



January 2019

Finding Alpha

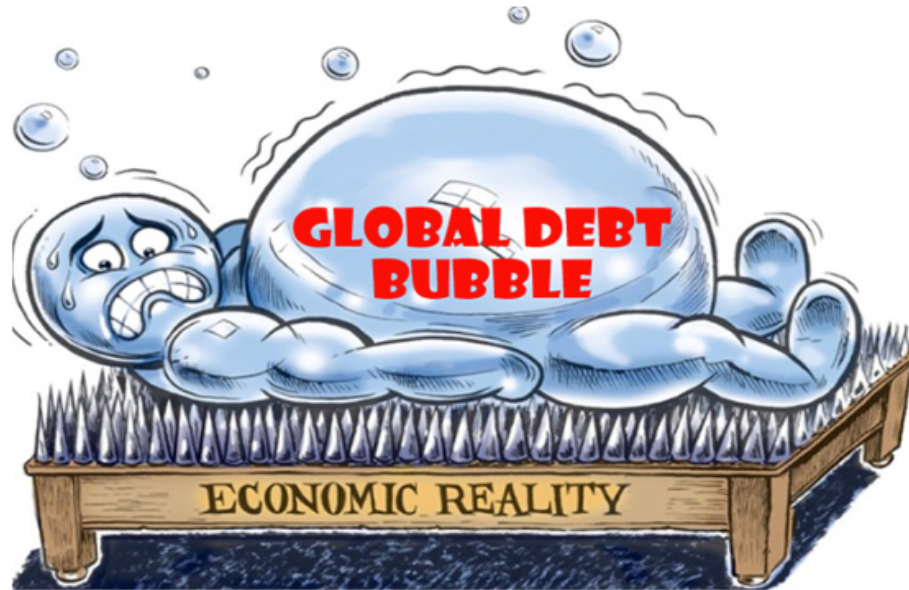
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THE GLOBAL DEBT BUBBLE

DARREN LI**JANUARY 31ST, 2019**

Consider this: You just borrowed \$5 from your friend. Now, you have gained \$5 in cash, but increased your payables (debt) by \$5; so your net value is zero. Similarly, your friend just lost \$5 in cash, but increased his receivables by \$5; so their net value is also zero. Now, for the net value between both of you: zero plus zero should equal to zero, right? Wrong. At least that's what reality is telling us right now and it's becoming a very serious problem in 2019.



Source: The Gold Telegraph

The concept of borrowing and lending has many benefits to the growth of the economy. Borrowers can invest with more money than they would otherwise be able to muster, and lenders gain from the low-risk interest payments. With more debt, there is more cash flow and it supports a healthier economy.

In an ideal world, though, entities should only borrow money to cover short-term cash deficits or to finance mission-critical projects. However, around the globe, individuals, companies, and governments alike have taken to the idea of running constant deficits as the normal course of business.

The Debt Bubble

When a firm borrows money, let's say \$100, the firm now has an obligation to eventually pay off the debt. The lender receives a token (e.g. a bond) in exchange for the money and expects to receive payments from the borrower. In contract law, the token must be recognized as \$100 "in good faith" if the borrower has not defaulted. Now, the lender can use that token as collateral to borrow more money – essentially doubling the value of what the \$100 is intrinsically worth. What is happening here, is that the world economy ends up being built on promises and speculations, which can be easily broken if something goes wrong.

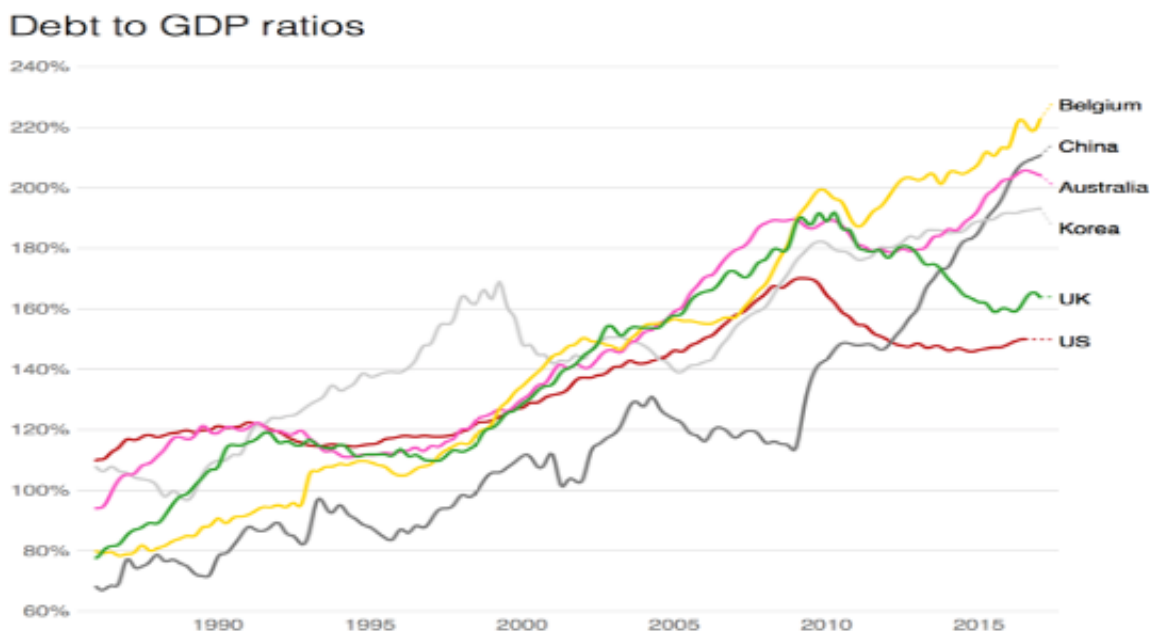


Figure 1: Debt-to-GDP ratios of representative countries during the past three decades.

Source: Bank of International Settlements

According to the Bank of International Settlements' (BIS) data, the global debt-to-GDP ratios have been steadily on the rise in the past three decades. By comparing what a country owes with what it produces, the debt-to-GDP ratio indicates its ability to pay back its debts (1). This ratio can be interpreted as the number of years needed to pay back debt if GDP is dedicated entirely to debt repayment (i.e. a ratio of 220% would be equivalent to 2.2 years of debt repayment).

These debt-to-GDP trends around the world is suggesting that the accumulation of global debt is growing much more rapidly than the world's GDP, creating a debt "bubble". A bubble in the financial industry occurs when the price of an asset, such as stocks, bonds, real estate or commodities, rises at a rapid pace without underlying fundamentals, such as equally fast-rising demand, to justify the price spike (2).

In the case of our topic, a debt bubble exists because there is increasingly more debt in the economy without enough intrinsic value in the economy to justify those debts. This can become a massive problem once an event reveals to the public the inability of the market to repay these debts – causing the bubble to "burst".

It Could Get Worse

Since 2008, because of the Great Recession, governments encouraged spending on assets with low interest rates and cheap lines of credit to accelerate economic recovery. By holding interest rates at artificially low levels, it creates false signals that encourage the undertaking of businesses and other endeavors that would not be profitable or viable in a normal interest rate environment. Today, those low-cost borrowing methods have amassed a total global debt bubble of over \$217 trillion USD.

1 <https://www.investopedia.com/terms/d/debtgdpratio.asp>

2 <https://www.investopedia.com/articles/investing/082515/how-do-asset-bubbles-cause-recessions>.

On August 2, 2018, the Bank of England raised its interest rate from 0.5% to 0.75%, which is the highest level it has been since March 2009 (3). On September 26, 2018, the U.S. Federal Reserve increased its benchmark interest rate from 2% to 2.25%, which is its highest level since April 2008 (4).

Based on these interest rate trends, the outlook for 2019 is rather bleak. With the potential of more interest rate hikes this year, it is possible that businesses and other investments can fail once they cannot afford to borrow. This could even spiral out of control and induce yet another global crisis – similar to what was experienced in the mid-2000s U.S. housing bubble.

Though it can be difficult to accurately predict how many investments and businesses may fail due to the interest rate changes, it is important to keep in mind that a recession or a banking/financial crisis is on the horizon. Investors need to prepare and protect themselves from these potential risks; the best strategy to prepare for the eventual crisis is probably diversifying your portfolio among non-correlated trading strategies and avoiding debt-related asset classes.

3 <https://www.bbc.com/news/business-45043776>

4 <https://www.bbc.com/news/business-45657009>

BRAZIL IS BACK

DAWSON MACDONALD

JANUARY 31ST, 2019

Yes, it finally happened. On Monday, January 28, 2019, the Brazilian IBOVESPA index opened at a new all-time high as sentiment is improving and a new leader takes office (1). The newly elected president, Jair Bolsonaro, is expected to implement new expansionary reform, hence the rise in the market.



Figure 1: IBOVESPA Index 6-month timeframe: *Tradingview*

Vale – A Disaster

Vale S.A., a Brazilian metals and mining corporation, was hit hard this past week despite the rise in the IBOVESPA Index. Its stock sank nearly 25% and lost nearly \$19 billion in market cap following the collapse of a dam that led to the death of more than 300 people. 5 people have been arrested following this event, and it has been reported that the company is complying with authorities (2). Despite this tragic event, it seems like no other equity in the market is taking a negative hit.

Brazil – The Emerging Market Darling

As previously stated, the Brazilian IBOVESPA index is off to a hot start this year. As of this writing, the index is up 5.08% YTD for 2019. One event that contributed to this was the change to the country's pension plan – a change that was cheered by investors (3). Again, it is all about the new president; and investors are expecting that he delivers on his promises of expansionary reform, and that there will be blue skies ahead for Brazil.

Climbing out of Recession

Despite recent growth in the IBOVESPA index, Brazil's economy should be growing at a much faster pace than it currently is. Recovering from one of the worst recessions in its

1 <https://www.voanews.com/a/brazil-stocks-hit-record-as-bolsonaro-takes-charge/4726787.html>

2 <https://www.reuters.com/article/emerging-markets-latam/emerging-markets-brazil-stocks-in-recovery-mode-latam-currencies-steady-idusl1n1zt0ms>

3 <https://www.cnn.com/2019/01/29/brazil-reclaims-status-as-an-emerging-market-darling-among-investors-amid-new-leadership.html>

economic history in 2016, Brazil's GDP growth rate is expected to be much higher – much more than the lackluster 1% growth in 2017. A reason for this is that one of Brazil's largest exports, crude oil, did not have a great year – a factor that led to the nation's slower GDP growth rate. The sharp fall in crude oil prices in 2016 did not help their recession, but as crude oil recovers, hopefully, the economy does so as well.

To add to an already existing problem, government debt is at a high – more than 75% of its GDP. Other emerging markets are not even close to Brazil's debt levels, with South Africa at 59% and Mexico at 46% (4). Again, this is where President Bolsonaro swoops in and promises reform that will greatly expand the economy and fix many of Brazil's current problems. Overall, investors are expecting great things out of Brazil and the new President in his coming term.

It is Not Always Sunshine in Brazil

As investing in any equity market comes with its fair share of risks, so does investing in Brazil's. Despite such high hopes, Bolsonaro may not live up to his promises, potentially sending Brazil into another economic downturn (5). Also, the country still possesses an unsustainable debt profile that soon needs to be addressed.

Looking to Invest?

Investing in emerging markets can be tricky, but some ways to purchase Brazilian equities is through the (NYSEARCA: EWZ) iShares MSCI Brazil ETF, which tracks a basket of certain Brazilian stocks. Another viable option would be to purchase some shares of the VanEck Vectors Brazil Small-Cap ETF (NYSEARCA: BRF) which invests in smaller market cap Brazilian stocks. These ETFs have seen a recent rise in volume and share price, as investors look to capitalize on this opportunity. Their recent charts are included below and on the next page.

4 <https://www.capitalgroup.com/europe/capitalideas/article/what-next-emerging-markets-debt.html>

5 <https://finance.yahoo.com/news/emerging-markets-brazil-shares-hit-221325674.html?.tsrc=rss>



Figure 2: (NYSEARCA: EWZ) iShares MSCI Brazil ETF 6-month timeframe: Tradingview



Figure 3: (NYSEARCA: BRF) VanEck Vectors Brazil Small-Cap ETF 6-month timeframe: Tradingview

Definitions

Emerging Markets: An emerging market economy (EME) is defined as an economy with low to middle per capita income (6).

BE READY, 5G IS COMING

STEPHANIE SHA

JANUARY 31ST, 2019

Imagine the possibility of downloading movies online in seconds. That is future of mobile networks. 5G, one of the trending topics recently, is set to have a massive impact on how we use technology.

What is 5G?

On a very basic level, 5G is the next generation of mobile broadband that will replace current 4G connection (1). For consumers like us, 5G brings 3 main benefits: faster speed, shorter delays, and increased connectivity.

Latest News on 5G

- January 24, 2019 — The telecom giant, Huawei Technologies, announced its intent to showcase the world's first foldable 5G phone at the Mobile World Congress 2019, in Barcelona, Spain (2).
- January 24, 2019 — Ottawa pledged \$40 million for Nokia to conduct 5G research in Canada(3).
- January 17, 2019 — IBM and Vodafone launched a venture aimed at boosting Europe's 5G network, Artificial Intelligence, and cloud capabilities (4).



Figure 1: 5G End-to-End Strategy

Source: ZDNet

1. <https://www.digitaltrends.com/mobile/what-is-5g/>
 2. <https://www.cnet.com/news/huawei-will-reveal-foldable-phone-with-5g-in-february/>
 3. <https://www.cbc.ca/news/business/government-nokia-huawei-5g-1.4991435>
 4. <https://www.cnn.com/2019/01/17/ibm-vodafone-launch-5g-ai-venture-in-europe.html>

Stocks to Benefit from the 5G Revolution

According to International Data Corporation (IDC), a US market research firm, 5G global infrastructure spending is set to grow from \$528 million in 2018 to \$26 billion in 2022 – a compound annual growth rate (CAGR) of 118% (5). As a result, investors are likely to see companies' stocks rise due to this revolution.

Consider Nokia as an example: Finland-based Nokia Corporation (NYSE: NOK), once a leader in the cellphone market, sold its smartphone business for \$7.2 billion to Microsoft in 2013, since it failed to survive the competitive mobile market with its own Symbian operating system (6). Today, Nokia has reinvented itself, now capable of working with major carriers who offer 5G services. Back in July 2018, Nokia signed a \$3.5 billion deal that would provide end-to-end 5G solutions for T-Mobile's nationwide 5G network (7). In addition to that, Nokia has also expanded its collaboration with China Mobile to test its new Future X architecture in the Chinese market.



Figure 2: Nokia (NYSE: NOK)'s Stock Chart, as of February 1, 2019

Source: StockCharts.com

5. <https://www.investopedia.com/3-stocks-to-benefit-from-the-5g-spending-boom-4584440>

6. <https://www.reuters.com/article/us-microsoft-nokia/microsoft-swallows-nokias-phone-business-for-7-2-billion-idUSBRE98202V20130903>

7. <https://www.bloomberg.com/news/articles/2018-07-30/nokia-wins-3-5-billion-t-mobile-deal-with-u-s-5g-heating-up>

Nokia's stock (NYSE: NOK), with a market cap of \$35.62 billion and dividend yield ratio 3.64%, had a 50-day moving average of 5.86 and a 200-day moving average of 5.75, as of February 1, 2019 (7). Let's take Ericsson Telecom Corporation (NASDAQ: ERIC) as a comparison. Sweden-based Ericsson (NASDAQ: ERIC) is also a leading developer of 5G infrastructure network, yielding 1.43%, and had a market cap of 29.11 billion as of February 1, 2019 (8). In January, Ericsson reported a quarterly net loss of SEK6.55 billion (\$723.3 million) as sales rose 10% to SEK63.81 billion and 5G demand continues (9).



Figure 3: Ericsson (NASDAQ: ERIC)'s Stock Chart, as of February 1, 2019

Source: StockCharts.com

Net losses are not necessarily a healthy signal for a company's stock, but if earnings are expected to grow in the coming years, telecommunication companies may not be a bad choice for long-term investments.

7. <https://www.marketwatch.com/investing/stock/nok>

8. <https://www.marketwatch.com/investing/stock/eric>

9. <https://www.marketwatch.com/story/ericsson-loss-narrows-as-5g-demand-continues-2019-01-25>

DWINDLING OIL

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JANUARY 31ST, 2019

On Christmas Eve of 2018, the price of US Crude Oil (WTI) reached a low of \$42.53 per barrel on closing as it fell to its lowest in 2018, almost 40% below its peak of \$76.41 just three months ago. However, with a recent influx of policy changes and supply events, crude oil has made a slight rebound to a price of \$54.21 as of Jan 31, 2019.



Source: Emirates Business

Change in supply

On December 7, 2018, OPEC (Organization of the Petroleum Exporting Countries) decided to strike a deal to decrease the oil production while providing support for the crashing oil prices (1). With a daily reduction of 890,000 barrels for the month of January, and a plan to further reduce it to 1.2 million barrels per day within the first six months of 2019 (2), this deal diminishes the supply for oil and supports the wavering oil prices.

At the same time, Venezuela, with potentially the largest oil reserves in the world, faces sanctions from the Trump Administration that limits its exports to the United States. As the third largest exporter to the United States with about 500,000 barrels per day, Venezuela is also expected to produce less than 1 million barrels per day, with a further forecasted daily drop of 300,000 to 500,000 barrels this year (3). This is quite the difference when compared to the more than 2 million barrels produced daily in 2017 (3). As a result, this restriction in supply supports the price of oil.

1. <https://www.cnbc.com/2018/12/07/opec-meeting-saudi-arabia-and-russia-look-to-impose-production-cuts.html>

2. <https://oilprice.com/Energy/Energy-General/Reuters-Survey-OPEC-Production-Drops-Most-In-Two-Years.html>

3. https://realmoney.thestreet.com/investing/energy/first-russia-then-turkey-now-sanctions-on-venezuela-what-about-oil--14848124?puc=yahoo&cm_ven=YAHOO&yptr=yahoo

Faltering demand

The demand for oil is decreasing as well. IEA (International Energy Agency) projects a decrease in the demand of OPEC crude oil by 300,000 barrels per day for 2019. Furthermore, the price of oil is constricted by the slowdown of GDP growth rates of many of its primary consumers, such as China and India, who are among the largest users of oil worldwide (4,5). Thus, alongside the global economic slowdown projected for 2020, and the ongoing trade war between the United States and China, economic activity will be negatively impacted, and, as a result, inhibit the consumption of oil.

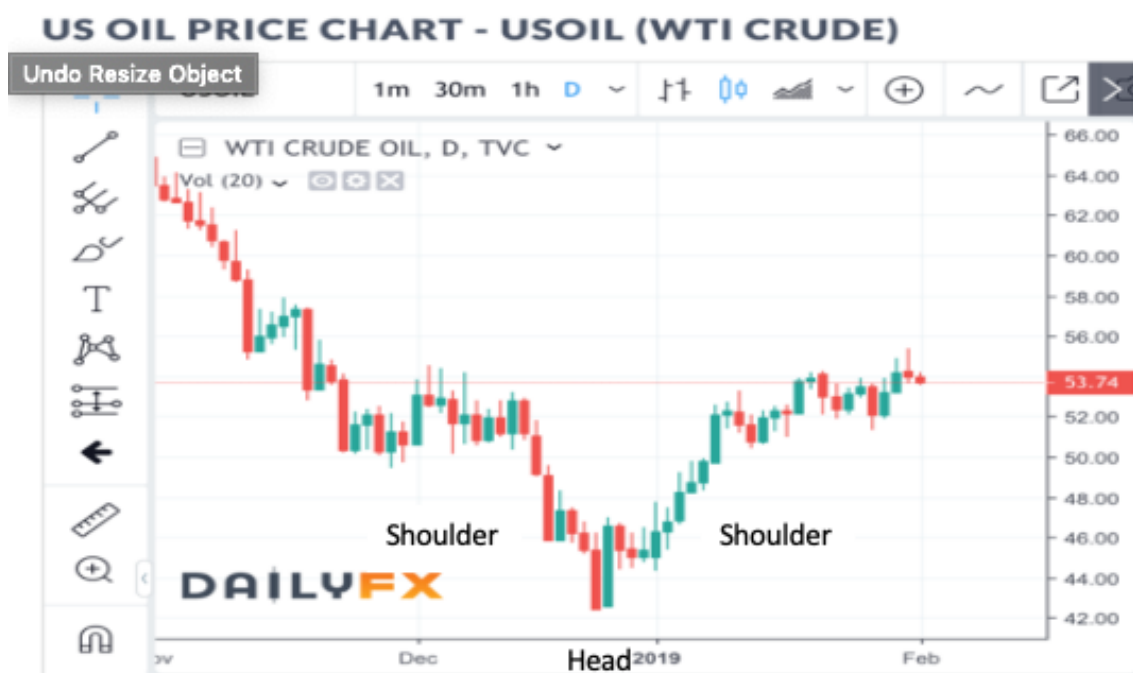


Figure 1: Inverse head and shoulders pattern signifies possible short-term reversal

Source: <https://www.dailyfx.com/crude-oil>

Looking to the future

With less supply in the market due to OPEC's actions and its allies withdrawing 890,000 barrels of crude oil out of the market per day, it seems that the oil price will remain supported around this range at current levels of demand and supply. With the price action of crude oil exhibiting an inverse head and shoulder price pattern in the past two months, a reversal in the downtrend to higher price levels is to be expected in the near future.

At the same time, sanctions in Venezuela contribute to the dwindling supply by reducing its exports to the United States, seemingly assisting the efforts to balance the levels of demand and supply. However, with ongoing trade talks and a looming economic slowdown, the demand will continue to decay, leaving the future of crude oil uncertain past the first half of 2019.

4. <https://www.fxstreet.com/news/iea-cuts-demand-forecast-for-opec-crude-oil-by-300-000-bpd-in-2019-201811140914>

5. <https://www.rbccm.com/assets/rbccm/docs/news/2019/oil-strategy-2019-outlook-infographic.pdf>

THANK YOU FOR READING!

JANUARY 31ST, 2019

Thank you for reading FARMSA's January newsletter! As we are getting things started this month, the January issue is shorter than usual. We will come back with a more extensive February issue, where we will also properly introduce FARMSA's Market Research team for Winter 2019.

We would love your feedback! If there is anything regarding the financial market or recent economy that you would like us to discuss, send us an email at farmsa.editors@gmail.com, and your idea could be in the next issue!

Cheers!

The Editors