The Revival of Natural Resources: Deflation or Inflation SME's 4th Mining Finance Conference

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Proposed Bottom Line

Interest Rates will eventually rise. Interest rate volatility will also increase. Exchange rates will be volatile in global the race to the bottom.

Timeframe for the **New, New Normal Natural Resource Evolution** is 3 to 5 years.

Fed Funds rate goes away. Globally Central Bankers (CB) take on a **MUCH LARGER ROLE**.

Ultimately we are headed for inflation and higher nominal and real rates. CB's can and will INFLATE if necessary via the Freidman / Bernanke Helicopter Drop.

Key Questions That Need Answers

- How Did we Get Here?
- When Will we Escape the Downturn?
 - Leading Metals to Follow?
 - Lagging Metals?
 - Gold? Silver?

The Natural Resource Industry Needs:

Global Economic Growth "Escape Velocity"

and

Global Supply / Demand Visibility

Bill Gross April 16, 2016

WHY RATES MUST RISE

"Today's ultra low interest rates are destroying savers who are the bedrock of capitalism"



Bill Gross

Why Rates Must Rise

"The Fed has to 'normalize' interest rates over a period of two, three, or four years. or the domestic and global economy won't function."

Barrons April 16, 2016

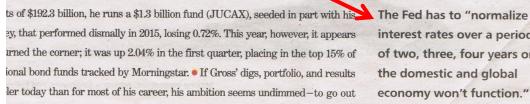
R STORY

r a rough year at Janus, bond guru Bill Gross is starting to hit his e. A passel of fixed-income picks, and some advice for the Fed.

Vhy Rates Must Rise

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ney say, is where you make it. For Bill 1, manager of the Janus Global rained Bond fund, home these days is suite in an office tower in Newport alif., down the road from Pacific Investnagement, or Pimco, the asset-managen he co-founded in 1971 and ran until brupt, in 2014, following a few years vestment result and an ugly manageat. At Pimco, with which he is still Gross oversaw what was once ergest mutual fund, Pimco Total Reter: PTTAX) with assets of \$293 billion k, and built an outstanding investment t Janus Capital, a Denver-based firm



interest rates over a period of two, three, four years or the domestic and global economy won't function." -Bill Gross

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Global Central Bank Policy: Central Bankers are Out of Effective Tools! (ZIRP, NIRP and now HIRP?)

Worry that global deflation is now a serious possibility threatening stable banking and government policy.

88 months of ZIRP, \$7 trillion in QE ... the US Federal Reserve is yet unsure in its interest rate dilemma.

Nascent deflation has damaged Emerging Growth countries, commodity markets. It threatens global economic growth and REVERSES globalization

Commodity Demand Suffers Globally

Emerging Country Economies Suffer

Credit Default Rates of Emerging World Skyrocket

Inflationary expectations continue to decline

U.S. Q1 2016 GDP Growth Sags

Atlanta Federal Reserve Bank

Forecast Q1 = .6%

Actual Q1 = .5%

The Rest of the World has been Frantically Easing Since 2014

Norway cut rates twice in 2015.

Indian inflation falls from 7.6% to 3.5%. Seeks easing.

41 countries devalued thru rate cuts in 2015.

Emerging countries do not want a US rate increase.

All seek mercantilist currency devaluation. Some institute capital controls!!

The New, New Normal: More Drastic and Unconventional Measure to Punish Savers

Japan goes to negative Interest rates!!!

Europe follows the negative interest rate path!!!

The End Game of Unconventional Central Banking:

Will we see the Friedman / Bernanke HELICOPTER
Strategy? (See Addendum 1)

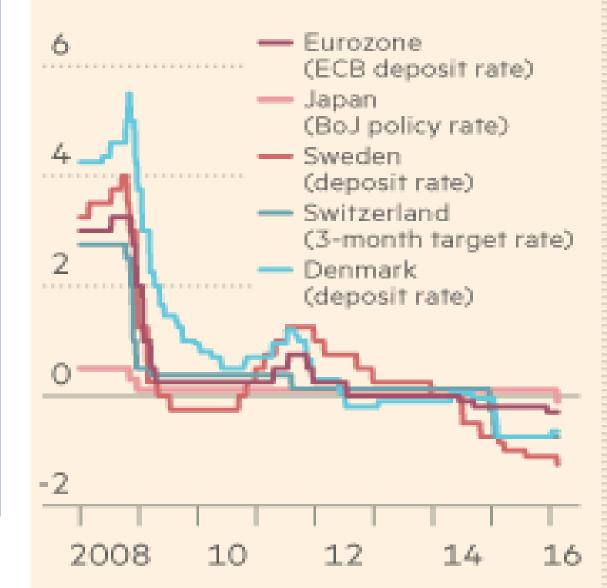
Negative rates punish savers are meant to encourage consumption in a deflationary environment.

Have not been effective even though they are considered unconventional and heretofore thought impossible.

They are positive for gold and silver. Today Platinum is a tremendous bet in a negative interest rate world.

Going negative

Central bank policy rates (%)



Exploding Central Bank Balance Sheets and negative Interest rates in 2014 to 2016 This may be the New, New Normal for Central Banking.

More later.

Unconventional measures



Junior Miners Suffer Along with Other Commodity Sectors



Is the Suffering Finally Over????

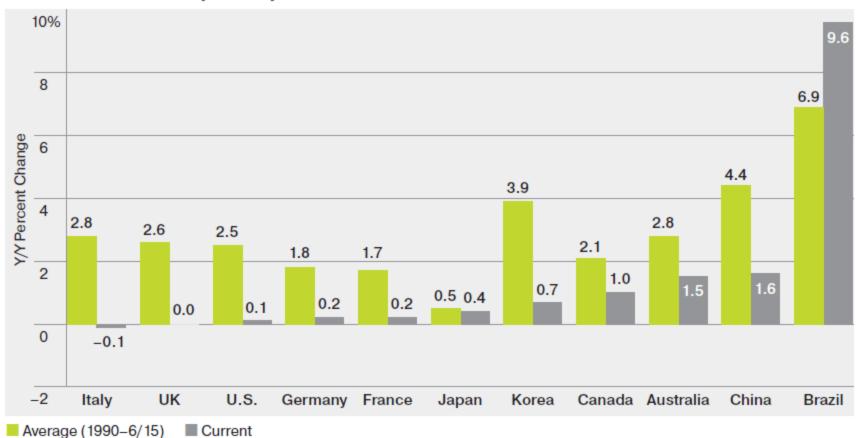


Commodities: Probably Not Yet!!!



Global Disinflation: Even China and India

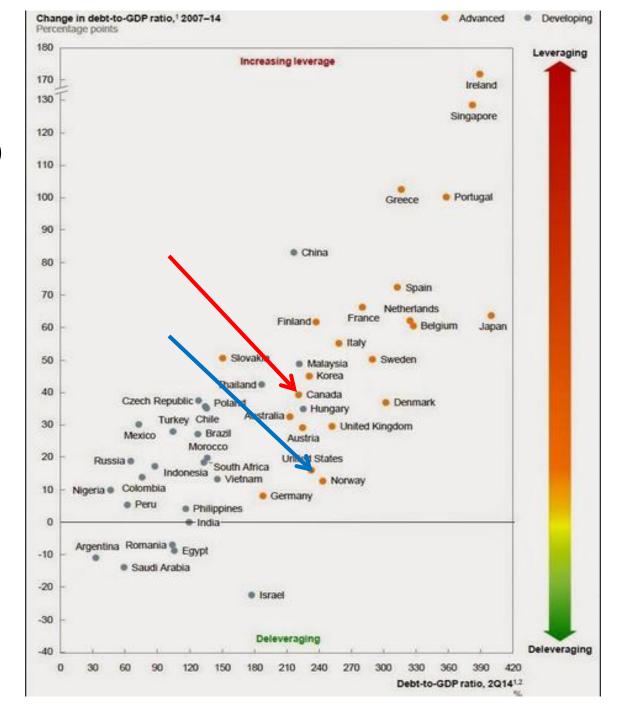
Consumer Price Index by Country



Source: Bloomberg, 7/31/15. Brazil's average is from 1995-6/30/15.

Another Headwind to Global Growth:

The World is Still Highly Levered:



The Epicenter of Risk is China!!

The PBOC may not have a sense for proper communication of the necessary devaluation of the Yuan.

They miscommunicated in September 2015. Equity markets reacted badly.

What is the real growth rate in China?; how much more devaluation is required? and how will it be communicated?????

China's Corporate Bond market is unraveling with 7 defaults as of April 2016

Revival and Recovery: The Key Influences

- Safety of the Big Resource Companies??
- Global Coordination of Monetary with Fiscal Policy.
- Dr. Larry Summers suggests this is not a cyclical recovery but a longer term secular recovery similar to 1938.
- We are now trapped in a global slowdown that will demand coordinated action, monetary, structural and fiscal.

University of Chicago Professor John H. Cochran's View of the Current Slow Growth Issue

Sclerotic U.S. growth could be caused by:

- 1. "We've run out of ideas ... get used to it" (permanent slow growth).
- "The culprit is secular stagnation, a savings glut "Demanding negative interest rates and "vast new stimulus spending ..."
 Professor Summers' view
- 3. "The US economy is overrun by an out-of-control and ... politicized regulatory state." Professor Cochrane's View

Recovery, Revival and Resolution: Seven Issues

1. Time for necessary Deleveraging -	
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3 years Minimum

2. Need for Global Coordination.

declining agreement

3. Reducing excess supply.

3 years 4 % growth?

4. Coordinate fiscal / monetary / regulatory.

Now

5. Investor Focus on disruptive technology.

NOW

Now

6. Investor Focus supply chain development.

Now

7. Focus on Corporate sustainability for 3 years

Commodity Recovery: A 2020 Window

Top Quartile Ranked by Probability of Recovery Lithium

Cobalt

Oil

Silver

Copper

Zinc

Uranium

Lithium- Best Bet for Early Revival

- Prices for lithium hydroxide and lithium carbonate (both used in batteries)
 are on the increase based on strong demand in the lithium ion battery
 sector for electric vehicles and stationary storage.
- It is anticipated that major producers won't be able to increase supply as
 quickly as demand is increasing. FMC, a major producer recently announced
 they are increasing prices by 15%. Other majors report being "sold out" of
 material.
- Spot pricing for Lithium Carbonate ad Lithium Hydroxide has spiked with Carbonate pricing said to be close to \$20,000 per tonne.
- Current Speculation is not the real price mover. If LI battery technology checks out, industry will need a new lithium mine each year for the next decade. Expect a pull back in the short term.

Cobalt

A byproduct of copper and nickel mining.

A disruption in copper or nickel production has a material effect on the price of cobalt. This currently occurring as Glencore, one of the largest cobalt producers in the world, is halting their African copper production for 18 months removing 16% of global cobalt supply.

Cobalt demand in batteries is growing 10% (CAGR). The cobalt price has been flat at $^{\sim}$ \$10 per pound, but could tick up slightly over the next couple of years.

China has recently (May 8, 2016) made inroads in to this important market by entering negotiations to purchase African cobalt resources from Freeport McMoRan.

Silver: Primed to Lead a Precious Metal Reversion

Increasingly an industrial / high tech metal with new applications.

Demand exceeded mine supply by 79 million oz. in 2014 and 129 million oz. 2015 Forthcoming 2019 - 2020 economic growth will positively impact silver pricing. Price will revert to \$18 in 2016 and \$25 by 2020 with emerging market growth.

Silver Factoids (2015):

Solar used 79 million ounces of silver a 25% increase

India imported 350 million ounces.

Buyers purchased 250 million silver coins / bars.

Only three silver producers were profitable in 2015.

Mid cap silver producers are "eating their young" grades are declining

There is an alarming dearth of physical relative to paper silver.

Copper

Copper - Supply cuts won't be enough to counteract a slowing China and excess supply on the market. Copper should be range bound \$2.25 - \$2.50 for the next 12 to 24 months.

Copper production at Glencore will come off line and we think that RTZ and BHP will be cutting production next year. Problems in Indonesia and Peru also place some emphasis on copper production in the United States and Canada.

Yerington, NV may be the next big NA copper district to be developed. Yerington is a funded JV between Quaterra Resources and Freeport McMoran.

Copper needs a 18 to 24 months window to chew thru excess supply and allow for global growth to resume. Following that timeframe we expect to \$3.00 to \$3.50 copper.

Oil: To Settle at \$60 or \$80 Per Barrel

(Prices in US\$ per barrel)

\$315 billion in FX Reserves have been destroyed thru 2015.

In November 2014 Saudi Arabia refused to cut production. Oil spiraled down to \$40. The Saudi's purpose was two fold but primarily aimed at US shale oil producers. The US had become the number 1 producer.

The spiral from \$100 to \$40 forced innovation on the shale producers. Shale is now the global "swing" producer. Shale producers are profitable at ~\$45 and will return quickly at \$60. US now exports and TX crude is a premium to WTI and is easily shipped to the Gulf.

The resulting decline has had a deflationary impact on NA economy thru decreased oil production. Lower gasoline prices have gone to savings and not consumption.

Russia, Iran and many other nations require oil at or above \$100 to run a surplus. Therefore we believe oil will mean revert to a minimum of \$60 by 2017. This is this "NEW" level that we think oil will equilibrate to over time albeit in a volatile market.

Uranium: Technology of the Past?

Uranium - Excess supply and fears of another Fukushima will be offset by the China's nuclear growth story.

Uranium prices should revert to \$60 to \$75 per pound by 2018. \$75 is Marginal to incentivize **new hard rock development**.

Watch List: Rhandawa's **Fission** - \$80 million in Chinese investment, David Cates' **Dennison** for Uranium, Environmental Services, UPC, **Next Gen**.

Why A Technology of the Past: Much longer term (2030??) new nuclear reactor technology will cap uranium demand. Investors will move to supply chain opportunities – Lynchburg, Virginia.

Bottom Line: Deflation then Inflation

- Rates will rise in due course and interest rate volatility will increase.
- Exchange rates will be volatile in global the race to the bottom.
- Timeframe for the New, New Normal Natural Resource supply / demand evolution is 3 to 5 years.
- Fed Funds rate goes away and Central Bankers take on a MUCH LARGER ROLE in stimulating growth through inflation.
- Ultimately we are headed for inflation and higher nominal and real rates. CB's can and will INFLATE the Freidman / Bernanke Helicopter Drop.

Addendum 1: The Helicopter Drop



The "Helicopter Drop"

A Hypothetical Unconventional Tool of Monetary Policy

"Let us suppose now that one day a helicopter flies over this community and drops \$1000 in bills from the sky. ... let us suppose further ... "

"If an economy is running substantially below potential, simply give everyone direct money transfers to stimulate inflation (destroy deflation)."

Milton Friedman's 1969 "Helicopter Drop"

Interpreted as a relevant solution to deflation by Bernanke in 2002

"A broad-based tax cut, for example, accommodated by a programme of open-market purchases to alleviate any tendency for interest rates to increase, would almost certainly be an **effective stimulant to consumption and hence to prices**.

Even if households decided not to increase consumption but instead rebalanced their portfolios by using their extra cash to acquire real and financial assets, the resulting increase in asset values would lower the cost of capital and improve the balance sheets of potential borrowers.

A money-financed tax cut is essentially equivalent to Milton Friedman's famous 'helicopter drop' of money."

B. Bernanke, Deflation: Making Sure It Doesn't Happen Here, Nov 21, 2002