Dead Pigs Aren't Afraid Of Boiling Water

Operators,

We've got a lot of great stuff for you in our July issue of the MIR.

First up we discuss what's happening in China, including their Ponzi finances, why it won't last, and when we expecting the bough to *finally* break.

And for an extra twist, we'll explain why we're actually *bullish* on China over the next 3-6 months…

In This Issue:

Of course we'll also give you our best ***bet*** to play this China theme.

That last sentence is clever because we're talking about casinos… or maybe not.

Either way we'll finish up with our Quant section dedicated to teaching you one of the most effective ways we measure liquidity conditions around the world.

I'm excited to hear your thoughts on on everything we have to say.

Be sure to send me an email at alex@macro-ops.com with what you think.

Your Macro Operator,

Alex

Macro: China's Ponzi Scheme

Last year famed short-seller and fund manager of Kynikos, Jim Chanos, was interviewed by the Financial Times. He told the following story about his team's recent dig into China:

> *This story is internally now one of our great stories.*
>
> *A real estate analyst was addressing the partners and he said: 'Currently there's 5.6 billion square meters of high rises in China under construction. Half residential, half office space.' And I thought for a second and I said: 'No, you've gotten the American, rest of the world metrics wrong. You must mean 5.6 billion square feet. Because 5.6 billion square meters is roughly 60 billion square feet.'*
>
> *And my analyst looked at me sort of terrified. He was a young analyst at the time. He said: 'I know. I double checked. It's 5.6 billion square meters.' And I thought for a second and I said:* ***'Well if half of that's office space, that's roughly 30 billion square feet of office space. And that's a five foot by five foot office cubicle for every man, woman and child in China!'***
>
> ***And that's when we all looked at each other and our jaws dropped. We realized, wow, this is a once in a lifetime kind of thing,*** *where this whole country is in effect building itself out in a very short period of time.*
>
> *So then we looked at the capital spending of their miners, and we went back and looked at a time series of those that were around from 1990 on, and once again it was just one of these hit your head kind of moments.*
>
> *And with the government's explicit backing to do whatever it takes to keep China growing faster than the rest of the world's major economies.* ***Right now markets believe in two things: central banks have the market's back and China has the global economy's back.***
>
> ***Those are two very, very big pillars and they'd better hold up… because everybody believes them.***

Everybody knows central banks, led by the Federal Reserve, have been the explicit providers of liquidity (credit/demand) whenever markets have hit an air pocket. This has been the case ever since the Great Financial Crisis (GFC).

And just as important, if not *more* important this cycle, has been China -- the marginal provider of credit fueled demand to the entire world.

The central bankers received the praise for putting a bid under markets, but it has really been China that's done the heavy lifting… and still is…

This is important because liquidity drives fundamentals, fundamentals drive sentiment, and sentiment drives markets in a reflexive loop that goes on and on.

Since the Fed and China are the two biggest providers of liquidity, to successfully ***play the player***, we must pay close attention to what they're doing.

Remember, *playing the player* requires 3 steps:

1. Identify the dominant beliefs driving markets
2. Imagine alternative future scenarios that would impact these beliefs and subsequent asset pricing
3. Wait for indications to see which scenario is playing out (price action helps here)

The first step to *playing the player* is identifying the dominant beliefs driving markets. Understanding and dissecting these beliefs allows us to exploit them.

And like Chanos said:

> ***Right now markets believe in two things: central banks have the market's back and China has the global economy's back.***
>
> ***Those are two very, very big pillars and they'd better hold up… because everybody believes them.***

On the central bank front we've recently seen a dramatic shift from the global monetary policy chiefs.

Central bankers are having a "Mission Accomplished" moment. It looks like the central bank "put" is getting pulled as we transition from an easing cycle into a tightening one.

The focus is no longer on growth and inflation. It's now centered around investor exuberance and financial stability.

The larger impacts from this regime change won't be felt until 2018. But in the second half of this year, we should expect an increase in volatility as interest rates lift off from all-time historical lows.

The more important liquidity variable heading into the end of the year will be China.

We need to monitor whether they continue with their recent round of tightening or follow their historical pattern of with easing right after a short tightening cycle.

Discerning China's intentions is a lot tougher than reading central banks, but at this stage it's more important.

Paul Podolsky, a portfolio manager at Bridgewater, recently said that they estimate over **"70 percent of the swings in the global economy are driven by swings in the Chinese economy."**

I think that's a fair assessment.

In this month's MIR, we're going to talk China.

China matters a lot.

It's also an economic Gordian Knot.

A problem of false data and competing narratives create a thick opacity, especially for us outsiders. Churchill's quote about Russia applies: the country's economy is "a riddle wrapped in a mystery inside an enigma".

We're going to start unravelling this knot.

I say, "start" because China and the second and third order impacts of its policies will be a focus of ours over these next few reports. Like the country itself, the story of China is simply too big to unpack in one go. There are too many subsequent trades that stem from this narrative to properly digest in a few pages.

For example, if you want to understand:

- The global housing bubble 2.0 (we'll be covering this in a coming report)
- The commodities and emerging market boom following the GFC
- Why commodities and EMs cratered in 2015
- Or why they recovered so strongly in 16'
- The viability and impact of One Belt, One Road and how this is reshaping geopolitics

Then you need to know China.

Let's begin.

At its core, the story of China is one of unabashed and unprecedented credit growth couched in a Frankenstein capitalist economy.

Their goal is to enjoy all the upside of capitalism with none of the downside (the Chinese are not familiar with Schumpeter's "creative destruction").

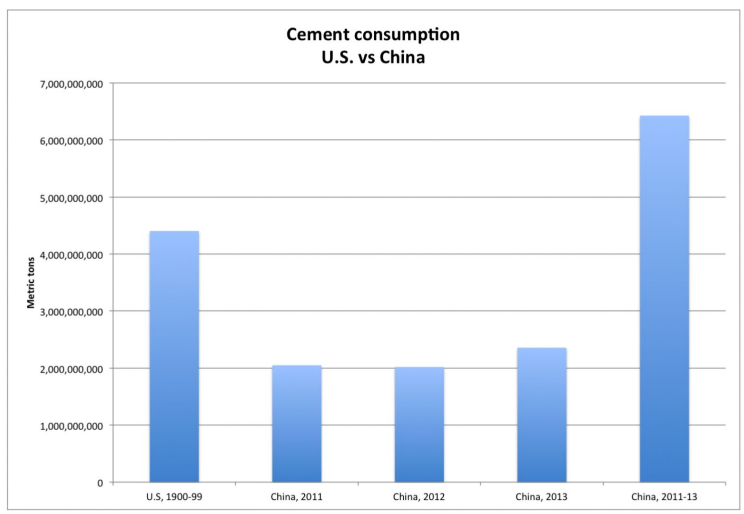
This in turn has spawned incredible levels of moral hazard, all controlled by various levels of semi-corrupt state and local governments. These guys prize social stability (hence why no Schumpeter) and self-enrichment above all else.

There's no good historical economic comparison to what's occurred in China.

The speed and size of its debt-fueled ascendance puts Japan's run in the 70's and 80's to shame. And the USSR's communist organized rise of the 50's and 60's doesn't even come within a hectare.

The Far East nation of 1.4B people is simply in a league of its own considering the velocity and scale in which it's risen to second place in global GDP.

For example, **in the three years from 2011 to 2014, China consumed more cement than the US did over the entire last century** — a century in which the US became the wealthiest and most powerful nation in history.



U.S. Geological Survey and International Cement Review

That kind of scale is tough to wrap your head around.

It's estimated that half of China's infrastructure *(that's a LOT of infrastructure)* was built in just the last 16 years.

Just 30 years ago, less than 20% of China's population lived in cities. By 2020, that proportion will be up to 60%.

This Usain Bolt of urbanizations has radically altered the country over the last 30 years.

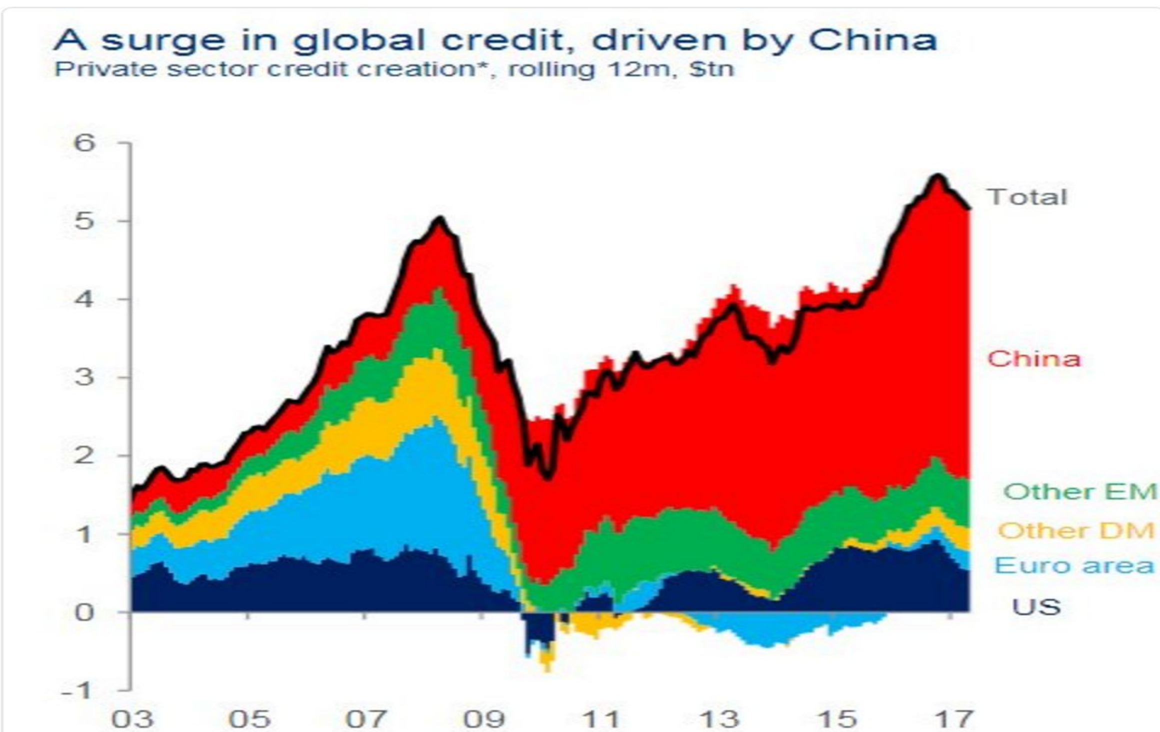
Beginning in the 1980s, China was very poor. Its GDP per capita was equivalent to that of Zambia's.

Fast forward just three decades and China's GDP per capita has increased over 48-fold, bringing 800 million people out of poverty.

But it's not like the Chinese have something in their drinking water, or they probably do, but it didn't help them unlock a secret key to economic growth.

What China has benefited from is tons of people, tons of credit, and a governance system that is incentivized to keep the party going, not only for its own personal gain, but also out of fear of what would happen should the music stop.

Look at the chart below. It depicts global private sector credit creation over the last 15 years. The chart bleeds red.



China has been the largest source of global demand since the GFC by a mile — which is why they've been the key driver in global macro.

And this is just private sector debt. When you look at total debt, the numbers, and especially the growth of those numbers, are even more staggering.

Just six years ago the World Economic Forum predicted China's debt would increase to a "worrying" $20 trillion by 2020.

China heard this, yelled "hold my shaojiu", and **ran its debt to over $30 trillion today. This is more than double what it was just eight years ago.**

At its current pace, **China's total debt is expected to surpass $50 trillion in two years. This would bring its debt-to-GDP ratio close to 500%.**

China's young financial system is now over twice the size of the US's — which is a larger and vastly more mature economy.

Now debt/leverage isn't bad in and of itself. It can be a valuable tool when used prudently to invest in productive assets that add value and have a positive return on capital.

But problems arise when people/businesses/countries use debt to consume or invest in assets that return below their costs — like when they build ghost cities or produce so many base metals that the excess needs to be bulldozed into the ocean (a common occurrence in China).

And when you're growing your debt at the rate China has over the last decade, it's just a law of numbers that much of the assets bought on borrowed money will not return their initial costs. There's just not $30 trillion worth of profitable investing opportunities located in one country within a 10-year span.

Here's the rub.

China's growth has been mind-blowing and durable, at least up until now. But there's a big difference between the country's current growth and real, *sustainable* economic growth.

One is driven by the need to generate "economic activity" and maintain a high level of employment for social stability reasons.The other is based on household consumption and productive investment.

Most economists fail to differentiate between the two, usually due to a general confusion of what GDP measures in the first place.

GDP isn't a measure of the value of goods and services produced within a country's borders. GDP is a measure of economic activity.

But it's the former — the value of goods and services produced — that matters to a country's long-term wealth and prosperity.

A country could turn out trillions of dollars worth of fidget spinners using government subsidized money. But unless there's actual market demand that'll pay above cost for those fidget spinners, the country is no better off.

Economic activity has been created, sure. GDP will register *trillions* in dollars of economic activity. And if the country made more fidget spinners than last year, they'll clock GDP growth and employment will rise as a result.

But regardless of those numbers, absolutely no value has been created.

In fact, a lot of wealth has been destroyed. They've borrowed from the future to produce these fidget spinners today, and won't reap the benefits from an offsetting productive return on capital. All they've done is pull their future consumption forward.

The reality is that most of China's high GDP growth over the last two decades has been nothing more than an artificial boost to economic activity. There hasn't been a commensurate increase in capacity to create value add goods and services.

Eventually, if an investment doesn't create additional productive capacity over its initial costs, it needs to be written down to its true economic value.

When unproductive investments are made with debt, it means all the benefits enjoyed at the time that debt was spent will eventually be reversed.

High debt levels also have the potential to spark systemic risks within the economy, in which case the final costs could end up being much higher than the initial debt payments.

We can call this the Kardashian Fallacy.

That family of trolls can take out millions and millions in loans to buy fancy homes, cars, and lots of plastic surgery. On the outside, this will make them appear successful and wealthy.

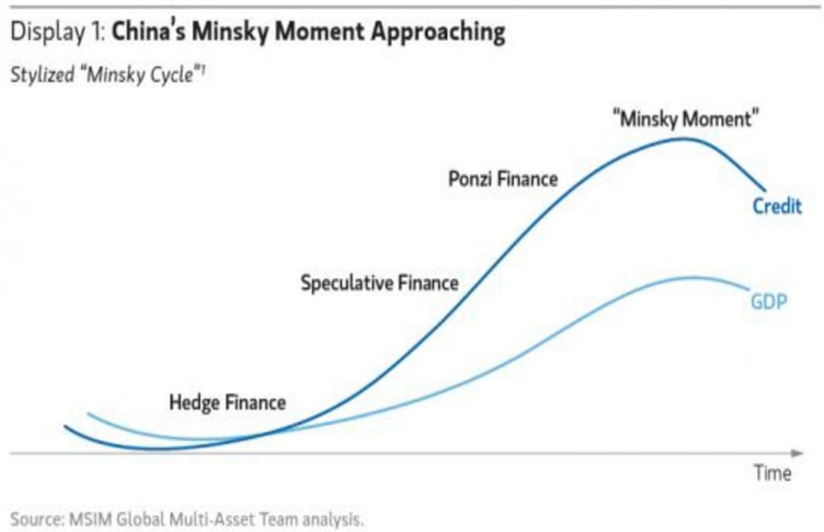
And if interest rates are low and money is cheap, the family's creditors may be lenient enough to roll over those loans or even extend the family more credit.

This is called Ponzi finance. It allows the appearance of wealth to persist, at least for some time. But eventually the debt builds to a point where the additive interest costs of accumulating new debt to pay off old debt becomes higher than the immediate cash flows each unit of new debt brings in.

The old saying that a rolling loan gathers no losses can only be true for so long. Eventually, all serial accumulators of unproductive debt have their Minsky moment.

Then they either default, get bailed out, or in a government's case, they inflate their debt away (which is a default through monetization).

It doesn't take much digging to realize China is well into the Ponzi stage of finance.



This has been accepted fact for a *long* time.

But even so, people still believe it will keep going. Because if the Chinese Communist Party (CCP) has "successfully" managed everything thus far, then why not?

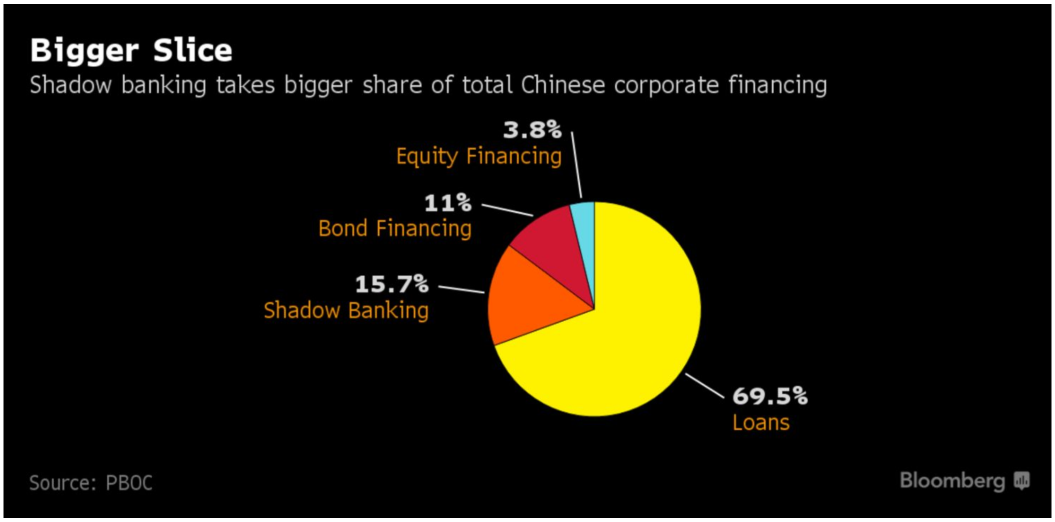
In *play the player* terms, the dominant market belief is that the debt-fueled Chinese train will keep rolling, regardless of blatant problems with the system.

Now the second step to *playing the player* is <u>imagining alternative future scenarios that would impact these beliefs and subsequent asset pricing.</u>

So how bad are things in China really? Is the market correct in their belief? Can the CCP maintain control?

Hedge fund manager Kyle Bass believes **the level of non-performing loans at Chinese financial institutions is over 20%**, well above the 1.7% rate that's officially reported. From the people we've talked to and our own research, the 20% seems about right and could even *understate* the problem.

The China Banking Regulatory Commission (CBRC) has already established 12,836 creditor committees to help manage roughly 15 trillion yuan in bad debt. **This amount is more than all the equity in the entire banking system.**



What makes analyzing the severity of the credit rot difficult is the size and opacity of China's shadow banking sector.

Shadow banking has continued to make up an increasing portion of the country's financing as the government clamps down on lending. Since shadow banking is comprised of off balance sheet loans, it's much tougher to regulate.

According to PBOC data, the most popular form of shadow banking is the use of so-called trust loans and entrusted loan agreements.

Entrusted loans are where one company lends money to another with a bank acting as a middleman. And trust loans are where banks use proceeds from selling wealth management products (WMPs) to invest into a trust plan. The cash flows from those trust plans eventually make their way to the corporate borrower.

It's complex... but that's not even the start of it.

These WMPs have become extremely popular. They're bought by people, corporates, and banks alike because they provide returns of up to 8 percent. This is well above the one-year deposit rate of 1.5%.

On top of that they're also viewed as risk-free. Most people believe they're implicitly backed by the government. Here's the following from Bloomberg:

> *Like many individual investors in China, Yang Mo has no idea what's in the wealth management products that make up a big chunk of her net worth.*

> *She says there's really no point in finding out. Sure, WMPs invest in all kinds of risky assets, but the government would never let a big one fail, she says.*
>
> *"It's not how the Chinese government does things, and it's not even Chinese culture," explains Yang, a 29-year-old public relations professional in Beijing.*
>
> *"Cracking down on implicit guarantees is just like curbing home prices," she says. "It's something that the government needs to say, but it's not something they will eventually do."*

Because of this widely adopted belief in a government backed 8% risk-free rate, the WMP industry has grown enormous.

WMPs now total 60 trillion yuan or roughly $9 trillion. **That's equal to more than three-quarters of China's GDP.**

But of course these numbers are just rough estimates. Nobody <u>really</u> knows exactly how large the system is or who owes who what. There are numerous examples of WMPs investing in WMPs that are invested into a WMP. It's all extremely interconnected and convoluted.

And if that weren't enough, there's widespread reporting that much of the lending occurring in this market is based off collateral that either doesn't exist or has been rehypothecated for use in other loans. In a recent story Reuters reported "One lawyer said he discovered that the **same pile of steel was used to secure loans from 10 different lenders"**.

Violet Ho, a senior director of Greater China Investigations and Disputes Practice at Kroll has said, "Often you also see that the paperwork around collateral may be dodgy, and the bank loan officer knows, the intermediary knows, and the goods owner knows — **so it's essentially a ponzi scheme.**"

The problem is so widespread that even the International Finance Corporation (IFC) (the World Bank's investment arm) got taken for tens of millions of dollars by one of China's richest men. Here's the following via ZeroHedge:

> *The deception began in 2007, after the IFC lent the money to Hong Kong-listed Zhejiang Glass Co Ltd, then owned by Chinese tycoon Feng Guangcheng. Two years later, the IFC made an unpleasant discovery: In discussions with other banks **it found that the collateral for the IFC loan had also been pledged to other lenders, according to a person with direct knowledge of the case**. Anxious IFC officials hurriedly dispatched lawyers to the land and company registration authorities in Zhejiang Province, where they made another startling discovery: The stamps on the mortgage certificates for the*

land, properties and industrial machinery used to secure the loan were fake, people familiar with the case said.

Concluding they'd been swindled, IFC officials traveled to the eastern city of Hangzhou in late 2009 to confront Zhejiang Glass's chairman. Feng, who sat at the head of the table with a junior by his side, didn't want to dwell on the loan, recalled one person who attended the meeting. He admitted right away that the documents were fake and quickly tried to move the discussion along.

"His attitude was, ***'Dead pigs aren't afraid of boiling water',"*** *the person said, using a Chinese proverb to describe Feng's attitude: Any attempt to punish him was futile because the loan was already lost.*

As a student of economic history, China absolutely fascinates me. I mean the numbers and level of financial malignancy is off the charts.

Can the CCP somehow manage this mess indefinitely?

<u>Hell no.</u>

When the last block gets pulled and we all yell Jenga, we'll have front row seats to the greatest debt unravelling in history.

I suspect that since China values stability above all else, it'll choose to massively devalue the yuan to recap its banks.

The yuan bears like Kyle Bass and Mark Hart will eventually be proven right.

But the question with these things is always timing. When analyzing complexities like this, the sandpile analogy always comes to mind (via the book, *Ubiquity: Why Catastrophes Happen)*:

In this simplified setting of the sand pile, the power law also points to something else: the surprising conclusion that even the greatest of events have no special or exceptional causes. ***After all, every avalanche large or small starts out the same way, when a single grain falls and makes the pile just slightly too steep at one point.*** *What makes one avalanche much larger than another has nothing to do with its original cause, and nothing to do with some special situation in the pile just before it starts.* ***Rather, it has to do with the perpetually unstable organization of the critical state, which makes it always possible for the next grain to trigger an avalanche of any size****.*

We don't know exactly when that next grain of sand will trigger the collapse. But we do know that the pile (of debt in our case) becomes much more unstable in illiquid environments. This is when the cash flows needed to keep the Ponzi game going start to evaporate. And it's likely we enter an illiquid environment somewhere near the second half of next year.

Going back to the steps of *playing the player*:

1. **The market is clearly wrong in their belief the China train will keep on rolling indefinitely**
2. **The alternative scenario here is that the CCP loses control and the debt pile collapses**
3. **There's a good chance we get indications this alternative scenario is playing out when we finally hit an illiquid environment in the second half of next year**

That's when we'll make our move and profit. We'll continue to watch for signals that'll alert us and keep us multiple steps ahead of the rest of the market.

In the meantime though, we're actually **bullish** on Chinese and Asian markets over the intermediate term (ie, 3-6 months).

There are three primary reasons for this.

1. China is starting to benefit from a weaker yuan which has been seen through a rise in exports
2. A strengthening global economy is leading to increasing demand for Chinese goods
3. China's all-important Congress is coming up in November. This makes it likely they'll ease off this recent period of tightening to juice the economy

China's economy bottomed in early 2016 and has picked up ever since. The rebound is the result of a more dovish Fed and more importantly, **an early 2016 $2 trillion credit injection into the economy by the PBOC through repos.**

This massive credit injection put a bottom in commodities and emerging markets and likely saved the developed world from falling into recession last year.

The positive impacts from this credit impulse are still being felt today.

Data as at 1Q2017. Source: China National Bureau of Statistics, Haver Analytics.

But the CCP, concerned about the rapid rise in credit, began raising short-term interest rates. They also clamped down on hot money flows and increased regulation in the bond market earlier this year.

Afraid to completely pop the monster it's birthed, the government has acquiesced to periods of short tightening until a certain economic pain point is felt. They then transition back to more easing.

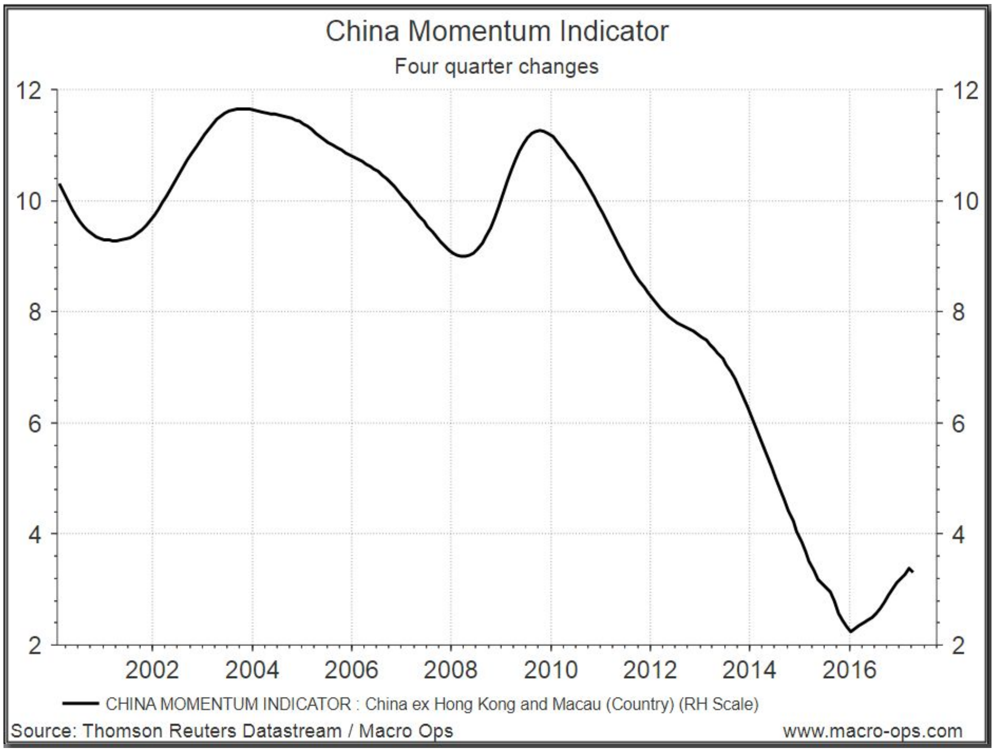
This back and forth can be seen in the chart below via Nautilus. It reveals that a negative 30% 3-month rate of change in iron ore prices tends to act as a good indicator of the pain point.

forward returns after 5 events 7/13/2009 - 5/18/2017

	MBIO62DA MBUL	MXEF/MXWD	MATR/SPX	FCX (Freeport)	DE (Deere)	PCAR (Paccar)	STLD (Steel Dyn.)	IBOV Index
Event Dates	3Mo	3Mo	3Mo	3Mo	3Mo	3Mo	3Mo	3Mo
07/12/2010	18.88%	4.10%	7.18%	51.09%	31.09%	20.97%	0.76%	12.47%
10/27/2011	13.70%	1.30%	2.23%	7.84%	12.44%	0.66%	20.42%	5.90%
08/29/2012	32.80%	2.51%	2.34%	9.64%	13.09%	10.71%	5.47%	1.45%
04/01/2015	12.32%	-2.11%	-1.44%	-3.00%	9.81%	3.96%	5.46%	0.38%
12/07/2015	48.54%	1.73%	0.80%	26.56%	4.98%	6.53%	22.05%	8.06%
Avg after Signals	25.25%	1.51%	2.22%	18.42%	14.28%	8.56%	10.83%	5.65%
Average All Periods	1.34%	-1.11%	-0.72%	0.77%	3.67%	2.78%	3.94%	1.04%
T-Statistic	3.48	2.54	2.07	1.87	2.39	1.64	1.58	2.07
# Events Up/Down	5 / 0	4 / 1	4 / 1	4 / 1	5 / 0	5 / 0	5 / 0	5 / 0
Significance	99%	97%	95%	94%	97%	92%	91%	95%

The most recent pain point signal was triggered in May. Chinese deliverable iron ore has rebounded since then which gives weight to the idea that the CCP will ease into the end of the year.

Our Chinese economic momentum index continues to trend higher after bottoming early last year. This index aggregates data such as freight and rail traffic, along with electricity usage. It's data that isn't adulterated by the government and is therefore likely to provide a clearer picture of what the economy is really doing.



China's A-shares have recently broken out of an 18-month consolidation pattern which suggests that at least an intermediate bottom may be in. We are long A-shares through the ETF (ASHR).

Relative strength is being confirmed by a number of other Asian markets. The price action of Vietnam (VNM), Korea (EWY), Thailand (THD), Malaysia (EWM), and Taiwan (EWT) all look extremely constructive and suggest there's a high likelihood that Asian markets outperform developed markets into the end of the year.

Macro Recap:

1. **The Fed and China are the two biggest liquidity providers. Together they drive current market trends. China in particular will have the largest effect on markets going into the end of the year.**
2. **In *play the player* terms, the dominant market belief surrounding China is that their debt-fueled train will keep rolling, regardless of blatant problems within the system.**
3. **But in reality this is impossible because their massive production doesn't have any *real* value.**
    a. **Their assets won't be able to pay off the enormous debt load they've built up through their Ponzi financial system made up of shadow banking and WMPs.**

   b. **Our alternate scenario is that the CCP loses control of the ship and must eventually "default" by ~~devaluing~~ destroying the yuan**
4. **There's no way to know exactly when shit will *finally* hit the fan, but things will get a lot more unstable as we move into an illiquid environment during the second half of next year. That's when we'll start looking for indications of a debt collapse.**
5. **But in the meantime we're bullish on China over the next 3 to 6 months because:**
   a. **China is starting to benefit from a weaker yuan which has been seen through a rise in exports.**
   b. **A strengthening global economy is leading to increasing demand for Chinese goods.**
   c. **China's all-important Congress is coming up in November. This makes it likely they'll ease off this recent period of tightening to juice the economy.**

Micro: Casinos

Asians love to gamble more than any other people.

They treat both the stock and commodity markets like casinos.

And when the markets are closed, they hit the *actual* casino.

They don't fear losing money like Westerners do.

I've put in A LOT of hours at the poker table and the most action by *far* comes from Asians. They aren't afraid to get their chips in. Westerners, by comparison, are much more timid and tight.

There's a huge cultural difference.

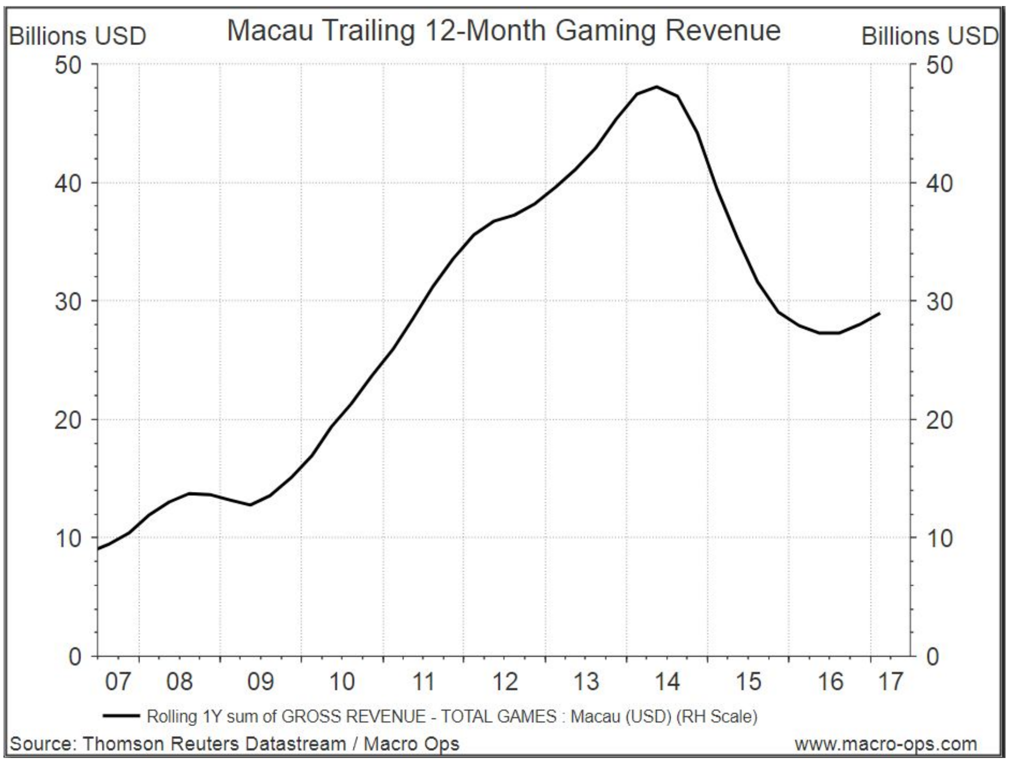
And this difference is why the big Vegas casinos have poured all their time and money into building the next gambling mecca of the world — Macau.

Macau is a tiny little island off the South of China… the only spot over there where gambling is allowed. As you can see below, it's pretty much a Vegas 2.0.

MGM resorts, Steve Wynn, Sheldon Adelson — all these guys are building like mad over there. And for good reason!

The amount of gaming revenue Macau brings in is 5 times what Vegas pulls…

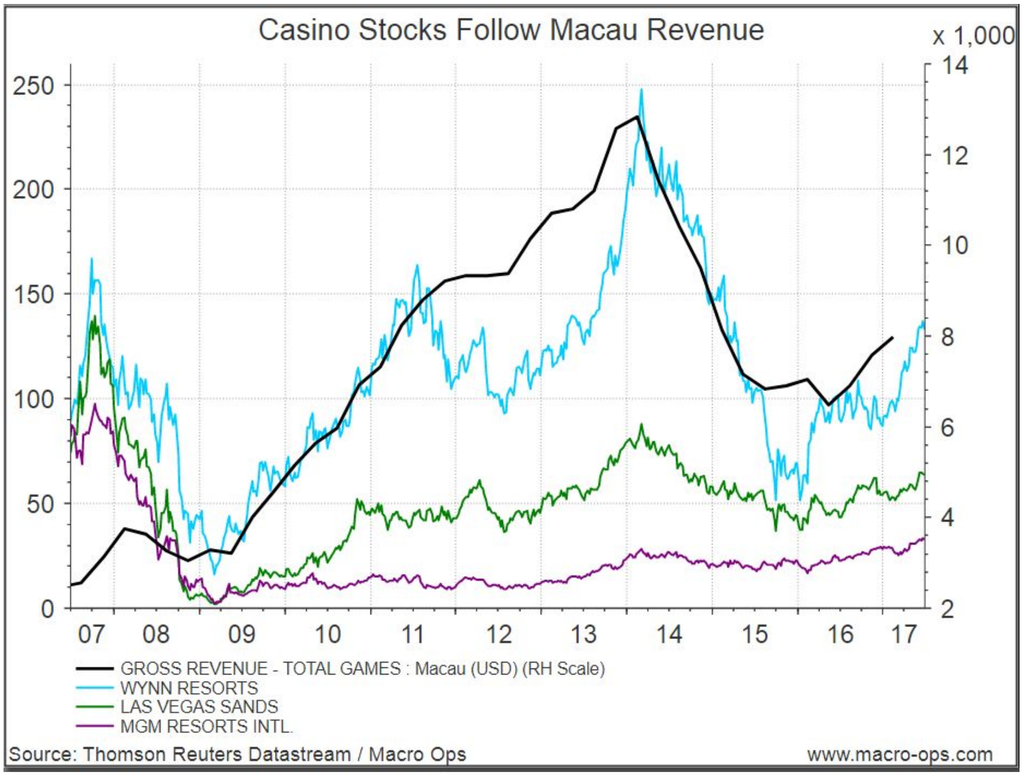
In 2016, Macau generated $28 billion in gaming revenue. In comparison, the Vegas strip brought in just $5.8 billion. And these Macau numbers are still well off their all-time highs of $48 billion.



The Vegas gaming market has fully matured. Low single digit growth is about all we can expect. But in Macau, year-over-year growth can easily top 20% when things are running hot.

Because of the large amount of revenue and high growth rate, Macau is the primary focus for investors betting on casinos.

In *play the player* terms, the success of Macau is the dominant belief driving the market. Wherever Macau revenues go, casino stocks follow…



Up until recently, the Macau gaming industry had been in the doldrums.

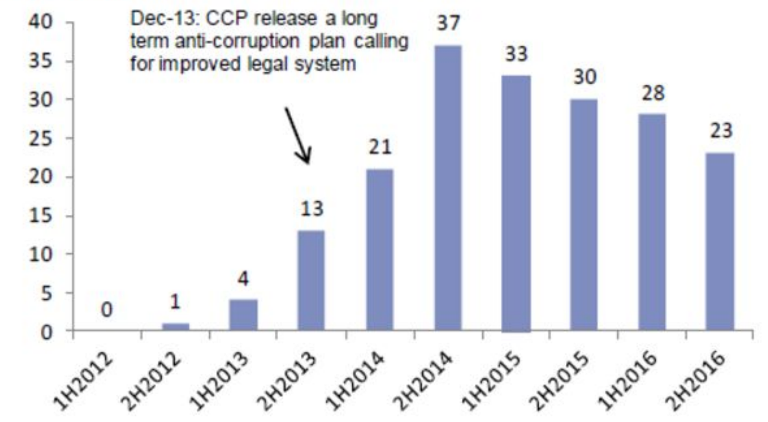
In late 2013 Xi Jinping led a very aggressive anti-graft and extravagance campaign that scared away many of Macau's coveted high-rollers. These guys didn't want to risk drawing attention to their spending habits while Xi was busy cracking down.

But now 4 years have passed since the beginning of the campaign. These same high-rollers have gotten very familiar with complying by stricter anti-graft measures. They figured out how to blow a ton of money on VIP activities without coming under fire.

Xi has also turned his focus to the People's Congress later this year. He's done pouring all of his efforts into policing the "sin city" of the East.

Prosecutions of Chinese officials dropped in 2016 for the first time since 2011. And the number of Deputy Minister-level investigations have been consistently falling from all-time highs in late 2014.

Figure 8: No. of Deputy Minister-level Chinese officials investigated

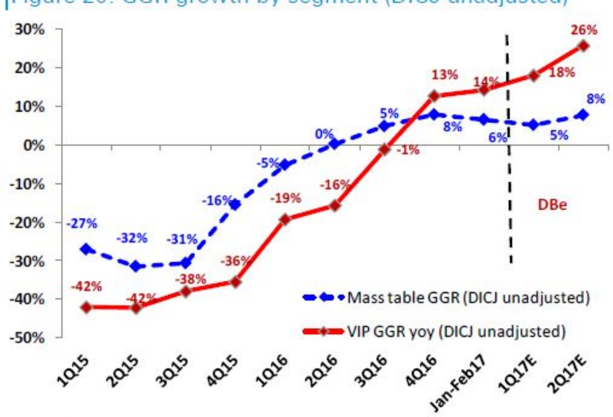


Note: Deputy Minister-level equals to sub-provincial level
Source: Deutsche Bank, Government data

The loosening government grip has made high-rollers feel much more comfortable returning to the tables to show off their wealth. This in turn has done wonders for the casinos.

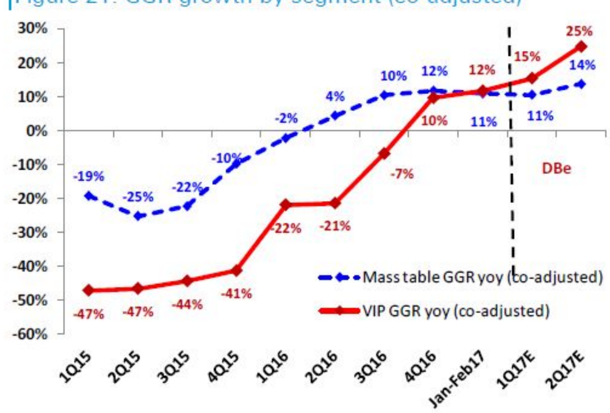
YoY growth in both high roller and mass table revenue flipped from highly negative to strongly positive. And Deutsche Bank is forecasting this growth will continue for rest of the year.

Figure 20: GGR growth by segment (DICJ unadjusted)



Source: DICJ, Deutsche Bank forecast

Figure 21: GGR growth by segment (co-adjusted)



Source: Company data, Deutsche Bank forecast

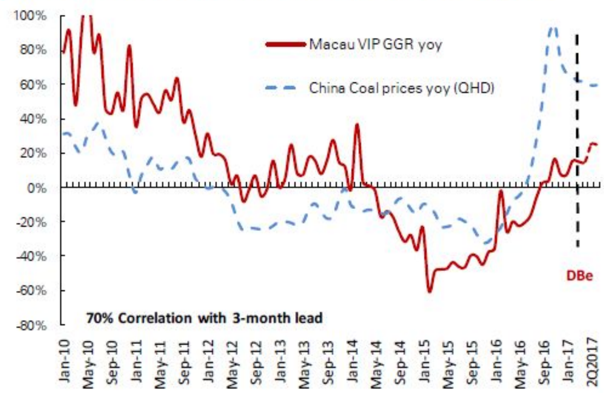
Laid back regulations aren't the only thing contributing to the uptick either.

As talked about in the Macro section, whenever Chinese monetary officials sense an economic pain point, they respond with intense credit injections to keep the ship afloat.. This money ends up showing its face in all types of markets — stocks, real estate, commodities, you name it.

The higher these markets run, the richer people feel. And the richer they feel, the more likely they are to head to Macau and donk off their extra cash at the Baccarat table.

Deutsche Bank has found that coal prices in particular are highly correlated to the amount of VIP gaming activity in Macau. The higher coal rises, the richer people get, and the more they bet on black.

Figure 3: Coal price growth to drive VIP GGR growth



Source: Deutsche Bank forecast, government data, Bloomberg Finance LP

Figure 4: China coal prices to stay elevated in 1H17

Source: Deutsche Bank estimates, Bloomberg Finance LP

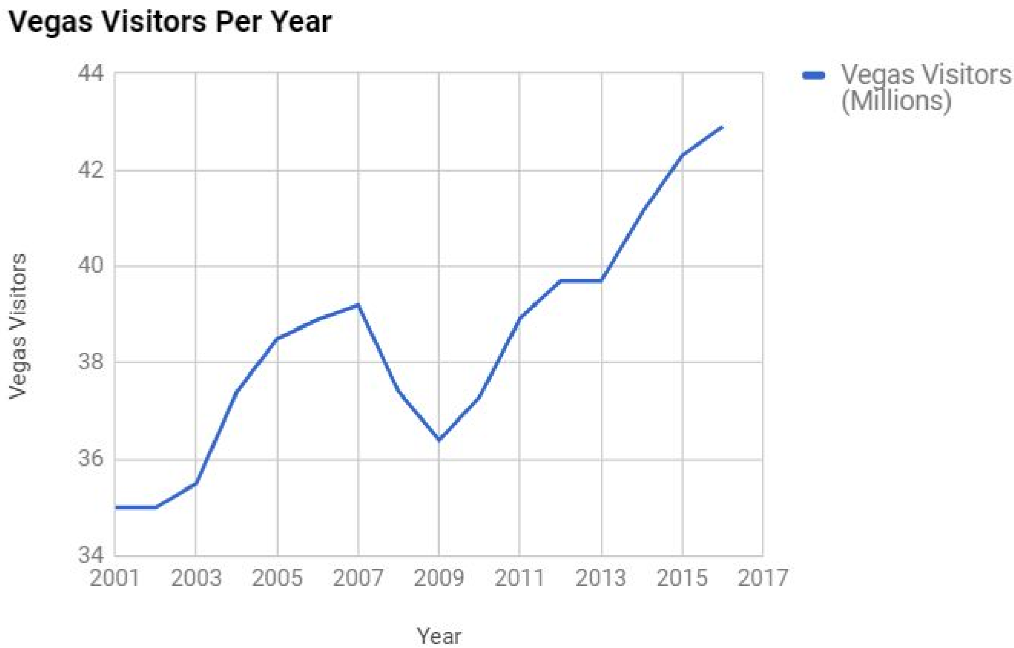
Lucky for Macau casinos, Chinese authorities are dead set on propping up coal prices to support the economy into the People's Congress.

On June 29th they banned all coal imports at small ports. This caused Chinese coking coal futures to immediately soar 8%. The resultant tightened fuel supply should support a continued rally in Chinese commodities over the summer.

Apart from the favorable short-term macro in China, these casinos still have plenty of extra "kickers'' to sweeten the deal.

The mature Las Vegas market has continued to show its resilience.

Foot traffic keeps climbing year over year and we are now in all time high territory — way above the 2007 peak.



Even though gaming revenues aren't as high as Macau's, Vegas still puts up strong numbers in the lodging, food, beverage, and show category. The casinos there have finally figured out how to monetize the millennial crowd through high priced booze and clubs instead of slot machines.

The strip alone brought in a total of $17 billion last year, the highest top line revenue number ever recorded for the area.

And as Vegas hits new highs, casinos are gearing up for what could be another game changing expansion into the world's largest untapped gambling market — Japan.

In late 2016, Japan's parliament passed a law legalizing casinos. This is a huge deal. We know Asians love to gamble and Japan is no exception.

But before this law went into effect, the Japanese would get their fix through Pachinko — a "legal" gambling game where winners would get prizes instead of cash. Most would then take these prizes to neighboring stores to trade them in for money. For some reason this extra step made it legal…

Pachinko basically looks like a slot machine.

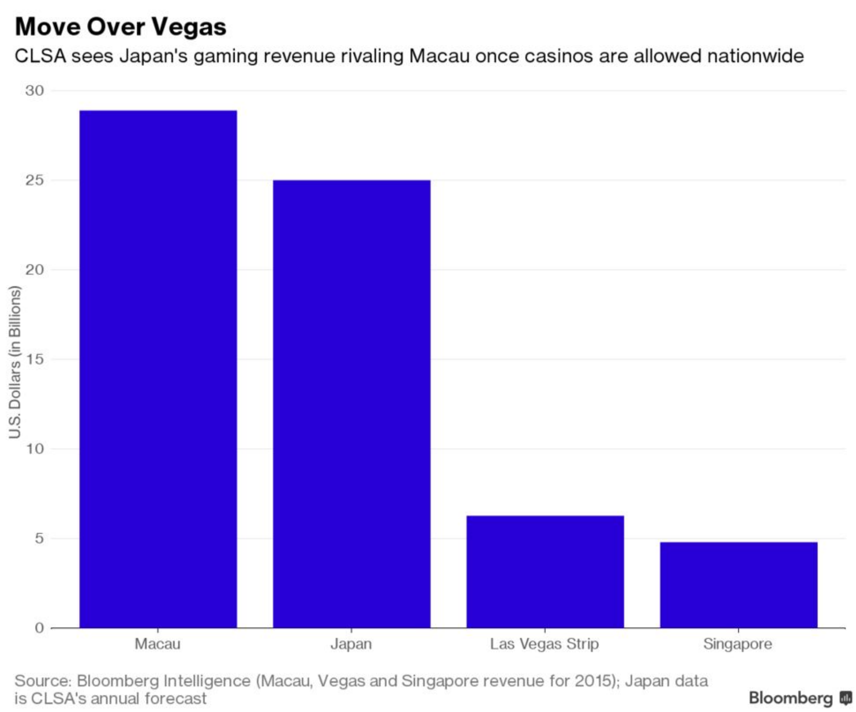
Japanese gamblers wagered $209 billion on Pachinko in 2015.

To get an idea of how ridiculous that is, $209 billion is bigger than the entire economy of New Zealand. It accounts for **4% of the total Japanese GDP…**

You can bet guys like Steve Wynn and Sheldon Adelson are just licking their chops thinking about getting in on that action.

Analysts estimate that gaming revenue from Japan could rival that of Macau, while absolutely trouncing Vegas numbers.

The only issue is that there’s still a lot of regulatory stuff to figure out before the big casinos can start construction. It’s unlikely doors open before the 2020 Olympics in Tokyo.



Even so, Wall Street will be pricing this new growth narrative into the casino stocks. As we know, stocks move on the expectations of future outcomes, not the present or past.

Investors have been slow to pick up on these positive changes in the gaming sector. While they're stuck in the past, valuing these stocks based on their previous issues (particularly their Macau troubles), the combination of a more lenient government juicing the Chinese markets, along with a strong Vegas market and huge potential in Japan, has completely transformed the story here.

We have a chance to *play the player* by jumping on this theme before the rest of the market gets wise to the improving fundamental data. We'll see below that price action is already starting to confirm the alternate positive scenario we've been discussing.

There are a few options to play this theme.

VanEck has a gaming ETF (BJK) that provides broad exposure to the entire casino market.

The ETF broke out of a bottoming pattern in March and has been uptrending since.

Any dips from here on will be attractive buying opportunities.

For a more concentrated approach, MGM resorts (MGM) is a solid contender.

Price has broken out to a new 7-year high but has recently dipped on short-term fears of a soft Q2. We think this dip is a buying opportunity as the long-term outlook hasn't changed at all.

Last year the Wynn Palace was the newest mega resort to open in Macau.

But in 2017, the brand new MGM Cotai (pictured right) will win all the hype and excitement. Doors are scheduled to open in the second half of the year, right as Macau is heating up again.

The new build-out will feature non-gaming attractions to help diversify risk away from VIP gaming revenue.

Analysts at Fitch Ratings expect this new property to add around $220 million in EBITDA for MGM.

We're not alone in our excitement for this new opening either.

Eric Mandelblatt, one of Stan Druckenmiller's favorite hedge fund managers, just disclosed a huge position in MGM resorts.

In June his $19 billion fund, Soroban Capital, disclosed a 5.3% ownership share in MGM. Mandelblatt has read the writing on the wall and in classic Druck fashion, "bet the ranch" on this theme.

MGM also has an unexpected short-term catalyst that will boost Q3 earnings.

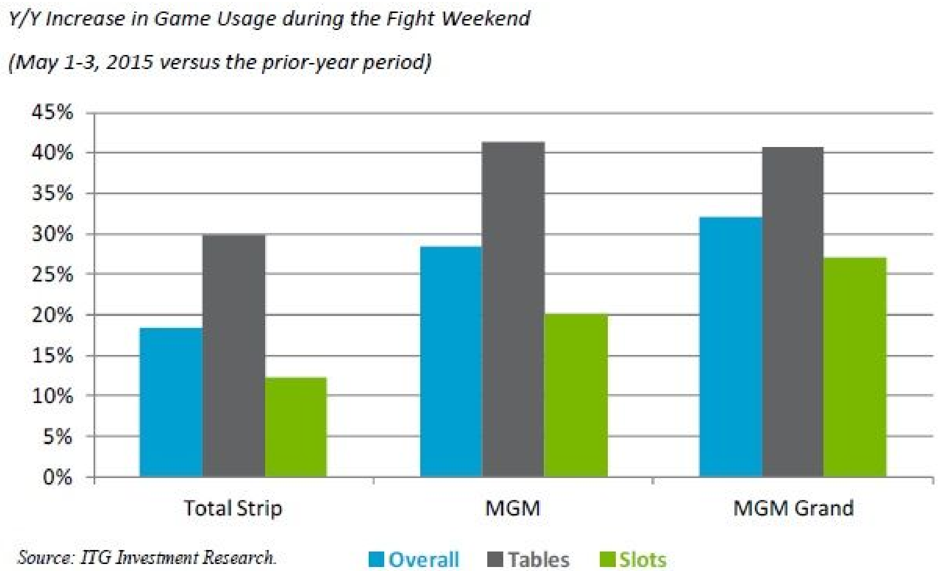
For the first time in history, the most popular mixed martial arts fighter (Conor McGregor) will fight the most popular boxer (Floyd "Money" Weather) in MGM's T-Mobile arena on August 26th.

A highly anticipated Mayweather fight usually brings in so much foot traffic that all other verticals — gaming, lodging, food, and beverage, pop as well.

The last Mayweather "superfight" to hit the strip brought in one of the highest REVPAR (revenue per available room) weekends in the history of MGM resorts.

The chart to the right shows that because MGM hosted the superfight, YoY growth drastically outperformed the rest of the strip.

We expect this next fight in August to have a similar effect.



Micro Recap:

1. **Casinos are making a recovery, giving us a good opportunity to profit.**
2. **The success of the Macau gaming market is the primary driver behind share prices. Aiding Macau's recovery are:**
    a. **Looser regulations allowing high-rollers to return to the tables**
    b. **The Chinese government juicing financial markets again, which is in turn giving people more money to burn at casinos**
3. **Apart from Macau there are a few kickers to this thesis:**
    a. **The Vegas market is hitting new highs after learning to better monetize their non-gaming offerings**
    b. **Japan, the largest untapped gambling market in the world, has finally legalized casinos**
4. **2 ways to play this theme:**
    a. **The ETF BJK provides broad exposure to the entire casino sector**
    b. **MGM Resorts (MGM) is one of the strongest contenders in the sector with big name hedge fund managers already invested**

Quant: Credit Impulse

In our Quant section I want to dive deeper into one of our most effective tools we use to measure global liquidity conditions: **Credit Impulse**.

We're going to go over exactly **what credit impulse is and why we use it**.

Credit impulse measures the ***change in the growth of credit***.

That's the second derivative of credit for all you math folk out there…

Basically it shows us whether credit growth is accelerating or decelerating.

The acceleration of credit growth is important because of its effect on the GDP growth rate.

The GDP growth rate isn't impacted by plain old, year-over-year increases in credit. It's impacted by **the rate of those increases** in credit — whether total credit creation is speeding up or slowing down.

Let's say in 2016 you went a little nutty with your retail therapy — charging $5k to your credit card buying Givenchy and Gucci shirts.

Now in 2017, you take the same annual trip to the mall, but this time you keep things a little more in check. Instead of living that Gucci life, you spend less cash by sticking to Polo.

After it's all said and done you run up the credit card by $1k — much less than last year.

So from 2016 to 2017 your total credit card debt increased from $5k to $6k. But in 2017, the total amount of debt you added was less than the year before. $4k less than to be exact.

Your rate of credit creation *decelerated*. And the resulting slower demand caused GDP growth to take a dip.

Total credit may have grown from one year to the next, but it did so at a slower pace than last year, reducing the *growth* of GDP.

This credit impulse concept helps us make sense of credit crises too.

When an economy is actively deleveraging (reducing their total debt load), GDP growth will still rip if the *rate of deleveraging* slows at all.

A credit-led rebound in domestic demand growth can occur even while total debt levels are falling.

Let's say that during the first year of a crisis you have $50k in debt with a salary of $100k a year.

Things aren't looking great and you want to reduce your debt level while you still have a job. So out of that $100k you use $30k to pay off your debt, leaving $20k of debt left over. You spend the other $70k of your salary at the mall.

The next year, you still have your job and $100k salary. Hooray!

But now instead of paying off the last $20k of your debt, you decide to pay down just $10k. You want to use the other $90k of your salary at the mall again.

So because you spent more at the mall this year than last year ($90 vs $70k) your contribution to GDP increased. This in turn caused the GDP growth rate to increase. But at the same time, you also reduced your total debt level.

This is how GDP growth can still occur during a deleveraging.

And that's why tracking credit impulse is so important. The actual level of credit in the system is not a good indicator of what will happen to GDP. It's all about how aggressively people are leveraging and deleveraging.

We use the following framework to make sense of the interaction between credit impulse, GDP growth, and the leveraging/deleveraging cycle:

- **Positive Credit Impulse + Positive Credit Growth (Leveraging) = Increase in GDP Growth Rate**
  - Total credit levels are rising at a faster pace than the previous year causing the GDP growth rate to increase

- **Negative Credit Impulse + Positive Credit Growth (Leveraging) = Decrease in GDP Growth Rate**
  - Total credit levels are rising at a slower pace than the previous year causing the GDP growth rate to decrease

- **Negative Credit Impulse + Negative Credit Growth (Deleveraging) = Decrease in GDP Growth Rate**
  - Total credit levels are decreasing and people are paying debt instead of buying things, causing the GDP growth rate to plummet

➢ **Positive Credit Impulse + Negative Credit Growth (Deleveraging) = Increase in GDP Growth Rate**
  - Total credit levels are decreasing, but at a slower rate than the previous year as people spend more of their money on goods instead of debt, causing the GDP growth rate to increase

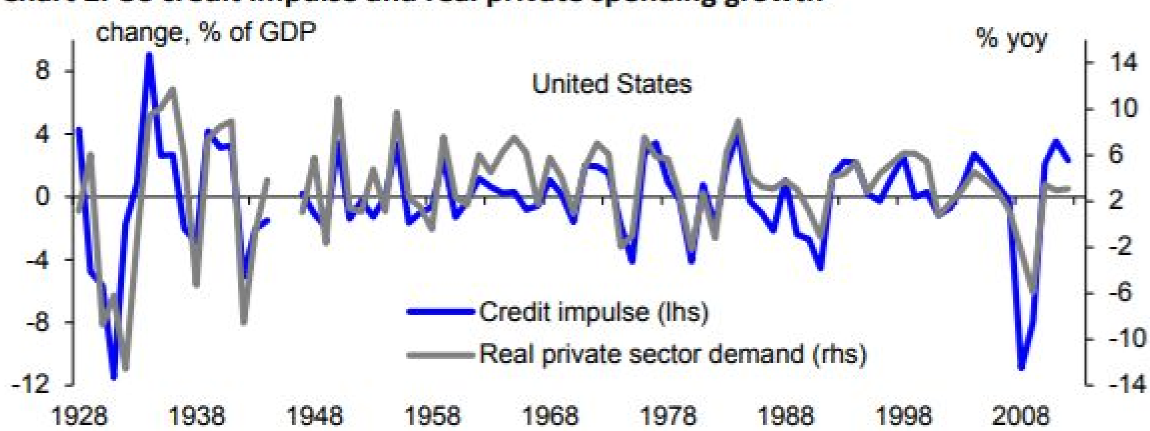
Credit Impulse

Credit Growth	+	—
+	**+ GDP Growth Rate**	**— GDP Growth Rate**
—	**+ GDP Growth Rate**	**— GDP Growth Rate**

It's clear from the above examples that the sign of <u>credit impulse</u> determines GDP growth, not the sign of credit growth.

The chart below sums up this relationship nicely:

Chart 2. US credit impulse and real private spending growth



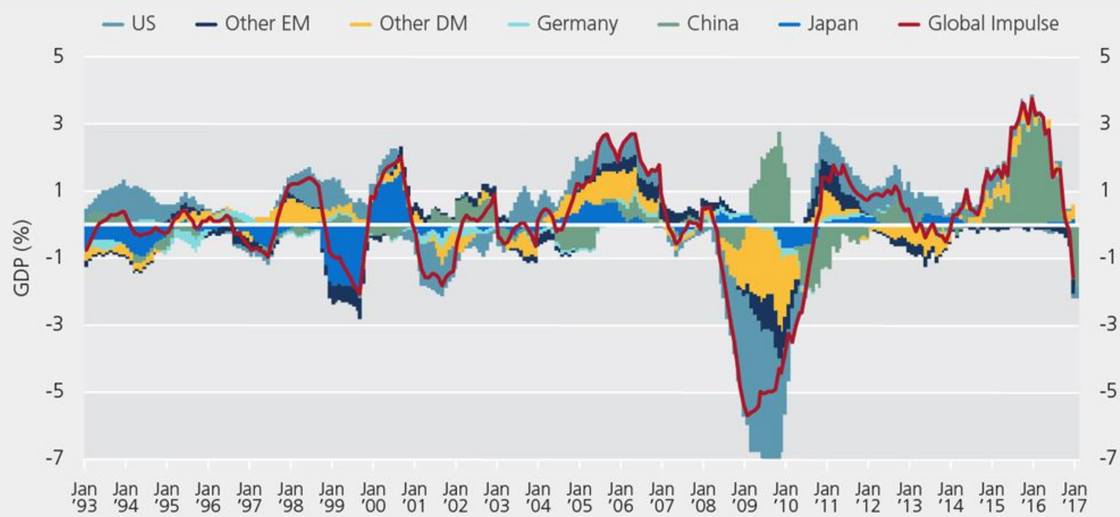
Source: Deutsche Bank, BEA, Bureau of the Census, US Federal Reserve

Ray Dalio taught us that to time markets correctly, we must have a good handle on the credit situation around the world. Since most of the world's GDP is driven by credit, changes in the flow of credit matter more to an economy than any other variable.

Where We Are Now…

Recently credit impulse has rolled over into negative territory.

FIGURE 2: CHINA'S CONTRIBUTION TO THE GLOBAL CREDIT IMPULSE (MARKET GDP WEIGHTED)



Source: UBS as of 31 January 2017

PIMCO

Although people are still taking on more debt, they're doing so at a slower pace, signaling that economic activity will contract in the near future.

Wall Street is looking at the credit impulse indicator as a tell for slower growth into the second half of the year.

But our view is different. We expect credit impulse to actually bounce from these levels.

China runs the show these days when it comes to credit. The size of their credit injections are so big that they make other countries' policies pretty much irrelevant when it comes to shaping the global liquidity environment.

And since they have decided to juice up their markets yet again into the the 2017 Congress, ***global credit impulse should bounce and offer a fresh wave of liquidity into Q4 of 2017.***

We will be vigilant in watching how credit impulse evolves throughout the summer. If our thesis plays out, we'll continue to press our bullish bets in China.

Quant Recap:

1. **Credit impulse measures the change in the growth of credit.**
2. **The acceleration/deceleration of credit growth is important because of its effect on the GDP growth rate.**
    a. **If credit growth decelerates, the GDP growth rate will decrease.**
    b. **If credit growth accelerates, the GDP growth rate will increase.**
3. **Recently the credit impulse has rolled over into negative territory. But we are expecting a bounce due to Chinese intervention. This should offer favorable liquidity conditions into year end.**