

## The Inevitable Economic Depression; The Debt Axioms

How is it possible to know an economic depression is imminent? Simple; when asset bubbles, which are illusions of wealth, become collectively too large for central banks and governments to diffuse on a gradual stealth basis via inflation, and these asset bubbles are accompanied by massive malinvestment, then the result always includes sudden and pervasive collapses in the economy, which is its mechanism to correct the malinvestments and bubbles. Please refer to the Austrian Enginomic “U.S. Economic Health Graphs”<sup>(1)</sup> to learn the magnitude of the bubbles today (2012). The illusory aggregate asset bubble (stocks, bonds, and real estate) is at least \$23 trillion<sup>(1)</sup>, and climbing!

The size of the U.S. asset illusion for real estate<sup>(1)</sup> has been improving, and the U.S. stock bubble<sup>(1)</sup> has been shrinking to a lesser extent. Unfortunately, the Total Credit Market Debt bubble<sup>(1)</sup> has not improved. This article will focus upon that debt bubble by uncovering an alternate means to view debt and its relationship to a sovereign’s output.

### The Austrian Enginomic Debt Axioms;

The [Debt Relative to GDP; The Austrian Enginomic Debt Axioms](#)<sup>(2)</sup> article is a prerequisite to this article. Critical definitions and logic that are referenced below are discussed in that article.

### The Impossible Debt Bubble

Once one experiences the required paradigm metamorphosis to view debt in a real vs a financial context, then the following charts will make sense. There is an inescapable relationship between real debt and real output in aggregate. The analysis of debt incurrence and repayment that most people utilize is based upon an individual agent perspective. For example, if I’m overwhelmed with debt as an individual (or sovereign), then who is to say I cannot grow my way out of the burden under the right conditions? If I’m a greeter at Walmart, and have \$1 million in credit card debt, then why could I not work my way up the corporate ladder, earn millions, and repay the debt with ease! That is certainly possible, but that example is describing a very high default risk situation. In contrast, macro debt cannot be evaluated from an individual context. This article analyzes real debt in aggregate and asserts that once aggregate debt saturation has been reached by the citizenry of a sovereign, then **any** increase in aggregate debt relative to an increase in total output **is impossible to repay in real terms!**

This analysis is conceptual logic. It is impossible to assemble any history of data to confirm or dispute the assertions. It is possible, however, to establish *a priori* logic that will support the Austrian Enginomic debt axioms.

### All Debt is Netted to the Individual Agent Level

Every human in history has had a net debt/credit position at every moment in his lifetime. All of the debt discussion in this article must first be viewed and netted at the individual level before any aggregation. One can readily understand that a person may have multiple credits and debts. In dollar terms, if I owe \$1,000 to others and others owe me \$700, my net debt is \$300. Further, every business on earth has individual agents who are responsible for the credits and debt obligations of the business. These credits and debts must be netted to the individual level as well. If I own a share of IBM, then I will have additional credit and debt

obligations of IBM to net against my personal credits and debts. Government debt may be distributed in any manner to the individual agent level as long as it is captured in the aggregate.

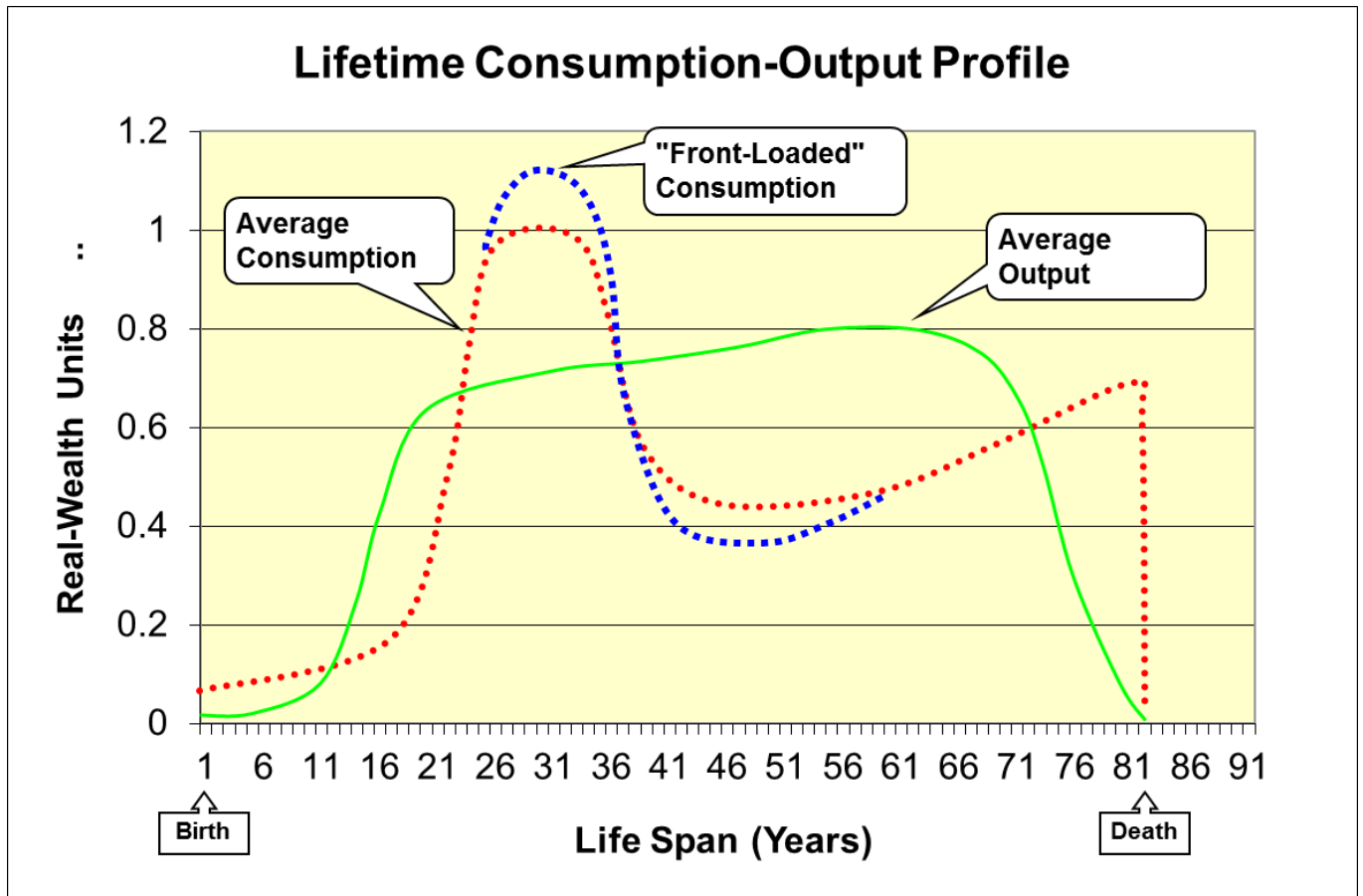
Certainly any analysis or reconciliation of this mass of data would be an impossible task. Again, conceptually all real debt at any time in history must be viewed at the individual level, which must be netted. At any point in time in human history the sum of credit for individuals who are in net credit positions must be precisely equal to the sum of debt for individuals who are in net debtor positions. An effort to reconcile this logic to contemporary Debt-to-GDP data is discussed in the [Debt Relative to GDP; The Austrian Economic Debt Axioms<sup>\(2\)</sup>](#) article.

### **The Concept in Graphical Form**

The first chart illustrates the conceptual “Lifetime Consumption-Output Profile” of the “average” person noted in the debt axioms. The vertical scale represents “Real-Wealth” units which can be characterized by listing all of the goods and delivered services ever produced by humans on earth, then dividing that listing of Real-Wealth by the number of humans who have ever lived. The result is certainly an astronomically complex fraction of all the Real-Wealth ever produced. The concept, however, is simple. If you can accept the logic that, on average, one cannot consume more than one produces, then the graph offers a visual of that logic. The horizontal scale represents conceptually the average age reached by all humans who have ever lived and projected for those who are alive today.

1. The green line represents the “average output” of every human who has ever lived distributed over the average lifetime (years). There are four sections to this output.
  - a. The first section includes the first few years of a human life where no significant output is possible. i.e. babies are totally dependent upon the produce of others to survive.
  - b. The next section represents the rapid increase in production where humans begin learning skill sets and producing goods and services.
  - c. The third large mid-section recognizes a producing human that gradually increases his productivity throughout his working years via process improvements (e.g. new technology) or new products.
  - d. The fourth section represents retirement and/or the decline in the person’s ability to produce anything. When one is no longer working he must consume the produce of others to survive regardless of his asset ownership.

The area under the green line conceptually represents the entire production (output) of the “average” person in the history of human existence.



2. The red dotted line conceptually represents the “average consumption” of every human who has ever lived on earth. Complying with the definition of consumption <sup>(2)</sup> it will necessarily and precisely equal production (output). So, the area under the red dotted line will be precisely equal to the area under the green line. Differences between the green line and the red dotted line are as follows:
  - a. Consumption begins the day every human is born and gradually increases. At minimum, food and other requirements for sustenance will be “consumed”.
  - b. The rapid red dotted line increase indicated in the graph represents the “consumption”, for example, of a new car, home, or appliances. In this time period, one’s “consumption” far eclipses one’s production; hence, real debt for an individual is incurred where the red line height exceeds the green line height.
  - c. Following the peak “consumption” period the “average” person must reduce consumption to a level significantly lower than his output (red dotted line moves below the green line) to effectively repay the real debt incurred earlier in life.
  - d. The final upward slope of the red dotted line represents the increased consumption associated with old age (e.g. higher medical expenses). Consumption will again exceed production similar to the initial “baby” section.

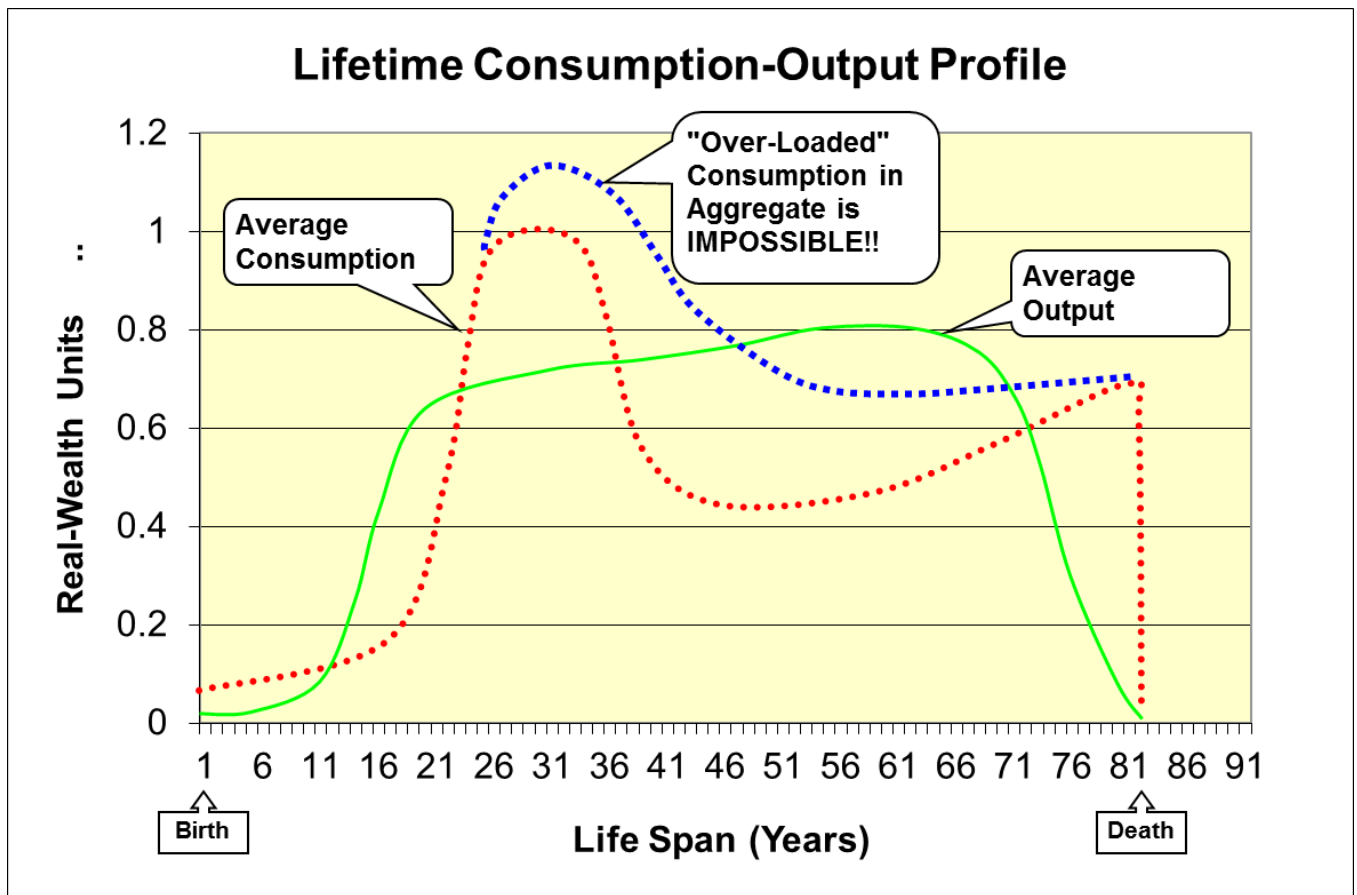
Note: This real debt incurrence and repayment pattern is entirely possible and even healthy. There is no reason a person (or company) cannot plan to incur and eventually repay debt in a responsible manner.

3. The blue dotted line represents an exaggerated “front-loaded consumption” profile. This logic illustrates a period of time that an individual or group of individuals (e.g. U.S. citizens) is encouraged to consume more earlier in life than otherwise would have been. As a result, they must consume less later on in life relative to the historical red dotted line profile such that the area under the red/blue line is again precisely the same as the area under the green line.

This increased level of real debt taken on earlier in life portends a greater risk of non-repayment. If a person is spoiled by enjoying increased consumption, then his expectation is that the good times will continue indefinitely as long as government and banking policies, and commonly held belief systems support this excessive consumption. The highly visible rhetoric in the U.S. today stresses the importance of consumption. i.e. Consumption represents 70+% of the economy. So, “... consume to the extreme to keep the economy going strong!” The all-important production and investment components are missing from this sales pitch. If this increased consumption is being produced by the Chinese, then the imbalance and high repayment risk is rather obvious.

This “excessive” front-loaded consumption profile can exist in theory, but the likely result is that those who provided the real wealth (e.g. China) to feed the excessive consumption (U.S. citizens) will be on the losing end of the lifetime consumption deal.

The next chart illustrates a debt burden that **is impossible** to repay. This chart captures the essence of a financial debt bubble, which is an illusion of wealth. Our creative monetary and banking system enables the creation and issuance of financial debt at a rate that far exceeds economic output increases.



In this case the blue dotted line spikes above the original balanced red dotted line, but does not return back below the red dotted line. Hence, the area under the new blue dotted line plus the area under the first two sections of the red dotted line is far greater than the area under the original red dotted line or the green line. This expanded area is an illusion of wealth and is impossible to repay! Creditors who hold these debt securities believe they are much wealthier than is possible.

This dichotomy illustrates the disconnect between the "financial economy" and the "real economy". The ability of the banking system to issue greater increases in financial debt compared to the increases in real economic output creates this illusion or bubble. The excessive credit expansion effectively dilutes all existing credit market debt. It is similar to the Federal Reserve Bank "printing" more fiat currency, which dilutes the value of all existing currency. This second chart demonstrates the violation of the second debt axiom that, on average, one cannot repay more debt for Goods and Services received than one can produce in a lifetime.

### Debt Saturation

Once humans progressed to a level of specialization (division of labor) such that an insignificant quantity of our own produce is consumed by ourselves, we have reached what I term as real debt saturation. Modern industrialized societies and most developing societies have achieved this condition of real debt saturation. As a consequence, any increase in aggregate real debt cannot be greater than the increase in aggregate real output.

In contrast, prior to "modern society" where individuals would consume significant portions of what they produced (hunter gatherers), one could certainly increase real debt greater than his increase in production.

As societies have advanced over time, the original “hunter gatherers”, who consumed 100% of what they produced (“0” debt-to-GDP or output), gradually gave way to specialization and the division of labor where virtually 0% of what an individual produces is consumed by that individual (100% real debt relative to output). Hence, it becomes a state of real debt saturation. One must repay to another agent virtually 100% of what one consumes. That repayment may be nearly instant (exchanging money for good or service) or over a period of time (buying an auto via time payments).

The complete break away for any semblance of a gold or commodity backed currency by the U.S. in 1971 enabled the financial powers to creatively expand financial debt at rates much greater than our nations output.

### **Debt Redemption**

The logic that most people utilize in analyzing debt repayment is based upon an individual rather than system approach. As mentioned earlier, who is to say that one cannot repay any debt incurred given enough time and good fortune? The problem with this logic is the complete neglect of the aggregate system-wide production and consumption framework. Any heroic efforts to repay a seemingly impossible individual debt obligation must necessarily create real debt elsewhere in the system. That heroically expanded output by an individual must be consumed, and thus owed by another agent. It is a “catch-22”. As the world of humans progresses through time, any new real debt incurred must, by definition, equal the output produced. Hence, any increase in aggregate debt cannot be greater than the increase in output. A creative illusory paper system of debts in excess of the saturation level does not represent the real world.

### **Conclusion**

Our aggregate debt expansion on earth cannot increase at a faster rate than the increase in output on earth. All advanced and emerging countries and their citizens today are creatively issuing debt securities at far greater rates than the associated output which gives the creditors holding the debt securities the perception they will be paid back fully in real terms (principle plus interest after inflation).

This global debt bubble is the largest in history. Once the debt bubble is discovered on a large scale by a critical mass of people and confidence is lost in our fiat monetary system, then the bond markets will falter in a dramatic manner. Since bond markets are perceived to be “safe” and “conservative”, it is the worst financial asset in which to create illusions. If one’s safest harbor of perceived wealth is discovered to be an illusion, then confidence in the entire system can diminish rapidly. The economic depression we’re experiencing will be deep and long because of the size of the global bubbles and the resistance by humans to adapt policies that prevent the formation or expansion of bubbles. Only a return to a sound money system (currency backed by gold or similar) could quickly return the global markets to balanced consumption/production profiles and risk exposure.

### **References:**

- (1) The “U.S. Economic Health Graphs” generated (2012) by Russell Randall can be found here: <http://austrianenginomics.com/id10.html> They include U.S. equity, bond, and real estate graphs illustrating market valuations in comparison to “real” valuations.
- (2) The [Debt Relative to GDP; The Austrian Enginomic Debt Axioms](http://austrianenginomics.com/DebtRelativetoGDPTTheAustrianEnginomicDebtAxioms.pdf) by Russell Randall (7-26-2010) can be found here: <http://austrianenginomics.com/DebtRelativetoGDPTTheAustrianEnginomicDebtAxioms.pdf>