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Deutsche Bank
Markets Research

Global

Metals & Mining

Industry
Gold Market Update

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Market Update

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It's expensive, but you need some insurance

The world has changed in favour of gold

The conditions that led us to forecast gold falling below USD1,000/oz have changed. Slowing global growth momentum, the rising risk of a US credit default cycle, and the increasing likelihood of a large one-off RMB devaluation means that the Fed may have to relent from its path of tightening. US rates are now expected to end the year at current levels, and the upward trajectory of the S&P500 is no longer a given in our view. Given the rising core inflation and strong job creation data, the Fed may be compelled to hike in the near term. This combined with seasonal weakness in Q2, may provide investors with a good entry point.

Chipping away at growth, softer US yield and year-end equity targets

In a world of rising real interest rates, rampant equity markets and strong global growth, gold struggles to perform. However, our Deutsche Bank economists have started chipping away at their US and Euroland GDP forecasts, and we would not be surprised to see consensus global forecasts slip below 3%. Our Fixed income analysts expect 10Y treasury yields to end Q4'16 at 1.75%, which implies that real yields will end the year at current levels. Although, our US equity strategists have only trimmed their year-end S&P500 forecasts modestly, we see risks from US high yield credit defaults which would weigh on the equity markets. The combination of all these changes makes the environment more favourable for gold. Short term price movements have become sensitive to the movements in forward market implied probability of a rate hike. The probability of a rate hike by year end has ticked up modestly after falling to almost zero.

Chinese buying presents further upside potential

Chinese physical buying has increased by c.14% CAGR since 2005, mainly in the form of jewellery. However, as in India many of the jewellery items are bought as a store of wealth. Given the depletion of foreign reserves and the flight of capital from China, we think the risk of a one-off RMB devaluation has increased. As these expectations increase, we think physical demand in China will increase. In the near-term however, Chinese buyers remain price sensitive, and trading activity on the Shanghai Gold exchange has been more muted in the recent gold price rally. However, we see buying activity pick up on any small price dips. As result of the change in view, we upgrade our forecasts by an average of 13% over the next three years.

Gold looks expensive, but a premium is justified

Gold screens as expensive relative to its medium term trading levels, as well as relative to other commodities and economic metrics. A bit like insurance which is often a grudge purchase for many, some investors may balk at the current levels. We would, however, argue that given the plethora of negative deposit rates globally, the holding cost of gold is now negligible in many jurisdictions, and therefore gold deserves to be trading at elevated levels versus many other assets. For instance; the ratio of gold to oil at a multi-year high. We would argue that in this case, oil is simply too cheap. The risk to gold is that although a rally in oil will make gold look less expensive, it eases the pressure on the US high yield credit, which in turn could result in an equity rally.

Top picks	
Acacia Mining plc (ACAA.L),GBP250.70	Buy
Barrick (ABX.N),USD13.48	Buy
Newmont (NEM.N),USD25.58	Buy
AngloGold Ashanti (ANGJ.J),ZAR198.65	Buy
Harmony (HARJ.J),ZAR47.95	Buy

Source: Deutsche Bank

Companies Featured	
Randgold (RRS.L),GBP6,650.00	Hold
Fresnillo (FRES.L),GBP992.50	Hold
Acacia Mining plc (ACAA.L),GBP250.70	Buy
Barrick (ABX.N),USD13.48	Buy
Newmont (NEM.N),USD25.58	Buy
Goldcorp (GG.N),USD15.78	Hold
Sibanye Gold (SGLJ.J),ZAR52.00	Hold
AngloGold Ashanti (ANGJ.J),ZAR198.65	Buy
Evolution Mining (EVN.AX),AUD1.80	Hold
Gold Fields (GFIJ.J),ZAR67.13	Hold
Harmony (HARJ.J),ZAR47.95	Buy
Nordgold (NORDNq.L),USD2.84	Hold
Polymetal (POLYP.L),GBP644.00	Hold
Zhaojin Mining (1818.HK),HKD6.25	Hold
Zijin Mining (2899.HK),HKD2.32	Hold
Alacer Gold (AQG.AX),AUD2.71	Buy

Source: Deutsche Bank

Deutsche Bank AG/London

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Rising financial risks underpin gold

A time to buy insurance although it feels expensive

Our call on Gold breaching the USD1,000/oz level (to the downside) by Q4'16 was based on rising US real yields, a buoyant US equity market, and three rate hikes by the Fed. Furthermore, with our expectation of an appreciating USD versus the trade weighted basket and global growth well above 3%, all the key financial and economic indicators pointed to a gold price grinding lower over the course of 2016. Over the past two months, financial factors have changed and no longer look as bearish for gold. We think that the risks in the global financial system have risen, such that a central bank mis-step is now more likely. The adoption of negative deposit rates in Switzerland, Sweden, Denmark, the Eurozone and Japan increases gold's attractiveness, reducing its holding costs. However, as with any insurance policy, the premium paid should be carefully considered. The first quarter is a seasonally strong period for gold and gold is now expensive versus other commodities and versus historical levels. In our view Q2 and Q3 will provide better opportunities to purchase insurance. So whilst we think, Q4'15 marked the lows in USD gold prices, we do expect prices to weaken in Q2 from current spot levels, we have upgraded our forecasts by an average of 13% over the next 3 years.

Figure 1: Upgrading gold price forecasts

USD/oz	Q1 16	Q2 16	Q3 16	Q4 16	2016	Q1 17	Q2 17	Q3 17	Q4 17	2017	2018	2019
New	1,230	1,150	1,170	1,230	1,195	1,250	1,175	1,210	1,290	1,231	1,275	1,317
Previous	1,100	1,050	1,000	980	1,033	1,050	1,100	1,100	1,150	1,100	1,150	1,233
% change	**12%**	**10%**	**17%**	**26%**	**16%**	**19%**	**7%**	**10%**	**12%**	**12%**	**11%**	**7%**

Source: Deutsche Bank

US real yields are now neutral for gold

In their 2016 outlook, our US Fixed income analysts were forecasting the US 10Y rate to rise from 2.21% to 2.5% by the end of 2016. This implied a 10Y real yield of 0.94% by the end of 2016. The team ultimately expects a Fed relent and have adjusted their projected rate path lower. They expect 10Y Treasury yields to finish Q1 at 2%, Q2at 2.25%, Q3 at 2% and Q4 at 1.75%. This implies that year end real yields will end 2016 at roughly current levels. The increase in Q2 should however put pressure on gold prices and provide a better entry point.

Divergent monetary policy remains the problem given the environment of weak global demand. We expect the Fed to continue eking out tighter policy, only to be derailed by tightening financial conditions or deteriorating activity and inflation data. With financial conditions tight and increased potential for further tightening, we are cautious on gold in the near term, but believe that the Fed will ultimately relent. This would signal a far more (permanently?) benign environment for gold. In the near term, we think the gold price has overshot the move in US real rates.

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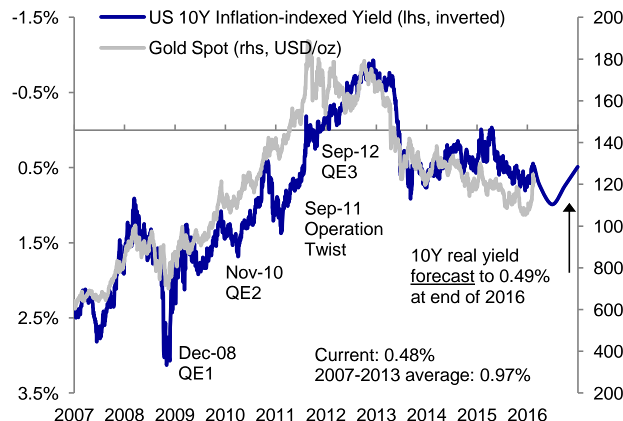
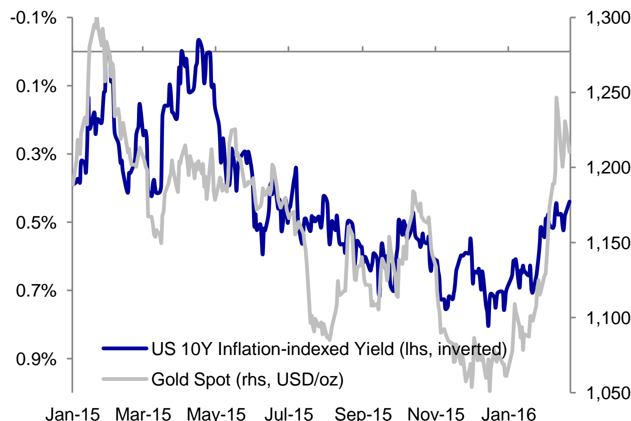
Figure 2: The progression of real rates – neutral by year-end



Source: Deutsche Bank, Bloomberg Finance LP

Figure 3: Near-term overshoot versus US real rates

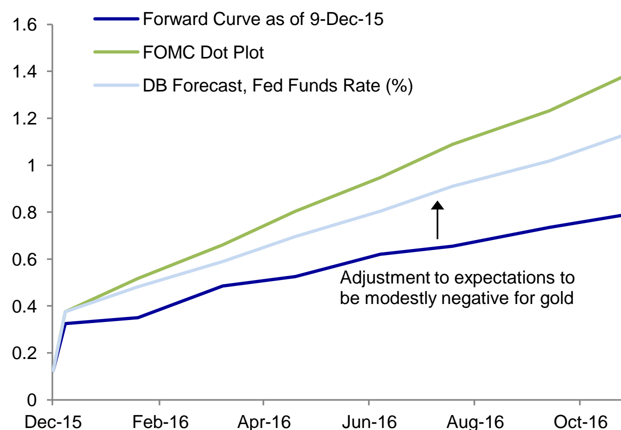


Source: Deutsche Bank, Bloomberg Finance LP

Shifting market rate expectations will continue to drive short-term volatility

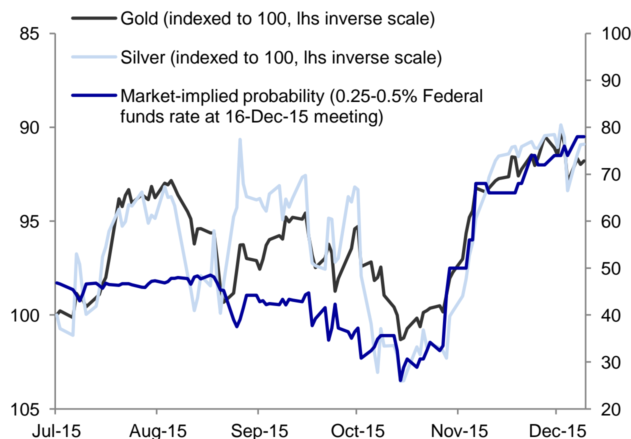
The big adjustment in the market-implied probability of a higher Fed funds rate at the December FOMC meeting in Q4'15 wiped out roughly 10% of the value of gold and silver.

Figure 4: Market adjustments closer to the FOMC Dot in Q4'15…



Source: Deutsche Bank, FOMC, Bloomberg Finance LP

Figure 5: …was negative for gold



Source: Deutsche Bank, FOMC, Bloomberg Finance LP

All that reversed in Q1'16, with the market implied probability of a rate hike falling to zero. As a consequence, gold and silver prices are up 14% and 10% respectively.

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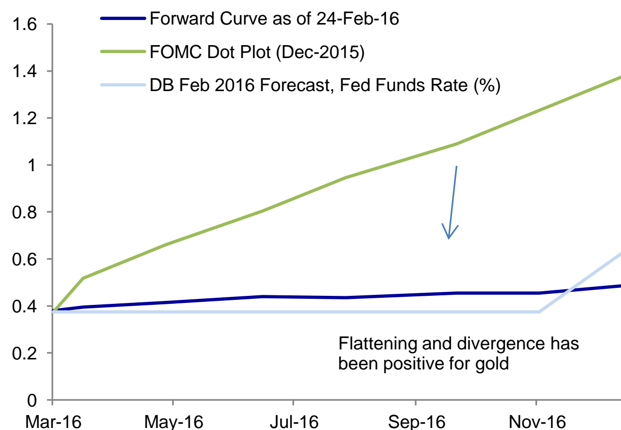
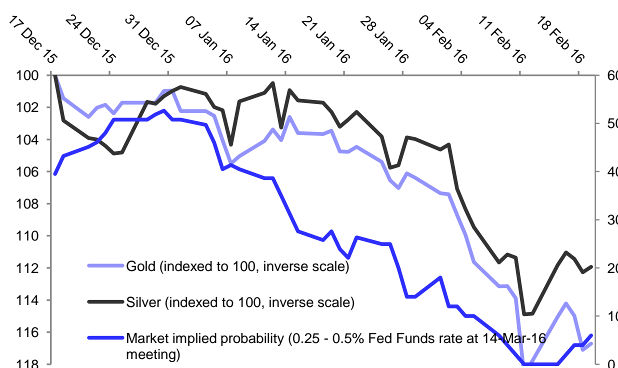
Figure 6: Market divergence away from the Fed in Q1'16…



Source: Deutsche Bank, FOMC, Bloomberg Finance LP

Figure 7: …has been positive for gold



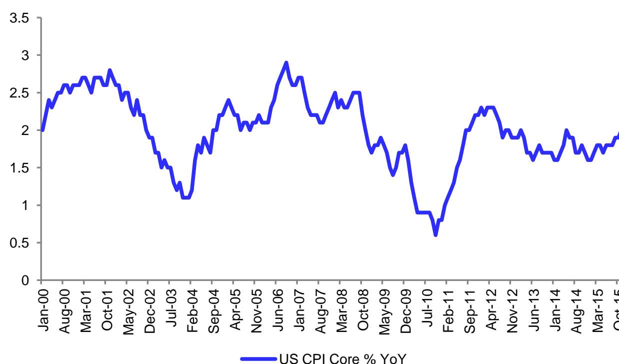
Source: Deutsche Bank, Bloomberg Finance LP

Given the recent above expected core inflation and strong job creation data, the probability of a rate hike has ticked up, pushing gold down closer to the USD1,200/oz level. The DB house view is now for only one rate hike this year, and for the pace to accelerate in 2017. Should this be the case, then the rate hike headwind would re-emerge in 2017. Our forecasts in 2017 do not price in an acceleration of the hiking cycle.

Figure 8: Future markets are now priced for the Fed funds rate to rise by 12bps this year, up from zero last week

Source: Deutsche Bank, Datastream

Figure 9: Core CPI has risen to the highest level since June 2012



Source: Deutsche Bank, Bloomberg Finance LP

Slowing growth expectations ease the headwinds for gold

Since the beginning of the year, our US and European Chief Economists have downgraded their expectations for growth. In Europe, Mark Wall has cut his forecast by 0.2pp to 1.4%. The argument of resilient growth expectations was contingent on the headwinds from slower global growth and a stronger currency being balanced by the tailwind benefits of lower oil prices and the effective transmission of monetary policy through the bank lending channel. The balance between these four forces has been tipped towards the negative by a further slowing of global growth and the headwinds in European banking.

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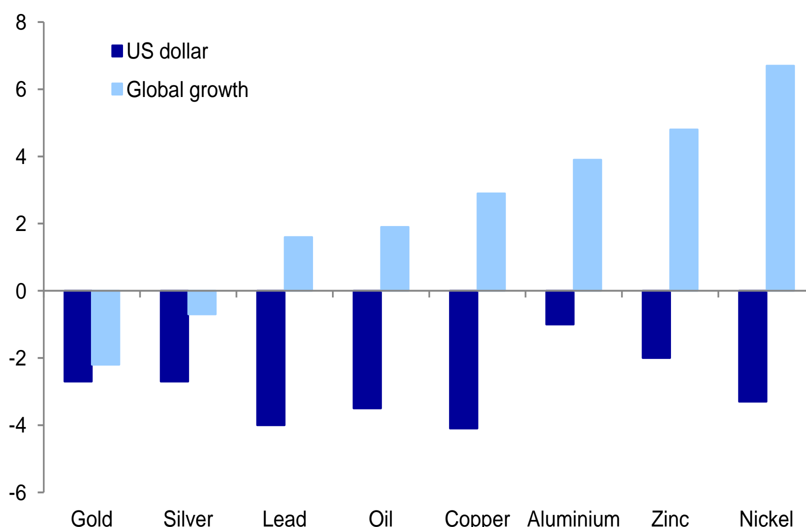
The revision, which is broad-based across euro area members, is concentrated in Q1 and Q2 2016. Lower oil prices offer ongoing protection to private consumption growth. We expect deteriorating lending conditions, the rise in economic risk and weaker external demand to have the clearest negative impact on investment spending growth.

Our Chief US Economist Joe LaVorgna has revised down his 2016 real GDP growth and core inflation estimates due to tighter financial conditions (lower equity prices, wider credit spreads, stronger US dollar and tighter bank lending standards), elevated inventories, weak global growth and depressed energy-related capital spending. This backdrop has already produced a contraction in the factory sector, which has the potential to spill over into the services sector. As a result of this weaker economic growth profile, we expect the unemployment rate to be little changed over the course of the year. These factors should keep the Fed on hold longer: Joe is now expecting only one rate hike in 2016, likely in December.

He has reduced our estimates of Q1, Q2 and Q3 real GDP growth in 2016 to 0.5%, 1.0% and 1.2%, respectively. Our Q4 2016 forecast remains unchanged at 2.4%. This compares to our previous projections of 1.5%, 2.2% and 2.1%, respectively. Consequently, full-year 2016 real GDP growth, as measured on a Q4-over-Q4 basis, is now 1.2%, compared to our prior projection of 2.0%. If our forecast is correct, inflation-adjusted output growth in 2016 would match the 2012 post-recession low (Q4/Q4). However, economic activity could be substantially softer if financial conditions were to tighten meaningfully further. We remain concerned about downside risks to output and inflation.

Our global growth forecast remains at 3.1%, similar to 2015, but this is at the slowest pace post the financial crisis. We think the risks are to the downside. Gold has tended to underperform in an environment of strong global growth, so whilst not an outright tailwind, slowing growth certainly eases the pressure on gold in our view.

Figure 10: Historical metal performance versus global growth and the USD



Source: Deutsche Bank, courtesy of the DB Asset Allocation team

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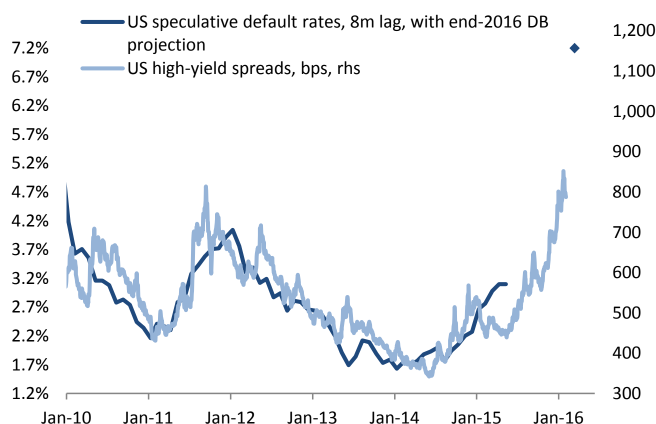
Rising financial stress increases the need for insurance

There are rising stresses in the global financial system; in particular the rising risk of a US corporate default cycle and the risk of a sharp one-off RMB devaluation due to the sharp increase in China's capital outflows. Both of these "events" would be big negatives for global equity prices. We think the rising risks increase Gold's insurance premium.

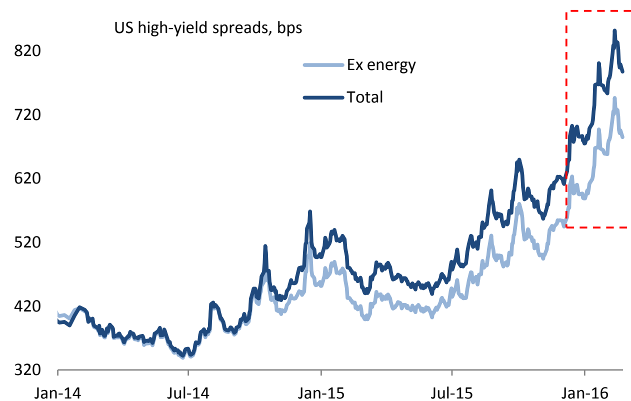
US HY spreads have risen above their 2011 peak and, at 840bps, are discounting a default rate of 5%, compared to the current 3.1% and our credit strategists' projection of 7.2%. Over the past 100 years, when defaults have risen above 4%, they have typically continued to rise close to 10% (i.e. a full default cycle). This is because of the tendency for credit stress to become self-fuelling: a rise in expected defaults pushes up financing costs, which tips some marginal borrowers over the edge, further increasing defaults and so on. With non-energy spreads rising in line with overall spreads and issuance down sharply, this process seems to be under way

Figure 11: US HY spreads at 840bps are consistent with a default rate of 5%, versus our strategists' forecast of 7.2%



Source: Deutsche Bank, Bloomberg Finance LP

Figure 12: Ex-energy credit spreads have continued rising in line with overall HY spreads



Source: Deutsche Bank, Bloomberg Finance LP

Whilst our S&P target has only been marked down from 2,250 to 2,200, which still implies an equity risk premium much lower by year-end, we think there may be some risks to this target. This would imply less of a downside risk on gold.

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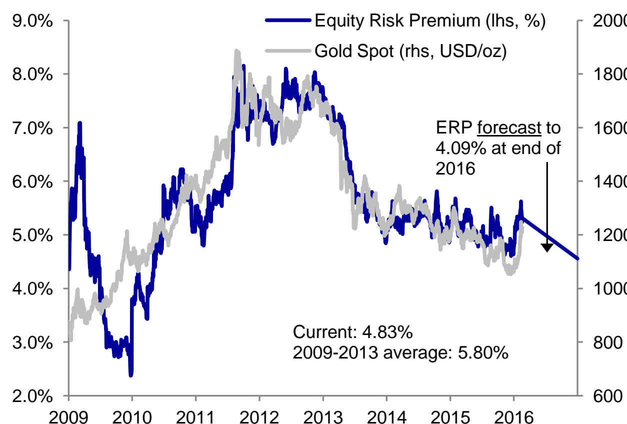
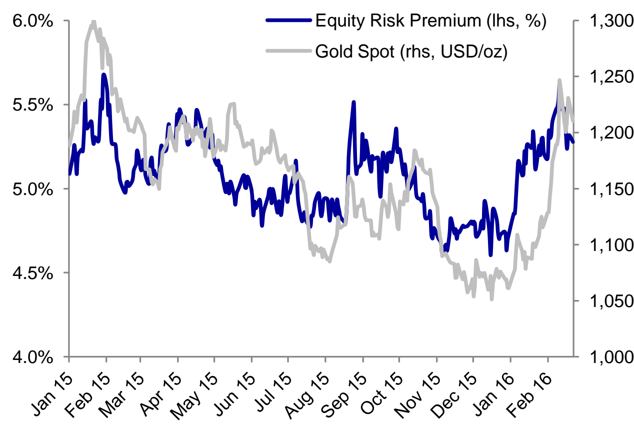
Figure 13: The expectation of a strengthening equity market is a headwind for gold



Source: Deutsche Bank, Bloomberg Finance LP

Figure 14: …but this has not been the case in Q1

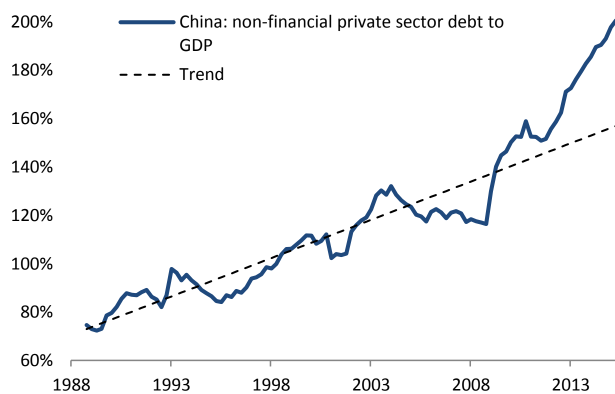


Source: Deutsche Bank, Bloomberg Finance LP

The current depletion of China's FX reserves could lead to further devaluation of the RMB. High private sector leverage means that China will have to keep a loose monetary policy, which puts it at odds with the tightening US cycle. A further RMB devaluation, or at least the expectation thereof could in turn lead to further capital flight which is currently running at an annualized rate of USD1tn. Using the IMF's methodology for reserve adequacy, China only has about USD400bn of "free" reserves left.

The following charts and analysis has been provided by our European Equity Strategy team; Sebastian Raedler et al.

Figure 15: High private sector leverage means China will have to keep an accommodative monetary policy



Source: Deutsche Bank, Bloomberg Finance LP

Figure 16: …which risks triggering further RMB devaluation

Source: Deutsche Bank, Bloomberg Finance LP

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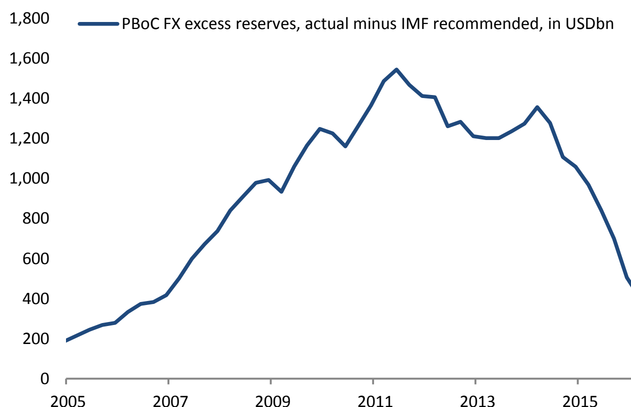
Figure 17: ...which in turn would lead to further capital flight and a drawdown of FX reserves (currently at USD1tn on an annualized basis

Source: Deutsche Bank, Bloomberg Finance LP

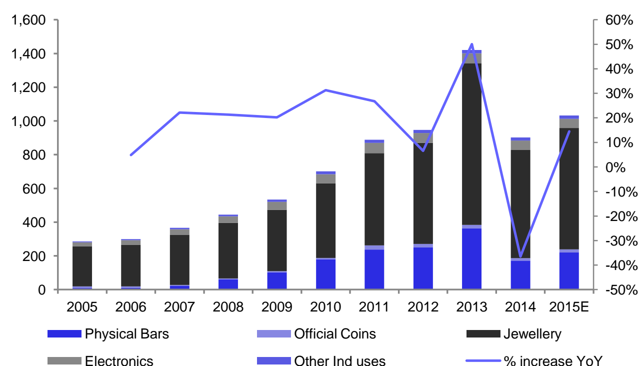
Figure 18: Using the IMF's methodology for reserve adequacy, China only has c.USD400bn of "free" reserves left, down from USD1.4 in 2014



Source: Deutsche Bank, Bloomberg Finance LP

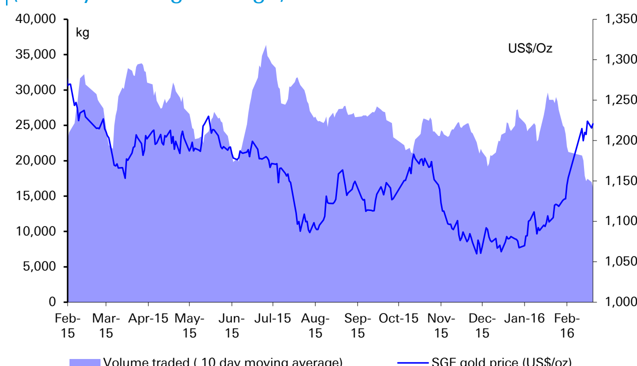
As a hedge against a weakening currency, we think Chinese gold demand will continue to increase, and whilst we do not forecast a repeat of 2013, physical demand could grow in the order of 10% or 100 tonnes. Chinese demand has increased by 14% CAGR since 2005. In the recent bout of RMB weakness we have seen increased trading volumes on the Shanghai Gold exchange, suggesting a higher propensity to buy gold as a hedge against a depreciating currency. Chinese buying remains tactical with the most activity occurring on the dips. We note that since the strong rally in gold, we have seen activity drop off on the SGE.

Figure 19: The growth in Chinese gold demand



Source: Deutsche Bank, GFMS

Figure 20: Trading on the Shanghai Gold exchange (SGE) (10 day moving average)



Source: Deutsche Bank, Bloomberg Finance LP, SGE

Gold holds its own in a US recession

Although we are not as bearish on the US to suggest that the entire economy will lapse into a recession, there are certain manufacturing sectors that are in a recession. Assuming the worst case scenario where the US slips into a recession, dragging the global economy with it, the USD normally performs very well as investors search for safe havens and US investors repatriate funds onshore. Gold is normally inversely correlated to the USD, but under these conditions i.e. extreme risk aversion, gold also performs relatively well. We outline the performance of the USD in the past two global recessions.

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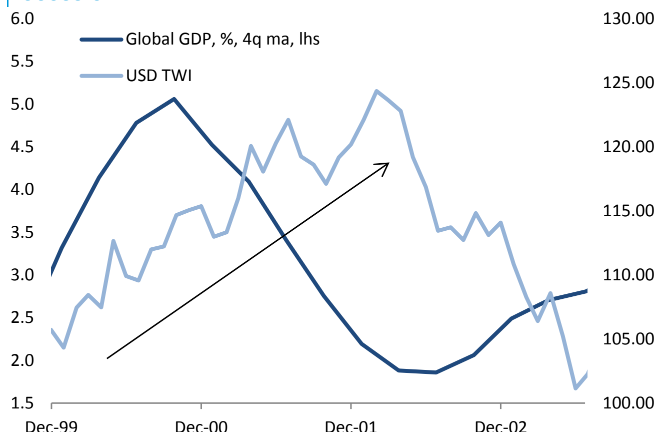
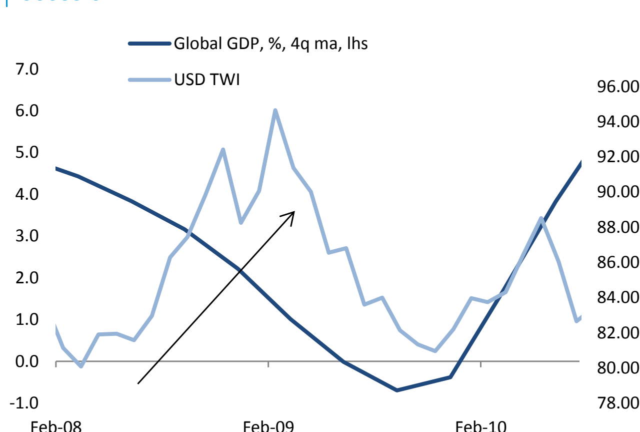
Figure 21: The USD performance during the 2001/02 recession



Source: Deutsche Bank, Datastream

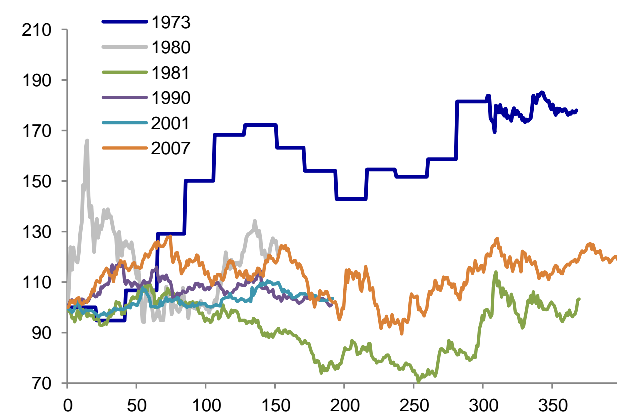
Figure 22: The USD performance during the 2008/09 recession



Source: Deutsche Bank, Datastream

The average performance of gold during the last six recessions was +21%, and if the 1973 oil shock recession is excluded, the average performance is +9%. The performance in the 81, 90 and 01 recessions is less than inspiring, so we would not build a bull case on gold based on a US recession, but the metal certainly remains defensive.

Figure 23: Gold's performance during US recessions



Source: Deutsche Bank, Bloomberg Finance LP

Figure 24: Gold tends to perform better in long recessions

Start	End	Gold Start (USD/oz)	Gold End (USD/oz)	Gold change (%)	Duration (days)
Nov-73	Mar-75	100	178	78.0%	515
Jan-80	Jul-80	512	614	20.0%	212
Jul-81	Nov-82	422	436	3.3%	517
Jul-90	Mar-91	352	356	1.0%	273
Mar-01	Nov-01	266	275	3.5%	274
Dec-07	Jun-09	783	930	18.8%	577
			Average	20.8%	395

Source: Deutsche Bank

A word of caution: Seasonality and relative pricing

Given the rising risks to the global financial stability from 1) the rising risk of a corporate default cycle because of stressed US energy balance sheets, 2) China's capital flight crisis increasing the risk of a sharp one-off RMB devaluation and 3) weakening global growth momentum, buying some gold as "insurance" is warranted. However gold remains fundamentally expensive which means that investors need to be tactical, as to the levels at which gold is bought. Gold is already expensive versus many other commodities, and relative to a number of other metrics. Gold now ranks as the most expensive commodity relative to its 15 year trading history. We think the low interest rate environment in part justifies the fact that gold looks optically expensive.

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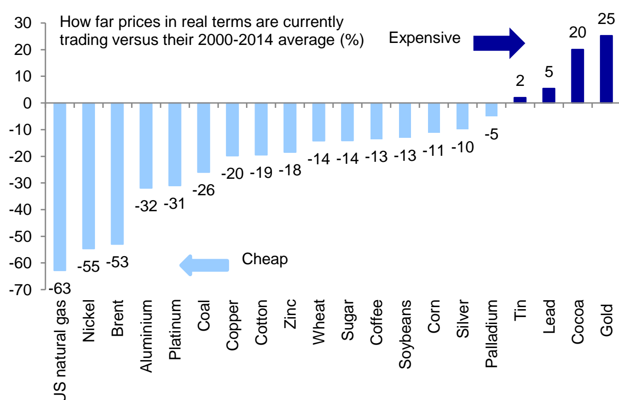
Figure 25: Gold most richly valued commodity



Source: Deutsche Bank, Bloomberg Finance LP

Figure 26: Gold fair value falls with crude oil

	Oct-14	Jan-16
In real terms (PPI)	697	710
In real terms (CPI)	766	777
DB Global Asset Allocation model	1176	816
Relative to per capita income	661	719
Relative to the S&P500	945	855
Versus copper	1,145	766
Versus crude oil	1,462	516
Average	**979**	**737**

Source: Deutsche Bank

From a seasonal perspective, January and August are the strongest months for gold, with the first quarter being a generally strong period. Our partial explanation for this is that the US tends to have some jitters in the first quarter with weather related impacts and August tends to be the peak of Indian buying ahead of the wedding season. Seasonally however, the best is behind us, although we note that February 2016 has been one of the strongest in the past 10 years.

Figure 27: Gold's seasonal performance

% move	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5 Yr Avg (2011-2015)	3.21	-0.09	-0.94	0.42	-3.36	-1.26	1.39	5.24	-3.79	0.35	-2.2	-3.14
10 Yr Avg (2006-2015)	4.35	1.08	-1.03	1.46	-0.64	-1.13	0.94	2.23	0.25	0.1	2.2	-0.77
2016	5.38	9.31										

Source: Deutsche Bank, Bloomberg Finance LP

Gold supply demand balance

We outline our gold supply demand balance in the chart below: Although less of a driver given the ample above ground stocks, we think the gold market looks under-supplied in 2016E onwards.

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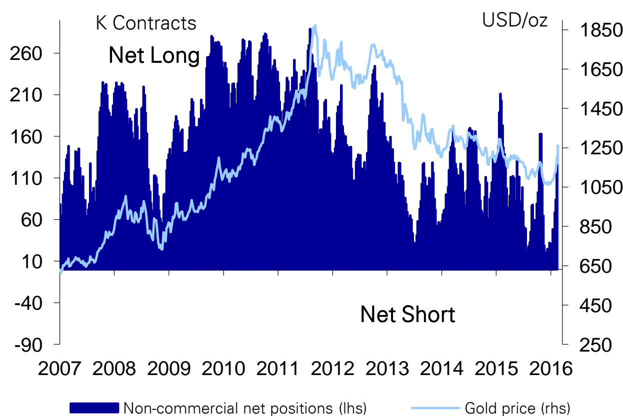
Figure 28: Deutsche Bank Gold supply – demand model

		2009	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E
Mine Production	tonnes	2,575	2,741	2,839	2,864	3,061	3,133	3,101	3,101	3,070	2,925	2,906
growth		*6.6%*	*6.4%*	*3.6%*	*0.9%*	*6.9%*	*2.4%*	*-1.0%*	*0.0%*	*-1.0%*	*-4.7%*	*-0.7%*
Producer Hedging	tonnes	-257	-106	11	-40	-39	103	-21	50	-25	150	100
Official Sector Sales	tonnes	34	0	0	0	0	0	0	0	0	0	0
Secondary Supply, Scrap	tonnes	1,695	1,711	1,649	1,591	1,287	1,125	1,035	1,126	1,155	1,230	1,231
growth		*28.8%*	*0.9%*	*-3.6%*	*-3.5%*	*-19.1%*	*-12.6%*	*-8.0%*	*8.8%*	*2.6%*	*6.5%*	*0.1%*
Total Supply	**tonnes**	**4,047**	**4,346**	**4,499**	**4,415**	**4,309**	**4,361**	**4,115**	**4,277**	**4,200**	**4,305**	**4,237**
Jewellery	tonnes	1,814	2,020	1,975	1,896	2,439	2,213	2,180	2,250	2,360	2,250	2,390
		-21.3%	*11.4%*	*-2.2%*	*-4.0%*	*28.6%*	*-9.3%*	*-1.5%*	*3.2%*	*4.9%*	*-4.7%*	*6.2%*
Industrial, other	tonnes	410	465	452	407	419	400	395	405	425	438	405
		-11.1%	*13.4%*	*-2.8%*	*-10.0%*	*2.9%*	*-4.5%*	*-1.3%*	*2.5%*	*5.0%*	*3.0%*	*-7.5%*
Total fabrication demand	tonnes	2,224	2,485	2,427	2,303	2,858	2,613	2,575	2,655	2,785	2,688	2,795
		-19.6%	*11.7%*	*-2.3%*	*-5.1%*	*24.1%*	*-8.6%*	*-1.5%*	*3.1%*	*4.9%*	*-3.5%*	*4.0%*
Bar & coin investment	t	791	1,218	1,519	1,289	1,775	1,079	1,163	1,177	1,222	1,258	1,293
ETF and similar	t	652	343	172	275	-969	-159	-133	120	100	50	50
Total investment demand	tonnes	1,443	1,561	1,691	1,564	806	920	1,030	1,297	1,322	1,308	1,343
growth		*21.3%*	*8.2%*	*8.3%*	*-7.5%*	*-48.5%*	*14.1%*	*12.0%*	*41.0%*	*28.3%*	*0.8%*	*1.6%*
Official Sector Purchase		0	77	457	544	409	466	450	450	480	400	380
OTC investment & stock flows		380	223	-76	4	236	362	60	-125	-387	-91	-281
Total Demand	**tonnes**	**4,047**	**4,346**	**4,499**	**4,415**	**4,309**	**4,361**	**4,115**	**4,277**	**4,200**	**4,305**	**4,237**
Gold bullion price	**USD/oz**	**974**	**1,225**	**1,576**	**1,669**	**1,411**	**1,266**	**1,160**	**1,178**	**1,231**	**1,275**	**1,317**

Source: Deutsche Bank, World Gold Council, GFMS

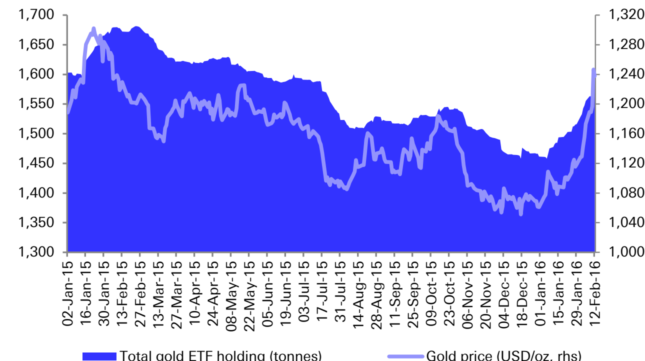
The ETF holdings in gold have increased by 12% (or 6.54Moz) since the beginning of the year, roughly in line with the price increase. Net longs on the Comex have increased 10-fold since the beginning of the year, but positioning is not yet extreme in our view, remaining in line with recent peaks.

Figure 29: Non commercial net positions on the Comex



Source: Deutsche Bank, CFTC, Reuters

Figure 30: Gold ETF holdings



Source: Deutsche Bank, Bloomberg Finance LP

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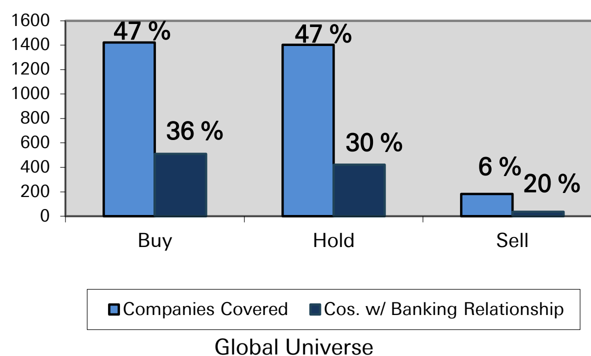

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