DANIEL SMITH

Proposal and Comment Information

Title: Check Services - Request for Information and Comment on the Future of the Federal Reserve Banks' Check Services, OP-1874

Comment ID: FR-2025-0077-01-C154

Subject

Docket No. OP-[1874] (Check Services)

Submitter Information

Name: Daniel Smith

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Greetings,

I must express my disapproval for proposals to discontinue check services by Federal Reserve member institutions in the strongest possible terms.

The declining usage argument is specious and rings as hollow as those wishing to force the economy onto a so-called "cashless" system where all transactions must be electronic. Such a system will break, as the security of digital communications is illusory. The insecurity of such methods was proven conclusively by Claude Shannon in his 1949 paper, Communications Theory of Secrecy Systems, which contains a rigorous mathematical proof that only single-use pad is cryptographically unbreakable. Thus, any claim that electronic systems are "more secure" than physical/paper systems is demonstrably false, it is merely more difficult to track adversaries and prove the chain of ownership, a hazard which our physical cash and paper check systems provide a critical backup for. Further, since transactional information is statistically more regular than language overall, it is easier for a potential adversary to reconstruct the ciphers used to obscure them, and more difficult for the system stewards to detect unwanted intrusions.

There is also the hazard of then general reliance on technology to consider. Imagine a situation where a local power grid is disabled for a considerable span of time - an ice storm in 1998 disabled the grid for a month or more in parts of New England and Canada - would it be tolerable to effectively disable the ability of folks on scene to perform commerce during such a span? The RFI's underlying proposal would create a single point of failure for entire regional economies, and a particularly acute one for rural communities, which would be an altogether intolerable situation.

Another aspect of this is the monopolistic behavior of the electronic payment service providers, which many (myself included) would argue encourages higher overall price levels (counter to the Federal Reserve's mandate to encourage price stability), and which clearly violates the terms of the Clayton Act of 1917, which requires all commercial entities to offer their products at equal prices to all willing customers. If only indirect commerce is possible (which if neither checks nor cash are taken, by definition it must), then the price transparency Clayton requires can't exist, since direct customers offering lawful payment may be refused service in favor of those who use chosen intermediaries. The current Chair of the Federal Reserve has spoken about the need to uphold the legal tender status of cash, but little has been done to crack down on entities which violate the law by refusing cash payment, and indeed refusing direct business on the part of individuals of any kind. Discontinuing check services would only embolden these entities - whose prices can be demonstrated to have far outpaced overall inflation in recent years - to disregard Federal Antitrust Law altogether.

The desire to look "modern" and "innovative" is causing many within the sphere of economics (both policymakers and academia) to disregard the critical role which the physical currency plays in maintaining economic stability and, more importantly, in ensuring economic recoverability under various worst-case scenarios. The push to electronic-only creates the hazard of an unrecoverable scenario in which the chain of ownership of physical assets can be obscured by the nebulous chain of ownership of electronic/virtual assets - in other words, where it can't be established with any confidence as to WHO owns WHAT. That is a recipe not just for economic regression, but creates a substantial risk of societal collapse. Too often "unlikely" or "infrequent" events are discounted when calculating policy, which is why I felt this notice of opposition was warranted.

For your convenience, I have attached a PDF copy of an e-book I published in 2013 on the general failure of economic policy over the preceding century. Time has proven the concerns found therein to be more than warranted. For this particular discussion, I would call attention to chapters 3, 5-8, and 11. The

reliability of electronic methods is nowhere near as good as advertised, and claims of security are outright false. How absurd would it be to eliminate a mode of payment, which by its nature leaves a paper trail, on the basis of such arguments?

Sincerely,

Daniel M. Smith

In Defiance of Reason:

The Failure of Modern Economics and the Coming Dark Age

By Daniel M. Smith

Foreword

"There is no error so monstrous that it fails to find defenders among the ablest of men."

-Lord Acton

The purpose of this book is not one of forewarning. The catastrophe which is described herein has already come to pass. The great civilization in which we live is no more than an illusion, and the fantasies upon which scholars and statesmen alike would have us pin our hopes, dreams, and aspirations, can not be made real by any means, however clever and inventive. All that is left is for the light to shine upon this great tragedy, so that it might at last be fully and firmly understood.

Nearly a century has passed since the great clash of ideals which pitted great liberals[1] like Ludwig von Mises against the monetarists led by John Maynard Keynes. It was, unfortunately, the arguments of Keynes which won influence over the statesmen of the day, owing principally to the fact that the theories of von Mises concluded that statesmen were utterly incapable of assisting real economic growth in the long term, and invariably unwilling to sacrifice short-term benefits for long-term stability. Keynes alone gave them hope that government functionaries may yet be able to be a potent and benevolent force for all. Modifications to the monetarist system have been proposed at various times by the likes of Milton Friedman and others, but the monstrous and fundamental error in the belief that government power should or even could be used to enhance economic growth and stability has stood without meaningful challenge in public policy circles ever since.

As the consequences of malinvestment which von Mises predicted[2] became apparent,

1 The author uses the word "liberal" in its classic sense, meaning belief in individual freedom from restraint based on free competition, a self-regulating market, and the Gold Standard. The school of economic thought to which Ludwig von Mises belonged is now commonly referred to as the Austrian School, since many of its founders were born in Austria. However, the ideological roots of the school, to which the author ascribes himself, are actually drawn primarily from English and American history.

2 Mises, Ludwig von. *On the Manipulation of Money and Credit*. Translated by Bettina Bien Greaves, Jr. and Percy L. Greaves,

governments and central bankers alike have resorted to ever more creative means of obscuring those consequences from both the public and themselves. However, just because something is hidden does not make it less real, and as the consequences have grown, this grand disguise has grown along with them. The enormous productive capacities which once dominated Western nations are but a faint shadow of their former selves. The enormous reserves of capital which took generations to accumulate are all but exhausted. The immortal words of Keynes ("*In the long run, we are all dead."*) will soon serve as an epitaph for the present age of public fiscal profusion.

The contents of this book draw heavily from the most prominent works of ages past. The science of economics is not merely the study of money, it is the study of civilization itself. Civilization stands as incontrovertible proof that, upon the whole, man can and will produce more than he consumes. Civilizations could not come into existence otherwise. It is also apparent that while great discoveries and technological advancements are to be found in all ages, coming from all manner of individual, the event is truly rare in which such knowledge, confined to a particular field of study, is pooled together in a single work, creating a reliable, self-consistent system of thought. In the field of economics, that work was Adam Smith's *Wealth of Nations*[3], first published in 1776, which remains to this day the most comprehensive study of the science ever published.

Since the time of Adam Smith, however, the study of economics has, naturally, become much more fragmented. It was the strength of Adam Smith's patient reasoning, thorough explanations, and most importantly, his meticulous definition of terms which made his treatise on economics so immensely useful and understandable. Unfortunately, those same virtues have also subjected his work to distortion and willful misrepresentation as particular passages have been taken out of context. The view and interpretation of *Wealth of Nations* which pervades American academia today is based largely upon second- and third-hand statements from individuals who have never read the book. The ignorance of Smith's

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Jr. 1978. Auburn. The Ludwig von Mises Institute, 2002. PDF file. pp. 129-131

3 Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. 1776. Amherst: Prometheus Books, 1991. Print.

definitions can lead to drastic misunderstanding and even contrary interpretations of other written works of economics which followed, most consequentially in the review of the works of David Ricardo[4]. The end result is a complete destruction of whatever self-consistency the science of economics ever possessed.

As this treatise will endeavor to show, the consequences of this discontinuity of study have been devastating to the proper function of market economies and liberal democracies since it first occurred in the early 20th Century. The failure of "mainstream" economic schools to even address their own definitions for terms has given rise to a system of thought and market dynamics which is incomplete, self-contradictory, and logically impossible to sustain. In particular fields, and in formulating action plans for individual players within the system, the rules and methods which Keynes and others derived have, and may for some time yet, prove useful for those individuals. However, the benefits those individuals derive from the employment of such methods must always come entirely at the expense of other players. On the whole, the market itself has devolved into a negative sum game, one in which the constant, though initially very gradual, destruction of wealth is unavoidable. Like a great tree, rotting from the inside, it projects an outward image of strength, beauty, and even of modest growth, as its foundations are gradually eroded to nothing. By the time this erosion becomes apparent, however, and the highest branches at last begin to die, it is almost always too late to save the whole. What was once whole, true, and genuinely strong has become something hollow, false, and deceitful.

This book is divided into four parts. The first is intended to show how far modern scientific and statistical measures deviate from long-established standards of practice and methodology. It is quite impossible to get good results from bad information. The second part deals with politics, and all the manners in which politicians and policymakers confuse

4 Keynes, John Maynard, *The General Theory of Employment, Interest, and Money*, New York. Harcourt, Inc., 1964. Print. p. 3 – Keynes uses Karl Marx, of all people, as his reference to define what a "classical" economist is, pointing to Ricardo in particular as the foundation of the Classical School, with no reference at all to Adam Smith, whose work Ricardo would have regarded as prerequisite to the understanding of his own. In particular, Keynes's counterpoints to Classical theory rely almost exclusively on the written works of Arthur Cecil Pigou. Pigou, while a widely respected economist of his day, should not really even be considered part of the Classical School, since his primary work focused on soft measures of government intervention (such as the "Pigovian Tax"). Adam Smith rejected the use of taxes in controlling individual behavior, which in his view was the key action which led to the foundation of monopolies.

the public with regard to economic matters. The nature and purpose of money is perhaps the most commonly misunderstood concept in all of economics, and it is by the willful misrepresentation of men of political influence that this state of ignorance came to be. It is only by misconstruing the true principles of economics that demagogues are able to give the appearance of reason to their own ideals. The bill of goods that most Western nations were sold on half a century ago are logically unsustainable, a fact that was very carefully concealed from the public for decades, and which only now has become too large to disguise. The third part deals with the manner in which invalid scientific methods and purposeful political interference have destroyed the natural balance of capital, business, and labor markets, and gradually turned them towards an automated mode of self-destruction. The final part looks to history to demonstrate the manner in which other great civilizations, like our own, have brought about their own decline and ultimate destruction. It is often tempting to view calamity on this scale as unprecedented, but history is easily forgotten once it falls out of living memory. What is going on now has happened before, and for much the same reasons.

Those looking for a quick, clean, easy solution to the present crisis are not going to find it here. The advantages by which particular societies and civilizations thrive and grow are smaller and less decisive than many are prepared to believe, especially when surrounded by the grandeur which past generations of those societies have left to posterity. However, the strength of a nation does not lie in the laurels of past triumphs, but in its present capabilities. To trust the strong, the brilliant, or the seemingly capable to rescue the world from such a mysterious and intangible malaise is beyond foolish, it is delusional. It is only in understanding how things truly are, and in how things came to be as they are, that any hope can be entertained of successfully starting anew.

Part I – Invalid Methodology

Chapter I – The Cult of Modern Science

"The over-weening conceit which the greater part of men have of their own abilities, is an ancient evil, remarked by the philosophers and moralists of all ages. Their absurd presumption in their own good fortune, has been less taken notice of. It is, however, if possible, still more universal. There is no man living who, when in tolerable health and spirits, has not some share of it. The chance of gain is by every man more or less over-valued, and the chance of loss is by most men under-valued, and by scarce any man, who is in tolerable health and spirits, valued more than it is worth."[5]

-Adam Smith

What Adam Smith observed within the individual may just as well be applied to society in its collective belief. The conceit man shows in the abilities of mankind, as well as his overemphasis on universal improvement and good fortune, often blind the vast majority of people as to the true state of affairs. At every stage of civilization, in every particular society, particular vices and virtues have been, and continue to be, held up as examples of what a model citizen should be. Each nation, with few exceptions, places greater emphasis upon its past triumphs than upon its defeats, and extols its own strengths and virtues, while subtly denying its weaknesses and vices. In so doing, the dominant belief of those who look forward to the future, especially in countries which have grown in wealth and power, is that the most learned of men will never lead mankind astray, and that the forward progress of all mankind is both certain and irresistible.

In this present age, it might be said that the cardinal virtue which most Western nations purport to impress upon their youth is that of knowledge. As such, intellectual and scientific

5 *Wealth of Nations*. p. 113

pursuits and achievements are held up as the model, and all of society is to rest comfortably in the belief that the smartest among us could never possibly be wrong. Science has become a topic of public discourse, and as such, subject both of and to popular opinion, and to political pressures. As science has advanced, however, it has become ever more complex and divergent in its course of study. As this has occurred, greater and greater attention has been paid to its promise and to its leading frontiers. As this focus has become ever more distant for even the typical academic, less and less attention has been paid to the foundations of science. The failure of the majority to truly understand that which is offered by the leading figures of science has not dulled the public imagination, or led to more rational discussion of the subject matter. Knowledge, it is commonly said, is power, and it is nothing if not human instinct to wish to feel empowered by a sense of collective knowledge.

Of course, it is not rational discourse, but the ingenuine art of public persuasion which rules the day. Very few of the individuals who take a position on a particular scientific matter are capable of explaining the mechanism of action, let alone providing a well-reasoned answer to legitimate questions posed in challenge to their own position. Indeed, there is no such thing as collective knowledge. All knowledge is personal. A truly scientific and well-reasoned mind will not accept any point on faith alone. Each individual must not accept anything as true that has not been plainly, clearly, and distinctly presented within their own mind[6]. Knowledge requires demonstration, and as such, any fact must be personally demonstrated to each and every individual before it can be counted by such individuals as knowledge. Until proven, and while still accepted as fact, any supposition is merely belief. Those who accept what they are told based upon the supposed reliability or credentials of the source are taking the matter on faith. In the United States, a nation founded upon the idea that all faiths are equal, science has come to hold no different a station for the vast majority of the population than the Holy Scriptures do for the adherents of Christianity.

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6 Descartes, René. *Discourse on the Method* and *Meditations on First Philosophy*. Translated by Donald A. Cress. Indianapolis: Hackett Publishing Company, 1998. Print. p. 11 – Please note that the reader should apply this standard everywhere, including to the contents of this book. The arguments made herein are not to be taken on faith, but to be tested by every reader through rational examination of human history, the history of economic science, and the economic world of today. The proof is everywhere, as economic matters affect each and every person in nearly every decision they make.

What compounds this problem in the United States is the fact that educational methods have devolved from the older methods, which required demonstration, self-consistency, patient reasoning, open discourse, and incontrovertible proof, to a new methodology almost entirely rooted in memory and more basic indoctrination. Schools, instead of cultivating young minds to think for themselves, have become a battleground for those who wish to hold greater sway over the opinions of future generations. Matters of public controversy are not suitable subjects for students who have yet to learn the basics of reason. It is beyond such individuals to discern fact from fiction, let alone knowledge from belief. They can repeat what they read, and what they are told, but without careful and skeptical examination of these things they are asked to believe, true understanding will always elude them. Most tragically, school children in this country are introduced to, and grow dependent upon, the marvels of modern technology long before they are finished exploring the power and utility of more basic tools in concert with their own ability to reason.

The marvel and disbelief with which the average person regards the grandeur and mathematical precision of the great scientific and architectural achievements of the ancient world is proof enough of the consequences of such instruction. Euclid's *Elements* were the standard of introductory mathematical instruction throughout the world for two thousand years. Some of the methods described therein had been known to mankind for hundreds or even thousands of years prior. Euclid's text contains a compilation of all the methods and proofs available to the ancients, all brought together for the first time into a uniform, cohesive, and self-consistent system of rational thought. More amazingly, *Elements* demonstrates the incredible constructive power of the two most basic of tools, the compass and the straight edge. The wealth of figures and concepts which can be perfectly constructed and incontrovertibly proven using only these tools would defy the imagination of anyone not familiar with their practical use. And yet, to one versed in the study of Euclid's geometry, a world of limitless constructions would present itself most readily.

The most important lesson which can be drawn from Euclid, however, applies not just to mathematics, science, or architecture. In the beginning of each book of *Elements*, Euclid

provides a list of definitions and postulates, which the student must accept as true before any construction can proceed. This is because, in order to make practical use of reason, one must always start with a set of givens. These givens are the foundation upon which any rational construction must rely. If any of these givens later prove to be false, all conclusions drawn therefrom will be unreliable, if not demonstrably false, even if every aspect of their rational construction is otherwise without flaw. The natural imperfection of man and his faculties of perception and reason do not preclude him from perceiving the concept of perfection[7]. Indeed, it is the perception of perfect forms which gave rise to the various forms of mathematics which have since become the basis of modern empirical science.

As perfect, incontrovertible, and self-consistent as these conceptual forms of mathematics are, it is easy to understand why laymen and scientists alike could be led to believe that science is capable of being equally so. Indeed, to deny such capability is to assert that there are absolute limits placed upon human knowledge, and that a certain degree of uncertainty must invariably be accepted. The belief that all aspects of a system can be known, and that no absolute limits to the precision of measurement exist, is called *determinism*. One of the most prevalent scientific controversies of the present age deals with the quantum principle of indeterminacy, which adherents of determinism within the scientific community have been unwilling to accept since it was first formulated.

The principle of indeterminacy states that the product of the error margin of two linked system properties (most commonly position and velocity, but also time and energy) must be no less than a particular, finite value. Quantum mechanics, by virtue of this principle, asserts not a deterministic but a *probabilistic* model of the universe, one in which certain knowledge is denied to even the most perfect of scientific methodology. Such a supposition would indeed be viewed as heretical by the adherents of determinism. God, as Albert Einstein once said, “does not throw dice”. Einstein was one of the founders of quantum mechanics, and yet he could not bring himself to even entertain the idea of an indeterminate universe. Neils Bohr, who likewise made enormous contributions to the study of quantum mechanics, was

7 *Discourse on the Method.* pp. 19-20

equally insistent that indeterminacy was inviolable. Einstein's rejection of indeterminacy created an inherent conflict between his deterministic theories and those of quantum mechanics. Over time, Einstein's deterministic model has been ever more widely accepted as true, without rigorous demonstration, while the probabilistic predictions of Bohr and other quantum theorists have been presumed false (or at least imperfect) by many, despite the consistent accuracy of these predictions in exhaustive direct application. The only fact which has been thoroughly demonstrated through the time which has come since the Einstein-Bohr debates is that the two models are, at least in part, mutually exclusive.

The ultimate failure of physicists to remove this conflict has not halted research into finer and more exotic degrees of theoretical modeling. Instead of allowing observation and application to resolve the controversy, modern physicists resort to ever more complex constructions, and ever more exotic mathematics, to force-fit a deterministic model upon quantum mechanics which still allows relativity to be accepted as gospel. Whether it's string theory, black holes, dark matter, dark energy, or a host of other concepts, they are items which are mathematically perfect, but observationally nondescript.

Black holes, also known as singularities, are objects of infinite density which have long been theorized to exist. Albert Einstein and later theorists left numerous predictions as to what observational properties such an object should possess. However, as observational tools have improved, it has been discovered that neutron stars, which have large but finite density, can exhibit many of these properties, such as gravitational lensing, and relativistic jets. Even an event horizon, which has yet to be directly observed, would not prove the existence of an object of infinite density within, it would merely imply the presence of an object within the event horizon which is sufficiently massive to prevent light from escaping, and yet small enough to fit within the boundary of the event horizon itself. Its volume may still be non-zero, and thus its density may still be finite.

On the other end of the spectrum, in the study of the infinitesimal world of particle physics, the barriers presented by indeterminacy are conveniently removed through the use of statistics. As efforts to confirm the Standard Model (itself an exotic mathematical construct)

have pressed into ever smaller amounts of differential energy and ever shorter spans of differential time (quantities which, as noted above, are mutually indeterminate according to quantum theory), direct observation of the particles predicted by the Standard Model, such as the long-theorized Higgs Boson, have literally become impossible. Through repeated experiments and observations, grandiose experimental devices like the Large Hadron Collider have been used to acquire large amounts of data, which are then plotted to discover the energy signatures of these ephemeral particles. No single observation could possibly obtain the degree of accuracy necessary to confirm their existence, but given a sufficient number of observations, the periodic presence of them is supposed to be resolved by imbalances in the resultant energy distribution which are interpreted as statistically significant, within a specific confidence interval. Of course, any results derived from this method presume that all manner of bias has been removed from the construction of the experiment and from the apparatus by which the experiment is conducted. However, the designers of both experiment and apparatus may only account for biases which they themselves know about. No amount of data quantity can ever absolve experimental results of the possibility of specific bias of undetected origin. The replication of the experiment elsewhere on differing apparatus does not remove this possibility, either, since such fine experimental controls will invariably share design aspects which could be the very source of such bias. In truth, data quantity can never be asserted as a substitute for data quality. As such data becomes more processed, and the degree of calculation greater, the uncertainty of result represented by the uncertainty of measurement becomes progressively greater, regardless of the manner in which that data is processed.

As interesting and entertaining as the fields of particle physics and astrophysics may be, any incomplete or incorrect conjectures made within these studies are unlikely to have a meaningful impact on the immediate future of human civilization. Astrophysics deals with scales and magnitudes which largely defy human action, whilst any problems with the practical application of the theories of particle physics would certainly manifest prior to widespread use. Of course, just because a concept is incorrect or inexact does not preclude

such a model from being useful. The simple virtue of being right more often than not, even if the odds of any particular instance are entirely random, can still provide some measure of benefit to the individual user. For example, a casino, even when all games are fairly run, provides a virtual certainty of gain for its owner. In the case of each particular bet, the house stands a very real chance of losing. A given bet on red or black on the roulette wheel pays 1 to 1, and stands very nearly a 50% chance of winning. However, as the number of discrete events increases, the cumulative odds of loss become progressively more minute, though it never reaches zero. The mere presence of a colorless “0” makes the owner's offer of fair play a very safe bet.

It is because of this cumulative effect that probabilistic results can be misconstrued as deterministic certainties. If observations are taken on a large enough scale, even the smallest bias in favor of a given result can be taken as a certain and irresistible tendency in that direction. If a particular strategy in a game of chance wins 51% of the time, the cumulative affect of combining trillions of game results into individual data sets would give the distant observer the belief that said strategy always gains. It doesn't of course, but at the cumulative level of observation, any experimental result to the contrary, even if observed, would be unlikely to replicate itself within a human lifetime. That which is seen as a nearly even bet at one level of observation, at another becomes a sure thing.

Within the realm of physical science, where the rules of the game are presumably time independent, the impact of such misinterpretation is minimal, so long as the application of the theories derived from cumulative observation take place on nearly the same scale as the observation itself. The odds of a contrary result are indeed so small as to be neglected, so much so that the contrary result itself might be considered an artifact of extreme misfortune. The rules derived by scientists by such methods, while inexact, are sufficiently reliable to allow them to be practically employed by the engineer. However, when the element of human strategy is brought into play, and the game is no longer against an inanimate and immutable set of rules, but a constantly evolving array of individuals and thought processes, the consequences of this same form of misinterpretation can no longer be discounted.

A game of strategy, such as chess, provides an excellent example of these consequences. The use of any particular strategy may initially stand a particular chance of defeating a particular opponent in a particular game, but the utility of the knowledge of these odds begins to decline as soon as the first game has been played. The player who sits across the table from a given strategist is no longer an unchanging set of rules, but an unpredictable variable which must be considered carefully. Rarely will the losing player take precisely the same approach to a subsequent game, but the manner in which that player's strategy will evolve will depend both upon his own results, and upon the understanding he has acquired as to his opponent's tendencies. Victory no longer depends on rational examination alone, but also upon experience, foreknowledge, and familiarity. Stronger players can often fail to defeat lesser ones who employ uncommon or unorthodox strategies, especially if the lesser player has more experience with a particular game scenario. Many players are taught, for instance, to favor the exchange of material once a tangible lead has been obtained. One or two pawns is often more than enough of a material advantage to prove decisive in the endgame. However, an experienced player, who finds himself down a pawn or two early to an otherwise superior player, can purposely exchange material so that the endgame features opposite colored bishops, a situation which almost invariably results in a draw.

In such games, of course, strategy may only evolve within the confines of the rules, which, like the laws of physics, do not change with time. These rules invariably place finite (though often very numerous) degrees of freedom upon the individual player, and provide a single, tangible objective for every player to attain. It may still be possible for perfect play to be realized through analysis, and thus for a mathematically exact solution to be found for the game itself, provided one exists. There remains, however, the possibility of a nontransitive solution, in which any given strategy can be defeated by another.

The study of Economics, too, is dominated in this day and age by academics who believe that these same tools of mathematics can be used to understand economic cycles and market behavior. Absolute knowledge, it is assumed, can resolve any and all economic problems, and direct market economies to maximum efficiency. To achieve such knowledge,

the economist may break down the problem into smaller constituent problems, and once the pieces are known, the theories can then be unified[8]. The belief that economics is an empirical and deterministic science is held just as blindly and just as broadly as any of the other scientific theories which reach the level of public discourse. The fundamental presumptions upon which the logic of such theories is based are likewise just as ill-examined. However, since economics is the study of human action and behavior, one in which the rules, strategies, and players are constantly evolving, the consequences of misinterpreting empirical data can be severe, immediate, and irreparable. And in the particular case of economics, the presumption which underlies public faith in this empirical science is demonstrably false, as will be shown in the succeeding chapter. The consequences of this false presumption, given the extent to which and the duration of time over which the conclusions drawn therefrom have been allowed to guide both public policy and private industry, are incalculable.

8 Neumann, John von and Oskar Morganstern. *Theory of Games and Economic Behavior.* 1944. Princeton: Princeton University Press, 2004. Print. p. 2-9

Chapter II – Knowledge Destroys the Rule

"It is not that there exists any fundamental reason why mathematics should not be used in economics."[9]

-John von Neumann

John von Neumann is in many ways the most salient example of the manner in which trust in scientific methodology, and moreover trust in personal credentials, can lead the broader intellectual community to accept an unsound presumption, such as the one shown above, without serious examination of its veracity. Von Neumann was a brilliant man, who made a name for himself through the enormous contributions he made to the studies of mathematics, computers, and physics prior to his foray into the realm of economics. His work in economics lay in the development of Game Theory, which at the individual player level, is extremely useful in describing the dynamics of human decision-making, and in identifying the intrinsic stability or instability of a given system. Accepting the presumptions that von Neumann provides in his *Theory of Games*, his logic is sound. The presumption that mathematics, and that the collection of data in general, can be used to create a complete and comprehensive solution to the economy as whole, is not unique to him either. All of the members of the modern empirical and monetarist schools which dominate mainstream academic and public policy circles today rely heavily on this very supposition.

At the beginning of the 20th Century, as the potential of the science of statistics became more apparent, and the knowledge and use of empirical sciences became more widespread, an ideological battle took place which would decide the future course of public policy in Western democracies. On one side empirical economists, led by John Maynard Keynes, argued that central control of the money supply and careful intervention by government could enhance the overall rate of economic growth and improve the overall state of employment.

9 *Theory of Games,* p. 3

On the other, the members of the Austrian School, such as Ludwig von Mises and Friedrich Hayek, argued that the incredible success of the comparatively free and liberal economies of the United States and Great Britain stood as proof positive that the absence of arbitrary public intervention achieved the best possible results. At the time, the United States had been running with an Independent Treasury, which made the government's finances entirely independent of the private financial industry, since 1846. The nation had grown in size, power, population, status, wealth, productive capacity, and technological achievement at an overall rate which no other nation could claim to rival. To the former school, economics was to be viewed as a statistical science, no different from physics or chemistry, to the latter, it was a social science, based on historical examination and patient reasoning.

The fact that the Austrian School entirely forsakes the use of statistical methods in describing economic problems and phenomena is well known. Both von Mises and Hayek were outspoken in their belief that the rejection of their methodology on the grounds that it lacks scientific rigor was arbitrary at best, and flew in defiance of much historical evidence to the contrary. It should be noted that the earliest comprehensive essay on economics, Adam Smith's *Wealth of Nations*, takes on the task of defining the fundamental nature of human interaction and of the fundamental problems of economics by examining the history of civilization itself. In this regard he, too, might be regarded as unscientific, since he resorts only to historical records and observed effects to demonstrate the theory to which he ascribes. These records and effects might justly be called anecdotal, especially given the paucity of historical records which survive unaltered from ancient times.

The most influential modern texts which extol the virtues of mathematical theory often seek to preface themselves on the idea that economics is no different from any other empirical science, or by stating a supposition of what the theory of the prior, non-empirical Classical School[10] is in order to make a counterpoint[11]. However, it can be just as easily shown that these empirical texts rely on definitions which their Classical and Austrian School

10 The “Classical School” is a name retroactively assigned to the first great wave of economists, of which Adam Smith and David Ricardo are prominent.

11 Keynes, John Maynard. *The General Theory of Employment Interest and Money.* New York: Harcourt Brace and Company, 1936. Print. pp. 4-22

counterparts would reject. For example, von Neumann's definition of what constitutes "rational" behavior[12] is in fundamental conflict with von Mises' assertion that all human action is rational[13]. That the disagreement between the quantitative and qualitative schools of economics springs from a fundamental disagreement about the nature of the science quickly becomes evident to anyone with even a modest familiarity with both. It should come as no surprise, therefore, that logical discussion between these two groups has been basically non-existent, since logic requires agreement upon a particular set of givens in order to be useful. Von Mises himself refers to human action in general as "the ultimate given"[14], and given this assertion, the entirety of von Neumann's work, which seeks to dissect such action, would by nature be pointless.

There is no way to resolve this conflict or to open the door to some fantastical arrangement by which the two methodologies can coexist. They are mutually exclusive systems of thought. Indeed, the author is no different from his forebears in the Austrian School in suggesting that the empirical schools are fundamentally wrong. As an engineer, however, rather than a historian, he is in a unique position to understand the mathematical and statistical tools employed by empirical economists, and to understand, and more importantly to explain, why it is impossible for them to create any mathematical model or system which will yield the best possible result for an indefinite period of time.

Mathematics is the science of quantity, and it is to financial matters that it is often most tempting to first apply that science[15]. However, in order to employ mathematics in a given field, it is necessary to find a quantity which is unambiguously relevant, and to find for that relevant quantity a unit of measure which can be agreed upon as definite and immutable. It is to be understood that this relevant quantity, as it pertains to economics, is something called "value". It is often pretended that money can be used as a definite measure of value, using somewhat dubious measures of "inflation" (another term whose definition varies between

12 *Theory of Games*, pp. 8-9
13 *Human Action*, pp. 18-21
14 *Human Action*, p.17
15 Euler, Leonhard. *Elements of Algebra*. Translated by Rev. John Hewlett. 1822. Cambridge: Cambridge University Press, 2009. Print. pp. 1-2

schools) to adjust quantities thereof to make said quantities of just comparison over long time periods. Given the instability in the supply of money over long periods, even when based on a definite commodity standard like that of gold or silver[16&17], such a measure seems unlikely to be of sufficient consistency. However, even accepting that all of the adjustments so made are perfect and accurate, there is still a fundamental flaw in applying such measures to the establishment of any comprehensive economic model or even a single law of economic behavior.

This flaw is not dispelled or removed by confining oneself to a particular definition of what value is, or of what constitutes profit, growth, or even rational behavior. It is, unfortunately, a basic flaw in the fundamental logic which supports the use of statistical methods in economics. It is a flaw which by its nature can never be addressed in a free market, an open society, or in international economic relations and cooperation. This flaw arises from the problem of knowledge. In a sense, it might be stated that *knowledge destroys the rule*.

That value is a creation of the mind of man is not a controversial assertion. Whether it is the use of an item, the enjoyment of it, the abilities it grants to its owner, or any intangible quality, no value can exist if it is not first perceived by an individual. It is also accepted by empiricists and praxeologists[18] alike that the rational individual will act based upon his own personal knowledge and experience. What is revealed in the first statement is that value itself is not an immutable quantity, but has some aspects of quality which are impossible to quantify without knowing the mind of each individual who either possesses or seeks to obtain a particular good. But even supposing that such values can be quantified, the implications of the second statement are the undoing of any particular empirically-derived rule. Man has the ability to learn and adapt, and possesses a particular and highly prized talent for taking advantage of both his own knowledge, and the observational experience of himself and his

16 Gibbon, Edward. *The History of the Decline and Fall of the Roman Empire. Volume I.* 1776. London: Penguin Books, 2005. Print. pp. 81-82

17 *Wealth of Nations*, pp. 30-35

18 Praxeology is the term used by Ludwig von Mises to encompass the study of all human action, not merely that which involves the exchange of goods and services, as is studied in Economics.

published fellows. He is also by nature dissatisfied with mediocrity, and always wishes to outperform his peers. Just keeping pace with them is not satisfactory. In other words, if an individual is confident that he knows how others will act upon a particular set of data inputs, he may find an unpredictable myriad of ways to best his peers, and will doubtless employ one of them. Over time, those who anticipate, rather than those who follow, the implications of a given rule upon collective economic behavior will find themselves profiting at the expense of those who held said rule to be true. As knowledge of the superior strategy becomes more widespread, more and more individuals deviate from the rule in this manner, and the reliability of the rule declines. Once an insufficient number of followers remain, the rule's predicted effect vanishes completely. At this point, the strategy which undermined the rule in the first place also ceases to be effective, since the rule itself is no longer an effective predictor of market behavior.

The implications of human ingenuity are even more profound and immediate in the realm of international relations. The presumption of long-term, continuous growth leads nations to seek to secure for themselves the maximum possible benefit from current international trade. As such trade is of definite quantity at any given moment, any such additional benefit will come to the detriment of some other nation. It is, by nature, a zero-sum game of strategy. Those with the best information will invariably win, and those with poor knowledge will always lose. In other words, the more common a particular brand of knowledge is, the less valuable it becomes, and when such knowledge is universal, its value is by definition zero.

Whether the players are the individuals in the stock market, corporations in the commercial market, or nations in the global economy, the methods and strategies employed will evolve to reject those which do not work in favor of those that do. To refute von Neumann, this *is* the fundamental reason why mathematics should not be used in economics. It is not that human psychology can not be understood or quantified, it is not that there are immeasurable quantities, and it is not that infinitesimal quantities do not exist within economics. If we are to surmise, as von Neumann suggests, that economics can, like physics,

be subdivided into smaller problems to be addressed individually, then unified by patient examination, we will quickly discover that the formulae which were so rigorously proven but a few years ago no longer apply in the present day. The nature of the economic problem defies such definition, for the problem itself changes faster than the definition can be compiled, and does so in ways which can not even be predicted by empirical analysis. Indeed, such rules of prediction, like any other set of rules, would in time be anticipated by the market's actors and thus cease to be effective.

To witness the evolution of human strategy, let us revisit the idea of a chess club, or other strategy game parlor. Game by game, every player's knowledge of both the game and his opponents grows, and those who employ a consistent and unchanging strategy will find it less and less effective as time goes on. A player might be confused by an unorthodox opening when first he sees it, but as that player, as well as those who observe the games he plays, become familiar with its implications, its strengths and weaknesses become more apparent. The best among the club's players will invariably find multiple ways of besting that strategy, and those below them will adapt their game to mimic their peers' successes. This phenomena is a general property of human intellect. In economics, which unlike chess, does not have a finite number of permutations, mankind will always find a way to beat the machine, and not just in a game here and there, but with ever-increasing reliability. Individually, he can try anything, and collectively, man will try everything. More importantly, he will ultimately share this knowledge with his peers.

In the marketplace itself, we observe this same effect as it pertains to the recommendations of rating agencies and market analysts. As the number of information sources pointing towards a particular course of investor action increases, the returns the individual investor can expect from acting upon those recommendations declines. The first analyst to recommend a stock will almost certainly give that stock a boost in price, but as more and more analysts come to the same conclusion, the interest in that form of equity saturates, and those who entered the investment first will begin to divest in order to lock in profits. The same applies to market strategies. If a noteworthy investor has demonstrated

success, and divulges his investment methodology, others will seek to emulate that strategy. As the strategy becomes prevalent, still more will try to anticipate it. Regardless of how technically sound the strategy may be, as its employment becomes more universal, the strategy's effectiveness will eventually decline to nothing.

Humanity can not well be expected to show no improvement in its mastery of a game once its rules become known. It further can not be expected that the knowledge of such rules can be indefinitely confined to the realm of a handful of benevolent actors. That which is discovered by one man can just as readily be realized by another. The inner workings of a machine can, with detailed study, become known simply by analyzing and mimicking its action[19]. However, the human machine defies such understanding, as it is unlimited in its capacity for change and self-improvement. One can only be certain that man will change. One can never be certain of what the nature of that change will be.

In short, there can never be such a thing as a comprehensive empirical solution to any problem of economic behavior, be it individual, corporate, or political. Empirical methodology is only useful to the ends of gaining short-term economic advantage to the necessary detriment of other players. That is to say, it has a definite use and application to the microeconomic player, but such methods are, by their nature, entirely worthless in achieving the goal of macroeconomic understanding, in achieving an equitable balance of international trade, or in fostering long-term economic growth and stability. To the contrary, empirical economics, when employed on the macroeconomic level, necessarily work to the detriment of the economy as a whole. The expense incurred rises with the complexity of the statistical methods and the abundance of data variables employed. Ultimately, their only value to the legislator and central banker alike is to obscure the true cost of public profusion from the taxpayer, allowing ill management of public funds to progress much further and continue for much longer than the voters would otherwise permit.

The abstraction which necessarily occurs when empirical methods are employed may be unintentional at first, but it is likewise unavoidable for the model to increase in complexity

19 This procedure is what is commonly termed “reverse-engineering”. While this term often has a pejorative connotation, it is a commonly practiced and highly effective engineering method.

as its earlier, simpler axioms begin to fail. The mandate of the central banker might at first be contained within a page or less, but as private players begin to exploit the effects of predictable interventions, new rules must be put in place, which themselves will be exploited in time. This progresses to the point where the initial intent of the banker's mandate, and even the original meaning of the words contained therein, have been so far abstracted from the real conditions they were meant to represent, that no one is left to understand how the system as a whole was intended to function in the first place. The monetary system then becomes entirely reactionary, unable to defend any part of the economy from being bled dry by the consequences of malinvestment, both public and private. And since monetary reaction comes only after the damage is done, it affords no protection whatever to the economy as a whole.

A similar affect can be observed in the study of taxation. For just over half of the history of the United States, the federal government derived virtually the whole of its revenue from tariffs. Tariffs, so long as they are modest in proportion, and are levied equally upon both foreign imports and domestic exports, and are levied equally upon all manner of goods, are probably the simplest and most efficient method of taxation yet found. Until the early 20th Century, except in times of war, such tariffs proved more than sufficient to meet the financial needs of the federal government. However, the desire for more "progressive" modes of taxation led to the allowance of income taxes, which had been ruled unconstitutional until the passage of the 16th Amendment. Income taxes were supposed to be levied only upon the very wealthy, and as such they were to be levied as a simple percentage of income. However, the manner in which income was calculated gave rise to means by which the taxes could be lawfully avoided. Resultant public revenues consistently fell short of the values predicted by theory, and reactionary measures were added to the tax code to ensnare that missing revenue. Taxes levied upon other activities, such as estate bequests, gifts, and value tied up in permanent corporate holdings, led to unintended consequences for private decision makers, which lawmakers attempted to remedy by allowing credits and deductions. These, too, were exploited in a manner which extended beyond their original

purpose, and so the tax code grew in size and complexity, to the point where no one in government really understood how it was originally intended to work, or even what it was originally intended to do, let alone how well it functioned in the present day. Instead of being a means of gathering necessary revenue, the income tax code became a tyranny unto itself, directing private persons to employ their capital in ways they otherwise wouldn't, and shifting control of private capital more and more into the hands of corporations, and out of the hands of private individuals. The constant battle between insufficient revenues and unintended economic consequences led to the very same sort of constant reactionary action as was seen in monetary policy. In the end, this system was just as useless in achieving all of the aims it was originally employed with the intent of achieving.

The important point to grasp in all of this is that the harmful impact of employing empirical methodology in formulating public policy does not require any illogical or malevolent human factors in order to occur. Poor reasoning and malevolent intent may indeed accelerate the rate of decline associated with the methodology, but capital destruction would occur at at least a modest rate even if the public actors were perfectly rational, intelligent, and universally benevolent. The mere acceptance of the presumption that mathematical modeling and data gathering can enable perfect redirection of economic goals dooms the policymaker to failure. Illegal activity may worsen the problem, but there will always be perfectly legal and ethical means by which the intent of the policy can and will be thwarted by individual market players in pursuit of their own worthy objectives.

At this stage, it is necessary to realize a vital definition, which will come to characterize nearly the entire nature of the crisis in which Western Civilization presently finds itself. The preeminent members of the Austrian School were known to apply the label of “socialist” more broadly than people of the modern era would recognize. Hayek himself dedicated his most popular work to “socialists of all parties”[20]. It must be observed that the reason for this disconnect between their period and our own comes from the fact that both the term “socialism”, and its original antithesis, “liberalism”, have come to be used to describe

20 Hayek, Friedrich August von. *The Road to Serfdom: Text and Documents*. 1944. London: University of Chicago Press. 2007. Print. p. 36

things very different from what they actually do mean. The definition of “liberal” has already been discussed in this book's introduction. For “socialism”, the proper definition to be offered is: *the use of public power and/or resources in order to achieve particular social ends*. The social ends sought will by nature vary with the socialist, and his or her particular social values. The intended aims could be either purely selfish or purely altruistic, or anywhere in between. This definition is, admittedly, very broad, and in its breadth, there is hardly a person alive who hasn't entertained a socialist idea of some sort at one time or another. However, this definition most clearly distinguishes the mutual exclusivity of socialism and liberty. The purpose of empirical economics, even in those Western nations with the greatest liberal heritage, is entirely social in nature. Socialism, for reasons which will be elaborated later, can not be successfully employed without a net destructive effect. It is only through liberty, within the confines of a rule of law which prevents the individual and government alike from directly harming others, either purposely or negligently, that the growth of civilization occurs.

The social ends towards which the Keynesian methodology is applied are explicitly stated: to maximize both the rate of employment, and the wages which workers are paid. Wages can be increased in a number of ways, but the simplest means, by far, is to prevent new workers from entering the workforce. The high youth unemployment which would otherwise occur (and in many Western nations, has occurred) as a result of such restriction can be most readily forestalled (though not entirely prevented) by declining fertility rates, reducing the total number of youths over time as a percentage of both the workforce and the population as a whole. Demographic momentum keeps total population, and thus net consumption, relatively stable in the short term, so demand tends to hold up so long as credit or some other form of continuous monetary expansion remains in progress to sustain it. However, since net production is declining with the aging and ultimately shrinking labor force, the only means by which sufficient goods can be provided for near-term consumption is by consuming a portion of the economy's circulating capital. The predictable nature of these effects makes it easy for foreign producers to crowd out domestic manufacturers, who

will find sustaining output and competitive prices difficult, despite the continuous nominal profits which they appear to enjoy. It likewise enables the financial industry to exploit the ever-increasing supply of the form of capital that they alone draw benefit from, that being the supply of money. Most problematically, this methodology not only allows but requires a progressively increasing interdependence between public and private finance, a condition known as Corporatism. Corporatism is actually one of the fundamental aspects of the fascist system. In other words, despite the fact that Keynes formulated his ideas with the intent of protecting the West from the effects of totalitarian socialism, including both fascism and Marxism, because his methodology is itself intrinsically socialist, it invariably gives rise to precisely the form of public/private interdependence he sought to avoid.

All of these conclusions are unavoidable, even accepting the presumption that all of the public actors are perfectly logical, altruistic, and otherwise freedom-loving, and that all of the information they receive is perfect and complete. None of these presumptions are true, and every point of failure within these assertions gives rise to further sources of economic malaise and public misinterpretation, as will be discussed in succeeding chapters. However, it is apparent, even accepting this most idealistic set of presumptions, that a favorable end result from the employment of empirical methodology in economics is still entirely impossible.

Chapter III – Ever-Changing Measures

"We can start measuring only when we know what to measure: qualitative observation has to precede quantitative measurement, and by making experimental arrangements for quantitative measurements we may even eliminate the possibility of new phenomena appearing."

-Hendrik Casimir

That economics does not lend itself to purely quantitative definition has already been demonstrated. In the preceding chapter, it was assumed that all measurements and methods of data collection and data correction were both complete and accurate depictions of the physical reality they were intended to represent. This assumption is admittedly unrealistic, but necessary to demonstrate that empirical methodology, even if applied with complete morality, perfect skill, and under perfect conditions, will still generate an unfavorable result. The imperfections contained within the manner in which empirical methods are employed also have effects which are too substantial to ignore. The vast majority of the more consequential imperfections which are prevalent in the modern era relate to failure of economists to observe even the most basic standards of data quality.

As has been noted, the most basic quantity which economists seek to measure is that of value. All economic measures relate to the study of value in some way. However, in order to make any particular class of measure to be of just comparison, careful attention must be paid to the physical reality which each measure is intended to represent. Otherwise, equal quantities presented as being of the same type of measure may represent different things to different observers, making it impossible to judge the veracity of any conclusions drawn in part from such measures. The addition of apples and oranges is of no consequence if they are to be divided amongst individuals with an equal affinity for both fruits, but as soon as personal preference comes into play, controversy will arise as to fair valuation, and the

necessity of identifying the distinction between quantity types becomes plain. If there are three apples and four oranges to be divided amongst seven people, and none care which they receive, one fruit per person seems equitable. If any or all of these individuals are allergic to citrus, such a simple allocation is no longer tolerable. In the first instance, seven fruit grant the same value to the consumers regardless of their type, in the second, the quantity of apples matters much more than that of oranges.

This last example may seem frivolous, but if a particular quantity can be interpreted to mean differing things, whether it is because of the observers involved, the passage of time, or the subjective interpretation of a single individual, the utility of such quantities diminishes, and sometimes it vanishes entirely. In the preceding example, it is the unit of measure (the specific units of “apples” and “oranges”, versus the more inclusive “fruit”) which has been varied to demonstrate how the physical reality to be represented by a quantity may or may not be adequately described by the number and unit presented. The Imperial System is drawn partially around measures of quantity derived from body proportions. Before such units were standardized, the reality represented would depend very much upon whose body was used to define the unit of measure. No two feet are exactly the same, and the variation in the length of a “foot” can be quite considerable.

In economics, the most common unit used to represent an instantaneous measure of value is the unit of currency. The quantity of value is presented as a quantity of money, whether the real thing whose value is being measured is money, sheep, bread, automobiles, land, or any other good or service. Money prices are employed as a means of establishing ratios of value between dissimilar things, all of which are interpreted as possessing the property of value in some quantity. However, the value of anything, monetary units least of all, is not independent of time, observer, form, or even location. As a result, any quantity thus presented or recorded is very much subject to the arbitrary interpretation of the data gatherer, the computational algorithm chosen, and end user's own judgment.

In this modern era of fiat money, money itself takes on a myriad of different forms, and the units employed, the monetary units of the various sovereign nations and monetary unions,

do not long sustain the same proportion of exchange with one another, let alone with other things for which money can be exchanged. Even within a particular currency, the form which a given quantity of money may take may affect the quantity and manner of goods which can be had in exchange for that quantity of money, and even in those nations where all forms of money are treated equally by law, the ease by which they are exchanged may affect the quantity of goods which are obtained by the holder of a given quantity of money. As a simple example, some nations limit the amounts in which coins can be offered as legal tender. A large number of coins, while having the same nominal quantity as a single bank note, may not be directly exchangeable for the same item if that item's market price is sufficiently high. One might be able to exchange the coins for a bank note, but this additional required effort itself has value. Similarly, the act of offering cash and making change requires more effort than electronic forms of payment. Again, the effort itself has value, and even if it did not, it may alter the currency holder's decision as to what and when to purchase. In any case, the ease with which money is exchanged affects the quantity and quality of goods which are had in exchange, and as such, equal quantities of money, even of the same monetary unit, do not necessarily represent equal quantities of value, even when the variables of time, observer, and location are held constant.

The passage of time presents another affect which further confounds the use of money as a measure for value. The terms “inflation” and “deflation” are often used to described the phenomena by which the exchangeable value of a particular currency changes over the course of time. They are an acknowledgment that any quantity of money, in whatever form it takes, does not represent the same quantity of value at different points in time. To enable comparison of monetary quantities at differing times, empirical economists have created secondary measures to adjust for the change in unit value over time.

The collection of exhaustive price data has led to the creation of statistical methods for tracking what is interpreted in modern times as inflation. Perhaps the most well-known example of this is the Consumer Price Index (CPI) maintained by the United States Bureau of

Labor Statistics[21]. The characteristic variability in this data ultimately gave rise to two methods of adjustment. The first is the use of "seasonal adjustments", and the second is the exclusion of the more variable food and fuel components from the calculation to derive what is commonly termed "core" inflation, or Core Consumer Price Index (CCPI). It has already been demonstrated that no amount of empirical data can provide sufficient information to properly direct economic policy decisions, and that any attempt to do so will yield only an endless cycle of arbitrary and reactionary policy responses. However, this compilation itself runs afoul of some of the most basic tenets of empirical analysis, and stands in defiance of numerous price relations which have been known since the time of Adam Smith.

That the price of food, the most essential of all commodities, has great short-term variability and great long-term stability was known to Smith[22]. It was likewise noted that the metals then used as money had precisely the opposite characteristic variation. It was also noted by Smith that variations in the price of labor (wages) most often bear an inverse near-term relation to the price of commodities[23]. That the CPI includes services and manufactured goods means that it is an aggregation of both commodity and labor prices. The fact that these components are in rough proportion with one another means that the depression of wages will often partially or wholly cancel the affects of rising commodities. That a diminution of wages coupled with a rise in commodities presents no inflationary hardship to the working class is absurd on its face, but the use of CPI and similar measures in fact expects the public to accept this very supposition. When CCPI is calculated, and the approximately 25% of the index which represents food and fuel inputs are excluded, the rise in industrial commodities stands little chance of counteracting expected price declines of services and manufactured goods. In truth, the use of any labor components at all within price index calculations renders the result almost entirely useless for all but propaganda purposes.

Characteristically variable data often makes the identification of underlying trends quite difficult. Where the variability is shown to be characteristically transient, whether such

21 Bureau of Labor Statistics. *Handbook of Methods, Chapter 17. The Consumer Price Index.* Updated June 2007. PDF file.
22 *Wealth of Nations*, pp. 41-43
23 *Wealth of Nations*, pp. 79-82

transience is random or cyclical, the most useful tool in resolving the base trend is that of smoothing. For example, in measuring solar magnetic variation, or the sunspot activity of the sun, the amplitude of monthly variation can sometimes nearly equal the trend amplitude. A 13-month rolling average of the monthly average sunspot numbers is used to derive a "smoothed" sunspot number which, when plotted, reveals the underlying trend quite plainly[24]. While such methods do create a longer time lag for the receipt of meaningful results, they are nevertheless more reliable than seasonal adjustments, which are subject to human error and arbitrary judgment. Using a 12-month rolling average for "smoothed" CPI would resolve seasonal factors out, and provide much more meaningful data. It would further eliminate the motivation for removing essential inputs like food and fuel for the sake of statistical clarity.

Another issue with CPI also deals with the services and manufactured goods components. The use of "like goods" does not properly assess the impact of innovation upon real value. The value of scarce goods follows the utility theory in determining market price. A portion of utility is the relative advantage which a good or service represents. As was shown in the preceding chapter, the real value of particular information services decline as the information becomes more widespread. The same can be said of commercial manufactured goods. Cutting-edge electronic goods offer powerful utility advantages which are particularly valuable when such devices are either new or scarce. The price declines associated with commoditization (the point in time when supply can meet demand) represent not a deflationary pressure, but a real decline in objective value. Interpreting such price changes as deflation is akin to spending the net benefits of innovation. In other words, by including goods and services affected by technical innovation in the CPI, the real improvement in quality of life these innovations would otherwise offer mankind is being used as a statistical offset for ominous and increasing scarcities in the basic necessities of life.

Finally, because the scope of data collection is so broad, particular goods within the index are constantly being added as they come to market, and are removed as they become

24 Refer to: http://www.swpc.noaa.gov/SolarCycle/ for a current example of such a graph. Retrieved 21st January, 2012.

obsolete and unavailable. The information which goes into the final measurement is therefore not self-consistent with the passage of time. The set of items whose price changes are measured at one point in time are considerably different from the same number measured at a different time, and the justification for comparison becomes weaker as the span between measurement times increases. Further, it is altogether arbitrary as to which items will be added to and removed from the aggregate measure, and in which proportion the changes in included item prices are weighted. An equal number reported by the CPI does not represent the same physical reality from month to month, year to year, or century to century.

In essence, CPI is not a measure of inflation at all, it is more characteristically a measure of short-term economic growth. As such, in times of economic malaise, CPI, and CCPI in particular, will always yield numbers which make inflation seem tame. The availability of enormous quantities of data does not resolve the basic problem associated with human beings making arbitrary decisions of how to compile that data. The rules of consistent data acquisition and significant figures are impossible to uphold on such a scale, and the presumption that such human factors do not bias the end results in any particular direction is a tenuous one at best. Certainly, the statistical validity of such aggregate measures is impossible to confirm, and this invalidity, from a scientific perspective, must extend to the conclusions drawn from such measures. Correlation is impossible to confirm, and without such correlation, causality can never be determined[25], or even rationally examined.

The effect of the observer upon value is not trivial, either. The fact that the values of particular goods and services are different to differing individuals gives rise to the exchanges of goods and services upon which all systems of political economy are based. If these values did not vary from person to person, no individual would ever have occasion to construct or acquire anything not intended for his own personal consumption. An exchange occurs because each participant values that which he acquires more than that which he gives up. Neither is necessarily being swindled, both may have little use for the items they are trading

25 *Human Action*, pp. 22-23 – As von Mises noted, it is the mere belief in causality which compels human action. Government intervention is compelled by a popular belief in the causal nature of the intervention. The lack of reliable evidence to back this belief renders the intervention ineffective, even counterproductive, but no less likely given that such belief persists.

away. The trade itself represents not just an exchange of value, but the creation of value in, or at least the realization of potential value for, both goods. Differences in location can have a very similar impact. A wool coat, for instance, may have little or no value in a tropical paradise, but a great value in the Arctic. Products native to particular lands or cultures may have uses which are not realized until they are far removed from their source. Peoples half a world away may highly prize something which is so common as to be effectively worthless at its source. Here, the transport of goods from source to destination also represents the creation of value. The physical thing whose value is being measured may not change at all in transit, but its real value is changing nevertheless.

All of these factors may make the accurate measurement of aggregate values across time and space seem hopelessly obscured. If money can not be relied upon as a measure of value, then what hope does a central banker or public policymaker have of making sound decisions based on such measures? Of course, there is no hope of sound decisions being made based on purely quantitative measures. The money prices within the market are indeed meant to convey information, upon which individuals can make their own decisions, but these decisions are also influenced by each individual's own objectives and priorities. Here, differing quantities of money are not being used as a measure of value, but as a means of assessing proportional cost to the individual.

Economics also uses forms of measurement to assess economic conditions which do not include monetary units within their calculations. These, too, are subject to change over time. Assumptions about the fundamental nature of a particular market may hold true for considerable periods of time, but eventually, these assumptions will cease to be as new and creative uses for the market product in question evolve. This effect is further compounded when such metrics are used to motivate public policy. A shrewd politician will, without consideration for secondary effects, tailor his policy to produce the numbers which look the best, which often destroys the underlying assumptions of fundamental market relationships which made the metrics valid in the first place. Metrics may appear sound for considerable periods, even while the underlying quality of the data set erodes.

Unemployment is an excellent example of a measurement which is interpreted differently from country to country, and can be taken to mean very different things. It may be measured as a percentage of laborers actively attempting to participate in the labor market, as the United States government most prominently reports. It may also be measured as a percentage of those able to work, which is usually a considerably greater proportion. Persons engaged in valid non-wage earning activities (child-rearing, volunteer work, military service, etc) may or may not be counted. Part-time employees may be counted as employed, partially employed, or unemployed based on their particular aspirations. The definition of the term is therefore quite subjective. What matters for purposes of comparison, however, is that the definition used cannot be made to construe widely divergent real conditions with precisely the same number. Here, the measure of unemployment is at the mercy of societal changes, such as the participation rate of women in the workforce, sampling and data processing methods which are subject to revision[26], and overall changes in employment type and quality. Whether a "job" is a vocation, a paycheck, a 40-hour workweek, or some other standard of measure, it still becomes very apparent that the things being measured can and will change without necessarily changing the number produced by measurement.

Within the realm of the physical sciences, the units of measure employed are sufficiently static and certain as to make comparisons and analyses of various measurements reliable. Whether it's a meter's length, a gallon's volume, or a slug's mass, the property and quantity being described in such units is quite certain. The reliability of resultant computations depends only on the precision and accuracy of the tools used to obtain the measurement. So long as consistent tools and methods of data collection are employed, errors in measurement and calculation can be readily detected and corrected. However, when crossing over into a social science, like economics, the certainty associated with the units of measure employed becomes transient at best. Calculations based thereon can carry no greater certainty than the measurements from which they are sourced. The detection of errors and the explanation of contrary results requires an intimate knowledge of the source data, and

26 Refer to: *Handbook of Methods. Chapter 4. Measurement of Unemployment in States and Local Areas*. Last revised April 1997. PDF File.

an analysis more thorough and detailed than was required to obtain the calculation in controversy. Verification of computational accuracy thus becomes cost and resource prohibitive.

Statisticians often resort to exotic processing methods and formulae to make their resultant data seem less variable, and such methods do often make for a prettier graph, but it is a dangerous presumption at best to assume that the volatility or variability of measurements don't contain relevant information about the health and stability of the economy as a whole. Even if the economy is on a long-standing, long-term trend of overall growth, as is often presented, if the system of capital circulation upon which this growth depends is dynamically unstable, the amplitude and frequency of the cycle of boom and bust will eventually exceed the amplitude of the trend line. Economic crises will become more frequent and more severe, until the system breaks down. In the physical world, dynamic instability is most often manifested in the form of a resonance. Indeed, the only certainty within empirical economics is that no part of the data acquired can readily be trusted, and that no part of it can be safely ignored, either.

The impact of the equipment and individuals used to gather and process information can not be safely ignored, either. Take the example of climatological data. A great deal of the debate which swirls around the reliability of climate models and the predictions of future climate are based upon a very specific interpretation of temperature and atmospheric composition data which originate from a wide variety of sources. In the present day, weather satellites gather exhaustive information covering most, if not all, of the Earth's surface. This is a condition which has prevailed over a period of less than half a century, far too short a period upon which to draw sound conclusions. The Earth's climate, after all, is known through geological records to have varied quite widely at different times, and to have changed quite radically over comparatively short periods. There is of course the wealth of records recorded by human observation in various places, which over considerable portions of the world date back a century or longer, and in most inhabited places date back at least to before the space age. The locations chosen for this reconstructed data set are far from

random, and not necessarily self consistent. For example, the official temperature measurements for the city of Boston, Massachusetts, were for many years taken at Boston Common. Today, however, these measurements are taken at Logan International Airport, which is closer to the ocean, and thus more susceptible to maritime influences. In Boston, and in many other places, man-made changes to topography, surface composition, and daily sunlight patterns can alter readings considerably. Even the timing of measurement is not unimportant. In early times, it might be assumed that the "low" temperature was always taken just before dawn, and the "high" was taken in the early afternoon. When devoted meteorological stations were created, and even more so when automated plotting of continuous data was introduced, the high and low temperatures could be captured even if they didn't fall near the usual times. For information prior to widespread human measurement, various proxies, such as ice cores, tree rings, and sedimentary strata were called upon to give scientists some means of reconstructing the temperature record in various places through more considerable periods of geological time.

As the methods for data collection and processing change, very little attention is often paid to how consistent these various temperature constructions are with one another. One type of thermometer might be more susceptible to bias in direct sunlight than another, ice cores and tree rings seldom if ever occur in the same climatological region over considerable periods of time. Ice cores and sediment beds might contain data gaps coinciding with extended periods of local drought. Even satellites are retired and replaced by new and "better" instrumentation, and susceptible to errors arising from unforeseen changes in the atmosphere's optical properties, precise accounting of which is essential to ensuring the data acquired from radiating ground sources is self-consistent. In the 1970's, great concern was voiced in public circles that the beginning of the next glacial period was imminent. Thirty years later, the concern was that rising industrial output of infrared-absorbing gases would cause surface temperatures to rise greatly. In the 19th Century, noted economist William Stanley Jevons made a conjecture that the frequency of sunspots, which rise and fall cyclically, could be tied to agricultural outputs. There are a noteworthy minority of scientists

who still believe that sunspots, which are a manifestation of the Sun's magnetic activity, are a major driver of Earth climate. Detractors of this opinion note that the Sun's radiation output varies very little during the sunspot cycle, and that no known mechanism has been demonstrated to explain how this small change could drive warming climate to the levels seen during the last century, a period during which sunspot activity was unusually strong. Study of the most recent, prolonged solar minimum, which lasted from 2006 through 2009, demonstrated that while while the Sun's radiation still only fell slightly below historic norms, ionizing wavelengths fell dramatically, solar wind slackened, and radical changes occurred within the upper layers of the Earth's atmosphere.

Modern climate change advocates are quick to note the inaccuracy and incompleteness of data available to those earlier predictors of climate. However, while modern scientists have much more data at their disposal, and the resultant data picture can be described as more complete than before, a presumption that the data set is exhaustive and self consistent is tenuous at best. Imagine trying to put together a jigsaw puzzle of a particular scene, without a finished picture to guide the process, and while only receiving a few select pieces at a time. One could first see a person who is the subject of the picture's tale, and next how he is running through a forest, carelessly dropping his possessions, to the detriment of the local ecology, and only much later that he is being chased by a bear. The individual reconstructing this picture will have different ideas of cause and effect based not only on how much, but on which specific portions of the picture are visible. What can be known is that a portion of those participating in the reconstruction of a complex scientific picture will start to form systems of belief before the whole of the system is firmly understood. Once these beliefs are forged, they will bias the remainder of those individuals' intellectual pursuits. A researcher will often find what he or she is looking for, whether it's there or not, and negative results are often disregarded, sometimes purposefully, sometimes for fear of communal recrimination, and sometimes merely by accident.

The point to be taken here is, that not only are the units of measure in economics in flux, but the people gathering and processing the information available are constantly

changing as well. These individuals have different systems of belief, and different methods of data gathering and processing. What was once gathered by phone survey or shopping sample may now be done via web search. The wording of particular questions could be changed subtly to alter the connotation taken by the respondents. Countless arbitrary choices face the economic researcher who, even if mindful of his own prejudice, can introduce ever-changing degrees of bias and inconsistency to the data received. The introduction of personal beliefs into a system of measure is often times just as arbitrary as choosing one among a number of individuals whose foot will be used to standardize a unit of length. The key difference between one and the other is that the arbitrary choice of a unit of measure does not destroy any part of the objectivity of subsequent measurements taken, whereas the imposition of unproven personal beliefs necessarily diminishes said objectivity.

Chapter IV – Quantifying the Abstract

"For it seemed to me that I could find much more truth in the reasonings that each person makes concerning matters that are important to him, and whose outcome ought to cost him dearly later on if he has judged badly, than in those reasonings engaged in by a man of letters in his study, which touch on speculations that produce no effect and are of no consequence to him except perhaps that, the more they are removed from common sense, the more pride he will take in them, for he will have to employ that much more wit and ingenuity in attempting to render them plausible."[27]

- René Descartes

In order to employ mathematics in any particular field of study, or towards the goal of devising a solution to any particular problem, one must first resolve all relevant variables into specific numbers or quantities. Mathematics is the science of quantity, and is thus entirely intolerant of the abstract or intangible. All quantities must be measurable to a known degree of accuracy, wherein the allowed margin of error itself becomes a relevant quantity for determining the overall certainty of the end results. Therefore, a quantity need not be absolutely certain in order to prove useful to mathematical study, but its certainty needs to be known and quantified along with the quantity itself. A further requirement of quantity is that, in order to be useful outside of mathematics, it must be capable of translation into a certain magnitude of a real and quantifiable thing.

The world of man is finite in its scope, and in being so, it is easy to understand those who might suppose that in being finite, all within the world can be known to a tangible degree of certainty. Even quantum indeterminacy yields a known value or limit to uncertain measurements, which for purposes of measurement on a human scale may be considered negligible. However, the confines of man's capacity to measure, and even more so the

27 *Discourse on the Method.* p. 6

practical economy of measurement, do not presently, nor shall they ever, encompass the entirety of the world's information. A set of unknowns impossible to define in scope and importance lies within the faculties and motivations of each and every human being. Nature, too, provides a wealth of information equally impossible to assign with a predetermined quantity. In natural selection one can observe, on longer timescales, precisely the same effect as was seen in the dissolution of empirical models of economics. When a particular creature first evolves, a particular set of known conditions and competitive considerations may enable that creature to thrive and multiply based on the new advantages they bring to the world. Over time, however, these very advantages wipe out those incapable of competing within that creature's environment. Through further evolution and distribution, the subject creature's attributes, which were once unique among a myriad of different creatures, become common, and thus less advantageous. Add to that the constant change of the Earth itself, and no particular life form could ever hope to endure indefinitely without further adaptation.

Numbers can be presented in any form, and the complexity or consistency of particular forms of data should not be automatically construed as proof of the data's validity or veracity. If a particular thing can be imagined to have quantity or dimension, then mathematics can be used to describe it. However, whether the thing itself is imagined, or its dimension is imagined, in either case the mathematics thus employed serve no scientific purpose, because that which the numbers describe is entirely abstract in its real condition. If the thing described is in fact real, but indefinite in dimension, the number chosen is entirely arbitrary by nature. Even if certain rules are established to calculate a specific number, both the system and inputs are arbitrary, which makes the end result just as arbitrary as any number pulled out of thin air.

It may seem strange to suggest that people would assign arbitrary values to unknown things and present them as absolute and certain quantities, especially individuals in high offices entrusted with enormous influence over capital markets. And yet, the economic system which exists in the present age could not be made to function without such fanciful inventions of quantity. Virtually all businesses of appreciable size are now compelled to

report profit and loss on the basis of what is called the accrual method of accounting. Accrual requires every business to analyze the entirety of its holdings, and place a specific value upon the sum total of everything that firm possesses. A careful look at the annual report of any publicly traded firm will reveal a myriad of different things whose value can readily be described as subjective. In such instances, the manner in which information is presented can be used to justify entirely different values. Because accrual is used to calculate profit and loss, and thus taxes owed, regulators must constantly create ever more exotic rules to make successive reports seem self-consistent. Governments wish to maximize tax revenue, and thus the purpose of accrual has long since ceased to be the accurate measurement of profits. The consistency of tax revenue is the priority, and it is for that purpose that new measures of value are invented.

A simple and obvious example of this is that of goodwill. Goodwill is defined as the value of an entity over and above the value of its assets. Now, the fact that a business may be worth more than the sum total of all of the tangible things in that firm's possession may be true enough, but the dimension of that number is known with precision only upon the sale of that firm in its entirety. Even in the case of a sale event, the figure is still entirely arbitrary, as decided by the selling party. The value attributed by the buyer must naturally exceed the value attributed by the seller, or no sale would occur. Goodwill is, of course, not a measure of value, but merely an arbitrary number concocted to make aggregate value seem more certain and consistent with the passage of time. The ultimate value of a firm, it is often said, lies within its people, what is often termed "human capital"[28], those who know how best to apply the tools the firm has at its disposal. That the employees of a firm are important to the realization of profit is undeniable, which makes the uncertainty of their continued employment and participation (they aren't slaves after all, they can leave any time they want) of extreme importance. This uncertainty likewise makes any figure purported to be the goodwill of a particular firm uncertain to the point of absurdity. If a firm is not for sale, and

28 This is a fanciful and odious term, as employees are not owned, but provide their labor in exchange for wages. The profits of capital and the wages of labor are entirely different things, and any attempt to intermingle the two will by nature abstract any attempted measure of value from its true object.

after a firm is sold, the number has no discernible meaning, it represents nothing which can be defined to the point of being measured scientifically.

The same can be said of a host of other things within a company. Business analysts will often discuss “off-balance sheet” items which might manifest in various ways to affect future share price. These are items which are owned, but aren't traded in sufficient volume to track a market value. The sum total of these assets are often presented as single lines purporting to report their collective value to the firm. Capital equipment's liquidation value may vary with the market, but its productive value varies with the manner and extent of employment, as well as the availability and reliability of maintenance. If replacement parts for a drill press cease to be made, the future production provided by that equipment becomes limited by the amount of time it can be maintained without such parts, a figure altogether uncertain. Intellectual properties such as patents, copyrights, and trademarks have entirely unknown values which will be realized by the competence and resources of those employing them, as well as those of external competitors. If a particular book is discredited, or worse still is disproven, it could become entirely worthless. If a patented item's function is reverse engineered through other technology, the price the item commands will fall at least to the natural price of any viable alternative. And if a trademark is associated with a calamitous event, its value in marketing may evaporate altogether.

What is found in all of these examples is that the accountant is compelled, through external pressures, to accept an ever-increasing number of assumptions whose veracity can not be corroborated by any means. The purpose for which these numbers are assigned and the formulae that are contrived may diverge considerably from the purpose of the accountant to accurately represent the firm's value, and the purpose of the firm to succeed in its chosen market and to increase its profitability. The statements, which were originally intended to report profit and loss, now only report numbers without any tangible meaning. However, because the numbers are still purported to be profit and loss, they still drive decisions made by the firm, creating an ever-increasing risk of capital misdirection[29].

29 The specific manner in which this occurs will be examined in detail in Chapter XVI.

The governmental level is subject to this phenomenon, as well, though not in reporting current deficits and surpluses. For practical reasons, governments can not report their income statements using accrual as corporations do. Government, for the most part, uses the older cash method, where the difference between money received and money expended constitutes the current year's deficit or surplus. This method does allow true costs and solvency issues to be disguised, as will be explained in the next chapter, but in general there will be nothing on a government's annual statement which is not real and certain in quantity. It is in formulating numbers for public consumption that abstract and uncertain quantities are created by or on the behalf of governments.

One of the principle manners in which abstract data is converted into quantity is by means of survey results. Many economic indicators and government statistics are based entirely upon individual answers provided on verbal or written personal surveys. It is to be pretended that quantity can be achieved by restricting otherwise qualitative answers to either a list of discrete values or to a bounded numerical scale. The numerical scale can be analyzed directly, and the discrete answers can be given numerical values unknown to the survey recipient. There are a number of problems with this methodology. First, the randomness of the sample may or may not be affected by the necessarily voluntary nature of participation. Individuals who are engaging or have positive personal circumstances are often more likely to participate in surveys. Even if a survey is done anonymously, that is no guarantee that an individual will be willing to talk about economic difficulties they may face. Secondly, the responses will depend greatly upon the wording of questions and optional responses, as well as the participant's particular geographic origin and social station. English is far from the most uniformly employed language in the world, and differences in regional dialects and social vocabularies can place very different meanings upon precisely the same words, an effect which becomes amplified when the passage of time is introduced to the equation. Words can acquire both pejorative and ameliorative connotations over time, making comparisons of identical verbal responses inappropriate. Thirdly, the standard against which future data is compared must be chosen arbitrarily. For example, the

Consumer Confidence Index (CCI) uses the year 1985 as the “benchmark” around which the neutral standard value of 100 is compared. The Conference Board, the organization which publishes the CCI, chose this year because of its perceived status within the business cycle as being neither peak nor trough. However, 1985 was a year during which the United States was emerging from a fairly deep recession, which may make the data received seem unreasonably upbeat. Personal confidence is an abstract concept, but qualitatively it can be surmised that it depends not just on a person's current condition, but upon the change and progress of that condition over time. Lastly, no adjustment can be made for dishonest responses or unethical methods of information gathering.

There are two main reasons that measures of abstract concepts persist in policy circles. The first is that those who rely upon statistical models need such measures to justify their claims of informational completeness. The idea that unquantifiable data exists is antithetical to their methodology. The second reason is purely political. Demagogues often need, and will always exploit, the ability to quote both positive and negative statistics regarding any economic situation at any given time. The party in power will need to show how times are good, or at least getting better, while the opposition will need to show how times are bad, or at least getting worse. Competing visions of how the future will unfold simply don't stand up to popular sentiments regarding a particular political group's current track record. These sentiments are themselves subjective, and it requires a very careful selection of facts to paint the picture which a given politician wishes to impress upon the public. As we saw in the jigsaw analogy in the preceding chapter, the selective provision of completely factual data can give credence to suppositions which are altogether misleading, and sometimes even completely false. When the additional confusion of abstract quantities are introduced, it becomes impossible for the majority of people to discern fantasy from reality.

As Descartes observed in this chapter's opening quotation, the reliability of information tends to decline as it is further removed from the point of action. As information is gathered and analyzed further from those individuals performing the action, the personal consequences of improper decisions tend to decline. The more hands the information has passed through,

and the more individuals who are involved in its processing and dissemination, the less likely consequences are to be directly felt. The likelihood of finding the source of a given error, let alone visiting retribution upon any human source, becomes impossibly remote, and the probability of misassigning blame approaches absolute certainty.

Chapter V – Abstracting the Quantifiable

"Knowing nothing about a subject is frequently healthier than knowing what is not so, and a little learning may be a dangerous thing."[30]

- Darrell Huff

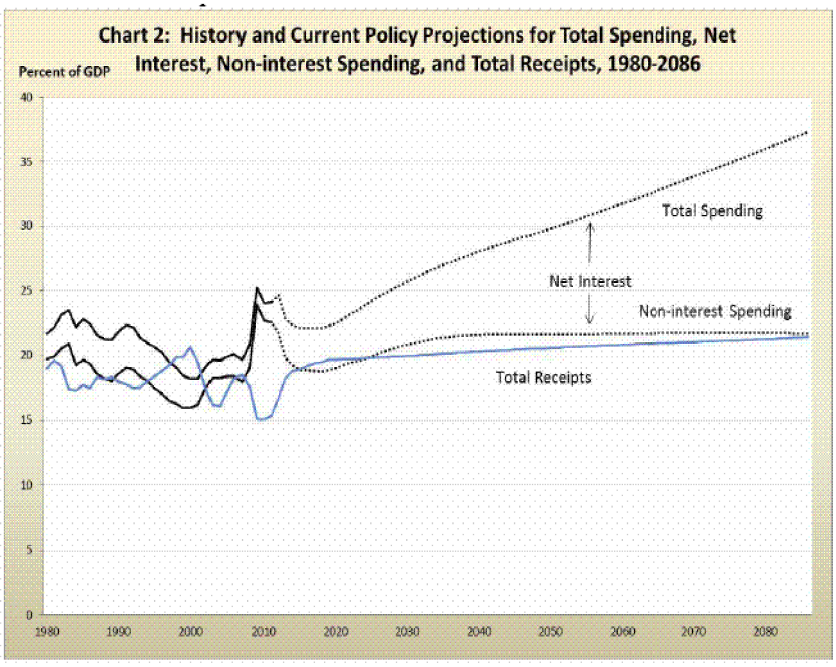
As difficult as it may be for the researcher to accept the limitations of their measurement units, and their inability to quantify certain known phenomena, the existence of contrary results is almost always received with a great deal more consternation than the potential for new and unexpected phenomena. However, inconsistent or even unfavorable data does not always preclude even the most well-intentioned analyst from resorting to the selective dissemination of facts which seem to best advocate their previously chosen plan of action. When a particular signal within the data presented obscures or reverses the signal the analyst wishes to demonstrate, there are numerous means at his disposal for disregarding it. The simplest is to pretend that a particular data influence either does not matter, or to presume that it will, on average, cancel itself out. Another method is to exclude portions of the data set which run counter to the effect one wishes to demonstrate. As was observed with Core CPI, seemingly plausible justifications can be made for excluding certain data components. In that example, food and fuels were disregarded, an exclusion justified by the inherent variability of the data input. Careful selection of time horizon can also be highly effective in skewing apparent trend lines. Excessively short time scales in particular can be used as justification for disregarding "unlikely" discrete events. Of course, there is always the option of presenting some influence as completely abstract, which in reality is quite measurable, absolving oneself of any responsibility to even collect data on the subject matter in the first place.

30 Huff, Darrell. *How to Lie with Statistics.* 1954. New York: W.W. Norton & Company, 1993. p. 45

It is surely not a controversial assertion to suggest that the present levels of sovereign debt which oppress the industrialized world were accumulated over a vast period of time, and result from the repeated failure of long-term public expenditures and revenues to meet long-term forecasts thereof. In highlighting the nature of this long-term shortfall, it is revealed that a critical influence on growth and revenue forecasts has been purposely disregarded by policymakers.

Chapter II has already addressed the principal reason that long-term statistical models are such invariably poor predictors of prevailing economic conditions. Namely, that even constant conditions within the economic environment yield inconstant results, and that returns which can be expected of model-driven action will tend to decline with the passage of time. The fiscal planner is not immune to this effect either, as even consistent tax and regulatory conditions tend to deliver revenues which don't follow the larger progression of economic conditions as well as government statisticians anticipate. The difficulty of long-term public fiscal planning is, however, compounded by tax codes and regulatory rules which restrict competition, create perverse incentives, and yield highly unstable sources of revenue.

It is the prevalent tendency of government institutions to model their statistics based on known factors, smoothing out the impacts of sudden shifts in economic conditions as they do so. Because such events are inherently unpredictable, both in timing and in magnitude, it is often pretended for projection purposes that the cumulative effects thereof will cancel out, and thus have a negligible bearing on the overall fiscal health of the subject government. The resulting extrapolations, when placed on the same graph with historical data, demonstrate how considerable the fluctuations in historical data can be



in comparison to the magnitude of the expected trend. A salient example of this is observed in the chart shown on the preceding page[31]. Note how smooth the projected data curves are in comparison to the real data which comprises the solid-line portion of the graph. In this case, the U.S. Treasury Department is assuming that the net effect of economic variability will not appreciably impact the long-term fiscal picture.

The presumption that variability does not considerably affect the aggregate fiscal picture is, of course, unfounded. To explain a major reason this is so, an analog can be found in the principle of compounding interest, which is so commonly upheld by the financial industry as a virtue to investment classes of all kinds, and a reason for their clients to alter their investment patterns sparingly.

An investor earning an average of 5% on an initial investment of $10,000 over the course of forty years can potentially see the sum grow to a limit of nearly $70,400 at the end of that period. However, the investor will only reach that limit if the return for each year is *exactly* 5%. Any variability whatever in the rate of return will diminish the end result, and the greater the variation, the lower the end figure will be for the same average level of return. For example, if returns are 4% half the time, and 6% the other half, the final sum declines only slightly, to $70,272. However, if the return is 0% half the time, and 10% the other half, the sum will be $67,275. Introducing the possibility of annual losses decreases the result further. Alternating 5% losses with 15% gains (still an average positive return of 5%) yields a final sum of only $58,672. Note that we have not changed the average rate of return, and that the end sum declines with each increase in the variability.

Likewise with economic growth, using only the long-term average rate of growth in GDP for extrapolation purposes yields long-term GDP projections which will get progressively worse with time, and which will invariably overestimate both annual GDP and aggregate GDP by ever-increasing amounts as they are taken to more distant time horizons. Further, it quickly becomes apparent that good long-term fiscal policy is incompatible with high degrees of revenue and spending variability, since the surpluses of rich years don't quite

31 The Department of the Treasury. *2011 Financial Report of the United States Government*. 2011. PDF file. The chart shown above appears on p. iii.

compensate for the shortfalls associated with lean ones. While spending variability is mainly an issue of discipline (which most governments nevertheless appear to lack) and unforeseen needs, revenue variability has a considerable structural component to it, one which could very easily be eliminated by removing margin-based taxes from the tax code[32].

Naturally, when any economic downturn does occur, there will be mounting pressure upon governments and central bankers alike to intervene. Whether the reaction is one of "stimulus" to encourage economic growth, or "austerity" to reduce the public deficit, the impact of both short-term and long-term economic variability depends on the fundamental nature of the action. The end result of intervention can very easily amplify the magnitude of the shortfall which is certain to occur due to natural variation alone.

The business cycle, the periodic ebb and flow of economic growth, is a type of oscillation. If an oscillating system has a negative damping coefficient, a condition which is often termed *positive feedback*, the amplitude of that oscillation will rise with time. Given such feedback, such a system can become dynamically unstable, even if it possesses inherent static stability[33]. While the economic gyrations of the business cycle are not purely periodic, they are nonetheless cyclical, oscillating about a trend line with variable amplitude[34]. Whether the amplitude of subsequent booms and busts is greater or less than those which precede them depends upon the feedback which is applied in reaction to changing economic conditions.

It can be demonstrated that, due to structural factors within nations' tax codes, that the fiscal crisis presented by a given downturn is proportionately larger than the economic crisis which causes it. If, as is presently the case with nearly all Western nations, the public sector itself represents a significant portion of national GDP, the fiscal crisis itself will naturally amplify the depth of the current economic crisis. Since the public revenue is inherently less stable than the private sector's, if the public sector's share of GDP were to rise with time, the amplitude of the boom-and-bust cycle will rise along with it. Either a stimulus program

32 This issue will be revisited in greater detail in Chapters XII, XIV, and XX.
33 Hartog, J.P. Den. *Mechanical Vibrations*. 4th Edition. 1956. New York: Dover Publications, 1985. Print. pp. 282-285
34 *On the Manipulation of Money and Credit*, pp.140-142

which raises public expenditure, or an austerity program which raises public revenue would therefore represent a positive feedback to the oscillation. The public expenditure would have to be paid for, and the additional revenue would be spent even after the economic conditions which justified the tax increase recovered. In times of economic stagnation, such interventions can even be the initial input which creates the oscillation. A stimulus program which reduces taxes, or an austerity program which reduces public spending would conversely be a negative feedback, as the public sector would shrink.

The near-term effects of such stimulus and austerity protocols may improve apparent economic and fiscal conditions, respectively, but the long-term impact of increased variability is impossible to compensate for in any economic system. Increased variability degrades long-term fiscal health, regardless of near-term gains, and ever-increasing economic volatility can only lead to ever more devastating economic crises. If the industrialized nations of the world truly valued stability, then they would have adopted less volatile sources of revenue, and acted more patiently, equitably, and methodically in reaction to changing economic conditions.

Excluding data on the sole basis of variability serves only to remove potentially essential data from the statistical model, and causes said model to completely ignore the dynamic stability of the entire system. Imagine, for instance, if an automobile engine were designed using a model which only examined shaft power and steady-state efficiency, but ignored vibrational effects because they varied too much with the shaft rotation rate. The end result would be an engine which is theoretically both powerful and fuel-efficient, but which would shake itself to pieces before any useful amount of work could be done with it. Disregarding variable inputs places the model's user in mortal peril each and every time the data model is employed.

Of course, sometimes variable data is excluded because it makes analysis difficult, and other times it is purposely excluded because it produces a contrary result. In the instance of CCPI versus ordinary CPI, food and fuel were intentionally excluded to minimize the appearance of near-term inflationary pressures, despite the ready availability of smoothing

techniques which would be particularly reliable when applied to food price components. Employment figures are another place where the United States government plays a very dangerous game with the information it collects and the manner in which the information that is gathered is processed and disseminated.

As noted in Chapter III, employment figures are subject to a number of curious data processing methods which make the nature of comparison over time nearly impossible. However, one particular item which is left off of the federal government's numbers entirely is the number of retirements. On the personal level, this may seem like a reasonable omission, as an individual's retirement is an inevitability, and not necessarily an involuntary end to a particular job. However, from the perspective of the economy as a whole, a retirement has precisely the same effect as any other form of termination of employment. A person is placed out of the labor force, the same as an individual who quits his or her job, the same as an individual caught in a mass-layoff, and the same as anyone who is fired for cause. The produce represented by that individual's labors is no longer being supplied, while that individual's consumption has hardly changed. It is the change in the total number of active workers that employment statistics should report, not simply the difference between the number who were hired and the number who were fired.

The whole of mankind are maintained by the produce of land and labor, whether they work or not, but the future growth of this product, and the sustenance it will thus provide for the population, depends very much upon the productive employment of labor[35]. The state and health of the economy, therefore, does not depend upon the proportion of employed workers to the number actively seeking work, but upon the proportion which employed productive workers bear in relation to the number of the population in total. As the productive years of a particular laborer come to an end, their produce ceases to be generated. If the economy is to sustain itself, this must be offset by another job being created. Since job creation numbers do not include the effect of retirements, this very tangible quantity goes almost entirely unmeasured, and even more completely unreported.

35 *Wealth of Nations*, pp.270-272 – Of particular importance is to understand the concept of "productive labor", as Adam Smith defines it. By this definition, public expenditure is by nature unproductive.

The intrinsic difference of perspective between the individual level and the economic scale gives rise to many such abstractions. It is indeed the focus of the individual on his or her particular interests that makes their judgment of such matters so reliable, but in the attempt to relate grander matters which fall outside their purview, statistical deception, both intentional and inadvertent, often becomes quite simple. Data consistency is not the same as data quality, and any particular set of numbers is certain to reveal only a part of the entire picture. As noted by von Neumann, the scientist's first instinct when faced with so complex a mechanism as a national or global economy is to subdivide the problem into manageable pieces. The constant evolution of the problem renders any such effort vain, but the intrinsic interdependence of all of an economy's parts also renders any attempt at subdivision unreliable. To examine a portion of the problem, and to create a smaller, simpler problem which can be examined and quantified with precision, a thorough definition and understanding of all external interactions must first be provided. Without such information, neither the reliability nor the very meaning of the statistics generated can even be grasped by those who review them.

Poor selection of time horizons can often be used to skew data to yield false or misleading results. Sometimes these selections are simply arbitrary, but other times they are purposely done to create the false appearance of advantage. The most acute danger associated with the selection of time scale is the treatment of improbable events. As was noted in the first chapter, when dealing with particular random events, a modest advantage of probability can, when taken to a long enough time scale, create the illusion of certainty and inevitability. Unlikely events are almost certain to be outnumbered by likely events. However, it can also be said that whatever possible events which can occur within a particular random time scale, become nearly certain to occur at least once on a longer time scale of sufficient length. For example, if an event has a 1% daily probability, it has a nearly 7% weekly probability, which rises to 26% monthly, and over 97% annually. As such, those events which can be justifiably discounted on a very short time scale must be factored in to longer ones. This effect can lead otherwise identical studies to yield contradictory results,

simply because their time horizons differ.

The strange logic selective omission of unlikely events gives rise to can be observed in the concept of the martingale. A martingale is a betting strategy, intended for use in games where the odds of winning are very nearly 50%, and the payout is one to one. The idea is that every losing bet should be followed by a similar bet which is twice as large. Once the "inevitable" win occurs, all of the funds lost during the preceding series of losing wagers is repaid, and an additional sum equal to the original wager is won on top of that. Once this occurs, the gambler should return to his original bet amount, and begin the process anew. On a roulette wheel, the odds of winning a bet on red or black are 18 in 38, or about 47.4%. Conversely, the odds of losing are 52.6%. Even though this is the more likely outcome of a single bet, as the number of wagers goes up, the odds of every bet in a sequence being a loser falls very quickly. The odds of losing twice in a row are just 27.7%, the odds of losing eleven in a row are less than one in a thousand, and the odds of losing twenty-one consecutive bets, one in a million. Thus, as the reasoning goes, a game in which every individual bet is stacked slightly against the gambler, can be turned into one which offers him a certain gain.

Of course, employing a martingale does not ever create a certain gain for anyone, and does not alter the expected gain of the house. After all, red and black both lose 2 times out of every 38, just over 5% of the time, and it is on this small probability that the casino makes its money. If everyone employs the same strategy continuously, "0" and "00" still come up, and the winners still otherwise equal the losers. Thus the gamblers in total lose the same amount of money regardless of the betting strategy they employ. With a martingale, on particular time horizons, a large number of modest winners are merely compensated from a smaller number of individuals who are bankrupted entirely. This is because the odds of going bankrupt, while dependent upon the number of times a particular gambler can redouble his bet with his available funds, never goes to zero. Using the same logic which justified the martingale in the first place, the single discrete event of bankruptcy becomes just as certain as the shorter-term certainty of gain. If the gambler has funds to redouble 11 times (which

for a $1 initial bet requires reserves of just over $2000), he has a 99.9% chance of remaining solvent, and thus coming out ahead, if he wagers that many times. If he does this (wagers eleven times) 20 times in a day, his odds of bankruptcy on any given day are 1.7%. Taking this habit into the casino every day over a whole year, his odds of remaining solvent are less than 0.2%.

The reason this logic seems so convoluted is that, depending upon the statistical analyst's perspective, the likelihood of some events have to be seen as so remote as to be disregarded. If the probability of unlikely events are included, successive repetition of the same experiment would sometimes yield contrary results. If these contrary results are sufficiently rare, they can often be attributed to random computational or data entry error, or merely disregarded entirely as contrary to consensus. These rare events themselves are no less real, and no less quantifiable in their impact, but because of the nature of the analysis, they have been excluded from examination. Such exclusion sometimes may well be justifiable. For instance, if a particular vocation poses a very small risk of death, time horizons beyond the practical length of a particular individual's career may very rationally be disregarded. Likewise, if the effect of unlikely events is the same regardless of the individual's chosen course of action, then it can also be ignored. However, this latter instance is not always the case, and many times the near term gains associated with ignoring such events leads to larger catastrophic loss later on.

Within the realm of business, this kind of selective analysis gives rise to a host of different issues. Invariably, however, the tendency is for time horizons to be excessively short, which causes firms to exchange long-term viability for comparatively modest short-term gains. The tendency of global manufacturing to reduce inventories is an excellent example of this. By carrying less inventory, firms can reduce their expenses associated with maintaining idle goods on the shelf. These costs consist of taxes, labor, depreciation, and obsolescence. However, by holding less materials in inventory, firms render themselves more vulnerable to supply disruptions. Toyota has often been identified as a leader in what in

industry is termed "lean" manufacturing[36], and recent history provides an excellent example of the type of issues infrequent, discrete events can cause. Toyota has facilities and suppliers around the globe, and given this fact, it is easy to imagine that a localized disaster would not measurably affect its far-flung enterprises. Yet, when a tsunami struck the Sendai region of Japan in March of 2011, the resulting industrial disruption created shortages of critical parts which idled factories around the globe. While both Toyota and its competitors were affected by this supply disruption, the loss Toyota experienced in terms of production, and thus sales, was very large, a significant fraction of their ordinary total output.

The heavy reliance of corporations on metrics with very short time horizons leaves these behemoths extremely vulnerable to the unexpected. Given that publicly traded firms are most concerned with their next reporting period, this is hardly surprising. The very important distinction between "unlikely" and "impossible" can often be the difference between enduring an economic downturn and falling into bankruptcy because of it. A recession as severe as the one which began in 2007 may only happen in one year out of a hundred, but that's a more than 63% chance of occurrence in any given century. Many of the firms which were destroyed, as well as those who were rescued by public bailout, almost certainly discounted these long short-term odds in formulating their investment strategies, and as a result became the most vulnerable when the event arrived.

In general, the larger the scale is upon which policy decisions are made, the longer the time scale which should be considered by the policymaker. Once the national level is reached, the period of living memory is no longer a satisfactory guide as to possible events. In general, the more efficient a system appears to be in the short-term, the more vulnerable it is to unrecoverable losses in the long term. Discrete events can transform national destinies in an instant. And when events like the Japanese tsunami occur, it's tempting to see them as unprecedented, as much as history tells us otherwise[37]. When the consequences of discounting particular infrequent events rise to the level of imperiling the managed entity's

36 Liker, Jeffrey K. *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer.* New York: McGraw-Hill, 2004.

37 Portugal, for example, suffered a similar catastrophe in 1755, from which it never really recovered.

very survival, the essential nature of developing redundancies and contingencies quickly becomes clear.

When reviewing past data, the selection of time scale is sometimes driven by the availability of data. For example, many studies of Atlantic hurricanes begin in 1970, since this is the first year for which complete satellite data, and thus full-basin monitoring, is available. However, even given this fact, it is well established that the 1960's in general, and 1969 in particular, were very active storm seasons in comparison to the 1970's. Using 1970 as a start date for establishing trend lines seems quite arbitrary, and perilously so, in light of this information. Likewise, the selection of particular years for tracking economic activity may well be driven by the availability of consistent data on the particular mode of activity the analyst wishes to track. However, since reporting requirements, and thus data streams, tend to arise most often in the immediate aftermath of economic crises, the data is much more likely to begin at a low point for activity in general.

Chapter VI – Data Overload

"Garbage in, garbage out."[38]

- An old programmer's adage

Just about everyone who has taken a computer programming course has probably heard a professor or classmate utter this phrase. It is a testament to the fact that however powerful and complex computers may become, they can never generate correct answers from flawed inputs. As the amount of data to be processed increases, and the complexity with which they are processed increases, it becomes increasingly important to analyze and understand the intrinsic quality which man has given both to the data being examined, and to the algorithms being used to examine it. It can not be pretended that data quantity and processing power can provide a viable substitute for data quality and thorough beta testing. Further, as the quantity of data increases, and the number and complexity of algorithms increase, the tasks of maintaining data quality and performing proper program review will require more labor, not less. This labor will also need to be performed more thoroughly, more diligently, and by more skilled laborers, also in proportion to the quantity of data and complexity of programming. Worse still, the proportion by which the requisite labor quantity and labor quality are commanded is not linear, but something more than linear. A program one thousand lines of code in length requires more than ten times as much effort to debug than a program of one hundred lines. As the length of code to examine rises, the task of finding a single error becomes much more difficult, and equally more tedious.

Debugging alone does not necessarily mean that a program will generate useful and correct outputs, either. A successful compilation of code merely means that the code can be converted to binary instructions which a computer structured for such code can understand and process. It does not mean that the instructions themselves will fulfill the intended computational purpose of the programmer. A misplaced character, an incorrectly structured

38 The origins of this phrase are not rightly known, but the phrase itself is almost universally known within the programming community.

formula, or an omitted function call is all it takes to make a program spit out nonsense upon execution. This type of error, too, must be checked for through human testing and verification which becomes increasingly difficult as the length and complexity of the program increases. Once an erroneous output is identified, someone with thorough knowledge both of the programming language and the mathematical formulae involved must once again pour through line after line of code to identify the source of the error and to correct it. Knowledge of either programming or mathematics by itself is insufficient, and so the technical proficiency required to correct imperfections in coded instructions must naturally increase with the length of the program. And of course, even once the program itself has been perfected, incorrect entry or acquisition of input data can readily render the program's output entirely worthless.

With the advent of modern computing, the sheer quantity of data which can be analyzed within reasonable spans of time and at reasonable cost has increased exponentially. Likewise, the amount of data being acquired has grown in leaps and bounds. As it has done so, and the pace of commerce and communication have accelerated, the temptation to utilize computers to take advantage of this wealth of “knowledge” (it is not knowledge, merely data) has been overwhelming to many. After all, as the conventional wisdom goes, humanity is intrinsically fallible and inconsistent, whereas a computer's processing is exact and reliable. If a particular program proves inaccurate, then the reason must be that it lacks all of the input information that it needs. Little attention is paid to the human factors which go into a program's design, or a computer's architecture, much less those which impact the fidelity of the information being fed into the machine. This truth may be quite evident to those who have experience with computer programming, but it is just as readily ignored by those who don't.

In the great age of American industrialism, firms were most often led by, and almost always founded by individuals with profound technical abilities which they wished to apply. Those which were simple enough to be supported initially by small quantities of capital grew from modest beginnings as proprietorships and partnerships, and only those which could not

would need to resort to the raising of capital through the sale of equity in the form of joint stock. The barriers to the employment of one's own capitals which presently exist[39] did not yet exist, which made those most skilled in particular technical fields the most likely to succeed in creating new modes of industry, and in creating large new businesses. These were people who could understand, and therefore verify the fidelity of, any topic which any employee of theirs might bring to their attention. Today, virtually all large firms, even those which are privately held, are held in the form of joint stock. The complexity of tax laws make it nearly impossible for a single individual to perform detailed technical work while maintaining cash flow and employing capital efficiently. Worse still, the arbitrary and often reactionary nature of bureaucratic regulation, legislative micro-intervention, and litigious action both public and private amplify the risk of self-employment far beyond the value of the capital actually ventured. For this reason, most firms are now managed, if not led, by individuals with a business or accounting background. These individuals do not understand, and therefore can not be expected to trust, the technical matters which lie at the heart of every industrial venture. Lack of understanding, and mistrust of individuals leads such people to fall back upon the computers and software which they are most comfortable with employing. This gives rise to an insatiable thirst for quantitative data, which in turn diverts resources and decision-making power from individuals to machines. It is forgotten that these machines are themselves designed, built, and fed by human beings. Data quantity becomes a substitute not only for data quality, but for human labor and judgment, as well.

Science, as noted in the first chapter, has not been immune to the application of this fallacy. Enormous amounts of data are acquired and analyzed for ostensibly scientific purposes, and mindlessly forced through program after program, constructing model after model, all in an effort to force-fit a deterministic quantitative model to the actual phenomena observed. Predictions are analyzed only for the ostensible consistency with observation, and the effect of prediction upon observation is forgotten. The expectation of result in and of itself creates a dangerous bias within the architects of these data models, and so drives them

39 These barriers will be identified and examined at length in Chapter XX.

to confirm their belief, to find a way to justify it, to find what they seek within the data, whether it is real or not. Once a fallacious concept has received widespread acceptance, or even merely widespread publicity, personal conceit often makes it impossible for the individual researcher to reexamine, let alone retract, potential flaws in the construction of his methods.

Public policy is now largely driven by the same deluded faith in computation. Regulators never ask for less information in compulsory reports. Whether it is the tax returns of individuals, the weekly receipts from firms, or the quarterly filings of publicly traded companies, more and more data is demanded with every passing year. The information requested continuously increases in required quantity, precision, detail, and complexity, all of which are expected to be performed at private expense[40]. From legislation comes regulation, from regulations come forms, from forms come information, all returned in the form of quantitative data. This data is compiled into statistics, and from the statistics arise computer models, which in turn generate predictions used to justify further legislation, renewing the vicious, undampened cycle of spree and crisis, of boom and bust. All the while, the intrinsic weakness of computational methods are ignored, and the certainty of the computer's output for given inputs blinds all within governmental circles as to the futility and destructiveness of their chosen course of action.

The end result of all this data is human action driven at its source by information unfit for rational review, let alone for public consumption. Flawed information can not be used to drive sound decisions, and the more power that is vested in those who are incapable of questioning the information with which they are provided, the more far-reaching and devastating the consequences will be. In this era of education by indoctrination, business management by spreadsheet, science by statistical consensus, and government by computer model, the hazards of accepting what one is told without serious question have never been greater.

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40 This expense, of course, is in fact itself a tax, as it diverts resources from productive labor in order to support the function of government. It may not be exacted in monetary form, it is paid with labor. The cost of this tax, the value of the produce which is lost for the sake of satisfying public purposes, is borne no less by the taxpayer than any tax paid with money.

Part II – Money & Politics

Chapter VII – In Confidence

"Yet the criterion of truth is that it works even if nobody is prepared to acknowledge it."[41]

- Ludwig von Mises

The advent of modern Central Banks gave rise to the idea that strict control over the supply of money could be used as a proxy for controlling the fundamental behavior of the economy as a whole[42]. As the interventionist methodology of Keynes worked its way into Western public policy circles, a very curious change began to befall these national economies. Namely, the real and natural conditions which once drove every aspect of the economy, including liquidity, savings rates, interest rates, capital investment, wages, and market prices, steadily yielded to ever-increasing influence from central planners. Sometimes this influence came directly in the form of government regulation, and other times through more indirect interference from the monetary authority itself. Indeed, elected legislatures during this period, far from acting directly or aggressively, proceeded to successively abdicate more and more of their responsibilities onto appointed bureaucrats, onto men whose technical and intellectual capacity would enable swift reaction to crises, in ways and with speed with which an ordinary democracy simply could not compete.

Savings, once considered a virtue, and expressive of the ability of man to produce in excess of his consumption, were discouraged by the suppression of interest rates. Those interest rates, once an expression of the risk of an investment, and of the marginal utility of capital, were directly held at particular levels by force of arbitrary intervention. Market

41 Mises, Ludwig von. *The Ultimate Foundation of Economic Science*. Princeton: D. Van Nostrand Company, Inc. 1962. PDF file. p. 94

42 *The General Theory.* pp. 326-332 – It should please the author to note that this particular book, which looks favorably upon the New Deal, was published just prior to the drastic reversal of national fortunes which occurred in 1937-38.

prices were manipulated to bear the relations which the policymakers thought best, no longer subject to the balance of supply and demand. Wages, once driven by the value and scarcity of each particular skill, were everywhere suppressed in an effort to maximize the number of workers, and the number of hours worked by every profession. The supply of money, once regulated by gold, which could be melted down in times of monetary scarcity, and turned to other uses in times of excess monetary supply, yielded at last to the subtle tyranny of fiat money, which can be used to create the illusion of eternal sovereign solvency.

Everywhere the methods and motives of these actions are questioned, policymakers stonewall with an arrogant wave of derisive responses. The Austrian School, which was the first to oppose Keynes on the grounds of being tantamount to autocracy, have been deemed heretical in government and academic circles ever since. In order to even have a question entertained by such individuals as run Central Banks, one must first accept as true a host of premises which, as we saw in Part I, are entirely unfounded. The reason that Keynesians are so intolerant of rational examination is because the immediate survival of the system that they have built depends entirely upon the confidence which the public places upon it. Not just dissent, but public discourse must be silenced by every possible means, and those who think for themselves must remain a distinct and unpopular minority. Indoctrination, and not education, became the hallmarks of the age. Without a steady stream of new and ever-more fervent acolytes, the faith of Monetarism would surely die.

With each passing generation, those who most blindly and vociferously endorse the dogma of the faith are advanced by their instructors, to the detriment of all others. Each set of stewards becomes ever more committed to the institutions of their religion, and ever less understanding of its intended purposes. Those who embrace their teachings without question are held up as a model, and all others are to believe themselves unworthy to question the judgments of their betters. Legislators, rendered blameless by the assertions of their accomplices at the Central Banks, pass one measure after another which, if the true cost were known, would never gather public support in the first place. Instead of having to patiently await the revenues needed to consider that which the demagogue desires, he can simply pass

it, safe in the knowledge that the coming wave of credit expansion will allow the requisite capital to be harvested from the taxpayer directly. By the time the true cost is known, and the real consequences felt, those responsible for the calamity will have long since retired, if not peacefully expired.

Yet the criterion of truth is that it works even if no one is prepared to acknowledge it. If any of the theories so vigorously defended by politicians, business leaders, and academics alike were indeed the case, then they could be made to work regardless of whether the public believed them or not. They would be invulnerable to, and thus entirely tolerant of, both rational discussion, and the most numerous and vociferous dissent. To understand why this system has persisted for so long, it is first necessary to understand its evolution. The changes, all of which were additional economic abstractions, which were made to the Keynesian system over time were made out of necessity, not out of convenience. Each time the tools of the Central Banker were exhausted, and the inevitable crisis came, new inventions were needed to divert ever larger portions of private capital towards public consumption. The inability of the economy as a whole to sustain itself was masked by successively dismantling and then consuming the very engine which made these economies powerful in the first place.

The monetary system's seemingly humble beginning took place in 1913, with the founding of the Federal Reserve. Up until that point, the United States of America functioned with an Independent Treasury, that is, a Treasury which issued bullion-backed notes, whose value was set by Congress. The supply of money was dependent upon the supply of bullion, and the demand for precious metals. What was more, the authority by which paper money was issued functioned entirely separately from the banking system. Justification for such a change came in the form of the Panic of 1907, a financial system shock which itself was arguably triggered by the fallout from the Hepburn Act of the preceding year. The arbitrary power of the Interstate Commerce Commission to cap railway prices caused a decline in the real value of railroad securities, against which a great many loans had been secured. The recession which followed a 53% decline in the New York stock

exchanges saw a great many bankruptcies, a fall in production, and a rise in unemployment from 3% to 8%. The United States financial system was, in the view of many, saved by J.P. Morgan, who intervened to save those trusts he viewed as unfairly targeted by panicked depositors. Those firms he viewed as responsible for the reckless lending which triggered the bank runs, he allowed to fail. It may seem strange to many that a crisis, largely caused by thoughtless and reckless public intervention, and contained through private market action, should prompt the addition, and not the removal, of arbitrary public power, but as will be seen in Chapter XIII, politicians have an uncanny knack for finding both fault and opportunity within crises of their own making.

The Federal Reserve Act created a nationalized system of banking, nominally under the control of Congress, who appointed its board members, which all nationally chartered private banks (and eventually all banks of any kind) were required to become members of. These banks had to purchase non-transferable equity (shares of stock) in their regional Federal Reserve bank, and set aside non-interest bearing cash reserves at the Federal Reserve. In exchange for this compulsory service, member banks acquired access to discounted loan rates, and received dividends upon their shares of stock. Federal Reserve Notes then supplanted Treasury Notes as the sole form of legal tender, outside of bullion. The power of the Federal Reserve to control the actions of its members allowed it to control the supply of currency, and to manipulate the rate of interest charged on credit, and paid in compensation to individual depositors. Access of member banks to the discount window meant that those banks could always acquire needed capital to maintain liquidity. This access also allowed them to borrow money at a lower rate of interest than they themselves could expect to receive by supplying credit in turn.

This, of course, did not remove the issue of the trustworthiness of debtors which had been at the very heart of the 1907 crisis. J.P. Morgan himself was noted to have said “A man I do not trust could not get money from me on all the bonds in Christendom.” The fundamental stability of the system was not secured from the untrustworthy, indeed, it merely increased the resources which the unwise could call upon to further, and if necessary

disguise, their own folly. What was more, the United States Treasury, hitherto immune from the fiscal ramifications of private financial meltdowns, was now in a position to play kingmaker with the entirety of the national finance system, and to bear with it the responsibility for its failures. The freedom of credit markets was shattered, only an illusion of liberty remained in its place. The banks remained under private ownership, but disobedience of the central, government-appointed board could mean ruin for any one of them. At least within the realm of finance and private credit, all was within the state, nothing outside the state, and nothing against the state[43].

The fundamentally limited outreach of the old, private regime of commercial credit, where loans were to be backed by actual deposits, gave way to an unlimited expansion of circulation credit, where the same funds could back a quantity of loans many times their value[44]. While the value of the currency itself was still nominally set by Congress, and still nominally backed by gold, the natural limits which the Independent Treasury placed upon the resultant supply of money were effectively removed through the use of fiduciary media. The dangers associated with this were very clearly articulated by Ludwig von Mises while the uncontrolled credit expansion of the 1920s continued. In particular, the consequences of misdirected capital would invariably trigger a cataclysm which would destroy the public confidence upon which the inflating credit bubble depended for its continuance.

Of course, because of the very system then in place, little credence was ever likely to be given to the sage advice provided by the members of the Austrian School. Indeed, as credit expanded, and nominal profits increased, tax receipts rose[45] and unemployment fell, placating governmental regulators to go along with whatever course of action, or inaction, their private membership deemed most favorable to the continued "economic" expansion. This expansion was not economic, but merely monetary, but as can be observed throughout history, governments rarely refuse to allow the furtherance of actions which liberate them

43 The end of this sentence is drawn from a speech given by Benito Mussolini in 1928. This may seem a frivolous thing, but it is meant to underline the fundamentally Corporatist nature of the Federal Reserve System upon its founding. It may have come a decade before the basic tenets of Fascism were first put to paper in Italy, but the methods employed by both systems are fundamentally the same.

44 *On the Manipulation of Money and Credit*. pp. 123-136

45 This would not have been the case were it not for the passage of the 16th Amendment, also in 1913.

from the ordinary restraints of the public's tolerance for taxation. In essence, the value and command of circulating capital was being systematically re-assigned to those who provided the least restrained, and thus least secure forms of credit. Those in private banking, in turn, would never likely be convinced to restrain the means by which they earned such massive nominal profits.

The public's confidence in the financial system was certain to fail in its support for the credit cycle at some point. The cataclysm which enveloped the world economy in 1929 should have, by all rights, put an end to the fallacy that the Central Banks which had come into existence around the world somehow fostered stability, but as is so often the case when learned men fail, the temptation to rail against the limits of their powers exceeded the desire to repent for the hubris which led them to believe they could direct the economy in a responsible manner. The relative ease with which Fascist Italy seemed to bear the blow of global contagion gave many in public policy circles reason to believe that it was the allowance of Western nations to be steered by private industry, and its failure to completely subjugate the means of production, which was at fault. Indeed, Italy's willingness to use coercion and even violence whenever it suited their purposes made it easier to enforce the appearance of public confidence, but the misdirection of capital, the tangible loss of production, and the strain on public finances was no less real in Italy than they were anywhere else. Italy, as it so happened, was simply more willing to take other nations' possessions by force to make up for the shortfall, as the succeeding decade would show.

In the United States, the failure of the Hoover administration to contain the crisis led to the election of Franklin Delano Roosevelt, who swiftly enacted a host of measures intended, at least publicly, to provide for the welfare of private citizens impoverished by the changing economic climate. These measures, quite a few of which were modeled after earlier Italian programs, could likewise never be realistically paid for by internal tax revenues. With the public mood of pacifism and isolationism which still gripped the United States in aftermath of the First World War, the shortfall could not be made up through conquest. Fortunately for Roosevelt, while he lacked the means to take the needed resources from other nations'

peoples, he also lacked the scruples necessary to prevent him from stealing said resources from his own. It is here where the tale of America's decline takes its first willfully sinister turn.

On March 9th, 1933, the Emergency Banking Act gave the President the ability to assume absolute control over the nation's finances and foreign exchange in the event of an "emergency", and to order the closure of banks. The Secretary of the Treasury, and by extension the President, was empowered to force private persons to surrender any gold in their possession in exchange for lawful money of equal nominal value, and through the Comptroller of the Currency, to assume control over any bank. What had been up until that point a secret public command of the financial sector now became an explicit one. This was followed on May 1st by an executive order requiring all gold coin, bullion, and gold certificates to be surrendered in exchange for paper money at the Congress-appointed rate of $20.67 per troy ounce. Private persons were no longer allowed to hold any gold currency of any kind. This was then followed by the Gold Reserve Act on January 30th, 1934. This final act debased the paper forcibly exchanged from $20.67 per ounce, to $35 per ounce, a reduction in value of 40%. Many existing contracts in 1933, including many debt obligations of the government itself, had gold equivalence clauses written into them, which commanded a proportionally larger payment of dollars in the event that Congress enacted such a debasement. The nominal value of a dollar had, up until that point, been essentially unchanged since the currency's founding in 1792. Enforcement of these clauses, which the government had willfully agreed to, was unilaterally terminated for all contracts, public and private, retroactively. The end result for the government was an enormous sum of gold, forcibly taken from its own private citizens, and no longer held in trust against future redemption, which could be spent in any manner the government saw fit.

It took a great deal of mental gymnastics by five of the Supreme Court's justices to discern from whence the government derived the legal authority for an act which even the assenting justices saw as immoral[46]. Perhaps it was the looming threat of using court

46 See *Perry v. United States* for the actual verdict rendered by the Supreme Court.

stacking to destroy forever the authority of the judiciary, but for whatever justification, the government's misdeed was upheld. An act of outright and premeditated theft was visited upon precisely the group of people who bore no responsibility whatsoever for the economic crisis which served as justification for the deed. Those who wisely saved their capital saw it taken from them, for the benefit of the indebted masses, and for the sake of enabling a power-hungry head of state. What was worse, a great portion of the circulating capital which private persons had managed to preserve through the financial shock of 1929 was at once diverted towards public consumption.

Whatever moral view one may take upon the deed itself, however, the effect of this action upon the functioning of markets could not have been more damaging. Currency within the United States, while nominally backed by gold, could not be exchanged for it. Foreign holders of U.S. Dollars were given rights denied to the country's own citizens. Thus the currency itself, while externally real, became internally a fiat currency. Nothing more than the faith of the public, and the willingness of the now all-powerful government to accept Federal Reserve notes preserved the purchasing power of the monetary unit. The commercial financial system was now subject to the direct control of the federal government. Through the social institutions founded as part of the New Deal, not just corporate but individual dependence upon government was created and expanded. Through the creation of government-sponsored enterprises like the Federal National Mortgage Association (now known as Fannie Mae), the government could now direct unlimited credit, and thus unlimited funds, towards the purchase of any particular thing. Whether that thing was property, education, or anything else, it promised the ability to drive nominal prices to ever higher levels, allowing the government to reap taxes upon the resultant nominal gains. Any particular market could be fundamentally broken at will by the arbitrary action of appointed government officials.

The New Deal, of course, did not end the Great Depression, it merely extended its duration, leading largely to the era's second great recession in 1937. The Second World War, however, largely forestalled the appearance of the more serious consequences of the

economy's re-engineering. Capital destruction is a far more serious matter in the long term than idled capital is. The latter may be remedied at any time, with immediate effect, but the former, if allowed to persist for long periods, may only be reversed through immediate economic collapse. The war did not solve the nation's economic woes because it enhanced production or employment. World War II was as destructive as any war, it is the particular disposition of its aftermath which naturally favored the United States. Well protected by the breadth of two oceans, American industry alone had been spared from the ravages of strategic bombing, so while the remainder of the world's industrialized nations lay in ruin, American firms had a brief but absolute monopoly upon which to build and then defend market share. Almost every Allied nation owed the United States repayment for material purchased during the war effort, repayment whose real value, thanks to the Bretton Woods Agreement of 1944, could be assured. Most importantly, the enormous stockpiles of weapons and equipment built for the war no longer had any practical use. The successive scrapping of ships, tanks, vehicles, and other war materiel spanned nearly twenty years, only falling off in the late 1950's. During this time, the price of most industrial commodities was artificially depressed, largely offsetting what would have been oppressive rises prompted by the government's credit and monetary expansions. This allowed the continued production of large quantities of inexpensive goods. As is always the case with prosperity, it is the plentiful supply of inexpensive goods, and not money, which makes life easier for the working population.

However, even in this time of rapid growth, the interdependence of private industry and government did not wane, it steadily increased. Government expenditures continued to account for a growing percentage of the economy, and those firms which supplied the government grew ever more influential over its chosen course of action. President Eisenhower, in his farewell address, sought to underline the peril that this interdependence, and the waning public understanding of the nation's founding principles, presented to succeeding generations. It was the overreaction to crisis, in his view, which lay at the very heart of the problem:

“In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades. In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers. The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present -- and is gravely to be regarded.

Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.

It is the task of statesmanship to mold, to balance, and to integrate these and other forces, new and old, within the principles of our democratic system -- ever aiming toward the supreme goals of our free society.

Another factor in maintaining balance involves the element of time. As we peer into society's future, we -- you and I, and our government -- must avoid the impulse to live only for today, plundering for our own ease and convenience the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow."

- Excerpt from Eisenhower's farewell address
January 17th, 1961

The concept of a "military-industrial complex" is of course well-remembered, however its fundamental comparison to prewar corporatism, which Eisenhower intended to convey, is largely lost to modern audiences. More critically, his remarkably prescient advice as it pertained to the progress and control of intellectual pursuits, and the growing dependence of governments upon such elites, as well as the coming crises of public solvency, remains almost entirely forgotten. Indeed, the decade in which Eisenhower left office would not conclude until every one of these mistakes was undertaken by his successors. Perhaps most incredibly, the passage of current costs onto succeeding generations, which Eisenhower wished to be avoided at all costs, was wholeheartedly embraced by the increasingly ignorant and ingenuine lawmakers and Presidents who followed.

Lyndon Johnson's Great Society is the mechanism by which the hand of monetarism was ultimately forced. There was never any hope that such a grand program of social welfare

could ever be paid for from direct taxes for any appreciable period of time. Indeed, the solvency of both Medicare and Social Security depended upon the continuation of youthful demographics, while at the same time removing for most working class families the advantages and security once offered only by family. Never again would the federal budget truly be balanced[47]. Punitive levels of income taxes merely served to idle private capital, which was now cheaper to consume than to risk through employment in industry. Crippling domestic inflation began to take hold as a result of ever more scarce supplies of energy and raw materials. The fiat nature of the US Dollar in domestic exchange began to deliver consequences to the economy which foreign markets could evade through their exclusive access to gold exchange. Less than a decade removed from Eisenhower's warning, American monetary policymakers were faced with their ultimate decision: hold on to the strength of the currency, and reveal the true cost of the welfare state, or destroy every safeguard of value in exchange for an unknown period during which public deception could be enforced.

When Richard Nixon ordered the gold window to close on August 15th, 1971, all global currency became fiat. From this point, savage inflation began to afflict all Western nations, but since the exchange rate of the dollar eventually stabilized, even though its purchasing power never did, forceful new monetary measures and persuasive new statistics were concocted to give the illusion of transience to the crisis. Western governments, through deficit spending which they now believed themselves at liberty to erase through monetary expansion, were able to justify any grand scheme which came to mind to salvage the economies they themselves had ravaged, hiding the true cost from the taxpayer all the while. The reason this occurred has been well-understood since the infancy of the economic science.

As Adam Smith noted, the governments of all commercial nations, be they democratic or tyrannical, will seldom fail to spend all or nearly all of their ordinary income[48] in peace time, as monarchs will be tempted to spend on the extravagances of the court, and republics

47 The apparent "balanced budgets" of the mid-1990s were in fact an illusion, as will be explained in Chapter XII.

48 *Wealth of Nations*, pp. 574-576 – Smith contrasted the prevailing profusion of public revenue to the parsimony of the prior feudal era. He notes that Frederick the Great of Prussia was alone in amassing a considerable treasury, which in Smith's view was the main reason Prussia endured the unprecedented destruction and expense of the Seven Years' War far better than larger, wealthier, and more powerful nations. The influence this great conflict had upon Smith can not be understated, as references to "the late war" pervade this text.

on the great buildings which project the health and nobility of the state. Whatever the source of a particular government's authority, it is from money that any such government derives its power. That power only becomes apparent in the profusion of money, whether it is in the form of great public works, governmental luxury and extravagance, or the construction or application of military might. However, as Smith also notes, the lack of public savings in time of peace always gives rise to the need to contract debt during the extraordinary expense of war. In contracting debt, a government is deferring the taxes which might otherwise need to be raised to support the military in action. Such taxes, if imposed as needed, would usually convince the populace of the need to end the war, if not of the foolishness of entering a conflict so ill-prepared[49].

The power of government to levy taxes further gives reason for the creditor to have confidence in that government's ability and willingness to repay, making borrowing initially quite easy for the government. It is therefore often tempting, especially when war is brought to a successful resolution, to employ the same funding techniques to facilitate great enterprises of government in subsequent times of peace[50]. It must be realized, however, that any effort to do so is merely attempting to separate the benefits of government action from the costs associated with its implementation. The issuance of debt is a deferment of taxes, not a substitute for them, the implications of which are both complex and dangerous for the nation which employs such methods of funding[51]. As any student of physics understands, any work to be performed requires the application of at least an equal amount, and in truth a more than equal amount of energy[52].

Adam Smith himself stated:

"The progress of the enormous debts which at present oppress, and will in the long-

49 *Wealth of Nations*, p. 581
50 *The Road to Serfdom*, pp. 213-214
51 *On the Manipulation of Money and Credit*, pp. 40-42
52 Moran, Michael J. and Howard N. Shapiro. *Fundamentals of Engineering Thermodynamics*. 3rd Edition. New York: John Wiley & Sons, 1996. Print. pp. 28-50, 166-171 – A common joke within engineering circles is that the first law of thermodynamics states that "there is no such thing as a free lunch", implying that someone has to pay the cost of preparing the meal. This is no less true in the field of economics. This theme will be expanded upon in Chapter X.

run probably ruin, all the great nations of Europe, has been pretty uniform. Nations, like private men, have generally begun to borrow upon what may be called personal credit, without assigning or mortgaging any particular fund for the payment of the debt; and when this resource has failed them, they have gone on to borrow upon assignments or mortgages of particular funds."[53]

This statement, of course, foretold the coming collapse of the French monarchy, which would lead Europe into a conflict far larger and more destructive than even the Seven Years' War had been. It might be observed also that the aftereffects of the First World War, which largely inspired the work of Ludwig von Mises, gave rise to the economic strains and ideological conflicts which would also culminate in another war of similarly greater scope.

However, while war has been the most common cause of sovereign insolvency, the advent of modern social welfare programs has led to a very similar phenomenon in the realm of public finance. With the advent of fiat currency, and the pervasive expansion of circulation credit, corporate and personal finance have been similarly pushed towards contracting ever increasing quantities of debt, though the extent to which personal finance has been affected varies greatly due to differing cultural attitudes from country to country. The attitudes of entitlement and of apparent public necessity (which are, in truth, the same attitude applied on different scales) have forced looming tax burdens and reductions in public expenditures to be deferred in ever-increasing amounts. Further, what was initially a problem of cash flow has transformed itself into a demographic one for which there can be no fiscal remedy. It does not stand to reason that ever-smaller numbers of working-age individuals can bear the expenses tallied by the more numerous generations which preceded them.

While it may be tempting to suggest that the low birth rates which have long pervaded the industrialized world are the true cause of the present crisis, these low birth rates are, in fact, merely the first manifestation of the unsustainable nature of the Keynesian system, which relies on gradual, disciplined monetary expansion to allow "sustainable" deficit

53 *Wealth of Nations*, p. 579

spending[54]. The declining value of money prevents a natural balance between wages and prices from ever being achieved. The working classes cope with this imbalance by raising fewer children, as the standard of living for successive generations can be more easily raised if they are fewer in number. A cursory look at the fertility rates of industrialized nations will show a precipitous decline roughly coincident with the end of Bretton Woods. These low birth rates have persisted in these nations ever since. While this decline in fertility goes on, a growing share of parents' income and savings are devoted to the education and training of a shrinking number of future workforce entrants. All the while, government spending draws capital away from productive enterprises, closing off employment opportunities which were plentiful to prior generations. This effect is compounded upon the young by the fact that governmental intervention will invariably protect the jobs and wages of their already-employed elders, who outnumber and therefore outvote them by a considerable margin.

In essence, the expense of public profusion is paid quite immediately by succeeding generations, first by reducing their number, then by reducing their economic liberties, and only much later by actually impoverishing them. The extraordinary rates of youth unemployment which pervade Europe, and the distressed nations of Southern Europe in particular, should be sufficient evidence for how far this effect has been allowed to carry itself. The quality of life of the retired person, or of the older worker who is nearing the end of their career, has seen but little change over their lifetime. But observing the young worker in comparison to his father and grandfather, and comparing the amount of effort needed to attain the same quality of life and the same number of children as they had, the decline in national wealth becomes that much more obvious. So, too, can the effect be observed in the productive and recuperative capacity of the national economies themselves. Indeed, the effects of excessive government expenditure have here so clearly led to a shortage of

54 *The General Theory of Employment Interest and Money*, pp. 113-131 – Keynes' notion of a marginal propensity for consumption is the basis of most modern public policy. Public focus on aggregate demand later gave rise to the derisive term "supply-side economics" to refer to the classical and Austrian theorists. However, even the most marginal propensity for consumption causes a declension in aggregate national wealth, though the actions through which such declension manifests are barely perceptible on short time scales. While the defenders of Keynes are quick to note that governments have nowhere shown the kind of fiscal discipline that the proper application of Keynes' theories demand, the adherents of the Austrian School would be equally quick to note that governments have nowhere shown themselves capable of showing the kind of fiscal discipline that the proper application of Keynes' theories demand.

productive laborers, and further led to a scarcity of capital so great as to forcibly idle a great portion of so meager a workforce.

As Europe, Japan, and the United States are slowly discovering, the private taxpayer is neither an infinite nor an inexhaustible resource. Both private consumption and public tax revenues have long been maintained by encouraging, and in essence necessitating, both businesses and private persons to tap first their personal credit, and then borrowing upon their assignments. The fallacy in the belief that, by maintaining liquidity and ever-increasing amounts of circulating credit, prices levels can be supported in defiance of wage pressures, is rapidly becoming apparent. What is still missing from this epiphany is the realization that governments could never be trusted in deferring near-term benefits for long-term goals to begin with. It is a long-held belief that our children will have a greater capacity for understanding and creativity than we ourselves have, and that the progress of mankind will render any problem we leave them solvable. However history shows us that progress is hardly a constant[55], and that the profusion of prior administrations does not easily yield to the imposition of discipline[56] by their successors.

The realization of sovereign insolvency invariably comes much later than the insolvency itself, and only after the effects of that insolvency have seriously degraded the economy's ability to make up for the shortfall. The unwillingness of older generations to sacrifice the benefits they have been promised eventually give way to the inability of younger ones to bear the burden of providing them. The natural balance of wages and prices, and a more perfect state of economic liberty, must be restored if the forward progress of national wealth is to be resumed. Resolution of the sovereign's insolvency can only occur after the most calamitous of events, national bankruptcy[57]. That sovereign debt has now been purposely intermingled with the entirety of the global finance sector makes the prospect of sovereign default even more dreadful.

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55 Euclid's *Elements* provided a methodology which would stand without significant improvement until the Renaissance, a span of nearly 2000 years. The aptitude of Greek engineers to craft complex machines of war is documented even before this time. For a prime example, refer to: Thucydides. *History of the Peloponnesian War.* Translated by Richard Crawley. 1874. New York: Touchstone (Simon and Schuster), 1996. Print. 4.100 p. 278

56 *Decline and Fall of the Roman Empire*, pp. 120-126, 170-188

57 *Wealth of Nations*, pp. 588-590

It was fear of this day of reckoning which kept all policymakers, and nearly all lawmakers, from coming to terms with the limited nature of their respective national and intellectual resources. If public confidence could be maintained, they thought, some miraculous solution may yet be found before time made plain the depth of their ignorance and the magnitude of their deception. Both ends of the political spectrum were content to draw attention to the immediate desires of their own constituencies, all the while distracting everyone from the insidious means by which their children were being indentured. Socialist and conservative alike were appeased by public profusion. The elderly received retirement and medical benefits. Parents were given an expansive yet ineffectual explosion in available funding for education, first in public schools, and later in higher education. Those in business received apparent relief from the oppressive taxes which had idled their capitals in the early post-Bretton Woods era. All shared in the spoils purchased with their children's lives and liberties, all the while believing their respective demagogues' incessant promises of a better tomorrow.

Virtually all that remains of the once-great Western industrial economy is an illusory facade. This illusion is easily shattered by contrasting between then and now the real conditions of family size, real wages for equivalent work, total and particularly youth unemployment, and the share of income taken up by the necessities of life for the working class. Yet, for this charade to continue, the vast majority of people must believe it will continue. They must have faith in the value of the money with which their wages are paid. They must believe that the current malaise is merely transient. Most of all, they must believe that the learned men at the heart of the crisis's creation will in turn be their economic saviors. However, even the most zealous propaganda, though it may convince the masses for some time yet, can not prevent the day, now fast approaching, when the capital base has become too small to sustain the population, even through its direct consumption. When that day comes, all the confidence in the world will not save our civilization.

Chapter VIII – A Quantity of One

"Money, therefore, the great wheel of circulation, the great instrument of commerce, like all other instruments of trade, though it makes a part and a very valuable part of the capital, makes no part of the revenue of the society to which it belongs; and though the metal pieces of which it is composed, in the course of their annual circulation, distribute to every man the revenue which properly belongs to him, they make themselves no part of that revenue."[58]

- Adam Smith

Few things in this world have been subject to as much ridicule and misrepresentation as the nature and purpose of money. Just as it was in Adam Smith's time, the common vernacular everywhere uses money, or more properly an expressed quantity of money, to express the respective value of things, whether those things be goods, services, profits, wages, or debts. In essence, money is taken to be synonymous with value itself. In particular, it is pretended that revenue, or what is more commonly today termed as "income", consists entirely of a particular quantity of money. Of course, though income is paid in money, it does not consist of money at all, but of the goods which are then purchased with said money[59]. To accept the truth of such statements of income is to misunderstand completely the nature and purpose of money.

Money, "the great wheel of circulation", is really just one thing, a great machine of sorts, or more accurately a great medium upon which information travels regarding the relative cost of things, information which is essential for rational actors to make effective decisions regarding their lawful exchanges of value. In this sense, it must be understood that money, regardless of the number of coins, notes, electronic credits, or other specie which are regarded as accepted forms of money, *has a quantity of one*. The purchasing power of the

58 *Wealth of Nations*. pp. 239-240
59 *Wealth of Nations*. pp. 237-239

money a given individual possesses depends not upon the absolute number of monetary units he or she has, but more properly upon the portion of the sum total of money in circulation which that individual commands. When the "supply" of money is fixed, or more properly, restrained by the availability of a particular scarce commodity, the share of total purchasing power represented by any particular number of monetary units can be assured to remain nearly constant in the near term. When the number of monetary units in circulation is highly variable, this confidence is no longer safely held. Most importantly, when the number of monetary units in circulation is forcibly increased, it is done so at the expense of every holder of lawful money.

It is vitally important to note that these proportions of purchasing power depend not upon the total number of *existing* monetary units, but only upon the total *in active circulation* at any particular point in time. All of the money in circulation will buy all of the goods to be sold at any given time. Idle funds, held for whatever reason, do not effect such calculations. The miser, hoarding his money, does harm to no one but himself. Removal of his money from circulation increases the purchasing power of every other person, in proportion to the share of circulating money those units withdrawn once represented. Those goods and services which the miser could have purchased, the profits of industries he could have sustained, are instead yielded to others, who are able to accomplish their economic objectives at a lesser cost than would have otherwise been the case. The value of every other person's wages and profits are enhanced until such time as the miser returns his money to circulation. Even then, external players are no worse off than they were before the hoard was created.

Related to this example is the common failure to distinguish hoarding from saving. In hoarding money, the money's owner is foregoing the profits and interest which could have been earned, in the case of profit by employing it himself, and in the case of interest by making it available to other industrious people. In saving money, those profits and interest are earned by the money's owner. In both instances, however, personal consumption is either deferred or forsaken entirely in an effort to secure one's future purchasing power for events or conditions which the owner considers to be of prime importance. Whether this is the

purchase of an expensive item, protection from disaster or medical emergency, or in securing a legacy for one's heirs, the money this individual has obtained, whether invested through savings or compiled through mere hoarding, constitutes no part of that individual's income. His income, like everyone else, consists only of the goods and services that individual purchases for the satisfaction of his own consumption needs and wants.

In the earliest stages of civilization, money took the form of precious metals. In both ancient Greece and Rome, the currency of choice was silver. In other societies, gold was the coinage metal of choice. The intrinsic desirability of these metals, coupled with their durability and ability to be subdivided, gave every user the confidence needed to use such currencies. Moreover, since the value of all nations' coinage was derived from the intrinsic value of the same source metals, conversion of value was as simple a matter as a comparison of weights. Since these metals were both scarce and difficult to procure in quantity, the near-term quantity of available money was somewhat stable.

However, as has been noted, money has often been mistaken by the layperson for value itself. Along with this misconception has come a widespread preference for an abundance of money. The bias of people towards increasing the availability of money is readily observed from the earliest stages of antiquity, whether it be Athens' desire to control the silver mines of Chalcidice[60], or the increasing abundance of silver during the early Roman Empire[61], or the methodical debasements of sovereigns as noted by Adam Smith. This preference for an abundance of available money, or what is today commonly termed *liquidity*, arises from a failure to comprehend the purpose for which money was first created. Money was created to enable people of various trades and professions to exchange the value of their goods efficiently and without the loss ordinarily associated with subdivision[62]. Further, the portion of the circulating capital which goes towards maintaining the availability of money does not enhance the revenues of society, it is merely an expense.

As time went on, dissatisfaction with the limited supply of money led clever and

60 *Thucydides*, pp. 310-317
61 *Decline and Fall of the Roman Empire*, p. 50
62 *Wealth of Nations*, pp. 29-31

inventive men to create new forms of money. The first form was paper notes, which were usually backed by a promise, either national or institutional, to exchange said notes for bullion upon demand. Lack of faith in such promises, however, sometimes caused such paper systems to fail[63]. In times of war, the public issuance of bonds and promissory notes to expand the supply of money was often viewed as necessary, though this often led to extreme price fluctuations. In the case of government debt, this was the first manner in which credit, or debt expansion, became a proxy for money itself. Even in these cases, however, an implicit promise of later payment in bullion backed note and bond alike, though this promise could only be kept if a nation was victorious in war. Eventually, the preference for ever-increasing availability of money gave rise to the unlimited fiat form of currency, as well as the pervasive presence of credit, both secured and unsecured.

Keynes placed a great deal of emphasis on the incentives and importance of liquidity[64]. In doing so, he was embracing this very erroneous understanding of the nature and purpose of money, which in turn caused within his works a complete failure to understand the related concepts of savings, interest, and inflation. He viewed savings as the withholding of money from circulation, and thus decreasing the available supply. Accordingly, he viewed interest paid as a disincentive to liquidity, and interest paid as a drain on economic activity. Most gravely, he confused inflation with a rise in general price levels.

Inflation is not a rise in prices, it is merely an increase in the quantity of monetary units[65]. Such increases often lead to rises in general price levels, but only upon certain conditions, and not always in proportion to the quantitative increase[66]. However, the overall effects of inflation are always deleterious to the economy as a whole. The means by which inflation does so is twofold. The first is by displacing and misdirecting capital from productive uses. Money itself is a form of capital, but itself represents none of the value of the circulating capital. The availability of additional money does not change the immediate demand for capital. To add money without a commensurate creation of value requires the

63 *On the Manipulation of Money and Credit.* pp. 16-18
64 *The General Theory.* pp. 194-209
65 *On the Manipulation of Money and Credit.* p. 8
66 The reason inflation does not always trigger price rises will be detailed in Chapter XX.

removal of other, valuable forms of capital from the market. The second is the business cycle, also known as the credit cycle.

Vast increases in available monetary units give rise to a proportional increase in the extension of credit, which for a time is self-driving. Credit is often, though not necessarily, directed towards a particular asset class. During the course of history, we've seen the target class take the form of general equities, sovereign debt, real estate, internet companies, and even tulips. Availability of seemingly limitless funds towards the purchase of a finite supply leads to uncontrolled increases in market price, which in turn secure larger quantities of credit, which in turn makes even more funds available. Eventually, of course, demand is saturated, prices level off, and the debts secured by the promise of higher prices become unsecured, and subject to default. Failures cascade, credit contracts, and other forms of money are withdrawn from circulation entirely. On the upswing, apparent growth is positive, but it is offset by an equal, and in truth more than equal downturn. The downturn is only reversed by more forceful public intervention to supply the market with artificial liquidity, causing a new cycle whose amplitude almost always exceeds the first. In effect, a dynamic oscillation is created in terms of national economic output. The amplitude of these waves of growth and decay often dwarf and render imperceptible the constant, tangible loss associated with the increased cost of maintaining a larger money supply. Most importantly, the oscillation created by monetary expansion tends to increase in magnitude with each passing cycle, leading the economic system as a whole to become *dynamically unstable*. In other words, even if the overall trend of the economy were one of steady, positive real growth, the system would still be destined to destroy itself.

The reason this is so requires only a cursory look at both extremes of the cycle's path. As we examined in the beginning of this chapter, the purchasing power of money depends not on the quantity of currency in existence, but only upon the quantity presently in circulation. At any given time, the quantity, and thus the value of goods available for sale and for use is more or less fixed. If the quantity of circulating money can change more rapidly than the supply of goods (which in the case of gold and silver coin, it generally can't),

prices can change radically over very short time periods. At the peak of the credit cycle, nearly all forms of money, including credit and notes backed by credit, are in active use all of the time. The portion of circulating money represented by credit is at its maximum. However, the unique difference between credit notes and ostensibly backed currency is that the use of the former must vanish from circulation, and indeed from existence, as soon as default becomes a realistic possibility. Money, in order to serve its immediate function properly, must not have associated with its possession any perceived threat of short-term loss. The collapse in circulating money supply which must accompany the initial wave of defaults will collapse prices, not just of the goods against which credit was secured, but of everything which is for sale. Conversely, at the cycle's nadir, enormous quantities of money are hoarded, as the apparent purchasing power of these units rises with each passing day. Further, the loss associated with holding tangible capital in place of money seems nearly certain. The artificial suppression of interest rates, which in real terms are negative, in every way discourage employment of labor and capital in productive businesses, precisely because negative real rates represent an overall mode of capital destruction. In other words, the miser's loss becomes smaller than the industrialist's[67]. However, the existence of huge quantities of idle monies means that once apparent profits return, the market will just as quickly become flooded with circulating money, at just the time when goods are scarcest. This causes a violent rise in prices, and in commodity prices in particular. Rising prices again make credit creation possible, which begins the cycle all over again. Absent public injections of liquidity, these sorts of oscillations would tend to dampen themselves, as the speed of recovery would be more gradual and cautious than the preceding collapse. With

67 For example, if one had purchased $1 in gold on August 15th, 1971, that gold would be worth about $43 at the time this book was written. At the same time, the same $1 invested in the stocks of the Dow Jones Industrial average, even if starting from the market bottom on December 6th, 1974 (thus excluding the severe market downturn of 1971-1974), would be worth just over $25, even with the Dow at its record high nominal levels (about 14,000 at the time this was written). Buying gold is not an investment, it is mere hoarding, as the gold held produces nothing of value itself, and yet, in real terms, the miser who buys gold is still richer than the typical investor who employed is capital productively. Dividends yielded by the stocks involved would increase the investor's return, but capital gains taxes and brokerage fees associated with having to sell Dow components removed from the index over that span would reduce it. Indeed, some former Dow components, such as GM, AIG, and Kodak, have gone bankrupt over this time span. Some might argue that active investment strategies would beat gold over the period in question, but the same can be said of precious metals. The index averages aren't an indicator of how the best investors are doing, merely an indication of how the market as a whole is performing. If the stock market underperforms gold, this means that the net produce of stock equity is less than the net produce of gold, that is to say, less than nothing.

policy intervention, however, each successive peak is driven to dangerous new heights, and each collapse is more savage than the last.

Typically, it is one of these discrete collapse events, and not the general destruction of capital, which brings about the end of the system, but in both static and dynamic terms, the system itself is doomed from the start. Money is one thing, whose purpose it is to fairly distribute and preserve value in exchange, to increase the efficiency of trade, especially in items which don't lend themselves to subdivision, and to deliver information in the form of prices which can be used by the currency holder to make sound decisions. If money fails to perform any of these functions, grievous harm will befall its every user.

Chapter IX – Capital, Capital

"The question is one of capital against current expenditure. It is well known that nothing so impresses upon trade as the necessity for a large capital expenditure; it is so much more risked, so much more to pay interest on, and so much more abstracted from the trading capital."[68]

- William Stanley Jevons

The Coal Question is something of a forgotten treatise in public policy circles, though in truth, it is one of the seminal works of economic science. In the present age of rising energy prices, it offers perhaps the most patient and thorough explanation of the dynamics of finite energy resources, as well as their implications on international trade and competition. During Jevons' lifetime, his native Great Britain was, without question, the supreme industrial power on Earth, which in turn gave that nation great political and military strength. Yet, as Jevons foresaw, other nations with large, inexpensive coal resources, in particular the United States, were poised to overtake Britain's position within a comparatively short period. Many of the arguments of his day bear striking resemblance to the energy debate which occupies the public attention presently. Unfortunately, it seems that none of the politicians and lobby groups involved in this debate have ever read *The Coal Question*, and if they have, they failed to understand it. For contained within this text is a particular notion now known as the Jevons Paradox: that an increase in fuel economy does not diminish overall consumption of the fuel in question, it in fact augments it[69]. The overriding emphasis certain political groups have placed upon forcibly increasing fuel economy is therefore wasteful, pointless, and in truth, counter-productive.

"Capital" is the base word from which *capitalism* is derived, and yet, very few

68 Jevons, William Stanley. *The Coal Question*. 1866. United Kingdom: Dodo Press. 2008. Print. - The quotation above is from the Preface.

69 *The Coal Question*. pp. 75-83 – In particular - "*It is wholly a confusion of ideas to suppose that the economical use of fuel is equivalent to diminished consumption. The very contrary is the truth.*" (The italics are Jevons' emphasis)

concepts are so poorly understood by the general public today. In fact, many would believe that the only form which capital takes is money. This is, of course, incorrect. While money is a form of capital, as was observed in the preceding chapter, it has no value as capital, at least from the perspective of a national economy. From the individual perspective, this is true as well, because the value of money lies not within money, but within those tangible goods which can be had in exchange for it. If there were no goods to buy, or no one willing to sell for the currency, money would be worth no more than the tangible things of which it is composed.

Capital is the portion of a person's stock[70] which is devoted towards the purpose of generating revenue, in other words, the portion of one's holdings which is intended to generate a profit for its owner. There are fixed capitals, such as factory equipment, which generate revenue without changing form or owner, and circulating capitals which change hands and form numerous times, and are most effectively employed when they are circulating at maximum speed and efficiency[71]. Fixed capital generates revenue for its owner through production, or through assisting production, while circulating capital generates revenue only through exchange. In this sense, savings upon which interest is earned, or money lent upon which interest is paid, is a circulating capital. In a market system with properly functioning currency, that is, without artificial expansion of the money supply, the interest paid to the owner of the capital is a share of the profits earned by those actively employing it[72]. In the Austrian School, this is expressed as a share of the expected marginal efficiency of capital, or rather, the amount by which the expected future value of the product of capital exceeds the value of the capital itself[73].

Within this context, interest is merely a part of profit. Profit is necessary for interest to be paid, and thus for capital, and thus production, and thus the general wealth of society to

70 "stock" in this sense is to be understood to mean the whole of one's property, not equity held in a joint-stock company, as is the commonly understood meaning today.

71 *Wealth of Nations*. pp. 224-225

72 *Wealth of Nations*. pp. 291-300 – It is somewhat curious to note that Keynes claimed there to be no explicit account among classical economists as it pertained to the theory of interest (See *The General Theory*. p. 175), despite the fact that Adam Smith devotes an entire chapter to this very subject. This topic will be explored in greater detail in Chapter XII.

73 Mises, Ludwig von. *The Theory of Money and Credit*. Translated by H.E. Baston. New Haven: D. Yale University Press. 1953. PDF file. pp. 339-364

grow, profits must be earned from the employment of stock as capital. For any form of stock to be used as capital, it must first be saved. In other words, its owner must elect not to consume, but to defer consumption for the sake of employing it productively. On this point we find that Adam Smith's and John Maynard Keynes's views are entirely antithetical. As Adam Smith stated:

> *"Parsimony, and not industry, is the immediate cause of the increase of capital. Industry, indeed, provides the subject which parsimony accumulates. But whatever industry might acquire, if parsimony did not save and store up, the capital would never be the greater.[74]"*

In other words, for an economy to grow at all, there must be re-investment in the form of savings. On the other hand, Keynes viewed savings as a drain on economic growth, especially in times of recession:

> *"For although the amount of his own saving is unlikely to have any significant influence on his own income, the reactions of the amount of his consumption on the incomes of others makes it impossible for all individuals simultaneously to save any given sums. Every such attempt to save more by reducing consumption will so affect incomes that the attempt necessarily defeats itself. It is, of course, just as impossible for the community as a whole to save less than the amount of current investment, since the attempt to do so will necessarily raise incomes to a level at which the sums which individuals choose to save add up to a figure exactly equal to the amount of investment.[75]"*

Keynes' "paradox of thrift" has been used extensively by monetary policymakers to justify the willful suppression of interest rates below the prevailing rate of inflation, all for

74 *Wealth of Nations*. p. 278
75 *The General Theory*. p. 84

the sake of reviving consumption. However, all this does is divert stock from use as capital in order to support current consumption. This, by definition, *decreases the total amount of available capital*. More importantly, the fact that inflation exceeds the prevailing rate of interest means that real interest rates are negative. Since interest is an expression of prevailing profit margins within an economy, negative real rates imply a net destructive prevailing mode of productive capital employment. In such an environment, there is no worthy applicant for credit other than to those who supply money, since all real industry sectors are suffering a tangible loss, though inflation may in many cases disguise the loss entirely.

This might seem like an impossible state for an economy to be in, but it arises from the fact that what is termed a "profit" by government sources differs in important ways from what profit really is. For any employer of capital to claim a profit, his stock must first be returned to him completely in its original form and quantity, with any additional sum left after this recovery of stock constituting his profit[76]. Unless the original form of one's stock is in units of currency (which is only true of the financial sector, which itself produces nothing of value whatever), then tracing the flow of money alone is entirely insufficient for purposes of quantifying that person's profit or loss. In the case of any productive industry, the original form of capital is the source materials needed to build the product to be sold.

For example, if materials with a present cost of $500 are used to build an engine which is subsequently sold for $1000, but in the time required to build and sell that engine, the cost of the same source materials rises to $900, the profit of the manufacturer on the construction of the engine is not $500, but $100. If the cost of materials rise beyond $1000, the same manufacturer will have taken a loss. The reduction of profits through modest inflationary pressures (imagine in this case the source materials only rose to $525) may seem benign enough, except when you stop to consider the fact that few, if any corporate concerns are able to re-invest the whole of their profits. Remember, the purpose of employing stock as capital is to derive revenue, which for the owners of that stock is ordinarily intended for their own

76 *Wealth of Nations*. pp. 50-57

personal consumption. A modest misinterpretation of profit can lead a joint stock company, for instance, to distribute a portion of its circulating capital in the form of dividend payments to shareholders. This can only be compensated for by diminished production, and if carried forward for enough time, it will ruin the company, which will no longer be able to produce a meaningful quantity of goods. In any case, the inflationary pressures will reduce future capital, and thus reduce future production and employment, an effect which is cumulative over time.

Capital is what provides civilization with the means of its subsistence. Reducing the amount of capital will cause economic and social decline, which must occur in proportion, even if the reduction of capital goes unnoticed by the politician, the central banker, or the general public. It was the enormous amounts of capital built up over generations which turned the United States of America into the most powerful and prosperous nation on Earth, and it was by means of liberty that such a vast quantity of capital was accumulated. The past century's relentless cycles of credit expansion and collapse, of false boom and real bust, has served to mask the slow but steady erosion of capital which has taken place worldwide. Further, this erosion has taken place as a result of purposeful government attack, and willful monetary deception. It has already progressed to the point where the population can no longer be sustained by the productive use of the capital which remains, a circumstance which guarantees the promise of a calamitous shock at this period's end.

Chapter X – No Free Lunch

"In the future days which we seek to make secure, we look forward to a world founded upon four essential human freedoms. The first is freedom of speech and expression — everywhere in the world. The second is freedom of every person to worship God in his own way — everywhere in the world. The third is freedom from want, which, translated into world terms, means economic understandings which will secure to every nation a healthy peacetime life for its inhabitants — everywhere in the world. The fourth is freedom from fear, which, translated into world terms, means a world-wide reduction of armaments to such a point and in such a thorough fashion that no nation will be in a position to commit an act of physical aggression against any neighbor — anywhere in the world."

- Franklin D. Roosevelt

The phrase "there's no such thing as a free lunch" is thrown around a lot in both science and economics. As was noted in a prior chapter, the first law of thermodynamics essentially states as much, in that in order to obtain useful work, at least an equal amount of energy has to be expended. In economics, it is often used to underline the fact that in choosing to buy one thing, one must often, if not always, forsake something else which is itself valued. The manner in which the term "no free lunch" is meant within the context of this chapter is much more akin to the former styling than the latter. Much as the concept of value requires the perception of man to exist, so it requires human effort, the work of human hands, to be made real. The means by which people subsist, and those by which they secure themselves, are not given by right, they are the hard-won product of human labor.

Franklin Roosevelt's "four freedoms" are a mental trap of socialist rationalization. He begins with freedom of speech and expression, and freedom of religion, which few, in his day or ours, would take exception to. The last two "freedoms", however, are in fact the very

essence of tyranny. To place freedom from want on the same level as freedom of speech is to say that everyone is entitled to be relieved from the natural pressures associated with earning one's sustenance. In order to be free from want, even when only referring to the bare minimums which a person requires to survive, those things consist of things which are brought about by human labor. No such freedom can ever be permanent, it is ever-fleeting, and must constantly be renewed by the very same productive labor. If one does not work, and is not supported by others who do work, that person will quickly find himself wanting the most basic necessities of life. In lacking, and in wanting, and indeed even in actually *needing* these things, it is easy to presume oneself entitled to them, until one stops to consider the true nature of such demands.

In demanding to be free from want, and thus to be secure in the idea that one will receive one's sustenance, a person is demanding real things of tangible value. In other words, he is demanding *the produce of human labor.* If one is willing to live from the produce of his own labor directly, or to pay from his stock or income a fair market price for the produce of others', then the removal of his wants is earned through labor and trade, and not given by right. It is often by being at liberty, indeed, that he should earn the means to secure for himself the necessities of life, but it is not his right to merely take them, nor to demand to be given them by others. For freedom from want to be secured by right for any individual or group, it must be taken from others by means of willful oppression and suppression. Slavery begins with one man believing himself entitled to the produce of another's labor without the latter's consent.

Freedom from fear, if not created by one's own courage and mental fortitude, likewise necessarily involves denying liberty to others. The unique thing about liberty is that anyone can use it, and each person can use it in a limitless number of ways. Those manners of use which many disagree with, or which are perceived as a threat to public safety, or those liberties which simply aren't exercised by the majority of people often become targeted for elimination by unscrupulous or misguided politicians. Fear itself has no purpose which is not better served by better mental faculties. Even self-preservation, the most basic purpose for

which fear is employed, is more effectively brought about through focused, calm, and rational decision-making. Fear is a common origin of irrational thought and behavior. Moreover, fear is an essential element in all manner of political oppression. It is never an efficient motivator of human action, and it is never a proper motivation for government action. And yet, so much of the laws and arbitrary regulations which exist today exist not for purposes of enabling free people to think and act as they see fit, but to restrain personal liberties for the sake of pacifying those who fear how their neighbors would utilize those freedoms.

Government is, by its very nature, an entirely unproductive mode of labor[77]. That is not to say that certain functions of government aren't useful, or even necessary, it is merely a statement of fact that whenever governments or officials thereof act, no vendible commodity remains upon completion of the action. Each and every government program, benefit, and regulation has a real and tangible cost which must by nature be drawn from either the net produce of productive labor, or from the available capital base directly. Regardless of who is actually assessed with the levy of taxes, the true cost of all taxes is borne by those who consume the produce of productive labor, in essence, by everyone. The benefit of such action, however, may or may not be shared by all, and even if shared by all, may not offset the burden produced by its cost. The issuance of government debt does not change the immediate net economic effect, either, because even though the capital involved may be provided voluntarily, it is nevertheless drawn from the same base capital as any direct tax or expropriation would be[78]. When a government raises funds, through whatever means, capital, which is by nature employed in support of productive labor, is instead diverted towards unproductive ends. The immediate effect is to reduce both net production and the means of future production. There are, in fact, only very few functions of government which can justify any expenditure at all.

Security, which is provided domestically through police, and internationally through diplomacy and military strength, has always been necessary to civilization. Those nations

77 *Wealth of Nations* p. 271
78 *Wealth of Nations*. pp. 582-583

which find themselves wealthy but weak will inevitably fall victim to neighboring peoples eager to acquire the bounty these states have accumulated. Infrastructure, by facilitating transportation, and thus the free movement of goods, facilitates production, trade, and competition, which generally allows more goods to be offered in more places at lower natural prices. These are benefits which are shared by all, so long as the infrastructure is built efficiently. Justice, in the form of the rule of law, is another indispensible function of government. However, the rule of law, in order to be effective must be equally applicable to all citizens, and based on clear, objective standards which minimize the need for litigation. Basic education is also universally beneficial, as it bestows upon the workforce the proficiency needed to adapt to whatever labor needs the economy may have in the future. However, it is here that the useful purposes of government end, and even within these four basic functions, there is grave danger of abuse and overextension. As always, the likelihood of abuse and oppression from government is directly proportional to the relative power that government wields[79].

One must remember that all governments derive their power from money, regardless from whence they derive their authority. In the case of initially principled republics, subtle and often well-intentioned changes critically weaken the safeguards of personal liberty long before vain and ambitious men appear to exploit the unchecked power such changes create. Most often, it is the public cost of what is at various times deemed the necessary functions of government which serve as the motivation for systemic changes. In the time of the Roman Republic, those in possession of property were obliged to join the army in times of war, and those without such property were not even allowed on the battlefield. No exceptions were made, and no substitutions allowed, and those called to serve had to supply their own weapons and armor at personal expense. In essence, only those who would be enriched by conquest, and those whose property would be preserved by a successful defense, would be entrusted with the future of the Republic. As the Republic conquered ever more distant territories, and as its wars became more constant, this taxed the time and risked the lives of

79 *The Road to Serfdom*. pp. 124-133

those among the social elite more and more. In the year 107 BC, a consul named Gaius Marius opened the door for all Romans to serve, and for weapons to be furnished to those too poor to afford their own. This did enhance the army's manpower, professionalism, and overall military strength greatly. It also relieved the landed class from the burden of service. Since the spoils of further conquests enriched the state, taxes were not needed to pay this new, professional army, either. Of course, lost in all this was the fact that a dedicated citizen army, whose loyalty to the state was guaranteed by personal self-interest, had been replaced by a mercenary one, indebted to its commanders for the rewards associated with victory. Not even a generation later, Lucius Cornelius Sulla turned this army back upon the Republic, appointing himself dictator despite the opposition of Gaius Marius himself. Rome would never see any significant period of both peace and freedom ever again.

It is, of course, the disappointment and fatigue which the citizen and taxpayer feels over the respective ineffectiveness and cost of government action which most often leads free peoples to allow personal liberties to be curtailed. As this happens, the portion of total consumption represented by public expenditures increase, and with this additional funding the power of government is enhanced. Each and every action, conflict, program, rule, regulation, tax and debt issuance has a real and unavoidable cost to the people, and this cost is by nature greater than each measure's proponents state and believe them to be. The solution to the shortcomings of government is always presented by government as a need for more of the same. Reverting to the tried and true methods of ages past, those of limited government, is never up for discussion. Of course, as soon as the government is in a position to infringe upon personal liberty at will, that is, to visit real economic costs upon those who do not conform to the government's political objectives, a system is born which can be diverted towards the achievement of any particular social end, except of course, for freedom.

Chapter XI – Gaming the System

"The enemy knows the system."

- Claude Shannon

As was noted in Chapter II, the constant dissemination of information gives rise to knowledge which is the undoing of any empirical model of political economy. Whether an economic system is operated empirically or not, however, there will always be those who benefit more or less from its application. Whether the economy is constrained by a uniform rule of law, applicable to all, or subject to the arbitrary rule of men, individual results will vary from person to person. It is for those who would exploit the system that knowledge of the system becomes most essential, because the matters pertaining to its function are most immediately consequential to them. Such exploitation may be entirely lawful, and even entirely ethical, and yet it might still earn the immediate scorn and envy of those whose results are comparatively poor. Likewise, those who game the system may do so illegally, immorally, or both, and escape both detection and blame for great spans of time. Indeed, those who operate outside the law, or outside of socially acceptable norms will have greater incentive to conceal both their actions and their results, or at the very least to create the appearance that someone or something else is behind their machinations.

The words of Claude Shannon, seen above, are intended to underscore the need of any system to be tolerant of public disclosure. Shannon himself was referring to the art of cryptography, where the very purpose of any system is to keep secrets. It may seem counterintuitive that having an open, public system would enable secrets to be kept more readily and reliably, until one stops to consider the consequences of secrecy. The more complex and widely distributed secrets are, and the more complicated deciphering becomes for those who employ the system, the more likely system failure becomes, and the more costly such failures are likely to be. More complex systems require more manpower and

machine power to operate, and if one element of the system is compromised, such a breach may be exploited to calamitous effect by a potential adversary prior to its detection. A simple system allows an adversary to completely understand the mechanism of encryption without compromising the messages being sent. Even if the actual function of the system is known to those trying to break the code, great security is provided by a myriad of possible implementations, and if a given message is compromised, it does not undermine the future utility of the system. The adversary must exert an equal amount of energy for each message he obtains, because no one message will enable him to automatically deduce any other.

The same can be said of an economic system. Information is being encoded and transmitted in the form of prices, through the medium of money, to a myriad of different recipients, each of which will use this information to aid in furthering their own particular objectives. In a simple and free system, devoid of arbitrary regulation and reactionary public policy, understanding the mechanism of price action is simple on the individual level. However, to undermine such a system is extremely difficult because the objectives of each individual is unknown, and knowing the mind of any particular individual does not necessarily allow one to exploit any other. Further, each individual's strategy for achieving their goals is free to change at will, allowing those individuals who may be duped once to take preventative action against those who would profit at their expense. Destructive modes of capital employment will be naturally short-lived, and as such control of the economy's capital will naturally divert more and more towards productive aims. In such a system, illicit behavior is controlled only by the consequences within the law, and the law itself is clear as to what constitutes legal and illegal behavior. Litigation, and the public and economic costs associated therewith, are kept to a minimum. Collusion alone becomes a potentially lawful impediment to economic growth, and even this mode of collective action is of limited effectiveness. Artificial restriction of supply, which is the objective of all forms of collusion, and the monopoly which results[80] from such restriction, will eventually be undermined by the

80 The term *monopoly* is often incorrectly interpreted as a single entity controlling a particular market. However, in economic terms, monopoly is merely an artificial restriction of supply which prevents supply from meeting current demand. Whether the number of sellers is one, ten, or a thousand, if by private collusion or public regulation others who would bring additional quantities of goods to that market are prohibited from doing so, then the effect on prices, and on economic efficiency as a

development of alternatives, at which point the natural balance of prices will be restored. When this happens, the collusive entity which created the monopoly will itself be ruined, and its capital returned to more productive uses.

Once, however, government interjects itself in an active manner within the economy, the situation becomes entirely different. Whether such intervention is through reactionary legislation, active monetary policy, bureaucratic regulation, or even overt government direction of economic activities, the net effect is to distort the information being transmitted through market prices. The efficiency with which individual decisions are made based on such prices is thereby undermined. The state's manipulation of prices of all kinds leads the decisions individuals make thereon to become unreliable for achieving those individuals' chosen ends. Private production is subordinated to the overriding objectives of the state. However, it is altogether incorrect to assume that merely because the state possesses the power to manipulate prices, and therefore the decisions of individuals, that such power necessarily gives the state the ability to direct the market as a whole in accordance with its own objectives. When government forays into the realm of private economy, the creation of interdependence between government and particular industries is unavoidable. This relationship works in both directions. The same mechanism which grants government its greatest power, size, and complexity, also renders it most vulnerable to external manipulation.

Since market prices are being actively manipulated, money prices, and thus money itself ceases to be an effective indicator of market direction. Because the monetarist system relies upon the supposition that public policymakers must act from a position of supreme knowledge, the government's thirst for information and external support becomes insatiable, and its need to secure such information and support from outside players grows in proportion to the quantity of data received. Data is both passively collected and actively sought, through methods which by nature must become familiar to a host of people inside and outside the government. Just as the government or central bank uses statistical measures to manipulate

whole, is very much the same.

individual decisions by manipulating prices, so can private interests manipulate public policy action by both manipulating the data collected, and by providing advice with regards to how said data will be analyzed. The sheer amount of data, and the incredible amount of analysis required by such data quantities make the detection and identification of such manipulation altogether unlikely before considerable damage is done. Further, because management of the system by its nature requires the talents of those most versed in its own unique statistics, those most adept and successful at manipulating public policy from the outside will invariably be viewed by many as those most capable of stewarding public action from the inside. The system is not simply corrupted by unscrupulous men intent on personal profit, it is corrupted by individuals of the system's own creation, whether their initial motives are selfish or not.

Since the principal mode of government intervention is now monetary, it is the financial industry which has come to be the most dependent upon government, and the government has become more dependent upon the financial industry than any other. So complex and pervasive is this interaction, that the line between government and private industry is blurred completely. Private employees, assigned to “compliance” or “reporting” are performing entirely public functions, while many governmental officials are in fact working entirely on the behalf of private industry, and not the taxpayer. It is within this interdependence that we find the root causes of nearly all of the fiscal and financial crises and scandals of the last century. Further, as the extent of reporting has increased, the scale and frequency of cases of outright financial fraud has increased in rough proportion.

Periods of growth and decline will often arise from natural conditions, but as has been noted previously, it is the reaction of public policy which creates a positive feedback to natural systemic economic stimuli. This creates a quasi-cyclical oscillation, which has been commonly referred to as the business or credit cycle. Finance is unique among all industries in that all of their circulating capital takes initially the form of money, and it is money alone which must be obtained to further the practice of their trade. Here alone, inflation can have no tangible consequence, and here alone does an increase in money supply necessarily lead to

institutional enrichment. Whether money takes the permanent form of currency or the ephemeral form of debt or credit is immaterial to them. However, because such firms can leverage themselves, borrowing many times the total value of their stock, credit is a much faster route to much greater riches. The credit cycle thus becomes a natural part of the industry's trade cycle. As credit expands, the financial vehicles sold by these firms rise in price, attracting private capital into unsound investments. During the collapse event, these same firms permanently monetize their gain, assigning the losses to those not in a position to react. Tax incentives and other inconveniences which confront the individual investor further weaken his position when trading against vast corporate entities, whose tax levy does not depend at all upon when they choose to buy and sell their shares.

Since, in such an inflationary monetary environment as exists today, the financial industry alone is experiencing real growth, while productive industries experience only illusory nominal profits, the financial sector will tend to continually grow to be a larger and larger share of the total economy. Its importance will seem to outstrip all others, to the point where lobbying for the monetary and regulatory actions they desire will become both public and commonplace. The sheer amount of money under the control of so few entities allow any one of them to manipulate any chosen market at will, which in turn yields these same entities the ability to coerce any action from the central banks they wish. Whether it's Citigroup, Bank of America, Goldman Sachs, J.P. Morgan, or anyone else, each has the ability to manipulate the market for their own gain, and such manipulation will invariably be destructive towards the productive sectors of the economy.

It is altogether incorrect, however, to lay blame for this circumstance upon the firms themselves. They are merely a product of the system, not to be confused with the system's architects. To direct punitive actions towards these groups who, despite malicious result or even malicious intent, have acted lawfully in cooperation with public policymakers, serves only to divert attention from those truly responsible for the present state of affairs. Further, any corporate entity which is punished, broken up, or even destroyed, can and will be readily replaced by others whose future actions will be no less harmful. Even those who commit

outright fraud, like Bernie Madoff, were clearly enabled in their crimes by the system, and not at all impeded by its supposed safeguards. The schemes became larger and longer-lived, and no less frequent. The fact that the system can be used to create such economic chaos for private personal gain means that it necessarily will be used for that very purpose. The enemy knows the system, and he will use his knowledge of the system to his own benefit to the maximum possible extent before the system even knows who the enemy is.

The only way to eliminate the cycle of artificial boom, and inevitable real economic bust, is to destroy the means by which the cycle is driven. The central banks themselves must be eliminated, and the link between public monetary policy and private banking and finance must be severed completely. In short, the system must be completely deconstructed, and replaced by a system which, like the Independent Treasury, is no system at all. This, in the present terms, would trigger the immediate bankruptcy of nearly every sovereign nation, and the complete collapse of the global financial system, something no government is prepared to face, even if doing so is the only means by which the liberty and remnant livelihood of their peoples can be preserved. However, even if no government is prepared to face this day of reckoning, the reckoning itself is no less certain to occur. It will merely occur later, and to even more calamitous effect. The outright destruction of global finance may seem like a calamitous event in and of itself, but it is far less so than the complete exhaustion of global capital, which is the alternative our sovereigns wish to inflict upon us.

XII – Lie by Omission

"What is the Classical Theory of the Rate of Interest? It is something upon which we have all been brought up and which we have accepted without much reserve until recently. Yet I find it difficult to state it precisely or to discover an explicit account of it in the leading treatises of the modern classical school."[81]

- John Maynard Keynes

Keynes goes on in his *magnum opus* to create what appears to be an extensive search for a classical explanation of the theory of interest[82]. He mentions the works of Alfred Marshall, Arthur Pigou, David Ricardo, and even those of Ludwig von Mises, though in the latter case he admits he does not understand the content. What he neglects to mention, of course, is that Adam Smith devoted an entire chapter of his *magnum opus* to the study of interest theory[83]. Those who would defend Keynes might use the word "modern" in the above quotation to explain Adam Smith's exclusion from discussion, but it is nonetheless erroneous to suggest that the Classical School lacked an explicit account of interest theory. It is all the more interesting to note that Keynes did include David Ricardo's *Principles of Political Economy and Taxation* in his review, a work which contains pervasive references to *Wealth of Nations*, to an extent which it is quite impossible to adequately cite the former without acknowledging the contents of the latter[84]. This is a salient example of a tactic which, unfortunately, is all too commonly employed by those who constructed the monetarist system, as well as those who now defend it from rational discussion of that system's merits. By very selectively revealing a host of sources, Keynes purposely leaves the reader with two notions that are altogether false. Namely, that Keynes searched Classical texts thoroughly for

81 *The General Theory.* p. 175
82 *The General Theory.* pp. 186-193
83 *Wealth of Nations*. pp. 291-300 – Adam Smith links interest rates to the prevailing rate of profit within a particular economy, of which the interest paid is typically the greater share.
84 Ricardo, David. *Principles of Political Economy and Taxation.* 1817. Amherst: Prometheus Books, 1996. - For instance, the first chapter begins - "It has been observed by Adam Smith that..." the first of literally hundreds of Adam Smith references.

an explanation of interest theory, and that no such theory had been explained at length in writing up until the time he wrote *The General Theory.*

It is not remotely credible that an economist of Keynes' stature and education would be unaware of Adam Smith's direct contributions to what Keynes termed the “Classical School”. His exclusion of *Wealth of Nations* from his overview of the Classical School is a calculated and willful lie by omission. Acknowledging Adam Smith, of course, would have forced *The General Theory* to explain numerous points where Keynes' definitions deviate from the classically-accepted definitions found only in Smith's work. Keynes would have likewise been forced to contend with those topics, such as savings, where *The General Theory* directly contradicts notions thoroughly explained and rationally proven within *Wealth of Nations*. Yet, it is from *The General Theory* that the modern fiat monetary system largely derives its justification. The system's adherents have in turn evaded discussion of Adam Smith, and his true successors within the Austrian School, based solely upon the pretence that Adam Smith's work is obsolete, and that the Austrian School is not “mainstream” or “scientific” in its approach. The use of mathematics does not make one's approach scientific, nor does the exclusion of mathematics make one's approach unscientific. If one uses mathematics, one must have a thorough explanation as to why such equations are relevant and correct in order to be scientific in approach. Without understanding the real conditions numbers are intended to represent, calculations and formulae become entirely meaningless, and even dangerously misleading. Conversely, if one rejects the use of mathematics within a particular realm of study based upon rational observation and deduction, such rejection may be entirely scientific. If it can be safely concluded that mathematical study will not contribute to resolving the scientific question at hand, then there is no reason to employ such methods in the first place. It is reason, not quantity, which drives scientific pursuit.

This tactic is used repeatedly by Keynes to extol the virtues of the system he had created, while appearing to invalidate the theories of those who objected to it. He pays no attention whatever to the fact that opposing theories preclude the use of his system, and thus within the confines of that system are entirely meaningless. Keynes mentions Ludwig von

Mises' assertion that interest rates are the expression of the difference between the value of a particular form of capital now and the expected value of that same form of capital in the future. In Mises' view, interest paid is equal to the value of deferred consumption. Within Keynes' own system, this does not hold true, but the Keynesian system not only allows, but depends upon circulation credit, which Mises' system explicitly forbids, a fact which Keynes again purposely fails to observe. The reason interest rates perform the incentive function Keynes advocates is because they have been perverted towards that very purpose by Keynes himself. This function is neither natural nor essential, since economies managed to grow quite well before the system described in *The General Theory* was first conceived.

Even the presentation of opposing economic views are made in such a manner as to misrepresent what they stand for. Nearly everyone who studies economics in the academic arena will be immediately confronted with the notion of *laissez faire* (literally: "let them do") economics, as attributed to the Classical School (which is often presented as the "alternative" to the Keynesian School). What professors and textbooks don't often tell their students is that *laissez faire* is only half of the original motto. The full phrase, coined by Vincent de Gournay in the 18th Century, is *laissez faire et laissez passer* (literally: "let them do and let them pass"). It is not only upon freedom of action that economic liberty and prosperity depend. Freedom of movement is just as essential, and it is no trivial matter to disregard this element when analyzing Classical works of economics. Adam Smith's wholesale indictment of the mercantile system[85], and the oppression of consumers, domestic labor, and foreign colonies which resulted, is based not so much upon the restriction of individual action as it is upon the restrictions of movement of men and goods which pervaded the British Isles in his day. The removal of these restraints which came as a result of Smith's revolution in economic thought gave rise to an explosion of liberty, technology, production, and wealth unprecedented in human history, and even helped Great Britain come to amicable terms with those colonies their parliament once oppressed for the sake of particular mercantile interests. To have freedom of action without freedom of movement is just as meaningless as having freedom of

85 *Wealth of Nations* pp. 326-445

movement without freedom of action. In either case, the freedom allowed is no freedom at all, and is entirely unrepresentative of the views of Classical economists.

Lies are more effectively delivered to their intended consumers when backed up by real facts, but since the root suppositions in these cases are false, the case must be presented very selectively to create the intended effect. The reason Bernie Madoff's Ponzi scheme worked as well as it did for as long as it did was because he had enormous amounts of factual accomplishments upon which to gather the trust of investors and regulators alike. After all, he was the architect of the NASDAQ, and the father of computerized quotations and trade execution. This gave him a position of both trust and influence over decisions being made all over the financial industry, and within public policy circles. The most effective fraudsters rely upon being able to make public statements which are true and verifiable to all who listen. The lie is hidden amongst the myriad of different facts the perpetrator has chosen to keep from view.

In the political arena, both major parties make a show of advocating “fairness” or “liberty”, all the while depending upon debt and capital destruction to fund their own ambitions. Democrats suggest that everyone “deserves” certain things by right, be it health care, a secure retirement, a reasonable income, or access to credit, with no attention paid as to how these things come into existence, let alone how they are ever to be paid for. Meanwhile, Republicans extol the virtues of a strong active military and low direct taxes, but mention nothing of the indirect taxes which are used to prevent them from having to make hard choices about what within the government gets funding. The things both parties claim to support seem quite desirable in the absence of knowing their true cost. The coexistence of all of these things at the same time, controversial though politicians may make it appear, is made possible by hiding within the debt, and further hiding behind monetary expansion, the true cost which immediately serves to disable private growth and free enterprise, and which will eventually doom the Republic itself. Both parties are entirely complicit in this state of affairs, because in the name of compromise, they chose to satisfy themselves at the expense of future generations, who as yet have no say in the matter.

The effects of debt and monetary expansion are further hidden by the selective release of government statistics, which though they may be technically factual, are also dangerously incomplete, and are delivered in a way tailored to increase or blunt their popular effect. For example, statistics which the government wishes to maximize, such as GDP growth, are reported on an annualized basis, even though reported quarterly, while inflation indices like CPI and PPI are announced as miniscule-sounding monthly figures. An annualized GDP growth rate of 3.0% translates to a paltry 0.74% growth for the reporting period, which is a quarter. Likewise, a innocuous-seeming 0.9% monthly CPI increase translates to an onerous 11.4% annualized rate. The number reported, while itself quite factual, is presented in such a way as to make it seem like something else entirely.

Even the Federal budget itself is often subject to misrepresentation. The federal government by nature determines its surplus or deficit based upon the cash flow method of reporting. Taxes received less expenses paid equal the reported figure. By this measure, a modest budget surplus was reported for four years beginning in 1998 and ending in 2001. However, these calculations excluded a number of off-budget surpluses to Medicare and Social Security, which were funds originally set aside against future expected expenses. Further, the revenues reported relied upon the unnatural tax receipts associated with the internet stock bubble then inflating, funds which were entirely ephemeral. The collapse of this asset bubble would soon plunge the nation back into recession, and the deficits which followed would more than offset the surpluses originally reported. Even now, with the annual reported deficit exceeding $1 trillion, these same off-budget surpluses are still being used to soften the apparent severity of America's fiscal situation.

It is altogether impossible for anyone to view, let alone understand, the entirety of an economy, so in reviewing the validity of various Schools it is essential not only to examine the topics their adherents bring to the reader's attention, but to more carefully identify those topics the writers seek to avoid discussing. Passion, eloquence, and even intelligence itself are a ready disguise for unsound assumptions and incomplete reasoning. Only weak arguments can not tolerate free discussion, and the patient and rational examination of

opposing views. Deceit need not depend upon outright lies, for the most powerful of illusions can be created merely by keeping particular truths from the public knowledge.

Chapter XIII – Faulting at Fault

"The danger is not that a particular class is unfit to govern. Every class is unfit to govern."

- Lord Acton

The title of this chapter is a purposeful double entendre, to be applied specifically to the political arena, and all parties, public and private, which attempt to play therein. The obvious meaning to be taken is in the blame game and character assassination which is so pervasive in modern politics. However, the purposeful fracturing and division of the populace into various factions and social groupings is at least as harmful as any particular or general negative attitude, as it serves to diminish the power of the electorate to make sound choices, and reduces the number of voters whose support must be actively sought by opposing political interests. When such groups are turned against one another, as is often easily done through demagoguery, manipulating these groups into supporting measures which empower government against individual liberty becomes a much simpler proposition.

Whether the subject matter of distinction is race, ethnicity, religion, gender, wealth, profession, education, or even political opinion, the political purpose of such division is to energize the passions of the greater number of individuals to destroy the liberty and property of the lesser. Every individual with any measure of free will will, however, find himself or herself within the minority on some matter of importance to them. If the passions of the majority are allowed to be brandished by government as a weapon against individual liberty, then the rights of all mankind are ultimately trampled, regardless of whatever the original motivation may have been to allow the majority to wield such power. Those who desire power must first create it, but once created, such power can only be used towards tyrannical ends. Of course, once such divisions have been allowed to persist for a generation or more, those indoctrinated into particular ideological groups will invariably convert their own

frustrations into anger at those they see as antithetical to their vision of society.

It is quite impossible to serve two masters[86], so when absorbing the stated opinions of "public servants" it is especially important to mind which master the orator wishes to serve. Liberty is an all-or-nothing sort of proposition. A politician may serve liberty, and thus seek liberty for all, otherwise he serves only himself, insomuch as he seeks only that which he values most personally. It is impossible to serve the cause of freedom while treading upon the rights of those who are in opposition. As Lord Acton put it, liberty is "the highest political end", and to obtain liberty, all forms of arbitrary power, including that of the majority, must be restrained. There is no "us" and "them" within the confines of this quest, only the right of each and every individual to enjoy the lawful rights of every other. No two people share identical values, it is up to each of them to decide how best to employ their resources, and for whom the benefit of those efforts will ultimately be expended. Those who resort to government action for the achievement of ends contrary to this, that is, whether it be the betterment of some subgroup of the people, or the punishment or subjugation of another, do not believe in liberty, if indeed they even know what liberty is. Using the coercive powers of government to achieve particular social ends is the very definition of socialism, it is the very foundation of tyranny, and it is the antithesis of liberty in all its forms.

It varies from socialist to socialist what particular social ends are sought, but invariably the primary means by which coercive power is exercised is in redirecting capital from the intended purpose of its rightful private owners. To term the use of one's own property and income as "economic" liberty is likewise to fail to understand what freedom is. Economic freedom is the only kind of freedom which truly exists, as all other liberties must be validated through the lens of economic freedom. Indeed, what would freedom of speech, expression, religion, the press, privacy, due process of law, or trial by jury mean if government could deny those who exercise those freedoms the right to subsist in the manner of their own choosing? What importance is found in the right to say what one wishes if one is also forced to work in slavery? What good is due process of law if the law allows one's property to be

86 Matthew 6:24

taken without compensation? Freedom is the right to direct one's property and labor towards whatever lawful ends one wishes, be they expressive, religious, political, private, or public. The word “liberty” is entirely meaningless in anything other than an economic context. Those who would argue otherwise merely wish to control resources and labors which do not rightfully belong to them, resources which they otherwise have no hope of convincing its lawful owners to direct in a manner of their choosing.

Once political interests deviate from the purpose of liberty, the division of the electorate into opposing factions becomes a foregone conclusion. Indeed, such division often begins, or at the very least is strongly reinforced, when those frustrated with the lack of “progress” towards their own favored ends lay blame upon those they see as “standing in the way” of said progress. Those most focused on a particular objective also most readily disregard the validity of the various objectives sought by others, to the point where the subjugation of others' priorities is viewed as inconsequential. Not only those opposed, but those who are initially indifferent to progressives' efforts become oppressed, and if they are not swept aside immediately, form into an organized opposition. While the initiating party usually is more ordered, due to the opposition's disparate reasons for opposition, the opposition is almost always more numerous, which in most instances leads to stalemate within a democratic republic. Once this stalemate is reached, factions form within both parties, and the exhausted or disinterested quickly drop out of the political equation. In this context, one might refer to the initiative group as the “progressive” element, and the opposition as the “conservative” element. However, in keeping these terms, it must be kept in mind that each may be, and both sometimes are, firmly socialist in their beliefs and methodology.

There are four potential reactions to any political question: support, opposition, apathy, and ambivalence. As such, on any particular social issue, the electorate will divide itself four ways. The winner of the election need not gain an outright majority, it need only establish more support than opposition, which can often be done more effectively by deceit and suppression than by popular appeal. Opposition can be turned to apathy quite readily by

various forms of menace, be they personal attacks on character, veiled threats to individuals, or relentless repetition through media. The ambivalent can often be duped into believing things which are entirely false, most readily by finding what in the opposing party's platform various individuals have reason to oppose. The reasons for political organization, like those for economic collusion, most often stem from negative sentiments, from the fear of personal loss stemming from other groups[87]. As time progresses, the argument becomes more and more about winning versus losing, about the destruction and silencing of opposition, than it was about the original matter in controversy.

To understand how far this effect has been carried here in the United States, it is important to understand the history of the two major political parties here, and most specifically the reasons for which they were founded.

The older of the two, the Democratic Party, was founded by Andrew Jackson in the aftermath of the election of 1824, where Jackson lost a vote in the House of Representatives to John Quincy Adams despite having gathered the largest number of popular and electoral votes, though without a majority in either category. All four candidates, the others being William Crawford and Henry Clay, were then members of the Democratic Republican Party, founded by Thomas Jefferson, which remained the only political organization of consequence in the aftermath of the War of 1812. Clay, who received the fewest electoral votes, threw his support to Adams, which resulted in the latter's victory in the House. Jackson organized the Democratic Party specifically to achieve his own personal objectives, chief among them to become President of the United States. His chief political objective was to eliminate the Bank of the United States, which in his view favored established commerce centers over developing regions of the country. The opposition, first in the form of the National Republican Party, and then in the form of the Whig Party, formed entirely from those who objected to Jackson himself. In this context, the ultimate objectives of the party were almost completely achieved within Jackson's own presidency. What fallout was created from the planned elimination of the Bank of the United States, which did not eliminate but rather

87 *The Road to Serfdom*. pp. 160-161 – Hayek notes in particular that most people more readily adhere to political groups for negative reasons.

distributed the power of currency creation, led to the Panic of 1837. This was corrected by James K. Polk, the party's third president, when the Independent Treasury System was established, firmly linking all forms of money to specific quantities of bullion. Polk viewed national banks and other semi-private institutions as a serious threat to the proper function of the republic. In his words:

> *"Any policy which shall tend to favor monopolies or the particular interests of sections or classes must operate to the prejudice of the interest of their fellow citizens, and should be avoided. If the compromises of the Constitution be preserved, if sectional jealousies and heartburnings be discountenanced, if our laws be just and the Government be practically administered strictly within the limits of the power prescribed to it, we may discard all apprehensions for the safety of the Union.*
>
> *With these views of the nature, character, and objects of the Government and the value of the Union, I shall steadily oppose the creation of those institutions and systems which in their nature tend to pervert it from its legitimate purposes and make it the instrument of sections, classes, and individuals. We need no national banks or other extraneous institutions planted around the Government to control or strengthen it in opposition to the will of its authors. Experience has taught us how unnecessary they are as auxiliaries of the public authorities – how impotent for good and how powerful for mischief."*
>
> *-Excerpt from James K. Polk's Inaugural Address*
> *March 4th, 1845*

Division of the country along geographic or economic lines is to gravely regarded as much in our own time as it was in his. Nevertheless, in the early days of the American Republic, the Bank of the United States was the only public institution of this nature. Its elimination removed, for a time, any serious threat of sectional or class bias arising within the

government. Indeed, by the end of Polk's term in 1849, it might be justly said that the Democratic Party had fulfilled its purpose entirely.

The Republican Party was founded in 1854 for one overriding purpose: the abolition of slavery. The subjugation of people in bondage is antithetical to the idea of a free republic, and as such there can surely be no more faithful purpose for seeking power than that which drove the creation of the GOP. Its first presidential nominee was not Abraham Lincoln, but the now largely-forgotten John Frémont, who was defeated by James Buchanan in the election of 1856. By this point in time, however, it was entirely unrealistic to expect so large an issue as slavery to be solved by political means. War was already a foregone conclusion, in which Lincoln had to resort to extreme measures to prosecute to a successful conclusion. Indeed, very few Presidents have suspended so many of the basic freedoms guaranteed by the Constitution, though in his case alone there is reason to call such actions as suspending *habeas corpus* legal[88]. Though slavery was abolished, and the right to vote given to freed slaves, the party's core objective of equality under the law was not entirely achieved due to the resistance of Andrew Johnson, a Democrat, who assumed the office of the Presidency following Lincoln's assassination. Extrajudicial actions and organizations were allowed to subvert the rule of law in the former Confederacy, a situation that only Ulysses Grant and, much later, William McKinley made any meaningful effort to correct. The active efforts of the party to stand for liberty and justice for all men of any race essentially ended with the latter's assassination in 1901. The election of Democrat Woodrow Wilson, a segregationist, in 1912, forestalled and indeed partially reversed meaningful progress on civil rights until the latter half of the 20th Century.

Looking at the roots of each party, both had reasons within their founding which could justly be called liberal, that is, supporting the cause of liberty[89]. The Democratic Party, by abolishing the Bank of the United States, and ultimately creating a stable, self-regulating

88 *The Constitution of the United States* – Article I, Section 9 - "The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it."

89 Again, the author wishes to emphasize that "liberal" is meant in the context of supporting freedom, not change. The modern context with which the term is applied today is a synonym for "socialist", which is in fact precisely the opposite of what "liberal" actually means.

money supply through the Independent Treasury System, created the most free system of finance and political economy which has ever existed. It was essential for the explosion of growth, production, innovation, and prestige which followed, the fruits of which the nation enjoys to this day. The Republicans, by eliminating the scourge of slavery, and beginning (though not completing) the path towards comprehensive civil rights, forced all industries to compete on the open market for precious resources of labor, the shortage of which made technological innovation essential, not only in industry, but in agriculture, as well. America was able to attract intelligent, industrious, and resourceful individuals from around the globe, who, enjoying the unique state of liberty found only in this country, forged a nation whose strength would soon eclipse all others.

However, in both cases, it is just as readily observed that the purposes for which they were founded bear little or no resemblance to each party's stated platform today. The reason for this is fairly simple. First, without their founding objectives, the parties themselves became merely a vehicle for the attainment of personal ambition, to seek political power for the sake of having that power. It is not quite accurate to say that power corrupts, there are a great many people who are incorruptible. Power attracts the corrupt, and compels the corruptible to compromise themselves for the sake of its attainment. Incorruptible individuals will seek power only for particular reasons which can not be practically achieved with the private means at their disposal. In the absence of such goals, and in an economic environment where private capital can be applied to maximum possible effect, such people tend to vanish from the realm of politics, since their talents are more profitably and more effectively applied elsewhere. In other words, in the absence of immediate objectives, even liberal parties will devolve into corruption, patronage, and nepotism, the extent of which will be proportional to the amount of power the government wields, which is in turn proportional to the amount of money it spends. Of course, the appearance of corruption on the other side of the aisle breeds contempt, and a false sense that one's own “side” needs to defeat and destroy the opposition in order to restore the integrity of government. Such integrity is better affected by demolishing the corrupt institutions completely and removing their power

altogether, since neither side can be safely trusted in running the government.

Once both parties have devolved, they become vulnerable to takeover by socialist demagogues, who take advantage of public dissatisfaction to support the erosion and eventual removal of laws which protect individual liberties. In a state of near perfect liberty, there typically isn't a whole lot which goes on in government, and that which is done is usually done at the behest of particular industries who are able to convince governmental officials of their importance to the state. This, of course, is a tactic of trust-building which harkens back to the mercantile system, but in the absence of any particular objectives or ideals, idle politicians tend to do the devil's handiwork. Demagogues tend to re-energize political factions who have lost their sense of purpose, bending them towards their own various personal goals. Whether these goals are seen as noble, ethical, and altruistic, or base, vile, and misanthropic matters very little in determining the end result, though it may seem consequential in the near term.

Now, there were certainly demagogues within the United States before the start of the 20th Century. However, there isn't any real example of successful socialistic political progression until this point in time. In the Republican Party, McKinley's death left the party's political apparatus in the hands of just such a person in Theodore Roosevelt. It is no accident that the Democratic Party resorted to using such a leader in Woodrow Wilson not long thereafter. Roosevelt's objectives were breaking up monopolies (though he failed to recognize the government's responsibility in their establishment), reducing poverty, and expanding America's global standing. Wilson's were the furtherance of segregation, usurpation of the financial sector via the establishment of a Central Bank, and organizing the various nations into a European-centered League of Nations. The immediate impact of these initiatives was quite different, but the ultimate purpose they served was to divide public opinion, pit various groups against one another, enhance the powers of government, undermine individual liberty, and remove institutional protections which had safeguarded the republic from the day of its founding. This is most prominently shown in the Constitutional amendments passed during this period, which required at least tacit support from both parties

to ensure ratification.

The 16th Amendment was supported by both Wilson and Roosevelt, and ratified in 1913, the same year the Federal Reserve was formed. Both engaged a great deal in class distinction, creating the altogether false impression that the great industrialists of the time were largely responsible for the poverty and suffering of the masses. Even if this were true, it neglected to consider the government's complicity in creating the very trusts they sought to tax. The stated purpose was to tax monetary incomes regardless of source, both sides having long forgotten that the true income of the people consists not of money but of goods. The effect of this, combined with the newfound ability of government to drive monetary investment incomes upward through inflation, derived from the establishment of the Federal Reserve, dismantled all safeguards individuals had in protecting their property. Rather than taxing those who consumed the most, it punished those who employed their own capitals towards productive ends. The small extent of the initial levy, combined with the enormous momentum left over from the prior period of liberty, made this change seem modest, especially as it helped government to readily fund new programs. The Amendment, however, removed all limitations to the exercise of Congress's power to tax, making this power essentially all-powerful, especially when coupled with the next, equally devastating change to the nation's founding charter.

The 17th Amendment was ratified later in 1913, and was likewise supported by both parties. This amendment addressed the manner in which U.S. senators were selected, hitherto left to the various state legislatures to decide, and changed it to direct popular vote. What the 16th Amendment did to destroy the protections of individual economic freedom, the 17th did to destroy the limitations of the use of government power. When senators were selected by state governments, they were somewhat beholden to them, and could be chosen not just from those actively seeking the job, but from all of that state's citizens. Populist measures which would have devastating impacts on the prosperity, solvency, and liberty of various states could be effectively blocked in an appointed senate, but never in an elected one. The powers of the upper house were summarily delivered up into the hands of the very

party bosses who had so profoundly corrupted the lower house. The idea that popular election could lead to better choices is easily refuted by the fact that state legislatures had a far better pool of candidates to choose from, and every reason to unseat any who dissatisfied them. Public attention fell away from state and local causes, and towards federal initiatives which alone seemed "important". As it did so, the unminded and ineffectual local and state governments, subjugated by the federal government, fell into disuse, and ultimately into the pitfalls of corruption, patronage, and nepotism. Again, the consequences of this change took some time to clearly manifest, but they were no less devastating to the liberty of the people, and to the solvency and integrity of the state.

Early demagogues of the 20th Century, not just in America but worldwide, resorted most often to distinctions of race and class. Religious biases most often had elements of both racism and class warfare[90]. This served to fracture the electorate, and drive large groups firmly under the control of one party or the other. The groups at the furthest extremes of the spectrum made ready scapegoats whenever crisis or scandal hit. Groups which proved to be more of a liability than an asset were often times pushed from one side of the aisle to the other. All the while, only a handful of states and a handful of easily persuaded voters decided which party would enjoy the spoils of victory, and which would endure a period in opposition. The profound degree of deceit and corruption inherent in both sides ensured that neither would be out of power for very long, provided that the principal public controversies between them were never resolved, or at least that new ones were created as quickly as the old ones were resolved. The Civil Rights Act of 1964, in many ways the crowning political achievement of the Century, was followed up almost immediately by the Great Society, which all but sealed the country's fiscal fate.

It may be tempting to say that the specter of racism has faded from mainstream

90 The Nazis, for instance, fomented public anger at Jews, not just for stated racial differences, but also for the control Jewish interests exercised over the banking system in many countries. Of course, the Jewish people had for centuries been barred from most trades in most European countries, at a time when Christians had likewise been barred from charging interest. State intervention had driven Jews from all other professions, and at the same time given them effective monopoly over banking, their dominance in the financial realm was therefore no reflection whatever upon their culture or character. Demagogues excel at blaming others for standing in the way of governmental progress, even in situations where governmental action is the root cause of the *status quo*.

political discourse in the United States, but the fact is that it has merely been pushed below the surface, and ethnic politics are still played aggressively on local, state, and national scales. The enormous amount of polling data compiled by political concerns and the press, broken down by gender, age, race, income, religion, and even location, should be proof enough of this. Invariably, these ties are used to inflame the passions of a particular group against a particular position of the opposition, and to tailor one's message to emphasize the natural points of agreement, while conveniently forgetting those which the target audience might not appreciate. Those groups whose support is viewed as secure are often disregarded, and campaign decisions are more likely to be driven by statistics than by any ideological factor. The end result are political parties which are entirely unprincipled, and instantly resort to scapegoating whenever their plans are obstructed, whether by the patient debate required by our form of government, or the utter failure of their statistics to adequately describe the objective reality of the situation they mean to affect.

Take for example the most recent global financial crisis which began in 2007. How many politicians, of all political persuasions, have stood before the podium to decry the "reckless" actions of the "private financial system"? Even forgetting that the founding of the Federal Reserve put an end to anything resembling a private financial system, and forgetting that finance has served as an extension of government ever since, how can industrialized nations, whose governments have universally bankrupted themselves, and crippled their nations' productive capacities for near-term political benefits, call anyone "reckless" in comparison to themselves? The target group for scapegoating is invariably small, and most often acted on behalf of the state, or under the direction of the state, in some capacity, intentionally or unintentionally. A great many frauds were uncovered in the aftermath of this crisis, but only by the ebb of the market, not by investigation or regulation of any kind. Bear Stearns, Lehman Brothers, AIG, Bank of America, Citigroup, J.P. Morgan, Goldman Sachs, and Wells Fargo helped to expand credit availability for real estate, for years allowing political leaders to tout growing tax revenues, rising nominal private wealth, and record levels of home ownership as political achievements. As Bear and Lehman collapsed, every

publicly-funded bailout was accompanied by a Federal Reserve- or Treasury Department-directed private one. J.P. Morgan was all but forced to shell out an extra $8 per share to the holders of defunct Bear Stearns equity. All of the large banks were coerced by the Fed into accepting TARP funds, whether they thought they needed them or not. It may never be known what kind of threats were made behind closed doors to maintain a united front, but the resultant action is proof positive that devious private counteractors, which politicians pretend to oppose on behalf of "middle class working families", do not exist and never have existed within the financial sector.

The focus on monetary income is likewise a distraction which leads to further distinctions of class. Foolish notions such as the "Buffett Rule" are based upon the long-discredited notions that profits can be effectively taxed[91], and that an individual's income consists solely of money. It is readily demonstrated that the real income of "wealthy" individuals, whose income is derived from investment sources, is in fact a great deal less, both in nominal terms and in proportion to prevailing wages, that is reported by identifying the number of monetary units reported to the government as gross income. An ounce of gold, bought in 1972 for $40, and sold today for $1700, is reported as a capital gain of $1660, but in reality amounts to scarcely any income at all. Moreover, though the $1660 is reported as an immediate income, it is, in fact, the sum total of nominal gains spread out over forty years, averaging only $41.50 per annum. A more honest and accurate assessment of gain would wait until the money is spent on personal consumption. If it is not, both money, and the goods and services purchased therewith, are in fact circulating capitals, which are meant to generate revenue for their owner, but which themselves constitute no part of that revenue. Indeed, it does not even count as profit until the item sold is replaced. If someone sold an ounce of gold today for $1700, and bought another tomorrow for $1600, then the $100 difference in price would be his gain. If he then used that $100 to buy some other form of capital, be it machinery for a factory, seeds for a wheatfield, or stock in a company, then that $100 is still not income, it continues to circulate as capital. Only when that $100 is used to

91 *Wealth of Nations*. pp. 518-534 – Adam Smith is exhaustive in his proof that the true cost of taxes levied upon profits invariably fall on people other than those charged with paying said taxes.

buy goods and services for his personal enjoyment or sustenance, does this money (and in truth, the goods purchased with said money) become income. The nominal incomes of wealthy individuals are almost entirely fictitious, especially considering the inflationary environment which has persisted over all of recent times. Taxes levied upon such "gains" are not merely punitive, but confiscatory, serving to diminish the real value of circulating capital with each passing year.

Of course, it is the ability to divert private capital towards public purposes which is the objective of every demagogue, as it alone removes the practical obstructions to the achievement of near-term goals. It does nothing to mitigate the real cost of the measure, in fact it increases this cost, but that is an issue which the demagogue will happily leave to succeeding statesmen. When politicians talk about taxing the rich, they really mean that they wish to expropriate their capital. That capital, in private hands, serves to support the production upon which all of society depends for its very sustenance, which in public hands will be exhausted almost immediately, serving to enhance the fortunes of only a few for a very short time. What capital gains and other taxes levied upon nominal profits do to the circulating capital, the Estate Tax does to fixed capital. Those firms which are privately held, whose value exceeds a certain amount, stand no chance whatever of surviving the demise of their proprietor, unless they convert themselves to joint stock, which destroys the liberty of action enjoyed by private ownership, and virtually guarantees eventual sale to larger corporate interests.

"Corporations" are another popular target for political rhetoric. A corporation, in real terms, is the combination of individuals for a particular economic objective. It is collusion, nothing more, and its objective is to raise the profits of stock above their natural level by suppressing competition. In this sense, it should be noted that labor unions and trade guilds are just as much a form of corporation as the joint stock companies traded on the NYSE. Union labor, at least in private business, derives most of its revenue as a share of unnaturally high profits, which occurs through the suppression of other parties seeking to enter into competition, and the artificial scarcity of supply which results. What are termed "wages", are

really a combination of wages and profit, and though the stock employed does not strictly belong to the laborer, the interest of laborer and owner in having the government suppress their competition is one and the same. Though the antagonism between union and management may be quite real, the political objectives of the supposedly divergent political parties they support are in fact one and the same. In both instances, it is the consumer and the public in general which is oppressed to enhance the revenues of a chosen few.

However, in the absence of government intervention on their behalf, such combination, be it in the form of a joint stock company, or that of a trade or labor union, is short-lived. The erosion of production which is inherent in union labor means eventual loss of market share as alternative goods and sources come into existence. Likewise, the inherent weakness and instability of joint stock companies has been noted since the earliest writings on economics[92], because they eventually lack unity of purpose, and immediately lack freedom of action. If corporations are forced to do business upon equal terms with private individuals, they can not long endure. For all the intense rhetoric politicians levy at them, it is government regulation and intervention which is the immediate cause and continual furtherance of the dominion of corporate interests over the vast majority of both the fixed and circulating capitals of industrialized nations[93]. Until the unnatural advantages given to corporations by government are eliminated, individuals seeking to employ their own capitals and consumers in general will continue to find themselves oppressed by incomprehensible taxation and regulation, unnaturally high prices, and an unnatural scarcity of goods.

No subgroup's interests are of any particular importance to society, and the seeds of tyranny lie within all arguments to the contrary. The blessings of liberty and the protections of justice must be bestowed upon all, otherwise they can be truly secured for none. However innocent it may seem to look out for “the middle class”, “the poor”, “working families”, “blue collar workers”, “small business”, or even “the children”, it must not be forgotten what purpose such divisions of the populace are truly meant to serve. Every class is unfit to govern, and so the powers of government must be denied to every subgroup of individuals,

92 *Wealth of Nations*. pp. 480-485
93 Chapter XX will examine this problem in detail.

especially when such groups seek to wield that power at the expense of others.

Chapter XIV – Fiscal Oblivion

"When national debts have once been accumulated to a certain degree, there is scarce, I believe, a single instance of their having been fairly and completely paid. The liberation of the public revenue, if it has ever been brought about at all, has always been brought about by a bankruptcy; sometimes by an avowed one, but always by a real one, though frequently by a pretended payment.[94]"

- Adam Smith

Let there be no mistake about where Western nations stand fiscally, each and every one of them is bankrupt, and has been so for quite some time. While the headlines of the moment may focus on Greece, Ireland, Portugal and Spain, these nations are merely further along the very same path towards fiscal oblivion. The United States, Great Britain, Japan, and even Germany all passed the point of no return many years ago, as all have resorted to pretended payment to maintain the illusion of solvency. The pretence of payment which Adam Smith refers to here is that of monetary depreciation, what the Austrian School would define as *inflation*. The current regime of fiat money, in which the supply of money is constantly increased, and in which the value of the monetary unit is steadily eroded, is by definition a state of continuous national bankruptcy. However, rather than liberating the public revenue, it has allowed the complete and immediate consumption of said revenue to continue unabated for decades longer than could otherwise have been sustained. The difference between this revenue and the sum required to sustain the true cost of government expenditure has been drawn ever since directly from the circulating capital. Adam Smith's explicit preference for open default, and his warning of the dire consequences of the pretence of inflation is the very last passage of *Wealth of Nations*, and this is not by accident. The progress of public debts, and the resultant temptation of sovereigns to destroy the value of the currency, or alternately

94 *Wealth of Nations*. pp. 588-589

to flood the market with excess currency, have brought about the utter ruination of entire civilizations since ancient times[95].

However, the preference for open default as opposed to monetary expansion and subsequent collapse is no different than it was in Adam Smith's or Ludwig von Mises' time[96]. Smith clearly shows no sympathy for debtors, and notes that in the case of an open bankruptcy, even the debtor is no poorer than he would otherwise have been. This attitude had clearly changed considerably by von Mises' time[97]. It must be understood that in the event of an open default, the remaining wealth of the nation would always be preserved, only in different hands[98]. Monetary expansion, on the other hand, destroys the nation's capital, ceasing only once that capital is too small to sustain its population. What time the economic pain is deferred is paid for by augmenting the severity of the ultimate collapse.

The Industrialized World stands upon the precipice of precisely this sort of fiscal oblivion, precisely because governments everywhere have failed utterly to comprehend the fundamental principles of economics. Where politicians have indulged their own ignorance at the expense of public fiscal security, they have been aided and abetted every step of the way by academics who have resorted to ever more clever and ingenuine feats of statistical gymnastics in order to disguise the severity and simplicity of their own error. Statesman and technocrat alike have made the grave mistake of confusing money for value, and thus confusing the creation of money for the creation of value. Money has no inherent value, whatever its form. It is merely a machine intended to help preserve value for those who create it, and when the market is artificially flooded with currency, money loses its ability to preserve value, and so that value it would have preserved is instead destroyed.

The names and agendas of the various demagogues and political movements which

95 Rome's Crisis of the Third Century is a salient example, driven largely by devaluation of the Roman *denarius*. Though the empire was re-unified by Diocletian at the end of this period, Diocletian's reforms in turn sowed the seeds of the ultimate division and dissolution of the Roman world.

96 *On the Manipulation of Money and Credit*, pp. 181-232 – The author would argue that the present crisis and the one to which von Mises refers to in his 1931 address are, in fact, the very same crisis. The final resolution of the crisis was merely deferred, and its true cost compounded, by monetary manipulation in the intervening eight decades. In essence, von Mises' predictions are finally coming to pass, he simply underestimated the ability of governments to deflect the blame for problems of their own creation.

97 *On the Manipulation of Money and Credit*, pp. 107-109

98 *On the Manipulation of Money and Credit*, pp. 148-149

have been born, lived, and died since 1913, as well as those which persist in the present day, matter little, if at all, in determining the end result. The experiment of centralized control of the money supply was doomed to failure at the moment of its conception. Politicians will in every instance fail to meet their own expectations, and yet if their ambitions are not checked by finite and inflexible resources, and the prohibition of committing funds not presently on hand, this progression of debt and devaluation will manifest itself at every opportunity. The warnings given by Adam Smith, Ludwig von Mises, and numerous other students of practical economics go unheeded, and nowhere is this more evident than in the realm of taxation. Tax reforms of the past century have invariably increased the levy, transferred power from individuals to the state, and created inherent instability within all aspects of public finance.

As was observed in Chapter V, the aggregate affect of variability is always detrimental to the achievement of long term fiscal objectives. A major component, if not the principal aspect of fiscal variance, lies within the composition and structure of taxation. Adam Smith created four maxims which, in his opinion, every tax code (the whole of a nation's set of tax laws), should seek to observe as well as possible[99]:

I. Equality, or what might be more accurately described as proportionality. That is, that the tax burden of every citizen should bear out to be a nearly equal proportion of their respective revenue (as defined by personal consumption, not monetary income).

II. Certainty, that the amount a person has to pay in taxes is clear and definite, and not subject to any arbitrary interpretation. It might be noted that indirect taxes, such as a Value-Added Tax (VAT), which are levied on the producer, but ultimately borne by the consumer, create a large degree of uncertainty as to the individual's actual contribution to the public revenue. Indeed, Adam Smith did a much better job distinguishing between the taxpayer and the tax-*bearer* than any economist who has come since[100].

99 *Wealth of Nations*, pp. 498-501

100*Wealth of Nations,* pp. 501-573 – Smith examined in detail many of the taxes which were proposed or levied in his time,

III. Convenience, that taxes should be levied at a time when the taxpayer is most able to pay them, and in a manner by which the taxpayer can most easily do so.

IV. Efficiency, that the difference between the amount of revenue collected and the cost carried by the taxpayer should be as little as possible. In particular, Smith includes within the latter cost of both the crime associated with evading the tax, and the necessary ruin visited upon individuals who are caught doing so.

Since governments are so intent on spending either the entirety or nearly the entirety of their revenue as it is raised, the author would offer these two additional maxims:

V. Each tax levied should bear total revenue in rough proportion to total gross domestic product (GDP), and specifically not to the rate of growth thereof.

VI. No tax should be structured in such a way so as to bias the taxpayer against additional production.

It should be abundantly clear that the tax laws of most Western nations run afoul of all of these maxims to some extent, and that the nonobservance of the second and fourth rules in particular have pervaded those nations in greatest present fiscal distress. The importance of these rules can not be understated.

If taxes are levied disproportionately, the oppression of one group or another will quickly become evident, and lead to social discord. However, even supposing it does not, the individuals called upon to bear an unfair burden will divert their capital to be employed in such a manner as to avoid the additional levy. This will lead to economic inefficiencies which will degrade economic growth. Further, even if this group is unsuccessful in avoiding additional taxes, their numbers will decline with the passage of time, and the necessary role this group played in the natural function of the market will cease to be performed.

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paying particular attention to this detail. The set of individuals who payed the tax collector was usually not the same as the group of individuals who actually paid the ultimate cost of the levy. It was the latter group which concerned Smith, since they invariably constituted a much larger proportion of the population.

Certainty was viewed by Adam Smith to be even more important than equality. Ignorance or unwillingness to fight authority might cause many to tolerate a good deal of excessive taxation relative to their peers, but very few will tolerate a levy which can not possibly be known or planned for. In the United States, the taxes levied upon business owners and the self-employed, who are responsible for the stewardship of the nation's circulating capital, could not be more uncertain. If one is self-employed, for instance, one must surmise the extent of one's income for the entire year, and bear a penalty if one's prediction of future events is incorrect. If the self-employed individual guesses too low, the IRS levies an additional tax penalty. If the guess is too high, then initial estimated tax payments will unfairly deprive that individual of fiscal resources later in the year precisely when they are most needed. For the owners of businesses, the ever-changing rules by which accrued items must be evaluated makes it possible to justify a limitless number of different tax liabilities. No two accountants would ever arrive at the same result, which likewise enables auditors to "go after" virtually any company they wish, for reasons both real and imagined.

It is abundantly clear that in collecting taxes, governments everywhere have long since ceased to consider the convenience of the taxpayer. Taxes are instead levied and regulated so as to offer minimal inconvenience to the sovereign, in that every effort is made to make the payment as even as possible during the course of the year. A free system would allow all individuals to settle their accounts upon the same terms, with the same rules, regardless of their profession or mode of income. Likewise, taxes would only come due when the taxpayer was certain to have cash on hand, and never levied in such a manner as might trigger a private bankruptcy, or the forced liquidation of capital assets. Again, it is in the holders of private capital that the consequences of non-adherence to this rule are most apparent. When a person dies, the Estate Tax is levied upon the value of their assets. If such assets are in the form of a business, or in the form of land, the levy will force the decedent's heirs to liquidate part or all of it. Indeed, the immediacy of the levy can sometimes exceed the actual funds which can be raised in the time allowed by the government. Likewise, taxes levied on

property which is not generating income for its owner may force either sale or abandonment. Businesses, forced by government agencies to account by accrual in an inflationary environment, can find themselves owing taxes based not upon their sales, but upon the nominal appreciation of their assets. Again, productive assets may need to be liquidated, and the jobs supported thereby lost, in order to pay the levy. Contracting debt may be an alternative to liquidation, but this increases the real cost of the levy, running afoul of rule IV. In any event, a business taxed upon the older cash flow method would never find itself short of the funds needed to cover the immediate levy.

The economic efficiency of taxes is of extreme importance. Some taxes merely restrain growth, whereas others actively destroy wealth. The cost of the former is rarely much greater than the amount of taxes collected, whereas in the latter case, the collateral damage inflicted upon the economy can often well exceed the revenue drawn by the sovereign. In this sense, any tax which violates rule III must also break this rule. Uncertainty, likewise, can inflict heavy costs. Accountants are, by nature, unproductive laborers, and yet present tax codes have become so complex as to virtually require them for any business owner, and to make their employment attractive to even the individual taxpayer. Debt expansion, which is really just another form of indirect and semi-voluntary taxation, inflicts added cost through interest payments and direct capital destruction.

Identifying whether a particular tax is growth-driven is not difficult. The most obvious of these are probably the Capital Gains Tax and the Corporate Income Tax. While specific rules differ somewhat between the United States and the United Kingdom, the basic intent of the capital gains tax is the same in both countries: to tax as income the difference in value of property bought and sold (or in the UK, of property acquired and disposed of). Corporate income taxes are an effort to tax the profits of companies, though this is, in truth, impossible[101]. The reason such taxes were brought into being is that the majority of wealthier citizens' incomes are derived from business and investment sources, and thus income taxes on wages were perceived to spare them from the levy[102]. If taxes are instead levied upon

101*Wealth of Nations*, pp. 518-534

102Adam Smith notes that taxes upon wages are actually paid by consumers and the unemployed. See *Wealth of Nations*, pp. 534-

consumption, however, then the rates paid would be equal regardless of the income source, and no disincentive to investment would be presented.

Capital gains tax receipts are driven by positive changes in money price, and so are by definition driven by economic growth and, more insidiously, by inflation[103]. The tax creates within government a bias towards high prices, since higher prices lead to higher tax receipts. In times of economic growth, receipts are high, but during economic downturns, receipts fall to near nothing. The end result is that the public fiscal crisis which results from a given downturn is disproportionately larger than the scale of the economic downturn itself. It further creates a number of perverse incentives for public and private sectors alike.

When money prices decline, governments and central banks are given the incentive to produce money, compounding for the working class the extant malaise of widespread unemployment with the specter of rising commodity prices. Monetary expansion drives commodity prices preferentially, but because it also supports asset prices, it in turn stabilizes tax receipts, albeit temporarily. Similarly, it lends to government regulators a preference for an overabundance of circulation credit, or what might be today termed a high prevailing leverage ratio. It also gives government reason to create incentives for individuals to contract more debt. The expansion of credit gives rise to asset bubbles, which in turn amplify economic variation, which ultimately increases the variability not only of capital gains receipts, but of tax receipts of all kinds.

Capital gains taxes also create an unfair playing field between individual and corporate investors. While corporations' taxes are levied against the change in aggregate corporate value over predefined time periods, individuals are taxed based on the time of asset acquisition and the time of sale. The levy of the tax gives the individual an unnatural incentive to hold onto their assets as prices decline, which means that the losses associated with market declines will fall disproportionately upon them. Conversely the corporate investor, whose tax levy will be the same regardless of which assets he sells and when, will

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103The inflationary component of capital gains does not constitute real income or revenue for the taxpayer, and thus any tax levied upon this component is in fact a direct expropriation of the taxpayer's base capital.

act as soon as market conditions suggest he should.

The Corporate Income Tax, like the capital gains tax, is also a growth-driven tax. This tax is levied against the change aggregate value of a company and its assets over a defined period of time, typically one year. Like capital gains, corporate income is not adjusted for inflation, and collapses to near nothing during economic downturns. Unlike capital gains taxes, this tax is levied regardless of what capital the subject corporation has bought or sold over the tax period. This tax has also led to the prevalence of accrual accounting, the impact of which will be addressed in detail in Chapter XVI.

Corporate income taxes create all of the same governmental temptations as capital gains taxes do, but they create an additional bias towards monopoly, and towards joint stock companies in general. Joint stock companies are actually inherently weak[104], and require an effective monopoly for long-term profitability. Effective corporate income tax rates tend to be lower than individual income tax rates, though nominal marginal rates may be quite similar, giving the corporation a clear near-term advantage over the proprietorship. Further, since tax receipts are tied to profits, and not base revenue, the government will prefer larger profit margins. The artificial restriction of competition is the only means by which profits can be long raised above their natural level, and this rise in prices inherently comes at the expense of the consumer.

That corporate income includes the value of goods in inventory also biases the corporation against additional production, violating both of our new maxims. In the industrial space, it has led to the prevalence of the Just-in-Time (JIT) philosophy on inventories[105]. Materials and components which were once kept on hand to meet new orders quickly are now only bought or manufactured once such orders are received. The delivery of a new component which goes through several stages of manufacture now adds many weeks to the production time of any manufactured good which may require it. It may seem convenient to note that carrying more inventory has a modest cost anyway, but the truth of

104*Wealth of Nations*, pp. 480-485

105Liker, Jeffrey K. *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer.* New York: McGraw-Hill, 2004. Print. pp. 22-25

the matter is that restricting inventories delays the onset of economic recovery by several months at least, as companies higher up the supply chain delay hiring until such time as material is on hand to effectively employ that labor. Most importantly, those companies which do hold more inventory during the downturn are much more likely to gain market share when the succeeding economic upturn arrives, since they will be able to deliver their products sooner than their competitors. The opportunity cost associated with missed potential orders does not appear on any corporate balance sheet, but the taxes levied on inventory values most certainly do. The VAT which is prevalent in Europe has a similar effect on production, which is most clearly seen when observing lead times[106]. In this case, it is not the material itself which is delayed, but the application of labor.

Property and investment taxes in general will have a growth-driven components to them, and will bear little if any proportion to aggregate GDP. Consumption taxes, which in truth covers taxes on wages, value-add, and sales, tend to be much more tightly linked to GDP.

Regulation can also amplify the inherent instability of public fiscal balance. What is meant by the term "regulation" can be construed to mean different things. To those of us in the Austrian School, regulation is a matter not just of law but of equitable law. The rules of the game need to be uniform, firm, objective, and equally applicable to all of the game's participants. This, of course, is not the state of regulation observed in industrial nations today. Those of the monetary school have found the task of regulating the currency and the financial realms to be one of ever-increasing complexity, requiring progressively faster and more arbitrary responses to specific events. Since so many of the economic problems which have arisen since the end of Bretton Woods have been either unanticipated or only partially anticipated within public policy circles, the temptation to believe that a constantly-evolving regulatory system is needed is understandable.

Before we proceed further down that line of thought, it is necessary to examine what

106The author is speaking here from personal experience. Lead times for European components tend to run somewhat longer than those for comparable items from the United States, Asia, or Latin America. Within the United States, materials and components are usually more quickly obtained from proprietorships than from corporate shops of similar capability.

this type of reactionary thinking has done to some other systems.

In the United States, few industries have gathered so much public attention as the automotive industry. Through the 1960s, the vast majority of vehicles driven were of the same basic class, confined to a narrow range of curb weights, chassis types, and engine styles. Progressive fuel economy standards first introduced in the 1970s led to the construction of more differing classes of vehicle, from subcompact to full size, including numerous vehicles built on a light truck chassis like the minivan and the SUV. These latter two became much more prevalent because many families had grown to depend on large-capacity sedans and station wagons, and could not afford to sacrifice passenger and/or cargo capacity. As a result of these changes, crash dynamics, which had hitherto been quite predictable, became much more chaotic. Instead of a single dominant crash mode representing impact with a vehicle of comparable height and weight, a host of new common crash scenarios became a reality[107]. What was more, the requirement for fleet economy standards meant that upstart companies could not offer any single class of vehicles other than compacts, which were of limited public appeal. As with most government mandates, the effort required (in this case, engineering effort) to re-design virtually the entirety of many automakers' product lines was not paid for by the government mandating it[108]. This amounted to an expropriation of incalculable quantities of precious engineering time, which would otherwise have been devoted towards profitable ends. This was a loss from which many domestic automakers never recovered.

Another good example would be the income tax code of the United States of America. The code itself, U.S. Code Title 26, Subtitle A, contains over 1500 sections, many of which are themselves exhaustive. The code has evolved and grown continuously more complex since its creation, usually for one of two reasons. The first motive is to “close loopholes”, in

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107Transportation Research Board, National Research Council. *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*. Washington: National Academy Press, 2002. PDF file. p. 3 – The research committee estimated between 1,300 and 2,600 additional fatalities were associated with CAFE-induced downsizing of vehicles in 1993.

108As an engineer, the author would like to take this opportunity to call particular attention to the injustice posed by this sort of governmental action. Politicians are rarely, if ever, engineers, and have no appreciation whatsoever for the amount of effort involved in design and qualification. This doesn't happen by decree, it takes hard work, work which politicians seem to feel at liberty to steal.

other words, to block the lawful manners in which people were directing their capitals so as to avoid incurring the tax. The Gift Tax and Alternative Minimum Tax are salient examples of this. The second motive is to create tax incentives for particular private behavior. The end result is a set of complex rules, and uncertain interpretation, which require a lifetime of research to understand, if such understanding is even possible. The Internal Revenue Service is presently as despised as any agency of the federal government because their actions can often seem both arbitrary and extrajudicial. Imagine how much more so it shall be once punitive taxes, such as the health insurance mandate, become commonplace, and taxes are levied on every conceivable act of private defiance of public dictum.

Invariably, if rules are written in reaction to every unanticipated shock, the end result would be a monstrous entanglement of regulation and overlapping authority which no one would fully understand, and which smaller enterprises would have no option but to fear. Active regulation, that which requires the active participation of the regulated entities, naturally amplifies economies of scale, for the simple reason that compliance effort is not paid for by the government. The amount of time a small business with a handful of employees has to devote to compliance is not much less than that of a huge corporation with thousands of employees in the same market. If both pass on the expense to their customers, as they must to survive, the smaller entity will find itself rapidly priced out of the business. The expropriation of effort, which in reality is no different than the expropriation of any other type of private property, has devastating impacts on the freedom of private markets. It restricts competition, encourages fewer, larger, and more monopolistic corporate institutions, and fosters the ultimate interdependence between government and private corporations. This is particularly true in the realm of finance, whose stock consists solely in monetary units, and which, as a result, cares nothing for the state of actual production.

Indeed, do we not find ourselves in our present monetary quandary because this interdependence is so complete? If it were not for the banks and central banks which bought so much sovereign debt, what western nation could have financed its obligations even to this point? Are we not engaged in these discussions because a single sovereign default might

destroy the entirety of the global financial sector?

The truth of the matter is that the regulatory environment itself creates the large institutions which in turn create what is commonly termed "systemic risk". Were it not for the fact that costs associated with compliance prevent the creation of new competitors, their bloated internal management bureaucracies would rapidly erode their market share, and with it, their systemic importance. Moreover, the lending system could recover more swiftly from a major bankruptcy since the barriers to market entry would be suitably low, and the profits associated with such ventures historically high. Was it not public intervention which saved many of these institutions from their well-deserved ruin? Monetarists commonly claim that a far greater calamity would have occurred had the cascading failures and associated price declines been allowed to proceed naturally. Doubtless this is true for those in the financial sector, and to all of those presently reliant upon debt, but as for the remainder of the populace, especially the young, this assertion does not hold up to scrutiny. Those without debt, and with the ability to work, or those with even modest savings, would find themselves presented with economic opportunity unprecedented in their lifetimes[109].

In truth, the most effective regulations for encouraging long-term financial stability are simple, legal restrictions placed upon all commercial entities. These naturally do come at the expense of near-term gains, and are thus frequently assailed by the financial industry, but they are nonetheless very effective at containing financial crises. The United States' Banking Act of 1933, more commonly referred to as the Glass-Steagall Act, separated commercial banking from investment banking. It further restricted commercial banking to be a source of commodity credit only. A crisis in one of these two financial sectors could not noticeably affect the other, and a crisis on the commercial end could readily be managed using the mandated system of insurance then in place. In the dozen plus years since its repeal, the American financial sector has seen a period of unprecedented volatility, with virtually no real market growth over the period. Circulation credit was again allowed to pervade every sector of global finance, and the end result will prove even more disastrous than it was in 1929.

109*On the Manipulation of Money and Credit*, pp. 134-136

Another simple rule, intended to eliminate circulation credit altogether, would be to forbid any individual or institution from being both a debtor and a creditor. If one owes money, then one would not be allowed to lend until the debt is eliminated, and if one is owed money, then one would not be allowed to borrow until repaid or the debt is forgiven. This would eliminate entirely the leveraging and circulation credit which gave rise to the great economic shocks of recent times. Certainly, boom times would not come so rapidly, and in the near term asset prices would decline considerably without the support of such credit. A financial sector as large as today's could probably not exist at all. However, this would be the ideal environment in which to foster productive growth and overall economic stability.

In an environment of freely floating interest rates and a gold standard, additional stability could be fostered by capping the rate of interest. The market as a whole, like individuals do[110], tends to undervalue the risk of loss, and overvalue the prospect of success. If the rate of interest can not rise but a little above the lowest market rates, then lenders will restrict their loans to the highest quality applicants[111]. Again, near-term growth is constrained, but more incentive is then created for individuals to employ their own capitals, or to turn to equity investments for increased returns. Indeed, it is in equity that such fiduciary risks are appropriately taken. It is altogether unsound for lenders to take such risks with depositors' funds.

More broadly, the need for regulation arises from the need to restrict behavior in favor of stability. However, the use of active regulation, or of reactionary *ad hoc* legislative action against every unforeseen event which arises is tantamount to government direction of capital, the temptation to which must always be resisted[112]. With the elimination of these sources of fiscal variance, the quality of long-term fiscal projections can be greatly improved. The natural variance of the market will still render a shortfall, but its magnitude would prove

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110*Wealth of Nations*, pp. 111-117

111*Wealth of Nations*, p. 299

112*Wealth of Nations*, p. 352 - " The statesman, who should attempt to direct private people in what manner they ought to employ their capitals, would not only load himself with a most unnecessary attention, but assume an authority which could safely be trusted, not only to no single person, but to no council or senate whatever, and which would no-where be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it." - Interestingly enough, F. A. Hayek leads off Chapter Five of *The Road to Serfdom* with this very quote.

more manageable than present conditions allow.

Naturally, when any economic downturn does occur, there will be mounting pressure upon governments and central bankers alike to intervene. Whether the reaction is one of "stimulus" to encourage economic growth, or "austerity" to reduce the public deficit, the impact of both short-term and long-term economic variability depends on the fundamental nature of the action.

Once again, the business cycle, the periodic ebb and flow of economic growth, is a type of oscillation. If an oscillating system has a negative damping coefficient, a condition called *positive feedback*, the amplitude of that oscillation will rise with time. Given such feedback, such a system can become dynamically unstable, even if it possesses inherent static stability[113]. While the economic gyrations of the business cycle are not purely periodic, they are nonetheless cyclical, oscillating about a trend line with variable amplitude[114]. Whether the amplitude of subsequent booms and busts is greater or less than those which precede them depends upon the feedback which is applied in reaction to changing economic conditions.

It has been demonstrated that, due to structural factors within nations' tax codes, that the fiscal crisis presented by a given downturn is proportionately larger than the economic crisis which causes it. If, as is the case with most nations, the public sector itself represents a significant portion of national GDP, the fiscal crisis itself will naturally amplify the depth of the current economic crisis. Since the public revenue is inherently less stable than the private sector's, if the public sector's share of GDP were to rise with time, the amplitude of the boom-and-bust cycle will rise along with it. Either a stimulus program which raises public expenditure, or an austerity program which raises public revenue, would therefore represent a positive feedback to the oscillation. The public expenditure would have to be paid for, and the additional revenue would be spent even after the economic conditions which justified the increase were removed. In times of economic stagnation, such interventions can even be the initial input which creates the oscillation. A stimulus program which reduces taxes, or an

113Hartog, J.P. Den. *Mechanical Vibrations*. 4th Edition. 1956. New York: Dover Publications, 1985. Print. pp. 282-285
114*On the Manipulation of Money and Credit*, pp.140-142

austerity program which reduces public spending would conversely be a negative feedback, as the public sector would shrink.

The near-term effects of such stimulus and austerity protocols may improve apparent economic and fiscal conditions, respectively, but the long-term impact of increased variability is impossible to compensate for in any economic system. Increased variability degrades long-term fiscal health, regardless of near-term gains, and ever-increasing economic volatility can only lead to ever more devastating economic crises. If the industrialized nations of the world truly valued stability, then they would have adopted less volatile sources of revenue, and acted more patiently, equitably, and methodically in reaction to changing economic conditions. That these states have in nearly all cases acted swiftly, inequitably, and without due consideration have led to the dire situation which now presents itself. Compound with this the self-delusion which most policymakers retain with respect to the idea that economic growth and monetary expansion can somehow relieve their respective nations of their present debt loads, and the result is the massive and unbounded growth in sovereign and private indebtedness which persists in the present day in every industrial nation. What awaits them all is fiscal oblivion.

Part III – Business & Labor

Chapter XV – Cultivated Minds, Idle Hands

"Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan 'press on' has solved and always will solve the problems of the human race."

- Calvin Coolidge

It is readily apparent that a far greater portion of the industrialized world's resources are presently devoted to education than was the case at any other time or place in recent history. The phrase "knowledge is power" has become so common in modern society that many have accepted the idea that education is the only ingredient necessary for success, and that failure can only be attributed to the want of education. As useful as various forms of education may be, and as universally so as some are, knowledge and education alone have never brought about the resolution of any problem. Without purpose, and the resolve needed to take action, education is relegated to the realm of the hypothetical, which is of immediate use to no one. Indeed, in the natural world, there are at least as many animal species which survive and thrive despite their lack of intelligence as those which endure because they possess it. Humanity is unique in the sense that every man has, in the form of his hands, tools of unparalleled versatility and considerable physical power, through which intellect can find a limitless number of practical uses, great and small. In evolutionary terms, human hands are a more decisive superlative than human intellect. Were it not for his hands, whatever his intelligence, man could not ever hope to craft even the most basic elements of civilization. Those individuals of unique brilliance and aptitude may be better remembered,

but for every great man of talent, genius, or culture, hundreds if not thousands of human hands, each with its own purpose, were needed to transform their conceptions into reality. Whatever tangible problem has confronted an individual, a community, or a society, the physical work to be done is at least as necessary to affecting the solution as any intellectual pursuit.

In the early days of economics, human labor was required to support all manner of industry, and all forms of agriculture. Other forms of power, such as draft animals, wind, and water supplemented such labor, but human effort was required to construct the means by which such power could be exploited. As such, the balance of wages in relation to commodities, and in relation to food prices in particular, were the only fair measures of economic growth and success. Labor alone was the most immutable measure of value[115]. The advent of steam power, which made the widespread use of mechanical machinery practical, altered the perception of this balance in two ways. On the one hand, motive power is a labor substitute, with value all its own, since machines and their resultant technology can render certain professions obsolete. On the other, motive power is a labor multiplier, its value dependent upon said labor, which vastly increases the real value of all forms of labor employed. The first effect tends to decrease wages by idling workers, while the latter enhances them by delivering a greater quantity of a wider range of goods at lower prices, increasing the subsistence which can be procured by prevailing wages. Even if monetary wages decline, the goods which can be procured thereby, which constitute the true form of every person's income, may yet increase.

While a great deal of controversy was stirred up during the Industrial Revolution as to which effect was greater, it is readily apparent that the latter effect is dominant over longer time scales, even within societies which lack a high degree of economic freedom. The mere existence of great quantity renders the broader distribution of wealth inevitable, for even the most avaricious of men have no cause to hoard consumable goods for which they have no use. All that is plentiful is cheap, and will be enjoyed by all who demand it. All that is

115*Wealth of Nations*. pp. 36-67

scarce is dear, and will only be obtained at great expense to the consumers who can afford it. In nearly every country, even the very poorest laborer today enjoys by means of his consumption a quantity and quality of goods which far exceed those of the average worker two centuries ago.

It is easy to understand the temptation to assign most of these gains to education, and to the technological innovation which is born from said education. The profound influence of relatively recent technology upon everyday life is, after all, readily apparent and undeniable. However, the bulk of technological gains made in any era, and the modern age is no exception to this, have been brought about by the intellect of scientists and engineers who are relatively few in number. For every student who becomes a useful member of the technical professions, many more will invariably fail to measure up. This is because the output of one scientist or engineer can be rendered entirely worthless by the superior work of his peers. The cultivation of science may be of extreme and immediate importance to a nation, but it is an altogether different story for the individual, and the expense to those who fail in their aspirations has been observed to well exceed the sum total of the rewards reaped by those who are successful[116]. Purely productive and eminently useful trades, however, bear the opposite relation, because the value created by the numerous individuals employed therein is almost purely cumulative, and quite often complementary. The wheat produced by one farmer does not reduce the utility of the corn produced by another, nor does the steel produced by one forge diminish the brass produced by another. By making a greater quantity and variety of raw materials available, more and more technologies become commercially viable, which creates new modes in which productive labor and circulating capital may be effectively and profitably employed. Indeed, the cheapness of raw produce is what enables all forms of innovation, innovation which in turn enhances the value of direct labor more than it enhances the value of intellectual work.

The cheapness and availability of energy in particular has long been the principal driver of that element of technological advancement which has led to real gains in economic

116*Wealth of Nations*. pp. 111-113 – Adam Smith likened higher education to a lottery, whereby the resources of many are risked to raise up very few.

welfare. It is natural for every nation to be proud of its own technical prowess and ingenuity, but such pride often blinds the people as to the conditions which gave rise to such advantages. As Jevons wrote:

> *"Even the steam-engine cannot be claimed as a purely indigenous invention. But before we consider this point, or go on to enumerate the undoubted contributions we have made, it is necessary to discriminate the conditions of invention.*
>
> *"There seem to be three essential conditions, too often confused or overlooked: - First, a distinct PURPOSE, arising from an urgent need of some new means of accomplishing a given end. Secondly, a new PRINCIPLE, or mode, by which it is to be accomplished. Thirdly, the material, power and skill for embodying this principle in a successful machine, - in short, the CONSTRUCTION."*[117]

Higher education provides mankind with the means by which new principles can be discovered, but in every instance other forms of labor are needed in far greater quantity to furnish the actual construction. Nearly every species of labor can derive benefit from literacy and knowledge of basic math and science, but more detailed and advanced studies are naturally of use to only a few.

Within this context, the obvious fallacy of education-oriented public policy becomes apparent. The fact that higher paid professions require more education is a natural outgrowth of both the effort required to qualify for them and the inherent risk of failure accepted by those who pursue them. A great physicist is, in economic terms, not very different from a professional athlete. Many aspire to stand at the zenith of each profession, and devote considerable energies to obtain this goal. Only very few realize such objectives, and their rewards, both in terms of wages and recognition, are great indeed. However, these rewards invariably are far less than the resources spent by all who joined in the pursuit, the

117*The Coal Question*. p. 59

recompense for the majority of them amounting to nothing at all. It is further apparent that as the quantity of available engineers and researchers increases, the additional value produced by each additional one declines towards zero very rapidly, to the point where the value furnished is less than the economic cost of producing said laborers. Indeed, in terms of purely intellectual workers, beyond a certain ideal proportion to the total workforce, quantity has no favorable quality aspect whatsoever.

In most countries, the emphasis on intellectual work has come hand-in-hand with a growing public disdain for physical labor. As the present era of cheap energy wanes, physical labor provides the only means by which the economic decline associated with higher energy costs can be retarded. As energy sources become less accessible, a greater share of capital and productive labor must be devoted to delivering the energy that the economy requires to sustain itself[118]. Physical labor must be advanced to a higher level of artistry to exploit what resources remain available[119]. Further, the increasing cost of fuel and electricity must eventually lead to the resurrection of labor modes once rendered obsolete by cheaply operated machinery. Most basically, the need for individuals to choose tangible professions over intellectual ones has never been greater, and even if such labor could be found, the age of economic and demographic growth which cheap energy once enabled must still come to an end. Even at the peak of this age, which is already long passed, the need for physical laborers, both skilled and unskilled, far exceeded demand for those who work only with their minds.

As the quest for education has increased in depth and distribution, the tangible cost of this very public pursuit has increased in rough proportion. Whether the direct costs are borne by the individual or the general public, the economic duress which results is impossible to overlook. In the United States, the cost of a college education has soared, while great numbers of students seek degrees without any clear purpose for applying the principles they acquire thereafter. College has become an expectation rather than a legitimate vocation,

118*The Coal Question*. pp. 34-44, 50-51
119*The Coal Question*. pp. 75-83

driven by vague and specious arguments of a diploma's alleged value[120]. Colossal amounts of time are wasted through the enforcement of "general education" requirements, which have nothing whatsoever to do with a student's intended future employment. The justification of making students "well-rounded" is absurd on its face, since those students with purpose go to college with the specific intention of learning a specialized expertise, and thus time devoted to other studies merely serves to increase the cost and duration of their chosen intellectual pursuit. Graduate degrees, once reserved for students whose mere presence would honor their university, or benefit their patron, are now up for sale, with an endless line of credit encouraging all frustrated job-seekers to indenture themselves further on the slim chance of better pay later on. Graduate students themselves are often treated by universities as a source of cheap skilled labor, and student work programs ostensibly established to help low-income students through school instead serve to limit their work options and suppress their wages. Just as a lottery is advertised by holding up the example of a handful of winners, so is a college degree promoted by identifying a college's most exceptional alumni, many of whom earned their degrees generations ago at far lower cost, and entered a labor market which was far more free. Certain professions, like architecture, are by government endorsement of guilds, effectively closed to new entrants. Even with a degree, some college graduates aren't even free to ply their chosen trade. Students who major in many liberal arts could never find work in the profession their major implies without a graduate degree. Further, as the possession of a degree becomes more common, the competitive advantage afforded by such possession declines, just as the price demanded for said degree is under unrelenting upward pressure. Worst of all, in the case of even some technical professions, the degree isn't even necessary[121]. Those driven by purpose are stifled from achieving their aims in a timely manner, while those with the lazy attitude of entitlement are coddled into wasting as much time and money as possible.

120*How to Lie with Statistics*. pp. 93-96

121The author speaks from personal experience here. The engineering field in which he finds principal employment contains nearly as many non-degree engineers as those with a bachelor's, and the overall quality of the former tends to exceed that of the latter (and the author has a college diploma). Worse still, those with recent graduate degrees have almost universally proven to be arrogant, unmotivated, and so highly specialized in their expertise as to be of use to virtually no one.

In many other industrialized countries, the direct cost of higher education is not borne by the individual, but by the taxpayer, and here the overall results are no better. As small as the young populations of Europe are, nearly every one struggles to find employment for new graduates. The protection of older workers trumps any effort to find work for new workforce entrants. The sense of entitlement in student and worker alike reaches a level of fanaticism such that neither is able to produce a value sufficient to justify the expense of their respective education and wage. Those who are advanced by the system are advanced to the exclusion and oppression of others among their peers. As the youth cease to be employed, their expense exceeds their value, leading to the looming demographic catastrophe which presently hangs over nearly every European country, as well as Japan.

Unfortunately, it is not just higher education which has suffered as a result of the education-first mentality. The cost of basic education has grown in leaps and bounds, as well, and just as is the case with universities, this additional cost has not resulted in any meaningful advances in education quality. Tried and true methods of instruction which dominated basic instruction for decades, and in some cases much longer, have been abandoned for fashionable, research and technology driven programs, most of which amount to nothing more than blind experimentation, with the students' future aptitudes at stake. Demonstration has given way to indoctrination, construction to memorization, and the minds of the vast majority of students fall back upon the crutch of modern technology. Children do not learn the incredible power of their own minds because they are introduced to powerful computational devices which relieve them of the need to exercise their own intellect. The marvels of the ancient world were built with only the compass and straight edge to manage their construction. Euclid's *Elements* are a testament to the myriad of different things the human mind can construct and prove using these most basic tools. In order to maximize a student's abilities, a student must first be forced to exhaust the utility of those tools available to him before seeking out new ones. The child's educational journey should most closely resemble the academic progress of human civilization. Students today rely far too much on memory, a problem compounded by the fact that complete and self-consistent mathematical

systems are presented to them piecemeal, and often intermixed with one another. Plane geometry is a distinct methodology from analytic geometry, and yet, many texts introduce concepts such as angle measure and coordinate systems alongside Euclidean-style proofs, in whose context they have no meaning. With respect to algebra, imaginary and complex numbers are avoided as long as possible, despite the fact that they are essential to create a closed solution set[122]. Even elementary instruction methods, such as phonics, have been thrown aside for new ideas which bear no relation to the language's origins.

Public officials, in a constant quest for greater funding, have fooled many into believing that more expensive programs somehow produce superior results. However, a cursory glance at the present state of instruction, and at the general quality of entering university students, will readily refute this notion. A few minds still reach superlative levels of cognition, but as a fraction of the total population, they are certainly no greater in number today than in decades past. Instead, research everywhere is dominated by technology and computation, whereby human intellect is no longer trusted to perform any function. After spending the formative years of their lives punching numbers into calculators, and using computers to generate beautiful graphs and charts, is it any wonder that such students have learned to trust nothing of their own intellect? These students never bothered to learn how these devices work, and yet they trust them implicitly to give them the “correct” answer. They have faith in technology, without having ever gained true knowledge of it. Such minds will accept whatever they are told by machines, but will almost never come to understand what they are told or by what means it was derived.

The simple truth in all of this is that it is an intolerable circumstance for everyone to try to work only with their minds. Not just some of us, but the vast majority of us, must find work which employs our hands. If developed nations continue in the delusion that there's a way to educate their way to prosperity, only poverty and privation will result. Those who seek knowledge will readily find it in this day and age, they need only the ability to read and to rationally discern truth from fiction. Higher education must be subject to the same

122See *Elements of Algebra*. pp. 42-44 - Euler chooses to introduce imaginary numbers very near the beginning of his text.

economic direction as any other good obeys. If it is not, it will continue to cost more, while delivering less value to both student and society. So long as the notion of every person being entitled to a college education endures, the universities of the world will continue to churn out class after class full of educated derelicts.

Chapter XVI – Dispersed by Accrual

"They do not see that the end of all commerce is to increase production, and that, by increasing production, though you may occasion partial loss, you increase the general happiness."[123]

- David Ricardo

All of human subsistence is maintained by means of production. Whatever any person wishes to enjoy or consume, it must first be brought into existence, and ultimately brought to the point of consumption, by means of commerce. If the population is to increase, if the standard of living is to improve, or if both are to be affected simultaneously, then production must keep pace with the quantitative and qualitative advances of humanity. In Chapter XIV, the impact of taxes and government regulation upon production was given a cursory review. While it is through government action that much capital is exhausted, the manner in which "profit" and "loss" are calculated by firms contributes in no small way to the destruction of capital. Focusing merely on the numbers has created a business environment where the measure of "value" has become the end objective, and as such, the influence of the manner of measurement on business decisions, and the wider implications of said influence, has largely escaped notice.

No problem of business is of greater importance than the understanding of what precisely constitutes profit. In this modern era where democratic governments pretend to tax profits[124], the desire to maximize receipts so derived has compelled most corporations in the industrialized world to adopt a particular system of value analysis, that of accrual accounting. Accrual accounting is the practice of assigning a capital value to all stock, property, rights, contracts, obligations, and even intangibles such as goodwill, and reporting the changes in the accrued result as a profit or loss. Cash accounting, or what is often referred to as cash

123*Principles of Political Economy and Taxation*, p. 189
124Again, all taxes levied on profits are actually paid by the consumer – Refer to: *Wealth of Nations*, pp. 518-534

flow accounting, is still permitted for some industries with considerable and consequential modification[125], but at present it is largely confined to very small business entities. Cash accounting is the practice of comparing income received to expenses paid, dated from the time of receipt and payment, respectively. The difference between cash income and cash expenses is treated as the actual profit or loss[126]. While neither of these methods quite captures what truly constitutes profit[127], the manner in which their respective expressions of profit differ from true profit is of great importance.

Both methods of accounting employ monetary units as a standard of measure, which leaves both open to the malinvestment problems associated with inflation[128]. The quantity of value represented by equal sums of money at differing times is not itself equal, and so inflation can serve to mask a certain component of real loss. However, this is precisely where the similarity between the cash and accrual methods ends.

It would be quite appropriate to suggest that accrual accounting, by assessing and assigning specific value to the totality of a particular economic concern, is capable of being more accurate, and is capable of more closely capturing the true profit and loss in terms of the growth and diminution of a particular business. It captures the impact upon a business of events which the cash flow method either fails to detect or by the nature of its analysis misrepresents. For example, if a piece of factory equipment breaks down and is not replaced, the accrual method would capture this as a real, tangible loss, whereas the cash method would not detect it, and would even consider a resultant insurance payment as a gain. The exchange of goods and money of equal value, by the accrual method, constitutes neither a profit nor a loss. The same transaction, by the cash flow method, would be treated as a profit for the business receiving the money, and a loss for the one paying it.

125The IRS still permits some business owners to use what it calls the "cash method", but in truth it is merely accrual accounting which uses cash payment as the triggering event upon which to base accrued values. Capital investments are still required to be amortized, allowing the government to levy taxes upon illiquid capital investments. Refer to: *Instructions for Form 4562* and *Publication 535: Business Expenses*. Retrieved from www.irs.gov, February 2013, in PDF format.

126Horngren, Charles T., Walter T. Harrison, Jr. and Michael A. Robinson. *Accounting,* 3rd Edition. Upper Saddle River: Prentice Hall, 1995. pp. 90-92

127*Wealth of Nations*, pp. 51-52 – Profit is, in truth, only realized once the stock of resources used to create the finished goods sold has been replenished.

128*On the Manipulation of Money and Credit*, pp. 129-131

To suggest, however, that because of this enhanced potential accuracy, that accrual accounting results in better business management, more appropriate tax assessments, and greater overall economic growth and stability, is entirely incorrect. It is important to remember that taxes assessed against the profits of stock are not actually paid by the businesses against whom these taxes are levied. Such taxes are actually paid by the consumers of these businesses' goods and services. Further, while businesses do not directly bear the weight of taxes levied upon them, both the taxes themselves, as well as the methods employed for assessing profit and loss, will substantially affect the business decisions they make. These decisions, in the aggregate, will affect the health and stability of the economy as a whole. In this regard, accrual accounting is much inferior to the cash method.

Accrual accounting creates an inherent preference for speculation, market consolidation, leverage, liquidity, and volatility. Circulating capitals are everywhere preferred over fixed capitals. In turn, accrual accounting discourages employment, capital investment, inventory, and production. This is compounded by the fact that many larger types of businesses, due to the complexities of such accounting, are in fact run in accordance with empirical rules derived from the wealth of data that accrual methods by their nature must compile. Analysis of this data has led to a system of different internal "metrics" which are employed by most corporations today. The data itself, however, by its nature completely omits any opportunity costs, as well as the costs associated with the failure to undertake a project or to be prepared for an order or economic shift. This effect will be examined in greater detail in the succeeding two chapters.

Another pitfall of accrual accounting is the fact that a nominal, or even a real profit can mask intrinsic problems with organizational solvency. Even if a business is constantly growing, if capital demands continually outstrip sales revenue by increasing amounts, that business will contract debts which by its nature it will never be able to repay[129]. To reduce the debt load would require liquidation of capital assets at prices below their value as utilized capital, and would further reduce production, and therefore sales, over and above the loss

129For a prime example of this effect, refer to: Ruback, Richard S. and Roy Burstin. *Kochman, Reidt + Haigh, Inc*. 1993. Case Number 9-294-056. Boston: Harvard Business School Publishing, Revised June 26th, 2000. Print. pp. 3-5

associated with the liquidation itself. However great the accrual profit may be, the cash flow deficit will ultimately doom such a firm.

Accrual methods, in addition to encouraging leverage, also add to the natural instability associated with high degrees of debt. The recent case of MF Global demonstrates how quickly a firm can unravel if it is forced to mark down its assets at market prices[130]. Accounting standards required MF Global to mark its portfolio of sovereign bonds based on prevailing market prices, despite the fact that these bonds had short maturities, and none were believed to be in serious danger of default. These write downs in turn triggered a cascading cycle of collateral obligations and credit downgrades which ultimately made it impossible to tap the premium credit markets that such leveraged firms depend upon for their continued existence. Indeed, by the time the first rating agency downgrade came, the company was effectively doomed.

Cash accounting, on the contrary, makes it easier to start and maintain a productive business, and encourages internal investment and stability. This method, as shown earlier, can mask a real loss, and hide a real profit, but it will preserve solvency far better than accrual methods, since business obligations must be met with cash on hand. It further creates the preference for starting a firm with capital which is already owned by the firm's principal owner, whereas the accrual method creates the preference for borrowing such funds. Indeed, accrual accounting creates a considerable bias towards debt expansion and outsourcing in general.

When starting a productive firm, large cash expenses are immediately incurred on capital investments and initial inventories. By the accrual method, those items so acquired do not constitute an expense. Only the depreciation of capital equipment is marked down. Inventory is not expensed until consumed. As long as sales revenues exceed capital depreciation, consumed inventory value, and operating costs, a profit is registered, and taxes will be due on the profit recorded. Borrowed funds only represent an expense so far as

130Duffy, Terrance A. *Testimony of Terrance A. Duffy, Executive Chairman, CME Group, Inc., Before the House Committee on Financial Services, Subcommittee on Oversight & Investigations*. December 15th, 2011. PDF file. - Audits showed no distress as of March 31st, 2011, and the bankruptcy petition was filed on October 31st of that same year.

interest is paid. Outsourced operations are expensed immediately and in their entirety, whereas capital investments are only marked down over time by depreciation. Since a firm's customers are charged based on costs incurred, the preference will be for outsourced operations wherever possible. This is economically inefficient, because the markup associated with the utilization of another firm's capital is also incurred, over and above the real cost to produce the operation desired. Debt will be seen as favorable so long as the value of items acquired with it exceed the magnitude of the debt, a near-term profit which often causes long-term cash flow and solvency issues.

Cash accounting, on the other hand, allows the start-up costs to be expensed immediately, which often gives the appearance of an operating loss in a firm's first years. This loss can sometimes be carried forward, as well, deferring any taxes due until such time as cash inflow is good, and tax payment will not require capital liquidation or debt incursion. Since capital investments are expensed entirely and immediately, the preference will be to enhance internal productive capability. Any equipment which can be utilized full time, or nearly full time, will enhance the company's growth, and reduce its operating costs. So long as no debt is incurred, a firm's survival is guaranteed, liquidating only if the principal owners decide to do so. Taxes are easily calculable, and will not come due unless cash is on hand to pay them[131]. Real losses cause a firm to shrink, and real profits cause it to grow, but the progress of both is slow and steady. Further, if the borrowing of funds is necessary, such funds will be invested immediately so as not to give the false appearance of cash inflow.

It must be remembered that taxes levied against profits are in fact consumption taxes. That the cash method results in a lower level of corporate income and capital gains tax receipts is undeniable, but this shortfall is more than compensated for by increased growth elsewhere, and by lower consumer prices in general. Indeed, the increased near-term receipts forced accrual accounting provide to government come at the expense of a nation's economic growth trajectory and stability. Both of these effects are by their nature harmful in the long

131*Wealth of Nations*, p. 499 - Recall Adam Smith's second and third maxims on taxation, those of certainty and convenience. Here cash accounting passes both maxims with flying colors, where the accrual method falls considerably short of both objectives.

term, both to a nation's fiscal and economic health. Capital is dispersed and destroyed, while indebtedness grows from all quarters. Most importantly, the effects of accrual accounting reduce production, which means that they run counter to the very purpose of commerce.

Chapter XVII – The Almighty Spreadsheet

"Many a man who is ignorant of human nature has friends who are bad friends, and in that case he ought to do harm to them; and he has good enemies whom he ought to benefit"[132]

- Socrates

It may be said that a man pours his soul into his particular craft, and that in understanding a man's labors, one can better understand his true nature. Surely there are few traits more precious to one's security than the ability to choose one's friends wisely. Placing trust in those who are undeserving can often be fatal, and harboring paranoid fears of those who are honest and genuine will eventually alienate everyone. If an individual is to succeed in business in the long term, the ability to judge personal character is at once both indispensible and irreplaceable. Yet, if one were to examine the day-to-day operations of many large corporations, it might seem like all business is impersonal, as if entire industries are running on autopilot. This is no mere coincidence.

As the tax code has evolved, it has become progressively more complex, requiring larger amounts of data and man-hours to ensure compliance. Not only do new taxes and deductions constantly spring up, but new forms and differing accounting rules along with them. At the same time, the regulatory environment in most industries has likewise become more onerous. Whether it's OSHA, the EPA, the SEC, the FDA, or state & local regulators, the rules never get any easier to follow, and the demands upon private labor invariably increase with time. The constant threat of litigation adds yet another dimension of difficulty, over and above what would otherwise be necessary to run even the most basic and specialized of productive firms. As much as any company can be held accountable for, it should come as no surprise that an incredible amount of actual accounting is required of any

132Plato, *Republic*. Translated by Benjamin Jowett. 1871. New York: Barnes & Noble Books. 2004. p. 13

business, great or small. In publicly traded firms in particular, the immense and difficult task of evaluating accrued company value makes the accountant a prime candidate for just about any important executive position.

A natural consequence of this ever-increasing data acquisition burden upon firms has been to deliver control of one firm after another out of the hands of visionary leaders with direct knowledge of their particular industry, and into the hands of accountants with little or no such experience. Accounting is perhaps the most impersonal of all professions, and it is in this impersonality that it is often viewed as the most objective. After all, the numbers themselves can impart no bias in the one who crunches them. However, it must also be said that accounting places no faith whatsoever in human beings, and as such an accountant is not in a position to decide matters of granting trust or favor to anyone within a company. Accountants excel at data processing, and thus data acquisition gives rise to the spreadsheet. The spreadsheet is then used to determine blanket policies, which are intended to govern all conceivable contingencies, and thus relieve the company from having to rely on imperfect human decisions.

While the architect of this all-governing system of formulae has a great deal of control over what data is acquired and how it is processed, even these individuals are not, in the truest sense, running the company. The data itself is being used to arrive at predetermined conclusions, and so the numbers themselves are in control, the spreadsheet itself is omnipotent. Given the degree to which modern software enables data acquisition to be automated, it might be tempting to call the spreadsheet omniscient as well, but there are several reasons why this is not the case.

First, as much as the spreadsheet's data acquisition is automated, human inputs are invariably required to put any form of commerce into motion. The accuracy and reliability of data entry goes a long way to determining how effective that data will be in directing future decisions. Those who best understand the manner in which numbers are used to direct decision-making are also in the best position to manipulate the end result. This can have meaningful impacts on business direction without rising to the level of outright fraud. If the

interpretation of events are subjective, an accountant will no doubt enter them in a manner which favors his own intended purpose. Of course, that isn't to say that fraudulent numbers aren't ever entered, but as was observed in Chapter VI, as data quantity increases, the likelihood that incorrect inputs will go undetected also increases. However, of greatest consequence in any spreadsheet-driven operation are all the events which can't possibly appear as quantitative data at all.

The most obvious example of such an event is the event which goes unobserved. If a customer does not find a store, or does not buy an item he can not locate, how can such an event be captured if the individual responsible for said event has no contact with the firm wishing to acquire the data? If a company chooses not to develop a particular product, how is the opportunity cost of lost sales to be quantified? Just because something is unseen, or even undetected, does not make that thing unreal, and if such things are real, their consequences are real, as well. An event which does not occur is not a non-event, it is instead an event whose data is delivered elsewhere. The spreadsheet can only record what actually happens and is observed by the company and its agents. It can not, under any circumstances, account for the alternate events which *could* occur if different decisions were made. In the view of the accountant, the spreadsheet's data processing is perfect and infallible, but that is only because they, like the spreadsheets they create, are blind to the idea and deaf to the suggestion that granting directive powers to machines could result in tangible opportunities being lost.

Opportunity cost is not merely restricted to customer contact, either. The adoption of blanket policies, designed to protect the firm from fraud and abuse by its employees, invariably restrict the freedom of individual workers to make decisions. A machine is incapable of trust, and any example of harm visited upon the firm will almost certainly result in the passage of a more restrictive set of worker regulations. While these regulations lessen the cost of worker misconduct, they also stifle worker creativity and productivity. The most capable of employees will invariably produce value for their employer in direct proportion to the capital resources over which they exercise direct control. The more freedom they have to

direct their own efforts, and to obtain useful items which aid in the completion of their projects, the greater the rewards will be for the firm as a whole. If an engineer has a faulty computer, or a salesperson's phone coverage is spotty, the ability of these workers to respond swiftly to important queries, both internal and external, is diminished. The fault for such failures is invariably assigned to the employee. However, the truth is that a restricted employee will seldom deliver much more than his time, while an employee at liberty will deliver his passion and creativity along with the investment of time.

Individual workers, like markets, are most prolific when they are most at liberty. However, unlike markets, which are protected from fraud by the rule of law, firms are protected only by trust, and when trust is lacking, by reducing the degree of freedom of its employees. Trust being a human attribute, any firm run “by the numbers” is an employee setting devoid of trust, and therefore devoid of liberty. The firm will never get anything from its employees which it does not specifically demand of them, and in doing so, the lion's share of potential profits and productivity are lost. Those who are trustworthy will be treated precisely the same as those who are untrustworthy. Further, as with any purely empirical system of economic direction, the manner in which data is measured and analyzed will directly impact the decisions being made, with invariably negative consequences, as will be observed in the succeeding chapter.

Chapter XVIII – Death by Metrics

"There are two kinds of truths: those of reasoning and those of fact. The truths of reasoning are necessary and their opposite is impossible; the truths of fact are contingent and their opposites are possible. When a truth is necessary, its reason can be found by analysis resolving it into more simple ideas and truths, until we come to those which are primary."[133]

- Gottfried Leibniz

As large business entities grow ever more enamored with the idea of using business metrics to enhance operational efficiency, the metrics themselves become more numerous. As new metrics are drawn up, and emphasis shifts both business-wide and departmentally, the visibility of various metrics, and the manner in which they influence individual actions begins to vary. Great attention is typically paid to the reasons that metrics are initially created, and in justifying their use as a feedback to the control system which is the corporate spreadsheet, but comparatively little time is afforded to anticipate the pitfalls which the use of or emphasis upon particular metrics may have on day to day operations, and upon the natural progress of the business in general. Ironically, it is operational efficiency itself which is most often the first victim of such a business strategy.

In any productive business, there are a myriad of different job functions, and numerous levels of supervision and management. In most manufacturing concerns, these functions are divided into departments, which each encompass a different aspect of the firm's necessary operations. A given manufacturer may be divided into a sales department, engineering, quality control, procurement, and manufacturing. Each of these departments has both leading roles to perform for the business, and supporting functions upon which other departments depend to meet their own core objectives. Sales' primary role is to increase sales,

133From *The Monadology*. 1714

engineering to develop new products and technologies, quality control to maintain product quality, procurement to manage inventory, and manufacturing to deliver products on time. These leading roles are easily quantified, and thus form the main source of data upon which the firm's metrics are derived. This in turn leads to an atmosphere where each department has “ownership” of particular metrics, which in turn leads support functions to be neglected. Sales will fail to obtain proper specifications from customers, or accept jobs outside the firm's capabilities. Engineering will focus on product development, and neglect the process development which manufacturing needs to thrive. Procurement will seek to reduce inventory, reducing the ability of manufacturing to absorb supply disruptions. Manufacturing will seek to ship more product sooner, attempting to short-circuit or override quality controls. Each department looks to enhance “their” metrics, often to the detriment of all others. A great portion of worker energy is therefore spent on inter-departmental strife, rather than towards any productive aim.

While such organizational dysfunction is often quite costly, any reasonable manager will come to recognize internal strife and take measures to mitigate its impact. However, there's another issue more intrinsic to the metrics themselves. This issue arises from the fact that there is more than one way to enhance any given metric. While a measure itself might have once (before its operational implementation) been definitively correlated to profit or revenue, that isn't to say that said metric can't be improved in a manner altogether contrary to the purpose of enhancing the firm's profitability. Further, the metric itself may have large unintended costs or lead to operational instability.

One of the more common metrics in operational use by manufacturers is that of *inventory turns*. This metric takes the total amount of product shipped within a given period, typically one year, and divides it by the total value of inventory on the books. The end measure is a ratio indicative of the number of times the full value of inventory has turned over. The objective, of course, is to minimize the amount of inventory kept on hand, which from an accrual standpoint is idled capital whose value is taxed dollar-for-dollar. Assuming all production to be profitable, profits should be greatest when this ratio is highest. As with

most metrics, the correlation between inventory turns and profitability seems reasonable enough. It's somewhat akin to the concept of increasing capital profit margins by increasing transaction frequency. If one uses his available money to buy and then sell goods once per year at a 20% profit, the annual profit on his capital is 20%. If the profit margin is only 5%, but the cycle is monthly (thus a 5% profit is made 12 times per year), the annual margin is now nearly 80%. An equivalent 20% annual profit would require only a 1.5% margin on monthly transactions. If the turnover frequency is daily, this value drops to less than 0.05%. In other words, aggregate profitability depends not just upon the difference between product cost and sale price, but upon the frequency with which the same quantity of capital is circulated.

The end objective of inventory turns is to increase profitability. However, careful examination of the underlying reasoning behind the metric shows that these increased profits are best realized by increasing production. The immense success of Henry Ford was driven by this very concept. Ford focused not on reducing his inventory, but in maximizing the speed with which his vehicles could be produced. As Ford's production quantity increased, the price of his Model T continuously fell, and yet Ford's profits soared, simply because the firm's capital was being circulated with much greater frequency. However, affecting such success in accelerating production depends very much upon having a market into which the goods produced can be sold at at least some degree of profit. With emerging markets like the automotive field in the early 20th Century, this was a given, indeed, it was the intended aim of Henry Ford to provide an affordable vehicle to the masses. The absence of meaningful competition virtually guaranteed success.

There is, of course, another way to increase the number of inventory turns, and that is to cut back on the amount of inventory on hand. Indeed, reducing inventory is a far easier method of improving the metric, one which is far more certain to succeed than accelerated production. The public fiscal and macroeconomic implications of the just-in-time model which arise from a focus on inventory reduction have already been discussed, but the consequences to the individual business unit are also quite serious. Ordinarily, as the

business cycle slows, inventories will increase, which increases near-term costs, but also enables firms with such inventories to ramp up production quickly once market demand recovers. Holding additional finished goods allows a firm to take advantage of emergency requirements, when sales volumes and profit margins are most often at their highest. For example, a hardware store will never sell as many electric generators, flashlights, lanterns, batteries, and candles as it would during a prolonged blackout. Having inventory available to go where it's needed most represents a large, though admittedly irregular, profit opportunity. Holding inventories down by necessity will cause a firm to miss out on such opportunities, and to both make and sell fewer and fewer goods with the passage of time. Increasing inventory turns by reducing inventory may still improve operating *margin*, but such activities invariably reduce total profits. Taken to its logical extreme, such direction of a firm can, over time, cause a large, dominant producer to shrink to the point of market irrelevance.

Another example comes from the concept of overhead. Those workers who actually build the product being sold are typically referred to as “direct labor”, whereas those who don't are “indirect labor”. Overhead is intended to quantify the cost of all costs other than direct labor and material as a percentage of direct labor costs. For example, if direct labor expenses are $100,000, and total operating costs are $315,000, then the overhead number is ($315,000-$100,000)/$100,000 = 2.15, or 215%. A common practice within industry is to use this percentage, which is re-calculated periodically, to calculate bid prices, assuming the overhead ratio to be constant. The idea here is that the price charged on direct labor should cover the expense of all other business functions. However, not all indirect labor is equal, certain jobs place higher demands upon indirect labor than others. Those jobs which are difficult will require additional technical support from supervisors and engineering. Those customers with more stringent testing requirements will exhaust more time during inspection, and may return goods more often. The quotation strategy which uses the overhead percentage unaltered biases the firm's bid price in such a manner as causes difficult jobs to look comparatively cheap, and simpler jobs to seem more expensive. Easy, profitable work is lost in favor of highly technical jobs which entail significant operational risks. If overhead

were ignored, and the profit on operations considered instead, a greater influx of simple jobs and lower demands on indirect labor would lower the overhead metric considerably, though at the cost of technical innovation. A more effective method of quotation would be to count non-recurrent expenses and expected technical or quality verification support as direct labor where applicable, but this would require human judgment to perform accurately, it could not be driven by automatically acquired data alone.

Perhaps the most insidious thing about metrics, however, is the manner in which they enable the liquidation of valuable things which don't appear on the corporate balance sheet. The results often bring enormous companies to utter ruin, or else slowly convert great productive manufacturing businesses into unproductive service providers. For all of the intangible items which accrual accounting attempts to place a value on, there are many others which such accounting does not capture, whose value is nonetheless real and exhaustible.

Jack Welch's tenure as CEO of General Electric is a salient example of this effect. In accordance with conventional wisdom, his time with the company was wildly successful. Reported profits were up, operating margins increased, and costs were down. Looking more closely at the evolution of the business itself, however, it's clear that this assessment doesn't really hold up to scrutiny. When Welch took over GE, the company was a highly respected manufacturer of a wide variety of different products, with a reputation for high quality and excellent engineering in virtually everything they made. Today, GE is a shadow of its former self, producing only a few remaining specialties, and whose trademark is no longer trusted by consumers, and whose engineering is largely entrusted to inexperienced new college graduates with little or no understanding of their predecessors' design intentions. In essence, the firm has largely become a financial company, perhaps aiding in other productive ventures, but engaging in very little production of its own.

How does a transformation like this occur? Jack Welch pressed for a strategy whereby GE would either be a top player in a given market, or otherwise liquidate the business. Otherwise profitable but relatively small subdivisions were closed or sold off, and the cash flow generated used to enhance the appearance of core profitability. The capital of the firm

was being steadily dissipated for the sake of near-term reportables, and capital wasn't the only thing being converted into cash. For commercial products divisions, the easiest way to gain market share was to dump low-priced, cheaply-made products onto the market. GE's brand recognition made such sales easy to increase at such price points, and few of the firm's competitors had enough reserve capital to withstand the period between the commencement of the price war and the time consumers came to regard the GE product as junk. In essence, the company's reputation was being converted into cash, with no apparent regard for the rate at which it was being exhausted. Welch's emphasis on creating a lean workforce led to the nickname “Neutron Jack”, and not without cause. General Electric would not hold on to any employee whose job functions could be undertaken by others. Like Welch's other strategic initiatives, this had an immediate positive impact on the quarterly report, but an ultimately fatal one upon the workforce itself, as will be examined in the next chapter.

The short-term emphasis of quarterly earnings reports made the Jack Welch mentality extremely popular, and it's not surprising that many firms followed General Electric's path from productive giant to industrial irrelevance. Xerox is now an outsourcing company, IBM draws most of its revenue from services, and Cisco Systems is attempting to move in that same direction. The capital commanded by such firms shrinks continuously, and any which is not bolted down (and even much that is) is converted into cash flow as soon as it becomes convenient. Inventories are cut to the bone, and in so doing the company loses the productive agility which once made them great. Such agility, the ability to react to changing market conditions and technology, is essential to growing the business in the long term, but the costs which must be incurred in the short term will not be tolerated by restless shareholders. New, expensive, and unproven ventures are shunned for the appearance of risk, leading to technological stagnation. Economic competition is a never-ending foot race, and as with any race, the most certain way to lose is to stand still.

Chapter XIX – The Hollowed Workforce

"A man must live by his work, and his wages must at least be sufficient to maintain him. They must even upon most occasions be somewhat more; otherwise it would be impossible for him to bring up a family, and the race of such workmen could not last beyond the first generation."[134]

- Adam Smith

Just as it is with any other thing, the price of any species of labor must at least be maintained at a certain, natural level, in order for the market to remain in supply. However, unlike consumer products and commodities, the effect of artificial price suppression does not necessarily lead to an immediate shortage of labor. Labor shortages, on the contrary, are generational in nature, and so it can take twenty years or more for meaningful economic impacts to come to light. This is especially true of those species of labor which take a lifetime to master. While it is true that some jobs require only the most basic training, as the specialization of labor has advanced, it has given rise to those careers whose veterans are a great deal more capable than the neophytes. In such professions, it is natural for the experienced to demand far greater wages than those just entering the field, a difference well justified by the fact that it will take new hires years, if not decades, to achieve a comparable degree of capability.

With the advent of modern business metrics, many productive firms have introduced the notion of "head counts", and many of those that have not used such explicit metrics have instead resorted to eliminating labor "redundancies" during any downturns in business. If one's job functions can be performed by another, then that worker's employment is not immediately necessary, and that individual becomes expendible. The natural consequence of such thinking has been to virtually annihilate support staff, those individuals whose jobs only

134*Wealth of Nations*. p. 72

serve to free up time for scarcer labor resources[135]. It has also led to the general elimination of mid-level positions, which cost more than new hires, but which don't serve any functions which couldn't be lumped on the senior staff level during slow times. The desired effect from a business standpoint is to create a "lean" workforce, based upon very similar rational principles as lean inventory, but the actual effect upon the skilled labor professions is profound, though barely perceptible at first. A given profession will retain, for a time, the proficiency and productivity of its leading members, and receive from trade schools and universities a steady stream of new entrants. What seems to be a robust and strong labor supply, however, is in fact being hollowed out in the middle, creating a gap in experience levels which grows longer and broader with each passing year. Once the knowledge gap between the old-timers and the new graduates or apprentices becomes too large, a general loss of capability becomes inevitable. What was once possible and economical suddenly becomes inaccessible or unaffordable. Among the easiest places to see this effect is in the author's chosen profession, that of engineering.

Walk in to any engineering office in the United States, and you'll be hard pressed to find any engineer on staff between the ages of 30 and 55. Indeed, the most likely individual in the office to fall into this range of ages will be the department's manager, and this is not by accident. The technical work itself is either performed by young engineers less than ten years removed from college, or old ones within ten years of retirement. In many firms, where age discrimination is rampant, one will often only see the former demographic. The discipline which can only come from oversight, and the understanding which can only be acquired through experience, is lost in the communications gap between old and young. An entire generation of engineers, who departed the profession for more lucrative careers in sales or management, or left industry completely, has been wiped out by penny-pinching accountants. Process engineers, general-purpose electrical engineers, and materials scientists have become particularly scarce. Process engineering has been depleted by the pressure to move

135This effect alone is an instance of technological regression, as the division of labor upon which human civilization is founded relies on ever-increasing specialization of each and every job function. Such specialization allows all labor sources to produce more and to be utilized more efficiently. See *Wealth of Nations*, pp. 9-28

production offshore, even though such support can rarely be found in foreign countries. Electrical engineering education long ago shifted its focus to integrated circuits, leaving no one to manage power and signal transmission applications. Today's materials science students almost always specialize in a particular material class, and the opportunity to find broad experience in the field no longer exists in America. This is because the need to know and employ all material classes was most intense in two fields: space exploration and nuclear engineering. NASA has done nothing of consequence since the end of the Apollo program, and industrial nuclear engineering has effectively been on hold since Three Mile Island, both events occurring more than a generation ago.

Similar effects can be seen among welders, solderers, machinists, electricians, and a host of other skilled professions. The commitment to suppressing wages on the part of management causes wave after wave of new hires to leave these professions as quickly as they are replaced. All the while, the lone technicians who hold within themselves the last vestiges of the art of their profession are retiring, one by one, never to be replaced. The unique capabilities they afford to their employers are being lost forever. Parts, products, and fabrication methods which used to be readily available are becoming scarce and expensive, despite the fact that demand for such labor has increased, not declined.

As a result of this condition, a sizeable clamor has come from industry representatives, complaining of a “skills gap”, alleging that universities and vocational schools aren't churning out the types of students they need in sufficient quantity. This “gap”, of course, is one of their own creation, one which no amount of formal education could ever hope to bridge. They themselves wiped out the very segment of the workforce which was once destined to fill these roles. Those few who are left, who are capable of doing these jobs, will not do so without being paid wages reflective of the scarcity and value of their work, and those capable of being trained for the role would demand the same once trained, in addition to asking the employer to pay for such specialized instruction. There simply aren't enough workers to go around, which means that those who do exist are almost certain to be already employed. To get the worker a firm wants, that firm must offer considerably more than those

workers make already. Unless wages rise well beyond their present levels, this shortage of skill will only increase, and even when wages do increase, it could take a decade or more for demand to be met by available supply. The firms which complain of educational deficiences are merely hoping against hope that the government will somehow relieve them of the need to obey market forces, as government has protected them from failure so many times before. This time, however, it is impossible for industry to retain that which it is about to lose, and once lost, it will take a very long time for mankind to rediscover these lost arts.

Chapter XX – Forced Imbalance

"The exclusive privileges of corporations, statutes of apprenticeship, and all those laws which restrain, in particular employments, the competition to a smaller number than might otherwise go into them, have the same tendency, though in a less degree. They are a sort of enlarged monopolies, and may frequently, for ages together, and in whole classes of employments, keep up the market price of particular commodities above the natural price, and maintain both the wages of labor and the profits of stock employed about them somewhat above their natural rate."[136]

- Adam Smith

In studying the professed opinions of the various schools of economic thought, great emphasis has always been placed on the theory of value, or else the theory of prices. The value theory set forth by Adam Smith, and many other Classical economists, is based upon all goods and services being compared to the value of labor. In the Austrian School, it is more common to find value being defined in terms of the utility afforded the consumer. It is often pretended that this is a divergence of opinion between schools, but in reality it is only a divergence of perspective. The utility theory of later economists, like many other modern economic concepts, is actually covered by Smith in his *magnum opus*.

Wealth of Nations discusses three different prices which are of importance to the study of economics. These prices are the market price, the natural price, and the price of monopoly. Market price is merely whatever price prevails in the marketplace, which is driven by both natural and artificial influences. Natural price is the price towards which, without collusion or restriction of supply, market price would tend to gravitate. It is the lowest price at which a good can be provided while paying the wages and profits necessary to justify maintaining supply. This is the price which Smith and his contemporaries would identify with the term "value", and it is a price largely driven by labor. This value is from the

136*Wealth of Nations*. p. 65

supplier's perspective, the value returned which makes the product worth providing. The price of monopoly, on the other hand, is the highest price at which a good is still worth buying, the absolute limit of what any degree of collusion or government intervention can affect in terms of price increases. In a market where supply is artificially prevented from increasing to meet demand, prices will push higher until the price of monopoly prevails. It does not matter whether there is one, ten, or a thousand different vendors, if supply can not meet demand, the market is effectively controlled by a monopoly. In this sense, supply restriction and monopoly are synonymous terms, and identical economic conditions. The price of monopoly is driven by utility, representative of the use or enjoyment derived by the consumer. This is the price which Jevons, von Mises, and later adherents of the Austrian School would identify with the term “value”, as taken from the buyer's perspective. The difference is semantic, not substantive.

The secret of value creation lies in the difference between these two prices. Trade occurs precisely because both parties have greater use for that which is acquired than for that which is given up in exchange. If certain exchanges did not suit both parties, no voluntary commercial activity could ever occur, and every man would be forced to labor for the entirety of his own subsistence. However, the goods we buy are of greater value to us than the money, ordinarily earned through the wages of labor, which we give up to procure them. To the vendor, the money received is likewise more useful and valuable than those items which are sold for it. In this sense, for the individual trade, the amount of wealth created does not depend upon where the market price is in relation to the natural or monopoly price. In the aggregate, however, the total wealth created is clearly at its maximum when market price is nearest the natural price. The wealth created by each exchange is always the same, but far more exchanges are made, far more goods are produced, and far more utility and enjoyment are received. Because market prices can only be raised above natural levels by restricting supply, achieving higher price levels must by necessity reduce economic output.

Natural prices only occur in situations where the market is completely at liberty, and in a truly free market represent the balance which is to be achieved given natural conditions and

the present state of progress. As time goes on, and mankind's productive capacity increases per unit of labor employed, goods should generally become cheaper. Certain items, like agricultural products, will naturally vary with natural conditions, but on the whole the natural trend of prices, in relation to wages, is downward. Intervention, whether it is by combination of workers in the form of labor unions, by combination of businesses in the form of corporate collusion, or by government in the form of subsidy, tax, or price support, can serve to increase prices relative to wages in the near to medium term. The burden of such cost invariably falls upon the consumer, that is to say, upon the whole of the population, for the benefit of only a very few. In this sense, all forms of market intervention, combination, and collusion are anti-competitive, and promote monopolistic prices within the markets they target. Such conditions are a forced imbalance of supply and demand, denying goods to the people which would otherwise be available, depressing employment, production, and real wages, and forcing everyone to bear higher real prices than they would otherwise have to. However vigorously such monopolies are defended, even in the government sphere, the monopoly price represents the absolute limit to the extent that prices can be raised for any significant period of time. If prices were to rise any higher, then the consumer would have no choice but to seek other means of satisfying the role which the monopoly-controlled products would otherwise serve, or to otherwise give up the convenience said products once afforded.

Even when a monopoly does come into being in an essentially free market, it ultimately sows the seeds of its own destruction. The ability of alternatives to provide comparable utility at lower prices or greater liberty spurs the innovation of indirect competitors. The railroad trusts of the 19th Century, for instance, greatly accelerated the advent of the internal combustion engine, which led to both road and air transport. The same steam power which made railroads possible also led to a revolution in shipbuilding, making shipping by sea cheaper than ever before. With these new forms of transport available, the prices charged by railroads declined, and the artificially high profits they once afforded caused many rail lines to come to an unprofitable and premature end. The idea that

governments need to break up or otherwise prevent monopolies is downright laughable, since government almost always plays a key role in each and every monopoly's creation.

All forms of active government regulation, however slight and however well-intentioned, have the effect of amplifying the economy of scale, restricting supply, and reducing the number of market participants, which in turn increases the risk of collusion. Even in the complete absence of corruption, the results of government action are still anti-competitive, and invariably work to the detriment of consumers. Of course, it is well known that collusive entities such as corporations and labor unions are amongst the most active participants in governmental lobbying on all levels. These entities pretend that there exists a conflict between labor and management, when in truth both are supported by monopolistic practices, which government protection is required to enforce over long periods. Just as it was in Adam Smith's day, merchants and laborers alike attempt to convince the statesman that their product, trade, or profession is of national importance, and that it should be protected to the detriment of all others.

In the natural marketplace, economy of scale is very much a natural phenomenon. As production increases, supply chains can be streamlined, transport costs per unit decline, and the labor and material costs required to produce each unit are reduced. In this sense, it is natural for the larger business to have a pricing advantage over the smaller. However, this applies only to instances where both firms are producing *the same product,* and only upon the cost of production, not upon the total efficiency of the business. What the large firm gains in efficiency it must necessarily surrender in terms of agility and creativity. The unit cost of production may be much less for the large firm, but under natural conditions, the smaller firm will invariably have an advantage in bringing new and different products to market. The smaller firm relies more heavily upon labor, and upon individual expertise, which has far less of an up-front cost than that of the tooling and equipment needed to initiate a massive assembly line. Moreover, in the absence of regulation, the small firm is composed almost entirely of productive laborers, whereas large firms must by nature employ a much larger proportion of administrative workers, who create no value at all. Large firms may find

themselves at a distinct advantage in certain realms, and an equally decisive disadvantage in others. In any event, the market will provide more numerous opportunities, though not necessarily more valueable ones, to smaller firms.

Once government enters the fray, however, the advantages that smaller companies have in the marketplace quickly begin to erode. Complex tax codes and reporting requirements, which large companies already have accounting staff and software to comply with, small firms must hire unproductive workers or hire outside servicers to do the same. These costs are proportionally larger for smaller companies, which have fewer workers and smaller sales, but whose reports and returns need to be nearly as detailed, and require nearly as much work to compile. Once the burden of paperwork exceeds that which a business owner can handle himself, it becomes much more difficult for the average person to employ his or her own capital. Whatever expertise they may have in their chosen field, the time demands of accounting preclude any possibility of economically viable self-employment, because the cost of reporting is very nearly as great as the operation of the business itself.

Testing requirements, environmental regulations, and safety rules also add to the proportional burden of small firms, especially as it pertains to start-up costs. In the early days of the automobile and the airplane, starting a productive firm required only enough labor and capital to build a single unit, and to sell that unit for more than enough to build the next. Such firms were often founded by the engineers and craftsmen of older, larger firms, using only the capital which a brief professional career had allowed such workers to accumulate. Vehicles would often be tested by the inventor himself, at his own risk. Any class of vehicle could be built, and production increased only as much as sales and available capital would allow. Today, however, the number of tests and forms required to place even a single car on the road, or a single plane in the air, are so great as to eliminate such a possibility. The federal government requires units to be furnished for crash testing, an insignificant cost to a company producing a million units, but far more considerable to the firm intending to produce ten or twenty. CAFE standards, in addition to diverting design attention away from productive purposes, effectively preclude any small firm from offering

any class of large vehicle at market competitive prices. For example, no company could ever afford to just build large station wagons, even if the market would buy them, and even if the model produced were more fuel efficient than any other member of the same vehicle class, because the fines imposed for missing “fleet” economy requirements would price them out of a market dominated by large firms who can use subcompacts to offset the poor fuel economy of larger vehicles. Market entrants wishing to serve anything other than the high-luxury market may produce nothing but compacts and flex-fuel vehicles, which larger firms already dump onto the market at or below cost to maintain their fleet averages, again to avoid CAFE fines. In other words, the automotive market is effectively closed to any new market entrants wishing to provide inexpensive family or utility vehicles.

As much as industry representatives may claim that these regulations are bankrupting them, they are also protected from new competition by this very regulation, and are thus at liberty to pass their costs on to the consumer, provided they have not already reached monopolistic price levels. Once this point is achieved, the industry itself is doomed anyway. The possibility and consequences of failure are the most essential element of free market economy, and it is here that government intervention really shows its support for the Goliaths of the market.

Failure is what allows mankind to learn from experience, to discard those things which do not work in favor of those that do. If the possibility of failure weren't ever-present, and if the consequences of failure weren't unpleasant, no one would ever have any incentive to try anything new, or to do anything of consequence. The notion of particular large firms or industries being “too big to fail” or “systemically important” or “vital to the nation's interests” is antithetical to the concept of freedom. In a free society, we are free to succeed or fail upon our own merits, and all opportunity, both positive and negative, is equally available to all who engage in commercial enterprise. Unfortunately, the experience of a truly free market has long passed out of living memory, and all of the oppression which results from government protection of domestic monopolies have been revived in the very nation created by men who would not submit to such tyranny.

If a single firm is critical to the system, then the system must be allowed to fail along with the firm. If the system is essential to government revenue, then the government deserves to go bankrupt for placing the public treasury into such a state of dependence. Without failure, the lesson is not learned, and the near-term rewards of reckless policy are never tempered by the longer-term calamity which is certain to follow. Looking at government and central bank interventions over the years, it's impossible to overlook the fact that whatever the problem, the tactics used to fight the crisis are always the same, and are never effective. The answer is always to bail out the large firms which would otherwise be destroyed, and to support price levels which already oppress the working class. Governments being most dependent upon the financial sector, they will defend that sector's giants most vigorously. Statesmen will pretend to scold them, and levy meaningless yet impressive-sounding fines upon them after they've gorged themselves at the public trough, but the politicians' resolve to see them survive will be absolute, as government and “private” finance are essentially the same entity. Real wages rise through the falling of market money prices, deflation and progress are synonymous terms. In using artificial inflation to combat natural deflation, and public bailouts to forestall private failure, the true state of the economy is pushed further and harder from its natural state of balance. Just as a steel spring's release is more violent the further it is held in tension, so the economic shock becomes more devastating the longer the market is prevented from reaching its natural state of equilibrium.

Part IV – The General Character

Chapter XXI – Living Memory

"To not know what happened before you were born is to forever be a child. For what is the time of a man, except as it is interwoven with the memory of ancient things of a superior age?"[137]

- Cicero

The true nature of the present crisis is not one which can be grasped by personal experience alone, nor can it be identified merely by uniting the sum total of our collective memories. The great tragedy of our time is one which took multiple generations to craft, and it is for this very reason that even the most learned among us struggle to comprehend the magnitude and inevitability of that which is still left to come. While those who remember the misfortunes and misdeeds of the past still live, they may serve to remind us all of the wisdom and virtue which brought civilization through the darkest of times. As generations pass, however, and their experience passes out of living memory, it is fairly easy for the evils which plagued their day to creep back into existence, especially if no one takes the time to learn what caused these evils to come into existence in the first place.

One of the more obvious examples of this phenomenon is the notion that the events of our day are exceptional, unusual, or unprecedented. It might readily be said that the only reason we refer to the great conflicts of the 20th Century as World War I and World War II is because the first two world wars had passed out of living memory by the time Archduke Franz Ferdinand was assassinated. Even today, schoolchildren in the United States typically learn of the sideshow theaters in which Americans participated as the French and Indian War and the War of 1812, but never come to know that these were merely a small part of the

137Cicero, Marcus Tullius. *Orator Ad M. Brutus*. Verse 120

global wars which were the Seven Years' War and the Napoleonic War, respectively. They do not come to appreciate the scale of them, let alone the consequences which events half a world away had upon their nation's founding. Each of these conflicts was at least as great in geographic scope as was the war which began in 1914. The ships may have been made of wood, and powered by sail, as opposed to steel and steam, but this meant only that war took more time to spread around the world, not that it was prevented from doing so. As soon as global navigation became possible, global commerce and warfare became possible, and it should not surprise anyone to learn that world war followed very soon after the advent of global commerce. Once it was possible for people, materials, and information to travel from any inhabited place to any other, the idea of remaining isolated from distant conflicts could no longer be a reasonable expectation.

In addition to giving rise to the study of economics, the advent of world war gave humanity the antithesis of the liberal principles which early economists promoted: modern socialism. This is no accident of circumstance, either. Socialism, which at its root is the use of the coercive powers of government for the purpose of achieving particular social ends, has existed in abstract form since the earliest days of civilization, because socialism is the very essence of tyranny. However, before the middle of the 18th Century, socialist ideas were scattered about and applied in a piecemeal fashion, most often to assist with the one useful aim for which socialism itself is quite useful: the waging of war. Active oppression of a nation with static borders seldom maintains its strength for very long, because such oppression will invariably weaken either the tyrant, the populace, or both. In ages past, when populations and thus armies were comparatively small, and wars were fought through battles of encounter, control of the countryside was a daunting task, and effective control of trade and commerce nearly impossible over long periods. Even as restrictive regimes sprout up, merchants are especially skillful at finding new means of achieving profit, and if such profit can not be found locally, then it is sought elsewhere. Either way, the long-term objectives of socialist programs can never be achieved except by conquest.

Conquest itself was a major theme of early civilization, and since earliest time kings

and emperors have sought the means by which their dominions could grow. The most effective forms of government, however, dispersed power and only sought to use it in times of war, when it was most needed. The feudal system, for example, gives ultimate authority to a sovereign individual, but when the lord's vassals are not called up to serve in wartime, they are at liberty to govern their own domains as they see fit. Those who govern well will see their wealth and dominion grow, and those who are idle or profuse will see their own fortunes shrink. War itself was periodic, seasonal, and typically brief, which usually meant that the weight of government was comparatively light. Such a system isn't necessarily weaker than the later mercantile system which colonial powers later adopted, as best showcased by then-feudal Ethiopia's victory over colonial Italy at Adwa in 1896. The reason feudal order yielded to the mercantile regime in Europe was because of the growth of viable colonies. Oppressed domestic populations, especially in the United Kingdom, suddenly had the option of leaving the countries of their birth, rendering control of the peasantry impossible. New forms of governance were needed to handle the complications of colony and international commerce. These forms took divergent paths, those of liberalism and socialism. Liberalism tends to sprout up where citizens are most at liberty, and as such, far-flung colonies often founded liberal forms of government. Organized socialism, however, invariably has its roots in war.

The English Civil War which began in 1642, and the military protectorate which followed gave the world its first fleeting glimpse of precisely how effective socialist warfare could be. Oliver Cromwell's New Model Army was the first of the professional forces which would revolutionize modern warfare. In peacetime, however, the Protectorate was an abysmal failure, lasting well less than a generation. After Cromwell, the wars which had once been regular but brief took on an entirely different character. From the Anglo-Dutch Wars, to the War of Spanish Succession, to the War of Austrian Succession, conflicts grew ever bigger, with more and more professional soldiers. Each passing conflict was larger, more expensive, and less conclusive than the last. Nowhere was this more true than in the colonial theaters of conflict, which often involved Asia, Africa, and the Americas.

While colonial possessions were distant and often sparsely populated, the revenues they represented to their spective patron nations could be quite considerable. Indeed, most of the colonial wars of the 18th Century were primarily fought over that most valuable commodity, sugar. Sugar may seem like an odd thing to go to war over, but it has a very practical use in extending the life and utility of food crops grown locally. Given that many European nations lived on the brink of starvation for much of the period, loss of sugar supplies could prove quite devastating to a country's populace. Indeed, the French essentially traded Canada for sugar-producing islands in the Lesser Antilles during the Seven Years' War, and the Dutch did likewise in giving up the territory which would become New York and New Jersey after the Second Anglo-Dutch War, a conflict in which the Netherlands were unequivocally victorious.

The growth and importance of global trade to the fortunes of European nations, both in war and during subsequent times of peace, made the development of economic theory a topic of great national and international importance. In most nations, the first system of political economy to be developed for the expressed purpose of drawing maximum benefit from such trade was the mercantile system. The mercantile system derives its name from the diverse mercantile interests which dominated political discussion, and helped to shape the restrictive codes of law which pervaded Europe during the 17th and 18th Centuries. The objective of the system was to maximize the inflow of money, in the form of precious metals, into the subject nation by achieving a favorable overall balance of trade[138]. This arose from the confusion of money, which in this time was held in the form of gold and silver, with value. Indeed, Adam Smith notes that the Spaniards' efforts to identify gold- and silver-rich provinces in the Americas was not much different in purpose than the Mongols' efforts to identify countries rich in livestock. The standard of exchange in each country was used as a measure of territorial wealth, and so the Spaniards sought silver and gold where the Mongols sought cattle[139].

In all mercantile nations, there was a tendency to constantly increase the complexity of

138*Wealth of Nations*, pp. 326-330
139Adam Smith notes that the Tartar notion of value was probably closer to the truth.

laws pertaining to trade, transportation, and employment. Taxes, tariffs, prohibitions, drawbacks, bounties, and other measures were enacted, always seeking to protect domestic industries or trade routes which were deemed to be of national importance. In this sense, the lobbying which mercantile interests pressed upon lawmakers and government officials back then was not much different from the lobbying which modern corporations and labor interests press upon lawmakers and regulators in Western nations today. As it was the merchants of the home nation which drove the passage of new laws and regulations, distant colonies became at once prized as potential markets, and oppressed as potential competitors.

The colonial sources of gold, silver, spices, tea, and sugar became essential to national fortunes, and thus the objective of conquest for all of the world powers of the Age of Sail. Corporations like the British East India Company became proxies for their sovereign nations, often maintaining fleets and armies of their own with which to secure and enforce the trade monopolies upon which their future profits would depend. Such companies, which though nominally private were often state-sponsored, functioned as extensions of the state. Similarly the state served to further such interests[140], especially when they assisted in the broader goal of colonial conquest. The goals of commerice and conquest were thus linked, and national enrichment and military victory were deemed to be synonymous[141]. The purpose of waging war was to increase national commerce, and the purpose of conducting commerce was to enhance the nation's ability to wage war. The conditions at last were ripe for the discovery of national mobilization and total national warfare. While this innovation is most commonly associated with the French during their Revolution (which itself was merely an early phase of the Napoleonic War), its usefulness was actually discovered a generation earlier by Frederick II of Prussia, who is also known as Frederick the Great.

Prussia was a comparatively small nation in the 1700's, whose growing power was not yet well-recognized by its neighbors. Frederick II ascended to the throne of Prussia in 1740,

140The Tea Act of 1773, which provoked the Boston Tea Party and, ultimately, the American Revolution, was essentially a bailout of the British East India Company.

141The ruinous costs of the Seven Years' War led Adam Smith to question and ultimately reject this idea. Even the victorious British were left heavily laden with war debts which Parliament struggled to repay through taxes, with disastrous results for its dominions in North America.

and immediately he began his efforts to expand his dominion. Prussia was surrounded by the long-established powers of France to the west, Austria to the south, Russia to the east, and Sweden to the north. To help overcome Prussia's natural disadvantages of geography, Frederick sought to control virtually every aspect of the national economy in order to help his army stay in supply, and to protect his population from the ordinary ravages of the wars he intended to wage against his neighbors. Protectionism and indirect taxation were major elements of his reform program, intended to make domestic industry self-reliant, since during wartime the country could expect to be effectively blockaded. He even went so far as to force his subjects to switch from cereal crops, such as wheat and barley, to underground ones such as the potato. Fields of cereals could be burned or trampled by cavalry, but potatoes were protected by the earth, assuring that Frederick could burn out and starve his enemy's peasantry without fear of reciprocal action from his enemies.

Frederick the Great's preparations paid off during the War of Austrian Succession, when he was able to take control of the rich territory of Silesia from the Austrians. Prussia was again well-prepared for the Seven Years' War, which saw it successfully thwart invasions from north, south, east, and west. The success of Prussia in continental Europe was what allowed her ally, Great Britain, to retain the bulk of the American territories she had conquered from the French. William Pitt, who led Great Britain during the Seven Years' War, was often quoted as crediting the British Empire's gains to the victories won in the German theater. France's obligations as a continental power had to come at the expense of her potency abroad, a fact which made British victory in the global theater a practical reality.

The fiscal ruin of France in the Seven Years' War led directly to the national collapse which was the French Revolution. Although the French Revolution is often argued as a natural outgrowth of the American Revolution, the ideological roots of each are so different as to make such comparisons plainly unreasonable. Alexis de Tocqueville's *Democracy in America* underlines the reasons why the United States maintained its state of liberty while France quickly returned to despotism. The agents of the French Revolution did not understand the concept of liberty, and the coupling of liberty with equality underscores the

true purpose behind their actions. The feuds and jealousy of oppressed peoples were turned upon the aristocracy, and then upon various factions of the larger population in an orgy of violence known as the Reign of Terror. The inability of government, even of elected government, to enforce its will upon the people as it pertained to everyday life was made plain. It was only once Napoleon Bonaparte turned this apparatus of national collectivism back towards the objective of conquest that the nation itself began to mend. Napoleon's ultimate defeat does not refute the notion that his use of national mobilization and organization allowed France to achieve military successes which would have otherwise been impossible for a nation of its size and wealth.

The success of such totalitarian systems in wartime invariably gave rise to the idea of applying such controls in peacetime. Whether these were to be implemented piecemeal or as part of a comprehensive socialist program, the tendency of even small measures of socialism is to gravitate towards one of two totalitarian systems, those of Marxism and Fascism. The meaning of both of these terms is somewhat lost on modern generations, but it is particularly the latter which has become a taboo subject of discussion. In the aftermath of the Second World War, the victorious allies forcibly suppressed virtually every aspect of fascist literature and iconography. Even Finland, whose use of the swastika long predated Fascism, and had nothing whatsoever to do with the ideology of Naziism, was forced to remove any trace of icons which might be construed as fascist. As such, generations of Western students have come to learn that fascism was somehow evil, without ever learning what fascism itself even was. What little most people think they know about the subject is associated with Nazi Germany, which links the term inextricably with genocide. Genocide and racism were, of course, the particular social conditions which the Nazis used fascist methods to bring about, but fascism itself has nothing necessarily to do with any particular social agenda, least of all racism.

Understanding the achievement of totalitarianism through the explicit public expropriation of all private property, which is the basic tactic of Marxism, is fairly straightforward. This makes the nature of communism fairly easy to grasp intellectually.

Fascism, on the other hand, uses much more subtle and indirect methods of bringing about the user's intended social objectives. Again, what the socialist's particular social objectives are have nothing to do with defining whether that socialist is or is not a fascist, it is only the tactics which the socialist chooses to employ which are material to the discussion.

Fascism did not, of course, begin in Germany, it was born in Italy. As ancient as Italian civilization is, the modern country of Italy traces its origins only back as far as 1861. It was in this year that the Kingdom of the Two Sicilies was finally conquered by the Kingdom of Sardinia, which was then ruled by the House of Savoy. For this reason, Italy was a very late participant in the colonial era, having obtained only a handful of north and east African territories, as well as earning the distinction of being the only European power to be successfully repulsed by an African nation. During the First World War, Italy fared relatively poorly, committing far more men and material to the effort than it originally intended, and receiving far less from the Allied victory than it had been promised[142]. The economic shock which followed WWI afflicted Italy more than other Allied countries, which enabled the fascist takeover of the country in 1922, a full decade before it was to take root in Germany.

Benito Mussolini himself can be accurately characterized as the founder and creator of fascist doctrine. During his youth, Mussolini was heavily influenced by Marxism, and was himself a member of the Italian socialist movement. Expelled from the Italian Socialist Party for his support of Italy's entry into the First World War, which the party opposed, Mussolini became disillusioned with the communists. However, he was not willing to abandon the use of state power to achieve the social ends which were the reason he became a socialist in the first place. Instead, he founded an entirely new form of socialism.

Mussolini's definition of the system which he created couldn't be simpler:

"everything in the state, nothing against the state, nothing outside the state"[143]

142Italy was actually a signatory of the Triple Entente with Germany, but as Italy's main territorial ambitions were to the detriment of Central Powers Austria-Hungary and Ottoman Turkey, they ultimately chose to side with the Allies.

143From Mussolini's *The Doctrine of Fascism*, 1932. Found at: http://www.worldfuturefund.org/wffmaster/Reading/Germany/mussolini.htm

In a nutshell, fascism is simply the act of equating society and state, state being government. Where the Marxists sought total control through complete expropriation, the fascists achieved such control by getting the owners of property, and specifically the owners of capital, to accept their roles within the state. There are no individual rights, only responsibilities to society, which are obligations to the state. The threat of expropriation, or of ruin being visited upon them, was far more effective than outright theft in terms of coercing industries to do the state's bidding. It was not necessary, in fact it was counter-productive, to take explicit ownership of factory and stock when the owners of such capital could be compelled to obey the government's decrees. Of course, competition must be limited through protectionism and corporatism in order to keep the number of "private" industrialists manageable for the state, but public command of resources is as complete as, and far more efficient than, any communist nation could ever hope to be. If society and state are one and the same, then every person is a servant of the state, and all social and economic action must be in accordance with the state's objectives, whatever those objectives may be. By this definition, fascism is not an ideology, but merely a methodology. It is defined only by its tactics, and not at all by any particular objective.

The only thing that separates our present corporatist state from a truly fascist one is the uncertainty of adverse state intervention in the case of private disobedience or divergence from publicly stated goals, and this is already a tenuous distinction at best. The best illustration of near-certain punishment of private defiance can be found in environmental regulations. In a manner of speaking, it is quite easy to argue that Green is the new Blackshirt. The immense and ruinous costs and restrictions which can be arbitrarily handed down by government bureaucrats, the constant diversion of private labor, research, and capital towards "environmentally friendly" goals, and the very public extra-governmental groups who, with tacit public support, constantly menace those who don't accept the official state version of facts, these are precisely the set of tactics which Mussolini chose to employ. It's a slow, often subtle process, and it even may sound well-intentioned at first, but the end objective, which is the complete command of all private capital, is one and the same. Indeed,

this totalitarian intention of the Greens is made plain through the idea of “Cap and Trade”.

“Cap and Trade” is a proposed system of capping emissions, most commonly carbon dioxide, and only allowing a set pool of carbon credits to be bought and sold on an ongoing basis. Because these emissions govern virtually all forms of industry, this has the end effect of permanently closing off all productive industries to any new participants. Corporations would have complete command of their respective markets, and since no new supply could ever come into existence, monopolistic prices would govern everywhere. Government sanction of these credits would enable the state to destroy any remaining industry player any time it wanted, simply by rescinding its right to “pollute”, which is one and the same as that industry's ability to produce. This is totalitarianism at its most basic, its most complete, and its most fundamentally fascist. The social objective may be quite different from Mussolini's, but again it's only the tactics which are material to this discussion.

Without understanding fascism, any hope of combating it is entirely lost. Whatever immediate social end is behind the use of fascist methodology, the objective always morphs into one of complete economic servitude. Of course, those who would employ fascist methods to their own ends were among the very first to misrepresent the meaning of the term. Take this line from Franklin Delano Roosevelt:

> *“The first truth is that the liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than their democratic state itself. That, in its essence, is fascism — ownership of government by an individual, by a group, or by any other controlling private power.”*[144]

This definition is actually inverting the meanings of liberty and fascism. Liberty requires that all individuals, groups, and private powers be equal to that of the state, all being subject to the rule of law, while fascism seeks for the state to dominate all private parties. What form the state takes, be it dictatorship, oligarchy, or democracy, does not make the

144From Roosevelt's Message to Congress on Curbing Monopolies, April 29th, 1938. Found at: http://www.presidency.ucsb.edu/ws/index.php?pid=15637

state's dominance over private capital any less fascist. Roosevelt knew this, of course, as his New Deal was largely inspired by Mussolini's work programs of the 1920's. As the fundamental evils of fascism became apparent, it became politically necessary for FDR to create a false distinction between European fascists' efforts and his own. It must be remembered that it was this very period, and this very President, which warped the definition of "liberal" to be taken as "socialist" in the United States, which is precisely the opposite of what the word "liberal" really means.

Those who lived through the rise of fascism would understand that economic control by the state and totalitarianism are one and the same[145]. Where the Marxists exclusively used brute force and removed economic incentive, the fascists selectively used and more broadly threatened brute force while perverting economic incentive towards their own insidious ends. There is no difference in principle between communist and fascist, only a difference of method, and no principles at all to be found in either of them. Once no one was left to remember this period, fascism became a ghost, an unspeakable thing which everyone accepted to be evil, and which virtually no one has ever learned to recognize.

The fact that the present economic malaise is the result of policy mistakes spanning multiple generations is the very reason that the causes of this crisis have proven so difficult for academics and politicians alike to to identify. Long-held fallacies have so entrenched themselves within the platforms of all major political parties that uprooting them from these political machines is impossible without first destroying the political apparatuses which uphold them. Policymakers will continue to stand in defiance of any meaningful effort to find a permanent solution to the issue, because the system which they serve *is* the issue to be solved. However adverse the results of their actions are, they will continue to press for more of the same. The only meaningful dialogues regarding the progress of the West took place very near the beginning of this tragedy, and the stern warnings of Menger, von Mises, and Hayek, fall upon us now as the faintest of whispers. Few even know who they were, let

145*The Road to Serfdom.* pp. 124-133 – Hayek fled his native Austria because of the expanding influence of fascism there, and having experienced its results first hand, he was better acquainted with fascism's true nature than any British or American theorist of his day.

alone what they stood for, and the same can be said of the demagogues and academic charlatans whose guidance won out during the 20th Century's greatest periods of turmoil. If a mature, responsible course of action is ever to be found, then mankind must first make the effort to learn of the events and ideological struggles of ages long past.

Chapter XXII – Aging Demography

"Nature abhors the old"[146]

- Ralph Waldo Emerson

Aging is a demographic malady which presently afflicts nearly all of the industrialized world, as well as many developing nations. The root cause of the declining birth rates observed in the developed world is depreciating currency. This has been coupled with great strides made in life expectancy, fueled in large part by the wave of technological progress left behind by prior generations. The advance of civilization can not long continue in a society where too few are left to provide for the population's sustenance. Sustenance comes not merely in the form of wages, goods, or even food. At its most basic level, the sustenance of every society must come in the form of children. If the old ever come to outnumber the young, the relative proportion of childless adults must also rise. Because only women of a certain age may bear children, and then typically only one at a time, the balance of age within a society is a delicate one. These women alone provide society's sustenance, and without them, any civilization, regardless of how wealthy or technologically advanced it may be, is doomed to perish. The longer birth rates remain depressed, the smaller the proportion of child-bearing women becomes with respect to the population as a whole. Thus the demographic imbalance of a given nation becomes more difficult to reverse with each passing year.

A quick look at the age demographics of developed nations shows how far this situation has already progressed. The median age in United States is nearly 37, and the specific figure for women is just over 38. This means that fully half of the population is older than this. Given that life expectancy is only about double this figure, it means that the number of people entering their productive years is already barely matching those leaving the

146From his essay, *Circles* (1841)

workforce, if not actually falling short. Given that nearly every social program's solvency depends upon the young outnumbering the old, the fiscal consequences alone are quite apparent. What is worse, many other developed countries are even older than the United States of America. Japan's median age is nearly 45, and 47 among females, in Germany the respective numbers are 45 and 46, for the United Kingdom and France, 40 and 41, Italy 44 and 45, Russia 39 and 42, and Spain 41 and 42. Even China isn't all that young, thanks to forced suppression of fertility rates, their median age is 36[147]. Given the shortage of females in its younger age groups, the demographic strain that China is under may be just as severe as any of the aging nations of Europe.

Let us suppose for a moment that the solvency of a system like Social Security or Medicare is solely dependent upon money. The notion that today's retirees have somehow paid for their own retirement is patently false. Government, as it has been noted, spends funds as soon as they are received, so each generation in a social entitlement program in fact pays the benefits of the generation which preceded it. Since demographic imbalances can be anticipated, trust funds might be established in advance of the actual labor shortage to account for the revenue shortfall the sovereign knows to expect. If sufficient funds are set aside, then the system could theoretically remain solvent, the largest generation could receive their benefits, and the small generation which follows would not be troubled for additional taxes. The system could hold out until such time as demographic balance is naturally restored.

This analysis, however, depends upon a false presumption: that a man's subsistence consists of money. It consists not at all of money, but of goods, and in the case of the elderly and infirm, also of otherwise unproductive services. All the money in the world does little good if too little food is produced, and all the healthcare coverage in the world is ineffective if there are insufficient personnel and supplies to meet the demanded provision. The solvency of the social welfare system depends not upon money, but upon food, capital, and most of all, human labor. No amount of advanced funding or preventative savings can make

147Figures from *The CIA World Factbook 2012*. Figures have been rounded to the nearest whole year.

real the goods which are not produced, the capital that has not been accumulated, or the workers who have never been born. The shortage of qualified persons to provide medical care leads to rising prices, and efforts to cap these rises for the sake of public solvency only worsen the shortage by turning those with the intellectual capacity away from medicine and towards easier or more lucrative career pursuits. Even machines and technology are of virtually no use in stemming the tide of rising prices which come hand in hand with a shrinking workforce, since they require more capital to sustain than human laborers do.

The universal response to these shortfalls within developed countries has been to cap prices and to shift the cost burden off of the numerous old and onto the scarce young. Whether it's the protection of older workers' employments, restriction of age-based premiums which insurers are allowed to charge, or plain old generational theft by debt issuance, those who are young are asked to pay more to diminish the burden upon their elders. This renews and worsens the demographic crisis, as only the young are in a position to bear and raise the children which must come to be if the situation is ever to be corrected. Of course, by the time a nation's finances and demographics reach this point, it is already too late to prevent sovereign bankruptcy. The obligations of the government must be broken, both to bondholder and beneficiary, if the young working taxpayer is ever to be liberated from the obligation to work for everyone's welfare but his own. The freedom the young now enjoy is nominal at best, as nearly all of the opportunities of their parents and grandparents have been closed off to them. The government asks more of them with each year, more time, more work, more education, more money, more information, and more obedience. Fewer and fewer among them achieve wealth, fewer are able to marry, and nearly all are able to afford fewer children of their own. The very essence of liberty is being stolen from them, and still more so from their children, with ever-increasing rapidity.

The American left's commitment to population and birth control is particularly disturbing when viewed within this context. A great deal of comment is made about unwanted births, unplanned pregnancies, and the cost of raising children. Yet if children consumed more than they produced as adults, our civilization could not exist in the first

place. Viewing children, any children, as a net cost to society is absurd on its face when viewed in the context of that child's entire life. When viewed from this perspective, the essential nature of child rearing becomes apparent. If children are not born in sufficient numbers, then eventually human labor will become so scarce as to be unable to sustain the economy as a whole. Any effort expended to reduce the number of children born, beyond what natural economic conditions already limit them to, only serves to diminish the productive power of the economy over time.

However, the cost of rearing children does not consist of money, either. It consists of food, capital, and most of all of human labor. For nearly all of human history, the intensive labor of parents accounted for this provision. Yet today, these resources are being drawn off to supplement a workforce which is critically short of all of the most essential economic functions. But in doing so, society has been depleted of the most important social and economic function of all: motherhood. Mothers are plainly the most productive of all laborers[148], and the most essential element of any population. A nation can get by with a shortage of scientists, engineers, teachers, doctors, lawyers, and economists, most often by minding the quality of those few who remain. But no nation can long endure a shortage of mothers, much less a shortage of children.

The social welfare system aggravates demographic aging specifically because it diverts labor from the productive mode of child rearing to the unproductive mode of sustaining the old. Both demographic groups compete for the same pool of resources, which by nature is insufficient fulfill both purposes. The more committed governments are to supporting the system, the more thorough the depletion of the workforce becomes. Women today are not faced with a free choice between career and motherhood, they are compelled by economic policy to favor the former and to neglect the latter. The value produced by an ordinary laborer ceases upon their retirement, but the value produced by a mother continues to grow so long as her progeny continues to inhabit the Earth, that is to say, indefinitely.

Limiting births and marriages for the sake of supporting those who already live may

148Using Adam Smith's definition of productive labor, the vendible commodity which remains at the end of a mother's labor is labor itself.

seem to be the more humane thing than allowing children to be born into poverty, but the poverty of the young who remain is only increased by such measures. In truth, the only reason the subjugation of the youth is allowed to continue is because the old outnumber and therefore outvote the young, and because the young have never known, and thus never learned to value, the liberty their ancestors regarded as sacred above all other things. Unfortunately, democratic principles and demographic reality give those in government circles good reason to trust that popular support for such measures will continue for some time yet.

However committed politicians and the direct beneficiaries who support them may be to maintaining their own condition, the inevitability of the system's failure is still plain for all to see. Nature will eventually triumph, and the old will be swept aside to make way for the young. If nations admit to the failure of their policies, then the youth of their countries shall finally have the liberty and economic opportunity which has been denied to them for generations. If not, then these aging nations will themselves be swept aside by the growing tide of young, burgeoning, developing ones. In short, the West can stop its habit of generational theft, or commit itself to demographic oblivion.

Chapter XXIII – Forgotten Character

"Live free or die: Death is not the worst of evils."

- John Stark

The written words of America's founding fathers show that they were a diverse group of individuals, unified by courage, wisdom, and a complete devotion to liberty. The founders of any republic leave an impression of their character upon the nation they leave behind. As time goes on, this influence tends to decline, but never is it erased completely. Few nations began with as much promise, or were organized with as much wisdom and forethought as the United States of America. Between the first shots at Lexington, and the final ratification of the United States Constitution, even these most learned men who led the revolution had managed to make nearly every mistake a new nation could make. They had run headlong into a war for which the colonies were ill-prepared. The colonial militia which besieged the British garrison at Boston had their enemy outnumbered six to one, but had barely enough powder to fire each soldier's musket thrice. Intrigue and political favoritism thrust older, wealthier men from large colonies to positions of military leadership while suppressing the rise of more capable subordinates. A loose confederation of states led to infighting and even rebellion. The Continental currency had collapsed entirely. It was only after experiencing all of this that our founding fathers were ready to craft a form of government built to long endure.

The war which was brought upon the colonies was not with King George III, as is commonly professed today. The tyrant seeking to oppress the colonial population was not a dictator, but an elected congress, the British Parliament. It was Parliament which sought to tax the colonies to pay the debts it contracted during the Seven Years' War, in order to reduce the burden upon their own constituencies. Never mind that the colonials had fought hardest, and contributed most to the territorial gains of the Empire, they were viewed as being

wealthy and fortunate relative to the common people of England, Scotland, and Wales. This wealth and good fortune sprang from the natural spirit of liberty which came from being so far removed from the seat of British power. Taxation without representation is tyranny, whatever the purpose, whatever the justification. Our nation's founders were not willing to compromise this principle in the slightest, and it is for this reason that the American Revolution was fought so soon, and fought to a just and honorable conclusion.

It is commonly said that what this nation needs now is compromise, but the truth of the matter is that compromise is not one of our nation's founding principles, and it has no place in our form of government. The separation of powers and the checks on various exercises of government power were meant to assure that in matters of controversy, governmental inaction was all but certain. It is better to satisfy neither side in the interests of making sure than none are oppressed, even if this prevents actions desired by a substantial majority.

In all of their efforts to resolve potential conflicts and prevent oppression, our founding fathers inexplicably left one matter unresolved: slavery. It was plain to many at the Constitutional Convention that slavery was a very thorny issue, but it was only one among many, and one plainly antithetical to the notion of liberty. Had the convention managed to at least schedule the institution's abolition, the Civil War which nearly destroyed the United States would never have occurred. Their failure, in truth the only real shortcoming of the convention, was the source of nearly all of the internal strife of America's early years. During this period, the first great period of compromise, one agreement after another was made to maintain a balance between free state and slave state, in the vain hope that the ideological conflict between abolitionist and slaveholder could somehow give way to peaceful coexistence. What was compromised was the liberty of African Americans, the freedom of people not represented, an act of evil, or at least a tolerance of evil, which only served to delay the inevitable conflict until such a time as the slave-holding states had the greatest chance of victory.

Today, America's fiscal woes are front and center, and yet everyone seems to want both sides to put aside their beliefs for the sake of expediency. The President of the United States

openly declares his intention of raising taxes upon a small minority of well-off citizens whom his party claims not to represent. If either side acted in accordance with their principles, as our founding fathers did, there would be no room for compromise, and our national bankruptcy would come about openly and immediately. The fallacies of past public prodigality and central planning would be made plain, and our nation would revert to a more perfect state of liberty. The problem with the United States is not from a lack of progress or compromise, but from too much of both. Of the last twelve Amendments to the Constitution, only three (the 19th, 24th, and 26th) have served the cause of liberty in the slightest. The rest have given us the oppression and intrusion of the IRS, a useless and dysfunctional Senate, a foolish attempt to restrain private vices and the repeal thereof, a limit to the public's electoral choices, an abdication of Congress's duty to administer the seat of government, and a means by which the Cabinet can affect a coup d'état. It is entirely foolish to assume that today's leaders understand and value of freedom more than those of generations long past. It is quite clear that no one trusts any part of the political process, and yet we continue this vain hope that it will somehow deliver us from the fiscal day of reckoning we all know in our minds is certain and inevitable. Just as the Civil War was inevitable, the longer the final resolution is put off, the more painful and destructive it will be.

Our founding fathers sought to restrain the government's power, and to place the liberty of the individual first in all circumstances except for war, when the nation's very survival would be at stake. The Bill of Rights stands as a testament to the influence which small states with small populations had over the crafting of the document, as Rhode Island refused to ratify the Constitution without it. These enumerated rights are priceless, but the unfortunate belief that their order somehow demonstrates the emphasis our nation's founders placed in each has led to many modern, misguided interpretations of the document. The most important right is the right of property, as no other right or guarantee which could be made would mean anything if the government had the power to take away the means by which an individual provides for his own subsistence. That this right is tucked in at the end of the Fifth Amendment does not make it less essential than speech, the press, or religion. Next in terms

of priority is privacy, which in essence is an element of property, as protected by the Fourth Amendment. The right to keep and bear arms is essential to the external protection of the people's liberty, an assurance that the people will always be more powerful militarily than their government.

The most unfortunate circumstance, however, is that the Ninth Amendment has been almost entirely forgotten. It is an interpretive guide to the entirety of the Constitution, instructions to the judiciary which now largely go unheeded. It reads:

> *"The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people."*

Even if the Constitution grants the government certain specific powers, those powers can not legally be used as an end-around to circumvent the liberties promised to the individual. The most obvious violation of this principle lies in the system by which our income tax code is enforced.

The constitutionality of the income tax itself is beyond legal reproach, as the 16th Amendment explicitly grants Congress the power to tax any source of income. This is arguably a power which Congress should never have been granted, but this argument carries no weight in a court of law. What *should* carry all the weight in the world is the fact that the enforcement mechanism behind it, the Internal Revenue Service, plainly violates the Fourth Amendment at every opportunity. As this amendment states:

> *"The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."*

The IRS quite plainly violates every aspect of this amendment. In requiring the filing of supporting documentation with one's tax return, and in being given the power to audit any return they wish, they assume access at will to any individual's papers, home, and effects. Their ability to garnish wages and seize property defies both this amendment and the Fifth, which guarantees due process of law. In theory, the IRS has no right to ask anything except how much money a person earned (specifically not from what source it was derived), and the oath which the taxpayer signs at the bottom of the form should carry all the force of any other legal document. Requiring the IRS to obtain warrants and establish probable cause might make administering the income tax cost prohibitive, but the Bill of Rights was crafted specifically to make such things difficult. If the application of governmental police powers becomes too easy, then it is only a matter of time until patrolling and policing turns to tyranny and oppression. That Congress is granted the power to tax does not withstand the fact that it has used that power to disparage the rights of the people, and the laws which so disparage our individual rights should therefore be ruled null and void by every court under these United States at every opportunity.

Our founding fathers intended for the public to have a natural distrust of government, and that a limitation to government's powers and resources should naturally follow from this distrust. For a long time, it worked. The wealth produced by the Industrial Revolution and the westward expansion of the country granted the government monetary resources which the founding fathers would never have dreamed possible. Yet, these very resources did not satisfy the demagogues who sought to transform America from a principled and united republic to a selfish and divisive democracy. As much as our present generation is taught to abhor violence, it is readily demonstrated that our nation's founders were willing to kill and to risk their own lives over far less than our own present grievances. Courage in them was certainly not lacking, nor was the ability to face and endure hardship. Daniel Morgan survived five hundred lashes ordered by a British officer during the Seven Years' War, a punishment which was almost always fatal. A young Andrew Jackson, when ordered to clean a British major's boots, refused, and when attacked by the officer, caught the offending blade

with his bare hand. These sorts of stories may seem fantastic, perhaps even crazy in a modern context, but this is precisely the sort of person responsible for the establishment of this country, and it is presumptuous at best, and foolish at worst, to assume that our modern, tempered view of liberty and government is the correct one. The ideological conflict of our day, and the insuperable distress of our finances, refute such a notion.

Benjamin Franklin once said, “Those who would give up essential liberty to purchase a little temporary safety, deserve neither liberty nor safety”. Surely Franklin was the most learned and well-tempered of the lot, and even he understood that liberty is not something which should be subject to compromise. To face the dangers of the present day, we must remember the forgotten character of America's founding. In the immortal words of Patrick Henry:

> *“It is in vain, sir, to extenuate the matter. Gentlemen may cry Peace, peace - but there is no peace. The war is actually begun! The next gale that sweeps from the north will bring to our ears the clash of resounding arms! Our brethren are already in the field! Why stand we here idle? What is it that gentlemen wish? Is life so dear, or peace so sweet, as to be purchased at the price of chains and slavery? Forbid it, Almighty God! I know not what course others may take; but as for me, give me liberty or give me death!”*

This is our founding character, to press the cause of liberty without fear, whatever the cost.

Chapter XXIV – Progression, Regression

"So long as future generations seemed likely for an indefinite period to be more numerous and comparatively richer than ourselves, there was some excuse for trusting to time for the amelioration of our people. But the moment we begin to see a limit to the increase of our wealth and numbers, we must feel a new responsibility. We must begin to allow that we can do to-day what we cannot so well do to-morrow. It is surely in the moment when prosperity is greatest; when the revenue is expanding most rapidly and spontaneously; when employment is abundant for all, and wages rising, and wealth accumulating so that individuals hardly know how to expend it – then it is that an effort can best be made, and perhaps only be made, to raise the character of the people appreciably."[149]

- William Stanley Jevons

One of the principal notions found within *The Coal Question* is that apparent prosperity does not depend upon the sum total of production, but upon the rate at which production grows. The idea that future generations will always be larger and more prosperous than our own is one which affords great comfort, even when faith in such an idea is misplaced. The progress of mankind is not a constant, however, nor is the forward advance of civilization irresistible. History has left us numerous examples of societal regression, numerically, economically, and technologically. The collapse of the Bronze Age, the fall of the Roman Empire, and the dissolution of the Mayan civilization, all examples of once strong, vibrant societies which regressed in every conceivable way. Jevons wrote his treatise in what he called the "full morning" of England's prosperity. By this analogy, all Western nations are already far past noon. What could not be done at the height of America's relative power in the world surely can not be entertained so far along in its decline. The check of our

149*The Coal Question*, Preface.

numbers is already passed, and that of our wealth is now at hand. It is plainly obvious that in many regards, we can not do so well today that which could be done yesterday.

Forty years ago, man walked upon the surface of the moon. The record airspeed for a manned aircraft was attained in 1967. Supersonic civilian transport is no longer available, and even the fastest military aircraft, the SR-71, has been retired for more than a decade. While certain new technologies continue to emerge, some of the most common have seen little change in half a century or more. Whether it is power generation, flight, ground transport, firearms, or signal transmission, the advances seen are minute in comparison to the broad advances seen in generations past. For every new thing which can be done, there is another which could once be done and now can be done no longer. As time goes on, the grandeur of past triumphs seems more and more to dwarf the small victories of the present day. The shining promise of new possibilities is now mixed with the unmistakable stench of steady decay.

Even after the fall of Rome, during what is now termed the Dark Ages, inventive new concepts and technologies were created in various parts of the world. However, the incredible constructive power of the ancients, the skill and precision of their architecture, the extent of their trade, navigation, and communication, would not be rivaled again for a thousand years. Cities were smaller, nations more fractious and ephemeral, and systems of order had to be forged anew.

Not even every apparent advance of ancient times was as decisive as it may seem. Every history student learns that the Iron Age followed the Bronze Age, and it is easy to presume that because of this, iron is a superior metal to bronze. This is not so. Bronze is superior in nearly every way to raw iron. Bronze is stronger, harder, more durable, more sanitary, less susceptible to corrosion, and easier to forge into various shapes and to work to a fine, sharp edge. Indeed, the one practical virtue of iron is that it is somewhat lighter than bronze. What made iron supplant bronze as the essential resource of human civilization was the abundance of iron, and the comparative scarcity of bronze's constituent elements, copper and tin. Once furnace temperatures could be made high enough to smelt iron, huge armies

could be equipped with metal weapons and armor at fairly low cost. Iron was close enough in quality to bronze that the economy of its use proved decisive. No advantage of utility would be seen in iron until such time as man's knowledge of iron alloys advanced as far as his knowledge of copper ones, that is, until the advent of steel.

Even when society advances, it is nearly impossible to envision a circumstance where at least some knowledge of the prior age is not lost. Those arts and skills which are valued most highly invariably experience some regression as society shifts to other priorities. Even modern metallurgy has not equaled the quality of some ancient bronzes. Roman concrete was of a quality, strength and durability not seen again until modern times. When society experiences a more general regression, however, the results are unpleasant for all involved, and the time it takes to recover to an equivalent level of economic and technological achievement is often measured in centuries. To differentiate between genuine progress and impending regression, the most reliable signals are economic and demographic, not technological.

The development of new technology is by nature episodic and inconsistent, and almost always driven by economic necessity. However, not all technologies have equivalent impacts on economy and demography. Those technologies which enable production and are based upon abundant resources naturally propel society further and faster than those which are dependent upon scarce ones. The great abundance of iron allowed civilization to reach further and farther than copper alloys could ever enable. Likewise, enormous quantities of available fossil fuels for the first time pushed civilization to the very farthest reaches of the globe. Steam power and the internal combustion engine were the technologies which enabled this spread, the former an invention of the 18th Century, the latter of the 19th. The technological achievements of more recent times do not, by comparison, allow mankind to produce more or to go further and faster, but instead are intended to allow us to make do with less.

As real production has declined, and communication has become less dependent upon trade, the progress of civilization can already be observed to turn back from places it once

firmly claimed. Lands once well-administered have fallen into tribalism and anarchy. Nations break down into smaller and smaller entities, often along religious and ethnic lines, and some simply cease to exist altogether. Somalia hasn't met the criteria for what can properly be called a country for over twenty years. International agencies may cling to the notion that the boundaries and territorial integrity of Somalia should be respected. However, the fact remains that whatever the country was is irreparably broken, and that anarchy continues to reign in vast tracts of its former territory. In those nations whose national identities are most tenuous, in those places where history is not long recorded, and in those regions where the means of subsistence are most tenuous, the seeds of national and societal dissolution are fast taking root.

While the advances of the past age took advantage of iron and carbon, air and water, silicon and electricity, all things of great abundance, today we look to rare earths, platinum group metals, and naturally limited atmospheric radio pass bands. The technologies of yesterday could be made to serve everyone, but those of today could never be so widely propagated. As societies abandon the old for the new, the young will experience privation their elders never had to endure. Their freedom of action and of movement will be limited in ways which past generations never conceived. Aspiration toward goals unattained will give way to nostalgia for achievements long past. Society will shrink back upon itself, technology and production will regress, and mankind will have finally entered its new Dark Age.

Chapter XXV – Where the Sun Sets

"When clouds are seen, wise men put on their cloaks;
When great leaves fall, winter is at hand;
When the sun sets, who doth not look for night?"[150]

- William Shakespeare

It may be said that hope and ambition are what spur the progress of all mankind, but it is likewise true that both also give rise to disappointment and despair. In shining the light of reason upon the hopelessness of our present economic and fiscal circumstances, my intention is not to frighten or to disappoint, but to allow all who would listen the opportunity to foresee that which must still come to pass, and to steady themselves for the coming hardship which must be endured by all. Dark times, for reasons both natural and man-made, are certain to come from time to time, and when they do, only wisdom and persistence will enable people of strength and reason to endure. Those who hope against hope, who cling in blind faith to the fallacies which brought about our collective ruin, will ultimately be lost to their own despair.

Evening is upon this latest golden age of Western Civilization, a night beckons which though now inevitable, did not need to come, and would not have arrived were it not for those who chose to abandon liberty for the sake of fleeting comforts or petty jealousies. How we endure this night, how long it will last, and how long it will be before a new light of freedom breaks upon a new dawn for all humanity, is entirely up to us. For all the trials mankind has faced, for all the dark ages which have come before, and all the crises which have preceded us, civilization has always found a way to outlast the winter. It may take years, decades, or centuries, but eventually the natural light of reason and liberty will prevail, humanity will pick itself up, and once again raise itself to a new pinnacle of achievement.

150From *The Life and Death of King Richard III*, Act II, Scene III

Nothing less than the utter ruin of our present financial system can remedy the pervasive tyranny which oppresses productive peoples everywhere. There is no clever trick to avoid the day of reckoning, no magic formula to make our deficit of capital vanish, no miracle cure to the economic and fiscal disease which afflicts our sovereign nations. Facing such a calamitous event will no doubt be difficult, but it is far too late to lament our present circumstances. All that is left to do is to accept the truth of the matter, and to renew our devotion to liberty. To quote Alexis de Tocqueville, "I should have loved freedom, I believe, at all times, but in the time in which we live I am ready to worship it." The trials of totalitarianism are not yet over, the Second World War was merely the beginning of this battle. The evils of populism which infected the West with corporatist and socialist aspirations must still be purged from our systems of government. Failure must come to those institutions which are broken beyond repair, and those ideas which serve no useful purpose must be cast aside.

Nothing in this world will take the place of human reason, effort, and persistence. In allowing people to choose for themselves how best to apply their labors and capital, it will once again be remarkable how easily the challenges before us are overcome. The United States endured its first monetary collapse rather easily, as private citizens again reverted to the use of bullion. Whatever the problem is, freedom is the solution. The experiment of Central Banking has failed, it is time to dissolve the system. Our governments are bankrupt, and it is time to declare them as such. To argue otherwise is to stand in defiance of all reason. As dependent as many have come to be on both institutions, such people do not deserve the sympathy of those whose liberty they have sacrificed for the sake of temporary security. Let the night come, that we may once again cherish liberty above all else.