

Testimony

By

Steve H. Hanke
Professor of Applied Economics
The Johns Hopkins University
and
Senior Fellow
The Cato Institute

On

Rising Food Prices: Budget Challenges

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Mr. Chairman and members of the House Committee on the Budget, thank you for this opportunity to present my views on rising food prices. To address the problems associated with rising food prices, we must understand what has caused prices to rise. I will address a major cause of the rise in food and other commodity prices since 2001.

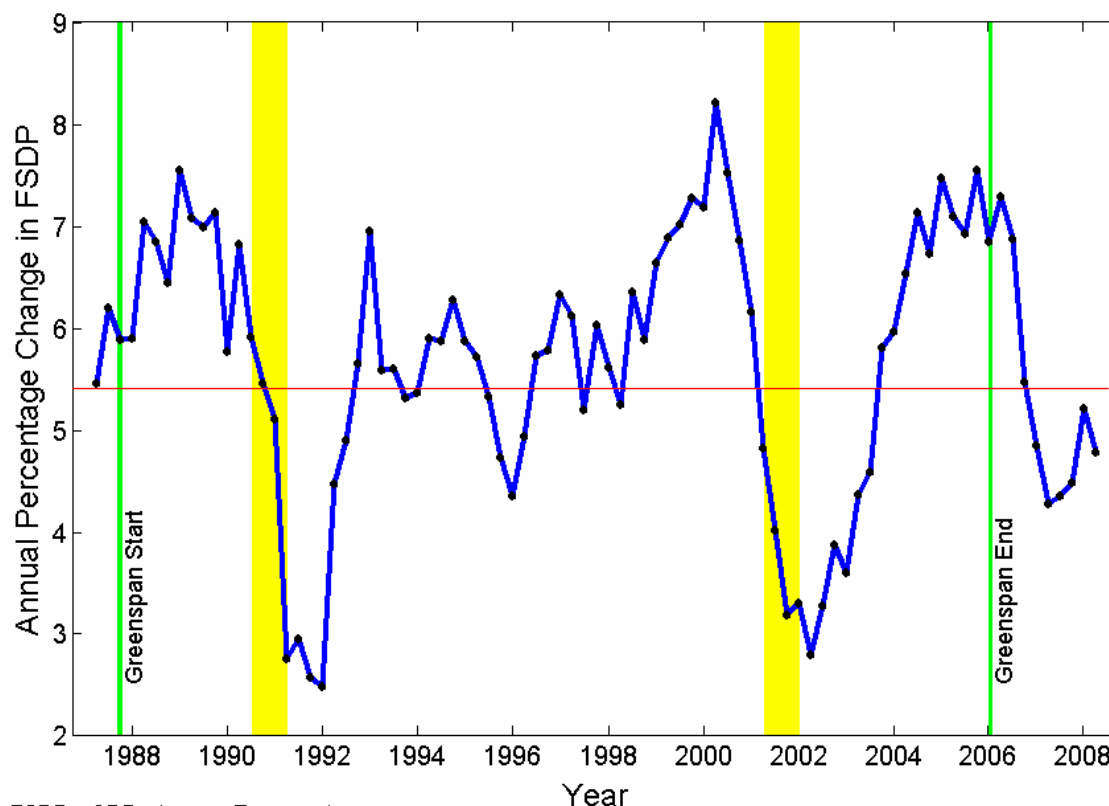
The evidence suggests that the Federal Reserve is a major culprit in the commodity inflation story. But you wouldn't know it from reading the press or listening to officialdom and the political chattering classes. This isn't surprising. After all, economic history is written, to a large extent, by central bankers. In consequence, one should take official accounts with a large dose of salt.

Just consider the "bubble-blowing" charges leveled at the former chairman of the Federal Reserve System Alan Greenspan. The former chairman has proclaimed his innocence. Let's look at the evidence.

What is a bubble? A bubble is created when the Fed's laxity allows aggregate demand to grow too rapidly. Specifically, a demand bubble occurs when nominal final sales to U.S. purchasers ($GDP - exports + imports - \text{change in inventories}$) exceeds a trend rate of nominal growth, consistent with "moderate" inflation, by a significant amount.

During Greenspan's 18-year tenure as Fed chairman, nominal final sales grew at a 5.4% annual trend rate. This reflects a combination of real sales growth of 3% and inflation of 2.4% (see Chart 1). But there were deviations from the trend.

Chart 1. Final Sales to Domestic Purchasers (FSDP) from 1987Q1 to 2008Q1 (year/year)



FSDP = GDP + Import - Export - Δ Inventory

Source: Bureau of Economic Analysis; and author's calculations

The first deviation began shortly after Greenspan became chairman. In response to the October 1987 stock market crash, the Fed turned on its money pump and created a bubble: over the next year final sales shot up at a 7.5% rate, well above the trend line. Having gone too far, the Fed then lurched back in the other direction. The ensuing Fed tightening produced a mild recession in 1991.

From 1992 through 1997 growth in the nominal value of final sales was quite stable. But successive collapses in certain Asian currencies, the Russian ruble, the Long Term Capital Management hedge fund and finally the Brazilian real triggered another excessive Fed liquidity injection. This resulted in a boom in nominal final sales and a bubble in 1999-2000. This was followed by another round of Fed tightening, which coincided with the bursting of the equity bubble and a slump in 2001.

The last big jump in nominal final sales was set off by the Fed's liquidity injection to fend off the false deflation scare in 2002. Fed Governor Ben S. Bernanke (now chairman) set off a warning siren that deflation was threatening the U.S. economy when he delivered a dense and noteworthy speech, "Deflation: Making Sure it Doesn't Happen Here," on November 21, 2002. He convinced his Fed colleagues that the deflation danger was lurking. As Greenspan put it, "We face new challenges in maintaining price stability, specifically to prevent inflation from falling too low." By July 2003, the Fed funds rate was at a record low of 1%, where it stayed for a year. This produced the mother of all liquidity cycles and yet another massive demand bubble.

During the Greenspan years, and contrary to his claims, the Fed overreacted to real or perceived crises and created three demand bubbles. The last represents one bubble too many—and one that is impacting us today.

Not surprisingly, the mother of all liquidity cycles has been accompanied by a weak dollar. Indeed, the Federal Reserve's Trade Weighted Exchange Index has fallen by over 26% since 2001. And as every commodity trader knows, all commodities, to varying degrees, trade off changes in the value of the dollar. When the value of the dollar falls, the nominal dollar prices of internationally traded commodities--like gold, rice, corn and oil--must increase because more dollars are required to purchase the same quantity of any commodity. Accordingly, a weak dollar should signal higher commodity prices. And it has. Since 2001, when the dollar started its downward slide, the fifty-five commodities that make up the Food and Agricultural Organization of the United Nation's "Food Price Index" have increased by 132.26%

Calculations that follow a method employed by the Federal Reserve Bank of Dallas indicate the strength of the linkage between the change in the value of the dollar and commodity prices (see Table 1). By computing what the prices of various commodities would have been on June 30, 2008, if the U.S. dollar-euro exchange rate would have remained the same as it was on December 28, 2001, we can determine (on a counterfactual basis) what the exchange-rate (weak dollar) contribution to the total change in various commodity prices has been since 2001. For example, soybean prices have increased by 281.24% since 2001, and the weak dollar has contributed 58.84% to the price increase of soybeans. In the case of soybeans, real factors (supply and demand fundamentals) have also contributed to the price increase since 2001.

Table 1
Contribution of the Weak Dollar to Commodity-Price Increase (2002 - June 2008)

Commodity		28-Dec-01	30-Jun-08	Price of Commodity on 30-Jun-08 if the USD/EURO exchange rate remained at 0.8912 (28-Dec-01)	Exchange-rate Contribution to the Total Change in Commodity Price	Direction of Real Supply-Demand Fundamentals
Soybeans	(cents/bushel)	421.00	1,605.00	908.29	58.84%	+
Corn	(cents/bushel)	209.00	724.75	410.15	61.00%	+
Coffee	(cents/pound)	46.20	150.90	85.40	62.56%	+
Wheat	(cents/bushel)	289.00	843.50	477.35	66.03%	+
Cocoa	(USD/mt.)	1,310.00	3,245.00	1,836.39	72.80%	+
Oats	(cents/bushel)	195.75	444.00	251.27	77.64%	+
Sugar #11	(cents/pound)	7.39	12.04	6.81	112.40%	-
Live Cattle	(cents/pound)	68.17	100.60	56.93	134.66%	-
Orange Juice	(cents/pound)	89.10	118.35	66.98	175.64%	-
Lean Hogs	(cents/pound)	57.05	71.78	40.62	211.59%	-
Gold	(USD/troy oz.)	279.00	928.30	525.34	62.06%	+
Crude Oil	(USD/barrel)	19.84	140.00	79.23	50.58%	+
USD / EURO		0.8912	1.5748		-43.41% *	

The following is the computation for the weak-dollar contribution to the price increase of soybeans

Price of Soybeans on 30-Jun-08 if the USD/EURO exchange rate remains at 0.8912 (28-Dec-01)

$$= 1,605 \times 0.8912 / 1.5748$$

$$= 908.29$$

Total Change on Corn Price from 28-Dec-01 to 30-Jun-08

$$= 1,605 - 421$$

$$= 1,184$$

Exchange-rate Contribution to the Change in the Commodity Price

$$= 1,605 - 908.29$$

$$= 696.71$$

Exchange-rate Contribution as a Percentage to Total Change in Price

$$= 696.71 / 1,184$$

$$= 58.84\%$$

* Note: The percentage represents U.S. dollar depreciation from 28-Dec-01 to 30-Jun-08

Source: Commodity Research Bureau, "Components: Monthly Charts and Data"; and author's calculations

Lean hogs are at the other end of the spectrum. If the dollar-euro exchange rate would have remained at its December 28, 2001 level, the price of lean hogs would have declined from 57.05 cent/lbs. to 40.62 cent/lbs. during the December 2001 – June 2008 period. In fact, the price of lean hogs was 71.78 cents/lbs. on June 30, 2008. Accordingly, the exchange-rate contribution to the change in the price of lean hogs since 2001 was 211.59%. This contribution exceeds 100% because real factors were working to depress the price of lean hogs.

Contrary to Capitol Hill testimony by Fed chairman Bernanke as recently as July 15, 2008, the weak dollar has played a significant role in pushing up food and commodity prices. A stronger dollar would provide relief from sky-high food and commodity prices.

In closing, I would like to address the price of crude oil—an important input in the production and distribution of food. Since 2001, the weak dollar has contributed almost \$61 per barrel to the current price of oil. In addition to a stronger dollar, the U.S. government's Strategic Petroleum Reserve could be transformed from a “dead” resource into a dynamic, market-based force that would put considerable downward pressure on crude oil prices.

The SPR is a response to the oil embargo imposed by the Organization of Arab Petroleum Exporting Countries after the 1973 Arab-Israeli War. It comprises five underground storage facilities, hollowed out from salt domes, located in Texas and Louisiana. By 2005, the SPR's capacity reached its current level of 727 million barrels. At present, 706.8 million barrels are stored in the SPR. That's over twice the size of private crude oil inventories. To put SPR's size into perspective, its current storage would cover about 71 days of U.S. crude oil imports or 47 days of total U.S. crude oil consumption. The SPR's drawdown capacity is 4.3 million barrels per day. That rate is slightly greater than the combined daily crude oil exports from Iran and Kuwait. In short, the SPR is huge.

Not being faced with capital carrying charges and never wanting to be caught short, government officials, like proud pack rats, want to just sit on this mother of all commodity hoards. They argue that the SPR represents an insurance policy for national emergencies. But without a specified release rule, just what is the insurance policy written for?

What should be done with the hoard of crude oil in the SPR? It's time to remove the release rules from the grip of politics. Market-based release rules would transform the SPR into an oil bank. It would provide the country with a huge precautionary inventory of oil, generate revenue to defray some of the government's stockpiling costs, smooth out crude oil price fluctuations, and push down spot prices relative to prices for oil to be delivered in the future.

How would the oil bank work? The government would sell out of the money call options on the SPR stockpile. It might, say, sell December 2008 call options with a strike price of \$150 a barrel. If the price surged above that level, the option buyer would exercise and take delivery of crude oil from the government's stockpile. If the price never reached \$150, the option would expire worthless and no crude oil would be released.

If we want lower oil (and food) prices, we can obtain them immediately by replacing politically-based release rules for the SPR with market-based rules.