<u>www.better-management.org</u> provides invaluable insights that will help you understand and deliver better organizational performance.

Better-Management Newsletter 22 September 2015

The relationship between energy, economic growth and debt/money supply / 'Science' gets it wrong too often / Too many scientist prostitutes

Energy, economic growth and debt/money supply

Certainly the most complex issue I have needed to confront is the relationship between energy, economic growth and debt/money supply.

I have, through analysis on a daily basis over ten years, thought I could discern the way falling energy EROEI, rising capital costs of all new energy projects and the stifling of real energy growth have led to the need for more debt and for lower real GDP growth. But I have never been able to articulate my views very coherently.

Gail Tverberg is a consulting actuary and has also made it her life's work to research and comment on these interrelationships. In the explanation below which will take you 20 minutes to ponder, Gail provides a fair amount of evidence for you to consider – should you feel so motivated - based on the published data from "officialdom".

 $\underline{\text{http://ourfiniteworld.com/2015/09/14/how-our-energy-problem-leads-to-a-debt-collapse-problem/}$

We now seem to be at the point in 2015 where a debt collapse is becoming likely in prospect. So while the mechanisms of supply and demand may suggest that oil prices will once again increase, so as to maintain the profitability of the industry and thereby ensure continuity of supply, the true value of oil to society is less than would justify the current level of demand.... and should prices rise, then an almighty collapse of debt and the global financial system with it, is in prospect.

IMHO from all the data, a systemic crash of the debt bust variety is almost certain although we can't yet see when it will happen. (Yes I repeat that ad nauseam, but what do you folk think?)

With recent comment from OPEC expecting a return to USD80/bbl oil next year and onwards, much talk by investment analysts is bullish about investing in oil companies. But that relies on Chinese demand and on the absence of a financial crash. Meantime the number of projects being discontinued is crashing...

 $\underline{http://www.bloomberg.com/news/articles/2015-09-21/oil-price-rout-seen-as-threat-to-1-5-trillion-of-new-projects}$

Let's just look at the USA where 90% of global oil production growth occurred over the last seven years. The number of oil rigs in the USA has dropped from 1,600 to 623 at last count. Existing oil wells in USA produced at peak last year, about 9.54million bbls of stuff (some of it with restricted utility being too light for usual transport purposes) but the output

has now dropped to 9.2 million bbls per day and is falling. The reason for the fall (which it seems is just getting started) is because although there was a backlog of drilled wells for completion when rig counts started falling, the shale wells which account for roughly 50% of total US production deplete at somewhere between 60-80% per year in terms of their production output. By reducing the number of drilling rigs by 50-60%, the high rate of depletion of producing wells is why output will continue to fall. Of course other wells are also depleting by about 5% as well. So the loss of a large slice of the USD1.5trillion of investment projects worldwide, means that unless there is a major depression, sooner or later there will be a major shortfall in oil production against demand in USA and from stories from Venezuela to Russia it will likely be a global phenomenon.

'Science' gets it wrong too often

I still have too many unanswered questions for me to get off the fence on this issue.

Many folk will remember how Professors Pons and Fleischman were vilified by a committee of their peers over LENR (AKA Cold Fusion), late last century. The so-called consensus of scientists then was that it was impossible and they were treated like charlatans (Editors' note: recall official views once were that the sun goes around the earth, and ulcers were caused by acidity). Now of course, we have the people who followed their work, being granted patents and preparing to launch LENR products into the market.

In 1998 we saw scientific orthodoxy chasing the Y2K computer problems and that impelled me to employ folk to check out the systems employed by local councils in NZ...against my better judgement. It proved a waste of public money.

Over the last 10 years I have seen scientists from NIWA and also James Cook University forced to leave their employment due to climate change orthodoxy and their treatment when they argued against the IPCC theories. This worries me a little (Editor's note: it worries me tremendously, including much of the main stream media's sycophancy to these modern alarmists, many of which live off the government's teat, which means YOUR tax).

Too many scientist prostitutes

There can be no doubt that where money for science is large enough, the objectivity of scientific debate is open to question. Theories, until proven are just theories and yet those in the so-called consensus have no real accountability for their opinions. I remain on the fence over AGW but I am growing increasingly concerned by the IPCC crowd and their tactics to end debate by coercion – rather than with firm empirical evidence.

Naturally President Obama (a convert to the AGW cause) has appointed Henry Paulsen (formerly US treasury secretary who bailed out the big banks - and before that he was head of Goldman Sachs) to evaluate the level of damage the climate is doing to the US economy and to work out solutions – presumably which will enrich Goldman Sachs and other bankers (spelled with a W not a B) from carbon trading credits.

With thanks to Peter (*Editor's note: me, in case you hadn't guessed...*), this article below is particularly obnoxious and if the information is correct, then the parties involved in vilifying their colleagues should be struck off the roll of the academic institutions that provide them with the platform to impose their arbitrary orthodoxy...

http://www.climatedepot.com/2015/09/20/update-leader-of-effort-to-prosecute-skeptics-under-rico-paid-himself-his-wife-1-5-million-from-govt-climate-grants-for-part-time-work/

This leaves a sour taste in my mouth. The whole process makes me more and more concerned that whether we have AGW or not, the attack on other data and opinion, together with the attempt to cure effects rather than causes, means we are going down the wrong path.

I would be happy to hear rebuttals where folk have them – based on facts that have been empirically sourced of course. Perhaps one day I too can get to join the ranks of the anointed?