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The Cause And The Cure Of 2008 World-Wide Financial Crises— Non-Violable Laws Of Nature In Social Science Vs. Man-Made Laws

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Abstract

It should be perfectly clear to everyone by now that the crisis occurs because THE PRICE IS WRONG! The incorrect solution of value is the cause of most and the current financial crises, and the correct solution of value is the cure.

No one wants to CHANGE the current value-absent scientific culture more than members of Post-Science Institute. Of all the CHANGES WE NEED, the first, the most important, and the most urgent is the way that the current society determines value. The solution of value is an non-violable law of nature in social science. Other possible non-violable laws of nature in economics affecting the current financial crisis are the Finite Spreadsheet Instability and the Quantity Theory Of Money PQ = VM. Nature teaches us laws of nature through punishment by financial crises.

This article has three parts: Part I gives an overview of the problem and the solution of value. Part II provides a technical

explanation and some examples. Part III proposes that the rational method of rational decision making be based on the rate of return.

The Cause And The Cure Of 2008 World-Wide Financial Crises Part I

From 1984 to 1991, Dr. William Kinnard (the recognized leader in real estate appraisal) and I led a team of world authorities in real estate appraisal to introduce a solution of valuation, which predicted the Savings and Loan Crisis by detecting the real estate over-valuation. The California real estate market crashed by 35% in 1991, verifying the prediction. The same solution predicted the Subprime Woe in June of 2006, a few weeks before it flared up and ignited the still growing world-wide financial crisis.

It should be perfectly clear to everyone by now that both the Savings and Loan Crisis and the Subprime Woe were caused by the over-valuation of real estate prices. When the market participant considered the price trend using a finite spreadsheet, the over-valuation instability initiated a vicious cycle, which exploded into the current credit crisis with the freezing of V in the Quantity Theory of Money **PQ = VM**, where P = Price, Q = Quantity; V = Velocity of Circulation of Money, and M = Money Supply. A great expansion of M is needed to balance the reduction in V to keep VM growing. A very dangerous snowball effect of downward spiral of P through a deflation instability is currently developing and is threatening to lead the world into another Great Depression. P, and Q, in a competitive capitalistic market must be raised through innovations.

Before another major innovation can take the place of the discouraged Internet entrepreneurs, the Fed started to increase the interest rate in 2004. According to the solution of value, which is a non-violable mathematical law of nature in economics, mortgaged real estate price decreases by about 9% for every percentage increase in interest rate. Increasing the fed rate from 1% to 5.25% triggered the Subprime Woe, which would NOT be due to subprime lending, if the mortgage payment had not been raised by the rise in interest rate. The over-valuation of the housing price is easily predictable by the solution of value.

Anyone can check the relationship between the price and the interest rate in a few minutes just by doing two calculations (change the two interest rates for Items 8 and 10 from 6.25% to 7.25%) at:

http://www.123is.com/fedreal.htm

The Subprime Woe caused a chain reaction, resulting in the credit crisis, which expanded through the law of nature of Finite Spreadsheet Instability into the current financial crisis. The cure, according to the laws of nature, namely, PQ=VM and solution of value, is to wind back the clock by lowering the interest rate to solve the Subprime Woe and by reinvigorating the proven Internet industry.

The solution of value can stabilize the price with an Infinite Spreadsheet Stability. If all market participants, including the policy maker, can calculate the correct price based on value, which is defined as the sum total of all the future benefits and losses to infinity in time, the real estate price will be stabilized. Otherwise, the Finite Spreadsheet Instability, which takes a short-sighted view of the price trend, is on its way to expand the Fed caused Subprime Woe into another Great Depression, fed by the free energy supplied by all the financial derivative, whose volume is currently matching the $50 trillion Gross World Product.

Understanding post-science Non-violable Laws of Nature in social science, which is an order of magnitude more complex than science, not just common-sense economics even less rigorous than science, is needed to solve the current and all future financial crises.

The permanent solution of the current world-wide financial crisis could just be finding and satisfying the non-violable laws of nature governing our financial system, such as the law of supply and demand, which, when quantified and made mathematically rigorous, would become the solution of value. Any ad hoc new regulations might come into conflict with these non-violable laws of nature.

The main debate on the current financial crisis should be the choice between regulation and deregulation. Currently, the general consensus is that the free market cannot be trusted, and the only remaining question for the policy maker is “How to regulate?”

Post-Science Institute believes that the market is regulated by non-violable laws of nature in social science, as the behavior of material objects is regulated by gravitation, a law of nature in science. All the laws in science are discovered, not man-made.

Man-made regulations, not based on laws of nature, would be in conflict with laws of nature dealing with the same situation. Thus, a deregulated free market generally functions better than a market regulated by man-made laws. However, the free market is increasingly subjected to dangerous market instabilities.

The free market can be defined as an economy where the non-violable laws of nature are not completely known to the market participants, including, particularly, government policy makers.

Post-Science Institute would like to introduce three important non-violable laws of nature in social science related to financial crises. They are (1) The Infinite Spreadsheet Stability where the Infinite Spreadsheet is based on the Cash Flow Equation, **Return = Sum Of Cash Flow + Cash From Resale**, which is considered to infinity in time, (2) The Finite Spreadsheet Instability, where the Cash Flow Equation is considered for a finite time, and (3) The Quantity Theory of Money **PQ = VM**. In terms of implementation, the policy maker should try to stabilize (2) the Finite Spreadsheet Instability with (1) and (3).

The cause of financial crises is simply the ignorance of these non-violable laws of nature. And the cure is the understanding and the observance of these laws of nature. Nature teaches us about laws of nature in economics by punishing us with financial crises.

The Infinite Spreadsheet has predicted both the S&L Crisis and the current crisis. The solution of value is necessary in predicting and preventing all future financial crises by detecting over-valuation. It can stabilize the Finite Spreadsheet Instability by determining a price based on future cash flows, not on past prices, which makes the price inflexible to market changes. Satisfying PQ=VM is needed to stabilize the money supply, the price, and the quantity and to save our current economy from another Great Depression.

Subject: Explanation Of The Cause And The Cure Of Financial Crises—Non-Violable Laws Of Nature In Economics Part II

The mathematically rigorous solution to the Cash Flow Equation has to deal with the satisfaction of the equation by the price and all the resale prices to infinity in time. The rigorous solution is disclosed in the patent ***"Quantitative Supply And Demand Model Based On Infinite Spreadsheet"*** (Pat. No. 6,078,901), which also suggests that the Market Comparison Method embedded in man-made regulations is the main cause of over-valuation, which, in turn, causes financial crises.

The Finite Spreadsheet Instability occurs when the Cash Flow Equation is considered only for a finite time, resulting in a vicious cycle generated by the feedback between decreasing or increasing returns and falling or rising prices, respectively. Considered to infinity, the return and the price moves in opposite directions.

For example, both inflation and deflation are Finite Spreadsheet Instabilities, and so are over-valuation and under-valuation. The Great Depression was caused by the Finite Spreadsheet Instability of deflation, which is threatening the current world economy.

PQ=VM gives a rough picture of the working of the economy, particularly, of the role of money supply in the economy. Putting it heuristically, the wheel of economic production must be lubricated by a sufficient circulation of money.

PQ=VM is severely tested in this financial crisis. The freeze of the circulation V has rendered the enormously increased money supply M ineffective in sustaining the normal operation of the economy.

The economic growth should also be based on the increase in the left side of the equation PQ=VM. In a capitalistic economic system, competition generally drives down the price. Alan Greenspan has exhausted the ability of the low-tech housing and auto industries in sustaining the economy, after he burst his "Internet Buble." Now these industries are becoming burdens on the economy. The real increase in P or the value and in Q is generally achieved through major revolutionary innovations.

Satisfying the non-violable law of nature PQ=VM should be more important than observing the self-imposed discipline of the national debt. The reluctance of President Roosevelt in abandoning his efforts to balance the budget could be one of the major causes in prolonging the Great Depression. PQ=VM is a law of nature, and the national debt, a man-made regulation.

As long as our economy satisfies PQ=VM, the self-discipline of the national debt would no longer be necessary. Throughout history, economies have been burdened by the silver standard (e.g. Roman Empire), gold standard (e.g. USA, Britain, etc.), and now the national debt (all nations), which might keep government from satisfying PQ=VM. Man-made regulations must not be allowed to interfere with or to contradict non-violable laws of nature.

The very possibility of the existence of non-violable laws of nature in social science could completely CHANGE our current social structure based on man-made laws, whose validity will be called into question by social crises. This is the debate for the coming century.

Subject: How To Make Rational Decisions Part III

The most relevant question in deciding which industry or small business, such as auto, housing, infrastructure, energy, and high-tech, to support is: "How To Make The Rational Decision On Any Project?"

The decision should be based on the sum total of all the arguments, for and against. There is only one way to consider all the arguments according to mathematical economist Gerard Debreu: Taking into consideration all the factors to infinity in time and space. And, according to him, there is only one way to consider infinity: Mathematically.

Economists have worked on the solution of value technically for the good part of the last century, until John von Neuman, Kenneth Arrow, and Gerard Debreu finally defined clearly the problem of value in the book "Theory Of

Value" of Debreu. But, the problem of spatial dependent of value is incorrectly solved on page 34, discussed by Arrow and me.

The most important question for decision making should be: "What Is The Rate Of Return On Investment On The Project?" For example, the rate of return for Internet startups are around 50% and up, and the rate of return for housing and auto industries is around 10%. The link below calculate stock return:

http://www.123iss.fedstock.htm

The Federal Reserve in the past decade had unintentionally disrupted the explosive growth of the high-return Internet Industry and had to replaced it with the low-return housing and auto industries to sustain the economy. Now, the housing and auto industries (most likely to be debated in the future, also the infrastructure building industry; supporting mainly infrastructure building fits right into a Great Depression economy) can only survive under abnormally low interest rates, and there is no high-return industry to replace them, so far, except possibly the proven Internet industry.

The new administration must have a rational method for determining the priorities of projects. The determination has to depend on the correct solution of value, from which the price and the rate of return can be calculated. Thus, the first question for everyone to answer, particularly top economists with Nobel Prizes, should be: "How To Make Rational Decisions?" ### Hugh Ching, MIT SB, SM, ScD, Post-Science Institute 11-25-2008 email: chien_yi_lee@universalcomputersourcecode.com