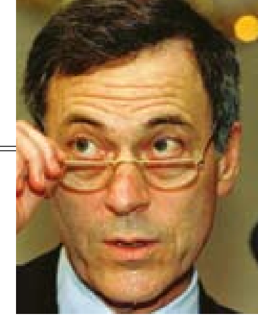
Perspective

by Steve Hanke



The greenback and commodity prices

The Federal Reserve's modus operandi is to panic at the sight of real or perceived economic troubles. As long as inflation remains at, or below, its "target level", the Fed provides emergency relief. It does this by pushing interest rates below where the market would have set them.

With interest rates artificially low, consumers reduce savings in favor of consumption, and entrepreneurs increase their rates of investment spending. In consequence, an imbalance between savings and investment occurs and the economy is pushed onto an unsustainable growth path.

Back in 2002, productivity in the US was in a boom phase and inflation was decelerating. For economists of the Austrian school, this was good news. Indeed, it appeared that the US might have both strong real growth and a mild deflation. Former Fed Chairman Alan Greenspan didn't see it that way. He was convinced by current Fed Chairman (then Governor) Ben S. Bernanke that "we face new challenges in maintaining price stability, specifically to prevent inflation from falling too low."

In the face of a possible deflation, the Fed panicked and started pushing interest rates down. By July 2003 the Fed funds rate was at a record low of 1%, where it stayed for a year.

This set off the mother of all modern liquidity cycles, and, as members of the Austrian school anticipated, a credit boom that ended badly.

The super-low Fed funds rate also resulted in a rout of the US dollar. For example, from 28 December 2001 until 11 July 2008, the greenback shed 44% of its value against the euro. Commodity prices exploded during this period, with the Commodity Research Bureau's index increasing by 122%.

And why not? After all, when the value of the dollar falls, the nominal dollar prices of internationally traded commodities - most being priced in dollars - must increase from where they would have otherwise been, because more dollars are required to purchase the same quantity of any commodity.

Counter-factual

The Fed has repeatedly kicked the weak dollar/strong commodity price story into the tall grass. For example, Fed Vice Chairman Kohn had this to say at a conference on May 20th: "In sum, lower interest rates and the reduced foreign exchange value of the dollar may have played a role in the rise in the prices of oil and other commodities, but it probably has been a small one."

And when presenting his Semi-annual Monetary Policy Report to Congress on July 15, Fed Chairman Bernanke repeated the standard Fed line, namely that the weak dollar might have only contributed "somewhat" to commodity price inflation.

To examine the link between the greenback and commodity prices, a counter-factual – a 'what if' thought experiment – is well suited.

Counter-factuals are often employed to examine alternatives to actual history. For example, what would have happened if, contrary to fact, some present condition were changed?

The use of counter-factuals has a rich, if not controversial, history. Perhaps the most famous counter-factual was employed by Professor Robert Fogel of the University of Chicago in Railroads and American Economic Growth.

In that book, Professor Fogel calculated what the transportation system of the United States in 1890 would have looked like without railroads. His calculations created a great controversy but they were robust and helped him win the 1993 Nobel Prize in Economics.

Table 1 contains the results of counter-factual calculations. By computing what the prices of various commodities would have been on 11 July 2008, if the US dollar-euro exchange rate would have remained the same as it was on 28 December 2001, we can determine (on a counter-factual basis) what the exchange rate (weak dollar) contribution to the total change in various commodity prices has been since 2001.

For example, rough rice prices have increased by 385% since 2001, and the weak dollar has contributed 55.53% to the price increase of rough rice. In the case of rough rice, real factors (supply and demand fundamentals) have also contributed to the price increase since 2001 - namely 44.47%. This is signified

Counterfactual: The Contribution of the Weak Dollar to Commodity Price Increases (28-Dec-2001 to 11-Jul-2008)

Commodity		28-Dec-01	11-Jul-08	Price of Commodity on 11-Jul-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
Rough Rice	(cents/cwt.)	369.00	1790.00	1,000.91	55.53%	+
Soybeans	(cents/bushel)	421.00	1615.50	903.33	59.62%	+
Corn	(cents/bushel)	209.00	691.00	386.38	63.20%	+
Coffee	(cents/pound)	46.20	142.25	79.54	65.29%	+
Wheat	(cents/bushel)	289.00	830.75	464.53	67.60%	+
Oats	(cents/bushel)	195.75	449.50	251.35	78.09%	+
Cocoa	(USD/mt.)	1,310.00	2912.00	1,628.29	80.13%	+
Sugar #11	(cents/pound)	7.39	13.99	7.82	93.44%	+
Live Cattle	(cents/pound)	68.17	101.20	56.59	135.07%	–
Orange Juice	(cents/pound)	89.10	123.05	68.81	159.78%	–
Lean Hogs	(cents/pound)	57.05	74.65	41.74	186.98%	–
Gold	(USD/troy oz.)	279.00	960.40	537.02	62.13%	+
Crude Oil	(USD/barrel)	19.84	145.66	81.45	51.03%	+
USD / EURO		0.8912	1.5938		44.08%*	

The following is the computation for the weak-dollar contribution to the price increase of ~~soybeans~~. Price of Rough Rice on 11-Jul-08 if the USD/EURO exchange rate remains at 0.8912 (28-Dec-01)
= 1,790 x 0.8912 / 1.5938
= 1000.91

Total Change on Rough Rice Price from 28-Dec-01 to 11-Jul-08
= 1,790 - 369
= 1,421

Exchange-rate Contribution to the Change in the Commodity Price
= 1,790 - 1,000.91
= 789.09

Exchange-rate Contribution as a Percentage to Total Change in Price
= 789.09 / 1,421
= 55.53%

Note: *The percentage represents the U.S. dollar depreciation from 28-Dec-01 to 11-Jul-08
Source: Commodity Research Bureau, "Components: Monthly Charts and Data"; Bloomberg; and author's calculations

by a "+" sign in the last column of Table 1 for rough rice.

Lean hogs are at the other end of the spectrum. If the dollar-euro exchange rate would have remained at its 28 December 2001 level, the price of lean hogs would have declined from 57.05 cent/lbs. to 41.74 cent/lbs. during the 28 December 2001 - 11 July 2008 period. In fact, the price of lean hogs was 74.65 cents/lbs. on 11 July 2008.

Accordingly, the exchange-rate contribution to the change in the price of lean hogs since 2001 was 186.98%. This contribution exceeds 100% because real factors were working to depress the price of lean hogs, and that is why a "–" sign is entered in the last column for lean hogs.

Given the dollar's recent upward surge in value, we don't have to rely solely on a counter-factual thought experiment to show how nonsensical "Fedspeak" can be. As Table 2 indicates, the dollar has appreciated against the euro by 6.9% during the 11 July -11 August 2008 period.

With the exception of live cattle and lean hogs, the prices of all commodities listed have fallen. And the CRB Foodstuffs and Spot indexes have fallen by -7.12% and -6.31%, respectively, during the period in question. That's almost a perfect mirror image of the dollar's strength.

For investors, the lesson is clear: you must take official explanations with a dose of salt and think things through on your own. **GA**

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Changes in the Value of the Dollar and Commodity Prices (11-Jul-200~~1~~ to 11-Aug-2008)

		11-Jul-08	11-Aug-08	Percentage Change
USD / EURO		1.5938	1.4909	6.90% *
CRB Foodstuffs Index		433.37	402.53	-7.12% **
CRB Spot Index (All Commodities)		472.45	442.65	-6.31% **
Commodity		11-Jul-08	11-Aug-08	Percentage Change in Futures Price
Gold	(USD/troy oz.)	960.40	822.60	-14.35%
Crude Oil	(USD/barrel)	145.66	114.45	-21.43%
Rough Rice	(cents/cwt.)	1,790.00	1625.00	-9.22%
Soybeans	(cents/bushel)	1,615.50	1215.00	-24.79%
Corn	(cents/bushel)	691.00	497.25	-28.04%
Coffee	(cents/pound)	142.25	135.85	-4.50%
Wheat	(cents/bushel)	830.75	793.75	-4.45%
Oats	(cents/bushel)	449.50	356.00	-20.80%
Cocoa	(USD/mt.)	2,912.00	2670.00	-8.31%
Sugar #11	(cents/pound)	13.99	13.37	-4.43%
Live Cattle	(cents/pound)	101.20	102.30	1.09%
Orange Juice	(cents/pound)	123.05	98.15	-20.24%
Lean Hogs	(cents/pound)	74.65	89.98	20.53%

*Note: *The percentage represents U.S. dollar appreciation from 11-Jul-08 to 11-Aug-08*
***The percentage represents CRB Index decline from 11-Jul-08 to 11-Aug-08*
Source: Bloomberg; and author's calculations