Relative Commodities & Economic Cycles

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CMC Markets

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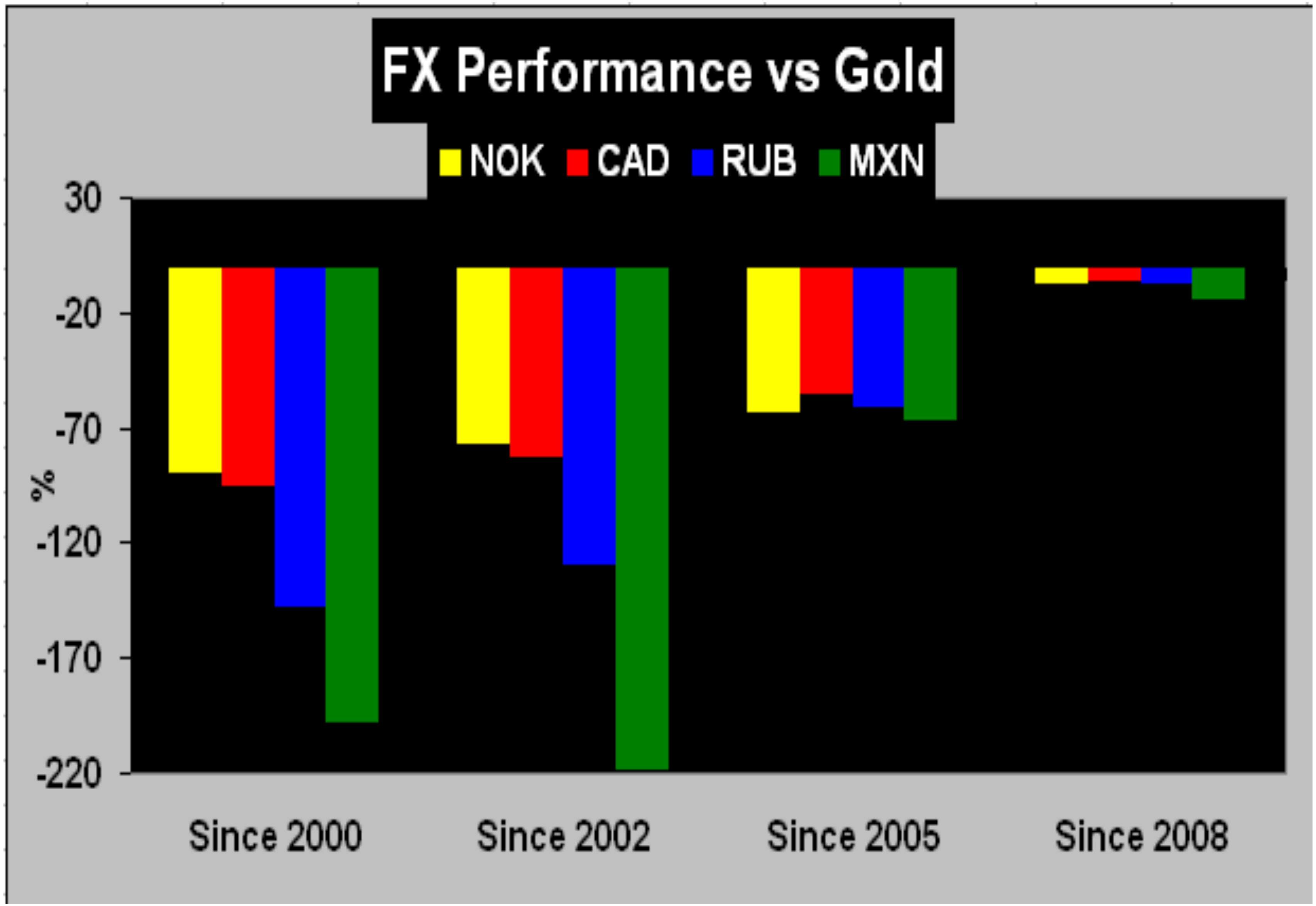
Norwegian Krone
External Balance & Energy Dependence

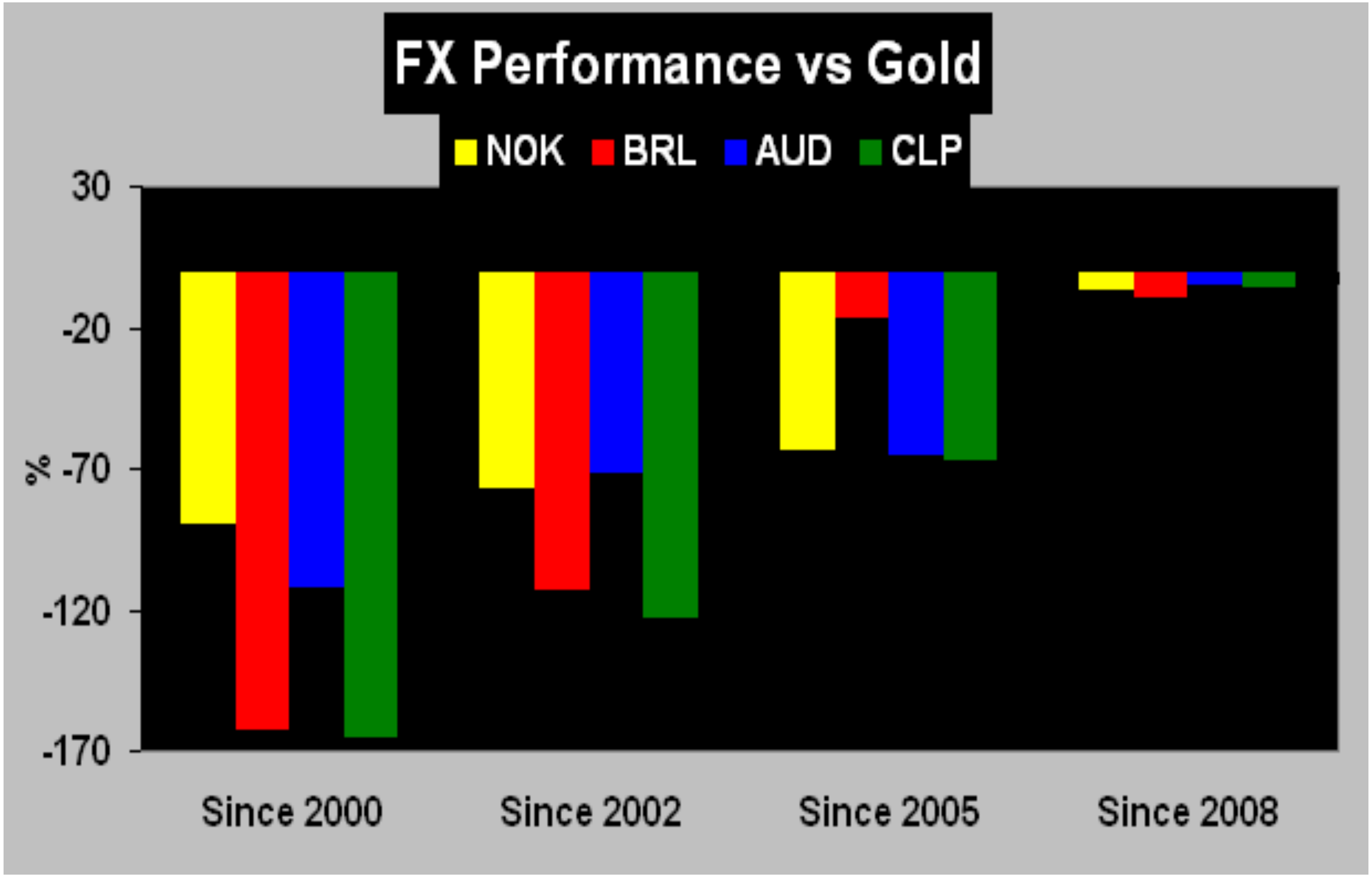
The Norwegian krone remarkably outperformed all other freely traded currencies of major oil-exporting countries between 2000 and 2007.

Crude oil, natural gas and refined petroleum products account for 2/3 of total exports.

Norway is the world's 3rd largest exporter of crude oil behind Russia and Saudi Arabia and also 3rd largest exporter of natural gas behind Russia and Canada.

Current account surplus = 16% of GDP, 2nd highest in the industrialized world after Switzerland's 17%.


FX Performance vs Gold
NOK
CAD
RUB
MXN
30
-20
-70
%
-120
-170
-220
Since 2000
Since 2002
Since 2005
Since 2008

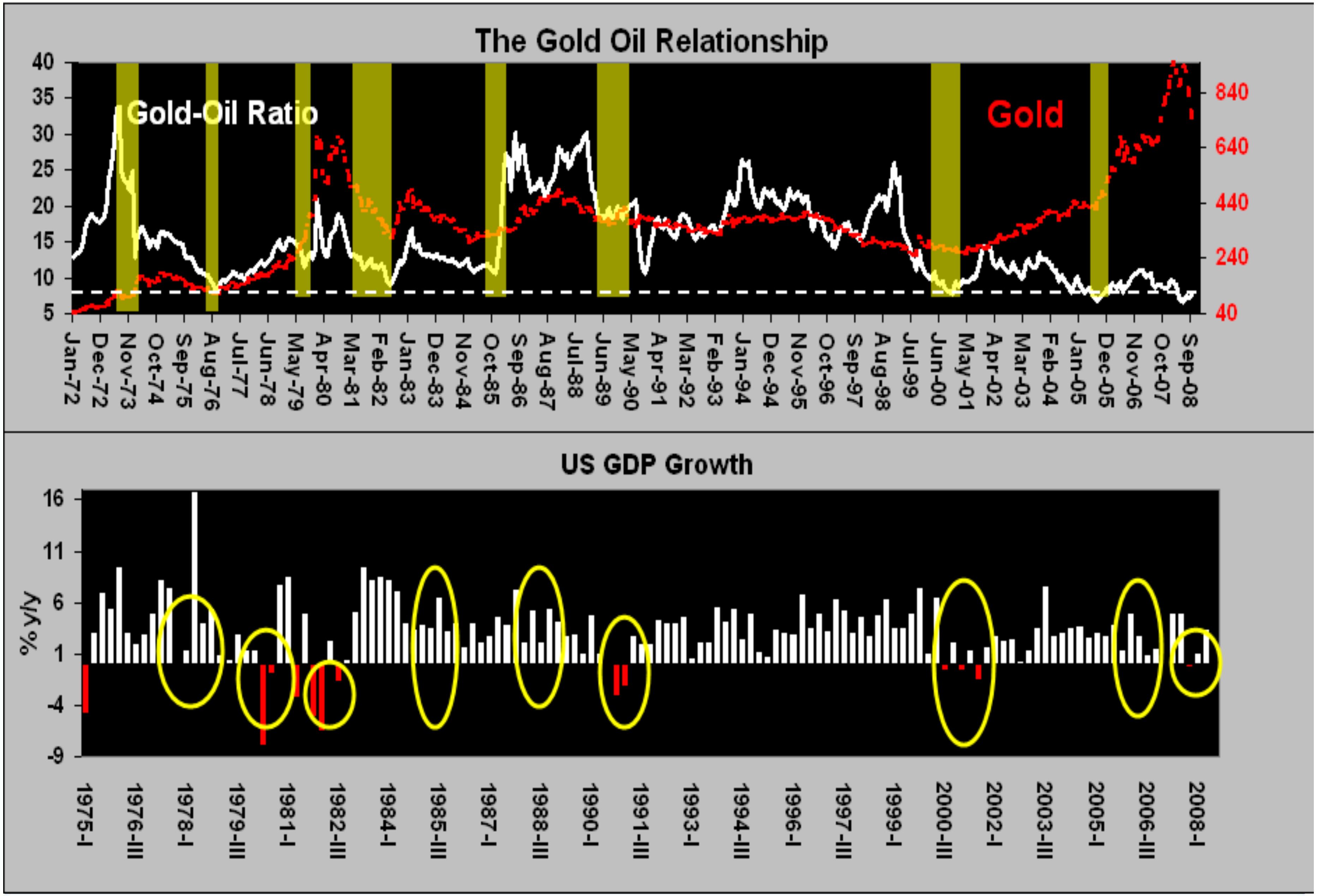

FX Performance vs Gold
NOK
BRL
AUD
CLP
30
-20
-70
-120
-170
%
Since 2000
Since 2002
Since 2005
Since 2008

Since 1972, each of the last five U.S. recessions was preceded by 20-30% declines in the gold-oil ratio from its most recent highs.

RATIONALE

During economic expansions, rising demand for industrial metals and energy boosts both oil and gold prices, which lead to a rising or steady gold-oil ratio.

But when substantial advances in oil are the result of supply factors (political risk, wars, acts of god, labor union action, OPEC action/rhetoric, refinery shutdowns and falling inventories), oil prices tend to overshoot, clearly outpacing any gains in gold in relative terms, producing cost and inflationary repercussions for importers and consumers.


The Gold Oil Relationship
Gold-Oil Ratio
Gold
40
35
30
25
20
15
10
5
840
640
440
240
40
Jan-72
Dec-72
Nov-73
Oct-74
Sep-75
Aug-76
Jul-77
Jun-78
May-79
Apr-80
Mar-81
Feb-82
Jan-83
Dec-83
Nov-84
Oct-85
Sep-86
Aug-87
Jul-88
Jun-89
May-90
Apr-91
Mar-92
Feb-93
Jan-94
Dec-94
Nov-95
Oct-96
Sep-97
Aug-98
Jul-99
Jun-00
May-01
Apr-02
Mar-03
Feb-04
Jan-05
Dec-05
Nov-06
Oct-07
Sep-08
US GDP Growth
% y/y
16
11
6
1
-4
-9
1975-I
1976-III
1978-I
1979-III
1981-I
1982-III
1984-I
1985-III
1987-I
1988-III
1990-I
1991-III
1993-I
1994-III
1996-I
1997-III
1999-I
2000-III
2002-I
2003-III
2005-I
2006-III
2008-I

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1973-75 Recession

1974 quadrupling of oil prices triggered sharp run-ups in US gasoline prices and a subsequent halt in consumer demand. Resulting USD drop pushed gold up by 15%.

But faster oil appreciation dragged down gold-oil ratio from a high of 34.0 in July 1973 to 23.2 in October of the same year, before extending its fall to12.2 in January 1974. By 1974-75, the U.S. and the major industrialized economies had fallen into recession.

1980-82 Recession

Tumbling dollar and record oil main culprits to the 1980-82 recession. Gold-oil ratio dropped from 15.3 in January 1979 to 11.4 in August 1979 due to a doubling in oil to $29 and a more modest 30% increase in gold.

The 1977-79 dollar crisis forced OPEC to further hike prices to offset FX value of oil revenues. Iran revolution endangered oil supplies, thus ensued a 200% increase in oil between 1979 and 1980, giving rise to the second oil shock within less than 10 years.

- Gold-oil ratio fell anew from early 1981 to mid 1982 as oil remained around the mid $30s while gold plummeted from the $830s territory to $400 on waning impact of Soviet-Afghan. In summer 1981, the gold-oil ratio dipped to a 4-year low of 11.4 amid plummeting gold and stable oil, then onto 9.0 in Summer 1982, in line with the deepening 1981 recession which extended into mid 1982.

1985- 86 Slowdown

In autumn 1985, the gold-oil ratio bottomed at 10.6 from its 16.9 high in February 1983 due to relative stability in gold & oil.

35% decline in gold-oil ratio proved successful in signaling the 1985-1986 slowdown and resulting Fed rate cuts in February-July 1986.

Unlike in prior cases of falling gold-oil ratios, GDP growth avoided a contraction partly due to the offsetting positive effects of 1986 oil price collapse following OPEC's flooding of oil.

1990-91 Recession

Iraq's 1990 invasion of Kuwait dragged down gold-oil ratio by 50% to a 5-year low of 10.6 in less than 3 months. That autumn, the Fed accelerated its interest rate cutting campaign slashing rates from 8.00% in August to 7.25% in December before pushing them down to 3.00% into autumn 1992.

Recession emerged in fall 1990 until end of Q1 1991.

2001-2 Recession

In December 1998, oil prices plummeted due to OPEC's decision to increase supplies combined with the break of Asian oil demand in the midst of the 1997-8 market crisis.

OPEC's Great Miscalculation droved down oil more than half to $11.00 per barrel in December 1998, lowest since 1986 glut. Gold-oil ratio hit 9-year low of 11.1 in 1999, raising effective signal for the ensuing recession-- almost ten years to the month from the 1991 recession.

- **2007-08 Recession**

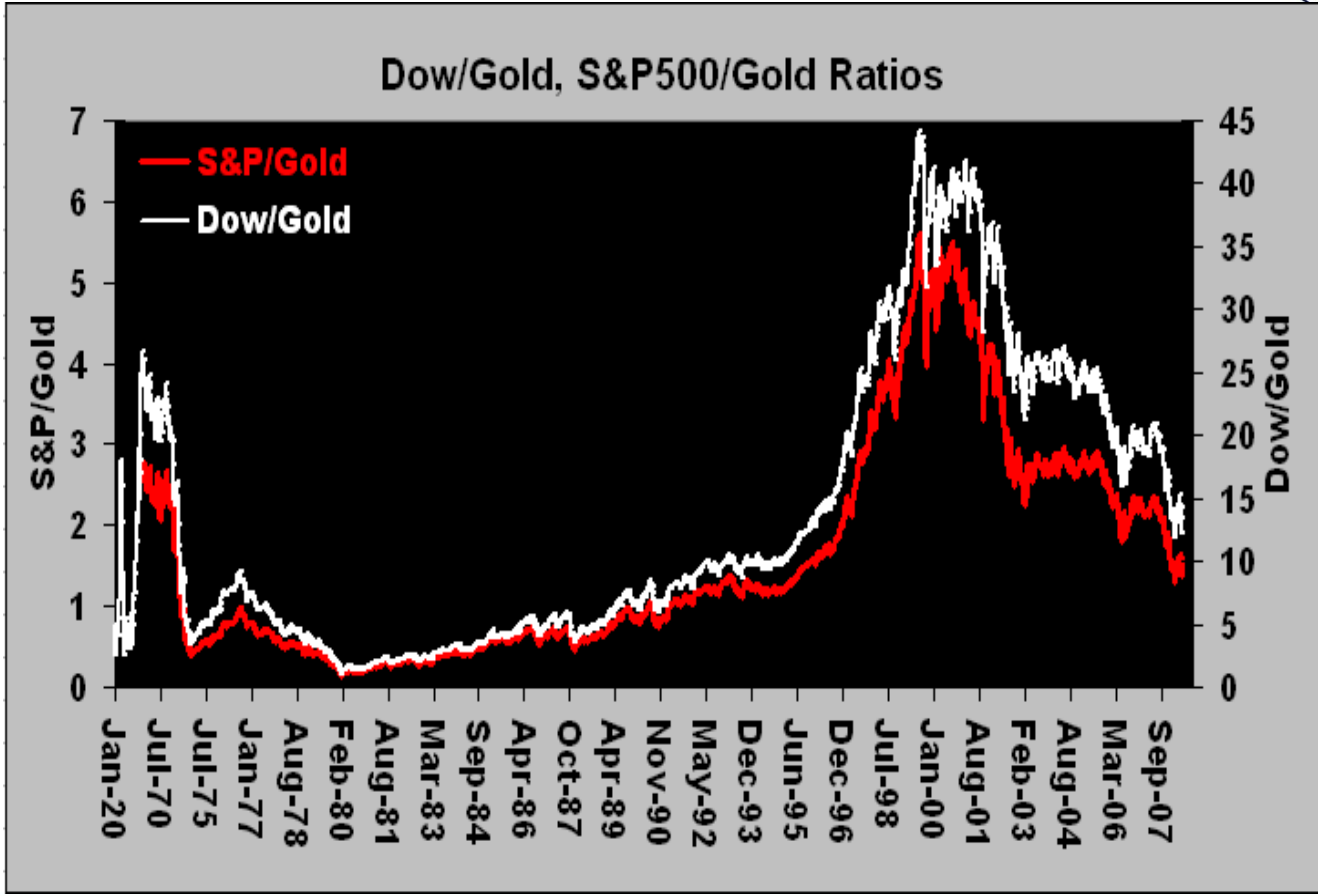
  2003 Iraq War and commodities boom produced 100% rise in oil to $61 between 2004 and 2006, dragging down gold/oil ratio to 6.7 in August 2005, lowest in 35 yeas.

  By the time more stable oil prices and faster gold appreciation in Q1 2006 lifted ratio off its lows above the 10.0 level, U.S. GDP growth fell from 4.8% in Q1 2006 to 2.4%, 1.1% and 0.6% for the following three quarters of the year. Fed was eventually forced to begin easing cycle in summer 2007.

- In Summer 2008, $147 oil and $930 gold produced a new low in gold-oil ratio at 6.0. Subsequent declines in fuel and metal lifted ratio to 7.5. Again, the rebound is intensifying a U.S. recession as we speak.

Equities vs. Commodities

Since the 20th century, the equities/gold ratio had peaked every 35-40-year cycle and followed by a long drawn out pullback towards the preceding lows, which lasted for 7-15 years.


Dow/Gold, S&P500/Gold Ratios
S&P/Gold
Dow/Gold
7
6
5
4
3
2
1
0
45
40
35
30
25
20
15
10
5
0
Jan-20
Jul-70
Jul-75
Jan-77
Aug-78
Feb-80
Aug-81
Mar-83
Sep-84
Apr-86
Oct-87
Apr-89
Nov-90
May-92
Dec-93
Jun-95
Dec-96
Jul-98
Jan-00
Aug-01
Feb-03
Aug-04
Mar-06
Sep-07

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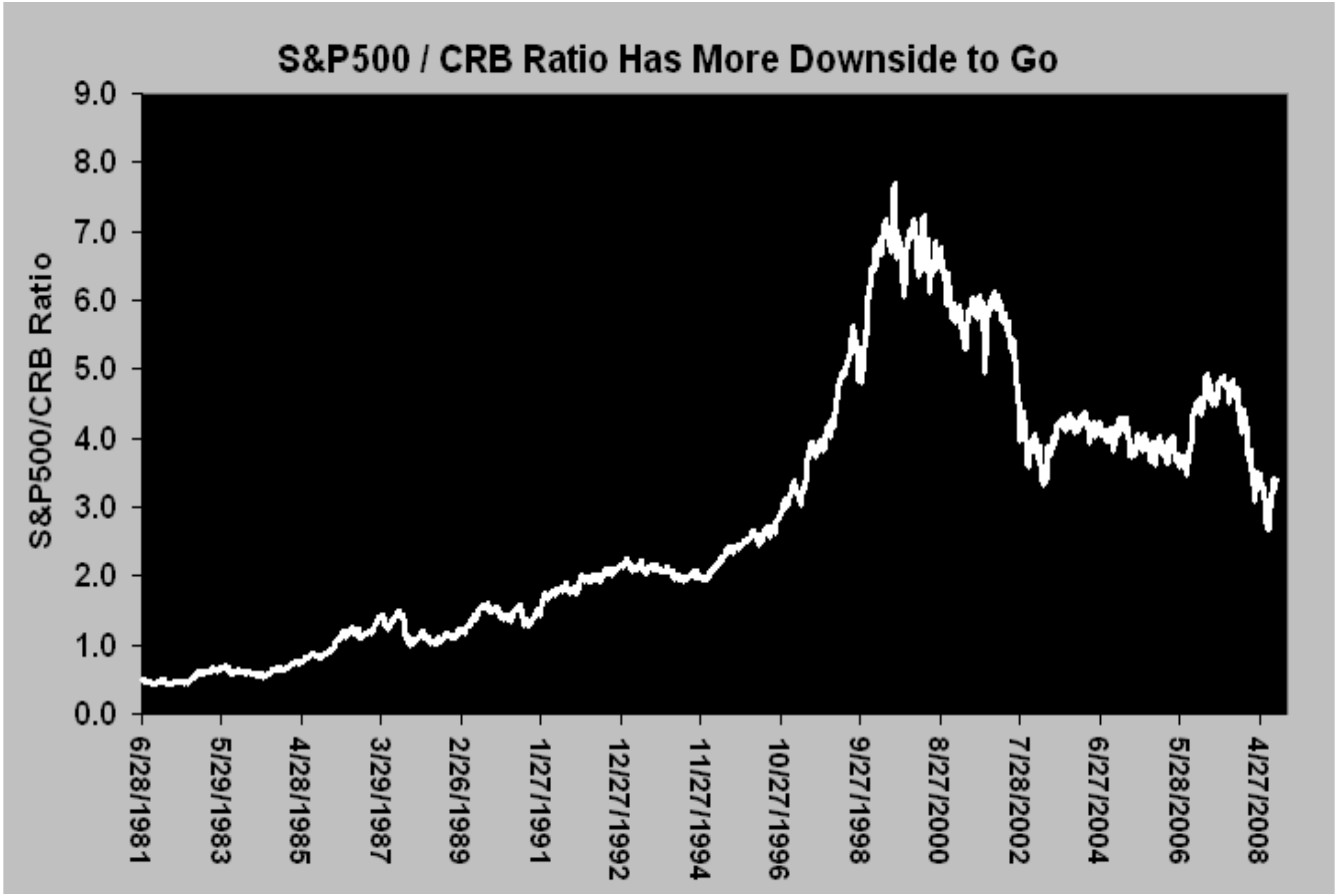
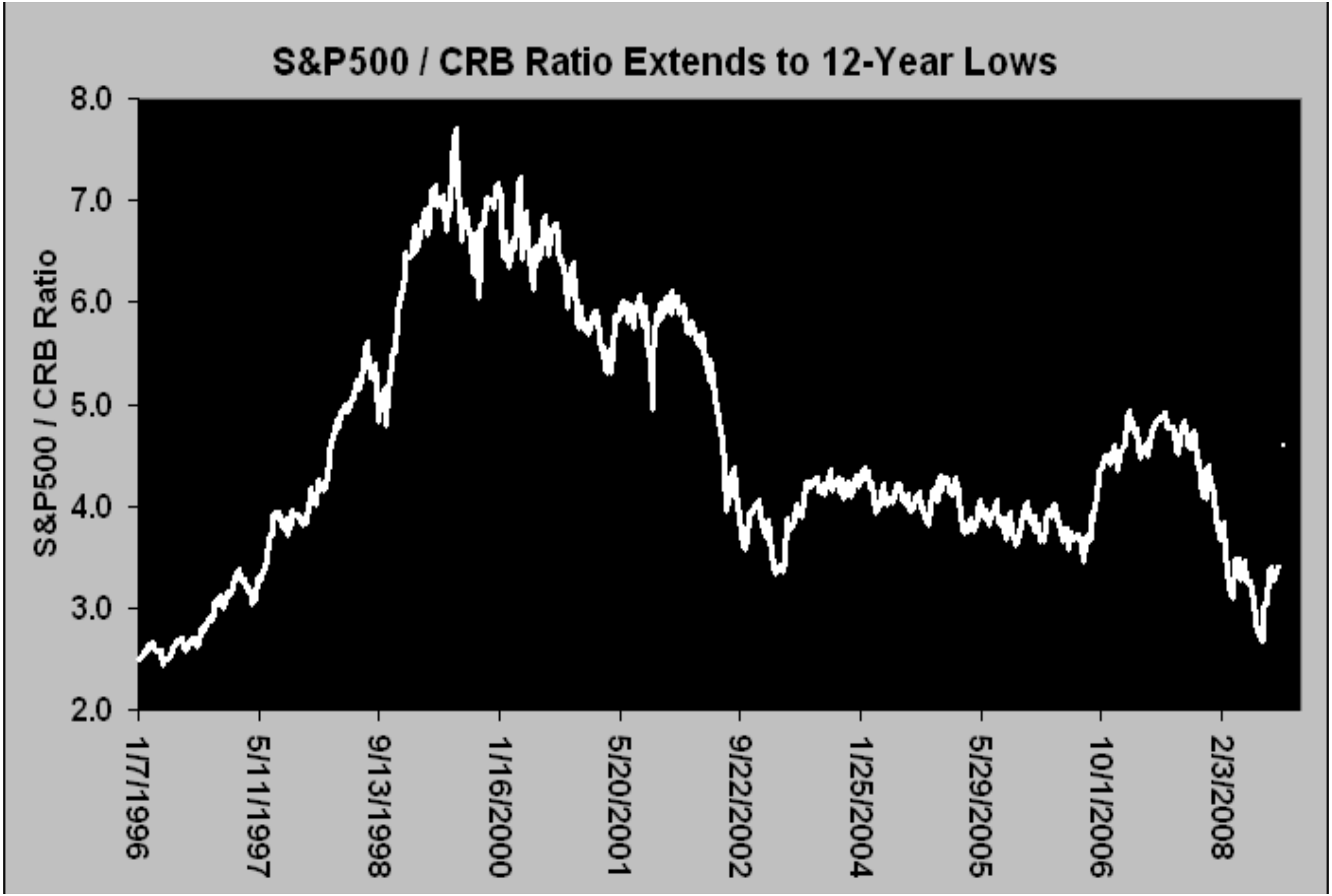

S&P500 / CRB Ratio Has More Downside to Go
S&P500/CRB Ratio
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
6/28/1981
5/29/1983
4/28/1985
3/29/1987
2/26/1989
1/27/1991
12/27/1992
11/27/1994
10/27/1996
9/27/1998
8/27/2000
7/28/2002
6/27/2004
5/28/2006
4/27/2008


S&P500 / CRB Ratio Extends to 12-Year Lows
S&P500 / CRB Ratio
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1/7/1996
5/11/1997
9/13/1998
1/16/2000
5/20/2001
9/22/2002
1/25/2004
5/29/2005
10/1/2006
2/3/2008

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From a time perspective, 2008-2015 is likely to witness continued out-performance in gold relative to equities in order for the decline in the equity-gold ratio to remain consistent with the past 100 years.