

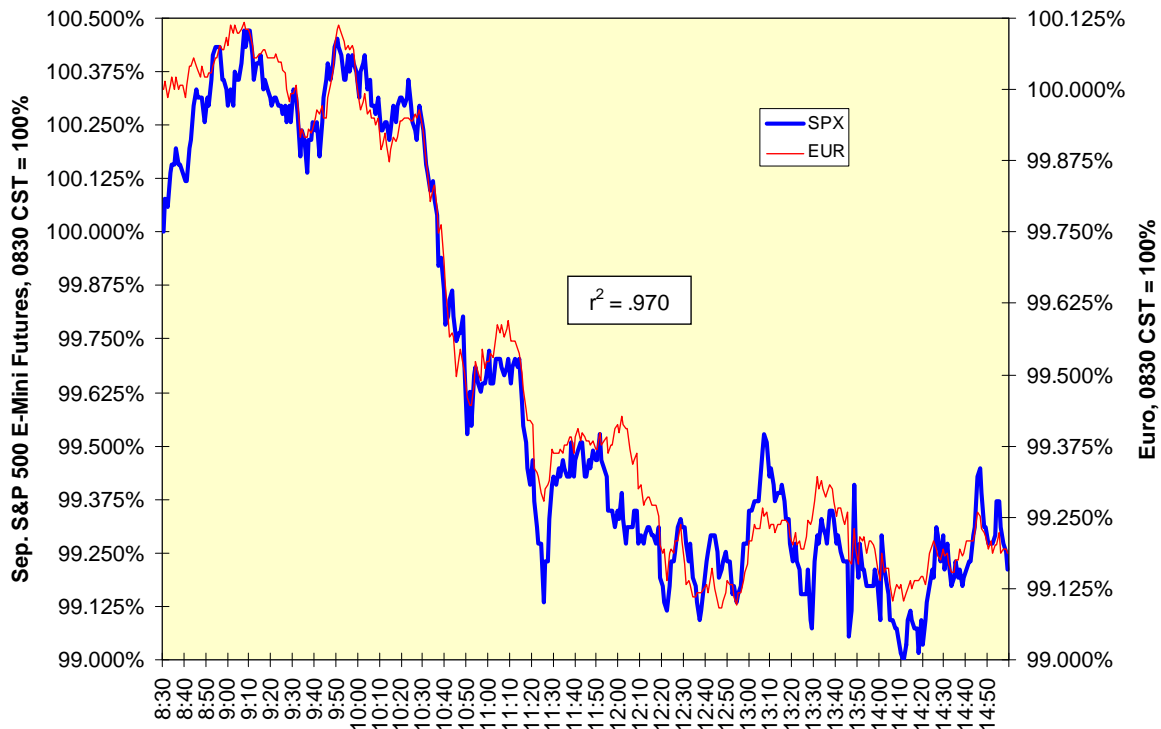
The Dollar And Non-Petroleum Import Prices

The author has stated for years none of the advances in financial theory and practice have emanated from winning traders. This is a modification of an earlier assertion all advances are made by the losers; the logic behind such a misanthropic outlook is winning traders go home or to a bar or to a bar and then home or to a bar and someone else's home while the losers sit around stewing about what went wrong until they come up with a reason. The reason for the modification is simple: As machines, not people, increasingly make trading decisions and the programming may be done by people who never have traded for their own account in their life, they cannot be counted amongst the winning traders.

The results can be confusing. High-frequency and algorithmic trades are not designed to capture underlying economic relationships, only small statistical perturbations. They do not capture actual relationships so much as they do perceived statistical relationships in fashion at the moment. Consider the two intraday charts from June 15, 2011, a day otherwise unnotable save for a strong downturn in the euro on one of the many days during that time when a bailout of Greece appeared at risk. The prices for September 2011 S&P 500 E-Mini futures, July 2011 crude oil and the cash price for the euro are re-indexed to 0830 CST and are displayed at one-minute intervals.

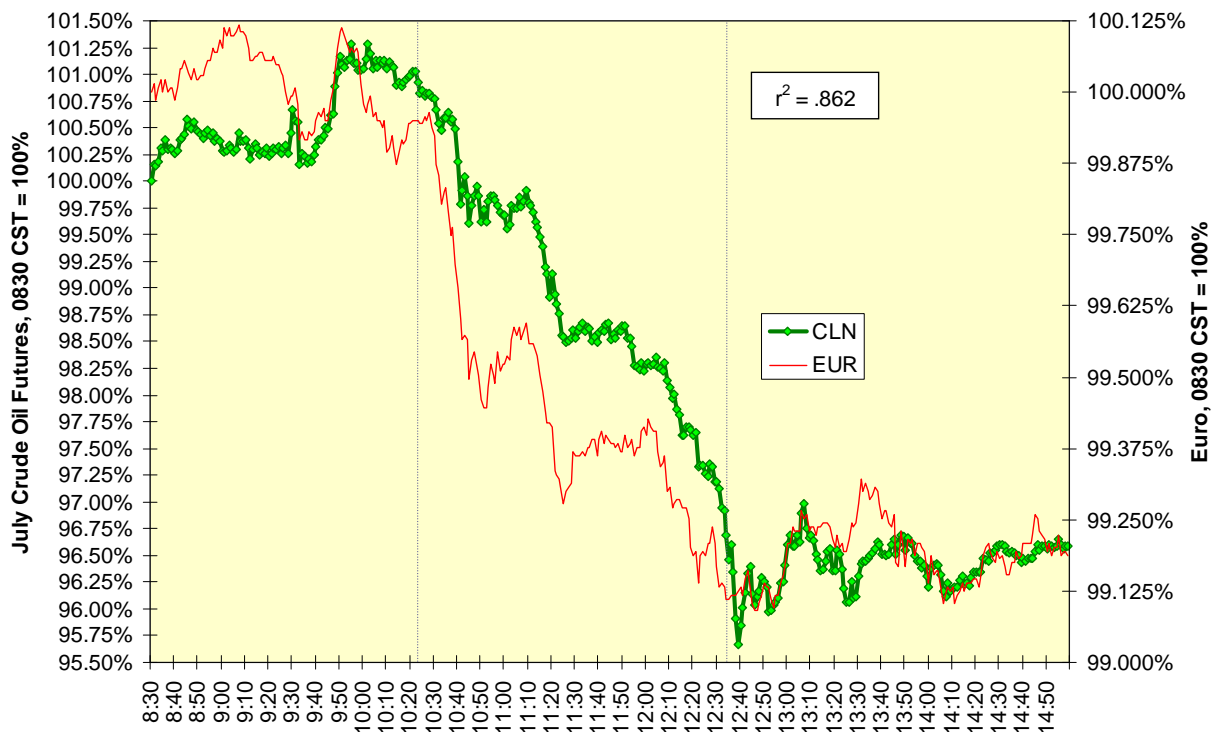
Once the euro broke lower, the S&P 500 followed quickly. Over the day, the r^2 of the two markets was an astounding 0.97; any practicing econometrician starts to wonder if there is something wrong with either the data or the analysis at that point.

You, Too, Can Be An Algorithmic Trader



The relationship was not quite as strong for the euro to crude oil; crude oil lagged the euro for about two hours intraday as if the memo had been delayed in transit. Even so, the r^2 here is a still-high 0.86. All of the tools and technology available to high-frequency traders could be distilled down to saying, "if the euro breaks, sell both crude oil and the S&P 500." You really do not need an advanced degree for that, do you?

Crude Oil Lagged Euro For About Two Hours



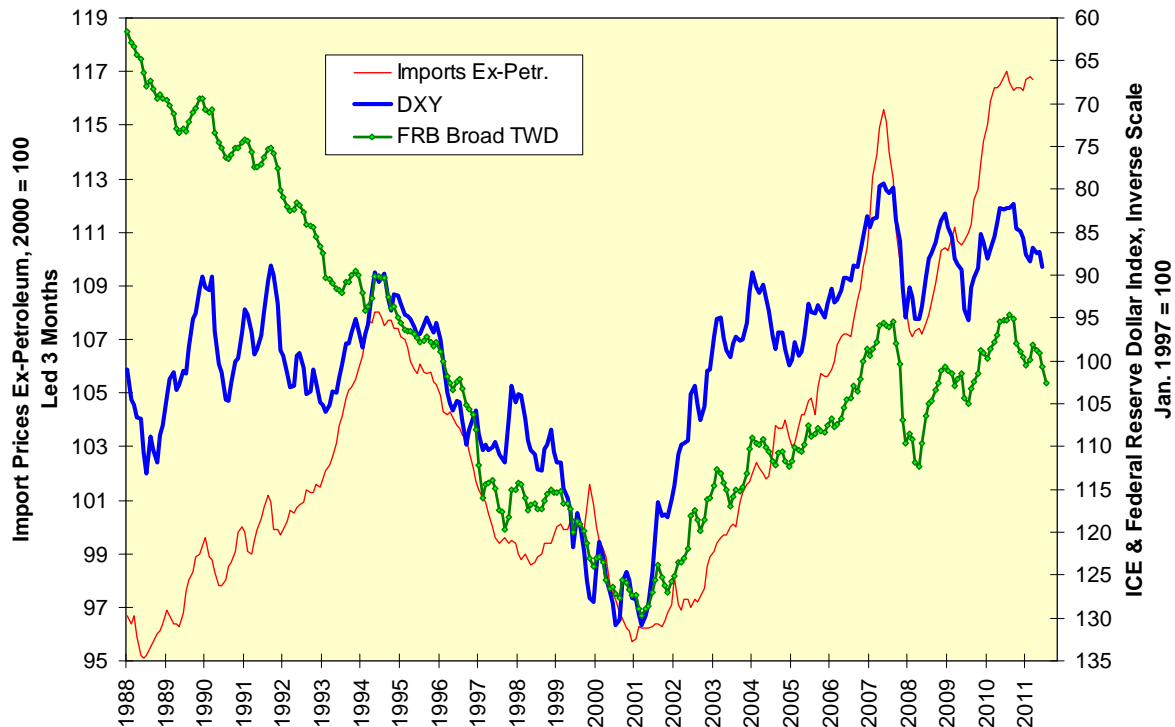
Another Good Theory Come And Gone

All of this brings us to the actual topic, the relationship between non-petroleum import prices and the dollar. You may be surprised to learn the U.S. maintains an index for non-petroleum import prices, but this is in keeping with such oddities as core inflation, which excludes those categories such as food and energy no one seems to buy and is part of the great government excuse-making factory: “See, if it were not for petroleum prices shooting higher, we would not have seen import prices rise.”

Macroeconomic theorists have, for years, operated on the notion a weaker currency should lead to higher prices for imports and greater demand for exports; this was part of the original argument for floating exchange rates made in the late 1960s and early 1970s. It is a crying shame this theory has yet to work on a broad and consistent basis (see “Currencies And Federal Reserve Trade Weights,” July 2007). It has, as we will see below, worked for some currency pairs and over some periods of time; if gravity worked with such an inconsistency, we would all be flying about randomly.

First, let’s compare the import index to two different measures of the U.S. dollar, the dollar index traded on ICE and the Federal Reserve’s broad trade-weighted dollar index (DXY and TWD, not to be confused with the Taiwan dollar). The six-member DXY’s weights have been fixed since inception; the TWD’s weights are recalculated annually as part of the Federal Reserve’s [H10 report](#).

Non-Petroleum Import Prices And The Dollar

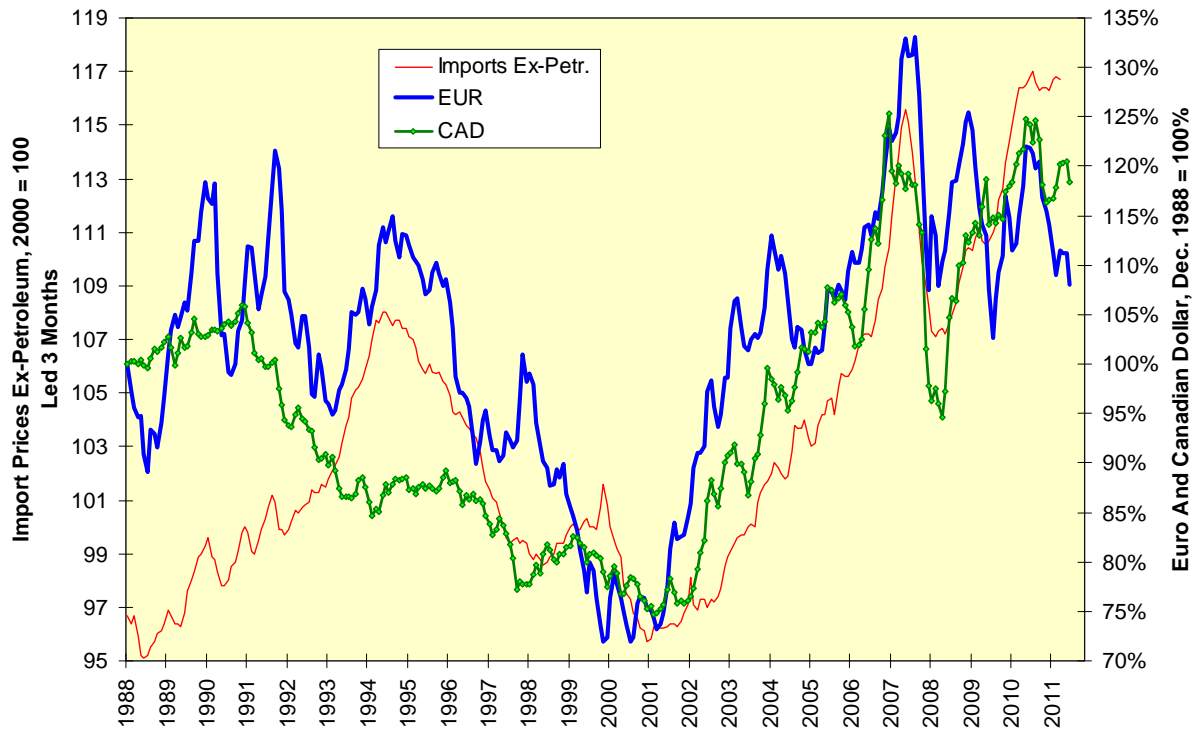


We can see an inverse relationship between the import index led three months and the TWD through 1994 and then a direct relationship thereafter; for the DXY, what had been no relationship through 1994 turned into a direct relationship thereafter.

We should ask, therefore, what magical event or events occurred at the start of 1995 to justify this switch to index conformance. Three developments come to mind: This is the period when NAFTA was starting to affect trade patterns, it is when China fixed the yuan and it is when the consequences of the Mexican peso's collapse led the Clinton Treasury Department to look after the interests of wayward bankers. The Federal Reserve ended its period of rate hikes at the start of 1995 and began a long series of what became known as Greenspan puts followed by Bernanke puts; each time the financial markets let out a bleat, they were sated with more money until we arrived at zero percent interest rates in December 2008 and outright money-printing in March 2009.

As the TWD is non-tradable, it has to remain a laboratory curiosity for now. If we delve into the tradable DXY, we find only two of the six currencies involved have a leading relationship to the non-petroleum import price index, the euro and the Canadian dollar. In both of these cases, the relationship was inconsistent and unstable until the Federal Reserve became very aggressive in lowering interest rates in the aftermath of the dotcom bust. By May 2003, a date whose importance will be revisited shortly, the relationship between the EUR, the CAD and non-petroleum import prices became strong and direct.

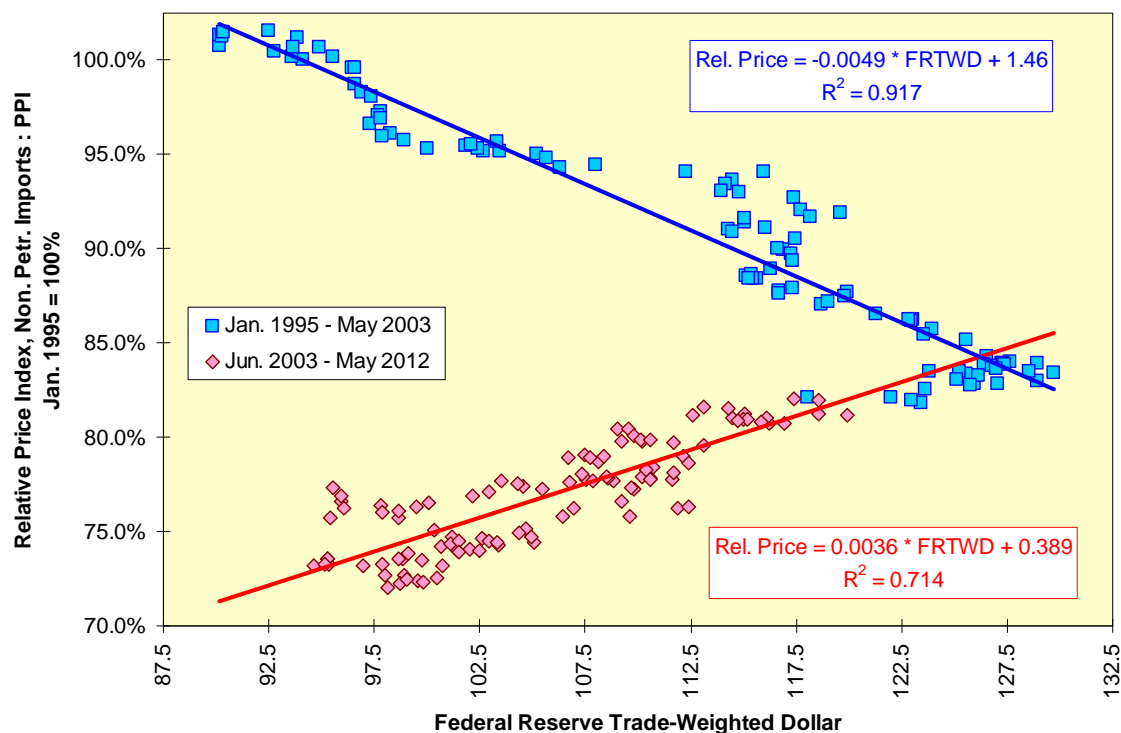
Non-Petroleum Import Prices And Key Currencies



A Reversal Of Sign

Now let's switch from an absolute to a relative frame of reference and normalize non-petroleum import prices to the Producer Price index. A remarkable and indeed unacceptable change in pattern emerges after the aforementioned May 2003 date. Before May 2003, the date when the Federal Reserve began its first war on deflation, import prices rose faster than the PPI as the dollar weakened. This, to the joy of some we are sure, was expected behavior.

Exporters To U.S. Lost War On Deflation



After May 2003, however, normalized non-petroleum import prices fell as the dollar weakened. This is the exact opposite of what you might expect. The post-May 2003 era of loose money stimulated the U.S. consumer as intended, but this consumer demand increasingly was met by foreign producers in the dollar bloc such as China. The prices of producer goods, the denominator in our fraction of normalized import prices, were pulled higher. The prices of consumer goods exported to the U.S. faced downward pressure and that pushed the numerator lower.

This mechanism by which the prices of non-petroleum imports fell relative to the PPI was the direct result of American monetary policies. It also had the odd effect of making exporters to the U.S. accept lower margins and become one of the few losers in the war on deflation.

Look hard in a textbook on international economics for a theory calling this shot in advance. You will not find it.