**The Oil Drum: Campfire**
**Discussions about Energy and Our Future**

### If I Were a Billionaire...

Posted by Nate Hagens on November 21, 2010 - 10:41am in The Oil Drum: Campfire
Topic: Economics/Finance

If I was a billionaire, I wouldn't believe what I'm about to write. Firstly, because my training, and especially my experience of getting richer in a growth based economy would have taught me that these 'perfect storms' when resource/financial bottlenecks supposedly loomed, historically worked out to be opportunities that spiked my digital wealth and incremental social power. Secondly, if I were a billionaire I wouldn't believe what Im about to write because all my peers, advisors and friends would tell me that it's caca. And lastly I wouldn't believe what Im about to write as the implications would be too threatening, at least on the surface, to comprehend let alone integrate into my world view. All the same, if I were a billionaire, based on my understanding of our particular juncture of history, likely on the verge of transitioning away from marker claims back to real capital, here is what I would do....

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The main messages in this post are:

*1) How we measure both wealth and status is likely to move away from financial marker capital back towards 'real capital', either gradually, or in disruptive fashion.*

*2) The amplitude available in social status, stretched during the terminus of the cheap energy/cheap credit digital marker era, is going to snap back, possibly significantly.*

This has implications for all of us, but particularly for the very (financially) wealthy.

### INTRODUCTION

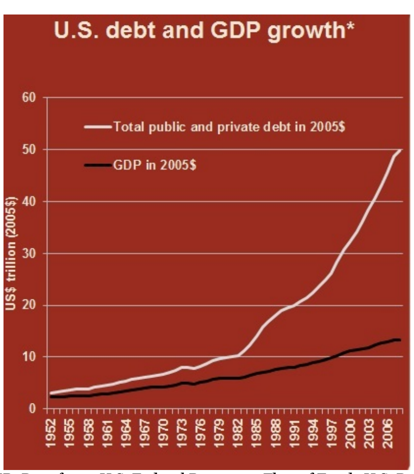
Most alive today think of wealth as how much money they have in their pockets, their bank accounts, their brokerage accounts, and their retirement accounts. Sure there is real estate, factories, gold and land as well. But it is a rare person that considers their skills, their relationships, their stuff and the ecosystems around them (human, social, built and natural capital respectively) as part of their 'net worth'.

I have alluded in posts in the past here that though energy/resource depletion lies at the heart of our current predicaments, the weakest link to future social stability is not oil decline or environmental externalities but the non-linear repercussions of currency and financial upheaval. Ive not posted the entirety of this analysis here mostly because I'm more interested in sharing broader ideas than details, at least on that topic, in this forum. But here is the general story.

In nature, access to high quality energy underpins everything. Biological organisms that maximize energy output/energy input (calories) at time T have advantages at time T+1 (and historically, conferred these advantages genetically at time T+X). In surplus situations, some energy can be 'stored' for later use. Relative to conspecifics, better energy access/harnessing/storage correlates with status - e.g. the weight/bulk of an elephant seal, or the antler mass on a stag confers both survival and ultimately mating advantages.

Humans too are biological organisms. Access to and control/use of energy correlates with status and social power. Energy of some form is required to create *every* good or product we have in our global or local economies (a fact that is still not widely recognized). Our modern institutional (and belief system) experiment allows for the 'storage' of surplus/below ground energy to occur in paper - mostly in electronic digits. Money becomes a claim on future labor, or things (basically energy). Most humans today have surplus resources far in excess of what they physically need. The average Americans physical caloric input requirements are met 100 times over with our daily subsidy of fossil sunlight.

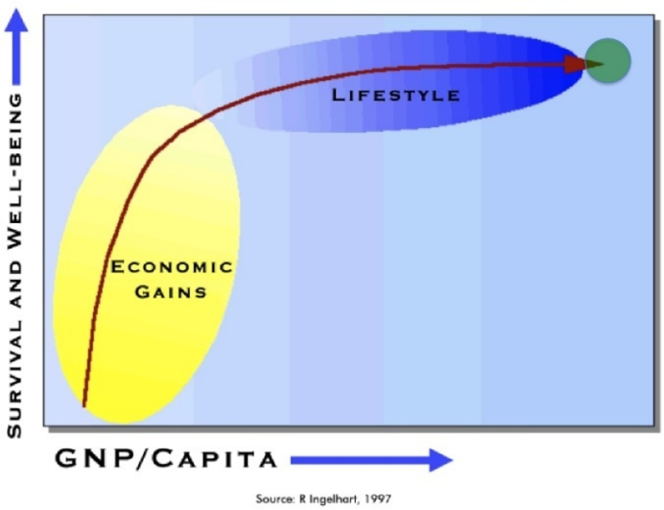
As such, over time, money and its derivatives have become such a prevalent marker for both biophysical needs/wants and social power at time T, that culture and 80 years of largely uninterrupted growth has tricked our evolved wiring into accepting that digital money at Time T is a perfect substitute for energy and stuff at Time T +1. Furthermore, unlike in nature, our perceived relative status is not limited by how much we can eat, or how large of ornaments we can grow, but by the leverage available in the heretofore limitless marker assets. In effect, instead of the built in negative status feedbacks in nature (stags with horns TOO heavy, get stuck or fall over), our leveraged monetary culture engenders positive status feedbacks ($1 billion buys you much more social power than $1 million). But during this generation long smorgasbord, we have either forgotten or neglected the possibility that monetary markers at Time T, might not get us anything at all at Time T+1.




Graphic from IIER, Data from: U.S. Federal Reserve – Flow of Funds,U.S. Bureau of Economic Analysis

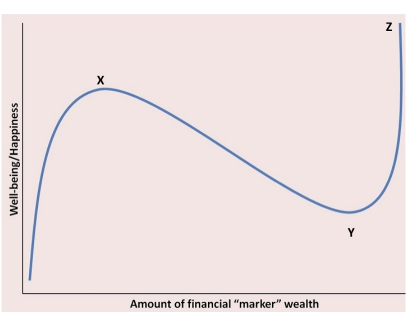
Cheap energy (as a % of total societal inputs) and its cultural storage vector (cheap money in the form of commercial/central banks creating loans and deposits simultaneously to meet credit demand in growing economy) created a non-linear social system that over time, departed from money being a realistic claim on future energy as it depended more and more on an increasing total money supply to service the debts of years prior. In the United States, we have grown our debt more than we grew our output (GDP) for each of the last 45 years. Think fast treadmill. In an era of overshoot there exist many elephants in the room (energy depletion, social stratification, environmental externalities), the biggest elephant is not that Quantitative easing is borrowing from the future by creating monetary claims out of nothing, but that our entire system has been using Quantitative Easing for over 40 years (not just since 2008) to enhance current consumption at a cost to the future.

Currently, the aggregation of 'claims' in the US requiring growth to service and pay off in the future is around $65-70 trillion vs $14 trillion in GDP - or around 500%. (stocks, bonds, corporate, municipal, state, private and corporate debt -including unfunded social security medicare the number jumps to over $110 trillion). Because of the inherent leverage in our monetary system, we can't stop growing lest the debt hounds snapping at our collective heels catch up to us. However, resources - currently their cost, and soon also their availability, now limit our aggregate system. When growth stalls each time we become resource/price constrained, more new credit will be attempted, increasingly by the government sector, accelerating the transfer of consumption from the future to the present and the periphery to the core, until it either physically can't continue, or more likely, becomes obvious to the major players it can't continue. This Wile E Coyote moment - the collective realization that there are more digits owned and promised than can or will ever be paid back will likely result in 80%, 90%, or even 100% of financial assets of all kinds to go poof. In my estimation this is a strong possibility in the coming decade and even potentially within five years.




Envy for status given environmental cues is a strong motivator. Increasing evidence in the fields of psychology and economics shows that above a minimum threshold of income/wealth, it one's relative wealth that matters, not absolute. In an analysis of more than 80,000 observations, the relative rank of an individual's income predicted the individual's general life satisfaction whereas absolute income and reference income had little to no effect. Sociological and physiological research shows decreasing returns to more absolute income/wealth. (Incidentally, in the 80 references in that peer-reviewed paper, not one was to biology or evolution). Furthermore, in a bizarre curse of neuroscience, our dopaminergic reward pathways activate as strongly when we ALMOST win or achieve something. So as long as someone is 'winning' ahead of us, those near the top may be driven even further to succeed in attaining culturally defined status markers. As such, even though, as indicated in the above Inglehart curve, well-being doesnt increase that much after a certain minimum threshold of GDP/wealth is achieved, that will not stop people, especially near the top, to continue to shoot towards the green circle.

For those who are wealthy/powerful the choices have always been about growing/preserving accumulated wealth via lateral shifts between various monetary marker assets - cash, bonds, stocks, commodities, etc. In a future where the traditional drivers of growth (energy/credit) are drying up , the conventional Capital Asset Pricing Model assumptions go out the window . Essentially opportunity no longer shuffles within the financial asset class, but moves outside the entire class itself to non-financial assets. Obviously one can't effectively transmute $1,000,000,000 into like amounts of social capital, skills, friends and stuff. Sure, some precious metals in the face of potential currency reform or nationalization make sense, but golds contribution to effective net worth is limited by 'non-precious metal inputs', like safes, friends, and a stable and functioning environment in which to transact with them. I.e. hoarding gold as a wealth/status preservation strategy is looking one step ahead - when thinking two or three steps is required.




The 'endowment effect', and loss aversion principles will make it very difficult for people with outsized means, the movers and shakers of our society, to just accept a lower relative social rank. One could argue that financial wealth is more of a burden in this environment, as excessive thought and effort will be made in this demographic to preserve financial markers at all costs, when the real paradigm is about transitioning from net worth back to self-worth. I hypothetically illustrate this in the above graphic. Beyond paper wealth levels of X, digital markers in the current environment actually will be a hindrance to well-being. A person at point Y (say, $5 million?), will be so locked in the old paradigm of measuring life success by digits they will adhere to that dying principle at a cost of new healthier options of social, human and built capital. Some few of the mega-wealthy may have enough (point Z) to maintain their wealth/influence going forward. But, as in Weimar Germany, the vast majority of wealthy will likely have it wiped out.

If I were a billionaire, my biggest strategy for adapting to a world of new formulas based on ecology and not economics, would be to accept the fact that the amplitude of social power engendered from markets without reins is going away. In some trajectories, there may even be social backlash against the very wealthy. I would try very hard to become 'unattached' to my accumulated digits as even if one disagrees with my percentages, an intelligent observer must acknowledge a non-zero possibility of a 'poof' event for financial assets. However, in addition to the psychological preparation of one day soon 'rejoining the pack', there are significant actions that billionaires can take to build important social and built capital in communities and regions all over the world. Who else can support efforts towards local/regional economies, the science and scaling behind import substitution models, which were shunned during the crusade towards efficiency and paper profits. Who else can initiate and support economic laboratories, experimenting outside the current paradigm on a scale necessary to impact society in a positive way. The risks posed to society from a globally interconnected system, where the average american farmer has something on order of 60 supply inputs, over half of which come from overseas is begging for new initiatives for systemic risk management.

In my life I have met maybe a dozen billionaires and I'm guessing very few have some knowledge as to what I speak (of course - look at them - they're the billionaires). But in the liminal space where paper wealth is losing its grip as a stable placeholder for status and power, new thinking and bold action is required. New thinking and bold action by Joe Six Pack, however well intentioned, won't be overly impactful for post credit society at the scale required. We need to either lead by example from the top, or have efforts from the top preparing for contingencies that our conventional institutions will ignore. In effect, we are facing environmental and energy crises galore - but the most critical hurdle in the near future will be a reset of our currency and debt system. Peak Oil (and Peak Credit) will most likely manifest as supply chain breakdowns not due to lack of energy, but disruption of basic goods from a fragile globally interconnected system. If we don't get this one right by preparing now, we probably won't have much of a chance to deal with the other long-term problems, where blueprints based on science of both supply and demand can be crafted and implemented. That echelon of society with surplus digital wealth, which may disappear anyways, are in a unique spot to help.

Finally, if I was a billionaire I would trade it all in, for my current understanding of the world, my current relationships and friends, my current lifestyle. But I'm not, so I'm asking those who are to open their eyes to the broader situation and effect positive change.

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Campfire questions

1) what would you do if you were a billionaire?

2) what would you recommend current billionaires do?

(Note: the difference, in aggregate, between the answers to 1 and 2 may explain a big part of our predicament)

*(Edit - If you have read between the lines here, and have access to resources, please contact me as I'm in touch with people who are working on such 'economic insurance' physical plans)*