

JPMORGAN GOLD OUTLOOK

Long-term inflation risks reflected in near-term pricing

May 2010

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Agenda

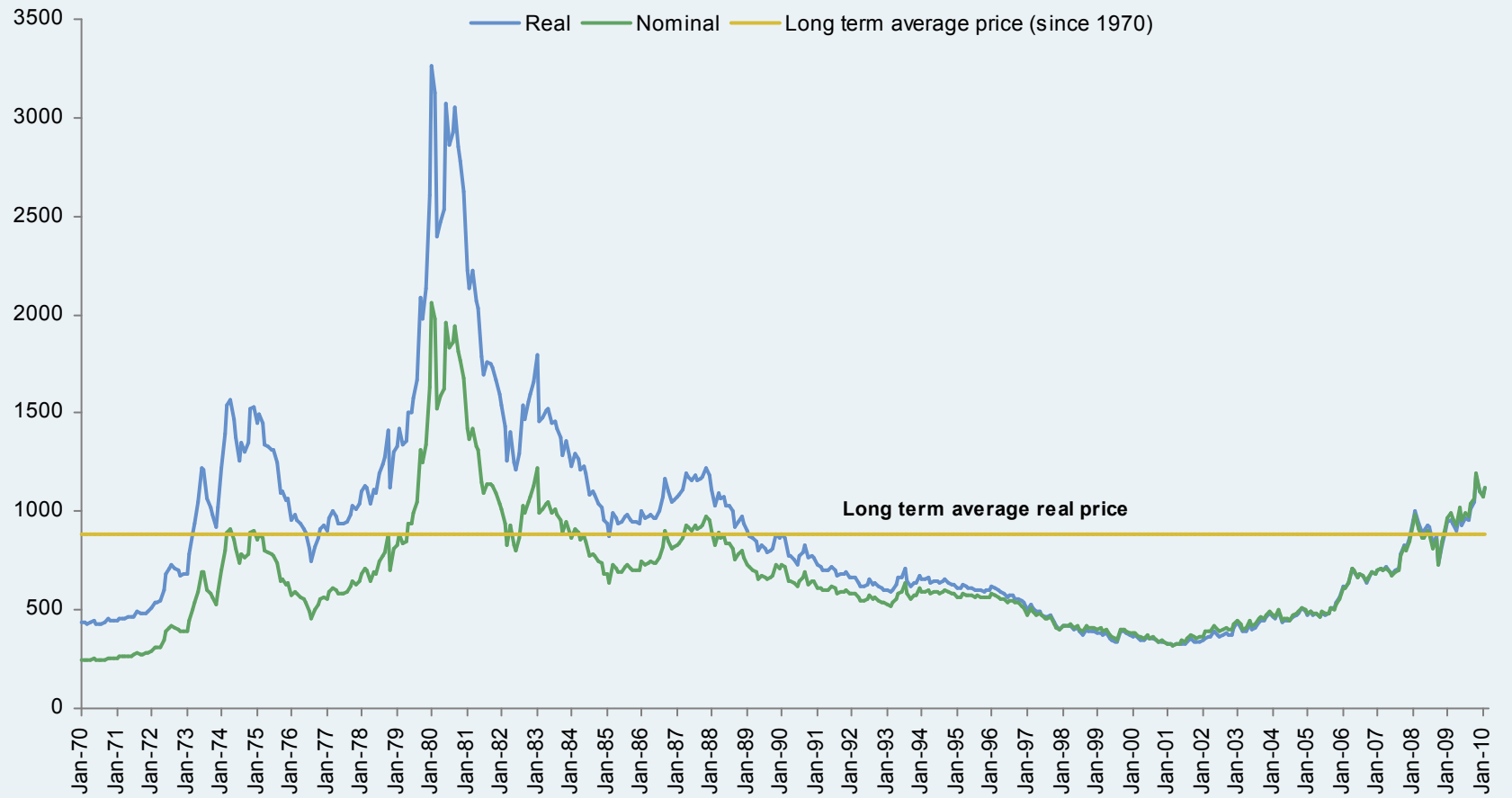
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Gold's value proposition(s)

- Gold as a hedge against inflation
 - Gold retains its value in inflation-adjusted terms, or that in the very least is the perception of many analysts and investors
 - Market concerns around inflation in the medium term are acute
- Gold as a store of value
 - The total supply of above-ground gold is fixed in the short term, with limited mine supply elasticity to price in the medium and long term.
 - Demand for gold is investment-theme driven – gold is never consumed, only transformed and/or hoarded to varying degrees
 - Gold's correlation with other asset classes is low to negative; gold is considered an efficient portfolio hedge
- Gold as a “hard” currency
 - Gold is seen as money; as both a means of exchange and barometer of purchasing power
 - Gold is no individual country or national central bank's liability
 - While gold is priced in USDs predominantly, it is quoted and traded in every other major paper currency
 - As such gold is currently perceived as the “anti-currency”

Gold – long term real and nominal prices

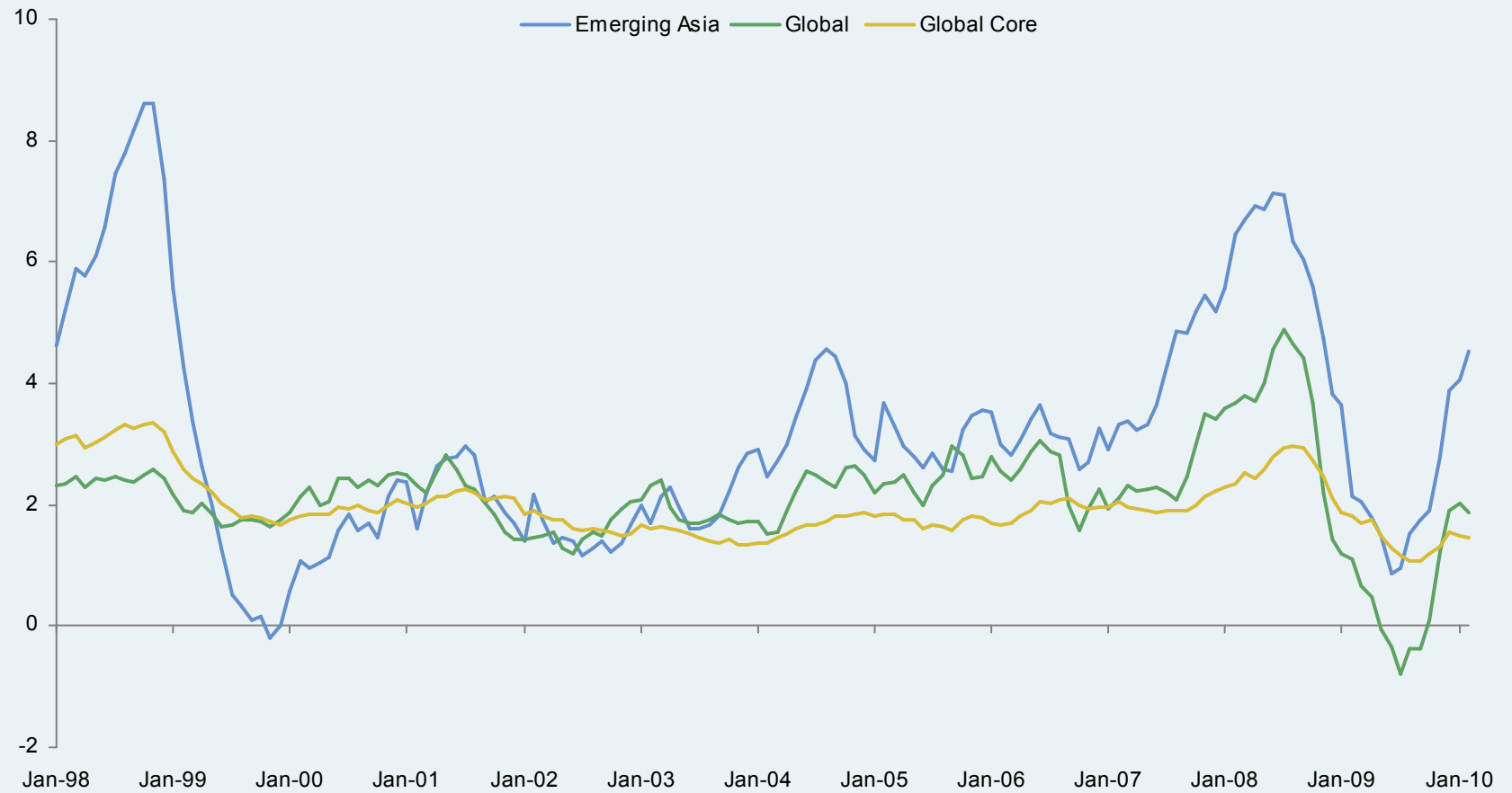
LBMA gold price – nominal – and adjusted for OECD All Items CPI, \$/oz



Source: JPMorgan Commodity Research

Inflation: A two tiered environment beginning to be realised – inflation is much stronger in Emerging Markets/BRICs – much softer in the Developed World

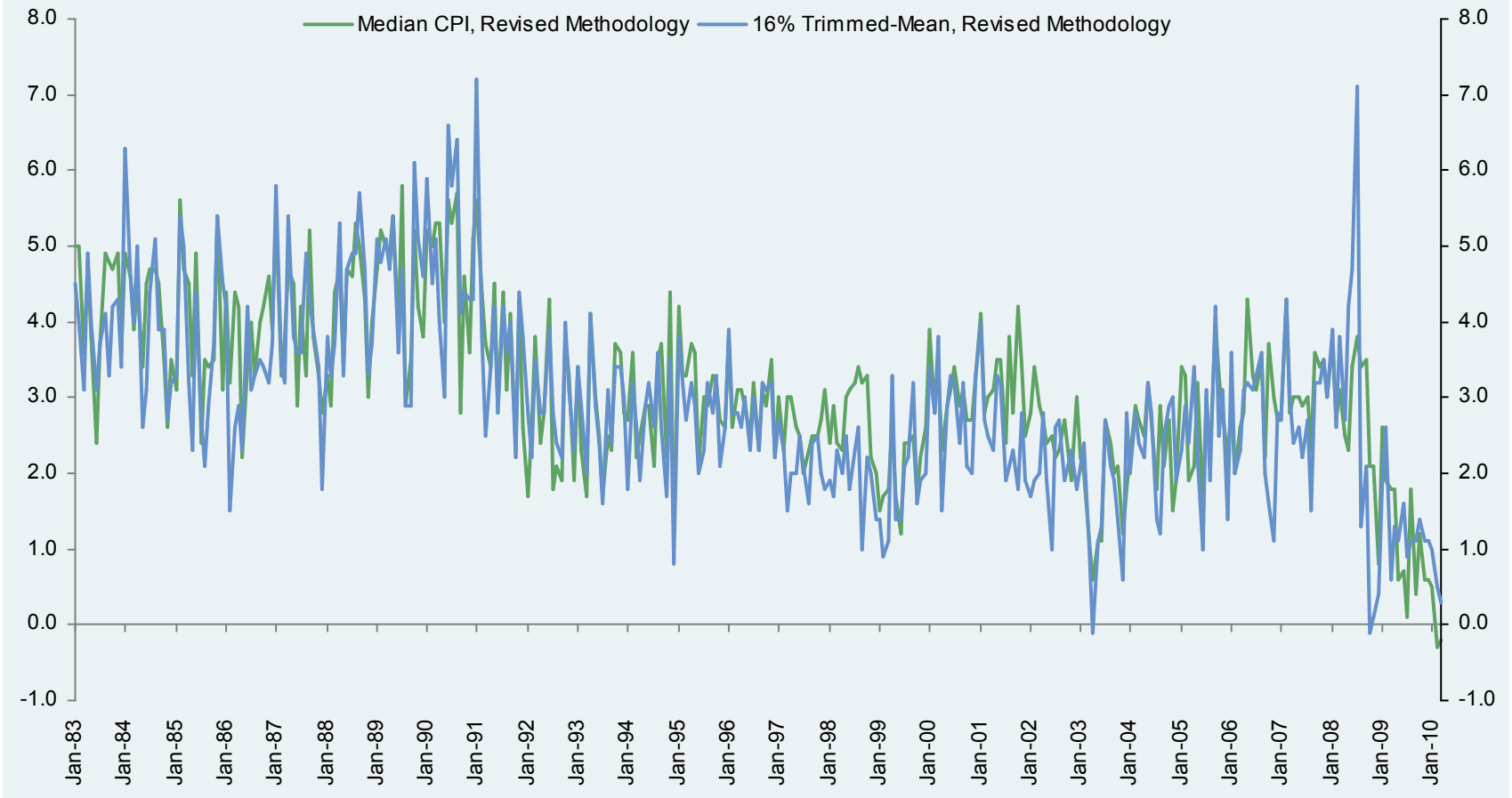
Annual change in inflation: global inflation (core and total) and emerging Asia



Source: JPMorgan Commodity Research

US inflation is on track to keep falling

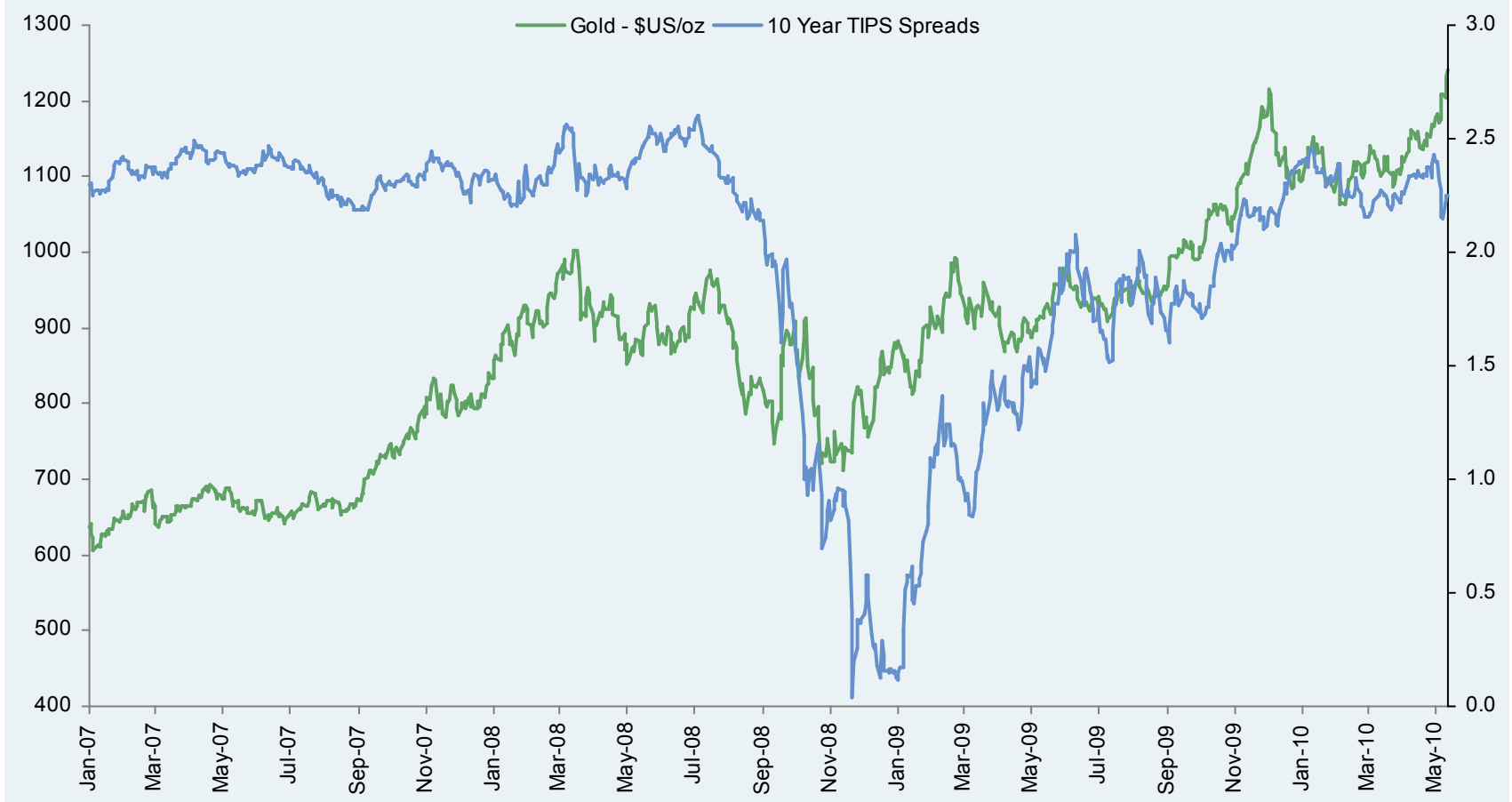
Measures of inflation in US, trimmed mean and 16% trimmed mean, annualised monthly changes



Source: JPMorgan Commodity Research, Federal Reserve of Cleveland

However the market is pricing in a return to average rates of headline inflation on a 10 year timeframe – market not worried about lack of inflation near term

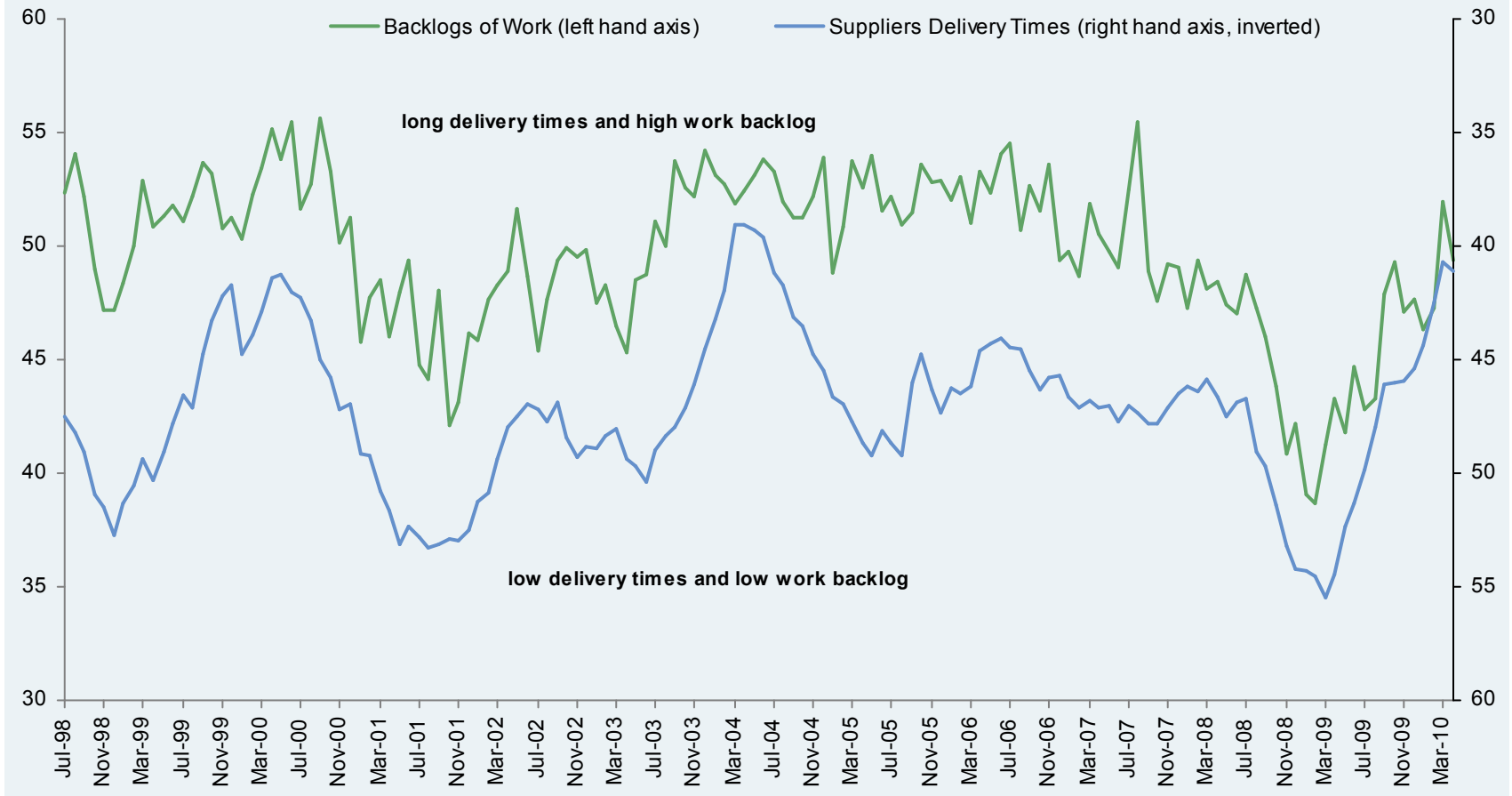
10 Year TIPS Spreads and USD/Gold



Source: JPMorgan Commodity Research

Rising delivery times, and rising backlogs of work out of JPM PMI surveys suggest that inflation risks are not as sanguine as the recent CPI outcomes imply

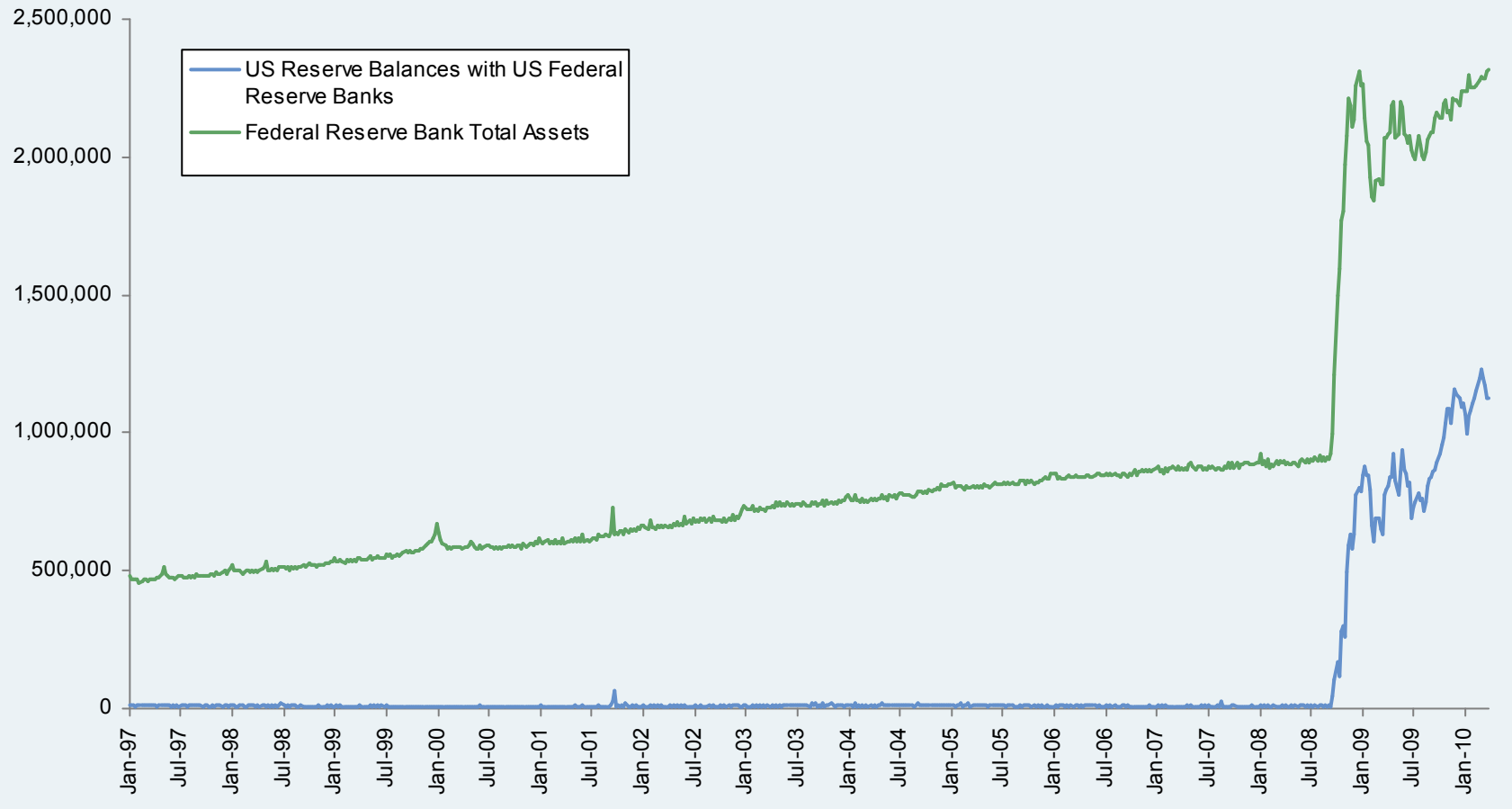
JPMorgan Manufacturing and Service PMI series on supplier delivery times and work backlogs



Source: JPMorgan Commodity Research

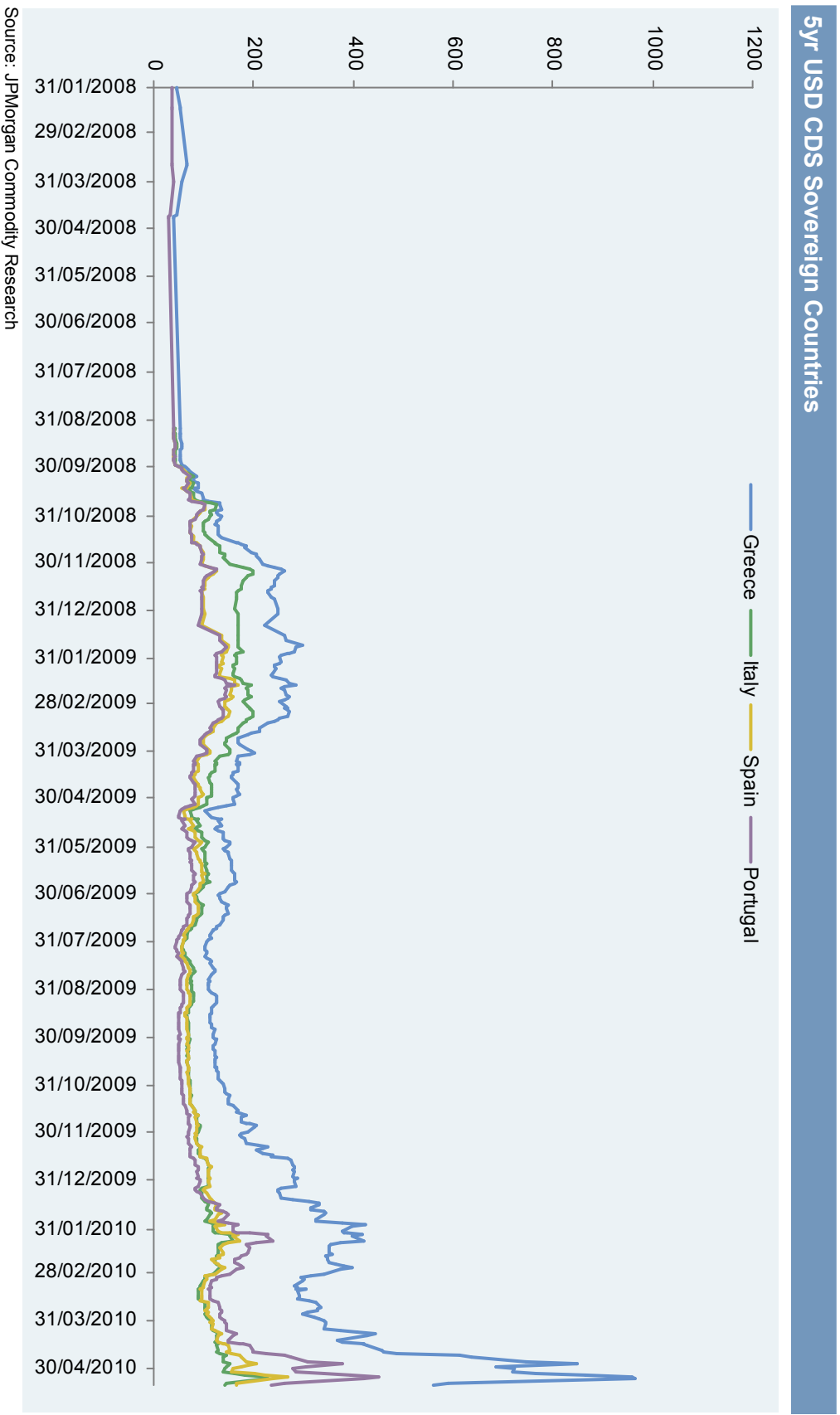
Monetisation of Fiscal Deficits delivers Significant Upside Risk to Inflation Long Term (will the pay off eventually be: recession or inflation?)

US Reserve Balances with the Federal Reserve Banks



Source: JPMorgan Commodity Research

Sovereign Risk –Elevated as EMU Stresses Linger. Recent massive bailout package only alleviates short term funding needs – long term stresses remain

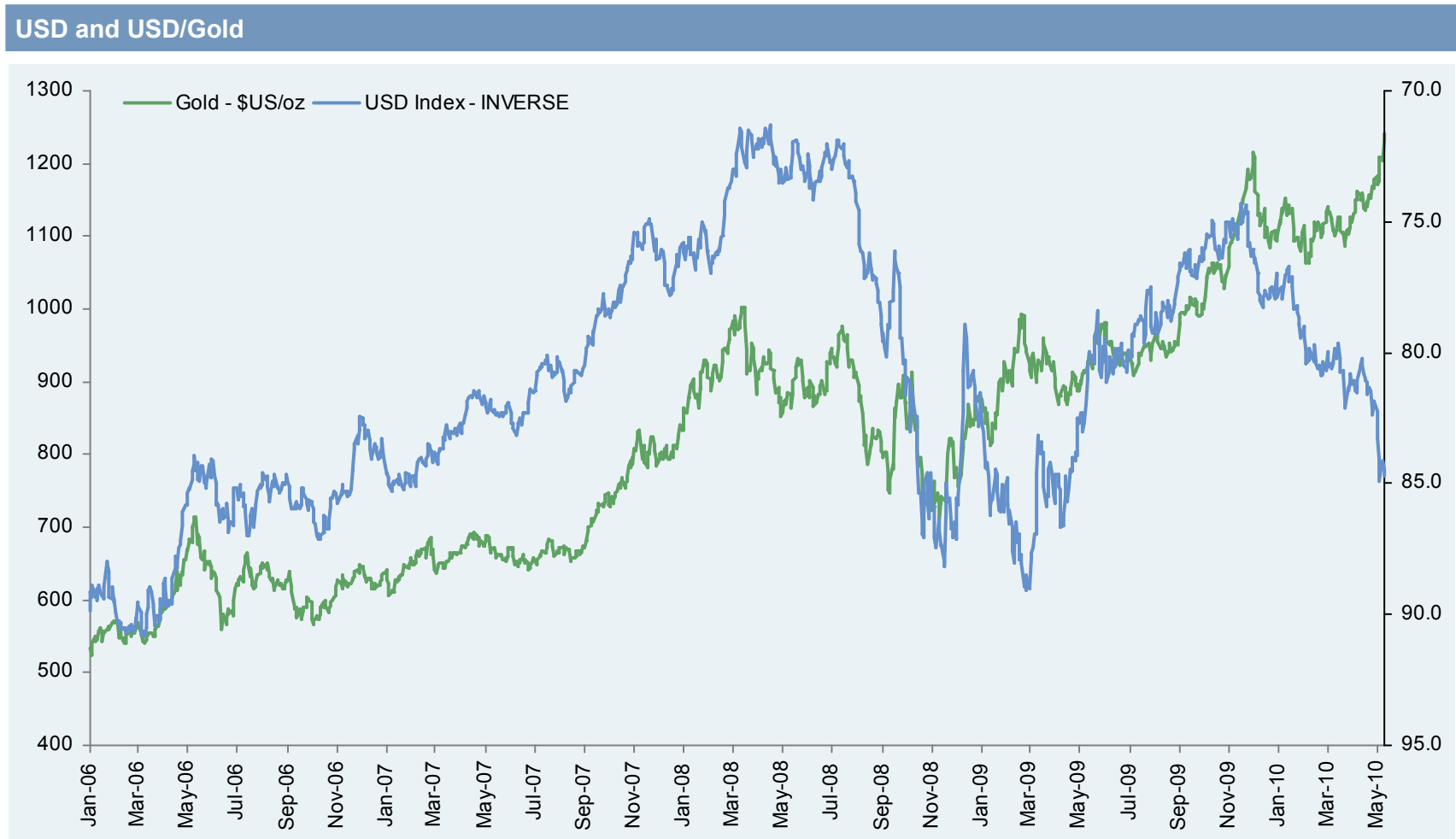


Gold in EUR terms has failed to drop even though CDS points towards lower default risk: gold is trading the longer term risks



Source: JPMorgan Commodity Research

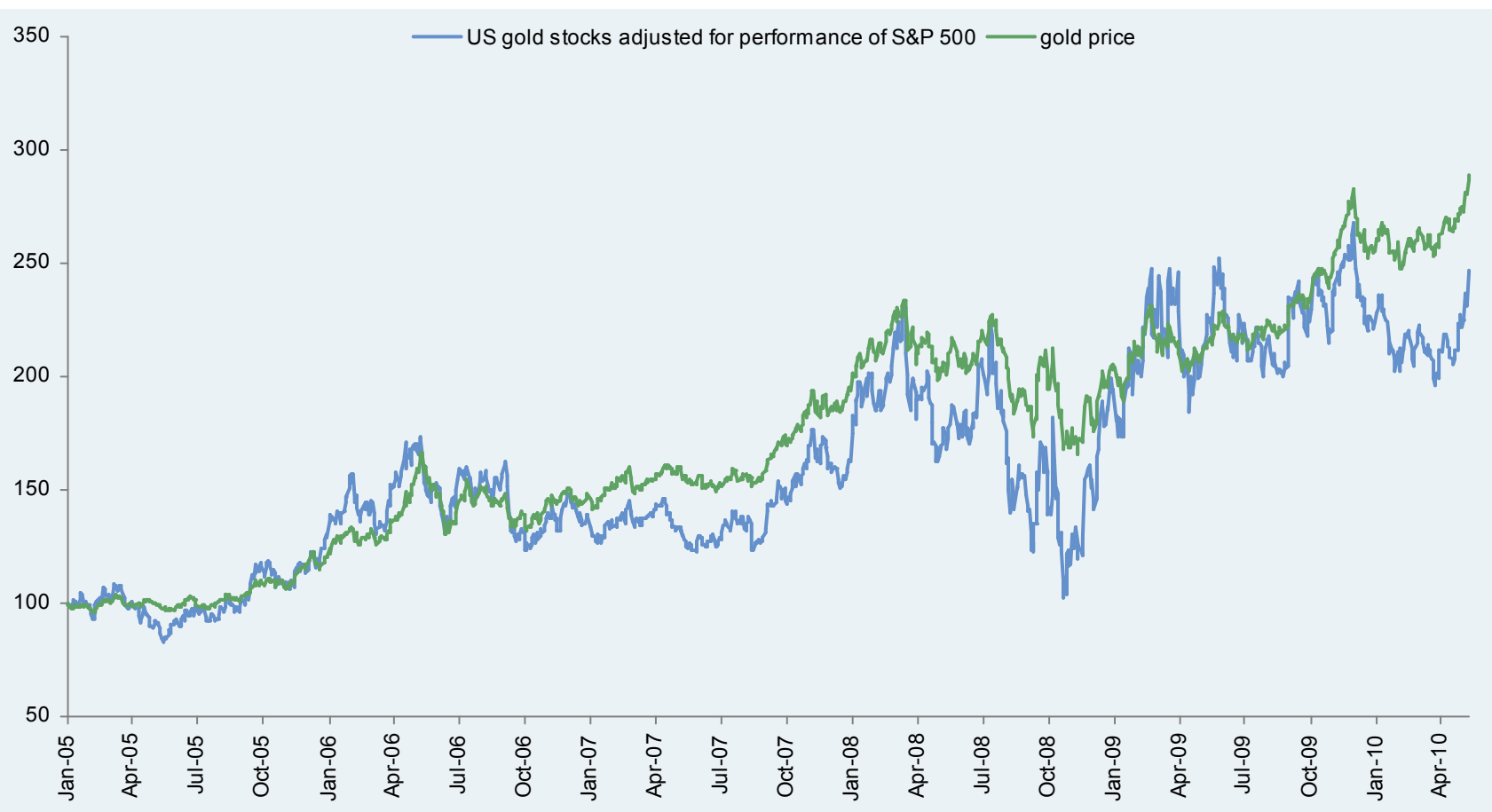
Gold has managed to ride out the USD rally extremely well, reflecting underlying demand on the back of longer term risks



Source: JPMorgan Commodity Research

Gold's relative outperformance to gold stocks also indicating the prospect of the gold price reflecting bearish global macro health themes

Gold price (\$US/oz) and performance of HUI gold stocks index divided by performance of S&P500 (both indexed to January 2005)

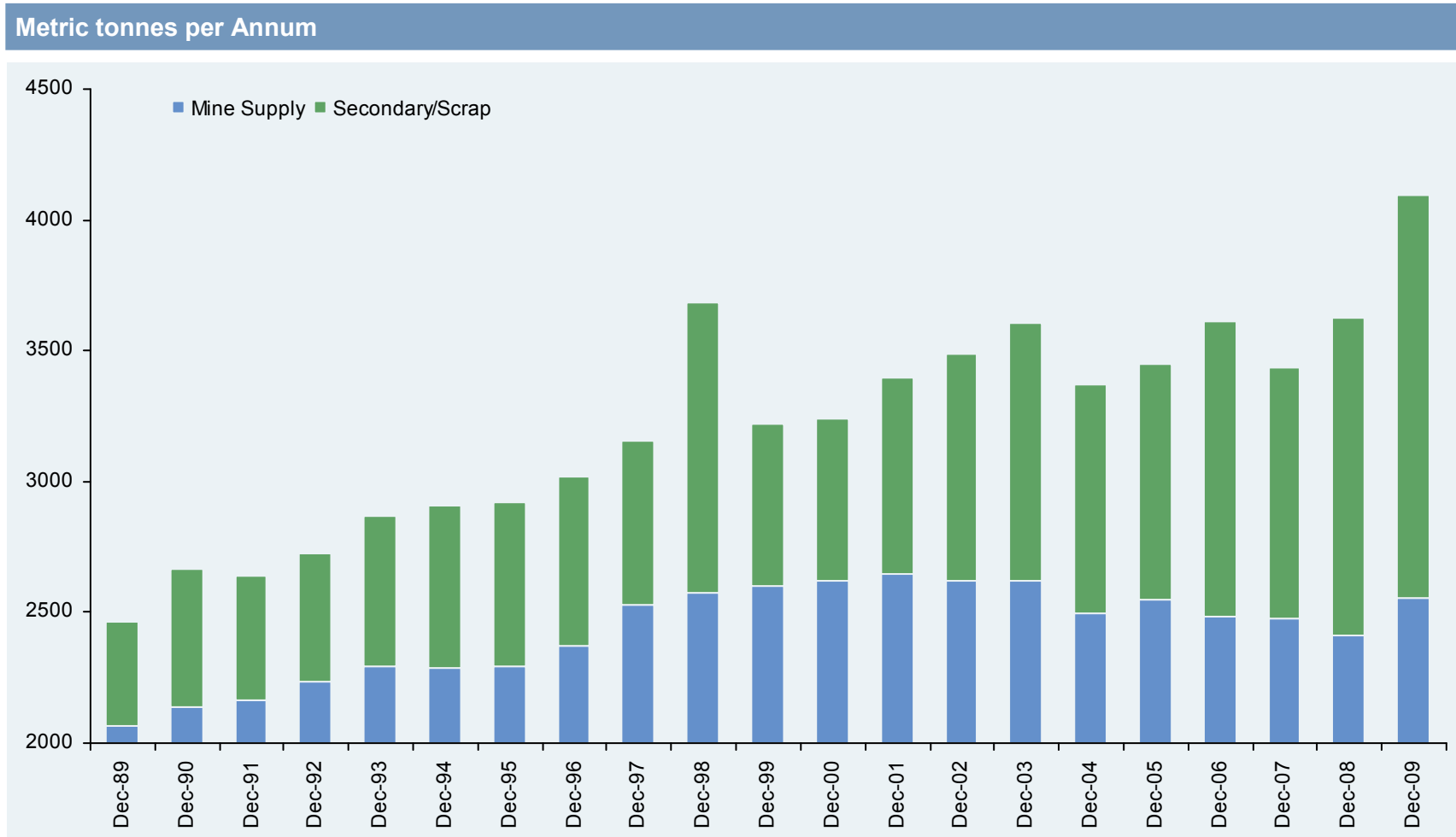


Source: JPMorgan Commodity Research

Agenda

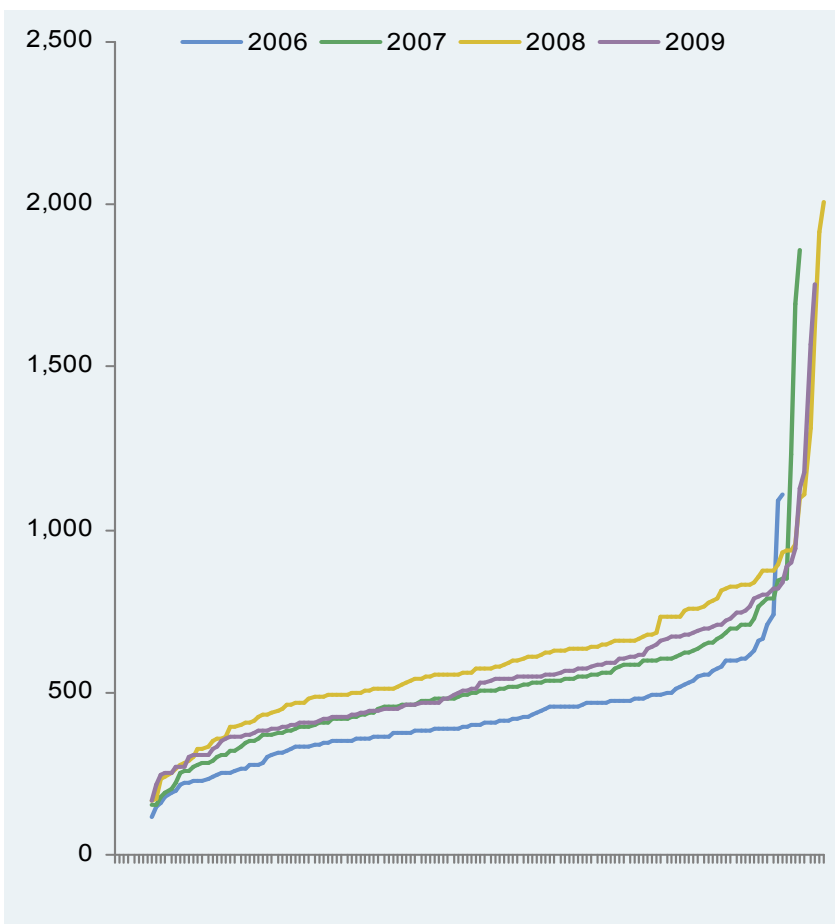
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Supply from Above Ground (Scrap) and Below Ground (Mines) - Improving



Cash costs: rising but not as fast as the price

Some very high cost operations but overall, profitability is considerable



Gold Total Production Costs \$/oz				
	50th	75th	90th	Avg
2006	382.0	464.0	511.0	281.7
2007	455.0	533.8	623.0	363.2
2008	514.0	631.7	776.9	447.0
2009	468.9	589.7	703.7	420.6

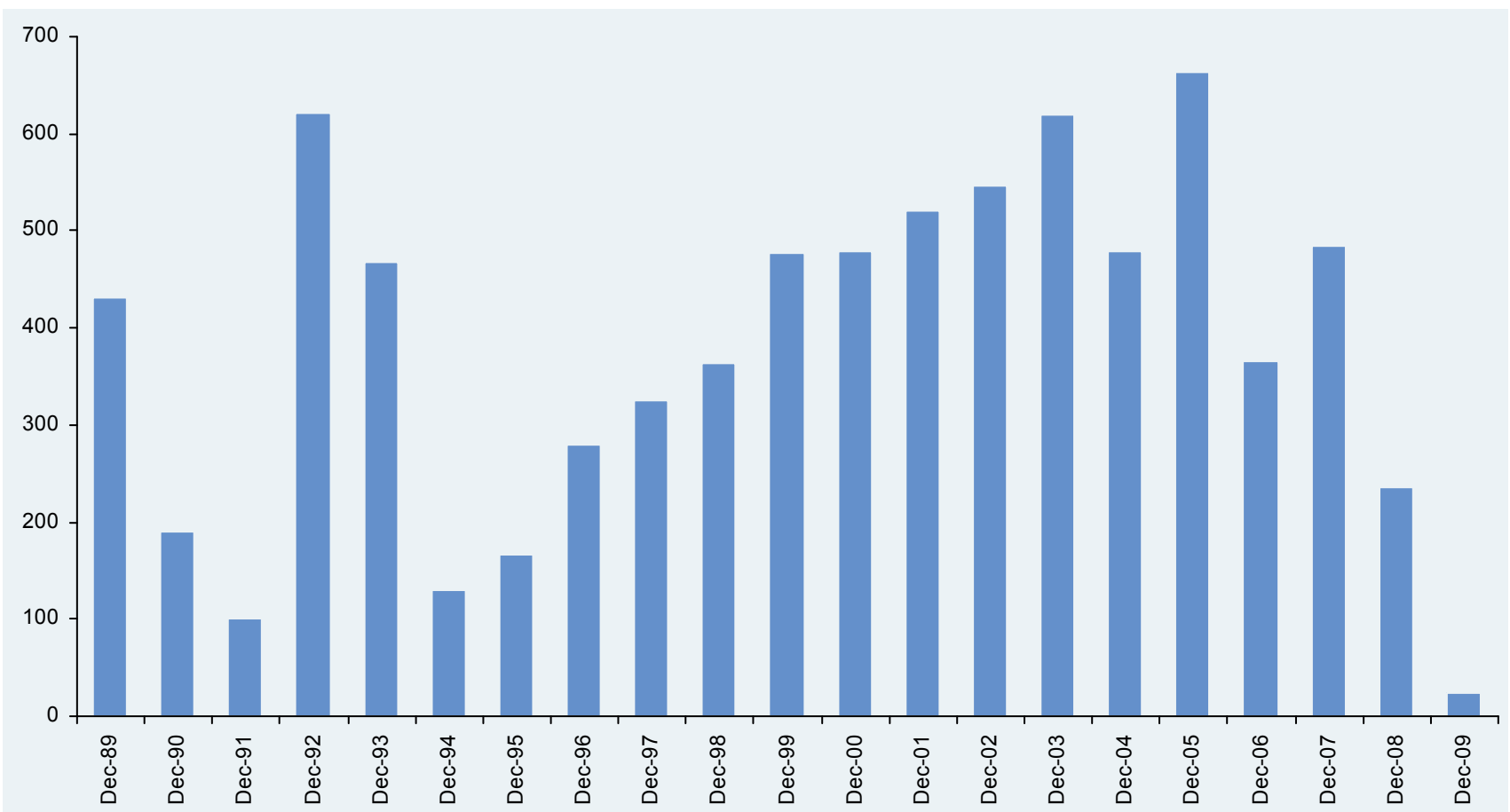
Profit margin for 75th Percentile Producer

	Total Costs	Cash Price	Margin
2006	464.0	604.7	30%
2007	533.8	697.3	31%
2008	631.7	872.4	38%
2009	589.7	974.4	65%

Source:

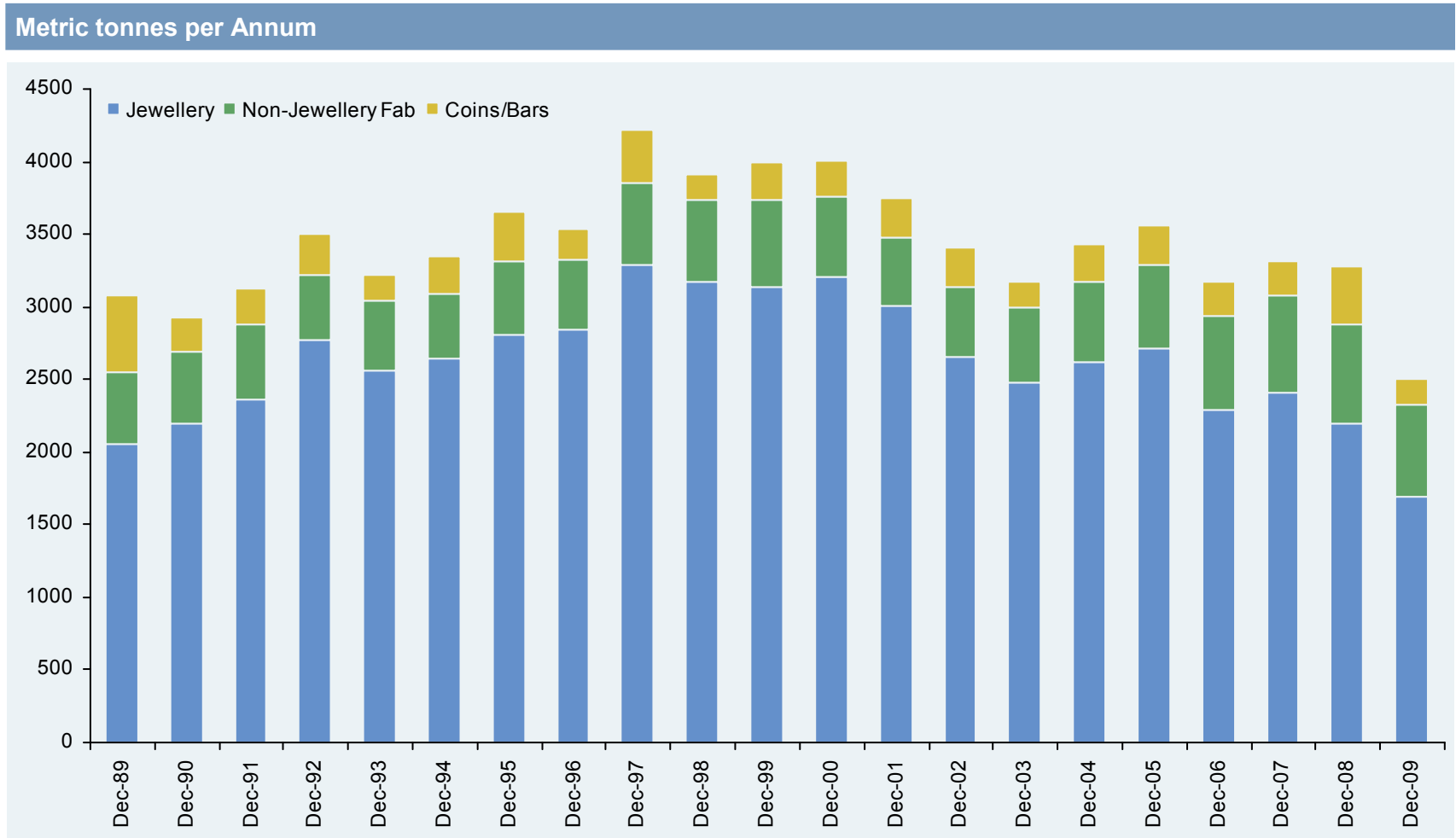
Mine/Scrap availability increase acting to counter the declining appetite of Central Banks to sell

Metric tonnes per Annum of Gross Central Bank Sales



Source: GFMS, JPMorgan Commodity Research

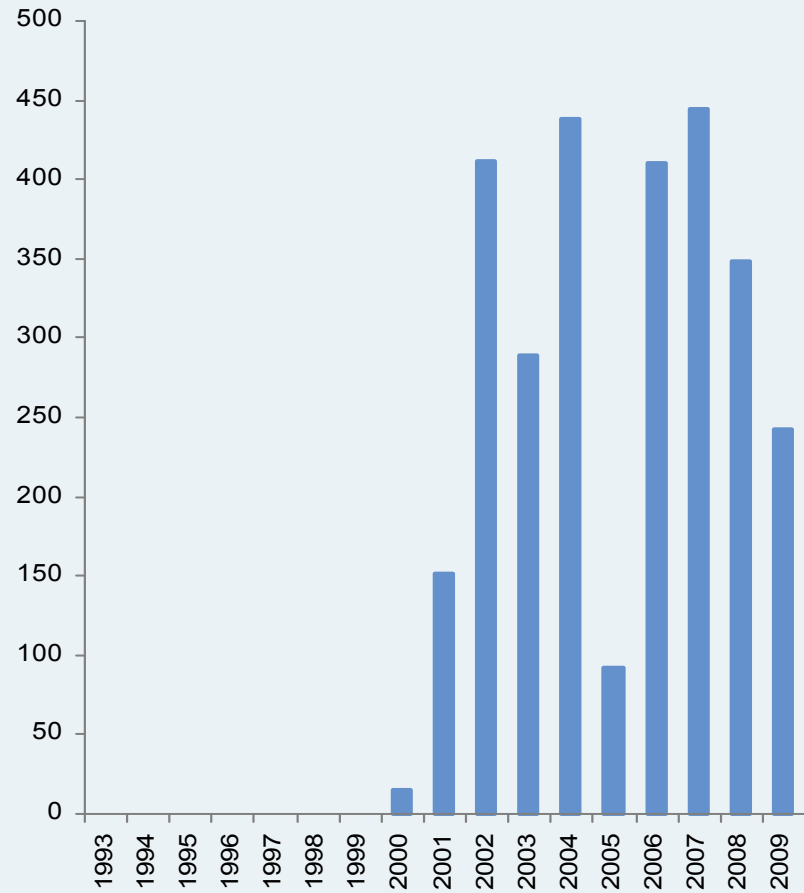
Traditional Demand – Weak as You Can Imagine



Source: GFMS, JPMorgan Commodity Research

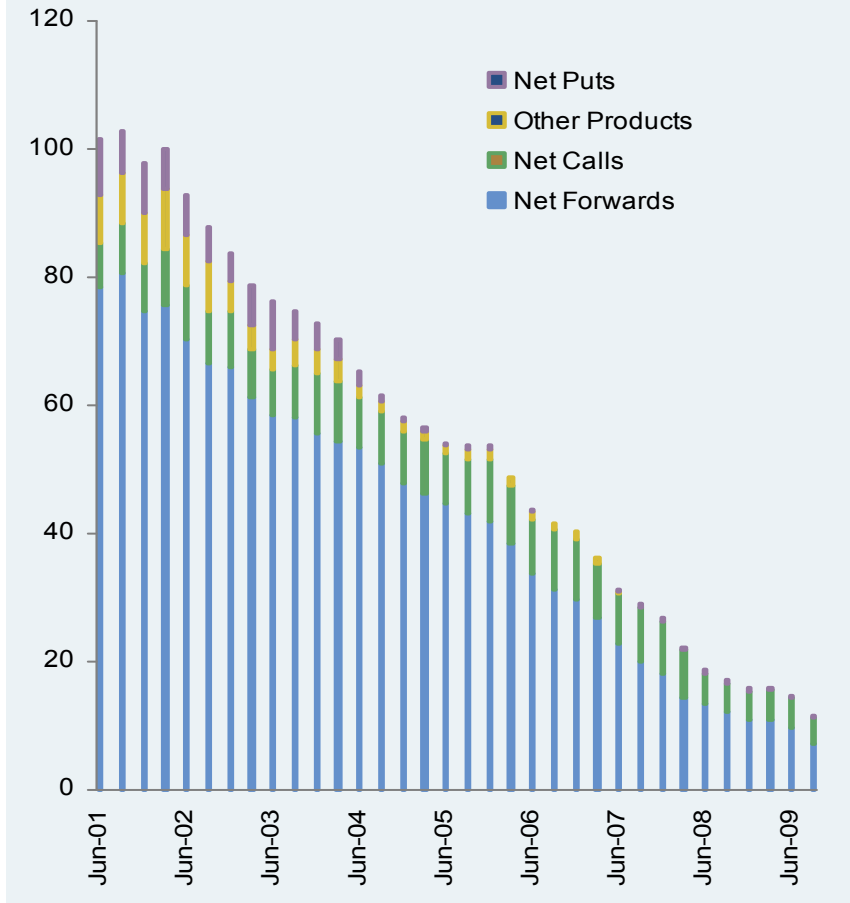
And You Cant Rely on Dehedging to Fill the Gap

Metric tonnes per Annum (NET PRODUCER BUYING)



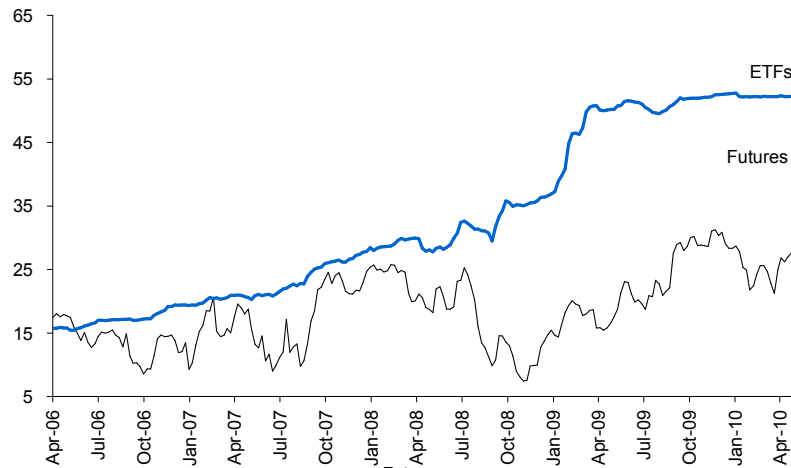
Source: GFMS, JPMorgan Commodity Research

Size of the Global Hedge Book (moz)

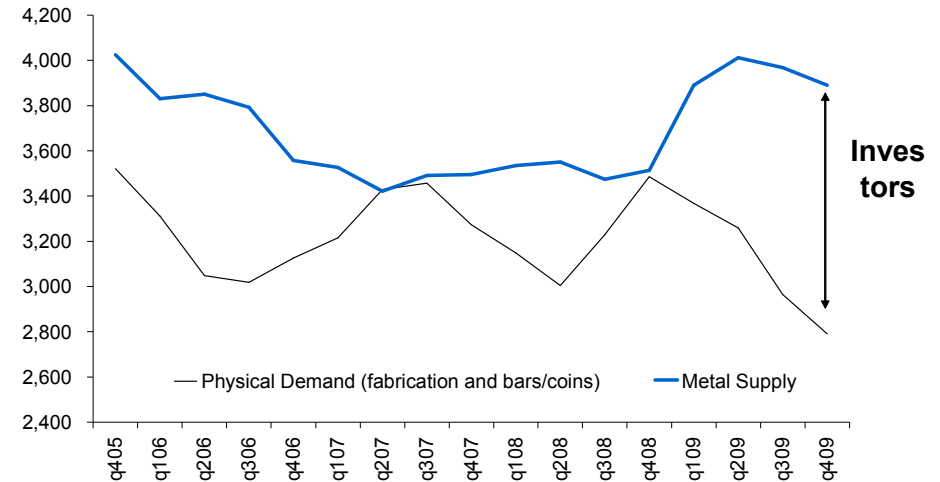


So why is gold so Bid...Investors, investors, investors

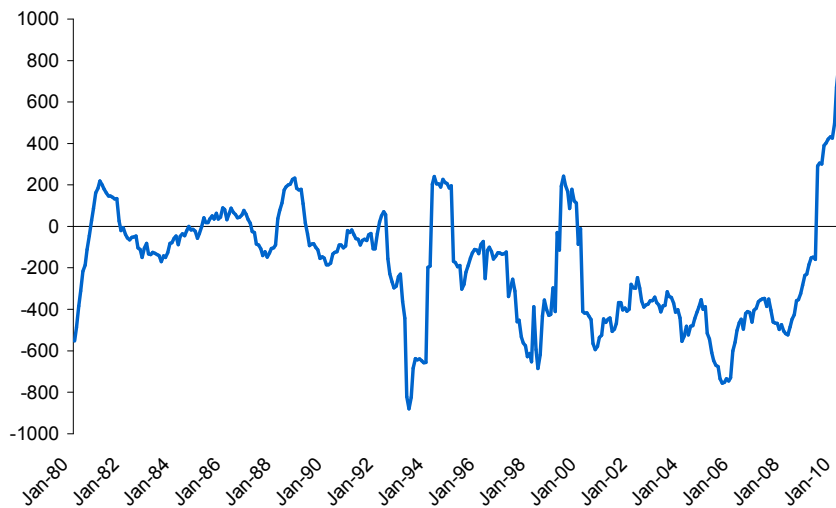
Million oz of gold investments by category



Gold Supply and Physical Metal Demand (mt)



Rolling 12month purchases of gold by central banks (MT)



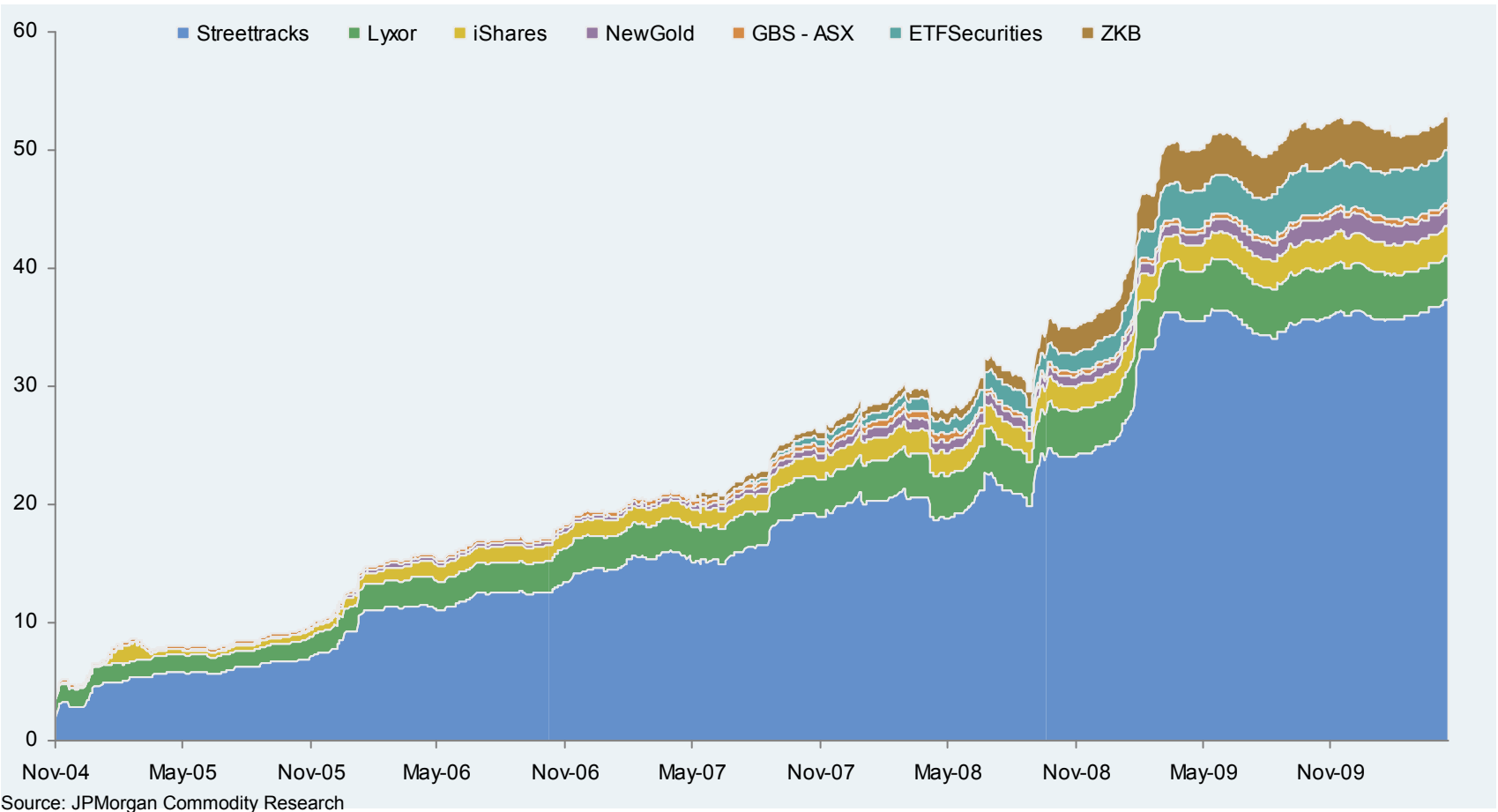
Key Points:

- Global demand from traditional drivers – jewellery and non-jewellery fabrication very weak
- But investment demand strong – and more than an offset – all excess material easily absorbed
- Investment drivers – excess liquidity, current debasement and inflation fears to remain in play for 2010 and into 2011 – expecting further investment flow
- Gold prices likely to peak mid-2010 but remain firm afterwards

Source: JPMorgan global commodity research

With the gold market in surplus, any slip in gold oz in ETFs is potentially worrying

Gold in ETFs, 000oz



Key Points

- The USD rebound in 2010 initially took some of the gloss off the gold price, but gold is back at record highs on most currency pairings – the USD, EUR, GBP for instance. This is sovereign risk at work.
- The macro picture for gold is friendly – accommodative monetary conditions, still aggressive fiscal expansion, debt monetisation and possible USD and broader currency debasement.
- However the micro fundamentals are less supportive. The hedge book is wound down, mine supply is growing solidly (likely to slow into 2011 however), while scrap supply is strong.
- The one positive micro fundamental is the change in central bank selling activity. IMF sales will be renewed in 2010-2011 but absolute volumes are small.
- Cash costs appear to be better behaved. This is bullish for gold producer margins in 2010-2011 but the long term bull case in energy and ongoing yield deterioration in the big 4 suggests that cash cost creep will emerge sooner or later, which is supportive for gold prices in the long term.
- Long term issues around reserve repletion are also slightly positive for the gold market but at current prices miners are incentivised to add reserves via exploration and organic development.
- We expect gold prices to be extremely strong in 2010, with an average of \$1250/oz in Q3.
- The gold market though is exposed to a significant thematic change. Any change of heart around sovereign risk, inflation risks, exit strategies would be tough for the gold market given the inherent considerable excess supply of gold relative to traditional fundamentals.

The Gold Market Surplus: Not a Problem with Longer Term Thematic Tailwinds

Gold Supply and Demand - MT

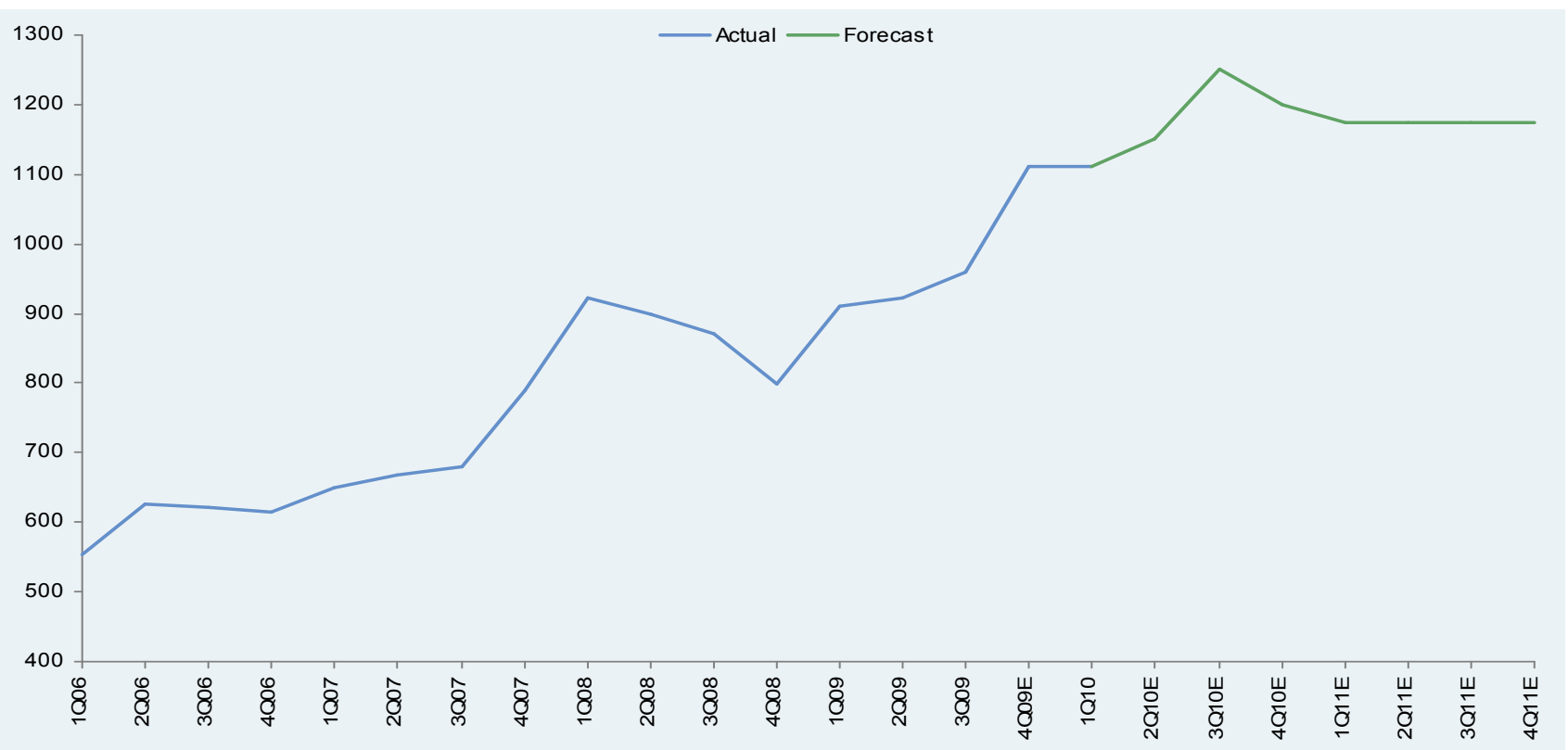
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010E	2011E		
Supply													
Mine Production	2,645	2,612	2,620	2,492	2,551	2,486	2,478	2,409	2,572	2,601	2,636		
% change	1.2%	-1.2%	0.3%	-4.9%	2.4%	-2.5%	-0.3%	-2.8%	6.8%	1.1%	1.3%		
Central Bank Sales	520	547	617	469	674	365	484	232	41	150	100		
Scrap	713	841	944	849	886	1,133	982	1,316	1,674	1,450	1,400		
Net producer Hedging	-	-	-	-	-	-	-	-	-	-	-		
Implied Disinvestment	16	-	-	35	-	-	-	-	-	-	-		
Total Supply	3,894	4,000	4,181	3,845	4,111	3,984	3,944	3,957	4,287	4,201	4,136		
% change	-3.0%	2.7%	4.5%	-8.0%	6.9%	-3.1%	-1.0%	0.3%	8.3%	-2.0%	-1.5%		
Demand													
Jewellery	3,008	2,660	2,482	2,614	2,707	2,297	2,417	2,193	1,759	1,920	2,060		
% change	-6.1%	-11.6%	-6.7%	5.3%	3.6%	-15.1%	5.2%	-9.3%	-19.8%	9.2%	7.3%		
Other fabrication	474	481	513	552	575	650	672	696	659	679	694		
% change	-14.9%	1.3%	6.7%	7.6%	4.2%	13.1%	3.4%	3.6%	-5.4%	3.1%	2.2%		
Bar Hoarding	261	264	180	257	263	235	236	386	187	215	225		
Net Producer de-hedging	151	412	255	422	86	434	444	352	254	25	25		
Implied investment	-	184	751	-	479	368	175	330	1,428	1,362	1,132		
Total Demand	3,894	4,000	4,181	3,845	4,111	3,984	3,944	3,957	4,287	4,201	4,136		
% change	-3.1%	2.7%	4.5%	-8.0%	6.9%	-3.1%	-1.0%	0.3%	8.3%	-2.0%	-1.5%		
Residual	-	16	184	751	-	35	479	368	175	330	1,428	1,362	1,132

Source: JPMorgan Commodity Research

Significant further investment flows are needed
to keep price moving higher

Gold Price Forecasts

Gold price forecasts, London fix, \$/oz



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	LT Real 2010 \$
Aluminium	1,431	1,729	1,895	2,593	2,664	2,624	1,696	2,213	2,025	2,150	2,250	2,350	2,200
Copper	1,779	2,889	3,506	6,669	7,286	6,902	5,157	7,288	6,688	7,250	7,750	8,250	5,500
Nickel	9,636	13,921	14,563	23,125	36,935	21,327	15,363	22,858	18,250	19,000	19,500	20,000	16,000
Zinc	829	1,055	1,394	3,249	3,384	1,908	1,669	2,388	2,125	2,100	2,400	2,600	2,000
Lead	507	890	946	1,287	2,739	2,105	1,729	2,263	2,013	1,850	2,000	2,100	1,800
Tin	4,891	8,483	7,480	9,234	15,021	18,395	13,314	17,430	17,750	18,000	18,500	19,000	17,500
Gold	363	416	445	604	697	872	976	1,178	1,175	1,100	1,000	1,000	950
Platinum	692	846	897	1,139	1,305	1,575	1,205	1,650	1,788	1,800	1,800	1,800	1,600
Palladium	200	236	202	320	355	349	262	523	675	742	775	800	700
Silver	4.9	6.7	7.3	11.5	13.4	15.0	14.7	18.1	18.1	16.9	15.4	15.4	13
Alumina	249	397	445	492	300	400	254	332	304	323	338	353	280