court if he follows through on threats to cancel federal funds to so-called sanctuary cities. For example, Governor Jerry Brown's State of the State speech this week made clear that California officials will not cooperate with efforts to deport illegal aliens. "We will defend everybody - every man, woman, and child," Brown said, "who has come here for a better life and has contributed to the well-being of our state." Local authorities have echoed this sentiment. Immediately following the presidential election, the San Francisco Board of Supervisors wrote a resolution defying Trump's stance on immigration: "No matter the threats made by President-elect Trump," the board members wrote, "San Francisco will remain a Sanctuary City." It's worth pointing out that similar attempts to establish California as a separate nation have been tried but have failed miserably in the past. In fact there have been more than 200 similar efforts by the state since 1849. The famous, but unsuccessful,

Yreka Rebellion came in 1941 when a group of Californians joined ranks with some Oregon secessionists and proposed starting a new state called "Jefferson." More recently, Silicon Valley entrepreneur Tim Draper spent 45 million on his 2014 campaign to split California into six different states. It's crazy to think this is possible, but a new Reuters/Ipsos poll found that one in three Californians now support the secession movement. In 2014, only 20 percent of Californians favored secession. (Source: Reuters)



## CASH SALES & HEDGING TOTALS

