



MATERIALS SECTOR LAUNCH

November 2015

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DISCLAIMER

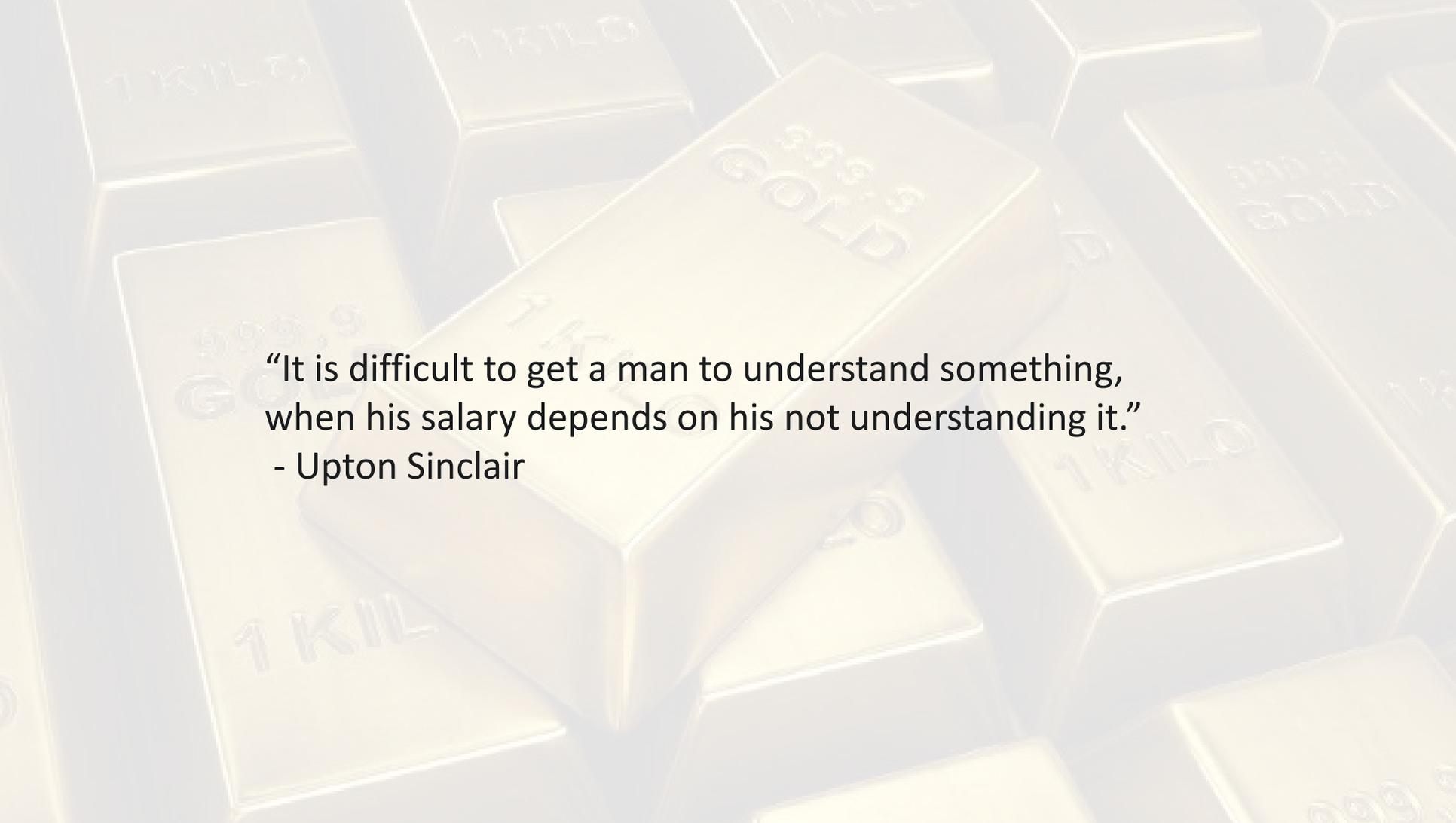
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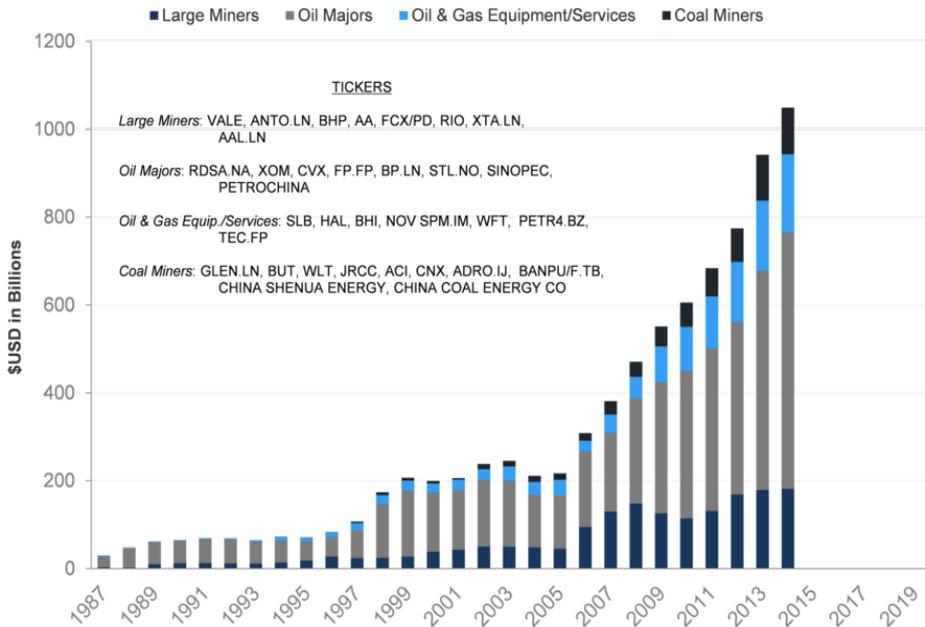
QA@HEDGEYE.COM



“It is difficult to get a man to understand something,
when his salary depends on his not understanding it.”
- Upton Sinclair

LAUNCHING IN INTERESTING TIMES

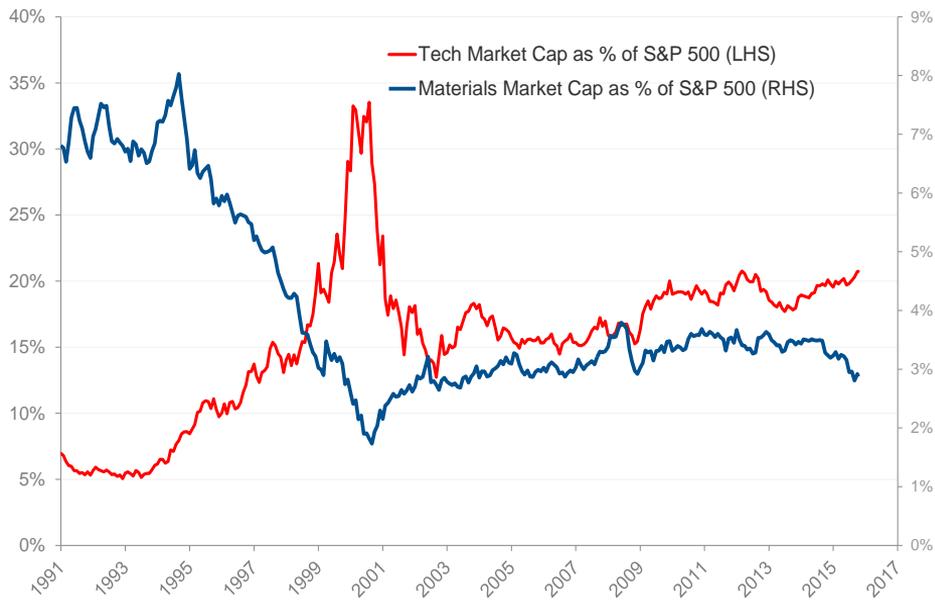
COMMODITY PRODUCER DEBT (ON BALANCE SHEET)



DATA SOURCE: COMPANY FILINGS, HRM ESTIMATES

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S&P 500 MARKET CAP SHARE BY SECTOR: TECH VS MATS



DATA SOURCE: BLOOMBERG, HRM ESTIMATES

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MATERIALS SECTOR INTRODUCTION



COMBINING INDUSTRIALS, MACRO STRENGTHS

Hedgeye Industrials sector head has over a decade of prior coverage in Materials sector, with Industrials team focused on multi-year resource-related capital equipment as a core short thesis. **Hedgeye Macro** team provides quantitatively oriented commodity coverage, with a strong track record in forecasting Trend duration drivers.



DATA-DRIVEN PROCESS, BEST IDEAS FRAMEWORK

Process focused on large structural vulnerability/strength, a differing view on supply, and deep-dive company specific work within our Macro process, where appropriate.



GOALS FOR IDEA GENERATION, RESEARCH

We expect to host opportunistic Best Ideas calls quarterly (1st of which is December 2nd), with ad hoc updates as needed. We also expect daily notes that highlight key data points relating to sector themes.

MATERIALS TEAM BACKGROUND

Jay Van Sciver

- Experience in Long only, Long/Short, and Proprietary Trading
- 14 years of experience as a financial analyst with buy-side coverage of the Industrials & Materials sector at Brown Brothers Harriman, LaBranche & Co. and Bishop & Carroll Capital Partners, a long/short fund seeded by LaBranche & Co.
- Joined Hedgeye in May 2012 to lead Industrials research vertical.
- B.S. Chemistry, Yale University, 2000 Chartered Financial Analyst, 2003 Financial Risk Manager, 2005

Ben Ryan

- Joined Hedgeye in 2014; formerly with Morgan Stanley equity-derivatives capital markets team
- Covers commodities for Macro team with both fundamental and quantitative approaches
- B.A. in Economics and Psychology from the University of Notre Dame

David Talbott

- Joined Hedgeye in 2013, working in Industrials/Cyclicals
- Former Junior & U-23 U.S. National Cycling Team member, Road Captain at international events
- B.S. Economics, The University of Tennessee at Chattanooga, Magna Cum Laude

TIMING MATTERS: COMMODITIES WORK

HEDGEYE EARLY LOOK

10/25/12 07:57 AM EDT

EARLY LOOK: STEADY-AS-SHE-GOES?

"You can boil down what we're thinking about 2013 to a short statement, and that goes both for economic environment and sales, and that statement is steady-as-she-goes, not much change from 2012."

- Michael DeWalt, Caterpillar, 10/22/12

This morning, Hedgeye ran a proprietary P/E screen to identify a couple of bargains. JDS Uniphase (JDSU) is trading at only 3x its 2000 EPS. Lennar (LEN) is at only 4.5x its 2005 EPS. Multiples were much higher when those earnings were reported, so today these names are on a big sale. OK...probably not. However, those "bargains" highlight the problem with using the peak margins and a simplistic framework to value companies.

The Industrials sector is loaded with mini-bubbles. Capital equipment goes through replacement cycles, driving sales and margins to very high levels only to have them drop-off following the boom. Our favorite cycle is shipbuilding. After World War II, war tonnage was converted to commercial use. Ships only last for about 30 years, so there was a replacement boom in the mid-1970s. Tonnage deliveries were nearly three times higher in 1975, at the peak of the boom, than they were in 1980, after the bust. The industry just had another replacement cycle with deliveries peaking in 2011. The group looks like a promising short today and should be a great long around 2035. Mark your calendar.

We joke that mining is the world's second oldest profession and that there is a reason the iron-age was called the iron-age. Mining is a highly mature industry with long-term cyclical growth slightly below global GDP growth. It should not boom. When it does, you know something interesting is going on.

Mining capital spending is an obvious bubble. For example, global iron ore output went from ~1 billion tons in 2005 to ~3 billion tons last year. Capital spending above depreciation at the eight largest miners went from about \$10 billion in 2004 to \$56 billion in 2011. And 2004 was a fantastic year for mining capital spending.

HEDGEYE INDUSTRIALS

05/09/13 03:02 PM EDT

COMMODITY BUBBLE BUST

A capital equipment supplier to a cyclical industry is almost always more cyclical than the cyclical industry itself. Bearish on commodities? Short CAT.

Summary

At the Ira Sohn conference yesterday, Stanley Druckenmiller put forth an extremely bearish view on commodities. As we understand it, his thesis is driven by increasing commodity supply and reduced Chinese fixed asset investment. We in no way claim to be as smart, savvy or good-looking as Mr. Druckenmiller, but we do agree with much of his commodity thesis.

In our March 2013 [Mining & Construction Equipment black book](#), we highlighted an environment that appeared weak for commodity prices and downright terrible for resource-related capital investment. The data do point to a very negative commodity price environment, but even flat commodity pricing would likely result in large declines in commodity-related capital investment. Importantly, these are not short-term headwinds, but are rather multi-year, largely unavoidable negatives.

A key conclusion is that resource-related capital investment – the key end-market for CAT, KMTUY, Sandvik, JOY and others – is likely to drop by approximately 30%-50% in the next few years (and stay there), not the 10%-20% expected by most bearish forecasts. Mining and other resource-related capital spending, in aggregate, will not rebound back above 2012 levels *this decade*, let alone in 2014 or 2015, in our analysis.

We highlighted four drivers for the enormous price gains through 2011 that now appear to be reversing:

- Under investment in the decade prior now met with over investment
- Slowing Chinese fixed asset investment growth
- Financial demand from investors, which can be subject to performance chasing
- Easy monetary policy, which is at the whim of unelected central planners

Outlier Price Gain Attract Outlier Supply Growth

Copper

Looking at real copper prices, the five year gains by 2010 and 2011 were the highest in over a century. The gains even exceeded the transition from the Great Depression to World War II.

HEDGEYE MACRO

11/05/14 12:18 PM EST

OIL: MORE DOWNSIDE?

Takeaway: OIL remains in a BEARISH Set-Up without a near-term catalyst to put in a hard support level.

In three recent notes, we highlighted *why* oil had more downside pressure:

- October 16th: [OIL HAS FURTHER DOWNSIDE BEFORE THE BOTTOM](#)

TAKEAWAY: "The expectation for a supply/demand floor is not a catalyst for volatility-induced real-time market moves"

- October 23rd: [OPEC'S NEXT MOVE](#)

TAKEAWAY: "A production cut from OPEC near-term is unlikely, especially with new competition threatening to take global market share."

- October 28th: [Real Cost of Producing Tight Oil and Shale Gas With Specialist Leonardo Mauer](#)

TAKEAWAY:

- "Most analysis has underestimated technological advancement in production and recovery efficiency
- Model-driven analysis in this space anchors on old information, holding rapidly changing variables static, rather than leaning on real-time, data-driven facts

The biggest mistake in consensus analysis is that it does not accurately weigh each production area within a formation. It uses a gross average for each area within a formation with each area equally weighted.

The lowest cost areas are by far the largest producers. For example McKenzie County, ND in Bakken makes up almost 1/3rd of the formation's production and is by far the lowest cost area with a break-even price in the \$20-\$30 per barrel range."

WTI Crude Oil is BEARISH on both a TREND and TAIL duration:

EDGE = OWN DATA + NO CONFLICTS + MACRO



UNIQUE SUPPLY FORECAST

We built our own granular datasets, including one for gold mine supply. The industry standard estimates can be biased toward satisfying their customer base.



INDEPENDENT VIEW

Our goal is to get the analysis and forecast correct – a tall order by itself. Research is often compromised by the need to keep constituents happy (e.g. maintain management access, not annoy large clients or bankers, support bullish industry narrative).



INTEGRATED WITH TOP-SHELF MACRO TEAM

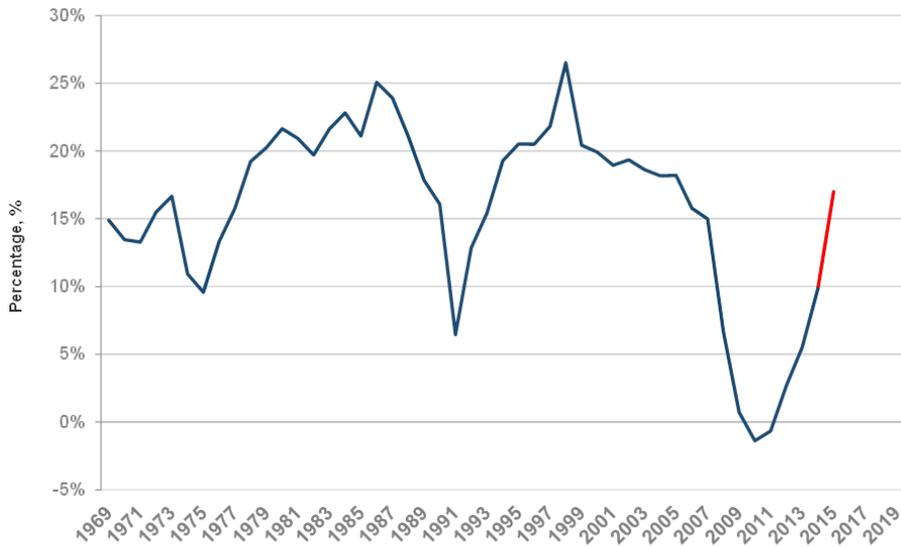
Our Macro team has a strong track record in the quantitative and qualitative analysis of many factors impacting gold.

COVERAGE BUILT OVER PAST YEAR

NOT JUST GOLD

In process work in several Materials industries.

VMC CONSTRUCTION MATERIALS SEGMENT / CURRENT CO OPERATING MARGIN

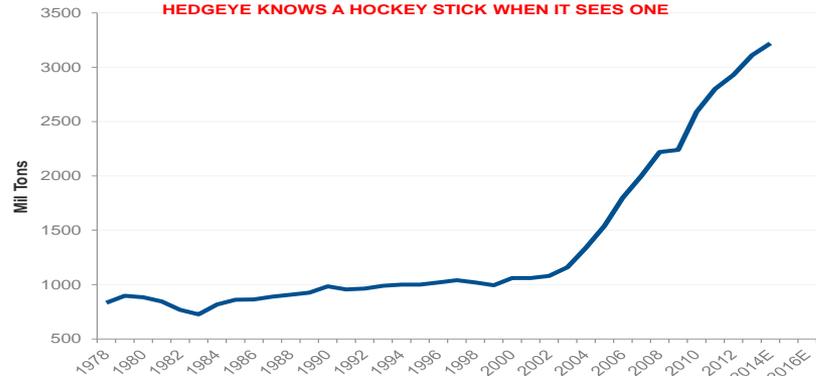


DATA SOURCE: COMPANY FILINGS, HRM ESTIMATES
*EXCLUDES FRK MERGER **2015 IS ESTIMATED

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WORLD IRON ORE PRODUCTION

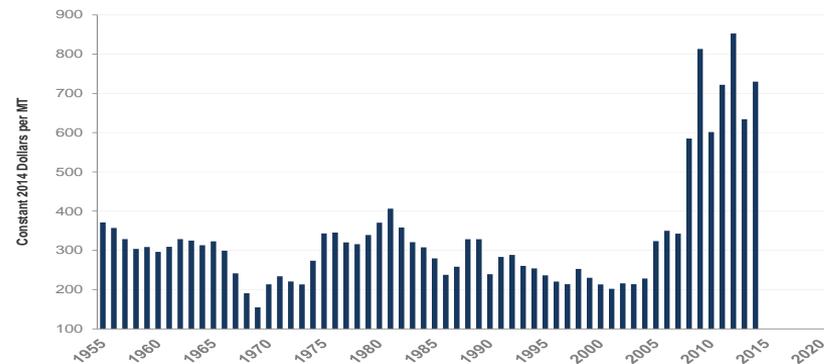
HEDGEYE KNOWS A HOCKEY STICK WHEN IT SEES ONE



DATA SOURCE: USGS, HRM ESTIMATES

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REAL POTASH PRICE



DATA SOURCE: USGS, BLOOMBERG, MINNEAPOLIS FED, HRM ESTIMATES

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PROCESS: WHAT WE LOOK FOR

A

STRUCTURAL WEAKNESS/STRENGTH

Identify structural vulnerability or resiliency in commodity related business that should have a dominant impact on market prices. (Gold = Investor Demand)

B

UNIDENTIFIED SUPPLY/DEMAND CHANGES

We look for consensus production or consumption estimates that are likely to prove incorrect based on our data-driven proprietary forecasts ranges (Gold = Supply Underestimated, Costs Move Down)

C

COMPANIES VALUE DIFFERS VS FORECAST, MACRO

Deep-dive company specific valuation work oriented toward finding effective exposure to our broader commodity thesis. We align with our firm's top-down macro view when applicable. (This is for our next call, but it should be clear where this is going)

A dimly lit underground tunnel, likely a mine. In the foreground, a large, dark metal cart or container sits on a set of tracks. The tunnel walls are rough and textured, and several bright lights are visible along the ceiling, creating a hazy, atmospheric effect. In the distance, a person wearing a hard hat and safety gear is visible, walking away from the camera. The overall scene is dark and industrial.

“As at least one of our counterparts in the base metals world has recently reminded us, the best cure for low commodity prices is low commodity prices.”

- Goldcorp Q315 Conference Call

GOLD MINERS

GOLD VULNERABLE



INVESTORS DRIVE DEMAND, CHASE PRICE

- **Investors & Central Banks Need Not Buy:** ~30-35% of demand at risk to a change of heart
- **Giffen Good:** Investors chase price, allocation models tend to use trailing returns
- **Gold Is Down Since 2010:** If 5 years of ZIRP and 2+ rounds of Q.E. didn't work, what will?



2015 NOT 'PEAK' OUTPUT, COSTS TO DROP

- **Gold Is Not Low:** A long-term look at real gold prices makes that abundantly obvious
- **Production Forecast Likely Inaccurate (Again):** Industry embraces bullish supply outlook
- **Marginal Cost Will Drop:** Miner costs follow prices, marginal costs a slippery support

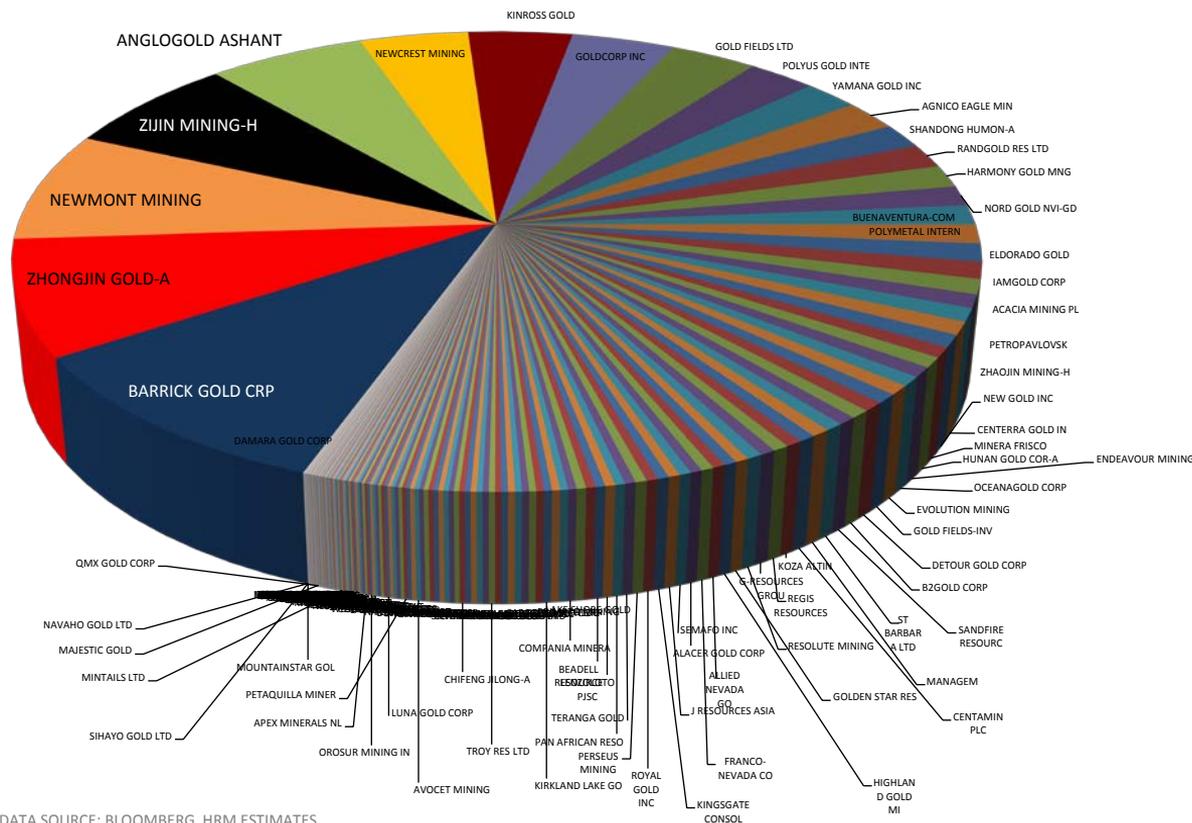


MACRO AND INITIAL COMPANY DISCUSSION

- **Short-run Currency, Long-Run Metal:** A mined commodity, no longer tied to key currencies
- **Doomsday vs. Performance:** Gold standard is not coming back anytime soon
- **Introduction Today, Follow-up Call Next:** We will dig deeper into a few key names (e.g. Barrick, Novagold, and Gold Corp) in call later in November.

EXPECT INTENSE COMPETITION

GOLD MINERS MARKET SHARE BY REVENUE



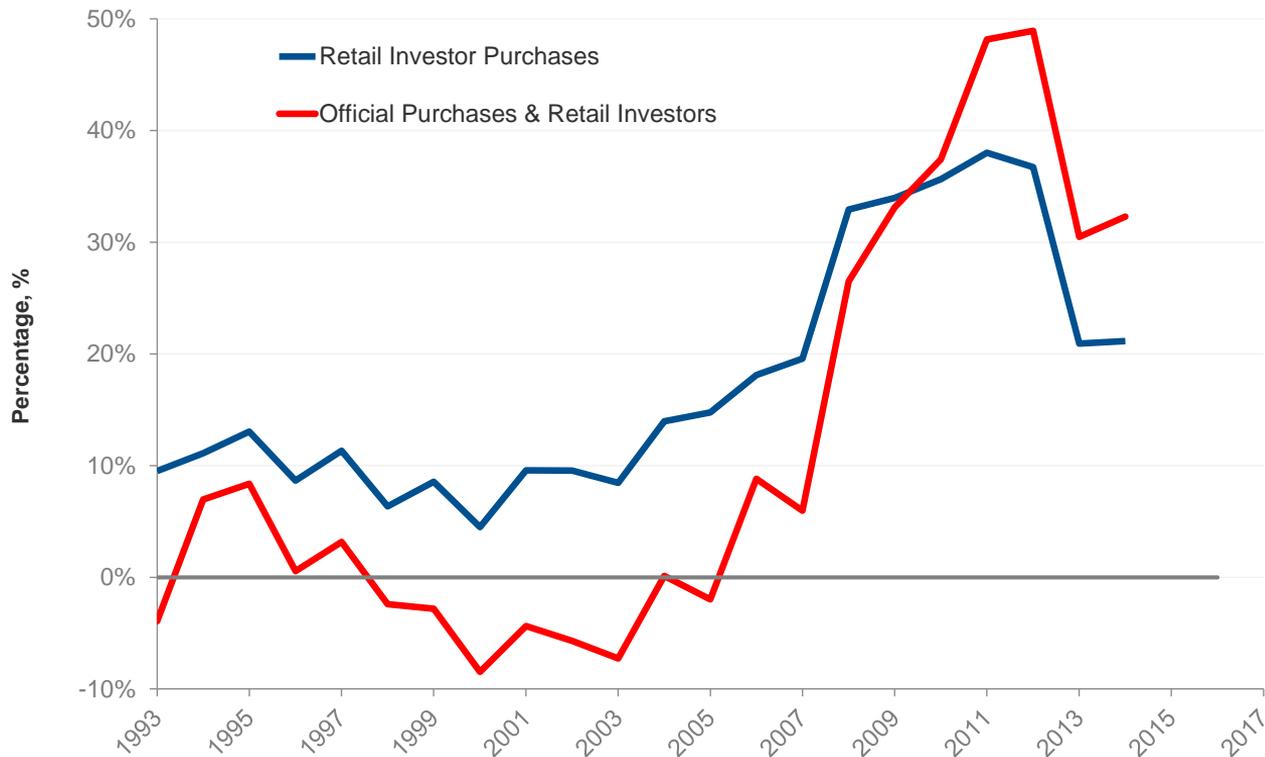
DATA SOURCE: BLOOMBERG, HRM ESTIMATES

Some Structural Items:

- Ultra-fragmented
- Chinese entrants
- Capital intensive
- Barriers to exit (local employment, mine closure, bankruptcy process)
- Low price incentivizes production to lower unit costs
- Slow supply response to price because of in-flight capital projects.

MAJOR STRUCTURAL VULNERABILITY

PERCENTAGE OF ANNUAL GOLD SUPPLY CONSUMED BY INVESTORS



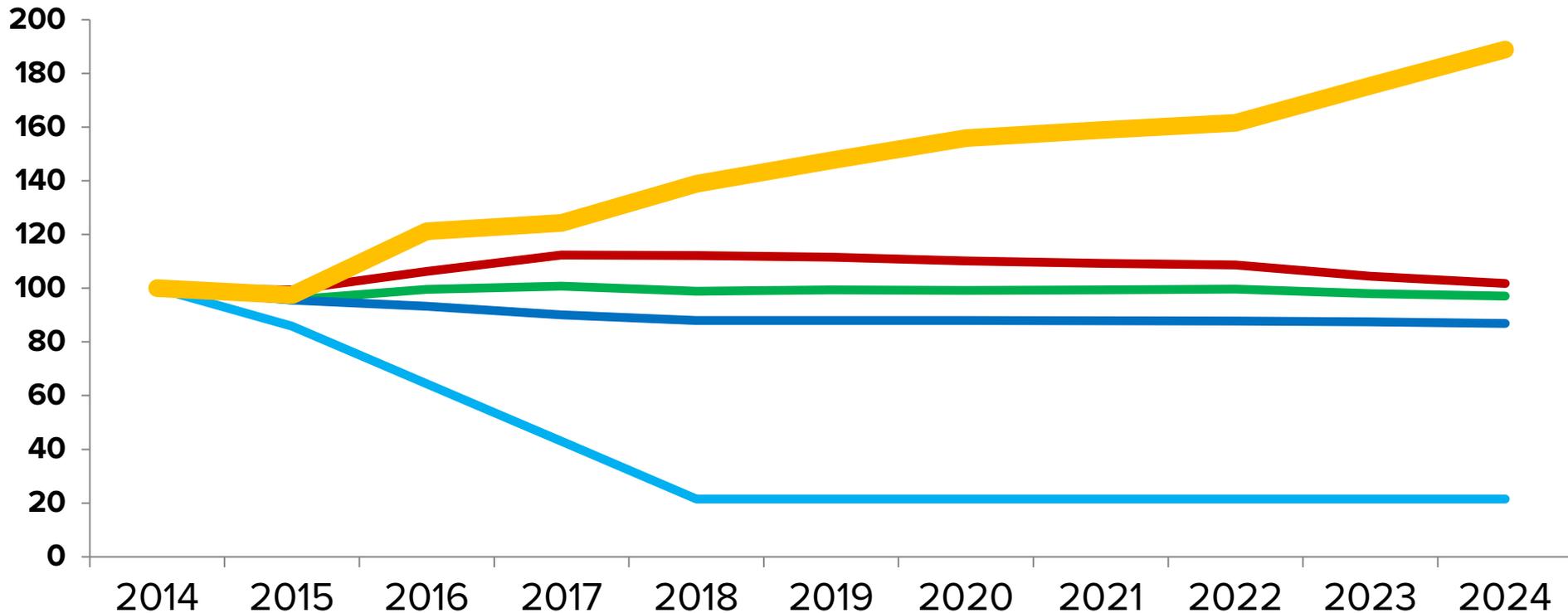
DATA SOURCE: GLD ETF FILINGS, HRM ESTIMATES

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CONSENSUS: INVESTORS TO DRIVE FUTURE GOLD DEMAND

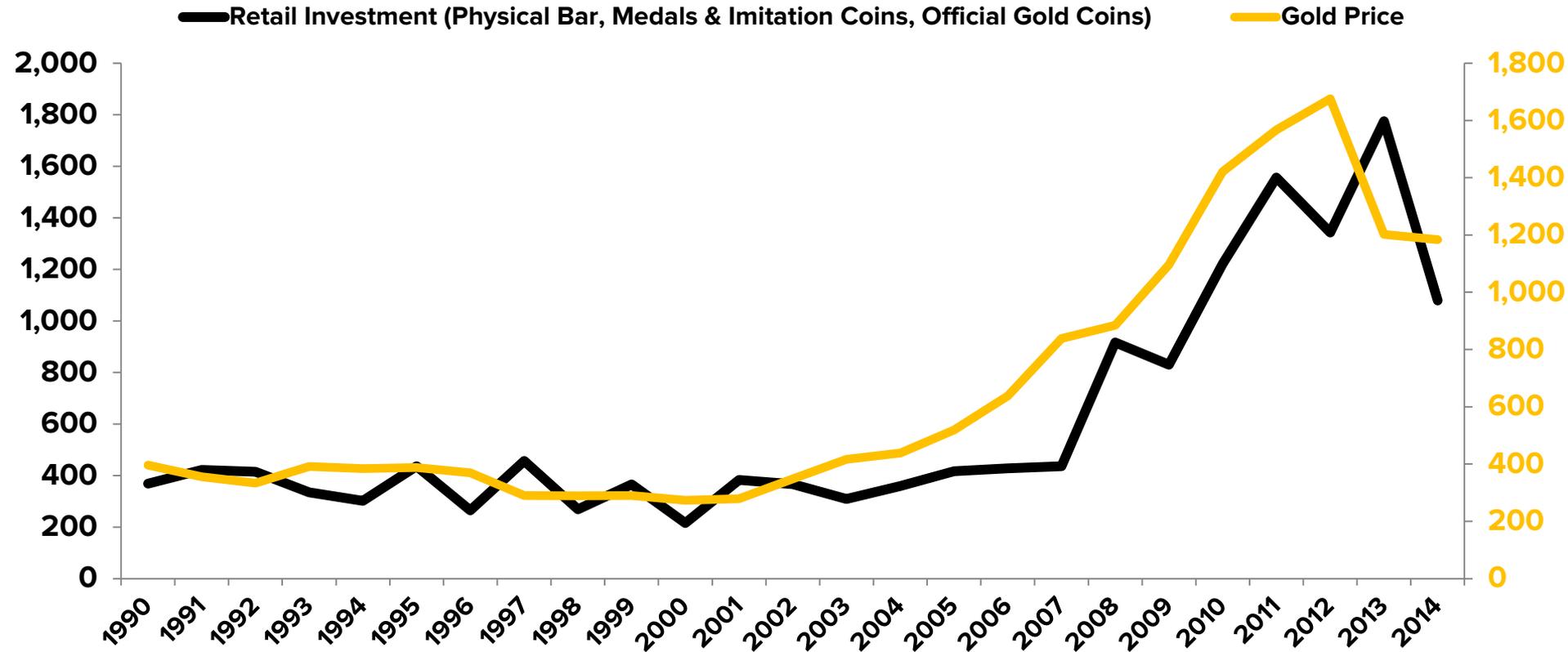
GFMS DEMAND FORECASTS INDEXED TO 100 FROM 2014 REPORTED NUMBERS

— Total Physical Demand — Jewelry — Industrial — Official Sector Purchases — Investors



HISTORICALLY INVESTORS CHASE PRICE

RETAIL INVESTMENT (BARS, COINS, ETC.) VS. SPOT GOLD PRICE



ASSET ALLOCATION BACKWARD LOOKING?

TABLE 1. HOW ALTERNATIVE ASSET CLASSES PERFORMED DURING DIFFERENT ENVIRONMENTS

	Annual Return for Decade (%)			Annual Return (%): 1970 through 1997		
	1970s	1980s	1990s	Average	Worst	Best
Gold	30.6	-2.4	-4.1	7.7	-31.6 (1981)	126.5 (1979)
Silver	28.3	-13.4	1.7	4.3	-46.4 (1981)	267.4 (1979)
REITs (NAREIT Index)	4.8*	12.5	14.1	10.5*	-42.2 (1974)	48.9 (1976)
Commodities (Spot Index)	9.6	-1.0	0.5	3.1	-11.8 (1981)	57.7 (1973)
S&P 500	5.9	17.5	16.6	13.0	-26.5 (1974)	37.4 (1995)
Small-Cap Stocks	11.5	15.8	16.5	14.4	-31.9 (1973)	57.4 (1976)
Long-Term Gov't Bonds	5.5	12.6	10.7	9.5	-7.8 (1994)	40.4 (1982)
Treasury Bills	6.3	8.9	4.9	6.8	2.9 (1993)	14.7 (1981)
Inflation	7.4	5.1	3.3	5.3	na	na

* Since 1972

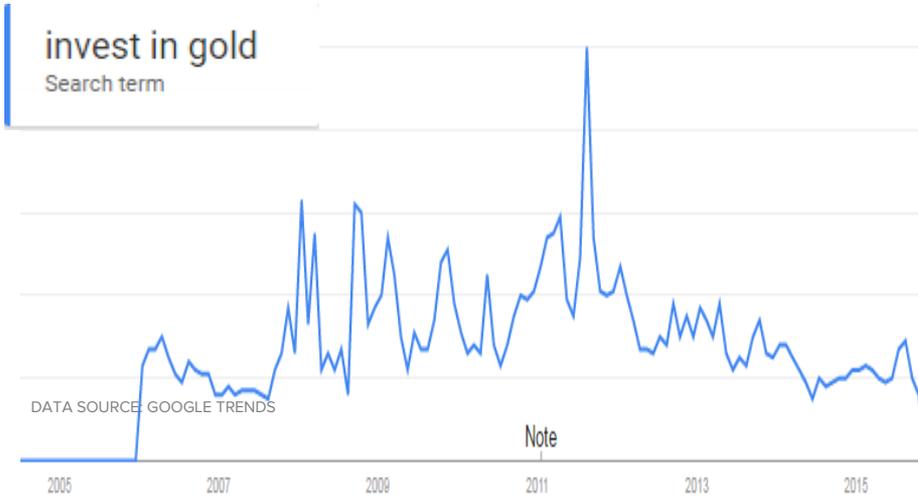
Source: *Stocks, Bonds, Bills and Inflation -1998 Yearbook*, Ibbotson Associates, Chicago; and *Chase Investment Performance Digest—1998 Edition*, Chase Global Data & Research.

Portfolio Allocation?

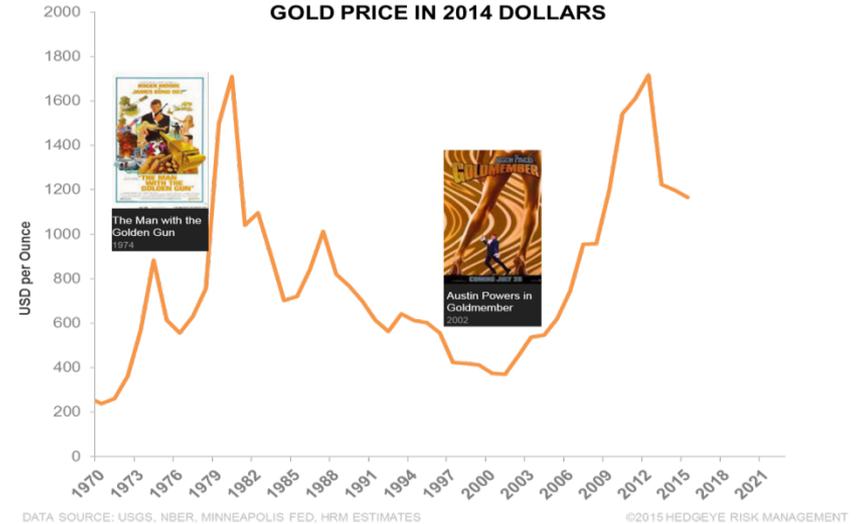
In the early 2000s, we recall “conventional wisdom” being that the diversification benefits of gold were not worth the performance drag.

GOLD LIKE A “GIFFEN GOOD”

INVESTORS CHASE PRICE...



(CULTURE, TOO)



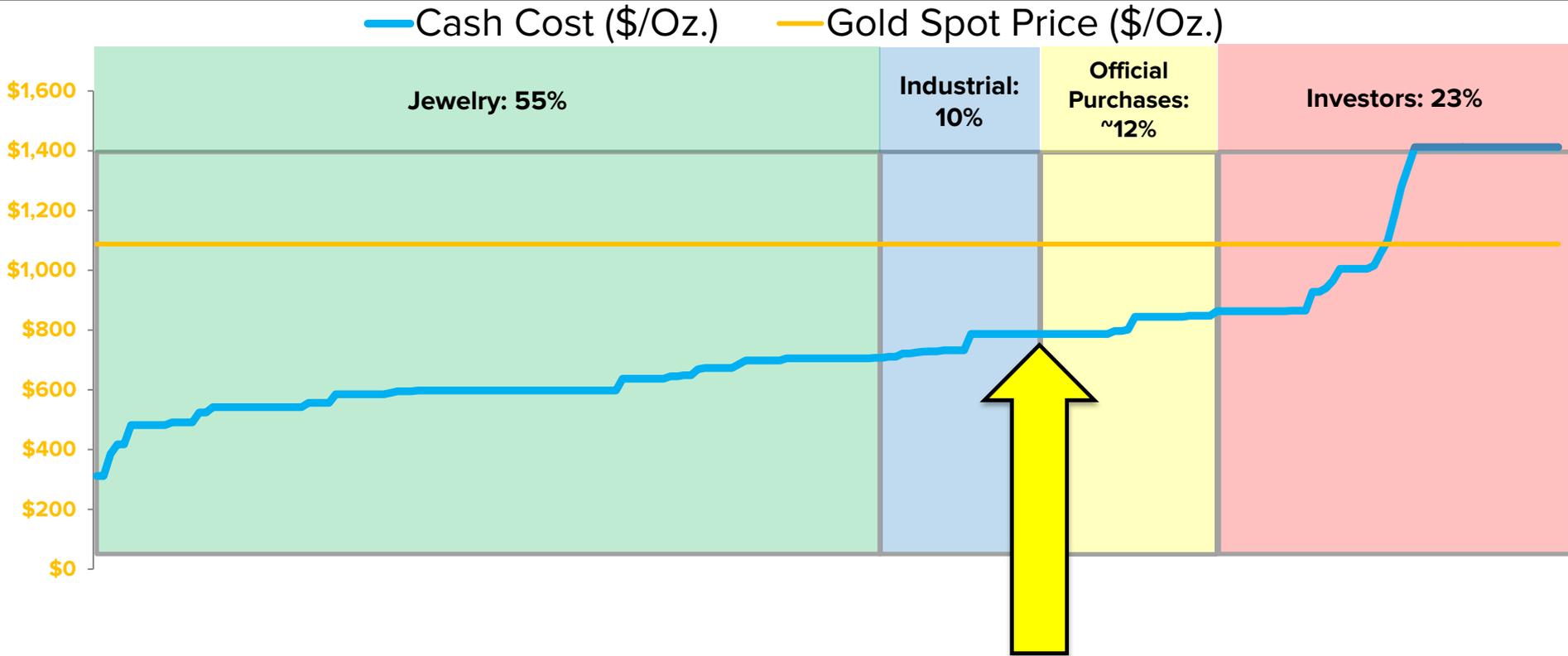
UAE investors splurge \$7m at gold ATMs

By Shane McGinley August 12 2012 10:32

Source: <http://www.arabianbusiness.com/uae-investors-splurge-7m-at-gold-atms-469450.html>



WHAT HAPPENS IF INVESTORS STOP BUYING?



2004-2006 Investor & Central Bank purchase levels may equate to a **<\$800 Gold Price** on 2014 (inflated) cost curve

(Yikes, what if they net sold?)

“[Gold] gets dug out of the ground in Africa, or someplace. Then we melt it down, dig another hole, bury it again and pay people to stand around guarding it. It has no utility. Anyone watching from Mars would be scratching their head.” – W. Buffett

CONSENSUS VS. DATA

CONSENSUS: GOLD PRICES ARE LOW

“Now, I personally think that gold is close to its lows, and maybe it's hope and expectation that it won't go much lower. But that's just an opinion” – 9/22/15



“Our focus on maintaining the strength of our balance sheet and our financial flexibility will continue to be priorities, particularly given the current low gold price environment.” – KGC 7/30/15



“The constraint in our tough gold price environment is obviously capital.” – Agnico 7/30/15



“Meanwhile, exploration on satellite targets around all our mines is being fast tracked to provide the operations with added flexibility in this low gold price environment. -Randgold” 11/5/15



“We will maintain strict capital discipline, regardless of whether the gold price is \$1,100 or much higher, all investments must meet our minimum investment hurdle of 15%.” – Barrick 10/29/15



- Scrap supply (about 30% of total supply) in decline since 2010 and no end in sight given the low gold price environment



“Today, as a low gold price bites, the miners have to dig deeper and cut costs to stay in business.”



Morgan Stanley sees focus on expenses, capex trends given low gold-price environment

Hedging

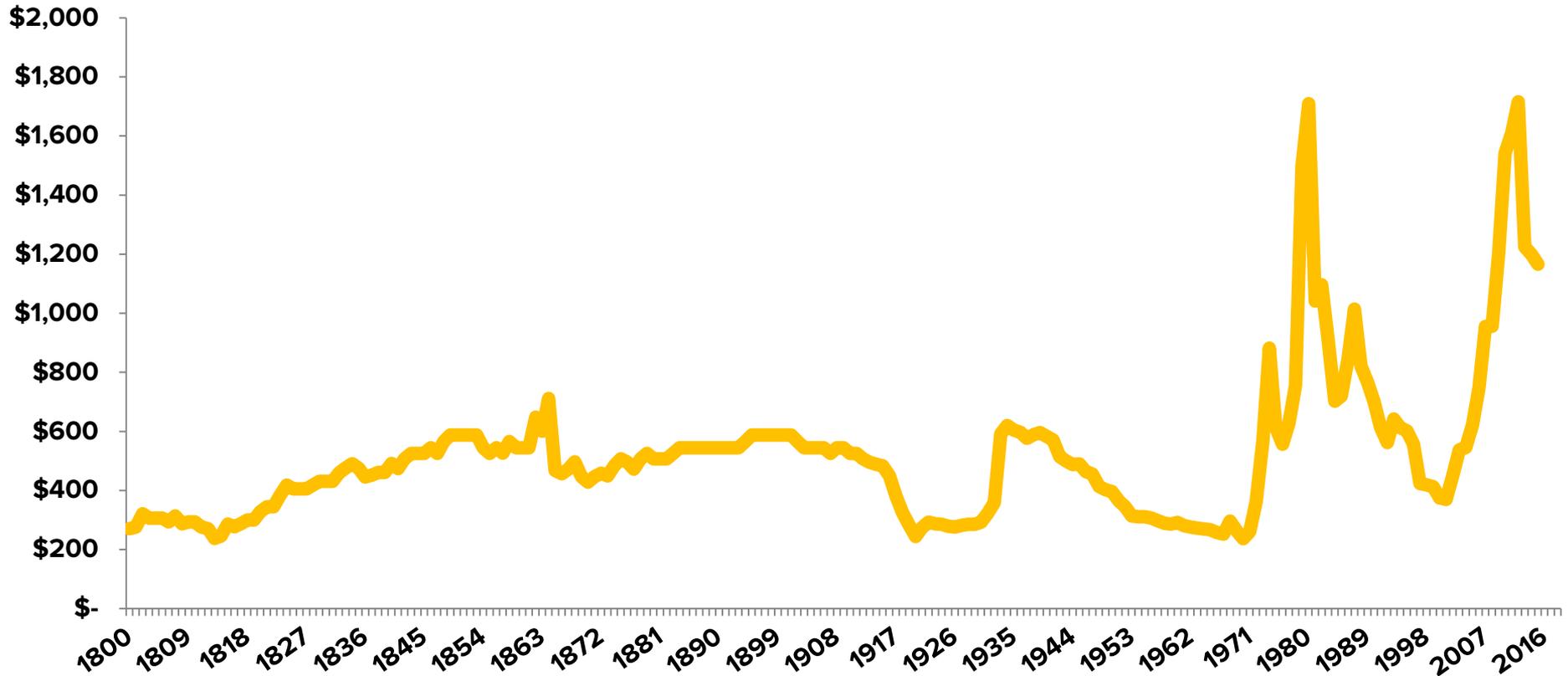
We are surprised by how close the hedge/don't hedge split has become for most categories except currencies. With lower currencies cushioning the impact of weaker gold prices, more respondents (70%) prefer no currency hedges. Interestingly, even at these low gold price levels, 44% respondents - although down from last year's 50% - continue to favor some gold hedging.

J.P.Morgan



GOLD: NOT EVEN CLOSE TO "LOW"

LONG-TERM GOLD PRICE IN 2014 DOLLARS (\$/OZ.)



OTHER RESPONSES TO “LOW” GOLD



NEAR MARGINAL COST? **FRAMED BACKWARD**

A bullish argument is that gold prices are at/near/below key producer costs. As Gold Corp said on its 3Q15 call “*the best cure for low commodity prices is low commodity prices.*” We disagree, as costs follow price. **The best cure for high costs and investor interest is lower gold prices,** we think.



GOLD SUPPLY TO FALL DUE TO LOW PRICE? **NOPE**

Certain industry data suppliers, along with the miners themselves, expect production to drop in coming years. We think expectations of peak 2015 mine supply are significantly off base. We expect mine supply to rise in each of the next two years, and believe that the industry-oriented consultants bias bullish.



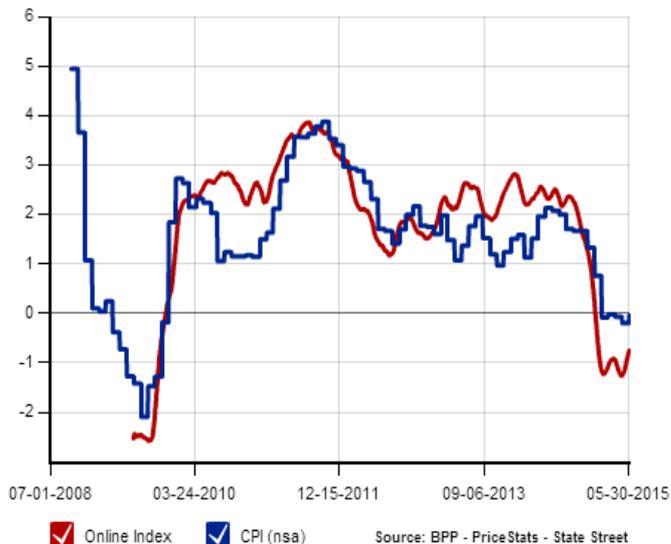
CURRENCY, INFLATION DATA WRONG? **TIN FOIL HAT**

We frequently see alternative measures of inflation or, occasionally, gold measured in different currency baskets. For gold to be approaching its 2001 low of around \$260 using an alternative inflation measure, the price level would have needed to increase ~400% in the last 14 years.

IS INFLATION MEASURED INCORRECTLY?

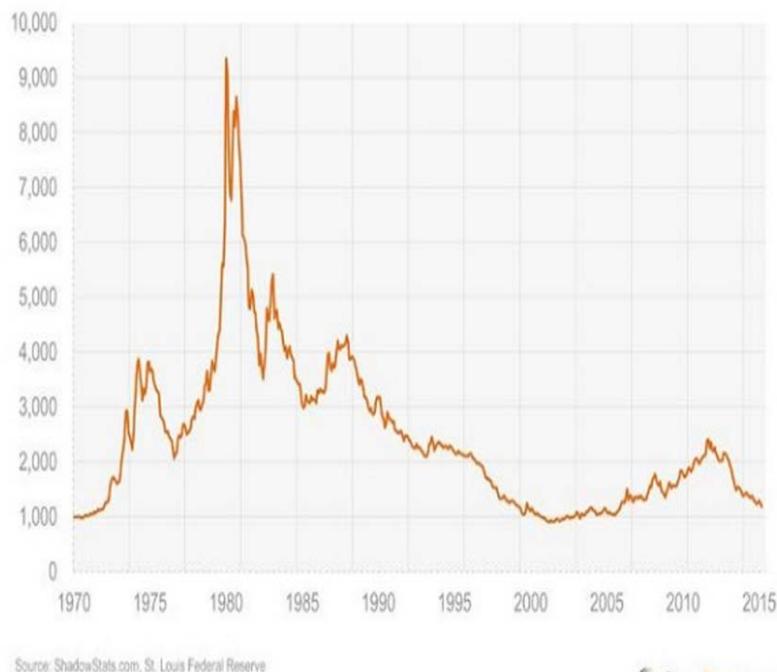
ANNUAL INFLATION

(last 365 days)



Inflation-Adjusted Gold Price Using 1980 CPI Formula

— Monthly Average Gold Price



It Would Be Too Obvious:

Measuring inflation is a dubious process, but some gold adjustments seem far outside reality. For gold to be back at 2001 lows, the price level would have needed to increase 3x-4x in the last 15 years. Maybe in tuitions, NYC/London rents and men's pants but likely not the total price level.

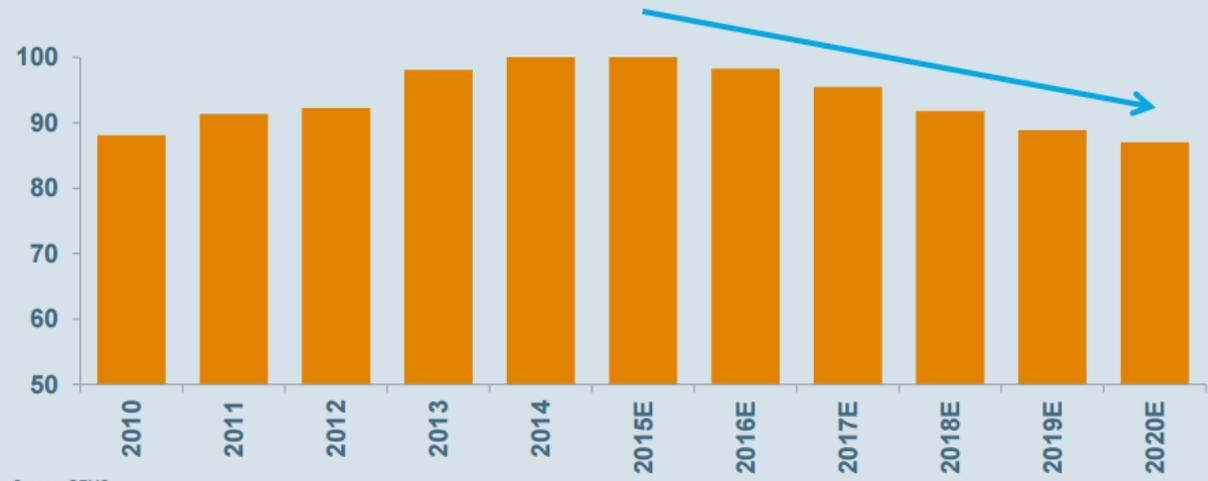


CONSENSUS: MINE SUPPLY AT PEAK

Global gold mine supply expected to decline by ~14% by 2020

- Current mine output expected to drop by ~25Moz due to declining grades and higher strip ratios
- Development projects (scoping through commissioning) only partially offset decline with ~13Moz

Gold mine supply reaching an inflection point (Moz)



Source: GFMS

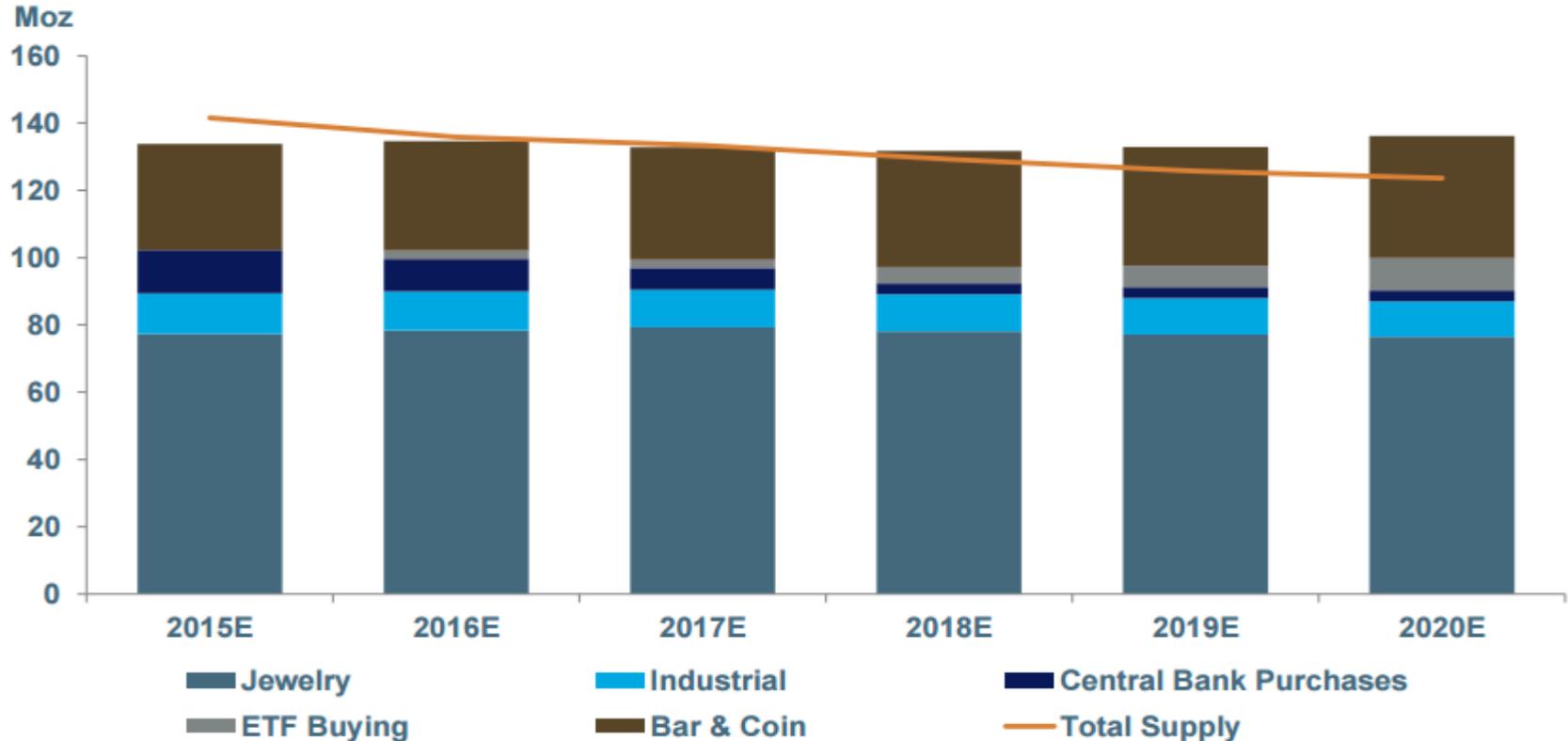
September 22, 2015

Newmont Mining Corporation | Denver Gold Forum | 16

Newmont, and some other IR departments, present this bullish forecast for gold output.

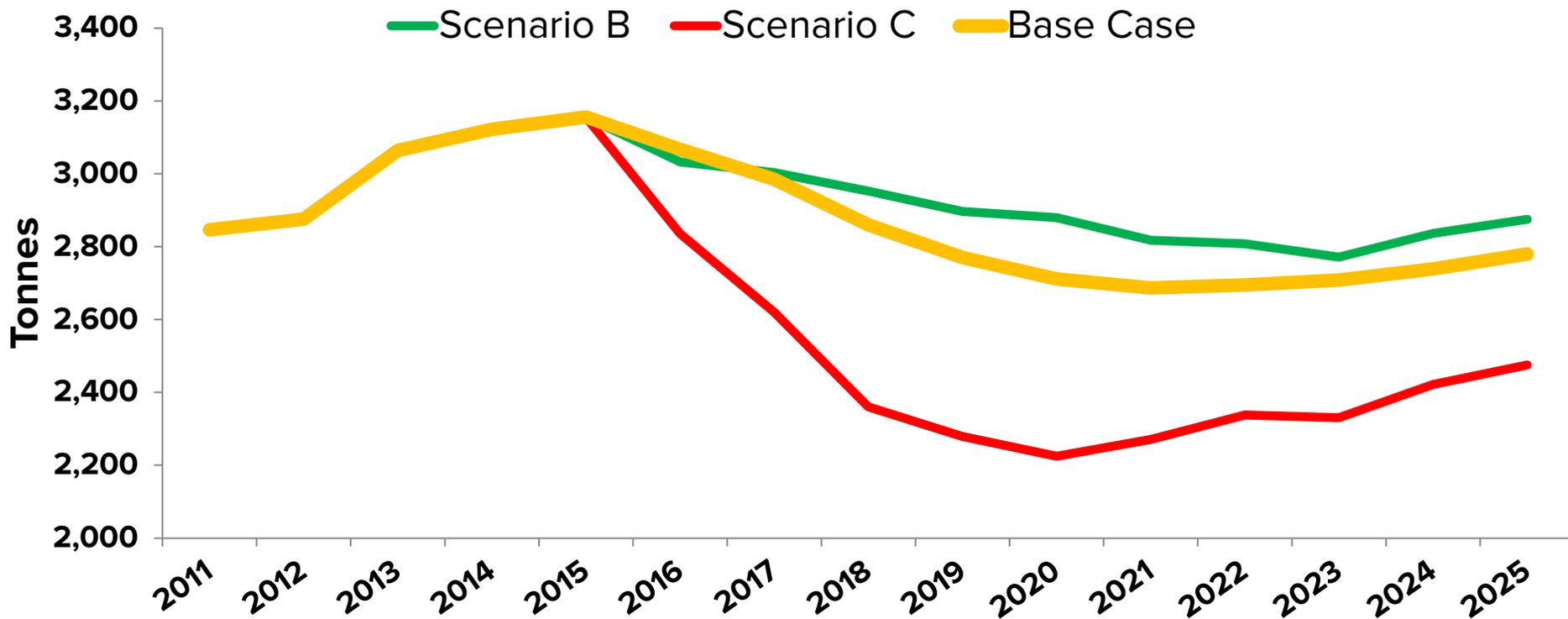
TOTAL SUPPLY PROJECTIONS

ESTIMATES THAT SUPPLY PEAKS IN 2015



EACH SCENARIO SHOWS MINE SUPPLY DOWN

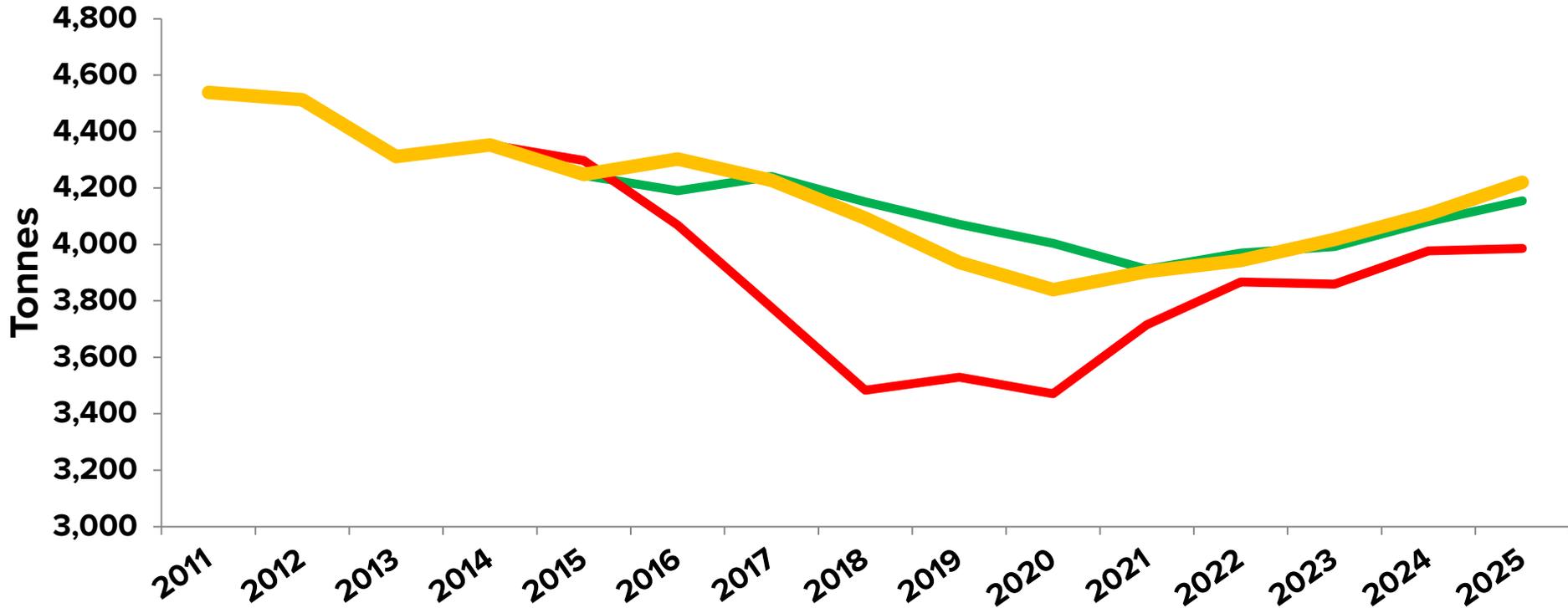
REALLY? WITH GOLD STILL AT A CLEARLY HIGH PRICE AND SO MUCH MINING INVESTMENT STILL IN FLIGHT??



SAME FOR TOTAL SUPPLY (MINE + SCRAP)

CONSENSUS

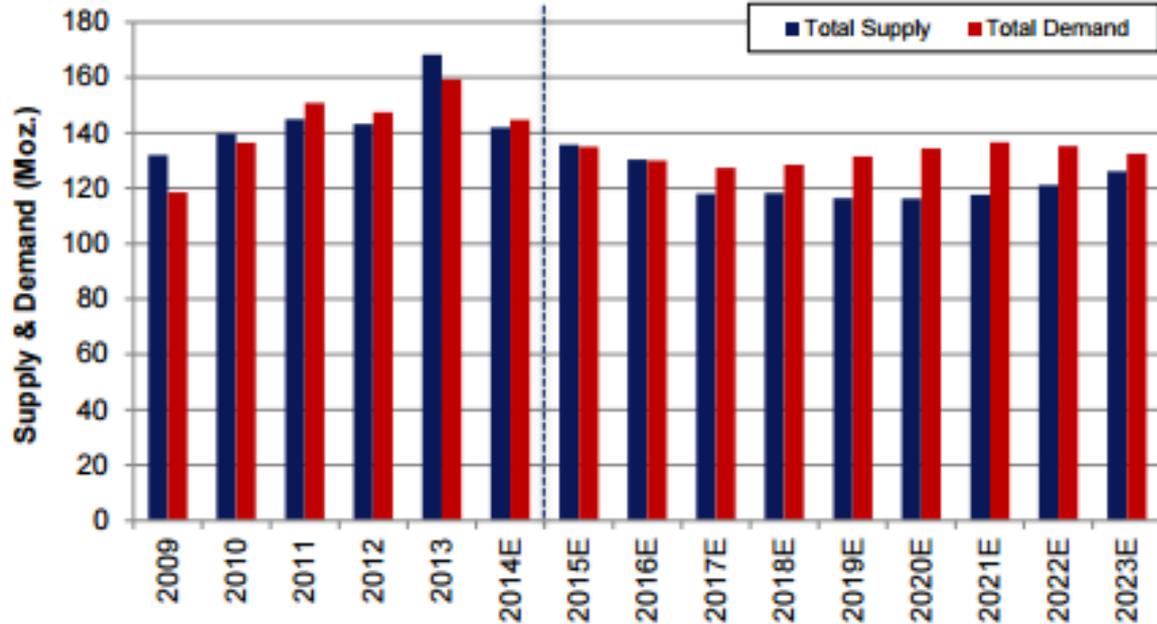
— Scenario B — Scenario C — Base Case



BUT THEY SAID THE SAME THING LAST YEAR

PREDICTED GOLD SUPPLY WOULD **DROP NEARLY 16%** IN '14 ALONE...

Total gold supply and demand projections*



In reality total supply increased by at least 1% in 2014

FORECAST CALIBRATION NEEDED?

MINE PRODUCTION TO DROP?

Key Industry Data Supplier World Mine Supply Forecast vs. Reported

	Mine Supply Forecast	Mine Supply Actual	Difference
2009	1.3%	7.5%	6.2%
2010	2.0%	4.9%	2.9%
2011	4.0%	3.6%	-0.4%
2012	3.0%	0.8%	-2.2%
2013	2.0%	5.6%	3.6%
2014	-1.2%	3.7%	4.9%
2015	-1.0%	? >0	

Source: GFMS, Hedgeye Estimates

Average

2.5%

Although providing indispensable industry data and intelligence, the forecasts look to have a **bullish bias**. Perhaps a similar audience awareness leads news broadcast weather forecasts to have a “wet bias”.

(h/t The Signal & The Noise)

UNDERESTIMATING SUPPLY ISN'T NEW

NEWMONT MINING COMMENTARY FROM 2001 ANNUAL REPORT

Gold: New Luster for Traditional Value

Gold's lasting value is once again being recognized in the marketplace. After trading at a low of \$256 an ounce in 2001, gold has risen to the \$300 an ounce range in early 2002 and analysts are adjusting their forecasts upward.

The reason is fundamental: worldwide production is falling and is expected to fall further in the years ahead. The low-price environment of the past few years has led to substantial cuts in exploration budgets throughout the industry and investments in new mines have been deferred. At the same time, central bank sales and producer hedging, which have added to the gold supply in the past, are moderating. With fewer new mines being opened and a low interest rate environment, the opportunity for producer hedging has diminished.

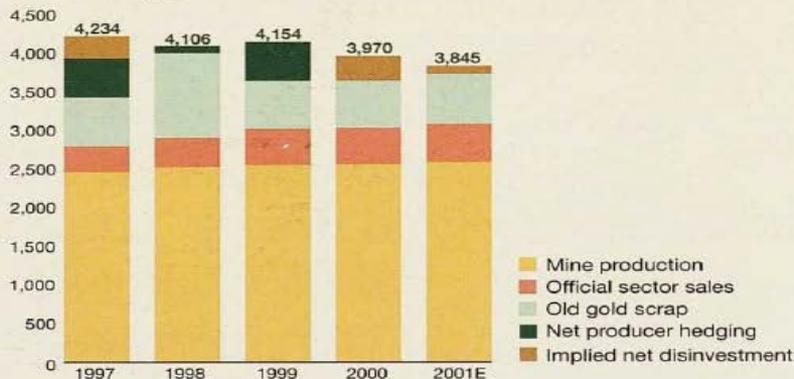
Meanwhile, the prospect of weaker worldwide economies, softer equity markets and political uncertainty around the globe are adding new luster to gold's intrinsic value. Investment demand for gold is increasing, most notably in Japan where stock market losses and limited insurance on bank account savings are driving investors toward hard assets. Jewelry, the

primary outlet for gold, saw modest declining sales in 2001, but overall demand is relatively unchanged.

We have always believed that gold and Newmont's stock, as an unhedged producer, offer investors an ideal way to balance their portfolios and reduce risk. Now, patient investors may also be able to reap the rewards that a rising gold price can deliver.

Improving Fundamentals – Decreasing Gold Supply

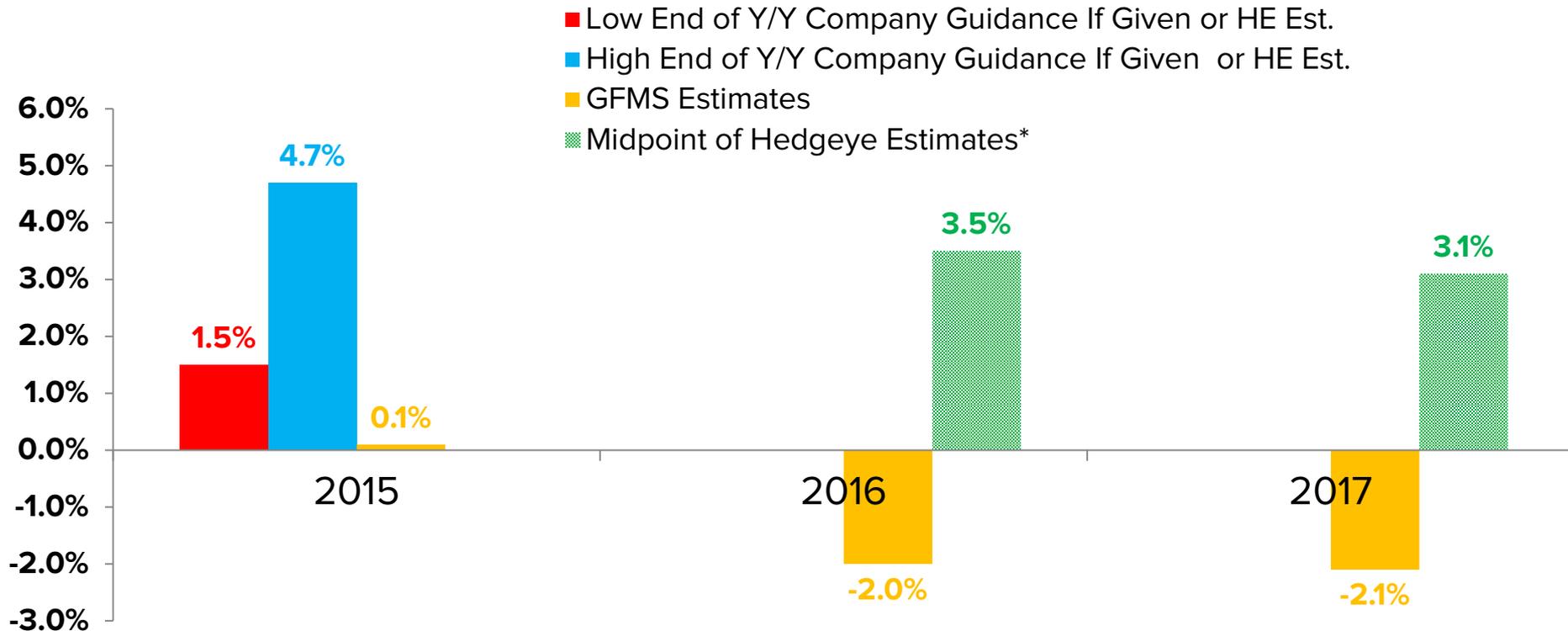
metric tons of gold



Source: GFMS' Supply Data

ACTUAL MINING PRODUCTION GUIDANCE LOOKS BEARISH...

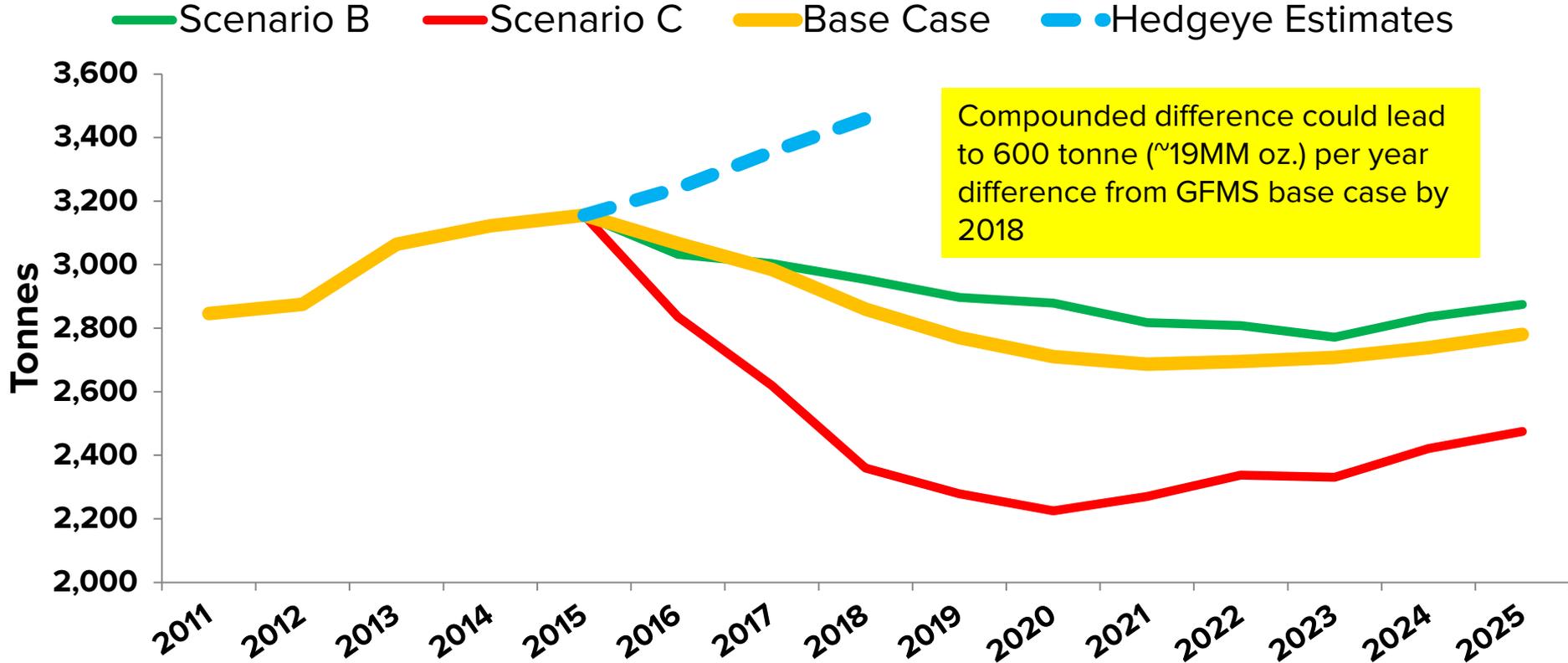
BASED ON COMPANY GUIDANCE, PRODUCTION WILL CONTINUE INCREASING



*Taken from a sample of gold miners representing 59% of global production, using the midpoint of guidance if range given

GFMS 3 SCENARIOS FOR MINE PRODUCTION

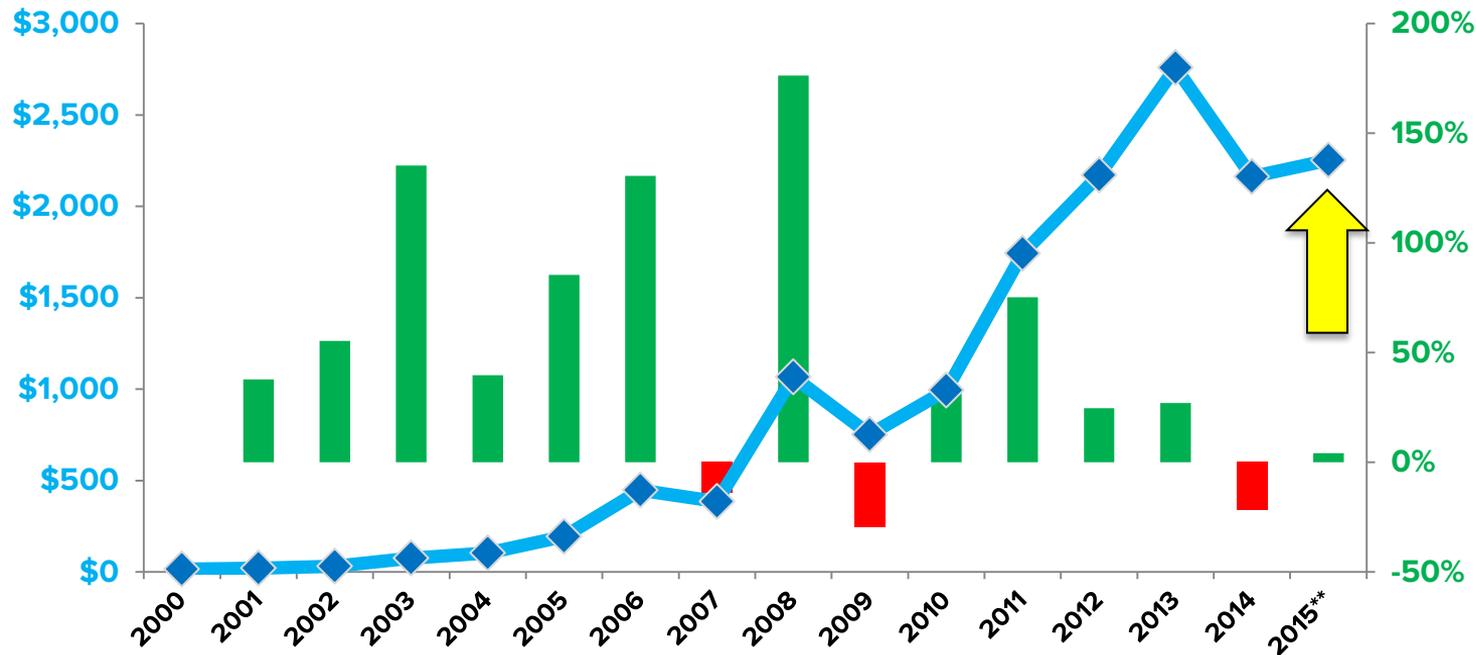
ALL BULLISH.....



CHINA: PRODUCTION WE CAN'T SEE HIGH COST?

(CHINA ISN'T LIKELY TO CUT ANYWAY)

■ Y/Y % Chg. ◆ Capital Expenditures* (\$MM)



*Zhongjin, Zijin, Zhaojin, Lingbao, China Gold International

** The 2015 Number is LTM reported Cap-ex through last quarter reported (either Q2/Q3)

Judging by capital spending, China is still ramping production

Sample includes 5 Chinese Producers that account for ~13% of global production

INVESTORS UNANTICIPATED SUPPLY?

CUMULATIVELY, MASSIVE ADDITIONAL SUPPLY

Cumulatively, relative to the consensus supply forecasts, the additional annual production by 2018 run rate is about **~19 mil oz.** That is nearly equivalent to investor & official purchases.

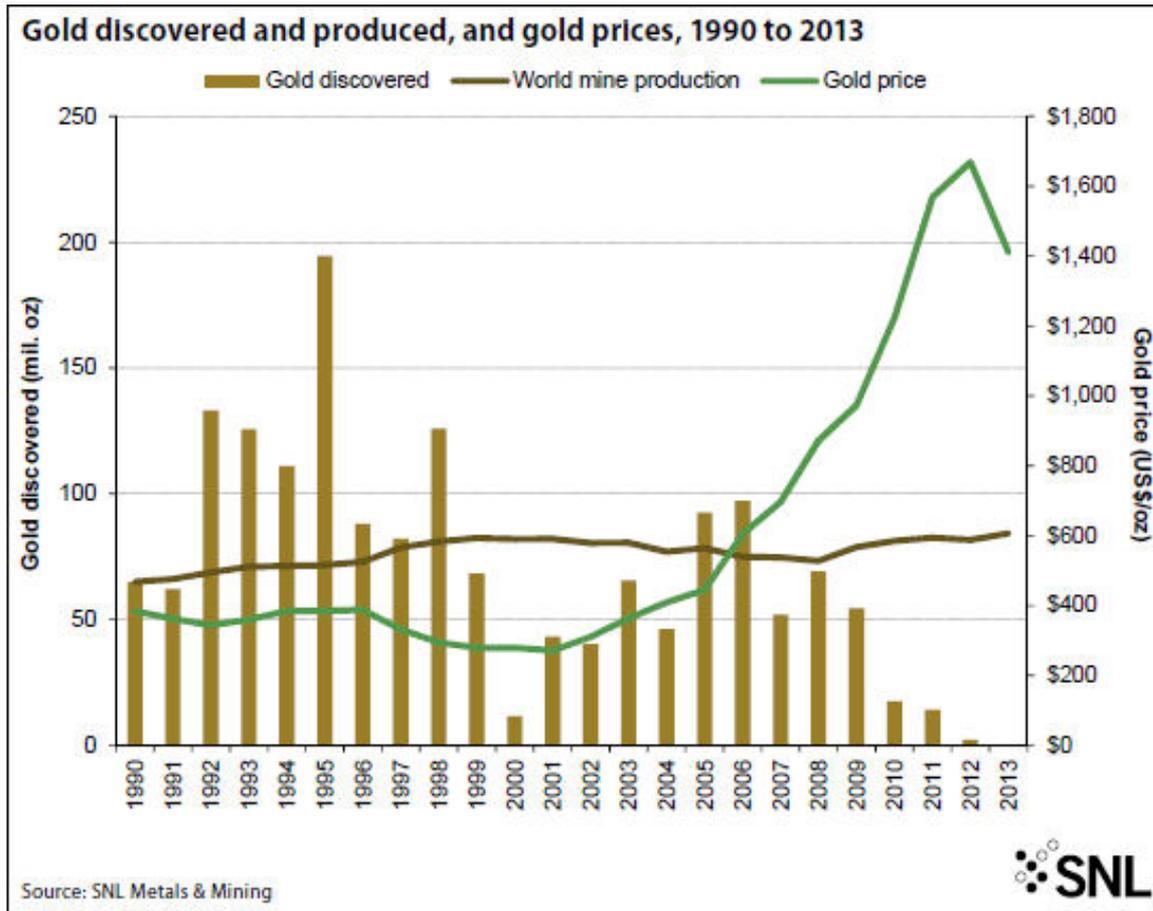
NO REASON TO ANTICIPATE INDUSTRY DISCIPLINE

Inflight capital projects and a desire to lower unit costs incentivize additional output. Industry fragmentation and leverage could drive every-mine-for-itself strategies?

NEGATIVE FOR INVESTOR SENTIMENT

If what is needed is investor buy-in to the bull story, industry oversupply makes a pretty strong bearish narrative.

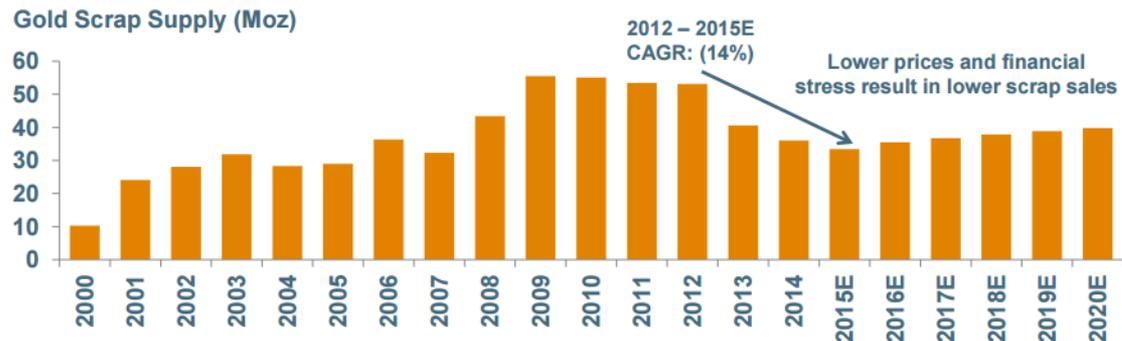
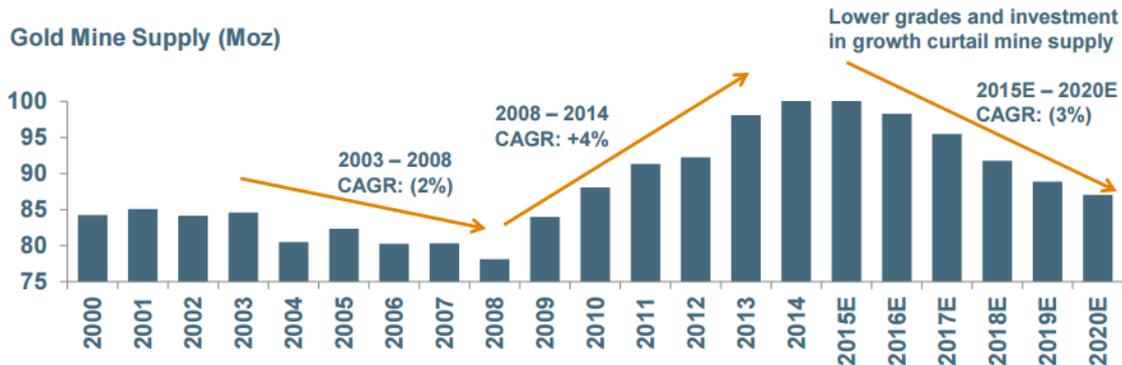
CONSENSUS: NOT FINDING GOLD & RUNNING OUT



But is this an accurate representation of gold discoveries?

PART OF WHY PRODUCTION TO DECLINE

Mine supply growth challenged with fewer discoveries



*GFMS Base Case projections (June 2015)

September 22, 2015

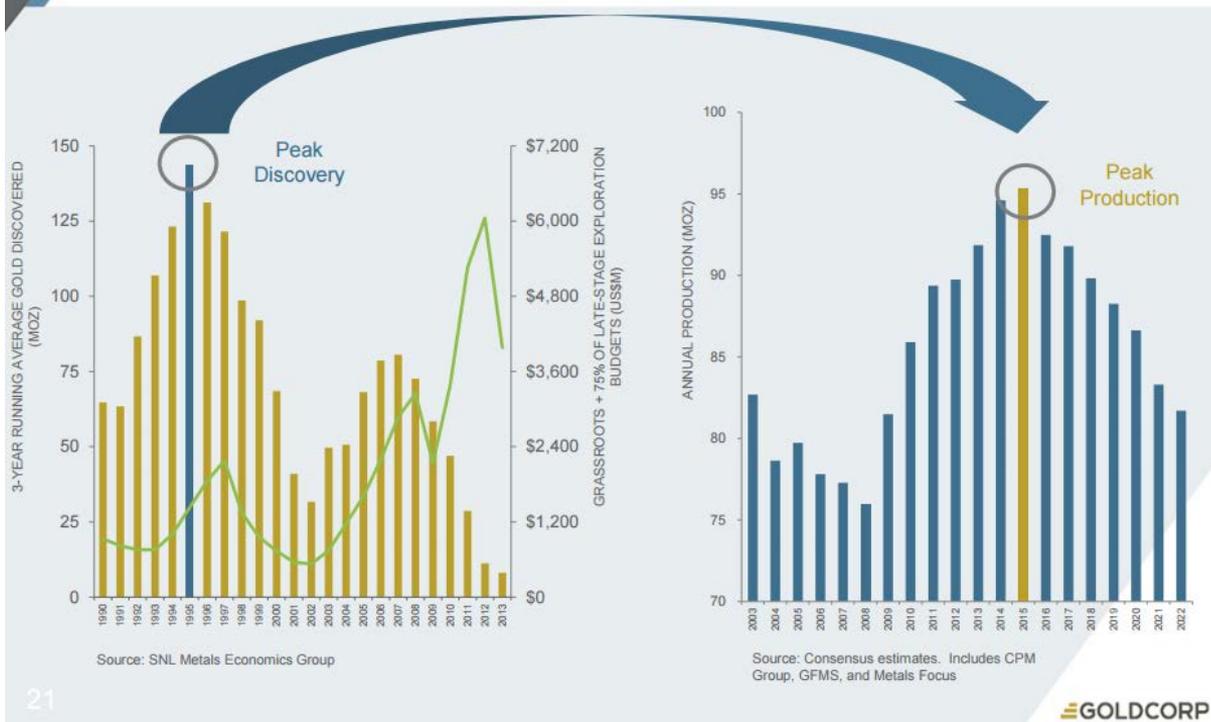
Newmont Mining Corporation | Denver Gold Forum | 21

These are arguments made by Goldcorp and Newmont, two of the largest public miners, in their investor presentations.

ARBITRARY RELATIONSHIP?

WHY GOLD?

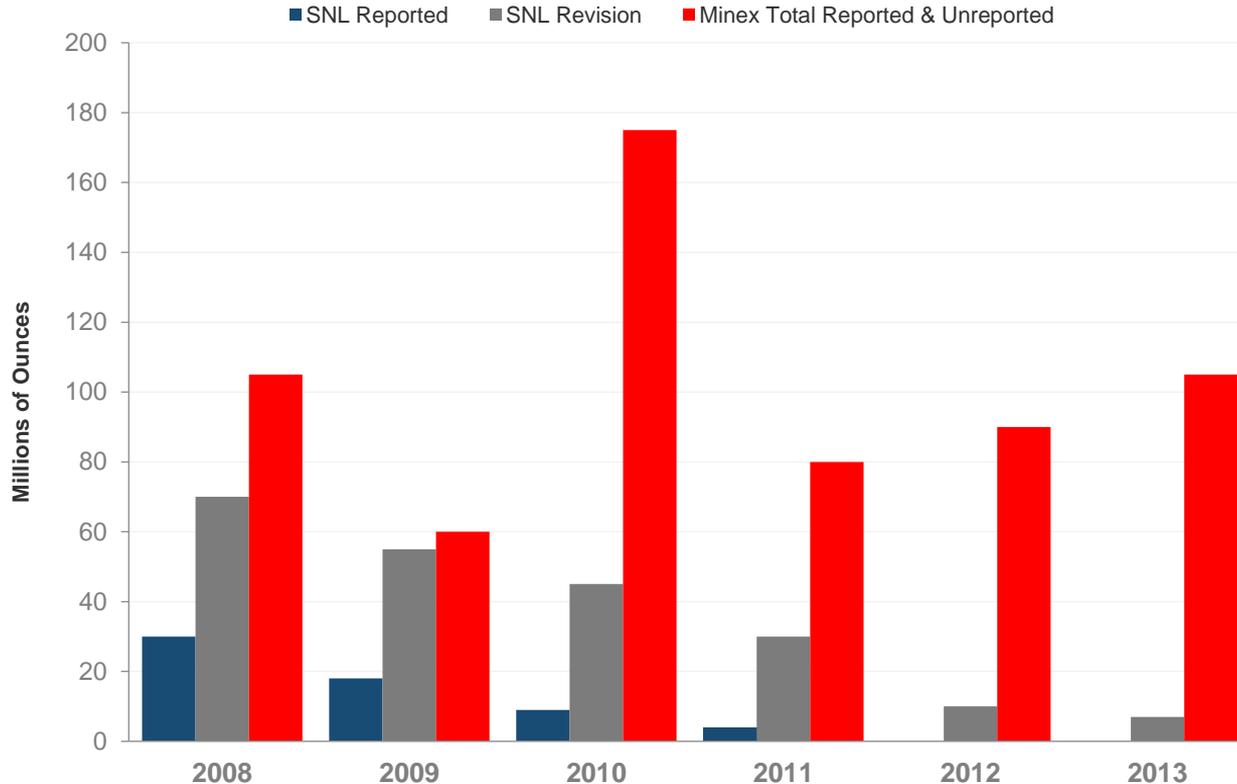
Supply: Peak Gold Production



This seems like an ambiguous relationship, but, hey, it's a good-looking slide.

BUT **ALWAYS A LAG** TO REPORT & SIZE

GOLD DISCOVERIES



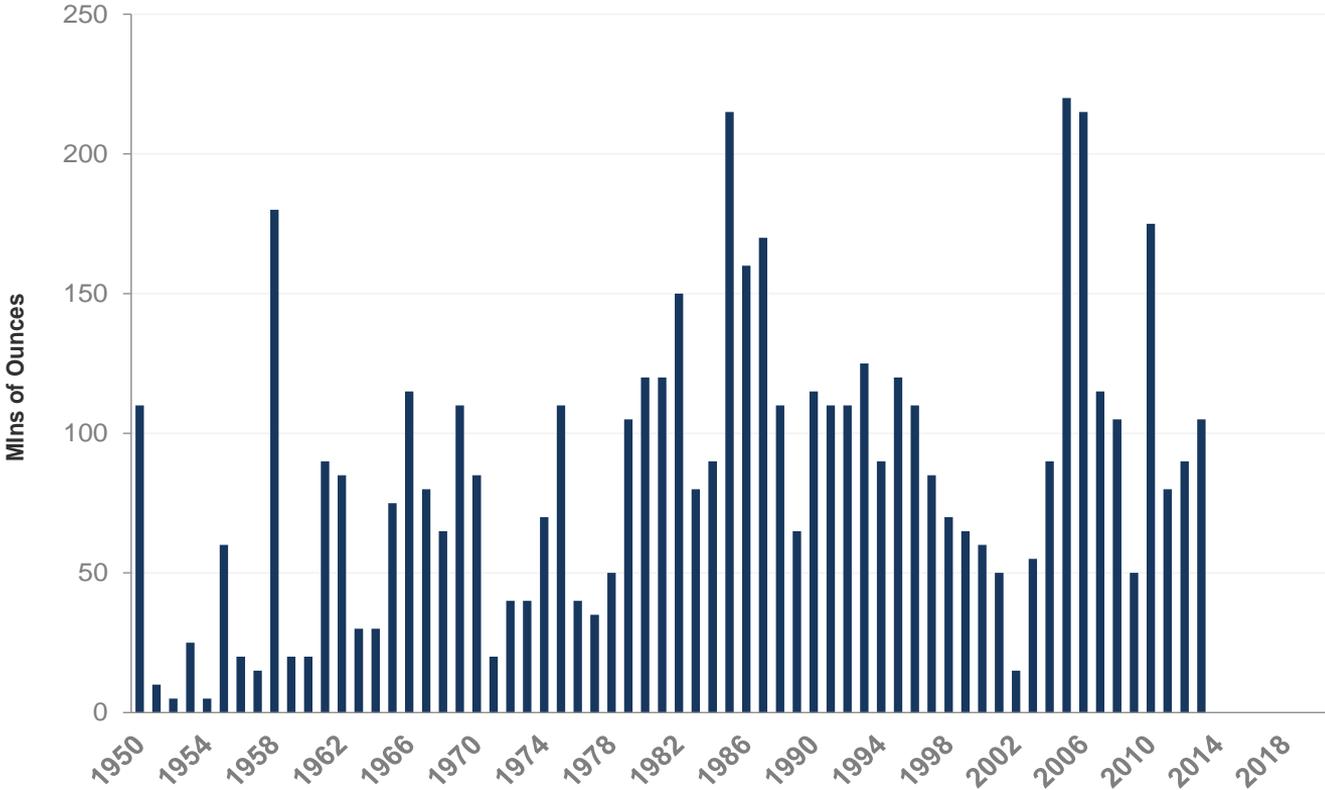
**EXPECTED TO BE
REVISED UPWARD**

It is not as though one can find a gold deposit on Wednesday, and report the discoveries scope by the following Friday.

Also, many gold discoveries are coproducts with copper and other base metals, complicating the analysis.

STILL FINDING GOLD JUST FINE...

MOZ OF GOLD DISCOVERED



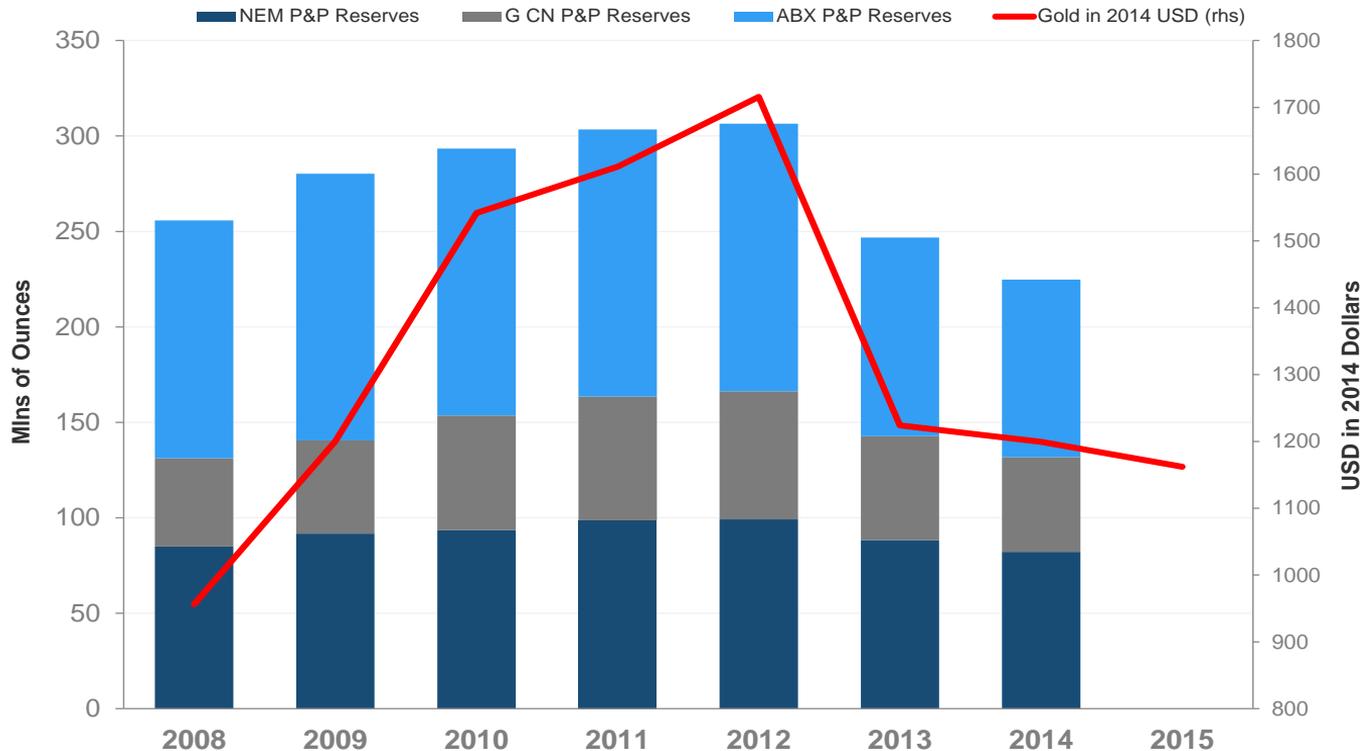
On adjusted data (that can still exclude some coproduction) the industry is pretty close to discovering a year's total production per year.

DATA SOURCE: MINEX, COMPANY FILINGS, HRM ESTIMATES

©2015 HEDGEYE RISK MANAGEMENT

RUNNING OUT OF RESERVES?

GOLD PROVEN & PROBABLE RESERVES VS. REAL GOLD PRICE



P&P reserves tend to follow the gold price.

PLENTY OF OVERHEAD SUPPLY...

Gold reserve pricing sensitivities*

Gold reserve sensitivities (Moz)

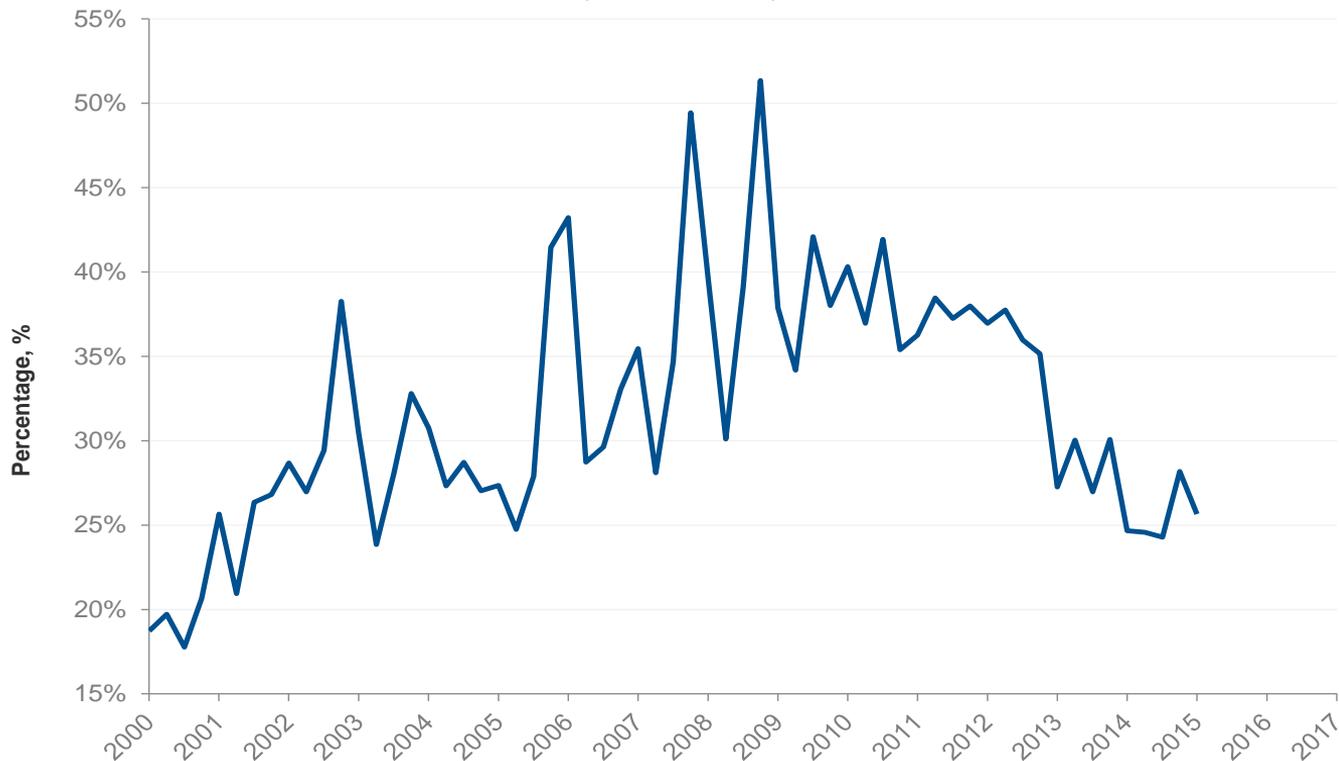


*All reserves noted in this presentation are as of December 31, 2014. See 2014 Reserve report at www.newmont.com. 2014 reserves are calculated at a gold price of \$1,300 per ounce, USD/AUD exchange rate of \$0.92, WTI of \$100/bbl and use a minimum discount rate of 7%.

Although, we think it would be more useful to see a reserve estimate at, say, \$800.

CONSENSUS: SCRAP IS PRICE DEPENDENT

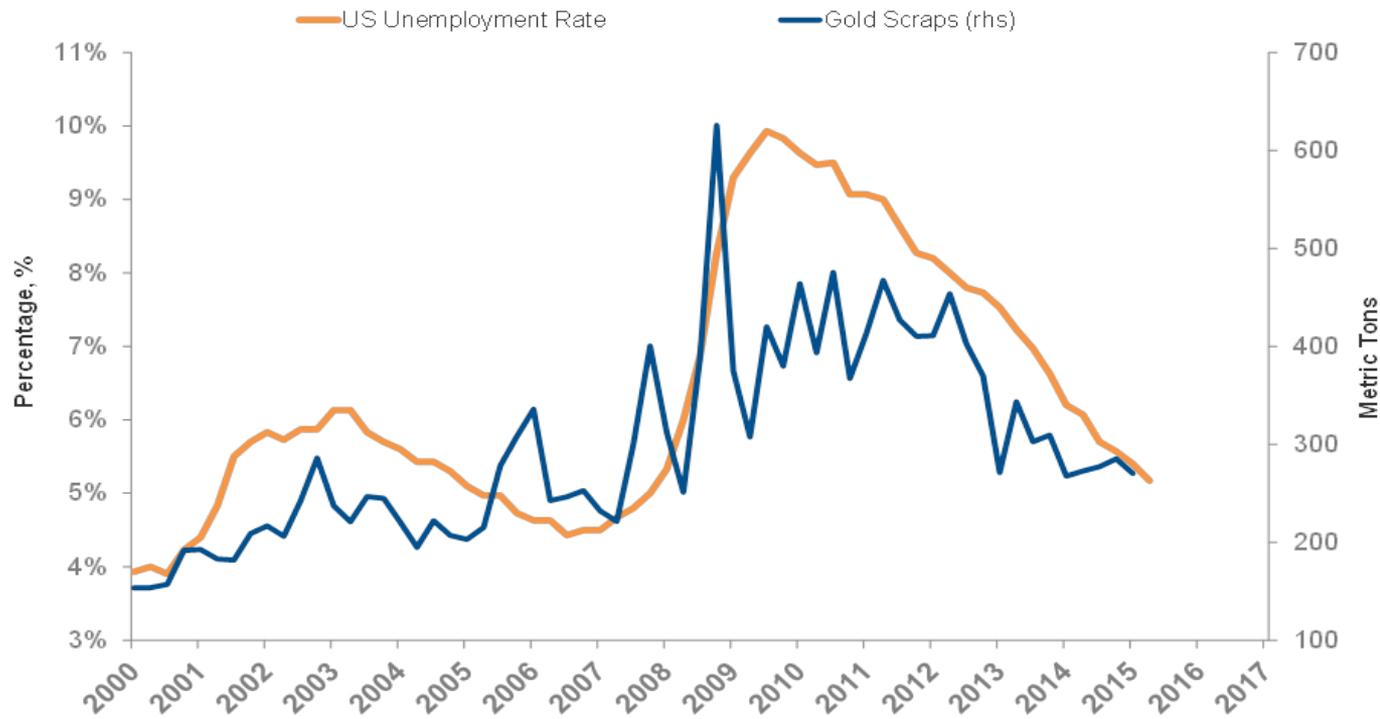
GOLD SCRAP AS % OF TOTAL SUPPLY
(QUARTERLY)



Holders of scrap gold may not be willing to sell at the current 'low' price.

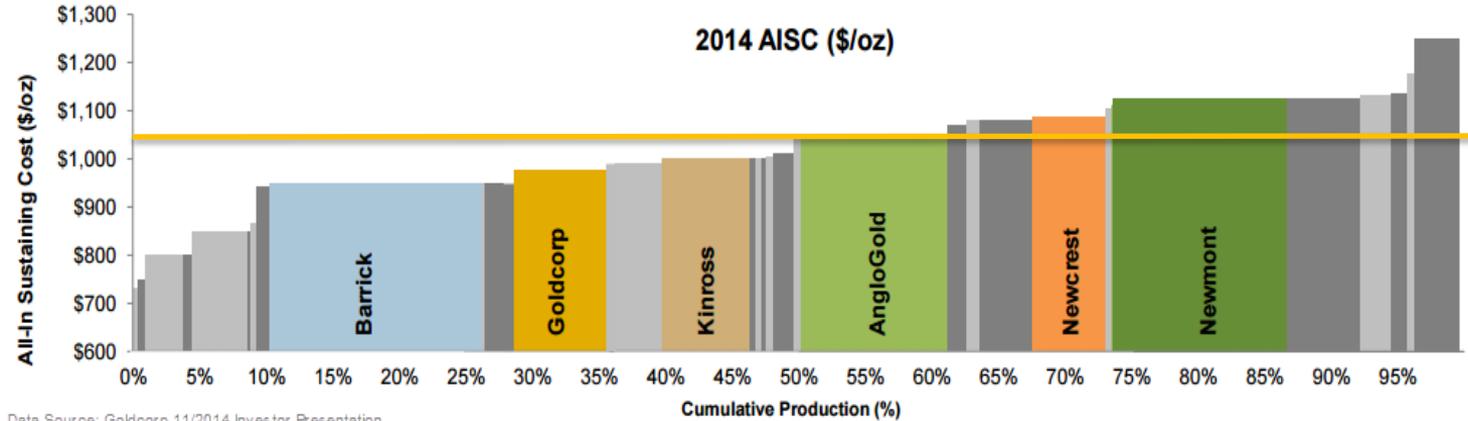
BUT, UNEMPLOYMENT ALREADY LOW

US UNEMPLOYMENT RATE VS. GOLD SCRAP



Scrap supply correlates better with consumer need for cash, which is less uplifting than the image of a rational, price sensitive jewelry liquidator.

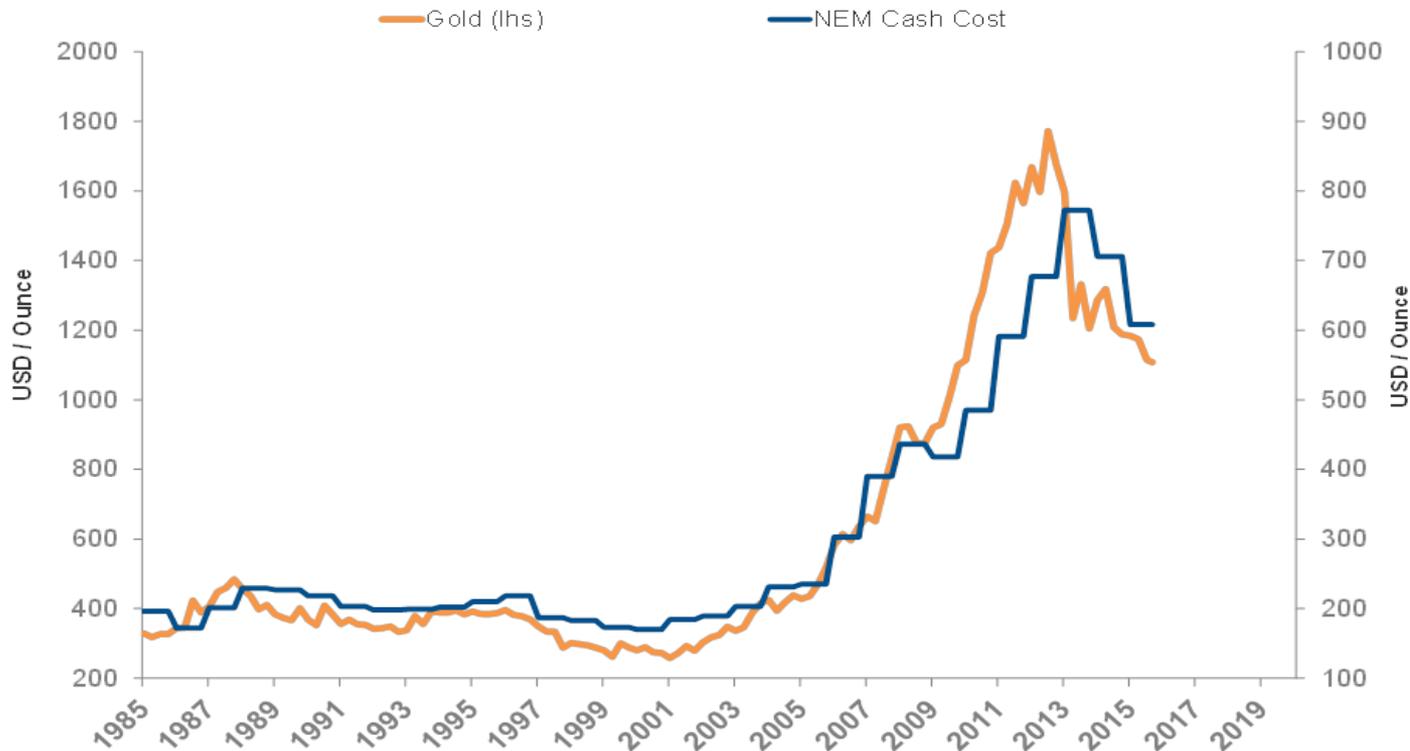
CONSENSUS: PRICE TOO NEAR COSTS



Marginal Cost Pricing: If commodities price at marginal cost, and marginal cash cost forms a solid floor, then gold should be on sound footing by virtue of the current cost structure.

REALITY: COSTS FOLLOW GOLD PRICE

GOLD PRICE VS. NEWMONT CASH COST



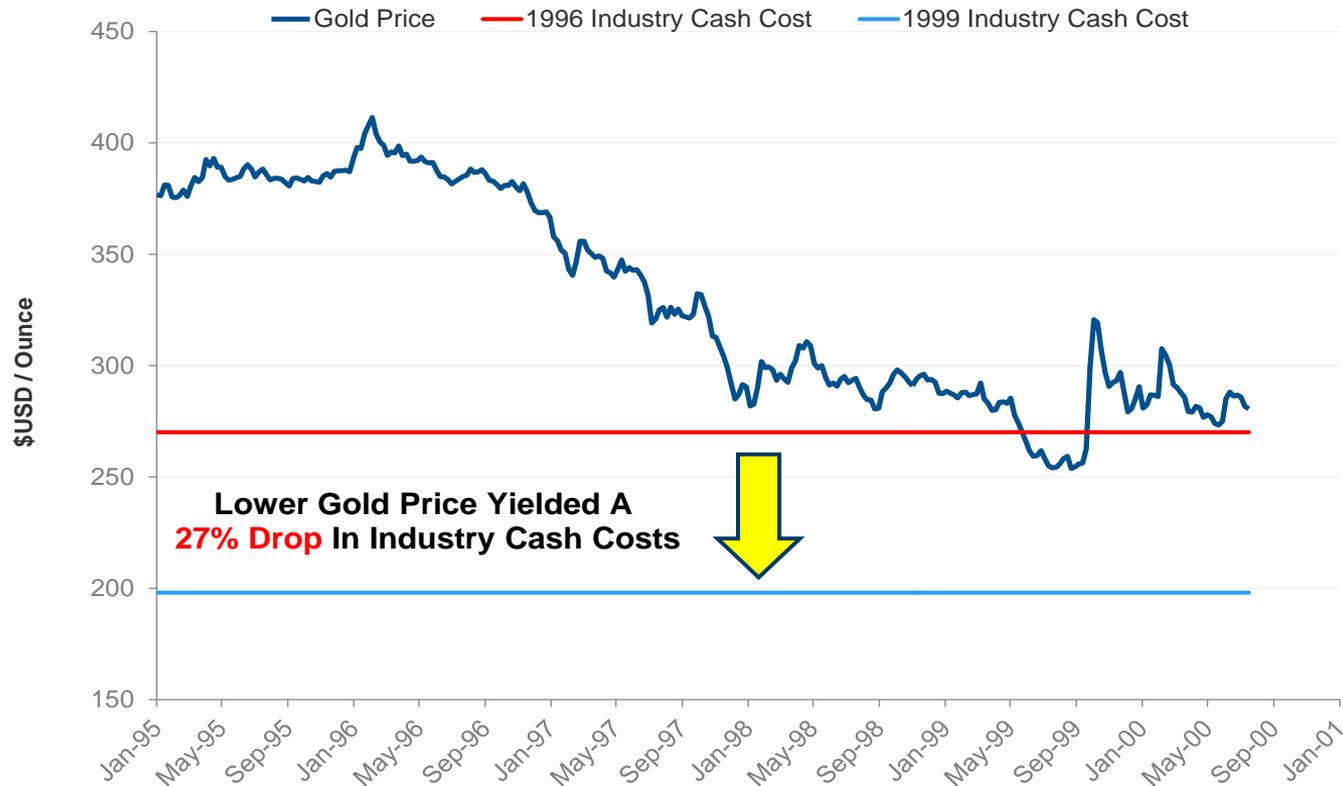
DATA SOURCE: BLOOMBERG, COMPANY FILINGS, HRM ESTIMATES

©2015 HEDGEYE RISK MANAGEMENT

For instance, ore grades decline because mining lower grades makes economic sense at higher prices.

THINK IT CAN'T HAPPEN?

GOLD PRICES VS. WEIGHTED-AVERAGE AVERAGE INDUSTRY CASH COSTS



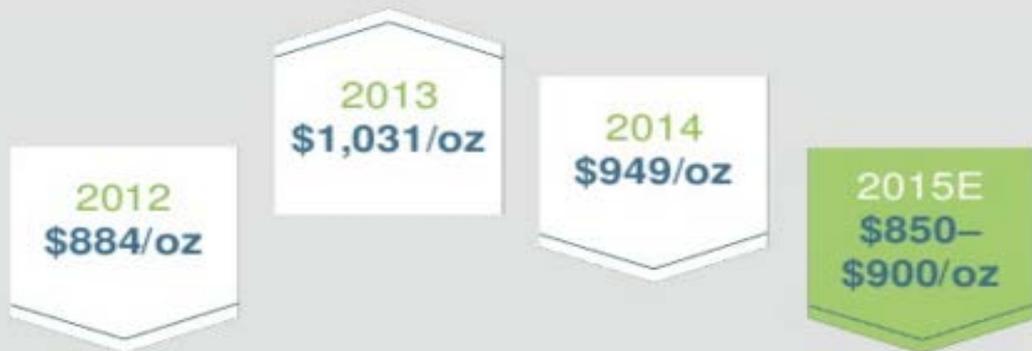
“Our gold all-in sustaining costs were \$835 per ounce for the quarter, bringing our year-to-date cost to \$864 per ounce. This represents a 27% reduction since 2012. About half the improvements we achieved in the third quarter are the result of sustainable cost and efficiency improvements across the portfolio and higher productivity in sales at low cost operations.”

- Gary Goldberg, CEO
Newmont, 3Q15 Earnings Call

INDUSTRY FOCUS ON LOWER COSTS

PROVEN STRATEGY

Focus on Cost Control Drives Declining Costs⁽¹⁾

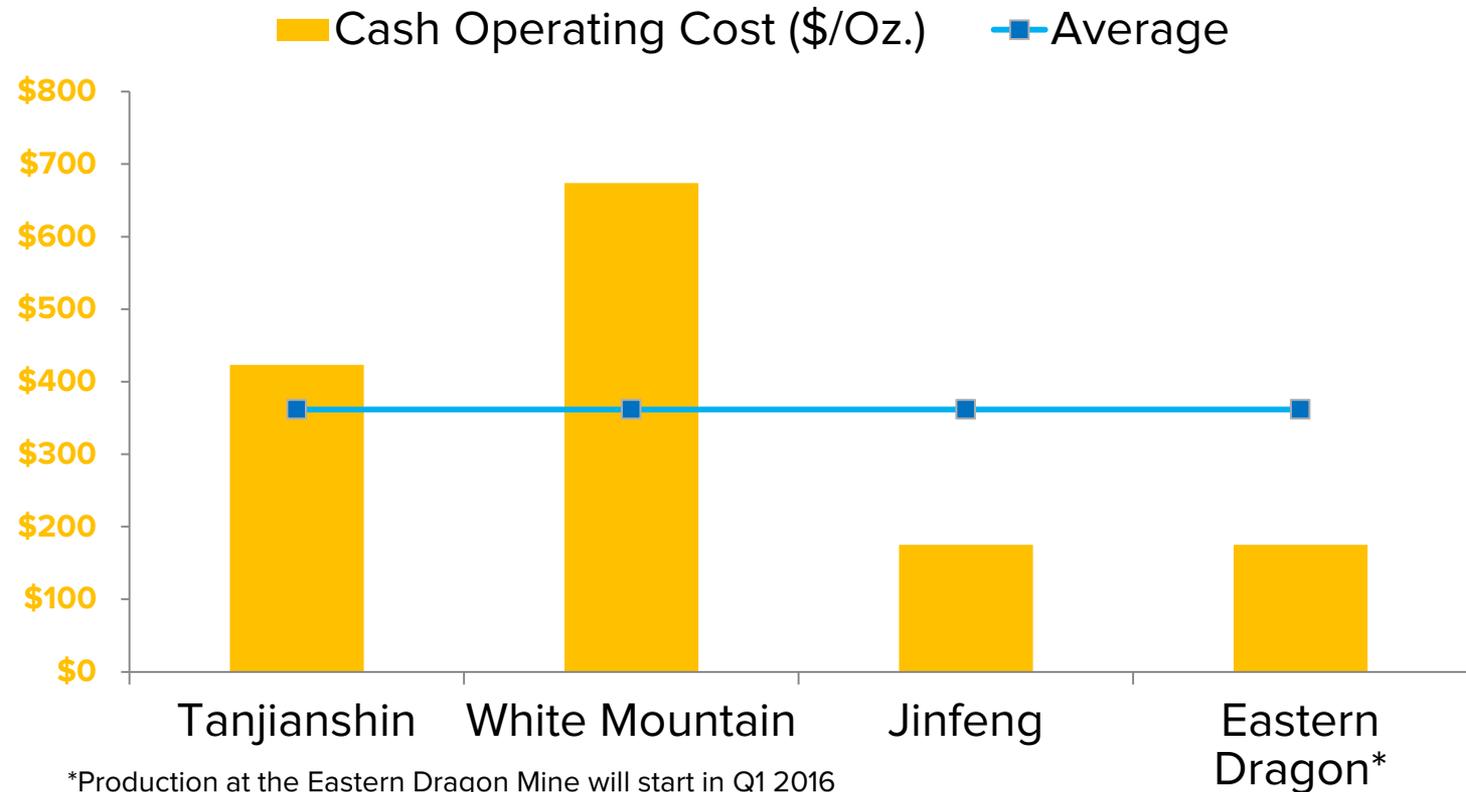


NEW MINES, OPERATING FOR EXCELLENCE
PROGRAM DRIVE COST SAVINGS

In what could be seen as a reflexive down-cycle, lower metal prices force lower costs, which in turn can lower price-setting “marginal cost”.

WHAT IS SEEN IN CHINA IS LOWER COST

ELDORADO GOLD REPORTS LOW CASH COSTS AT 4 DIFFERENT OPERATIONS

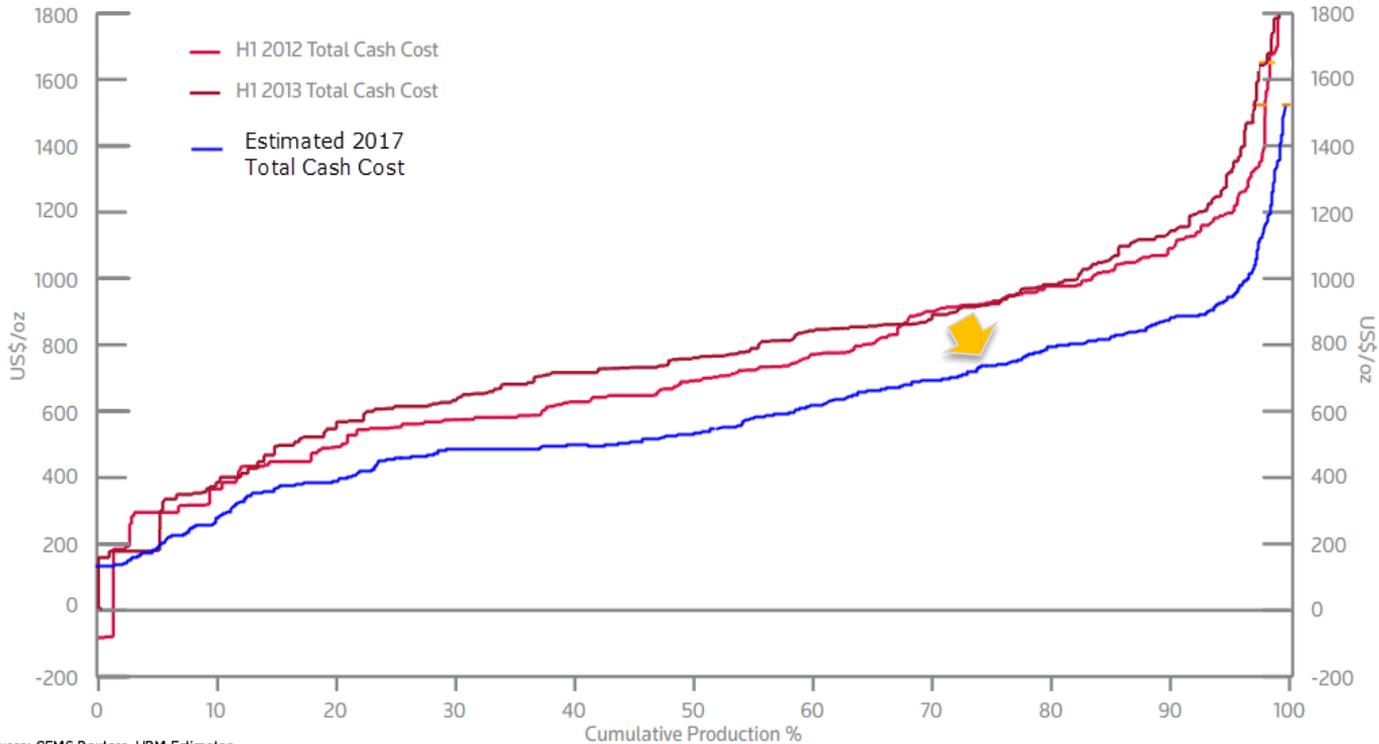


Eldorado Gold operates three mines in China, with one of those under construction

Avg. Cash Cost YTD in 2015 is ~\$360/Oz.

COST CURVE TO FALL MUCH FURTHER

Cash Cost Curves 2012 & 2013 vs Estimated 2017?



Data Source: GFMS Reuters, HRM Estimates

Rather than providing a support for gold prices, we expect the cost curve to shift down to accommodate lower gold prices.



QUANTITATIVE & MACRO



GOLD NOT A CURRENCY, MEDIOCRE HEDGE

cur·ren·cy

/ˈkərənsē/ 

noun

1. a system of money in general use in a particular country.
"the dollar was a strong currency"
synonyms: money, legal tender, cash, banknotes, bills, notes, coins, coinage, specie
"foreign currency"
2. the fact or quality of being generally accepted or in use.
"the term gained currency during the second half of the 20th century"
synonyms: prevalence, circulation, exposure; More

Can't Pay Taxes

With It: Commodities do display currency-like properties, but they are not a unit of account or legal tender.

Sugar, Sugar: Gold is less well correlated with the dollar than many other commodities.

Dollar Absolute Value Correlation Coefficient Table

Last # of Years	Corn	Gold	Sugar	Feeder Cattle	Feeder Cattle	Copper	Wheat
1	0.15	0.16	0.83	0.66	0.60	0.68	0.47
3	0.54	0.61	0.90	0.43	0.58	0.88	0.70
5	0.67	0.66	0.78	0.64	0.72	0.85	0.64
10	0.53	0.26	0.42	0.32	0.43	0.63	0.61
15	0.64	0.65	0.63	0.40	0.30	0.80	0.72
20	0.68	0.68	0.68	0.47	0.37	0.79	0.76
25	0.61	0.61	0.64	0.42	0.31	0.71	0.69
30	0.60	0.60		0.47	0.38		0.67
35	0.43	0.52		0.49	0.44		0.54
40	0.42	0.50		0.46	0.43		0.53
45	0.53	0.53		0.49	0.44		0.56

Data Source: Bloomberg, HRM Estimates

BUT IT USED TO BE: GOLD STANDARD



No Denying History: Gold obviously was a dominant currency medium for thousands of years, which is a reason it continues to maintain a currency-like halo.



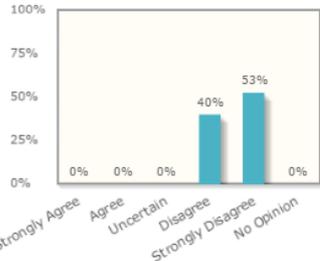
Gold Replaced, Why Bring It Back? Flexible exchange rates and international banking systems now fill that roll.

GOLD STANDARD ISN'T RETURNING

Thursday, January 12, 2012 9:54am
Gold Standard

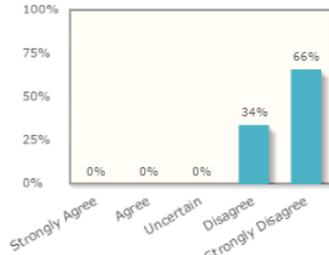
Question A: If the US replaced its discretionary monetary policy regime with a gold standard, defining a "dollar" as a specific number of ounces of gold, the price-stability and employment outcomes would be better for the average American.

Responses



© 2015, Initiative on Global Markets.
Source: IGM Economic Experts Panel
www.igmmchicago.org/igm-economic-experts-panel

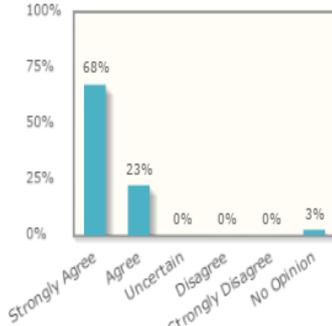
Responses weighted by each expert's confidence



© 2015, Initiative on Global Markets.
Source: IGM Economic Experts Panel
www.igmmchicago.org/igm-economic-experts-panel

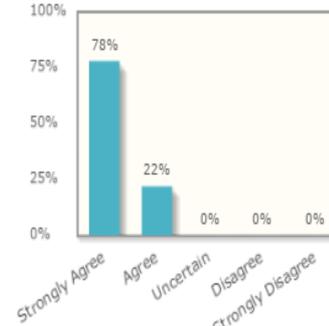
Question B: There are many factors besides US inflation risk that influence the current dollar price of gold.

Responses



© 2015, Initiative on Global Markets.
Source: IGM Economic Experts Panel
www.igmmchicago.org/igm-economic-experts-panel

Responses weighted by each expert's confidence



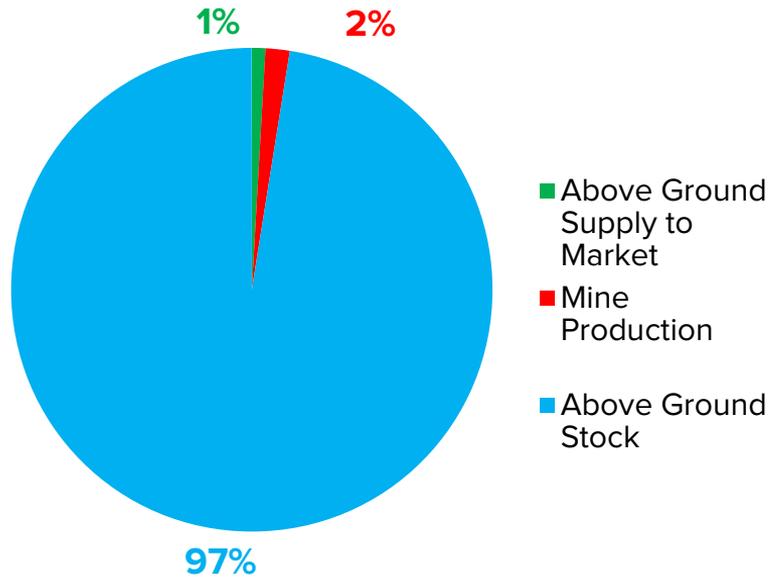
© 2015, Initiative on Global Markets.
Source: IGM Economic Experts Panel
www.igmmchicago.org/igm-economic-experts-panel



Fat Chance: Post-apocalyptic scenarios aside (in which case there will be bigger problems than gold miner portfolio allocations), a gold standard is not likely within anyone's investment horizon.

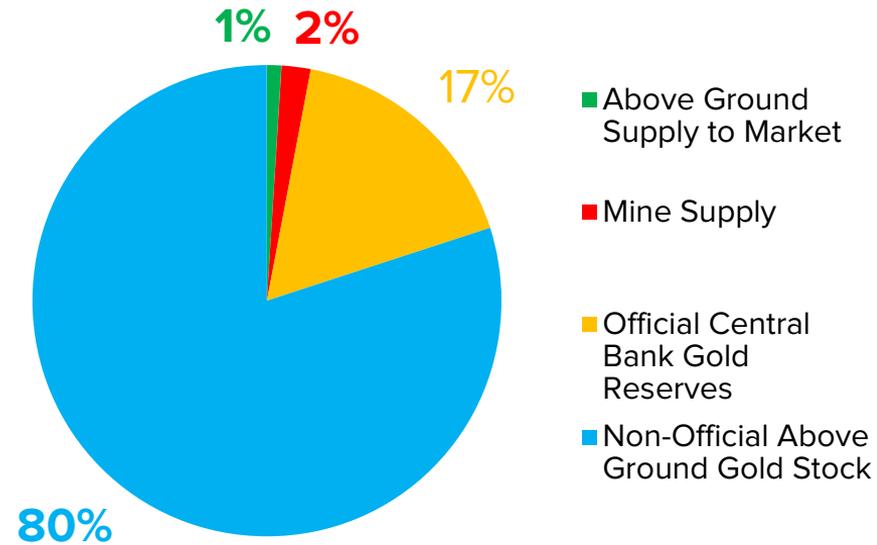
- Frequently incompatible with fractional reserve banking
- Policy makers prefer control
- Monetary tools may be a least worst outcome after central planners make mistakes
- Implementation would be a global nightmare
- Gold market information not very robust

GOLDEN RULE: ONLY 17% IN CENTRAL BANKS



GLOBAL GOLD STOCK

179,022 Tonnes end of 2013, 97.5% of which was above ground stock

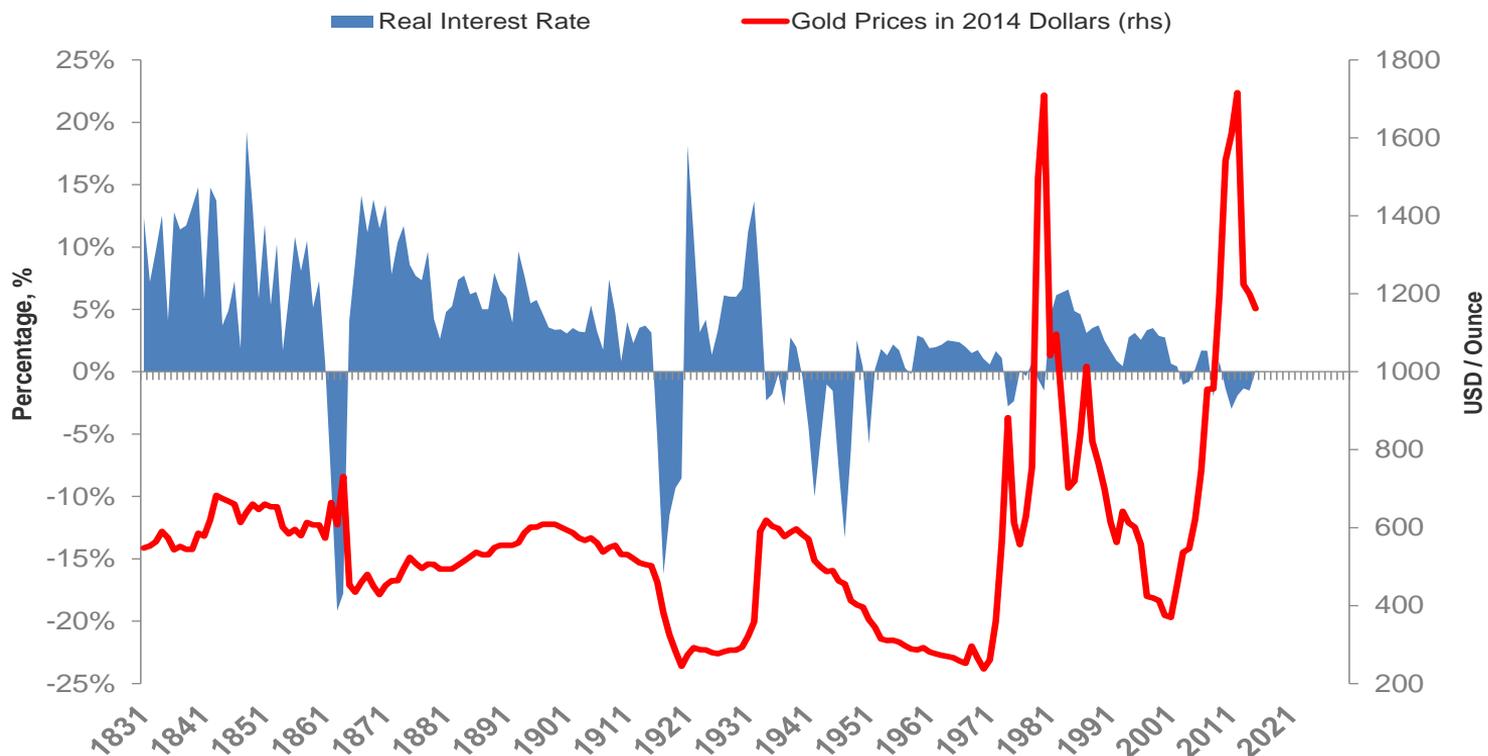


GLOBAL GOLD STOCK

179,022 Tonnes end of 2013, 17% of which was Central Bank Reserves

NEGATIVE REAL RATES USUALLY MEAN **SELL**

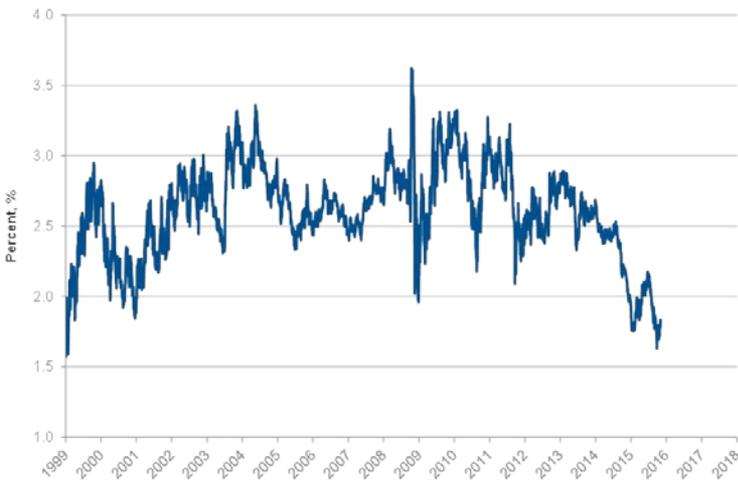
REAL INTEREST RATES VS. GOLD PRICES



Rock In A Safe: Since gold does not provide income, one would expect portfolios to allocate away from it when real interest rates are high, and vice versa. It is also a war/fear allocation.

MANY DISINFLATIONARY SIGNALS...

FED'S FIVE-YEAR FORWARD BREAKEVEN INFLATION RATE



DATA SOURCE: FEDERAL RESERVE, HRM ESTIMATES

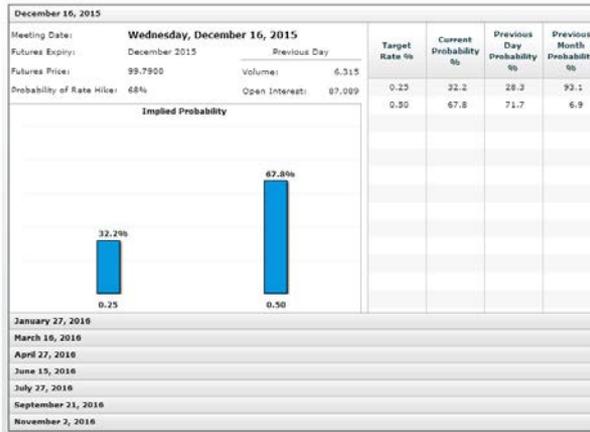
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FedWatch Tool

Based on CME Group 30-Day Fed Fund futures prices, which have long been used to express the market's views on the likelihood of changes in U.S. monetary policy, the CME Group FedWatch tool allows market participants to view the probability of an upcoming Fed Rate hike.

CME Group FedWatch

Last Update: 11/10/2015



<http://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html>

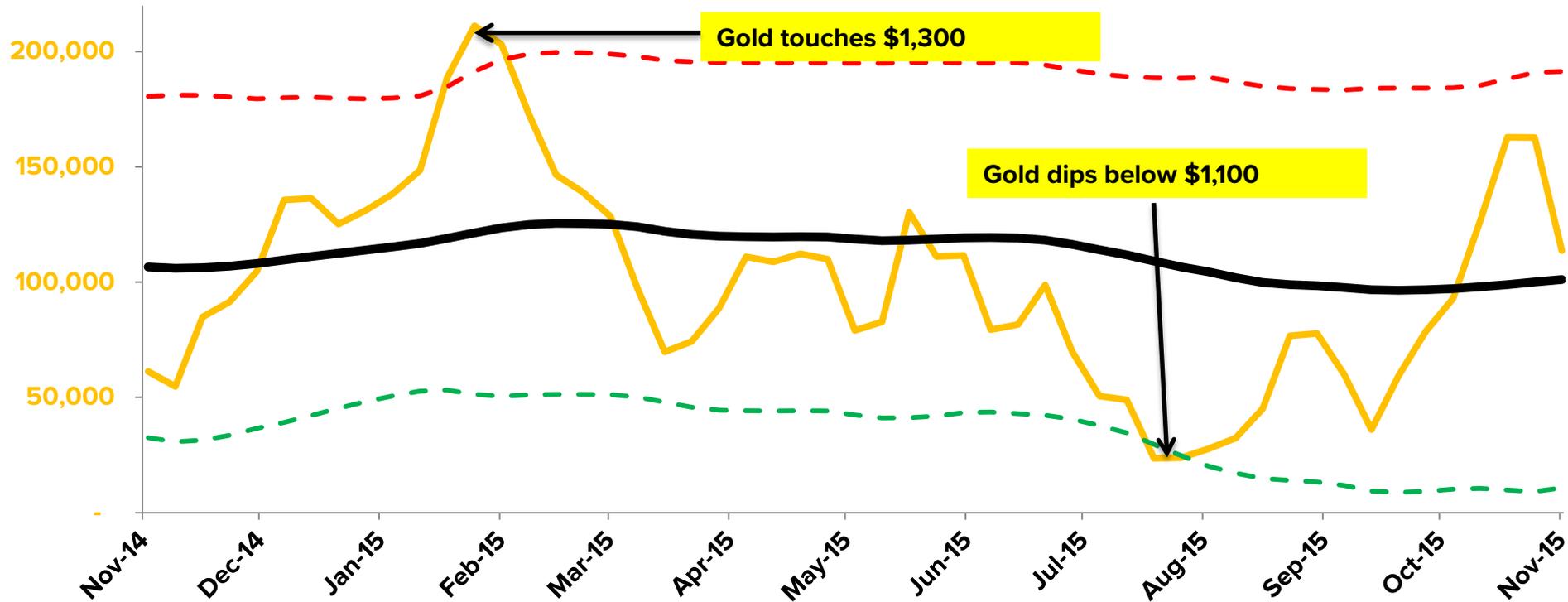
...like the collapse in commodity prices, just as there are increasing expectations that the Fed will raise rates. (We are in the 'under' camp on the prospects of a rate increase.)



CONTRACT POSITIONING: FED INFLECTION

CFTC NET NON-COMMERCIAL FUTURES AND OPTIONS POSITIONING

— CMX Gold Net NCCP = 113651 — TTM Average = 101082 - - +2x STDEV = 191373 - - -2x STDEV = 10792

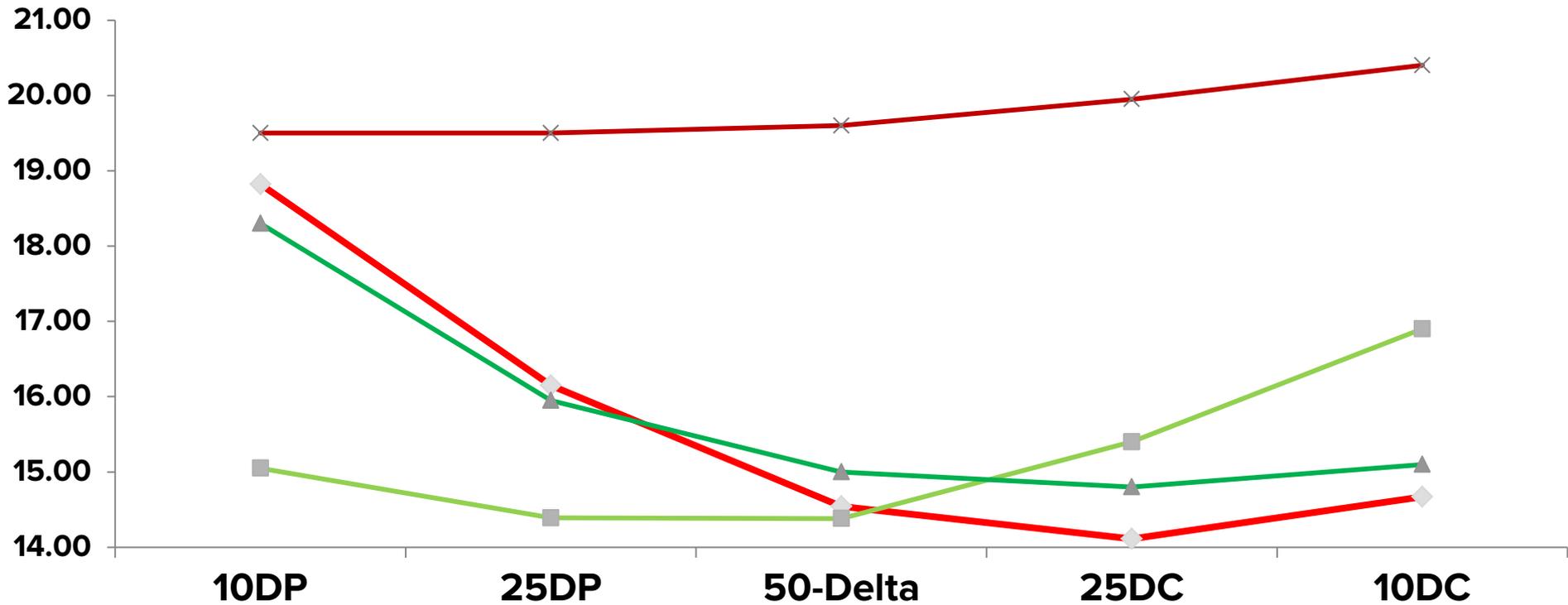


CALLS MOST EXPENSIVE AFTER A RALLY

LEFT AXIS = VOLATILITY ASSUMPTION EMBEDDED IN OPTION PRICES ON SPOT FUTURES CONTRACTS

RIGHT AXIS = STRIKE (OUT-OF-THE-MONEY PUTS FAR LEFT: 10-DELTA)

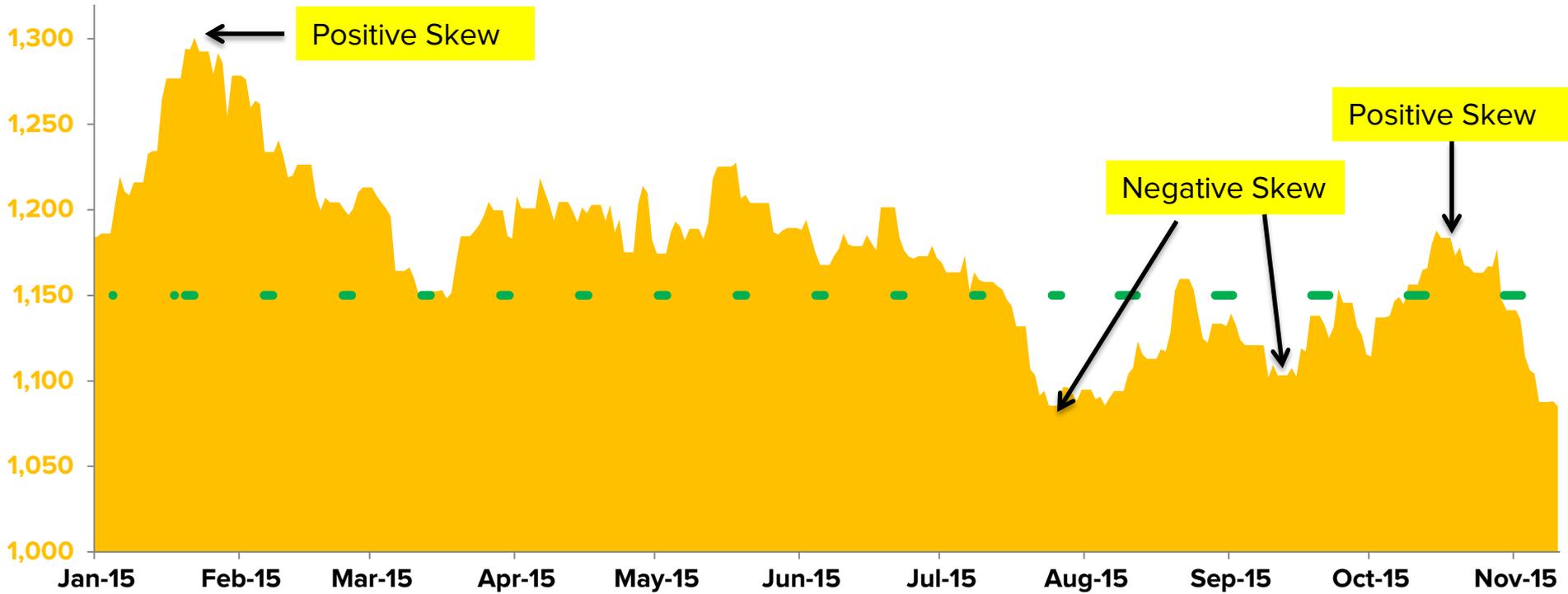
◆ Today ■ 1-Mth ▲ 3-Mth × January 22nd 2015 High in Gold



GOLD & IMP VOL: SELL POSITIVE SKEW

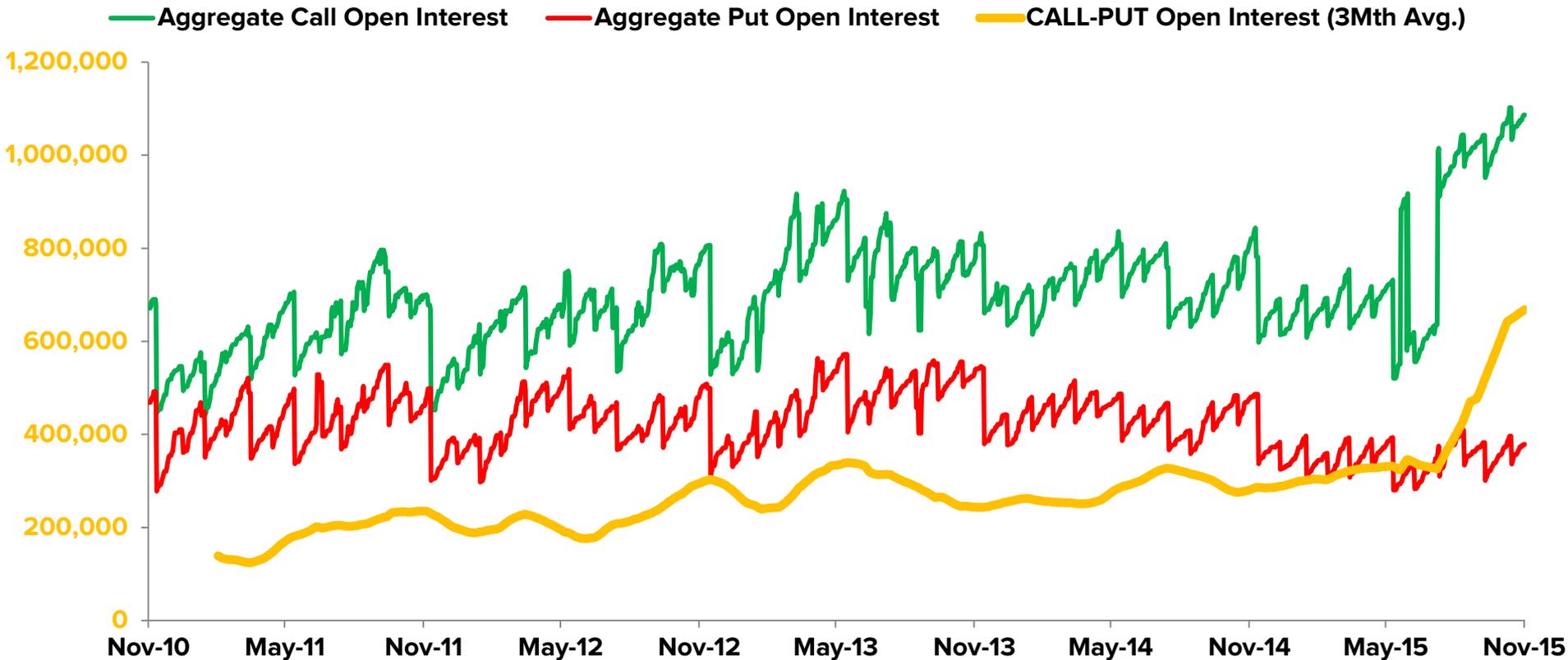
GOLD SPOT PRICE AND IMMEDIATE-TERM SUPPORT (\$1,150)

Gold (\$/Spot) Hedgeye Immediate-Term Support



OPTION OPEN INTEREST DIFFERENTIAL HIGHEST IN 5 YEARS

OPEN INTEREST IN OPTIONS MARKETS INCREASING



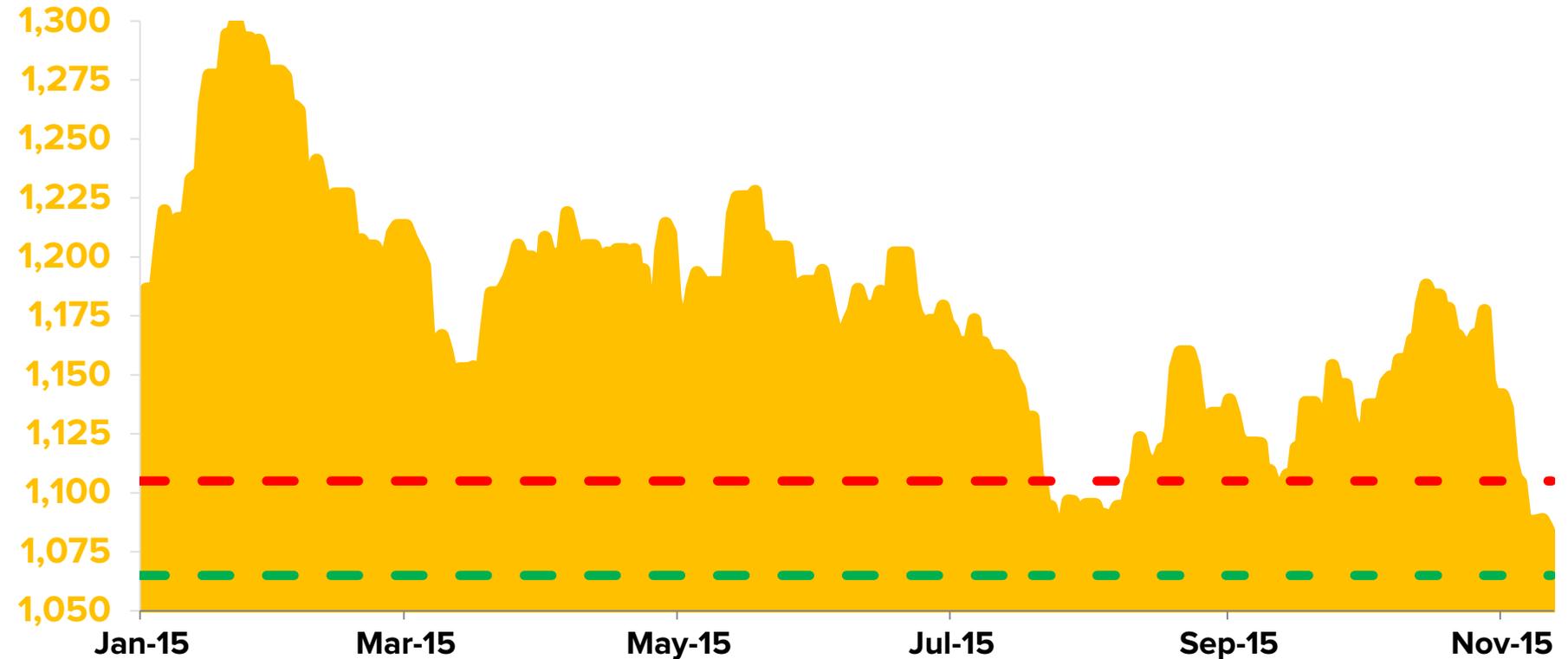
MATERIALS PERFORMANCE BY QUAD

Hedgeye Macro U.S. GIP Model Backtest Exposure	Weighted Average QoQ % Change, by Quadrant				Percentile of Weighted Average QoQ % Change, by Asset Class				Percentile of Weighted Average QoQ % Change, by Quadrant				Positive Hit Rate (color-coding by Asset Class & Quadrant)				Total Quarterly Performance Observations			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
S&P 500 Index	3.8%	1.2%	-0.2%	-0.6%	38%	38%	38%	46%	76%	61%	33%	55%	85%	83%	54%	65%	20	12	24	17
S&P 500 Consumer Discretionary Sector Index	4.7%	1.3%	-0.4%	-0.1%	85%	46%	23%	85%	94%	64%	15%	82%	80%	75%	46%	59%	20	12	24	17
S&P 500 Consumer Staples Sector Index	3.1%	1.6%	-0.2%	1.0%	15%	69%	31%	92%	67%	76%	30%	94%	90%	92%	58%	65%	20	12	24	17
S&P 500 Energy Sector Index	3.5%	1.4%	0.7%	-1.8%	23%	54%	92%	0%	70%	67%	76%	18%	85%	92%	67%	47%	20	12	24	17
S&P 500 Financials Sector Index	4.3%	0.5%	-0.6%	-0.9%	54%	15%	15%	15%	82%	42%	12%	39%	80%	75%	58%	71%	20	12	24	17
S&P 500 Health Care Sector Index	3.0%	2.1%	0.5%	1.5%	8%	92%	77%	100%	64%	91%	64%	97%	80%	83%	58%	82%	20	12	24	17
S&P 500 Industrials Sector Index	4.2%	1.9%	-0.1%	-1.1%	46%	77%	54%	8%	79%	82%	39%	36%	70%	83%	50%	47%	20	12	24	17
S&P 500 Information Technology Sector Index	4.5%	2.1%	0.3%	-0.6%	77%	85%	69%	54%	91%	85%	58%	58%	85%	83%	50%	65%	20	12	24	17
S&P 500 Materials Sector Index	4.7%	0.1%	-1.0%	-0.7%	92%	8%	8%	31%	97%	27%	3%	48%	90%	75%	50%	47%	20	12	24	17
S&P 500 Utilities Sector Index	2.0%	-0.5%	1.5%	-0.2%	0%	0%	100%	77%	55%	9%	88%	76%	70%	42%	63%	59%	20	12	24	17
Russell 2000 Index	4.5%	1.1%	0.2%	-0.9%	69%	31%	62%	23%	88%	58%	55%	42%	75%	75%	63%	59%	20	12	24	17
Dow Jones Industrial Average	3.7%	1.0%	-0.1%	-0.5%	31%	23%	46%	62%	73%	55%	36%	61%	85%	83%	54%	59%	20	12	24	17
MSCI Emerging Markets Index	5.2%	1.6%	-1.3%	-0.4%	100%	62%	0%	69%	100%	70%	0%	67%	80%	67%	46%	53%	20	12	24	17
FTSE NAREIT Equity REITs Total Return Index	4.4%	2.7%	0.7%	-0.6%	62%	100%	85%	38%	85%	97%	73%	52%	70%	67%	67%	76%	20	12	24	17
FINRA - BLP Active Investment Grade US Corporate Bond Average Yield to Maturity	-3.1%	-0.4%	2.7%	-3.0%	33%	33%	67%	0%	6%	15%	94%	6%	36%	67%	71%	33%	14	6	17	12
FINRA - BLP Active HY US Corporate Bond Index Average Yield to Maturity	-3.5%	-3.6%	2.9%	-1.7%	17%	0%	83%	50%	3%	0%	97%	21%	36%	17%	65%	42%	14	6	17	12
Barclays US Corporate High Yield Average OAS	-3.6%	-1.5%	4.2%	3.3%	0%	17%	100%	100%	0%	3%	100%	100%	20%	25%	46%	59%	20	12	24	17
US Treasury 2Y Yield	0.5%	-0.4%	0.6%	-2.6%	100%	50%	33%	17%	36%	18%	67%	9%	55%	50%	54%	35%	20	12	24	17
US Treasury 10Y Yield	-0.5%	0.5%	-0.4%	-2.2%	83%	83%	17%	33%	15%	36%	18%	12%	45%	58%	50%	35%	20	12	24	17
US Treasury 30Y Yield	-0.6%	0.8%	-0.6%	-1.5%	67%	100%	0%	67%	12%	52%	9%	24%	45%	75%	54%	35%	20	12	24	17
Bond Buyer US 40 Municipal Bond YTM	-1.1%	0.2%	0.6%	-1.5%	50%	67%	50%	83%	9%	30%	70%	27%	25%	50%	50%	18%	20	12	24	17
Thomson Reuters/CoreCommodity CRB Commodity Index	1.2%	2.1%	0.7%	-3.6%	50%	50%	25%	25%	48%	88%	79%	3%	70%	83%	71%	29%	20	12	24	17
Commodity Research Bureau BLS/US Spot Raw Industrials Index	1.1%	1.6%	-0.3%	-1.2%	25%	0%	0%	75%	45%	73%	27%	30%	65%	67%	42%	41%	20	12	24	17
Commodity Research Bureau BLS/US Spot Foodstuff Index	0.1%	2.3%	1.0%	-2.0%	0%	75%	75%	50%	24%	94%	85%	15%	55%	50%	54%	29%	20	12	24	17
Front-month Brent Crude Oil	2.5%	3.9%	2.1%	-4.5%	100%	100%	100%	0%	61%	100%	91%	0%	55%	83%	54%	29%	20	12	24	17
Gold Spot	2.1%	1.7%	0.8%	-0.4%	75%	25%	50%	100%	58%	79%	82%	73%	60%	58%	58%	47%	20	12	24	17
US Dollar Index	0.0%	0.4%	0.1%	0.4%	0%	57%	71%	100%	18%	33%	48%	91%	50%	67%	50%	71%	20	12	24	17
AUD/USD	1.7%	0.5%	-0.6%	-0.5%	100%	86%	0%	29%	52%	45%	6%	64%	60%	83%	63%	41%	20	12	24	17
CAD/USD	0.5%	0.7%	0.1%	-0.8%	57%	100%	86%	14%	33%	48%	52%	45%	45%	58%	54%	35%	20	12	24	17
CHF/USD	0.7%	-0.4%	0.4%	0.2%	86%	29%	100%	86%	42%	21%	61%	88%	60%	42%	63%	41%	20	12	24	17
EUR/USD	-0.1%	-0.7%	0.1%	-0.2%	29%	0%	57%	57%	27%	6%	45%	79%	50%	25%	58%	35%	20	12	24	17
GBP/USD	0.4%	0.5%	-0.4%	-0.4%	43%	71%	14%	43%	30%	39%	21%	70%	45%	75%	42%	47%	20	12	24	17
JPY/USD	0.0%	-0.5%	0.0%	-0.1%	14%	14%	43%	71%	21%	12%	42%	85%	35%	33%	50%	35%	20	12	24	17
JPMorgan EM FX Index	0.6%	-0.1%	-0.3%	-1.1%	71%	43%	29%	0%	39%	24%	24%	33%	60%	63%	58%	40%	15	8	19	15

Source: Bloomberg data; Hedgeye calculations. Trailing 20 years.

GOLD LEVELS (BEARISH TREND)

Gold (\$Spot) Buy TRADE Sell TRADE





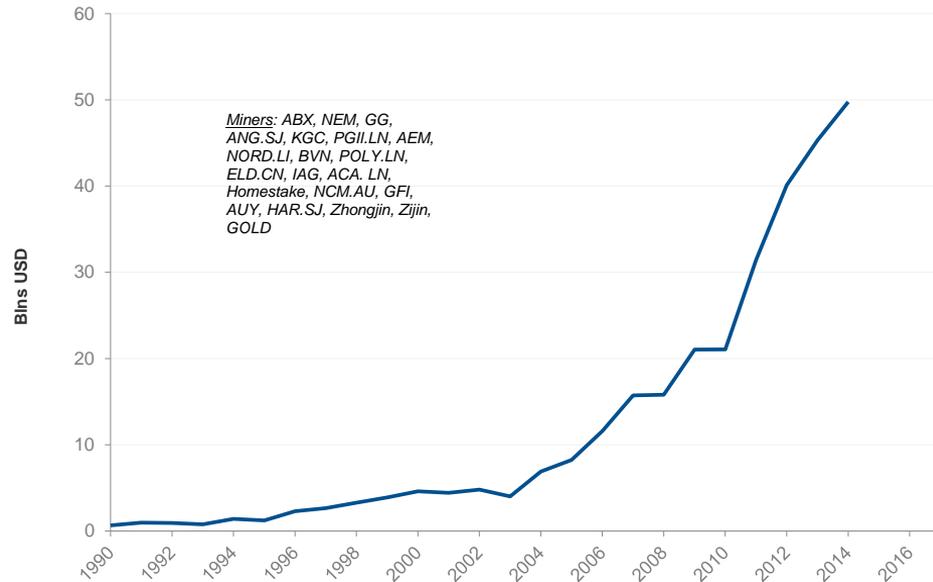
BRIEFLY LOOKING AT MINERS

IF WE ARE EVEN CLOSE TO RIGHT...

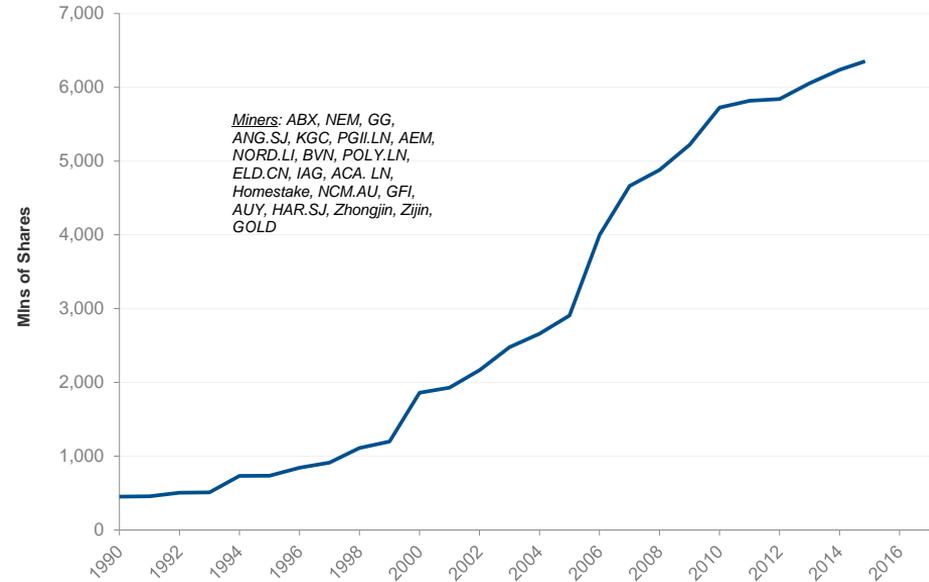
...THIS WILL BE A BIG PROBLEM

“During this super-cycle period, the industry's really taken up about \$90 billion of equity and some \$55 billion it has in debt and it hasn't been able to deliver anything for that...” – Randgold 3Q15 Earnings Call

GOLD MINERS TOTAL DEBT

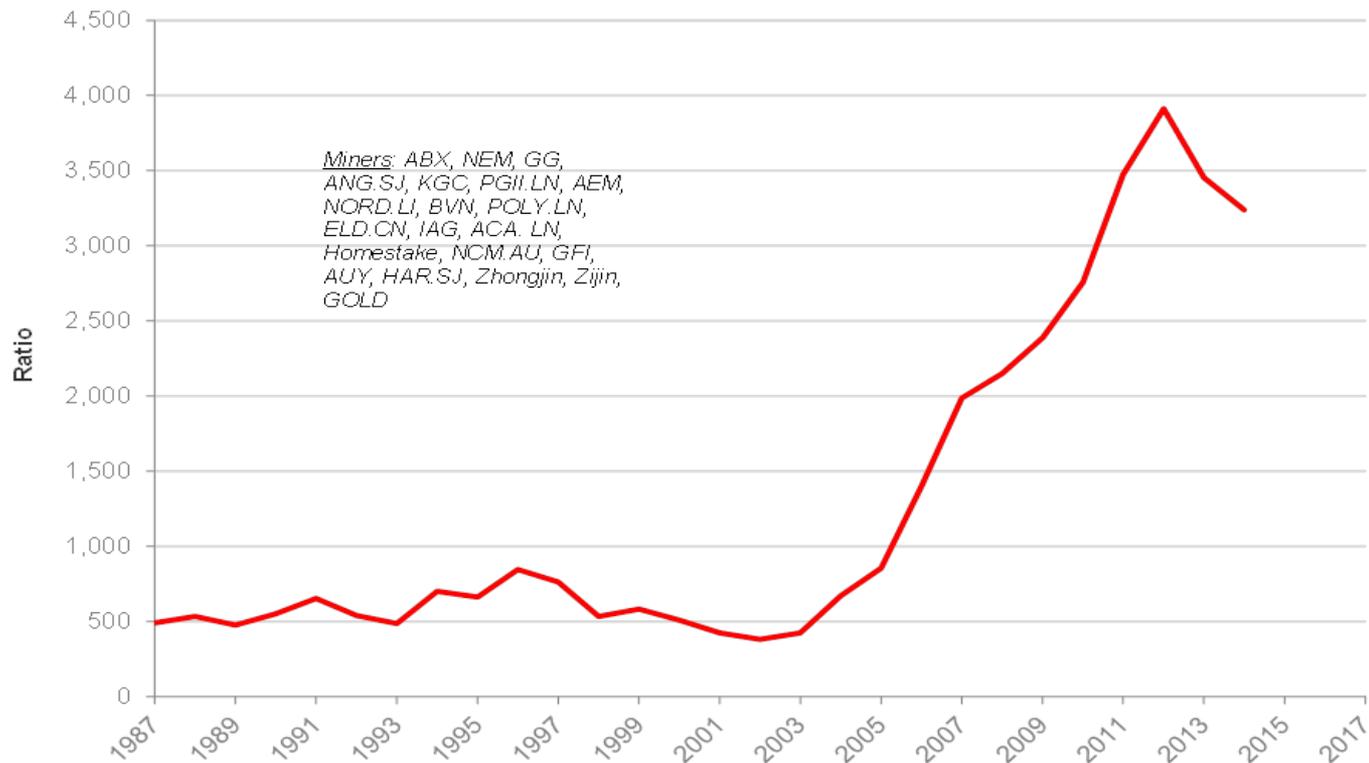


GOLD MINERS TOTAL SHARES OUTSTANDING (ONLY US LISTED COMPANIES)



MORE CAPITAL LOOKING FOR A RETURN

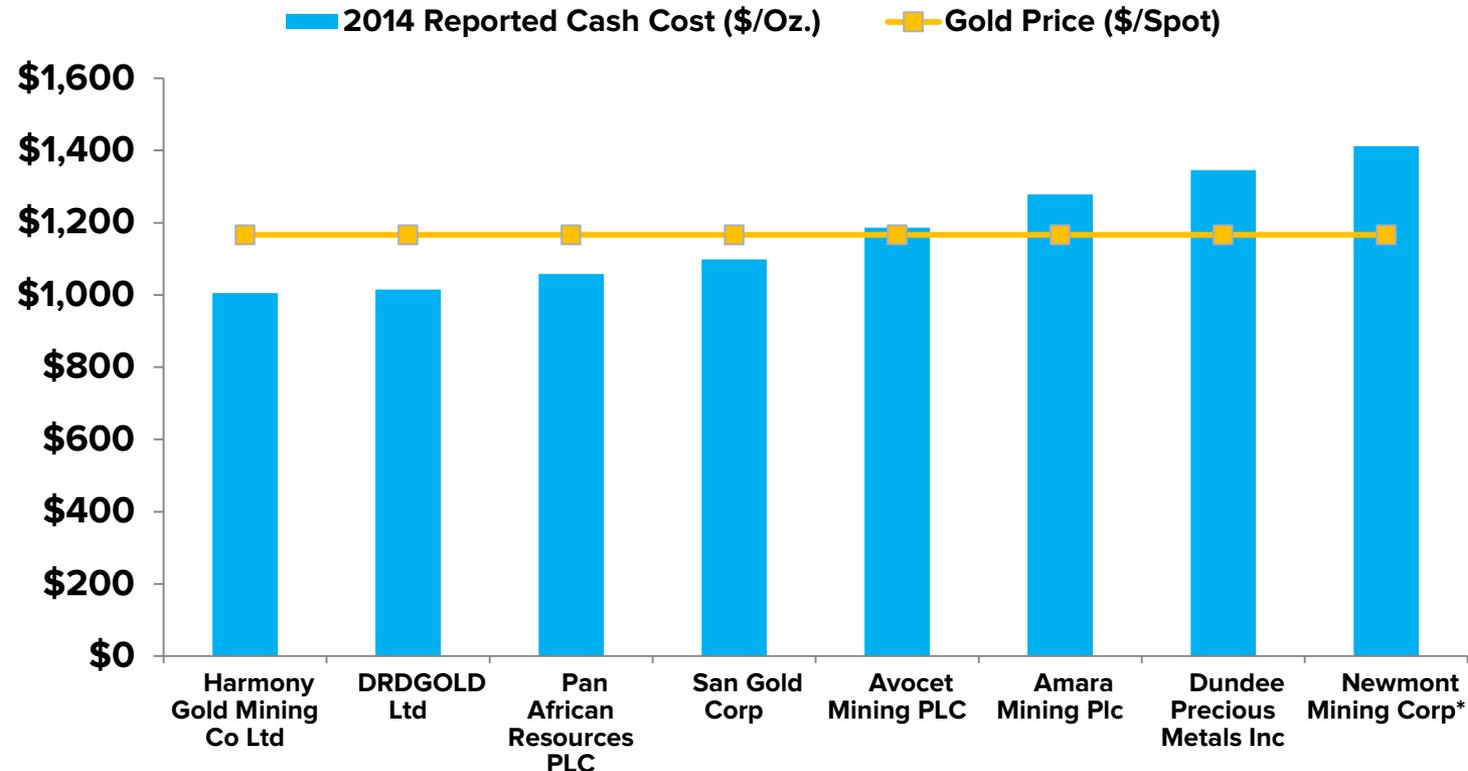
GOLD MINERS NET PP&E PER 1 OUNCE OF PRODUCTION



Investment Quality, Production Timing: Partly, the PP&E/oz. is the result of production in the pipeline. However, we also see it as the product of mediocre investment decisions in the boom.

MORE THAN HIGH COST, INDEBTED PRODUCERS

MOST ARE EXPANDING, SPEAKING OF MOVING DOWN THE COST CURVE, AND PRODUCING MORE IN 2015...

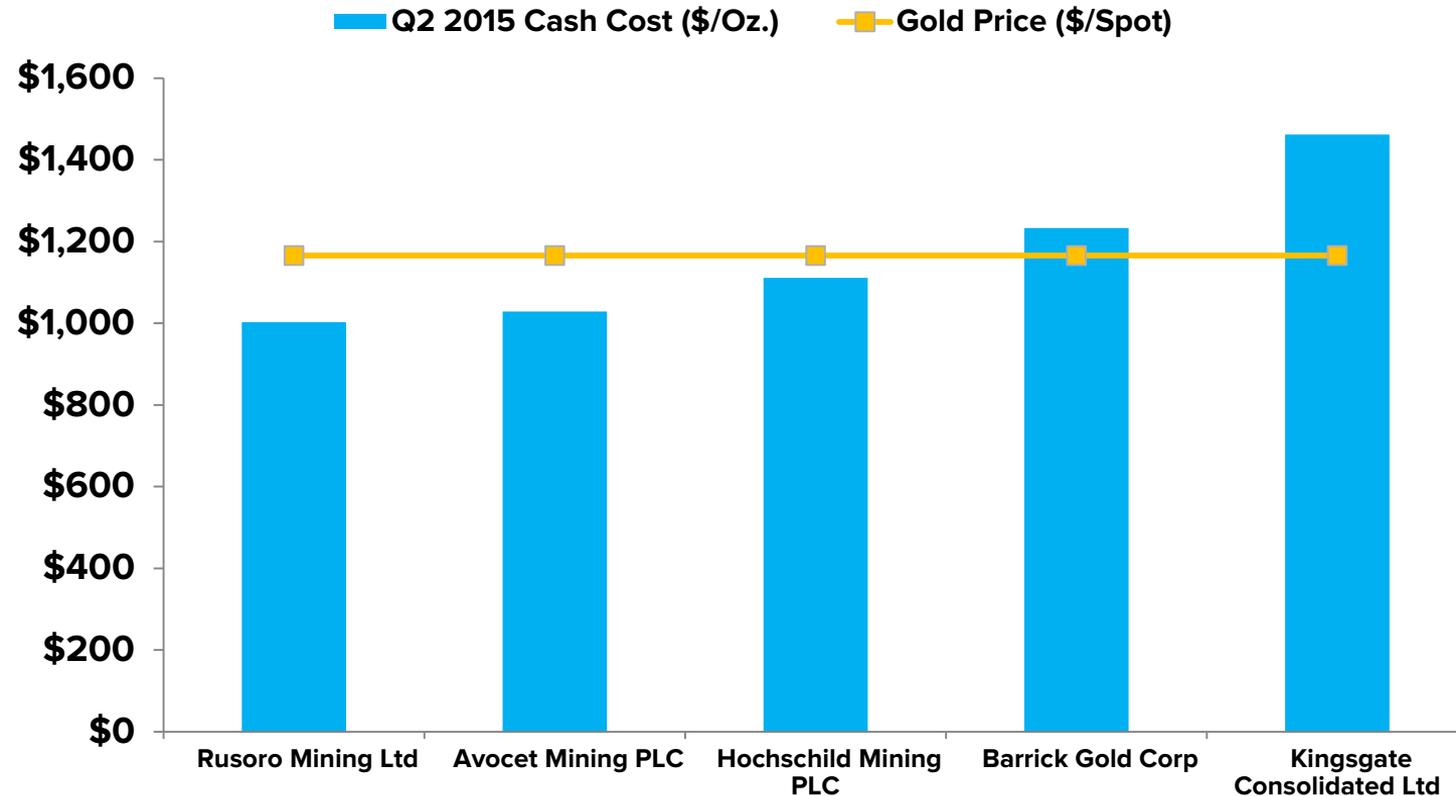


*2014 Cash Cost for Newmont higher than usual. 3-Year avg. below \$1,000/oz.

Although it certainly doesn't help them, many of these producers are ramping lower cost production, executing on cost reduction plans, or recovering from shorter-term cost increases.

Q2 2015 CASH COST CURVE HIGH COST PRODUCERS

SAMPLE OF HIGHEST COST PRODUCERS FROM A CASH COST PERSPECTIVE



...high cost a moving target.

SELECTION CONSIDERATIONS

Gold Company Exploration Spending

Company	Gold Exploration Spending as % of Gold Sales	Market Share	Market Cap (in blns USD)
Newcrest Mining	0.8%	3.8%	6.47
Yamana Gold	1.1%	1.9%	1.82
Goldcorp Inc	1.2%	3.6%	10.02
Gold Fields Ltd	1.6%	3.0%	1.96
Barrick Gold Corp	1.7%	9.1%	8.51
Newmont Mining	2.2%	6.8%	9.26
AngloGold Ashanti	2.7%	5.4%	3.07
Agnico Eagle Mines	3.0%	1.9%	5.70
Randgold Resources	3.4%	1.5%	5.80
Kinross Gold	3.9%	3.6%	2.13

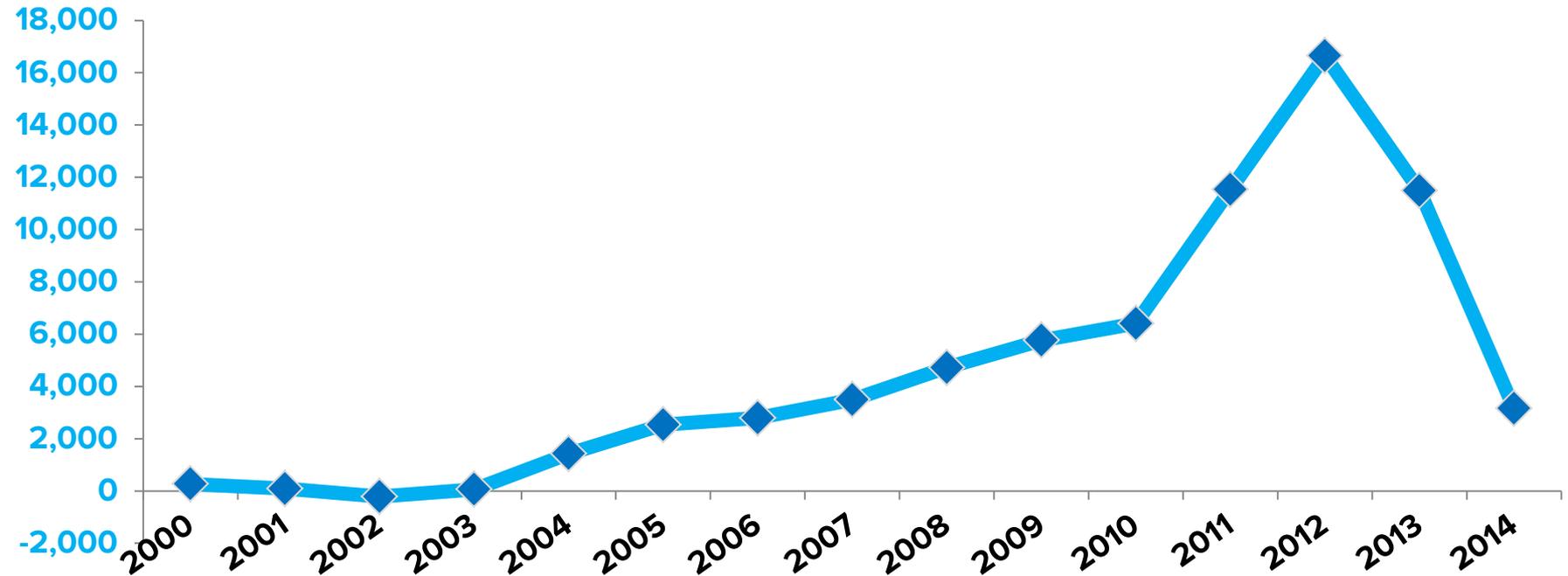
Data Source: Company Filings, HRM Estimates

“...[the]only way to really create value in the mining industry is through the discovery of world class ore bodies.” – Randgold 3Q 2015 earnings call

IN-FLIGHT CAPITAL PROJECTS

CAPITAL SPENDING IMPACTS OUTPUT ON A LAG

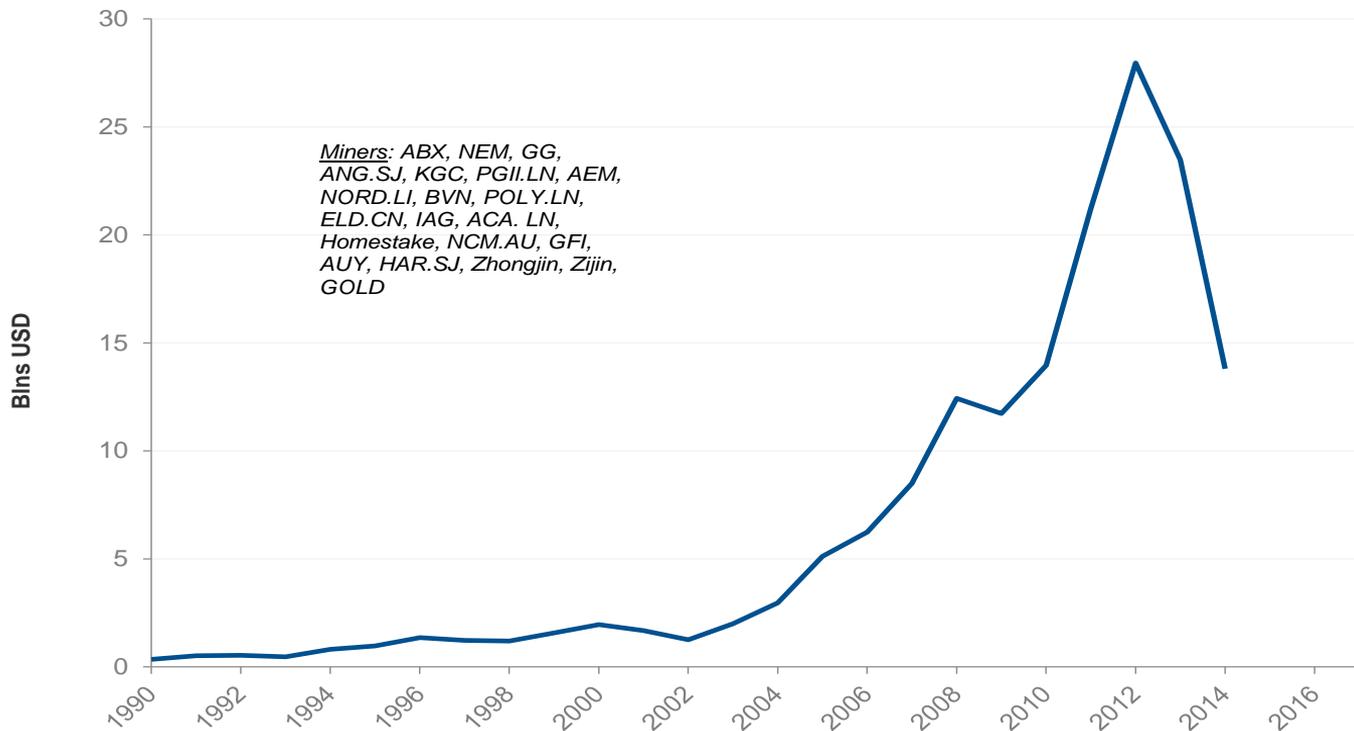
Capex Less D&A (\$MM)*



* Includes Filings from list in previous slide

CAPEX STILL ELEVATED

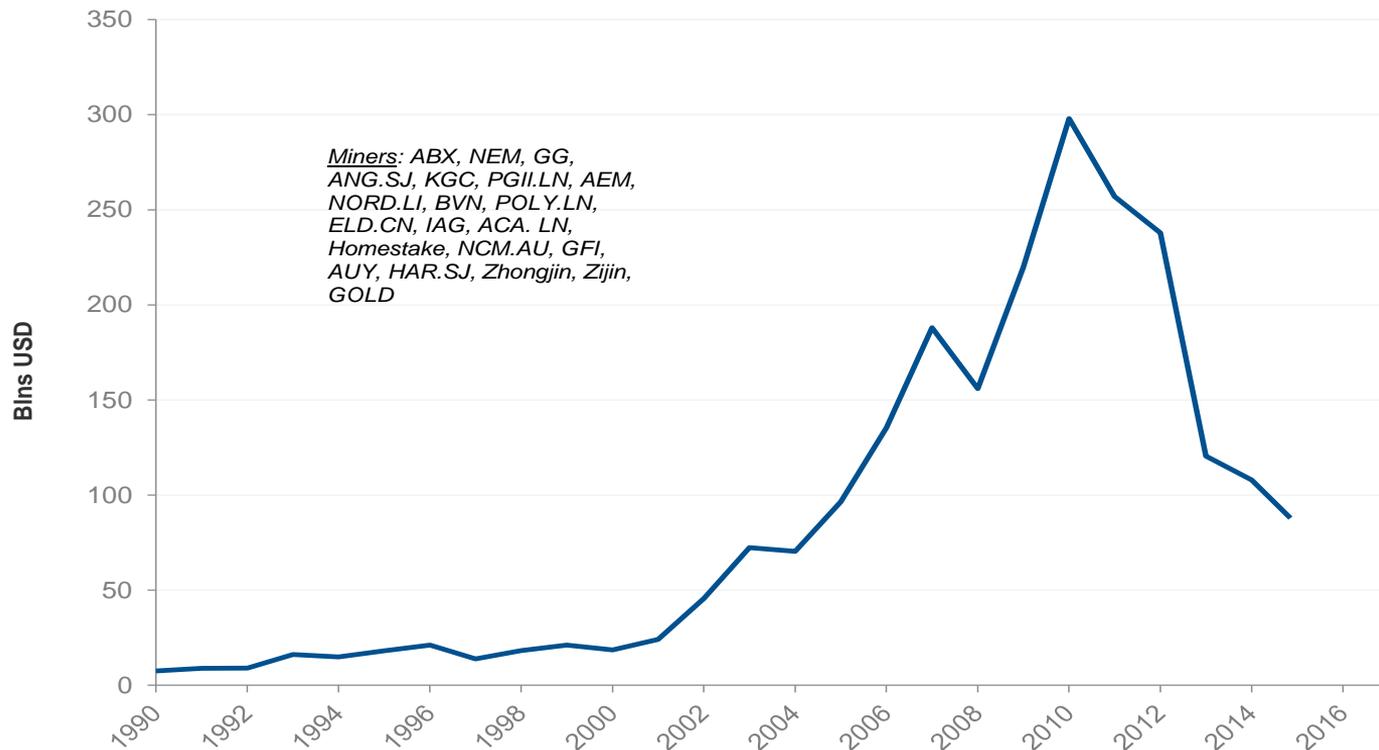
GOLD MINERS CAPEX



Capital spending is “down” like gold prices are “down”.

BUT VALUATIONS WELL OFF PEAK

GOLD MINERS MARKET CAP



Still, it is not hard to imagine some established players with **equity wiped out**.

Worked vs. working?

Implementing commodity view a key aspect of the process

SOME RISKS TO BEARISH GOLD VIEW

- **War, Crisis, Hard To Forecast Risk:** Gold generally rallies in times of fear
- **Fed, Central Banks Likely To Stay Dovish:** Shorter-term trading may revolve around Fed recognizing that the employment rate is a suboptimal policy guide.
- **Producers May Coordinate Better:** It seems unlikely given fragmentation, but cartel-like behavior would be a solid move.
- **China Output:** Our forecast assumes continued output growth from Chinese producers, where information can be harder to verify. China is the world's largest producer.
- **Central Bank Actions:** Central banks are already buying, but can certainly increase purchases, particularly in currency zones that are seeking greater credibility.
- **EM Demand Changes:** Given the large population, small changes in demand can have a significant influence
- **Mine Outages, Strikes:** Labor disruptions, legal/regulations changes or natural disruptions in key producing regions can have a material impact on mine output.
- **Narratives In General:** The gold market seems unusually sensitive to changes in investor perception. Bullish narratives can take hold and influence price in the shorter term.

UPSHOT: LESS PRECIOUS, MORE PRECARIOUS



INVESTOR DEMAND KEY VULNERABILITY

Investors have to keep rejecting Buffett's view. Otherwise, the decline in demand from reduced investor allocations to gold would meaningfully impact price. Investors could also become net sellers, a more serious scenario.



MINE SUPPLY ESTIMATES WAY TOO LOW

Industry forecasts consistently bias to bullish, as we see it. Mine supply should be vastly higher than expected over the next few years. The industry lacks structural elements to reign in excess production. Mine costs should follow the gold price, not support it.



VIEW AS SAFE 'CURRENCY' LED TO POOR CAPEX

Mines raised capital easily and spent lavishly on projects that were easy to justify at ultra-high prices. Unfortunately, gold is not a currency. It is also not as robust of a safe haven as some owners assume.

The best cure for high costs and investor interest is lower gold prices



APPENDIX

GOLD SUPPLY/DEMAND BREAKDOWN

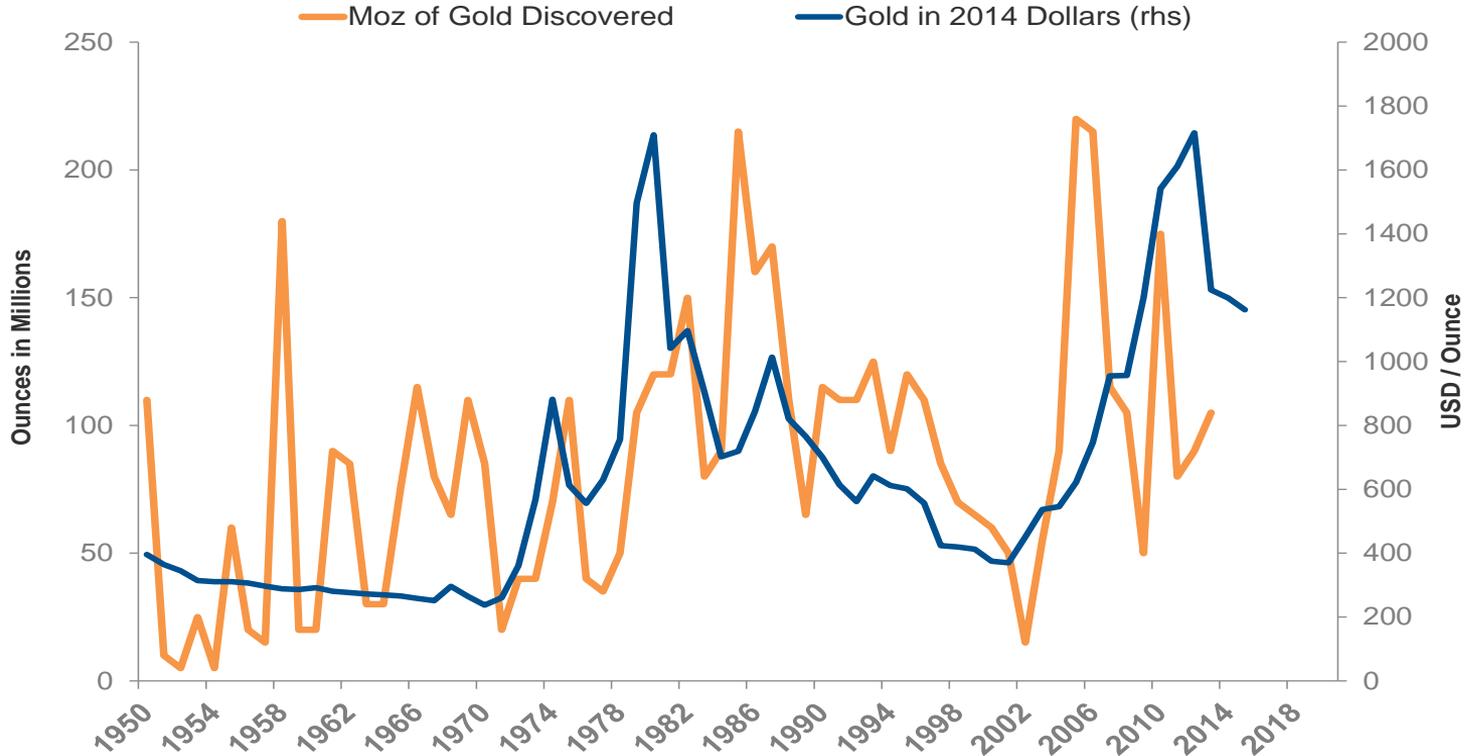
World Gold Supply and Demand, 1993-2014 (in metric tons)																						
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Mine production	2,291	2,285	2,291	2,375	2,527	2,574	2,602	2,618	2,645	2,612	2,620	2,492	2,550	2,471	2,497	2,429	2,611	2,740	2,818	2,861	3,051	3,114
Official sector sales	468	130	167	279	326	363	477	479	520	547	617	469	674	328	484	235	34	-	-	-	-	-
Old gold scrap	577	621	631	644	631	1,105	615	616	713	841	944	849	886	1,108	1,005	1,350	1,735	1,719	1,661	1,634	1,262	1,122
Net producer hedging	142	105	475	142	504	97	506	(15)	(151)	(412)	(255)	(422)	(86)	(373)	(432)	(357)	(234)	(108)	6	(40)	(39)	42
Total reported supply	3,478	3,141	3,564	3,440	3,988	4,139	4,200	3,698	3,727	3,588	3,926	3,388	4,024	3,534	3,554	3,657	4,146	4,351	4,485	4,455	4,273	4,278
Gold fabrication in carat jewellery	2,559	2,640	2,812	2,856	3,294	3,169	3,139	3,204	3,008	2,660	2,482	2,614	2,707	2,279	2,423	2,304	1,814	2,017	1,973	1,998	2,368	2,153
Gold fabrication in electronics	178	187	204	207	234	226	247	283	197	206	233	260	279	304	322	311	275	326	320	284	280	389
Gold fabrication in other industrial & decorative applications	100	104	110	113	115	103	99	99	97	83	81	83	86	86	96	95	82	91	90	92	93	
Gold fabrication in dentistry	63	64	67	68	70	64	66	69	69	69	67	68	62	61	58	56	53	49	43	39	36	
Official sector purchases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	455	544	409	477
Retail investment	331	349	465	298	452	263	359	166	357	340	293	340	386	380	443	883	791	1,183	1,543	1,357	1,765	1,064
Investment in Exchange Traded Funds and related products*	-	3	39	133	208	260	253	321	617	368	162	279	(880)	(159)								
Total identifiable demand	3,232	3,344	3,657	3,541	4,165	3,825	3,910	3,821	3,728	3,361	3,195	3,498	3,728	3,370	3,595	3,970	3,632	4,111	4,586	4,593	4,088	3,924
Supply less demand	246	(203)	(92)	(102)	(177)	314	290	123	(1)	227	731	(110)	296	164	(41)	(313)	514	240	(101)	(138)	186	355

Tonne refers to one metric tonne. This is equivalent to 1,000 kilograms or 32,150.7465 troy ounces.

*TTM Q4 2013, Q1 2014, Q2 2014, Q3 2014

STILL FINDING GOLD JUST FINE...

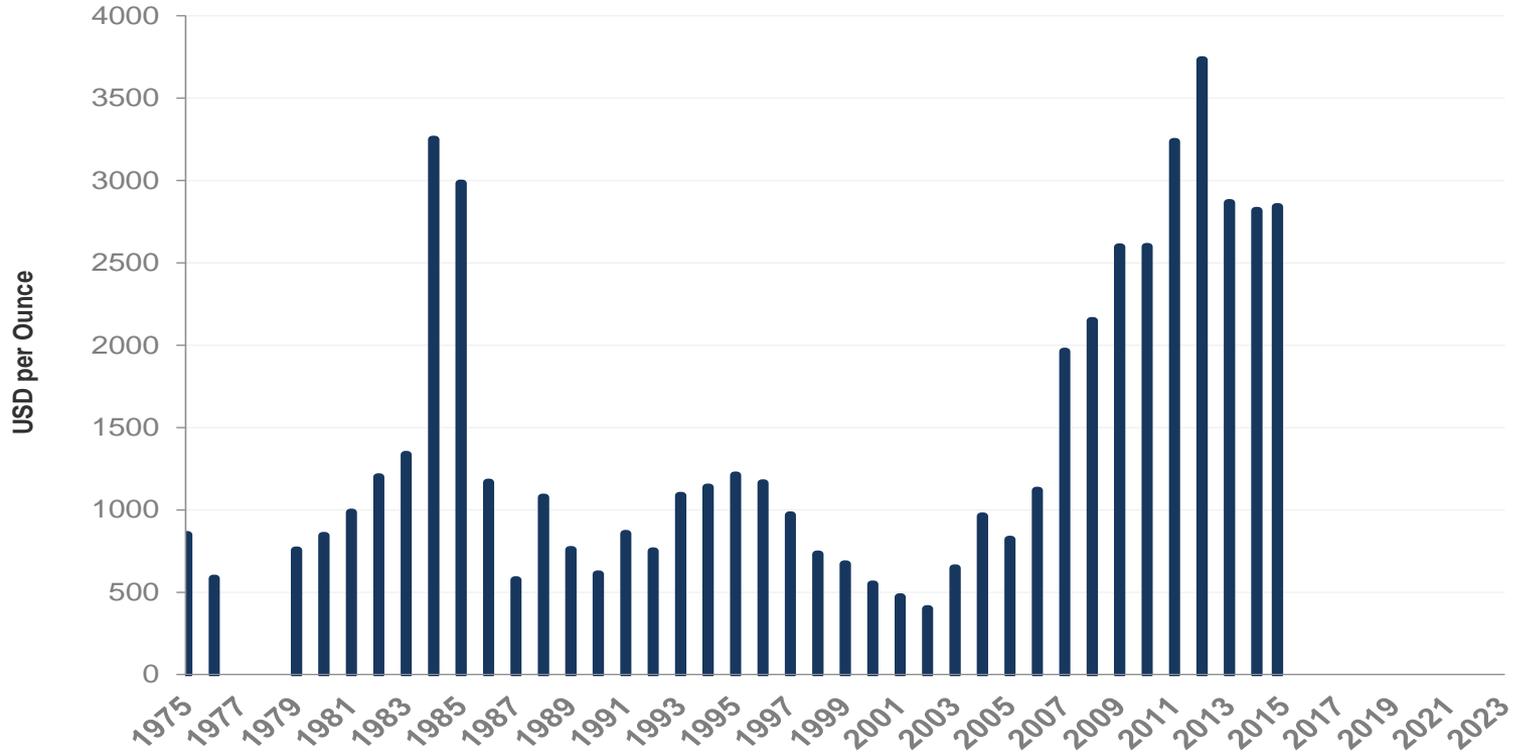
GOLD IN 2014 DOLLARS VS. GOLD DISCOVERED



Pretty close to discovering a year's total production per year.

ONE WAY OR ANOTHER, EFFICIENCY IMPROVES

NEWMONT GOLD SEGMENT: CONSTANT 2014 DOLLARS OF NET PP&E PER OUNCE OF GOLD PRODUCTION

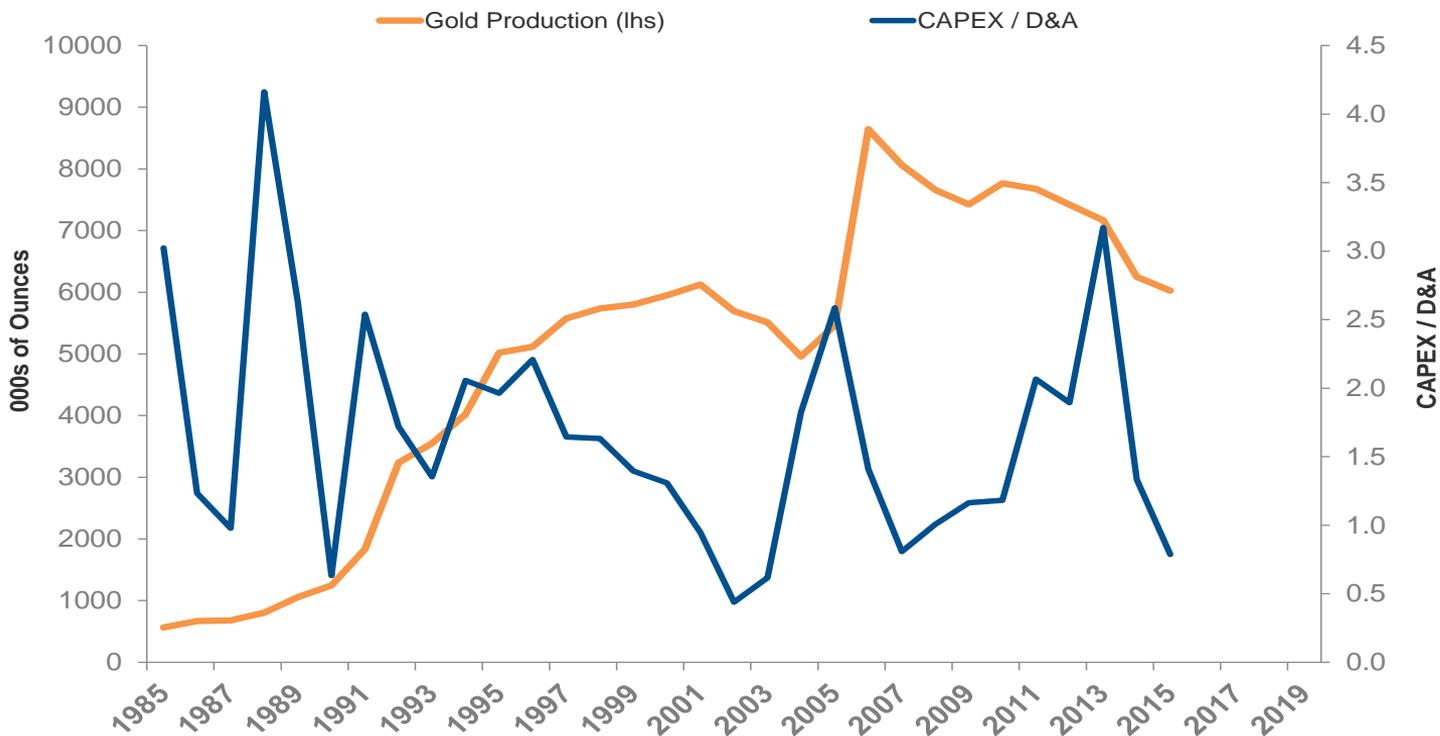


DATA SOURCE: COMPANY FILINGS, HRM ESTIMATES
**1977 AND 178 DATA UNAVAILABLE

©2015 HEDGEYE RISK MANAGEMENT

CAPITAL SPENDING AND OUTPUT

ABX & HOMESTAKE GOLD PRODUCTION VS. CAPEX / D&A



Not as straightforward
as consensus forecasts
assume?

DATA SOURCE: COMPANY FILINGS, HRM ESTIMATES
*HOMESTAKE & ABX COMBINED BETWEEN 1991 AND 2000

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PRODUCTION VS. COSTS

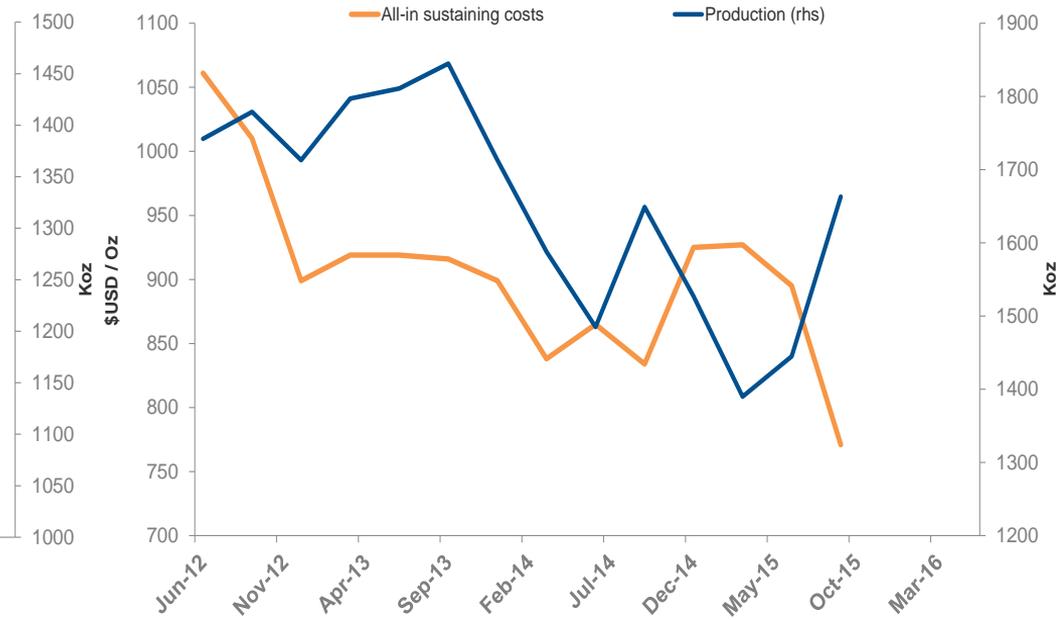
NEWMONT ALL-IN SUSTAINING COSTS VS. PRODUCTION
(QUARTERLY)



DATA SOURCE: COMPANY FILINGS, HRM ESTIMATES

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BARRICK ALL-IN SUSTAINING COSTS VS. PRODUCTION
(QUARTERLY)



DATA SOURCE: COMPANY FILINGS, HRM ESTIMATES

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AUSTRALIA'S ABS ALSO LESS BULLISH

WORLD GOLD MINED PRODUCTION



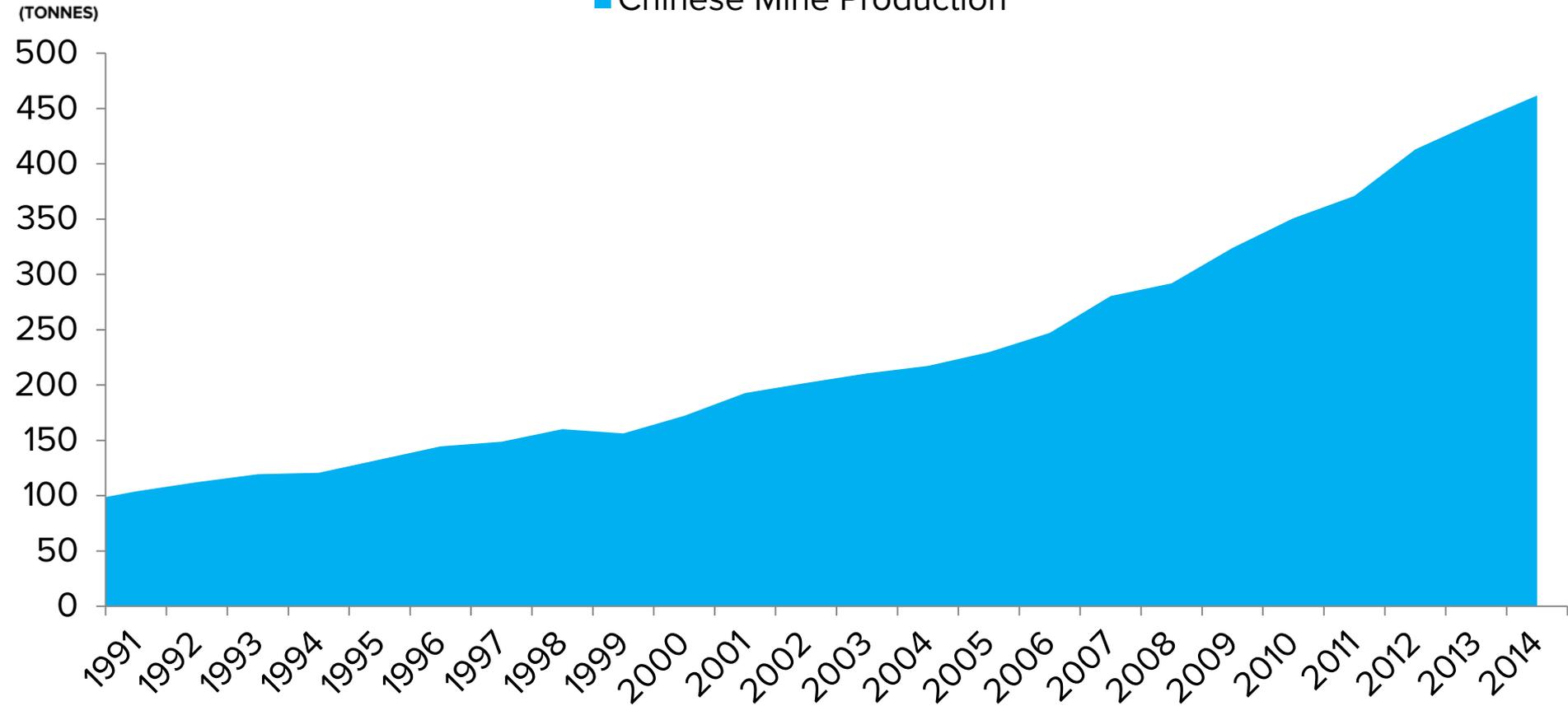
DATA SOURCE: USGS, ABS, GFMS, LBMA, OCE, WORLD GOLD COUNCIL, HRM ESTIMATES
**2015-2020 ESTIMATED BY ABS

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Although, we would bet that they also bias toward industry consensus.

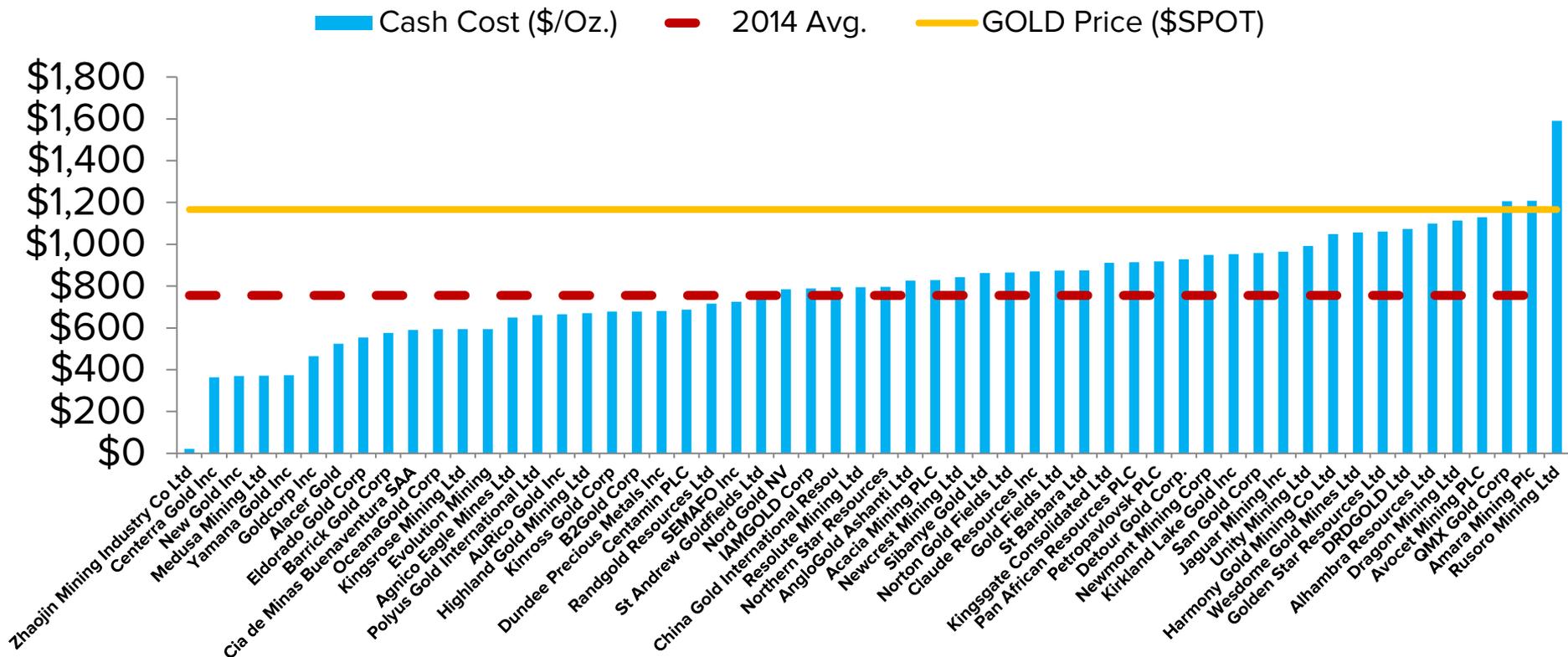
THIS TREND LOOKS LIKE IT WILL CONTINUE

■ Chinese Mine Production



FEW COMPANIES ABOVE CASH COST AT CURRENT PRICES

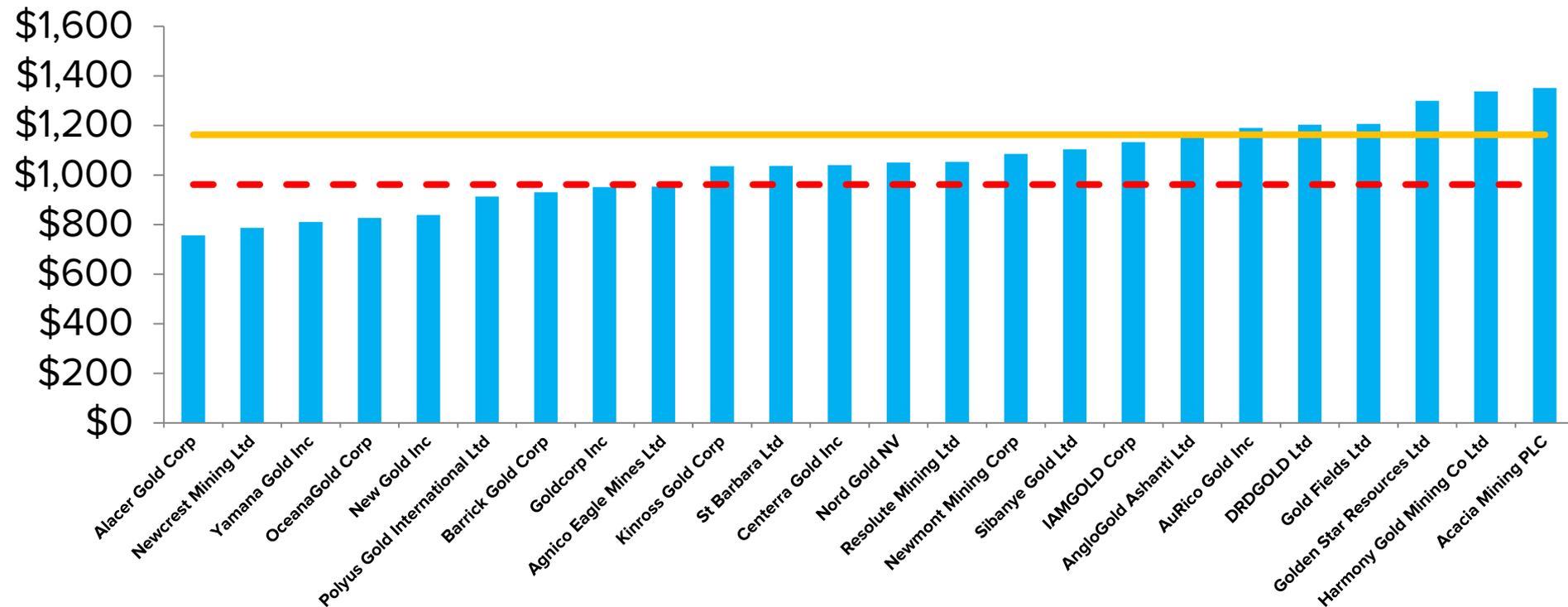
CASH COST: 3-YEAR AVG. (\$/OZ.)



ALL-IN SUSTAINING COST

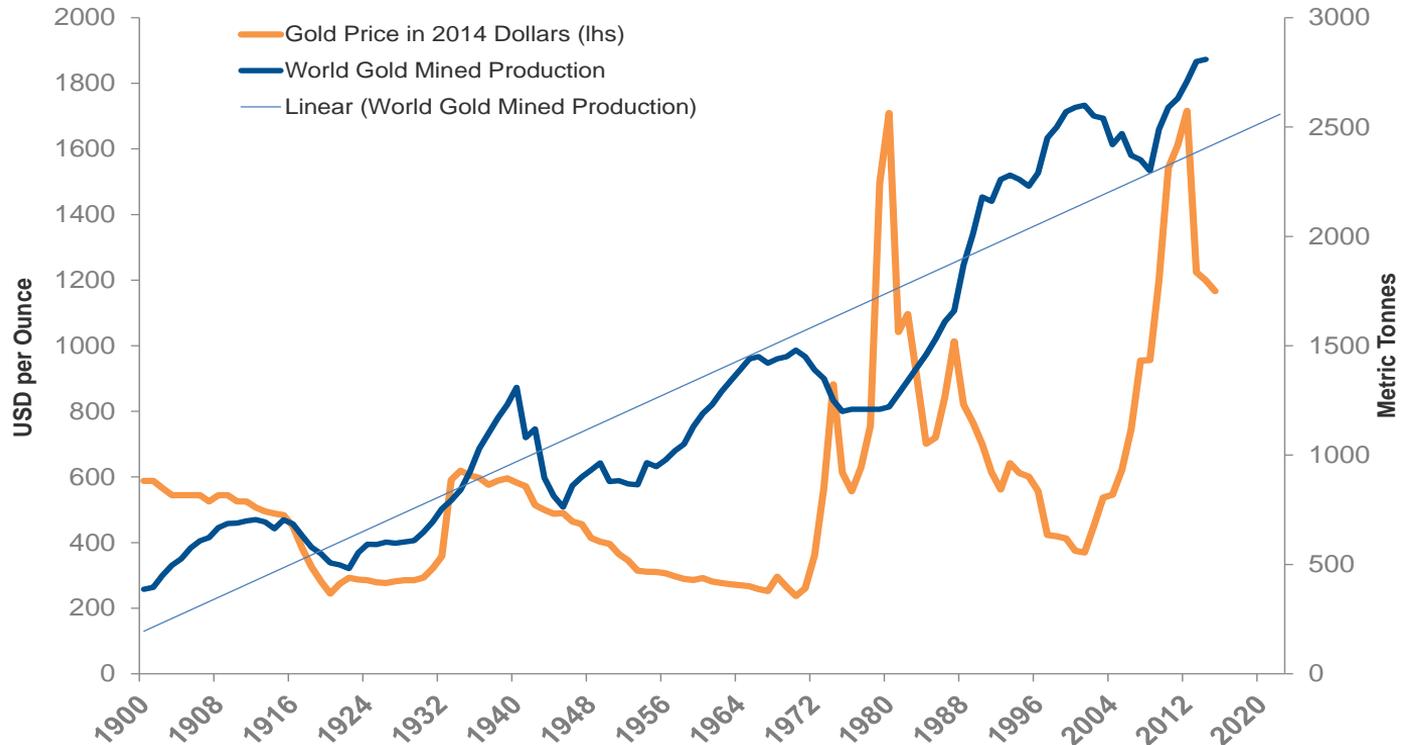
3-YEAR AVG. (\$/OZ.)

Avg. AISC (\$/Oz.) 2014 Avg. GOLD (\$/Spot)



PRODUCTION & PRICE RELATIONSHIP

GOLD PRODUCTION VS. GOLD PRICE IN 2014 DOLLARS

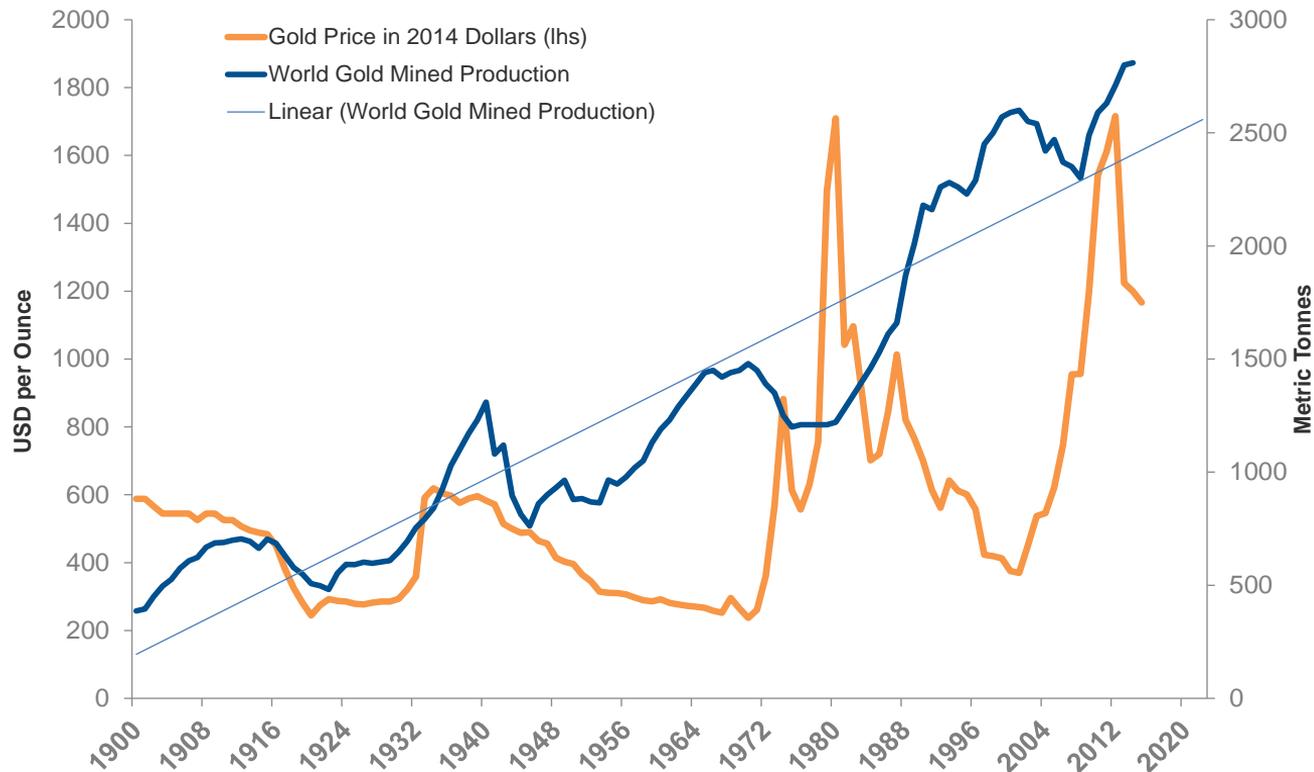


DATA SOURCE: USGS, NBER, MINNEAPOLIS FED, HRM ESTIMATES

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PRODUCTION & PRICE RELATIONSHIP

GOLD PRODUCTION VS. GOLD PRICE IN 2014 DOLLARS

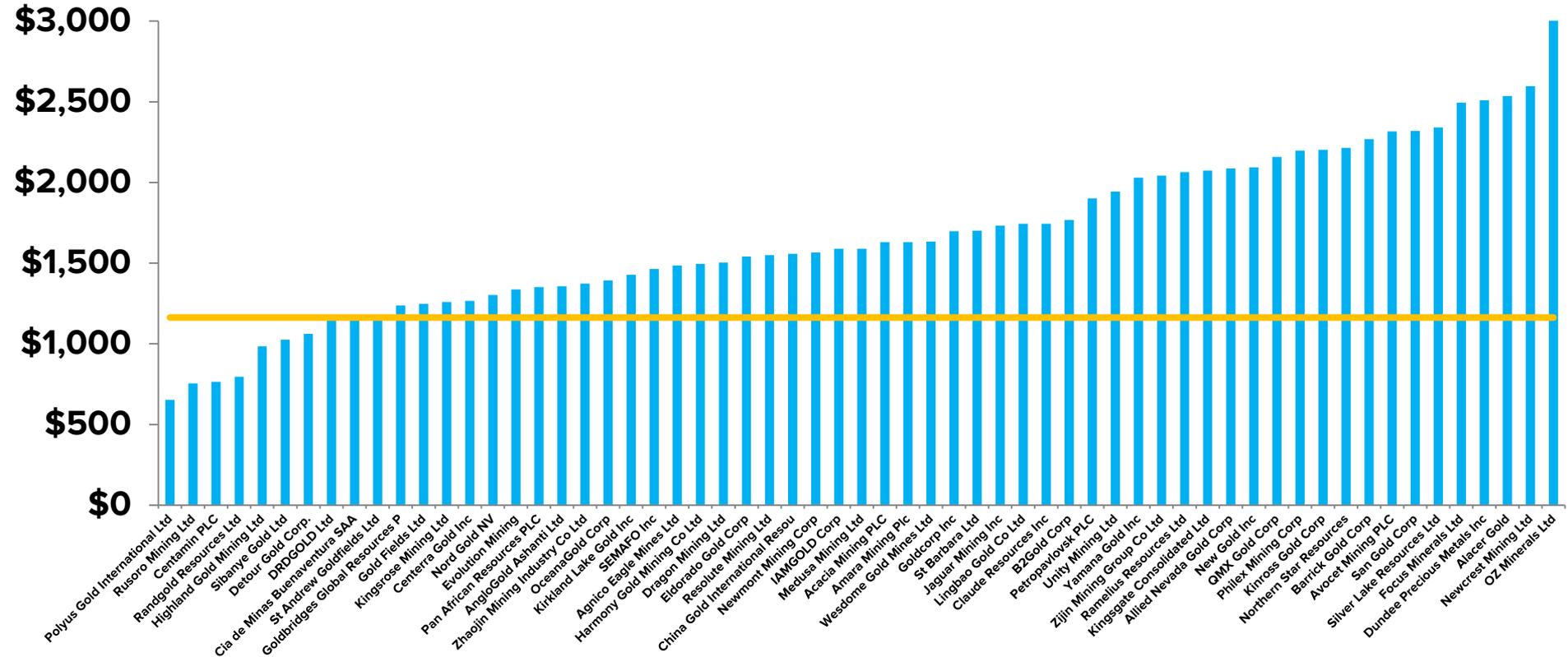


DATA SOURCE: USGS, NBER, MINNEAPOLIS FED, HRM ESTIMATES

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OPERATING COST METRIC (3-YR. AVG.)

[REVENUE – (NET INCOME + D&A)]/UNITS OF PRODUCTION



GOLD CORRELATION TO COMMODITIES

Gold Absolute Value Correlation Coefficient Table								
Last # of Years	Dollar Index	Corn	Sugar	Live Cattle	Feeder Cattle	10 Year Yield	Copper	Wheat
1	0.16	0.08	0.24	0.49	0.25	0.63	0.39	0.01
3	0.61	0.88	0.80	0.54	0.71	0.45	0.80	0.85
5	0.66	0.85	0.66	0.62	0.69	0.32	0.66	0.66
10	0.26	0.78	0.69	0.56	0.44	0.85	0.46	0.48
15	0.65	0.88	0.86	0.74	0.65	0.87	0.82	0.77
20	0.68	0.87	0.86	0.81	0.74	0.85	0.87	0.80
25	0.61	0.88	0.85	0.82	0.76	0.80	0.88	0.81
30	0.60	0.88		0.83	0.77	0.73		0.81
35	0.52	0.86		0.83	0.78	0.59		0.81
40	0.50	0.85		0.84	0.79	0.58		0.82
45	0.53	0.85		0.86	0.81	0.55		0.80

Data Source: Bloomberg, HRM Estimates

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