Coal and Treasuries

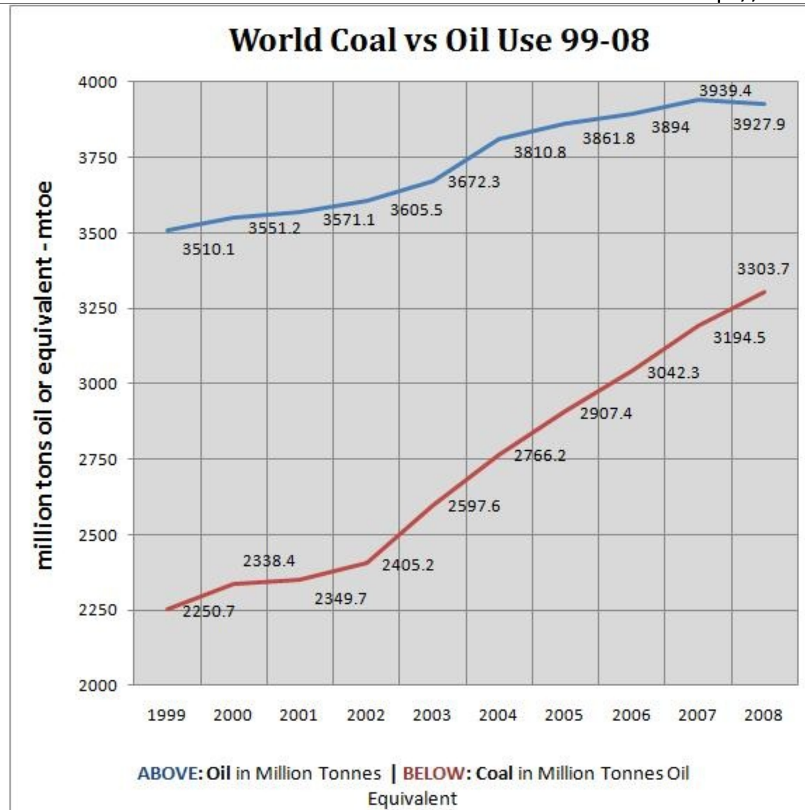
Posted by Gail the Actuary on February 2, 2010 - 10:28am
Topic: Economics/Finance
Tags: coal, csx, inflation, rail, treasuries [list all tags]

This is a guest post by Gregor Macdonald. Gregor's blog is gregor.us.

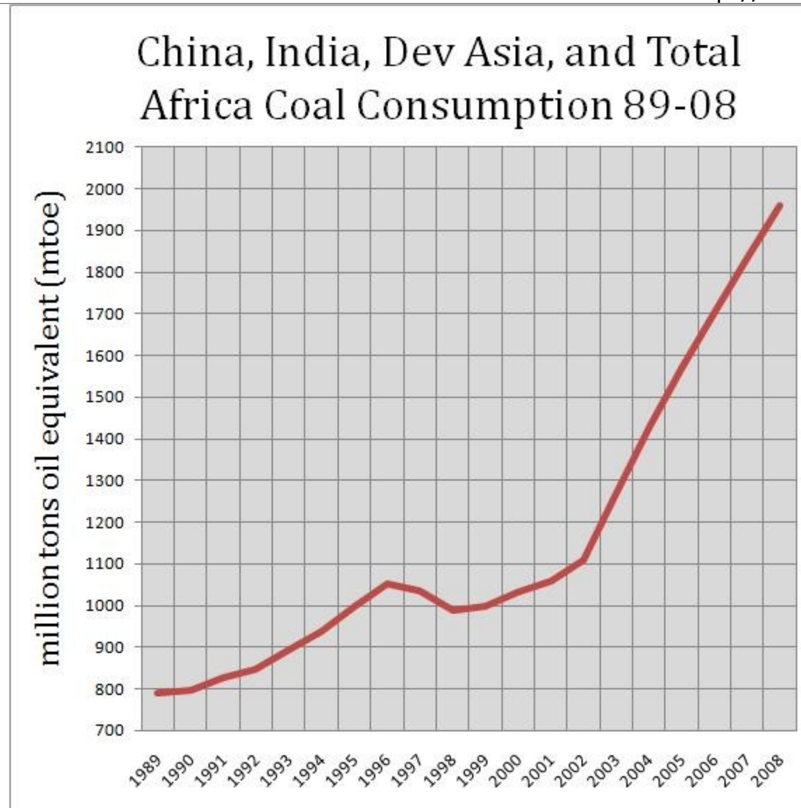
It was the best of times for the developing world, and the worst of times for the developed world. In the developing world, they built savings. In the developed world, they groaned and sagged under the weight of debt. In a world where the credit of developed nations had always been believed, the serial monetizations and bailouts set loose an emerging incredulity–driving developing nations into gold, commodity currencies, and land. In the aftermath of the financial crisis the developing world, measured at about 4.5 billion people, lumbered forth with its insatiable demand for energy. Mostly coal.

In the developed world? They replaced their lost demand, lost credit, and the loss of cheap energy the best they knew how: *with paper*.

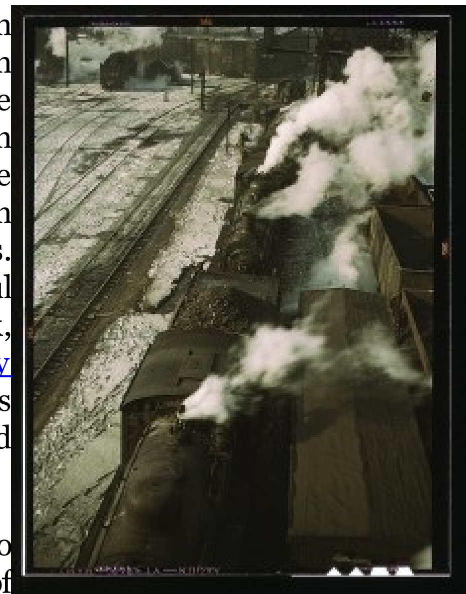
OECD demand *growth* for oil faltered years ago, as far back as 2004 when oil went above the “unthinkable” price of 40 dollars a barrel. In the developing world, the escalating price of oil did not as much delay, as divert, energy demand to the powergrid. To an extent that’s hard to measure, but certainly evidenced by power generation buildout and growth in electrified transport, the rising price of oil sent a confirmatory signal to the Non-OECD: stay on your coal trajectory. Of course, overall demand for all types of energy in the developing world took off ten years ago. Indeed, in 2008 for the first time ever, energy demand in the Non-OECD eclipsed by a hair all energy demand in the OECD. Roughly speaking, we can think of the OECD as the oil users, and the Non-OECD as the coal users. Gaze upon the chart below:



When the developing world faced higher oil prices, it guided its development toward power generation. But when the developed world, already married to an oil based infrastructure, faced higher oil prices it guided its development towards growth in credit. The United States is the number 2 user of coal, behind China, at 565 mtoe per year. And Germany is the number 7 user of coal at 85 mtoe per year. But coal demand growth in the OECD is largely halted by infrastructure. Most of the power generation additions in the OECD the past 30 years have been natural gas fired. Take a look at the growth of coal demand over the past 20 years, meanwhile, back in the developing world.



While the United States has little room for growth in coal demand, it does indeed have room to reduce coal demand as the depression rolls onward. It should not have been a surprise to anyone following the latest failed recovery in the housing market, the continued crash in the commercial real estate market, and the predictable fall-offs in auto production (since cash for clunkers) that US electricity demand is going nowhere. Thus, when CSX Railroad announced last week that shipments of coal to US utilities would not be strong this year, it was confirmatory to the macro trend. Although natural gas is "more expensive" on a per unit basis, it generally takes a much bigger spread to get utilities to actually favor coal over natural gas as the latter can be burnt with lower regulatory costs.



The expansion of the FED's balance sheet and the explosion in government debt issuance, therefore, may have eased the pain of the US industrial and consumer collapse–but they've done nothing to revive real demand. And the coming tail-off in electricity use even from low levels is yet another sign that the 2009 stimulus package as well did not come back to Washington in the form of higher industrial activity–and higher tax receipts. Indeed, tax receipts on both the state and federal level are awful and this accounts for recent declarations from Illinois, New York, and California that they are essentially broke. In all that empty commercial real estate across the country, where no shoppers roam, and no sales tax is recorded, the thermostats are turned down, and the lights are turned off.

Meanwhile, there is every indication that the FED is going to have to extend its quantitative easing as the supply of Treasuries continues to ramp higher, while US savings and international capital flows are simply not enough to supply the necessary bid, in US Treasuries. Moreover, it's likely that a great deal of last year's bid in US Treasuries was simply the FED's monetization of the mortgage-backed

securities market (MBS) coming back in the form of Treasury demand. The FED in a program of ongoing duration started purchasing 1.3 trillion of MBS starting last year, with the intent to continue through the end of March 2010. Should they not extend the MBS purchase program, I would expect Treasury prices to fall. Foreigners have already been avoiding the longer end of the bond curve, or simply reducing Treasury purchases overall. (See: Debt Burden Now Rests More on US Shoulders.)

Additionally, there is the problem of duration, in that Treasury has been funding a large portion of US deficit spending with shorter duration bonds. That means a larger number of bonds mature in shorter timeframes. Thus, in 2010, the US not only has to float a large new supply of Treasuries but it has to find buyers for its *maturing* supply of Treasuries. (See: The $700 Billion U.S. Funding Hole; Desperately Seeking A Very Indiscriminate Treasury Buyer.)

Surprisingly, or perhaps perversely, 2010 sees an accelerated continuation of the 10 year trend in developing world coal demand and developed world credit growth. For all of its reflationary firepower, the OECD has at best eased the acute phase of deflation while sparking strong inflation in the Non-OECD. Here in the developed world we continue to see asset price deflation in real estate, though notably, our purchasing power has started to fall in the aggregate in both the US and in Britain. (In China, inflation threatens to rage.)

The problem for the OECD is that energy demand in the Non OECD does not translate well to demand growth for US Treasuries or UK Gilts. Coal prices are strong however because US utilities may not require more coal but pan-Asian utilities continue to build capacity, and the trajectory higher continues.

In January 2009 I asserted that the 27 year bull market in US Treasuries had ended in the blow off panic spike (**in prices**) just that December. I maintain that view now. And, while Washington may at times entertain thoughts of choosing a deflationary pathway out of the crisis–call it a *liquidationist urge*, if you will –the voices that beckon to inflate our way out of the crisis will always win out in the end.

The developing world is clear-eyed enough to know that it cannot depend on developed world demand to keep its factories running. This is why a lot of direct trade occurs now *within* the Non-OECD that is designed to both trigger domestic demand and also facilitate resource-for-resource deals which lock up supply.

It is in the developed world however that the lack of sobriety has reached epidemic levels, as we keep trying to replace both energy inputs and production-–with credit. When the growth in private credit could no longer carry the weight and failed, we embarked on a mad dash to do the same with sovereign credit. If the OECD and especially the United States were building new power generation or electrified transport with this credit, we could at least expect to get some return on the investment. But alas, we are hellbent *still* in trying to revive consumer demand. Thus, for all the growth in government debt, we are doing nothing more than pouring water on concrete.

This work is licensed under a Creative Commons Attribution-Share Alike 3.0 United States License.