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Gutiérrez, Editor** | |  | | --- | | [**Home Page**](http://www.pelicanweb.org/)[**Front Page**](http://www.pelicanweb.org/solisustv12n08page1.html) | | |  | [motherpelicanlogo2012](http://www.pelicanweb.org/#infologo) |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | |  |  |  |  | | --- | --- | --- | --- | | ***Free Beer Tomorrow: A Thought Experiment*   Jada Thacker   This article was originally presented at** [**Seventh Bio-Physical Economics Conference**](http://bpeconomics.org/) **Washington, DC, 26-29 June 2016 REPRINTED WITH PERMISSION**   |  | | --- | | The entire credit system – inaccurately and misleadingly called “the monetary system” – was designed by investors, albeit piecemeal over time, as a moneyless interest-bearing flow of debt from perpetual debtors to perpetual creditors.  From the existence of government debt, which is monetized by central banks as currency, to the promissory note debt contracts offered by commercial banks, to the dividends and rents due shareholders and landlords – including every imaginable business transaction involving any bank account in the entire world – not an iota of tangible wealth has ever been created, exchanged, or consumed by the credit system. The credit system, in fact, does not deal in transactions that exchange “money” for tangible wealth, but in transactions that create financial profit and loss.  The pursuit of profit, defined always as a net positive return on investment (thus obtaining “something for nothing”) is the *sine qua non* of the credit system. But in order for creditors to profit, debtors must pay the difference between the smaller sum invested and the larger sum returned by means of interest – and so they do. Every dollar-denominated unit of profit returned on investment is necessarily subsidized to a greater or lesser degree by some other entity that consumes energy or matter.  Thus consumption of energy and matter “backs” the exchange value of money in the real economy, which in turn “backs” the value of interest-derived profit in the ethereal financial economy. Whether financial profit is subsidized by a human worker, a plant, an animal – or the common source of all life, the sun itself – all financial profit is proportional to the amount of physical subsidies provided to the profiteer.  The credit system is conceptualized as self-perpetuating, with potentially unlimited profits. But financial profits exist only as subsidies derived from consumption, which is ultimately limited by finite global energy/matter resources. The finite energy/matter of the real, biophysical world therefore cannot comply with the demands of the mathematically infinite financial profit motive. For humanity to expect otherwise is folly; to perpetuate folly is ultimately suicidal. |  |  |  | | --- | --- | | Imagine a typical neighborhood bar. Into this bar walk three old school chums: Bob the banker, Ingrid the investor and a biophysical economist named Frederick who goes by ‘Fred.’ Posted prominently above the beer taps is a sign: FREE BEER TOMORROW. All three chuckle at the sign as they take a seat and order a round. But only Fred really ever gets the joke.  **THE BANKER AND HIS EXPECTATIONS**  Banker Bob does not expect the bar to give him “free beer,” not tomorrow or ever. But, since he is descended from a long line of bankers, he does expect to get “free money” from the bar tomorrow and many days yet to come.  Here is Bob’s plan: The bar owner got a loan from Bob’s bank to go into business. He signed a promissory note – a legal contract – in which he agreed to pay back the amount loaned, plus interest, over an agreed period of time. The bar owner seemed grateful that Bob’s bank loaned him its money to start his business. But that is not what happened because banks don’t “loan their money” to anybody.  When a borrower signs a promissory note, his promise to pay instantly becomes an “asset” of the bank – in the amount owed to the bank. Simultaneously, with a few keystrokes on its computer, the bank deposits an identical amount into the borrower’s bank account. The amount so deposited in the borrower’s account now becomes a “liability” of the bank – in the amount owed to the debtor. Please note: no “money” changes hands in this process.  Notice, too, that the promissory note contract created both an “asset” and a “liability” for the bank (creditor) and a matching “asset” and “liability” for the borrower (debtor). Thus, credit and debt are always created simultaneously as the two sides of the same coin – though without the coin. Yet there is a crucial quantitative difference between the amounts owed: the debtor owes the principle amount, *plus interest*, to the bank, but the bank owes only the principle amount deposited in the borrower’s account.  It is important to remember that banks do not loan out any amount held in its customer deposit accounts; in fact, the amounts held in depositors’ checking and savings accounts are *liabilities* of the bank: these amounts are what the bank owes to depositors. The bank’s only *assets* are the amounts owed *to* it by debtors.  This process of commercial bank credit creation is known as “fractional reserve lending.” Critics of the process say it “creates money out of thin air.” This characterization is misleading because no “money” is created in this process. Only credit/debt is created “out of thin air” – on strength of the legally enforceable belief, pretense, or promise (take your pick!) that the debtor will pay back more in the future than he received in the present.  Just as with debt created by swiping a credit card, the physical presence or absence of dollar bills has nothing to do with this process of credit/debt creation. The receipt slip signed at the time of a credit card purchase is in fact a miniature promissory note, and the debtor’s signature thereon creates the debt he is obligated to pay in the future.  Simply put, Banker Bob expects to *get owed more back* from the debtor, through interest charges, than what Bob *owes to the debtor*. In fact, this is the entire purpose of financial capitalism: to be owed more than one owes. As long as the bank’s debtors fulfill the terms of their promissory notes, Banker Bob’s expectations will be met, and he will get more owed in return than the credit he typed into the borrower’s account (“out of thin air”).  Bob would describe his expected positive net return through interest as “profit” – essentially “free money.” Taking his seat at the bar he chuckles, not because he expects to get “Free Beer Tomorrow” but because, in effect, he plans to exchange his “free money” for beer today.  **THE INVESTOR AND HER EXPECTATIONS**  Although bankers, in addition to extending credit, can and do make all sorts of investments with their “free money,” not all investors are bankers. Ingrid is an example of a non-bank investor, who also does not expect the bar to give her “free beer,” not tomorrow or ever. But she also has devised a plan to get essentially “free money.”  Here is Investor Ingrid’s plan: Believing in the bar’s great profit potential, she convinced the bar owner to incorporate his business, and she has agreed to buy a significant amount of the bar corporation’s stock with funds she received from a substantial life insurance policy she had carried on her deceased uncle (formerly a part-time lion tamer trainee). The prospective bar owner agreed to her proposal partly because the funds he receives from her stock purchase means he now may borrow less from Banker Bob, thus saving the money paid in interest on a larger loan, and also because incorporating shields him from personal liability.  The deal is made, Bob’s bank extends “credit out of thin air” to the bar corporation, and the bar opens for business. As the bar corporation earns more and more income over the cost of its operational expenses, Ingrid – as a share-holding owner – now receives regular dividend payments from the corporation in proportion to her share of ownership.  Business has indeed been brisk, and Ingrid is gratified to receive the dividends she had hoped for. But customers now have difficulty finding a place to park. A large sawmill has been built at the edge of town, and its many workers have made the bar their favorite hangout. The bar’s lack of parking space clearly imposes a limit to future business growth.  But Ingrid, shrewd investor that she is, anticipated the parking problem from the start. Soon after the sawmill opened, she purchased the wooded lot next door to the bar. Since the wooded lot was sold by the owner with no “improvements” such as sewer, water, or electricity connections, she paid very little for it. In fact, she paid so little that she was able to clear-cut the trees on the lot and sell them to the new sawmill, recouping her purchase price.  Ingrid now offers a handy solution for the parking problem: she proposes to pave the lot and rent it to the bar corporation for additional parking space. Since she used all her insurance savings to buy stock in the bar, she will have to borrow from Banker Bob to cover the paving expense; but this is no problem. Since cutting down all the trees and paving the lot “improves” the land and increases its value in the bizarre world of real estate valuation, she will be able to charge a correspondingly higher rental fee to the bar corporation.  The bar corporation signs Investor Ingrid’s rental contract, Banker Bob once again “creates debt out of thin air,” and Ingrid – now a real estate speculator as well as a corporate stock-owner – enjoys a fixed rental income receivable from the bar over the term of her rental contract, which is enforceable by law.  Both of Ingrid’s income streams – dividends and rent – are forms of “free money” to her. She performed no labor and produced literally nothing of value to trade for the income she receives from either of them.  To receive this income, she exchanged two debt obligations and created two others: first she exchanged the amount in her savings account (a debt liability of the bank, who owed her that amount, plus interest) for stock-ownership; next she exchanged the debt owed to her by the sawmill for the debt she owed to the owner of the wooded lot. And finally, she incurred a new debt obligation to owe Bob’s bank for the cost of paving the lot, and got the bar corporation to agree to owe her for using it.  But since the bar corporation now owes her more in dividends than the interest Banker Bob owed on her savings account, and since the bar corporation now owes her more in rent than she owes Bob’s bank, Ingrid now enjoys a net-positive return on all her debt-rearrangement activity. By being both clever and shrewd, Investor Ingrid, much like Banker Bob, has managed to get others to owe her more than she owes others. This constitutes financial profit.  So as Ingrid takes a barstool next to Bob, she also chuckles – not because she expects to get “Free Beer Tomorrow” but because she too plans to exchange her “free money” for beer today.  **WHAT BIOPHYSICAL ECONOMIST FRED KNOWS**  Fred is not now, nor has he ever been, a bomb-heaving anarchist, a closet communist radical, or a kumbaya-karaoke Greenie. He is a biophysical economist. As such, he stands – like a tiny, unnoticed Colossus – with one foot planted firmly in the natural world of energy/matter and with the other foot sliding on an oil-impregnated banana peel in the mathematically imaginary, manmade world of interest-bearing debt.  **Free Money, Something for Nothing, and Profit**  Fred understands that investors like Bob and Ingrid do not think in terms of “free money.” Not only is Fred’s concept of “money” foreign to them, but (as will be discussed) the credit system in which they operate does not make monetary transactions. But Bob and Ingrid do believe steadfastly in the concept of “profit.” Profit is always defined as the net positive return from a business activity which, in their case, is a net dollar-amount returned on financial investment:  **$ RETURNED – $ INVESTED = $ PROFIT**  Thus “making a profit” by *definition* means to “get something for nothing.” This is not the same as “getting something from nothing” which is a metaphysical fallacy and a physical impossibility.  Getting more back than you put into the game is getting “something for nothing,” and that is exactly what Banker Bob and Investor Ingrid have managed to accomplish. In fact, getting others to owe you more than you owe them is the sole career goal of every banker, investor, and other kind of professional gambler on the planet. “Free money,” “profit,” and “something for nothing” are all functionally synonymous terms, and all are the very basis of financial capitalism today.  And it works. But there is a problem: it cannot work simultaneously for everybody in the economy. We all cannot be owed more by others than we owe to others; at any moment in time, in the aggregate, the quantity of all the net positive returns must be paid for by an equal quantity of net negative returns.  Financial capitalists remind us *ad nauseum* that “free markets” are based upon competition. But for every winner in a competition, there must be one or more losers. Who wins and who loses is a matter of who owes whom, and how much. Banker Bob and Investor Ingrid get “free money” solely by getting others to owe them debt contracts, which are enforceable by law. Conveniently forgetting that they can win only at the expense of losers, Bob and Ingrid assume everyone could make a living doing as they do, if only others were as clever.  Fred does not think his old chums are necessarily bad people. He just thinks they are people who expect to drink essentially free beer without knowing, or caring, about the consequences of their expectations.  **A Game of Poker and the House of Infinite Debt**  Being an astute biophysical economist, Fred realizes that – while it is a mathematical impossibility for *everybody* to get “something for nothing” from others simultaneously – it is possible for *many* to receive net positive returns at the expense of *many others* who receive net negative returns. But can any “something for nothing” scheme be sustained indefinitely?  Fred imagines a poker game played between perpetual winners and perpetual losers. The game is not played with money, but with poker chips convertible to money. Given a finite number of poker chips, the players who always win more than they lose will eventually bankrupt the other players, who always lose more than they win. This would be true even if there were only one perpetual winner playing against a million perpetual losers: given enough time, perpetual losers will lose everything available for them to lose.  But do perpetual winners really exist? Don’t all players make mistakes and lose, thus allowing others to win? If so, wouldn’t such mistakes prolong the game, perhaps indefinitely? Fred must concede this seems possible, even probable…but only for *individual* players.  As a *class*, investors always win because they designed the poker game, which must be played according to their rules – because their rules say so. True enough, *investments* may fail, and fail catastrophically. But *investors*, as an economic class, do not.  Even so, rules that guarantee perpetual winners still do not solve the problem of their ending up with all the poker chips in the house. It took Fred years to realize, however, that the inevitability of perpetual winners raking in every last chip has never been considered to be a ‘problem’ by perpetual winners. On the contrary, perpetual winners perceive the problem to be too few chips.  Since the entire purpose of the investment game is to keep interest-profit flowing endlessly from debtors to creditors – that is, always to be owed more than one owes – the problem of chip- scarcity has only one ultimate solution: infinite chips must be available to losers, thus to be transferred perpetually to winners.  But where was an infinite amount of poker chips to be found? Who could possibly supply them?  As it turned out, the answer was far from obvious: let the losers provide their own poker chips. What they no longer had to lose, they could borrow – endlessly and at interest – from the winners.  And so the gambling house of infinite debt was built. But it took a few hundred years.  **How Debt Became Money: A Thumbnail History**  Unlike some biophysical economists, Fred is something of a history buff. He knows that, while debt is unknown in nature, it is hardly new in the human experience, having existed since one cave man owed a favor to another. In fact, human debt obligations predate barter and money.  Creating monetary debt at a rate of interest, however, is a fairly recent cultural trait, and for good reason. For example, Christianity, Judaism and Islam forbade the charging of monetary interest, which leads exactly to the sort of problem posed by Fred’s hypothetical poker game. In an interest-bearing monetary system, a few perpetual winners eventually emerge. As interest debt outpaces the means with which to pay it, the game crashes when the vast majority of perpetual losers become impoverished – eventually impoverishing would-be perpetual winners.  Despite Biblical admonishments, the Pope allowed an Order of powerful monks-turned-bankers to begin charging interest during the Crusades. One notable result: 800 years later folks can now be seen paying interest to Master Card bankers in order to finance the purchase of air for an automobile tire.  But the real game-changer in the world of commercial credit came in the two centuries following Columbus, as Europeans roamed the world, trading for what they could, and stealing the rest. Merchant-banker investors – in order to finance both commerce and wars of resource theft – invented two clever accounting gimmicks. These now form the basis for the current world credit system: *bills of exchange* and *bills of credit*.  ***Bills of Exchange:*** In days of yore, courts would only enforce the payment of a debt to the party to which it originally was owed. But merchant-banker investors wanted a way to extinguish a debt they owed to Peter with a separate debt owed to them by Paul. In due course, the merchant- bankers re-wrote the rules (go figure!) so that a debt owed to one creditor could be purchased or bartered by another, all without letting the debtor off the hook.  These transferrable promises to owe were called “bills of exchange.” In fact, this is how the United States obtained the Louisiana Purchase territory from France: Napoleon transferred the property to the US, which in turn agreed to owe his debt to a British bank. So they work.  Today, this method of transferring debt is accomplished with “money orders,” “bank checks” or “electronic fund transfers.” Modern commercial banking could not function without transferring promises to owe from one entity to another. In fact, this is banking’s primary function.  ***Bills of Credit:*** “Bills of credit,” on the other hand, are used to back the issue of paper currency with debt. This historically obscure term has been replaced with the modernly obscure term: “monetized debt.” Monetized debt involves a transferrable debt, usually owed by a sovereign government. This has nothing to do with the much-fantasized existence of “government-printed fiat currency.” In fact, quite the opposite is the case. But what does it actually mean to “back the issue of paper money with debt?”  Fred recalls a story about king who desperately needed to go to war, but had no money for guns. Aladdin-like, an investor-genie appeared in a puff of smoke, with a business proposition and bag of gold. Says he: “If you promise to owe me the amount in the bag with interest, you may have it to buy your guns – but only on one condition. You must never repay the amount of money in the bag, but only the interest, forever and ever, amen!” Then the investor-genie added slyly under his breath, “And I want you to write an IOU for the amount you borrowed on a huge piece of paper, too.”  The desperate king agreed. Although the king had the power to seize the gold and renege on his IOU, he dared not do so for fear the investor would back his enemy in the next war. So the king paid as agreed. But since kings earn no money, he taxed his subjects mercilessly in order to pay perpetual interest on the permanent debt.  Meanwhile, the investor had taken the gigantic paper IOU and cut it into a million pieces, each illustrated with the image of the king. These he called “bills of credit” – which in fact they literally were. He then offered to re-lend these pieces of the king’s (now-transferrable) debt to the people at interest. When the people asked, “What worth has your tiny bits of paper?” the investor truthfully answered, “They are a token of His Majesty’s solemn promise to pay.” And he then cajoled them in a reverent tone: “Do ye dare question the money issued under his majesty’s full-faith-and-credit?”  A great many people had no choice but to borrow the “bills of credit” at face value – and agree to owe the interest that came with them. After all, the people had public taxes to pay, and – as if by majestical magic! – the tiny bits of IOU were inscribed with ink proclaiming they were “legal tender for all debts *public* and private.”  The needy people took counsel among themselves: If not even the indebted king could refuse to accept this tiny bit of debt as payment for taxes levied to pay the interest on this tiny bit of debt, then this tiny bit of debt must have value! Or so it seemed in the addled minds of the indebted people – even if they had to borrow the tiny bit of debt at interest to pay their taxes. Thus the beguiled people borrowed what the king already owed, while all the interest went to the investor- genie.  Fred could not have fabricated such a tawdry tale. In admittedly broad strokes, this is the story of the origin of the privately owned Bank of England in 1694 and how it came to be the empire’s central bank with a monopoly to monetize the sovereign debt, issuing it as the currency of the realm. A century later, Alexander Hamilton copied this basic model to establish the majority- privately owned Bank of the United States in 1791. Yet another century later, the privately owned Federal Reserve Bank (the Fed) monetizes US government debt in like fashion, though most of the interest paid to the Fed is refunded to its own warmongering king.  **Why There Is No Money in the “Monetary System”**  The Fed, in conjunction with all the Banker Bobs of the nation, extends all of the credit in the so- called monetary system. The Fed buys much of what the nation owes to others and uses this debt to “back” the Federal Reserve Notes it issues as legal tender. Commercial banks provide even far greater amounts of credit through the process of fractional reserve lending, as discussed.  The US Constitution, by design, does not permit the government to issue paper money, by “fiat” or otherwise. This is why all US paper currency is issued by a private banking cartel (the Fed), which “backs” every dollar by debt collateral it owns. That is, for every Federal Reserve Note issued by the Fed, some entity owes an equivalent amount to the Fed.  Whether issued as debt by the central bank, or borrowed at interest from a commercial bank, every dollar’s worth of exchange value in the entire credit system represents a financial debt owed to some entity at a rate of interest. As debts are repaid, exchange-value is destroyed; as new debts are incurred, it is recreated.  This is how the infinitely expandable gambling house was constructed over time. It could have been constructed differently, certainly more intelligently, and obviously more fairly. It need not have been constructed at all. But we must recall its purpose: to provide a perpetual number of poker chips for the benefit of perpetual winner-investors.  This, then, is the current banking and investment system, usually called the *monetary system*. But one of Fred’s biggest challenges as an economist was to understand a simple fact: *there is no “money” in the so-called “monetary system.”*  By “money” Fred means: “a token used as a common means of exchange for usable goods or services.” Although there are various definitions of the term “money,” he chose this one because it simple, elegant, and also because it was coined (how else!) by his namesake, Nobel laureate Frederick Soddy, in perhaps the first book that established the modern idea of physical economics: *Wealth, Virtual Wealth and Debt*.  Fred’s namesake told us: “We thus come to look upon money – quite irrespective of whether it is specie [coin] or paper – as a token certifying that the owner of it is a creditor of the general community and entitled to be repaid in wealth on demand.”  It is crucial to note that Soddy understood that “wealth is a positive physical quantity” *owed to* the possessor of money *by society* at large. In Soddy’s world of what he called “physical economics,” a person who is owed physical quantities of usable things is the real creditor, not a person owed an amount of debt at a rate of interest, denominated in monetary units.  Financially speaking, Frederick Soddy’s physical economics simply does not exist in the imaginary world of Banker Bob and Investor Ingrid. In their upside down world, money is not a token earned in exchange for the energy expended by human labor, but is an accounting asset owed into existence by a promise to pay; society is not indebted to the holders of earned money, but rather it is indebted to the holders of debt contracts; and wealth is not a measure of a physical good owed to the holder of money, but is rather a measure of how much “something” an investor gets in return “for nothing.”  Bankers and investors are not in the business of exchanging tokens for physical goods, or exchanging physical goods for tokens, which is what workers and merchants do, respectively. Workers make a living by exchanging productive work for money, then exchanging the money for usable goods; merchants do the same, but then re-exchange the goods at a mark-up, to get even more money.  As we have seen, the Bobs and Ingrids among us manipulate a financial system of mathematically balanced credit and debt, wherein interest, rents, and dividends flow endlessly from debtor to creditor. Money, whose only biophysical purpose lies in its exchange for consumable goods or services, is extraneous to the financial process – which is dishonestly called “wealth creation” by its practitioners. In fact, credit must *exit* the so-called “monetary system” before it may be exchanged as a token for any real physical wealth at all.  This Fred understands: workers don’t get paid with paychecks. They get paid only when they exchange transferrable debt at the bar, or at the grocery store, or wherever they obtain physical stuff they consume in the course of living their lives. Ingrid got paid, too, when she exchanged the credit extended by Bob’s bank to obtain real stuff, in the form of tons of gooey asphalt, which she “consumed” to increase the rental value of her real estate. So, while investors may actually exchange money for stuff, such transactions are merely incidental to their business plan, not its purpose.  Money does not exist in the world of banking and investment because money is only used for exchanges that do not occur in that world. The credit system has nothing to do with monetary exchange for usable wealth, but exists solely to account for who owes whom in currency- denominated poker chips, all of which are created as debt. Credit exits the credit system in exchange for physical stuff (at the point of sale), thereafter re-entering the credit system when it is re-deposited into a bank account.  In point of fact, the imaginary world of mathematically infinite debt and the real world of physically finite matter/energy are inconsistent and incompatible. Paradoxically, however, these two worlds are not mutually exclusive, because the imaginary world of debt depends upon the physical world to provide the crucial element it cannot provide for itself, but without which it cannot exist: profit.  **ALL FINANCIAL PROFIT IS A SUBSIDY – BUT ONLY WHILE QUANTITIES LAST**  Banker Bob and Investor Ingrid harbor two conveniently unexamined assumptions about reality. And since they remain studiously unaware of their assumptions, they also remain unaware their assumptions are false.  ***Financial Profit is Not Cost-Free:*** Since financial “profit” is defined as a net positive return on investment, investors weirdly assume that profit is cost-free. It is not.  While profit obviously is cost-free to its recipient, it is not cost-free to the system as a whole. Some entity must provide the “net positive return” above the outlay made by the investor. To reiterate: while it is possible to get “something *for* nothing,” it is not possible to get “something *from* nothing.” All net positive returns on investment are subsidies from the entity that pays to the entity that receives. Investors who claim the highest profits are therefore merely those who receive the largest subsidies from others.  Fred witnessed profit subsidies at work when Investor Ingrid launched her parking lot scheme. In order to get others to owe her rental debt, she harvested the trees on the wooded lot and used a petroleum by-product to pave it. But she did not pay a cent to create the trees or the petroleum, and neither did any other human. Nature provided the “silent partners” that subsidized her profit. Furthermore, the trees and the petroleum subsidized more than her profits. They also subsidized the profits of the sawmill’s corporate shareholders, the profits of the paving contractor, and indirectly the profits of Banker Bob, who expects a net positive return from credit he extended to both Ingrid and the bar corporation.  Moreover, the trees and petroleum subsidized the wages of the sawmill hands and paving crew; without trees to saw and petroleum goo to smear, these workers would earn no wages. When the workers exchange their wages at the bar for beer, they in turn are subsidizing the proportion of the bar’s income now owed to Bob’s bank as interest and to Ingrid as rental income and dividends.  Bankers and financiers and other vainglorious people believe profits are what make material wealth possible. Fred understands it is material wealth – the unaccounted-for “externalities” in economics-speak – that makes profit possible.  Fred views the bar corporation, its employees, its customers, its bank, its landlord, and its parking lot as a microcosm of the biophysical economy as a whole. What he understands is that every entity claiming to “make a profit” from this economic system has received a net positive return wholly subsidized by the consumption of biophysical resources – which are exemplified here simply as “trees,” “petroleum,” and the food and beverages consumed by workers at the bar.  Furthermore, Fred knows all consumed biophysical resources are quantitatively finite in scale, although some are renewable (trees, food and beverages) and some are not (petroleum). And it is the finiteness of all resources – energy and matter, alike – that presents an insurmountable problem regarding the future of the House of Infinite Debt.  ***Financial Profit is Not Limitless:*** Having conveniently assumed profit is free of cost, the investing class assumes profit is also without limit. This assumption, of course, is necessary to maintain the belief that perpetual losers may borrow at interest – or pay as rent – or return as dividends – an infinite amount of poker chips for the benefit of perpetual winners. Fred knows this belief is delusional: it is an axiom of the biophysical economy that “every economic activity involves the consumption of energy and every activity requires the through-put of some material.”  Every penny’s worth owed to Banker Bob and Investor Ingrid is subsidized by the consumption of energy – by humans, machines, and by nature itself – in the process of the consumption of natural resources. In fact, consumption of energy/matter (let’s just call it ‘stuff’) was necessary from Day One for the biological reproduction of human beings, who then harvested and produced more consumable stuff necessary for their survival through the ages.  The newfangled idea of exchanging money-tokens for consumable stuff (and vice versa) did not negate biophysical reality. Humans do not survive by getting and consuming money; we survive only by getting and consuming stuff. *It is stuff that gives value to money, not money that gives value to stuff*.  Likewise, it is the exchangeability of a money-token for stuff that ultimately backs the value of debt: if the debt in the credit system could not metamorphose into money in the real world where money is exchanged for stuff, there would be no incentive for anyone to want to owe or be owed. Without the need for the consumption of stuff – by creditor and debtor, alike – no interest income, rents, or dividends would ever be owed to anybody.  But the consumption of stuff is limited by the availability of stuff. And the availability of stuff is limited by the fact that stuff is finite. Here lies the disconnection between the biophysical world and the financial world: the real world simply cannot comply with the self-serving arithmetic of the investment class, which expects to receive endless profit subsidies predicated upon the endless consumption of finite resources.  Fred can only stand aback, amazed and terrified, by the incorrigible stupidity of both the credit system and of the humans who designed it on behalf of the investor class.  **PUNCH LINE**  Disconsolate, Fred observes the crowded barroom full of sawmill workers being served by the bar corporation waiters. No doubt most of them owe debts at a rate of interest – credit cards, college loans, mortgages, auto loans. Fred wonders how much of their lives will be spent laboring to pay interest-profit owed to third-party investors for the goods and services they are providing each other by their own labor and consumption?  But Fred reconsiders. What if none of these workers personally owed a cent of interest-bearing debt to anyone? Would it make a difference in how they must spend their working lives?  No. The stores at which workers must shop, the corporations for whom they must work, the landlords to whom they must pay rent, the governments to whom they must pay taxes, and even the bar where they go to have some fun …all of these entities owe their own debts at interest. Centuries before the invention of “consumer credit,” workers had still been required to labor their lives away to earn money-tokens that subsidize the debts of others – who owe the likes of Banker Bob and Investor Ingrid – who also owe taxes to the government – which also owes its investor-genie – who issues debt-based currency – which must be earned, or borrowed, by workers.  Of course, Fred realizes that the customers and the waiters in the bar live lives materially superior to those of the kings and emperors of antiquity, just as they live lives materially superior to those in less industrially developed countries. But he also knows the material condition of their lives is hardly a function of the false “wealth-creating” parasitic credit system. The extent of their prosperity is rather a by-product of the fact that their country, the USA, which comprises only 5% of the world’s population, consumes 25% of the world’s available petroleum energy supply every day of the year.  Were it not for the parasitic Banker Bobs and the Investor Ingrids of the world siphoning off their interest-profits from virtually every single dollar’s worth of income earned and spent, such a level of per capita energy subsidy should be sufficient to create a virtual economic utopia – or at least an economically equitable society – both of which the USA decidedly is not.  Perpetual winners require perpetual losers. And it seems everybody wants to be a winner.  Fred suddenly experiences an awkward moment of introspection. He thinks about his own savings account at Bob’s bank; about his college investment fund for his daughter; about his pension fund contributions; about his mutual funds; about his home mortgage; about the lottery ticket in his pocket; even about his life insurance policy…every one of them a financial investment from which he somehow hopes to realize a “net positive return” – “free money,” “something for nothing,” “profit” – even from his own death. Moreover, none of these investment schemes would have been sold to him without the sellers’ expectation of potentially endless profit, all subsidized by consumption of absolutely limited resources.  Suddenly, unbidden, a vision from Fred’s childhood swims into his mind’s eye: a little boy at a carnival; the sticky-sweet smell of cotton candy; the pre-recorded calliope music. And above it all, the beguiling voices of the hawkers at the gaming kiosks: *How about you, young fellow? Step right up, now! Everybody a winner! Everybody gets a prize!*  Did Young Fred get a prize? Did he get back more than what he paid to play the carnival games? Does he now believe his investments will return him, and all the other investors like him, “free money” at no expense to others or to the finite resources of nature? And what special privilege does he claim – as a dedicated biophysical economist – to expect to receive “something for nothing” on an overcrowded, finite planet?  But before Fred can attempt to reconcile his childhood vision with his knowledge as a biophysical economist, his attention is distracted by the manifestation of debt. The bartender has presented the bar bill.  As Fred reaches for his wallet, Investor Ingrid magnanimously plucks the bill from the bartender’s hand. Without so much as glancing at it, she leans and whispers to the bartender. Then she gives a little wink aside to Bob and Fred.  “No problem at all, Ma’am,” the bartender says. “We’ll be happy to put it on your tab.”  Fred glances up again at the FREE BEER TOMORROW sign. This time he does not chuckle.   |  | | --- | | **ABOUT THE AUTHOR**  Jada Thacker, Ed.D has been a history teacher and independent researcher for over 20 years. He is the author of the innovative textbook, *Dissecting American History: A Theme-Based Narrative* and numerous published articles. Respond to [jadathacker@sbcglobal.net](mailto:jadathacker@sbcglobal.net). |   [**|Back to Title|**](http://www.pelicanweb.org/solisustv12n08page6.html#articletitle)  [**Page 1**](http://www.pelicanweb.org/solisustv12n08page1.html)[**Page 2**](http://www.pelicanweb.org/solisustv12n08page2.html)[**Page 3**](http://www.pelicanweb.org/solisustv12n08page3.html)[**Page 4**](http://www.pelicanweb.org/solisustv12n08page4.html)[**Page 5**](http://www.pelicanweb.org/solisustv12n08page5.html)[**Page 6**](http://www.pelicanweb.org/solisustv12n08page6.html)[**Page 7**](http://www.pelicanweb.org/solisustv12n08page7.html)[**Page 8**](http://www.pelicanweb.org/solisustv12n08page8.html)[**Page 9**](http://www.pelicanweb.org/solisustv12n08page9.html)  [**Supplement 1**](http://www.pelicanweb.org/solisustv12n08supp1.html)[**Supplement 2**](http://www.pelicanweb.org/solisustv12n08supp2.html)[**Supplement 3**](http://www.pelicanweb.org/solisustv12n08supp3.html)[**Supplement 4**](http://www.pelicanweb.org/solisustv12n08supp4.html)[**Supplement 5**](http://www.pelicanweb.org/solisustv12n08supp5.html)[**Supplement 6**](http://www.pelicanweb.org/solisustv12n08supp6.html)  [**PelicanWeb Home Page**](http://www.pelicanweb.org/)  **[Bookmark and Share](http://www.addthis.com/bookmark.php?v=20)** | | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | ***"Confusion of sign and object is original sin coeval with the word."*  Willard Van Orman Quine (1908-2000)** | |  |  |  | | --- | --- | | **GROUP COMMANDS AND WEBSITES**  **Write to the** [**Editor**](mailto:the.pelican.web@gmail.com?subject=MOTHER%20PELICAN%20FEEDBACK) **Send email to** [**Subscribe**](mailto:solidarity-sustainability+subscribe@googlegroups.com) **Send email to** [**Unsubscribe**](mailto:solidarity-sustainability+unsubscribe@googlegroups.com) **Link to the** [**Google Groups Website**](http://groups-beta.google.com/group/solidarity-sustainability) **Link to the** [**PelicanWeb Home Page**](http://www.pelicanweb.org/index.html) | **CREATIVE COMMONS LICENSE  [Creative Commons License](http://creativecommons.org/licenses/by-nc-sa/3.0/us/) ISSN 2165-9672** |   **Page 6** | |  |  |  |  | | --- | --- | --- | --- | | **FREE SUBSCRIPTION**   |  | | --- | | [groups_small] | | **Subscribe to the *Mother Pelican Journal* via the Solidarity-Sustainability Group** Enter your email address:  Top of Form     |  | | --- | |  |   Bottom of Form | | | |