

## Tullett Prebon Research, a blog by Dr Tim Morgan

### The economy at the cliff-edge – our new report

*by Tim Morgan on December 20, 2012*

Regular readers will know that I've been working on a major report looking at the economic outlook in the context of surplus energy, globalisation and the fall-out from the thirty-year 'credit super-cycle'. Entitled **Perfect Storm – energy, finance and the end of growth**, this report is now complete, and will be published in January.

The report shows how four critical trends have combined to create a “perfect storm” which may signal the end of more than two centuries of economic expansion.

By far the most important of these trends is the unwinding of the energy dynamic which alone makes growth possible. Ultimately, the economy is not a monetary system but an energy one, for which the key driver is the relationship between energy extracted and the energy consumed in the extraction process. Known as the energy return on energy invested (EROEI), this ratio is nearing a “cliff edge” beyond which surplus energy becomes insufficient for the economy as we know it to function.

Our report argues that, having declined from 40:1 in 1990 to barely 17:1 today, this ratio is set to pass the critical 10:1 point in the coming ten years. The ratio has already fallen far enough to render overall growth a virtual impossibility, which helps explain why there has still been no strong economic recovery. To those familiar with the energy basis of the economy, the process of deterioration has become apparent over the last decade in a string of key markers such as energy price spikes, food shortages, escalating debt and deteriorating growth. Inflation, we argue, comes next.

Three factors have combined to worsen the outlook, particularly for the Western developed countries. First, the relationship between the financial and the “real” (energy) economies has become drastically over-stretched through a three-decades-long borrowing binge which created the biggest bubble in economic history.

Second, the West has allowed globalisation to drive an ever-widening gulf between growing consumption and diminishing production, a gulf which has been filled by escalating debt. To cap it all, the data on which policymakers, investors and the general public rely has been subjected to a process of incremental distortion which has exaggerated growth, inflation and output whilst disguising the true levels of debt and unemployment.

This report has taken a long time to complete, but I hope you'll find it worthwhile.