

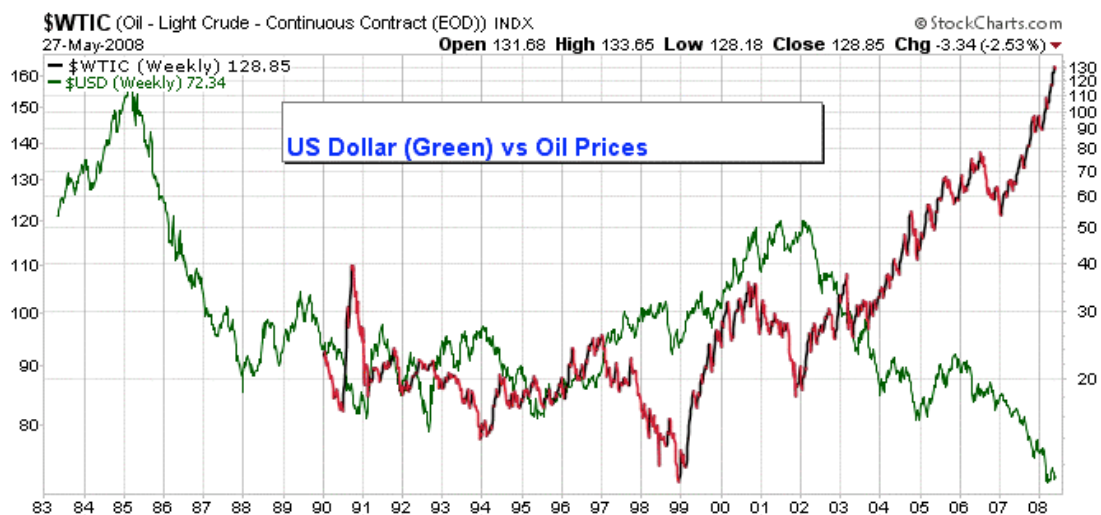
Oil, Oil, Everywhere

Introduction

Over the last five years, the rising price of oil has become one of the most critical topics on both Wall Street and Main Street. The topic could not be more important as it relates to the U.S and World economies. Our dependence on oil and refined products stems from their essential uses in transportation fuels, power generation, and chemical production. The analysis surrounding this topic has funneled down to three reasons causing the upward spiral in the price of oil and this article gives a summary of these reasons.

The Dollar

First, the falling price of the US Dollar vs. other currencies is one of the reasons for the rising price of crude oil. This is due to the fact that crude oil is denominated in U.S. Dollars, and as a consequence oil becomes a dollar proxy. For example, if today \$50 dollars could buy 1 barrel of oil or 50 euros (1 to 1) what would happen if this exchange rate changed tomorrow? If the exchange rate changed so that it would take \$100 dollars to buy 50 euros, then the result is that the dollar and items denominated in dollars have depreciated in relation to other currencies so the effect in this case would be that it would also take \$100 dollars to buy the barrel of crude oil. This relationship is not perfect but as the chart below illustrates, since 2002 the correlation between a declining dollar and rising oil is very visible.



Speculators

Since the inception of commodity exchanges, the speculator has played a very important role. The speculator has no need for the physical commodity itself, and is only interested in profiting from the short term price movements (up and down). In his/her endeavor to profit they provide the market with liquidity and price discovery, giving those who need to hedge their risk an orderly market to do so. There is no doubt that today there is more

speculative dollars in the oil market than there was three to five years ago, but the impact is not as ominous as has been reported. In recent testimony, Ben Bernanke, explained that after the Federal Reserve had studied the topic and their conclusion was that the precipitous rise in oil and other commodity prices was due to supply and demand fundamentals. His testimony was also echoed by the findings of The Interagency Task Force on Commodity Markets in late July 2008 that has been charged with determining the role speculators have played in rising commodity prices. The research to date is lending more evidence that the increase in speculation has increased the day to day volatility, and that constraining the speculators will not be a silver bullet that will lead to lower prices.

Supply and Demand

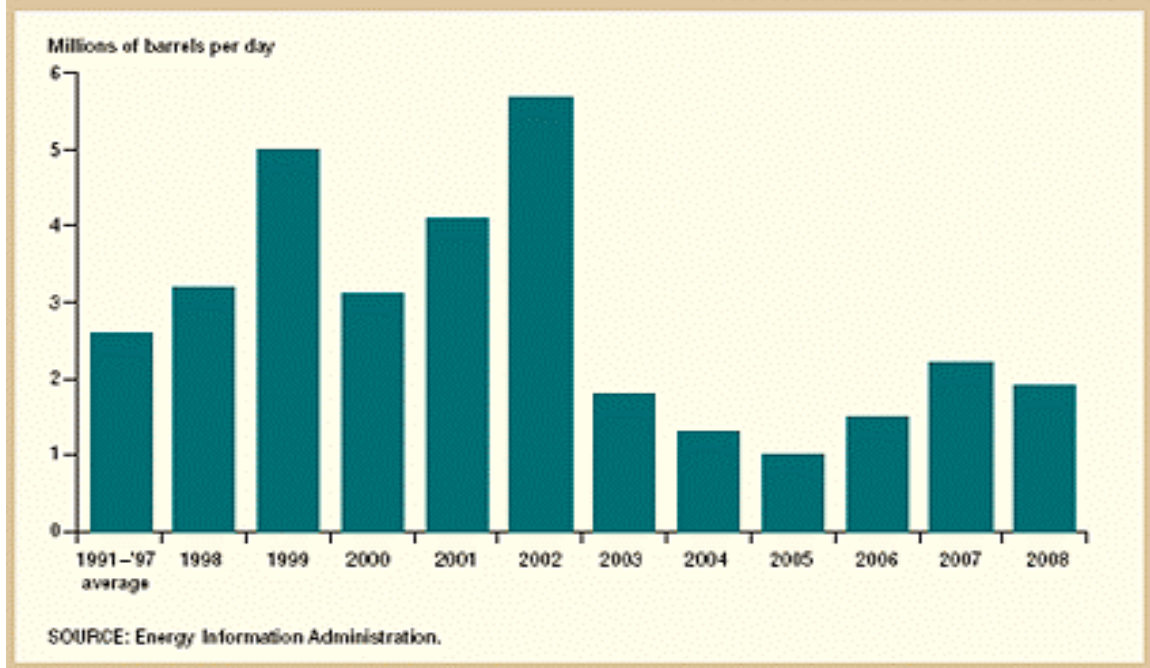
Finally, the table below illustrates a couple of points about world oil demand. Clearly over the last four years demand is increasing, and 94% of the increase is coming from emerging markets. This increase in demand has been widely reported, and economics 101 tells us that rising demand equates to rising price. That makes sense, but the table also gives another interesting data point. Global supply growth has failed to keep pace with demand growth and by 2007 demand actually exceeded supply.

World oil supply and demand. Million barrels per day

	2004	2005	2006	2007	2008
Total demand	82.5	83.9	84.8	85.8	87.8
OECD	49.4	49.7	49.3	49.2	49.7
North America	25.4	25.5	25.3	25.6	25.7
Europe	15.5	15.6	15.6	15.4	15.6
Pacific	8.5	8.6	8.4	8.3	8.5
Non OECD	33.1	34.2	35.5	36.6	38.1
Former USSR ²	3.9	4.0	4.1	3.9	4.0
Europe	0.7	0.7	0.7	0.8	0.8
China ³	6.4	6.7	7.2	7.5	7.9
Other Asia	8.6	8.8	8.8	9.2	9.4
Latin America	5.0	5.1	5.3	5.5	5.7
Middle East	5.7	6.0	6.3	6.7	7.0
Africa	2.8	2.9	2.9	3.1	3.2
Total supply	83.4	84.6	85.4	85.5	..

Production Rates as measured in Million Barrels/Day for most of the major fields in the world are in decline. New production is coming on line but personnel and equipment shortages have created bottlenecks and many producers of late have had to declare “Force Majeure” due to not being able to deliver on the futures and forward contracts that they had sold. The graph below illustrates how due to these production declines, OPEC’s spare capacity has been reduced putting upward pressure on where oil supply will come from in the future. Source: International Energy Agency.

OPEC's Excess Capacity Dwindles



Conclusion

This analysis suggests that in the short term the markets may be ahead of themselves. The price of oil could be at a point that inhibits demand and will temper its rise. However, demand reduction through global slowdown or recession is not a good trade off for lower prices. The dollar could also strengthen, but every Treasury Secretary since it began to decline has stated that we have a strong dollar policy. All evidence to the contrary. The long term answer is to continue to add to supply through production growth and to reduce real demand through the use of alternatives.

- The Stone Age did not end because we ran out of stones.