

**George Soros Testimony before the U.S. Senate Commerce Committee Oversight  
Hearing on FTC Advanced Rulemaking on Oil Market Manipulation  
Tuesday, June 3, 2008**

Madame Chairperson, distinguished members, I am honored to be invited to testify before your committee. As I understand it, you are seeking an explanation for the recent sharp rise in the oil futures market and in gasoline prices. In particular, you want to know whether this rise constitutes a bubble and, if it is a bubble, whether better regulation could mitigate the harmful consequences.

In trying to answer these questions, I must stress that I am not an expert in oil markets. I have, however, made a life-long study of bubbles. So I will briefly outline my theory of bubbles—which is at odds with the conventional wisdom—and then discuss the current situation in the oil market. I shall focus on financial institutions investing in commodity indexes as an asset class because this is a relatively recent phenomenon and it has become the “elephant in the room” in the futures market.

According to my theory, every bubble has two components: a trend based on reality and a misconception or misinterpretation of that trend. Financial markets are usually very good at correcting misconceptions. But occasionally misconceptions can lead to bubbles because they can reinforce the prevailing trend and by doing so they also reinforce the misconception until the gap between reality and the market’s interpretation of reality becomes unsustainable. The misconception is recognized as a misconception, disillusionment sets in, and the trend is reversed. A decline in the value of collaterals provokes margin calls and distress selling causes an overshoot in the opposite direction. The bust tends to be shorter and sharper than the boom that preceded it.

This sequence contradicts the prevailing theory of financial markets, which is based on the belief that markets are always right and deviations from equilibrium occur in a random manner. The various synthetic financial instruments like CDOs and CLOs which have played such an important role in turning the subprime crisis into a much larger

financial crisis have been built on that belief. But the prevailing theory is wrong. Deviations can be self-reinforcing. We are currently experiencing the bursting of a housing bubble and, at the same time, a rise in oil and other commodities which has some of the earmarks of a bubble. I believe the two phenomena are connected in what I call a super-bubble that has evolved over the last quarter of a century. The misconception in that super-bubble is that markets tend toward equilibrium and deviations are random.

So much for bubbles in general. With respect to the oil market in particular, I believe there are four major factors at play which mutually reinforce each other.

First, the increasing cost of discovering and developing new reserves and the accelerating depletion of existing oil fields as they age. This goes under the rather misleading name of “peak oil”.

Second, there is what may be described as a backward-sloping supply curve. As the price of oil rises, oil-producing countries have less incentive to convert their oil reserves underground, which are expected to appreciate in value, into dollar reserves above ground, which are losing their value. In addition, the high price of oil has allowed political regimes, which are inefficient and hostile to the West, to maintain themselves in power, notably Iran, Venezuela and Russia. Oil production in these countries is declining.

Third, the countries with the fastest growing demand, notably the major oil producers, and China and other Asian exporters, keep domestic energy prices artificially low by providing subsidies. Therefore rising prices do not reduce demand as they would under normal conditions.

Fourth, both trend-following speculation and institutional commodity index buying reinforce the upward pressure on prices. Commodities have become an asset class for institutional investors and they are increasing allocations to that asset class by following an index buying strategy. Recently, spot prices have risen far above the marginal cost of

production and far-out, forward contracts have risen much faster than spot prices. Price charts have taken on a parabolic shape which is characteristic of bubbles in the making.

So, is this a bubble? The answer is that the bubble is super-imposed on an upward trend in oil prices that has a strong foundation in reality. The first three factors I mentioned are real and would persist even if speculation and commodity index buying were eliminated. In discussing the bubble element I shall focus on institutional buying of commodity indexes as an asset class because it fits so perfectly my theory about bubbles.

Index buying is based on a misconception. Commodity indexes are not a productive use of capital. When the idea was first promoted, there was a rationale for it. Commodity futures were selling at discounts from cash and institutions could pick up additional returns from this so-called “backwardation.” Financial institutions were indirectly providing capital to producers who sold their products forward in order to finance production. That was a legitimate investment opportunity. But the field got crowded and that profit opportunity disappeared. Nevertheless, the asset class continues to attract additional investment just because it has turned out to be more profitable than other asset classes. It is a classic case of a misconception that is liable to be self-reinforcing in both directions.

I find commodity index buying eerily reminiscent of a similar craze for portfolio insurance which led to the stock market crash of 1987. In both cases, the institutions are piling in on one side of the market and they have sufficient weight to unbalance it. If the trend were reversed and the institutions as a group headed for the exit as they did in 1987 there would be a crash.

To be sure a crash in the oil market is not imminent. The danger currently comes from the other direction. The rise in oil prices aggravates the prospects for a recession. Only when a recession is well and truly in place is a decline in consumption in the developed world likely to outweigh the other factors I have listed. That makes it desirable to discourage commodity index trading while it is still inflating the bubble.

There is a strong prima facie case against institutional investors pursuing a commodity index buying strategy. It is intellectually unsound, potentially destabilizing and distinctly harmful in its economic consequences.

When it comes to taking any regulatory measures, however, the case is less clear cut. Regulations may have unintended, adverse consequences. For instance, they may push investors further into unregulated markets which are less transparent and offer less protection. It may be possible to persuade institutional investors that they are violating the “prudent man’s rule” by acting as a herd just as they did in 1987. If not, buying commodities--as distinct from investing in commodity producing enterprises-- should be disqualified as an asset class for ERISA institutions. The various techniques for circumventive speculative position limits should be banned, provided the ban can be made to apply to unregulated as well as regulated markets.

Raising margin requirements would have no effect on the commodity index buying strategy of financial institutions because they use cash. Nevertheless, it would be justified because it would discourage speculation, and speculation can distort prices. Varying margin requirements and minimum reserve requirements are tools that ought to be used more actively to prevent asset bubbles from inflating. This is one of the main lessons to be learned from the recent financial crisis.

Finally, dealing with the bubble element should not divert our attention from the inter-related problems of global warming, energy security and so-called “peak oil”. Although they are beyond the scope of these hearings, these are pressing issues that require urgent action.

I hope my remarks are helpful to your deliberations. Thank you.