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FARMSA Newsletter

2017

JANUARY





Central Bank Policies

What to Look for in Central Banks?

A central bank is a financial authority that sets up a country's monetary policy to meet its economic goals. This year, the central banks' policies will continue to be one of the biggest focal points for investors all over the world. People are particularly interested in the US Federal Reserve System, the European Central Bank, the Bank of England, the Bank of Japan and the People's Bank of China because these banks impact the global financial markets the most.

Figure 1: Implied Fed Funds Target Rate

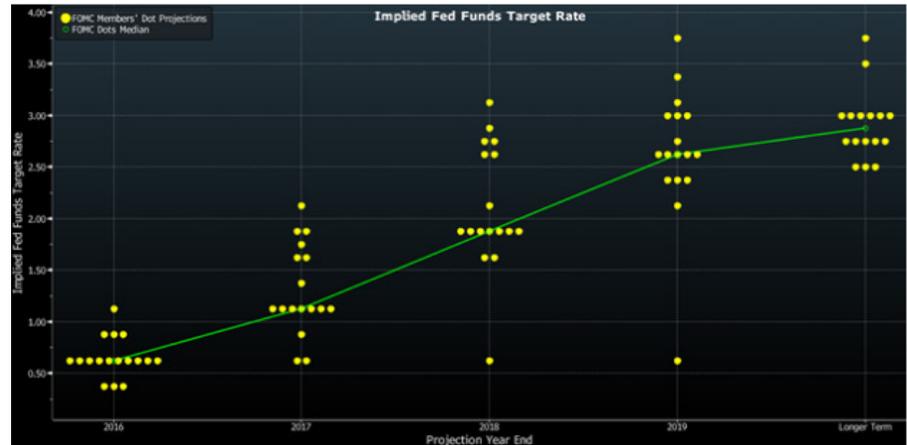
The Fed dot plot shows the view from each member of Federal Open Market Committee (FOMC) on the Fed funds target rate. It is published after every Fed meeting and used to signal the rates' outlook.

Source: Bloomberg
<https://www.bloomberg.com/news/articles/2016-09-21/the-fed-s-new-dot-plot-after-september-rate-decision-chart>

US Federal Reserve System:

The US Federal Reserve System, also known as the Fed, is the most influential central bank in the world. A hawkish Fed means that the Fed is being more aggressive on raising the interest rate. In a nutshell, a higher interest rate will increase the US denominated borrowing costs and the value of US dollar. This will have a detrimental impact on companies with high **debt** ratios, money outflows from **emerging market** economies and commodity prices. One of the biggest

questions this year is whether the Fed will accelerate its pace on raising the interest rate. Due to the market's optimism on Trump's fiscal policies and the strong US economic data last year, the Fed raised the interest rate in December from 0.50% and 0.75%. Thus, the interest rate expectation for 2017 has been shifted up from two rate hikes to three rate hikes. However, there is always uncertainty with Trump's policies and the road to interest rate hikes might be bumpy.



European Central Bank:

The European Central Bank, or often referred to as the ECB is another key player to watch for in 2017. Since 2008, ECB used quantitative easing as a mean to increase money supply while lowering the interest rate. Quantitative easing or QE is essentially buying or selling a large volume of government bonds. The issue with QE is it was only meant

to be a short-term solution and loses its effectiveness with a near-zero interest rate. As a result, the central banks will eventually reduce its efforts on QE and this is referred to as 'Tapering'. The mass panics on the market after investors see signs of potential 'tapering' is referring to as 'Tapering Tantrum'.

In 2016, ECB was very cautious with decision making due to the tumul-

tuous market conditions beginning of the year and the mid-year panic of Brexit. The ECB has always been a supporter of quantitative easing policies with the interest rates in Europe being consistently near the negative territory. Nevertheless, with Trump in office, there could be a numerous amount of unexpected changes and 'Tapering' might become inevitable.

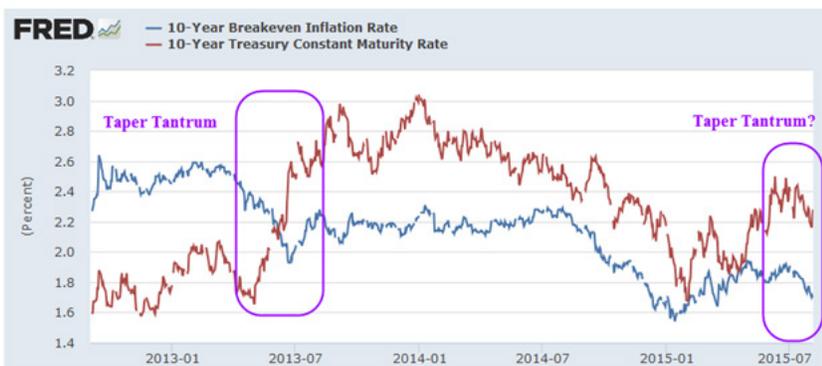


Figure 2: 2013 Taper Tantrum

Following the announcement that the Fed will no longer purchase bonds in 2013, the US Treasury yields soared with massive selloffs of bonds.

Source: Federal Reserve Economic Research(FRED)
<http://globoeconomicanalysis.blogspot.ca/2015/08/taper-tantrum-coming-it-wont-be-where.html>

Bank of England and the Bank of Japan:

The United Kingdoms and Japan are two of the largest economies that are in the middle of making a pivot. Both the United Kingdom and Japan are two developed countries facing the same issues such as stagnated economic growth, an aging population, and increasing debt. In 2016, the two economies faced several headwinds from the oil prices, Brexit and the election. Thus, the Bank of England (BoE) and the Bank of Japan (BoJ) were forced to play a particularly important role in the stabilization of the market and the improvements in the investor confidence.

For the BoE, Brexit is the most significant issue for the Bank and the

outcome of a hard Brexit will be extremely difficult to predict. Even though the British economy performed resiliently in 2016, the BoE kept the interest rate unchanged. This year, the BoE will likely wait for positive market signals before making any moves.

For the BoJ, maintaining a low exchange rate and boosting Japan's exports has been the cornerstone of Prime Minister Abe's economic plan. The plan worked very well for the past three years. In fact, the Nikkei Index was in a bullish trend since 2008. However, during last year's turmoil it became evident that once the interest rate drops to a near negative rate, the effectiveness of monetary easing diminishes. As a result, BoJ experimented with other ways of boosting the economy

and so far, it had achieved its objectives. For example, the BoJ introduced the yield curve control measurement after failing to boost the economy with lower interest rates. It is meant to keep the 10-year government bond yields at zero percent, which will allow long-term yields to be positive while keeping the short-term yields in the negative territory.

BoJ's developments in 2017 are extremely important to watch for because Japan represents a large group of countries that suffer from slow economic growth. With the new, experimental policies, Japan is a live experiment for all central banks around the world and the outcome of BoJ's policies will affect other central bank's future decisions.

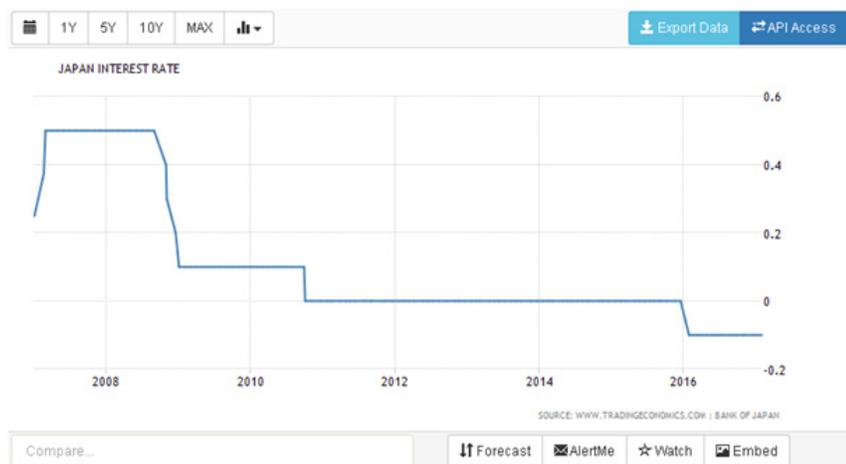


Figure 3: Japan 10-year Interest Rate

Since 2008 financial crisis, Japan had suffered a decade of low economic growth and deflation. To lift consumer prices and wages, the interest rate went down to negative territory.

Source: TradingEconomics.com
<http://www.tradingeconomics.com/japan/interest-rate>

People's Bank of China:

The People's Bank of China or the PBoC is the central bank of the world's second largest economy. In the past, the focus of the Chinese government is to increase exports while keeping the exchange rate low. However, China is on the cusp of transforming itself from an export-oriented economy to a service oriented economy as growth rate slowed down to 6.5%.

There are currently two major challenges that will impact PBoC's decisions. The first challenge is the debt. The debt in China is close to two and half times the size of its economy. The problem with the rapid expansion of the credit market is the increased exposure

to default risks and the misallocation of resources. The riskiest debt lies with the state-owned firms where extensive amounts of debt were used to fund its projects. The PBoC is trying to control growth in the credit market, but by tightening the credit market, the PBoC will risk lowering the growth rate even further.

The second challenge for the PBoC is maintaining a stable exchange rate. Unlike most developed nations, China uses a peg exchange rate and the exchange rate is fixed by PBoC against the USD. The stability of the exchange rate is often threatened by the pressure to depreciate the Chinese Yuan and the increased capital outflows. With a weak-

ened Chinese economy and the potential hawkish US policies, the PBoC was forced into using its foreign reserve to counter the impact of the increasing value of the US dollar. However, for the past two years, the foreign reserve system has decreased to the point where this solution is no longer sustainable. As a result, the PBoC introduced new measures such as stricter capital controls and a crackdown on bitcoin platforms.

2017 will be a difficult year for the PBoC as China faces headwinds from the global economy. PBoC's policies will be the key to maintaining investors' confidence in the Chinese economy.

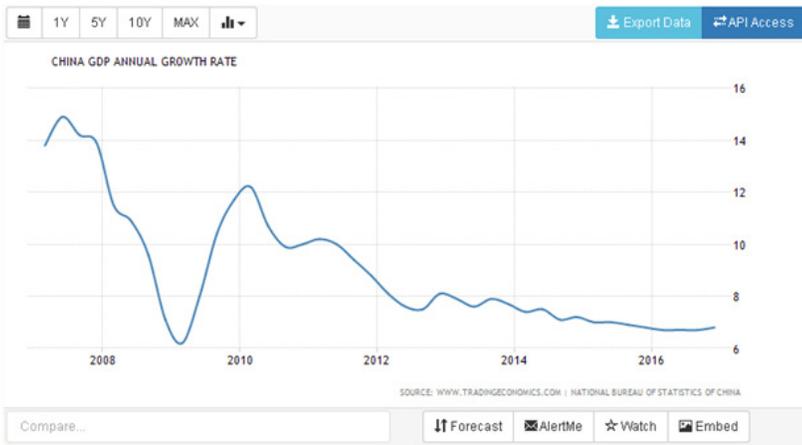


Figure 4: China 10-year GDP Annual Growth Rate

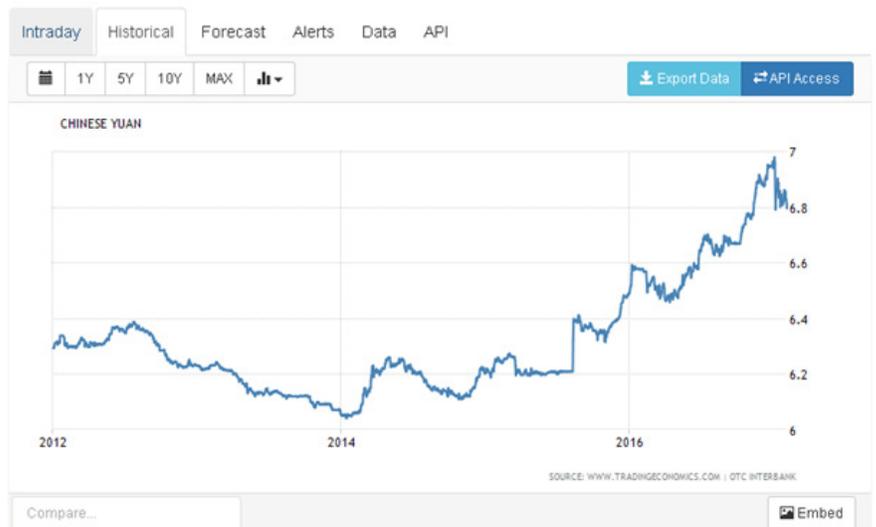
The GDP growth rate of China had been slowing from double digit to around 6%.

Source: TradingEconomics.com
<http://www.tradingeconomics.com/china/gdp-growth-annual>

Figure 5: 5 Year USDCNY Rate

The USDCNY rate had been up dramatically from 6 to 7 in the past five years. The depreciation pressure on CNY is huge as USDCNY bounces around 7.

Source: TradingEconomics.com
<http://www.tradingeconomics.com/china/currency>



Conclusion:

2017 will be another busy year for the central banks to help and protect the world economy. It will be imperative to follow all the major central bank policies, whether it is the good, the bad or the

ugly.

Definitions:

Debt: Debt is an amount of money borrowed by one party from another.

Emerging Market: An emerging market is a country that has some characteristics

of a developed market, but does not meet standards to be a developed market



The Future for Oil

What Does the Future Hold for Oil?

2016 has been a year of many tumultuous events in the financial markets. Oil has been one of the most dramatic movers of 2016 and this was highlighted by **OPEC's** agreement to cut oil production. OPEC, the producer of about 40% of the world's oil announced that they will collectively cut production by 1.3 million gallons of oil per day from 33.8 million barrels per day to 32.5

million barrels per day in order to raise the price of oil. This agreement became active during January 2017 and will last for the six months.

It has been over two months since the agreement and oil **futures** has skyrocketed by over 16% since November 30th, 2016 as indicated by Brent Crude and the West Texas Intermediate (WTI); two of the world's most significant oil benchmarks. Despite the bullish movements of both the WTI and Brent Crude;

new drilling projects, increased exports, and Trump are getting in the way of the trend and are influencing many traders to enter a short position on oil instead. So what are these factors and what impacts do they have on oil?

The 2014 oil crash brought an onslaught of economic and political instability to numerous OPEC nations and other oil-producing countries due to the drop in the price of oil. The United States took a huge hit when oil crashed as the

value of US oil fell by over 55% in half a year (indicated by WTI), forcing many oil companies and refineries out of business while abruptly halting numerous oil projects. With the surging oil prices, many US oil producers and investors are beginning to pool resources to drill oil again. In fact, the US is already producing 6% more oil than the mid-2016 levels and it has only been two months since the OPEC agreement.

In addition to the increased

Figure 1: WTI's 1 year price chart

Source: Nasdaq
<http://www.nasdaq.com/markets/crude-oil.aspx?timeframe=1y>

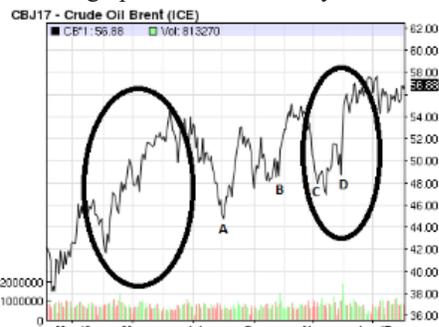


Figure 2: Brent Crude's 1 year price chart

Source: Nasdaq
<http://www.nasdaq.com/markets/crude-oil-brent.aspx?timeframe=1y>



Figure 3: US Dollar Index's price chart

Source: Bloomberg
<https://www.bloomberg.com/quote/DXY:CUR>

Keystone XL and the Dakota Access pipelines to support domestic oil production and transportation by improving infrastructure. The Keystone XL will bring over 830,000 barrels of crude oil from Canada to the Gulf Coast where many refineries and exporting companies are while the Dakota Access will transport oil from North Dakota to Illinois. This drastic action will encourage more investment in the US and Canadian oil companies due to the profit potential that oil has.

So what does all of these recent developments mean for the future of oil? The price of oil has always been heavily dependent on supply, demand, and politics. From the WTI and Brent Crude charts above, it is evident that oil is prone to sudden drops and sudden surges caused by new news and speculation.

drilling, the recently elected US president Donald Trump heavily favours **protectionism** and hates the idea of relying on foreign oil or imports. He even stated that he wanted to stop relying on foreign oil and wanted to impose hefty taxes on oil imports to encourage domestic oil production. Although the US currently has a positive net import value of about 3,448,734,000 barrels of oil per year despite its increasing exports, Trump's protectionist stance takes a large portion

of demand away from the global oil producers. In fact, the US buys about 1,056,471,000 barrels of oil per year from OPEC as of December 31, 2016. By restricting international competition, domestic US drilling companies will be encouraged to extract more oil and domestic refineries will be forced into buying domestic crude which will raise the overall production of oil.

To add fuel to his plans, Trump recently revived the construction of the

Just OPEC's activity alone has caused numerous shockwaves in the oil markets. For example, at point A for both the Brent and the WTI, there was a sharp decline in oil futures that was caused by OPEC's record-breaking supply levels which contributed greatly to an even greater oversupply of oil. For the weeks following point A, OPEC stated that it intends to stabilize the oil prices which caused a major rally due to improved investor sentiment. At point B, OPEC announced that they will cut oil output without specifying any figures and the oil prices surged by over 11% within the next two weeks. A few weeks after this announcement, doubts about OPEC's commitment to their earlier announcement caused another dramatic decline of about 13-14% of oil prices in late October (Point C) and when OPEC finally announced their deal to cut

production in late November, oil futures surged again by over 13% in the following days. This observation proves that oil is extremely volatile and unpredictable because it is traded based on fundamental supply and demand factors which cannot be easily predicted. So this brings up another question: What will happen to the future of oil?

This question is very hard to answer, but there are clues and indicators as to what to watch for and what will most likely happen to oil. In the short term, oil will most likely continue to soar at a much slower rate due to the increased demand created by OPEC's cuts and the fact that the increased global production does not make up for OPEC's production cut. This general uptrend will eventually hit a cap due to the fact that the increasing supply is limiting the growth of oil prices

and too much supply will only lower the price of oil. From a long-term perspective, after OPEC's 6-month agreement, it is likely that there will be another surplus of oil due to the fact that OPEC's oil production will start increasing again. With the already increasing US oil production mixed with the resurgence of OPEC's production, it is highly possible that there could be another huge decline in oil prices in the future.

Although oil's future is extremely hard to predict, there is one really useful index that is somewhat correlated to oil prices. The US Dollar Index (DXY) tracks the value of USD against a basket of international currencies. Since oil futures are usually traded only in USD,

Definitions:

OPEC: Stands for the Organization of Petroleum Exporting Countries. Largest oil cartel consisting of twelve countries including Iraq, Iran, Qatar, Saudi Arabia, and the UAE

Futures: An agreement on an organized exchange to buy or sell assets at a fixed price but to be sold or paid for at a later date. Most commodities are never physically traded, they are traded with futures

the power of the USD will influence the supply and demand of oil which will, in turn, affect the price. For example, during March to May of 2016, there was an evident downtrend for the DXY which drove up the demand for oil because it is more profitable for foreign countries to purchase oil. The effects of this increase in demand drove up the prices of oil during March to May of 2016 (as indicated by the WTI and Brent Crude). On the other hand, when the DXY entered an uptrend from November 2016, the demand for oil on a currency point of view decreased because other currencies had less purchasing power. However, the WTI and Brent Crude reacted in the opposite direction due to the change of supply and demand

contracts

Protectionism: the practice of shielding a country's domestic industries from foreign competition by taxes, trade barriers, and restrictions on foreign imports

Fundamental(s): The outlook of the market, the economic conditions of a security to judge the value of the security. For equities, fundamentals include analyzing the financial statements and determining the health and value of a company. From

fundamentals from OPEC's statement to cut prices. This observation shows that the changes DXY influences oil during times where the fundamentals of oil are not changing drastically, but is not a major market force in determining the price of oil during times of change in oil's fundamentals.

Overall, it is extremely hard to predict the price of oil due to its reliance on supply and demand fundamentals which are impossible to predict. However, we can certainly see that there are indicators that can help forecast the price of oil but understanding the fundamentals is by far the best way to get a grasp of this "sticky" commodity.

a commodity standpoint, its fundamentals are the market conditions and the supply and demand conditions.

Purchasing Power: Purchasing power is the value of currency expressed in terms of the goods and services the unit of money can buy. In the context of oil, when the USD drops in value, other currencies are able to use their own currency to purchase more oil since oil is traded in USD.



Resistance Levels

On January 11th, 2017, President-Elect Donald Trump gave his first formal press conference since the election in November. American stocks slumped during the day, propelled by the drop in pharmaceutical stocks as shown by the 1.66% drop in the **DJUSPR**, which is the pharmaceutical index on the NYSE. The drop was caused by Trump's statement of how pharmaceutical companies were "getting away with murder". The American dollar also edged slightly lower following the press conference since there were fewer than expected particulars about the economy and trade causing instability. The American dollar would continue to

trend lower over the next two weeks due to unease over the economic policies of President Trump. The weakened American dollar opened a path for gold which surged to a two-month high of \$1219.34 per ounce. This is because gold is often used as a hedge against the American dollar. There are two main methods in which analysts make a decision on a security. Fundamental analysis is the study of the economy, industry trends, financial condition and management of a company. Technical analysis is the study of past market data such as price, volume, and other indicators. A very important application in technical analysis is the identification

of support and resistance level. A support level is a level under the current market price where buying interest is strong enough to overcome selling pressure while a resistance level is the opposite. A support level is often identified by a previous trough while a resistance level can often be identified by a previous peak. Support and resistance levels are often also previous levels where there was little change in price, but a huge spike in volume which eventually led to a surge or decline in price. Finally, support and resistance levels can sometimes be identified by the intersection of the price and the uptrend or **downtrend** line. This is because

at these levels, investors are more inclined to enter a long or short position as they believe that they are getting a good price based on previous history. Furthermore, the breaking of a support or resistance level which is referred to as a breakout often causes the price to trend towards the next level in which investors believe it is once again safe to enter a position. However, false breakouts occur commonly so the general rule to confirm a breakout has occurred is either if 2 days have passed with the closing price outside the resistance or support level or a close that is 3% above. In 2011, Gold was at an all-time high of around \$1900 before it entered its current downtrend (the red line) which can be formed by drawing a line through the first two peaks. Gold continued this downtrend without ever testing the downtrend line until the final few months of 2016 where the price of gold was sparked by Brexit in June where it failed to penetrate the downtrend line. Gold declined for a couple of months before attempting to retest

the downtrend line in November when briefly sparked by the Trump election, but failed to break it and was propelled downwards by selling pressure. This means that this resistance line still holds and will be interesting to keep an eye on if gold manages to test it in the near future during its current or future rally. A more short-term view of gold identifies the area around \$1206 - \$1215 to be an area of great importance due to a large number of monthly candles that are between that area which signifies constant trading in that area. This means that there are strong buying and selling activities occurring in that region. Gold is currently either in that region or slightly above it while it tries to test the resistance level of \$1219 which it was unable to break. The consequences of the bulls continuously trying to break a resistance level but failing is that it is met by a strong bear which pushes the price downwards. Gold would crash to a previous resistance level that turned into a support at \$1180 before recovering back

to \$1213.

Another aspect of technical analysis is the use of volume and moving averages. Breakouts and changes in the trend of a security's price is often confirmed with volume as a higher volume is seen as a stronger move. Moving averages is the average of a security's price over a period (often 10, 30, 50 or 200 days) and helps smooth out the price of a security by filtering random price fluctuations. Similarly, to resistance and support levels, a breakout through the moving average often has significance especially with the moving averages with longer durations.

In chart 2, on January 11th, 2017 when President Trump held his press conference, there was a bullish crossing of the 50-day moving average because the price intersected the moving average from below with a large increase in volume. However, this bullish signal would be even stronger if the moving average was trending upwards instead of downwards.

Figure 1: After the resistance level of \$1220 look for future resistance at \$1241

Source: TradingView
<https://www.tradingview.com/x/YmT1Dxis/>



Technical analysis also allows the study of resistance levels, breakouts and moving averages to be combined with other indicators in order to confirm a price movement. One classification of indicators that help serve this purpose are **oscillators**. Oscillators generally work very well in markets with no price trend but also are able to confirm moves and warn the trader of overbought and oversold conditions when the oscillator is near its boundary points. Two popular oscillators are the Moving Average Convergence Divergence (MACD) and the **Relative Strength Index (RSI)**.

MACD is one of the simplest and most effective indicators of determining the momentum of a trend. It is calculated by first calculating the MACD line which is calculated by subtracting the 12 day EMA by the 26 day EMA. A 9 day EMA of the MACD line is then plotted as well as a signal line. A histogram of the MACD line less the signal line is then plotted. These lines oscillate above and below the zero line. The crossovers that occur with the MACD line, signal line, histogram and the zero line all have their own meanings. The most significant meanings often include the zero line. When

the histogram is above the zero line along with an up trending MACD and a signal line that is also above the zero line, it is a sign of strength from the bulls. However, if the price of the underlying security is increasing but the MACD indicators are decreasing, then **divergence** appears and is a warning that the underlying security may be **overbought** and a potential sell signal.

Relative Strength Index (RSI) is another oscillator that is often used in technical analysis and is extremely popular amongst futures traders. RSI is able to provide smoothing for price changes in a

that the values stay in allowing for easy comparison to past data. When the RSI is above 70, an overbought condition is noted while when the RSI is below 30, an oversold condition is noted. However, normally, these overbought and **oversold** conditions are just a warning and doesn't mean the price movements of the security will change trend. However, when there is a divergence between the RSI and the price of the underlying security, extreme warning should be taken.

Gold currently has a positive MACD which is continuing to rise along with the price which is a bullish indicator.

Furthermore, gold has an RSI that is a little bit above 70 which could potentially mean the gold is becoming overbought. This RSI is also above the peak in which gold began to reverse lower and enter a downtrend back in November which is risky. In order for the RSI to not signal a dangerously overbought signal, gold will need a slight pause or slowing of the move higher which is what is taking place currently on January 23, 2017, as gold attempts to break through the resistance of \$1219.

A final interesting application is its current use in the Dow Jones Industrial

Index (DJI). The Dow has been hovering 19600 – 19999.6 for the month of January as it attempted to break the resistance level at 20000. 20000 is an obvious candidate for a resistance level since round numbers tend to be a major psychological turning point in which traders will make often make buy and sell decisions. However, on January 24th, 2017, the Dow Jones broke and closed above the 20000 resistance level and closed at 20068.51. The Dow Jones would only stay above 20000 for three trading days before closing below 20000 on January 30th.

Figure 2: Long Term Downtrend

Source: TradingView
<https://www.tradingview.com/x/1f1o-TaLG/>



Definitions:

DJUSPR: Dow Jones US Pharmaceutical Index. Measures the performance of U.S. companies in the pharmaceuticals sector. Hedge – Investment to offset potential losses/gains that may be incurred by a companion investment.

Downtrend: The price movement of a security where the overall direction is down. A formal downtrend is where successive peaks and troughs are lower than the ones

found earlier in the trend.

Oscillator: A technical analysis tool that is banded between two extreme values and is most often used to discover short-term overbought and oversold conditions.

Overbought: A situation where the demand for a security increases the price of the asset to unjustifiable levels through the fundamentals of the security.

Oversold: A situation where the price of a security drops to a level well below its

true value.

EMA: A moving average where the more recent data is given a greater weighting

RSI: Calculated by the following formulas: $RSI = 100 - \frac{100}{1 + RS}$, $RS = \frac{\text{Average Gain per up day}}{\text{Average Loss per down day}}$. The most commonly used time period is 14 days for RSI is 14 days.

Divergence: A situation where the price of a security moves in the opposite direction as an indicator for that security.

Fact Sheet

For the Month of January 2017

Major Indices

Name	Ticker	Open	High	Low	Close	Change (Points)	Change (%)
Dow Jones Industrial Average	DJI	19872.9	20125.6	19677.9	19864.1	-8.8	-0.04%
S&P 500 Index	INX	2251.57	2300.99	2245.13	2278.87	27.3	1.21%
NASDAQ	IXIC	5425.6	5669.6	5398.	5614.8	189.2	3.49%
Nikkei 225	NI225	19298.7	19615.7	18650.3	19041.3	-257.4	-1.33%
SSE Composite Index	XGY0	3251.347	3324.031	3187.781	3308.062	56.715	1.74%

Sector Performance based on SPDR ETFs

Name	Ticker	Open	High	Low	Close	Change (\$)	Change (%)
Consumer Discretionary	XLY	82.05	85.64	81.38	84.83	2.78	3.39%
Consumer Staples	XLP	51.75	53.1	51.35	52.59	0.84	1.62%
Energy	XLE	76.11	76.81	72.13	72.9	-3.21	-4.22%
Financials	XLF	23.61	23.8	22.85	23.31	-0.3	-1.27%
Health Care	XLV	69.31	71.91	68.75	70.52	1.21	1.75%
Industrial	XLI	62.68	64.85	62.35	63.38	0.7	1.12%
Materials	XLB	49.83	53.26	49.63	51.96	2.13	4.27%
Real Estate	XLRE	30.86	31.55	30.37	30.71	-0.15	-0.49%
Technology	XLK	48.67	50.83	48.5	50.08	1.41	2.90%
Utilities	XLU	48.5	49.22	47.85	49.18	0.68	1.40%

Companies

Name	Ticker	Open	High	Low	Close	Change (\$)	Change (%)
Apple	AAPL	116.65	122.44	114.76	121.35	4.7	4.03%
Alphabet	GOOG	782.75	841.95	775.8	796.79	14.04	1.79%
Microsoft	MSFT	62.96	65.91	61.95	64.65	1.69	2.68%
Amazon.com	AMZN	766.47	843.84	747.7	823.48	57.01	7.44%
Facebook	FB	116.595	133.14	115.51	130.98	14.385	12.34%
JPMorgan Chase	JPM	86.1	88.17	83.12	86.03	-0.07	-0.08%
Exxon Mobile	XOM	90.03	91.34	84.175	84.86	-5.17	-5.74%
Wells Fargo	WFC	54.89	57.3262	53.34	56.08	1.19	2.17%
General Electric	GE	31.63	31.835	29.58	29.96	-1.67	-5.28%
Proctor and Gamble	PG	84.17	87.975	83.24	86.75	2.58	3.07%
AT&T	T	42.76	43.00	40.24	41.82	-0.94	-2.20%
Bank of America	BAC	22.02	23.55	22.1	22.64	0.62	2.82%
Pfizer	PFE	32.34	33.7	31.06	31.31	-1.03	-3.18%

Commodities

Name	Ticker	Open	High	Low	Close	Change (\$)	Change (%)
Gold	XAUUSD	1150.91	1220.01	1145.93	1210.37	59.46	5.17%
Silver	SILVER	15.894	17.614	15.889	17.52	1.626	10.23%
Platinum	PLATINUM	900.	1011.51	991.89	997.65	97.65	10.85%
Palladium	PALLADIUM	679.	796.42	679.	753.	74.	10.90%
Copper	XCUUSD	2.49506	2.72632	2.46143	2.71726	0.2222	8.91%
WTI Offshore Oil Futures	WTI	52.36	53.98	50.82	52.75	0.39	0.007
Brent Oil Futures	BRENT	55.05	55.9	53.18	55.25	0.2	0.004
Henry Hub Natural Gas Spot Price	HENRYHUB	3.71	3.71	3.14	3.	-0.71	-0.191

Fixed Income

Treasury Yields	Open	Close	Change (bps)	Change (%)
US 5 YR Treasury Yield	1.94%	1.90%	-40.	-2.06%
US 10 YR Treasury Yield	2.45%	2.45%	0.	0.00%
US 30 YR Treasury Yield	3.04%	3.05%	10.	0.33%
Canada 5 YR Treasury Yield	1.16%	1.13%	-35.	-3.01%
Canada 10 YR Treasury Yield	1.72%	1.76%	38.	2.21%
Canada 30 YR Treasury Yield	2.38%	2.42%	41.	1.72%
High Yield Corporate Bonds	Open	Close	Change (\$)	Change (%)
iShares iBoxx \$ High Yid Corp Bond	86.91	87.34	0.43	0.49%

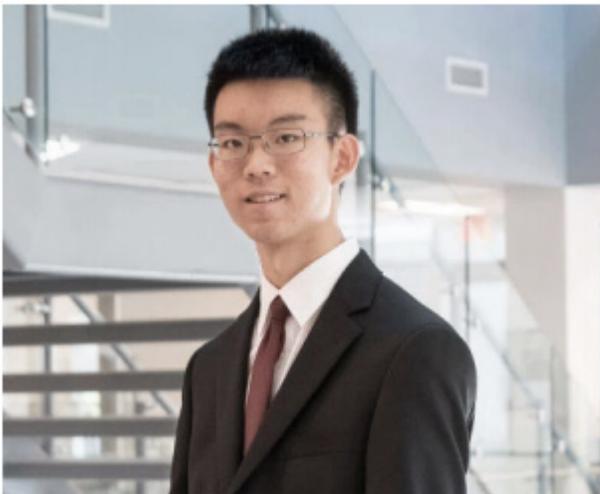


About the Authors

Danny Jiang, Chief Editor

Danny is a first year Financial Analysis and Risk Management student at the University of Waterloo. With a passion for learning, and a love for exploration, he has been able to partake in many leadership experiences in and out of the University of Waterloo. During his high school career, he captained the track and field team, the math team, and coached the soccer team. He is currently a Research Analyst in the University of Waterloo's Finance Association.

In addition to his wide range of skills, Danny was also a Senior Contributor at givemesport.com, one of England's most popular online sports websites and has extensive knowledge in journalism and writing. He is also very passionate about the financial markets and follows the major indices as well as commodities such as gold, silver, oil, and industrial metals. As the Chief Editor, Danny hopes to further develop his interest for writing while learning and sharing information about the world of finance.



Steven Lin, Editor

Steven is a first-year student studying Financial Analysis and Risk Management at the University of Waterloo. He is preparing to specialize in Financial Analysis in his third year and pursue a CFA. He has taken previous leadership positions in high school such as an executive position at his school's DECA and sport teams such as table tennis.

Steven is very interested in the financial markets and the field of trading. He follows the NYSE and NASDAQ along with the underlying options of stocks in those markets closely each day and commodities such as oil and gold. To help him grow in this field, he has read many books such as *Technical Analysis of the Futures Markets*. Steven has also completed his Canadian Securities Course. Steven hopes to further enhance his knowledge about the financial markets through the role of editor on FARMSEA.

JT Zhang, Editor

JT joined the University of Waterloo in 2012 and had five co-op terms of experience. He worked in OTPP, Scotiabank, bcIMC and Picton Mahoney Asset Management, and roles in information technology, global equities and fixed income. He passed the CFA level 1 exam and will take the FRM in May.

JT has a passion for the financial markets. He hopes the editor position will not only help him stay up to date with the market, while giving him an opportunity to share ideas with like-minded individuals.

