STRATEGIC ECONOMIC DECISIONS

Leaders in the Economics of Uncertainty

SED *PROFILE*

DECEMBER 2009

NUMBER 96

How to End Today's Dialogue of the Deaf, *and* Policy Gridlock

– A New Paradigm with an Application to the US Health Care Debate –

The Problem: *Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?* – T.S. Eliot

The Solution: *SED's Research Programme — dedicated to imparting an inferential edge so that clients are less wrong than the consensus, and less wrong for the right reasons.*

STRATEGIC ECONOMIC DECISIONS, INC.

TEL: +1 480.883.3200 ■ FAX: +1 480.883.3201 ■ EMAIL: SED@SEDinc.com

WEBSITE: www.SEDinc.com

How to End Today's Dialogue of the Deaf, *and* Policy Gridlock

– A New Paradigm with an Application to the US Health Care Debate –

Author's Note*:** This particular ***PROFILE essay is as much personal as it is professional. I never intended to publish it in its current form, but my outrage at what is going on within my own country (and within many others) has grown to such an extent that I feel obliged to speak out in as many forums as possible.

First, I am outraged by the feverous pitch of today's Dialogue of the Deaf between so-called Left and Right, whether between partisan politicians in Washington, or between Think Tanks who are now inevitably described as "Right-of-Center" or "Left-of-Center" lest anyone mistakenly suppose that any actual thinking goes on within them, or between columnists and other pundits whose predictable partisanship suggests that they are completely unaware of an arresting new scientific discovery:

***PQ** is inverse to **IQ**,*

where **PQ** refers to a person's Predictability Quotient, and **IQ** refers to his or her Intelligence Quotient. In particular, I am outraged at today's mortgage-the-future policies that are resulting not only from this Dialogue of the Deaf, but from the complete lack of logical scrutiny of all-important policies like health care reform on the part of supposedly brilliant people who are paid to scrutinize such policies. Imagine a White House economics staff that endorses a vast increase in health care demand while remaining deafeningly silent upon the all-important issue of increased supply. Since a failure to get this issue right could well imperil the fiscal solvency of the United States within twenty-five years, I think we all have a right to be very, very angry.

Yes, preparation of this report has delayed the preparation of my year-end forecast, for which I apologize. But I believe readers of all stripes will find this to be our most important report of the decade. This is true not only because of the importance of the issues discussed, but because I set forth new and constructive ways to *solve* the problems that are driving my outrage—including the problem of optimal health care reform. Due to the somewhat personal nature of the essay, I have chosen a first person tense in many places.

H. "Woody" Brock, Vienna

Introduction

Nearly two decades ago, during ski season, I had the pleasure of spending a weekend in the Alpine chateau of Bill and Pat Buckley near Gstaad, Switzerland. For those of you who remember, the late William F. Buckley was the dean of American conservative politics, having founded the *National Review*, and having hosted the conservative talk show *The Firing Line* for many decades. At lunch, we were joined by his close friend Ambassador John Kenneth Galbraith, the celebrated Harvard economics professor who was as liberal as Bill was conservative. Despite their sharply contrasting views on many topics, the two carried on a civilized discourse in which each put forth and defended his views intelligently and rationally. Of course, such behavior was once expected.

But this is no longer the case. What a contrast their dialogue offers when compared with today's Dialogue of the Deaf, which can take the form of shouting matches on cable news talk shows, at the family dinner table, in the Op-Ed pages of leading newspapers, and, alas, in the US Congress—even in the Senate once known for its bipartisan courtesies. Today's Dialogue of the Deaf treats us morons to an interminable repetition of predictable views by writers, commentators and politicians who rarely if ever change their views about anything. One result is that those of us who listen seldom end up modifying our own views, for the black-and-white dialogue between pundits that we are exposed to ends up reinforcing our existing prejudices. Whatever happened to the process of reaching a compromise by discovering a common middle ground?

The price we have paid for this development is very high indeed: policy gridlock across the board on issues ranging from global warming, Islamic containment, entitlements reform—health care reform in particular. How different it was when differences were ironed out *in camera*, and, indeed, in civilized columns like those of "Scotty" Reston and Walter Lippmann. Their writings conveyed the impression that they themselves were often as confused by policy dilemmas as their readers were, and that they were attempting to discover answers rather than to put down the views of those idiots who disagreed with them. Readers learned from and alongside these wise men. As a result, our views about complex issues were forged over time via a learning process that involved a healthy mix of inductive and deductive logic.

What Went Wrong

The Culture Wars: To a certain extent, the so-called "culture wars" of the late 1960s and 1970s hastened the end of civilized discussion as the gulf between the Left and Right grew, and as the attacks of the one on the other grew ever more vitriolic. While I bore witness to these wars first-hand and feared the cultural wreckage that would result, much of what happened was inevitable. After all, what was now at issue were no longer polite political issues such as how high tax rates should be on the rich, or how the US should best thwart a very real communist expansion. Rather, the purview of the debate expanded to include very personal concerns such as the obligation to serve in a much-hated war (Vietnam), or the probity of having an abortion, as well

as root sociological issues including the nature of public education, the rectitude of child discipline, the validity of "deference" to anyone, the conflicting roles and rights of the two sexes, the relativism of morality, and the deconstructionist critiques of reason and even of scientific truth itself. To top it off, a famous cover of *Time* magazine had to raise the stakes by asking: "Is God Dead?" The aggressiveness and nature of these culture wars often forced bystanders to choose sides in a binary manner. Moreover, neither side took any prisoners. I saw this firsthand as a graduate student in the 1970s. It was nasty.

Decline of "the Classics," and of the Dialectical Method: One particular casualty of the culture wars was the death of interest in the classics. After all, the authors of the Great Books were Dead White Males, so how could they be assumed to lead us toward any concept of The Truth? Yet, arguably the greatest of the Dead White Males was Plato, and the "Socratic Dialogue" that he promulgated set forth better than any other attempt in history the *process* required for truth-seekers to bridge their differences and arrive at the terra firma of common ground.

Indeed, the dialectical method of Dialogues such as the Crito *required* the participants and students alike to progress via deductive logic from Proposition **A** to **B**, then from **B** to **C**, and ultimately to **Z**. By contrast, in today's culture, one side keeps shouting "It's **F**, idiot" whereas the other retorts "No, it's **H**, idiot." Note that there is no Proposition **G** linking **F** and **H**. Moreover, the origins much less the validity of propositions **F** and **H** are never clear, much less questioned, and the idealized terminus of **Z** is never reached. This is as true on cable news as it is in the House or the Senate, or at the dining table at home. Patience, along with a belief in logic, is required for the dialectic to work, and both have evanesced.

As a classics student in high school who read the Socratic Dialogues in classical Greek, I can attest to how profoundly the dialectical process altered how I approached truth-seeking, and how I expected others to reason in attempting to convert me to their views. It was a process that *required* a measure of mutual respect, humility, patience, and most importantly, opinion modification. And in the truest sense, it did help us youngsters arrive at a common ground. The headmaster of my school was also my Greek teacher junior year, and I will never forget when, in criticizing something stupid I had said, he retorted: "You may be smart, but don't think *you* will find it any easier than the rest of us to escape from the flickering shadows of Plato's inner cave of ignorance." Not for nothing has my US phone number been 1-800-THINKER for nearly three decades!

Lifestyle Changes and Technology: Yet, if the culture wars played a pivotal role in the advent of the Dialogue of the Death, so did technology and changes in lifestyles. With the invention of TV and then the Internet, life sped up. Audiences exploded in size. Talk show hosts and columnists became celebrities. And incomes exploded with audience size and with celebrity. Given the collective, ever-declining faculties of reasoning, and increased impatience with the process of truth-seeking, celebrity commentators and even "Think Tanks" would increasingly "brand" themselves by adopting a Right versus Left identity, or vice versa. Once branded, how better to preserve one's brand and augment one's income than to become witty and sarcastic in trashing the opposition, a pastime that those involved clearly relish? Marshall McLuhan's

brilliant prophesy had finally become reality: *the media was indeed the message*. What he missed is that truth-seeking would be the victim. In a world of black-versus-white, who had time for those shades of gray in which truth ultimately resides?

Possible Solutions to Gridlock: There are three reasons to hope that today's status quo constitutes a low point in policy debate, and that matters can and will improve as they must if pressing problems are to be solved.

First, government itself will reform itself and help lead the way out of today's morass since it will have an incentive to do so. As columnist Peggy Noonan recently argued in an excellent *Wall Street Journal* piece, the American public is, for the first time, coming to believe that government gridlock is preventing the nation from finding solutions to *any* of today's most pressing problems. As the public becomes increasingly cynical and angry about what this gridlock implies for their future living standards, politicians will have to respond or else they may be voted out of office. And they will learn how they can personally benefit by backing bipartisan solutions to problems demanding solutions.

Second, the executives running the broadcasting industry will learn the benefit of demanding higher standards and enforcing them by firing those who engage in mudslinging and outright name-calling (e.g., the recent MSNBC and Fox News spate). They will partially be motivated by growing public disgust, and shrinking audiences and revenues.

Third, these first two developments could be reinforced should schools of government (e.g., Harvard's J.F. Kennedy School) and programs in media relations and communications identify the status quo described above as the problem that it is, and start to teach their students how they can advance their own careers by demanding much higher standards of analysis on the part of government and the media. Bluntly, I propose that a whole new approach to policy analysis be promulgated in which students who become tomorrow's policy analysts, governors, and media players can play a much higher-level and a more honorable game of "Gotcha" than they now do.

> *Imagine how cool it would be for a pundit to expose a politician for causing a decline of living standards because of sloppy thinking and outright illogic—as opposed to exposing his sexual peccadilloes? Yet when was the last time a politician's bad logic was pilloried, much less the costs of his illogic calculated? The pundit, for his part, would benefit for having chosen a "higher road" in attacking his prey, and having demonstrated how smart he is. [Who didn't like winning the high school debating prize back when debate was taught? What a high!] The politician, for his part, will have an incentive to bone up on his faculties of logical thinking lest he be exposed for his stupidity yet again. Finally, the public would benefit from higher living standards due to proliferating "logic audits" carried out by the press. A true Win-Win situation: Everyone comes out ahead.*

I am being dead serious about all three possibilities, especially the third. The stakes (see below) are too high not to be serious. But while politicians and media executives and students alike might *wish* to regain the higher ground, exactly how can a meaningful dialectic emerge—one that circumvents the Dialogue of the Deaf? For example, exactly how can two rival parties forge an agreement on such intractable public policy issues as health care? More fundamentally, what should future politicians and media leaders be taught that they are not now being taught?

The Solution—A New Policy Analysis Paradigm
– Holding *All* Parties Involved to a Higher Standard of Accountability –

The purpose of the rest of this chapter is to outline a new strategy for bringing to an end today's Dialogue of the Deaf and resulting policy gridlock. This strategy centers on a rethink of the practice of "policy analysis" whether as taught in the classrooms of schools of government, or as practiced within the media and within government. This new approach is motivated by two realizations that have grown on me in recent years: **(i)** Existing modes of policy analysis tends to maximize disagreement and lead to policy gridlock; and **(ii)** Eminently practical ways exist to improve the practice of policy analysis and minimize gridlock. The goal of utilizing improved policy analysis will be the enactment of more bipartisan policies that deliver good solutions to important problems.

Since the arguments being set forth are new and different, they deserve to be put to a test. Thus, in the final part of this essay, the new policy analysis paradigm is applied to the most intractable of all US public policy debates, namely health care reform. The revised health care package we deduce represents a big Win-Win strategy for almost everyone involved. If we are right in our analysis, then the disturbing question is why this revised strategy was never identified in the first place during two years of debate by almost every politician and pundit in the land.

The Three Root Problems in Policy Analysis Today
– The Wrong Kinds of Logic Applied at the Wrong Stage of Policy Debate –

To understand what is most wrong in today's practice, contrast the specious search for truth via today's Dialogue of the Deaf with the highest form of the search for truth not yet known to man, namely the deductive method whereby unambiguous theorems are arrived at by rigorous deduction from "first principles," otherwise known as axioms. Students first encounter this mode of thought when they study Euclid's geometry in high school. In cases where the so-called axiomatic method can be utilized, there are no disagreements with the truths (theorems) arrived at. Any disagreement centers on the axioms postulated up front in the search for truth. Even

within pure mathematics, debates about the appropriateness of axioms can be intense, but such debates are usually settled quite satisfactorily.[1]

Measured against this logical gold standard, consider what goes wrong in most real-world policy analyses, and what a new paradigm must redress.

Problem 1 – Lack of Clearly Articulated Basic Assumptions (Axioms): Consider traditional textbook microeconomics, e.g. the study of supply, demand, and efficiency in standard markets. The main result here is that, under particular assumptions (e.g., perfect competition), the resulting allocation of goods and services will be efficient. This result was first conjectured in a very fuzzy manner by Adam Smith in his *Wealth of Nations*. During the next two centuries, it was clarified, and was finally proven true with all i's dotted and t's crossed by K. J. Arrow and G. Debreu in 1953. Given this triumph of "capitalist economics" in an era when the appeal of communism was arguably at its high point, how could there have been so little dispute about the validity of these new claims?

The reason was that economic theory construction as carried out by Professors Arrow and Debreu made *crystal clear up front* exactly what was being assumed. And this was no small task since two very different types of assumptions were being made: **(i)** A specification of what was morally desirable in an economic resource allocation system, namely an "efficient" or non-wasteful outcome; and **(ii)** A specification of the specific conditions required for efficiency to result. These latter conditions included such requirements as perfect competition and non-increasing returns to scale, and were clearly articulated as Basic Assumptions up front. Additionally, it did not hurt that the reasoning process taking the reader from these Basic Assumptions to the proof of resource allocation efficiency was watertight. Contrast all this with the abject failure of communist-orientated economists to demonstrate that communism possessed any rival set of appealing attributes.

Problem 2 – The Wrong Stage of the Argument: People apply such logic as they have at the wrong step of the debate, almost always far downstream from the initial step in which basic assumptions or axioms should have been postulated up front. By enjoining the debate at any arbitrary stage—*thereby preventing the step-by-step dialectic called for in Platonic Dialogues*—the force of any logic they might bring to bear gets watered down, if not lost altogether. Indeed, the only kind of logic that remains will be that bastardization of inductive logic commonly known as "cherry-picking facts to back up my assertion." Even worse, when politicians and their staffers do ultimately enjoin the debate way downstream from its implicit origins, they often do so *after* they have arrived at their "views"—partisan views that are asserted, yet never deduced,

[1] In real world applications of the axiomatic method in physics or social science, one way an appropriate set of axioms is agreed upon is by testing how well the theorems implied by the axioms "make sense" and indeed "fit the facts" of the problem at hand. Logical circularities of this kind have proven very fruitful. An example in political theory is the way in which three successive sets of axioms ended up leading to one and the same solution to the "Bargaining Problem" as first posed and formalized by Princeton mathematician John F. Nash, Jr. in 1950. This is the problem of how **n** rational people will end up dividing a pie (money, etc.) when each person, of course, would like to obtain all the pie. Nash's axiom set was the first and the least intuitive one (axioms at their best are supposed to be transparently intuitive). But two other more intuitive axiom sets later implied the same solution as Nash's axioms did, thereby giving greater support to the celebrated Nash solution.

in a transparent and convincing manner from first principles. The result: A meaningful dialectic becomes almost impossible, and poor policies ultimately get adopted since those "logic audits" that ought to have screened out bad policies during the dialectic never existed.

Problem 3 – Emphasis on the Wrong Kind of Logic: All sound policy analysis requires the appropriate use of two different kinds of logic: inductive logic (the process of generating inferences from data or other forms of information), and deductive logic (the process of deducing downstream results, sometimes in the form of theorems) from Basic Assumptions or axioms. Deductive logic, for its part, entails two different kinds of deductions in a policy setting.

First, there is "positive" or "explanatory" deductive logic whereby we deduce how the world really is, like it or not. Thus, we deduce the truths of arithmetic from the axioms of number theory; we learn that the sum of the angles of a triangle in plane geometry is 180 degrees; we learn that the planets travel in ellipses, and why they do; we learn the rules by which antagonists end up agreeing on a division of the pie in bargaining with each other; and we learn that it is impossible to devise a voting system (more generally, a "preference aggregation" system) that is logical in the sense of avoiding the Condorcet Paradox.[2] Personally, I call such logic the logic of "the is," as it describes and accounts for reality.

Second, there is the normative deductive logic of "the ought." This logic focuses on what decisions we *ought* to make if we want our behavior to be consistent with certain eminently reasonable axioms, or norms. Most applied optimization theory falls under this rubric, with classic examples including Markowitz's 1952 theory of the optimal portfolio, and the Expected Utility Theorem of economics. Clearly, any claim in public policy analysis that policy **X** is better than policy **Y** must *at some stage* utilize normative theory, since what is being asserted is that **X** better advances (i.e., is more consistent with) a person's (or society's) objectives than policy **Y** does. *Normative deductive logic permits policy makers to prove this, not merely assert it*.

In public policy discourse today, the reality is that policy makers and their staffers typically ride roughshod over the canons of all these variants of deductive logic. As stated above, their tendency to enjoin a debate at arbitrary points "downstream" from its starting point prevents any meaningful process of deduction, and results in a tendency of the parties involved to fallaciously equate their "views" with either their "basic assumptions" or else their "policy conclusions"—and sometimes, with both! But if sound deductive logic is largely defunct in practice, inductive logic of a bastardized variety is running amok, abetted by the advent of high-speed computers and vast databases. I already referred to the tendency of policy wonks to cherry-pick "facts" to support a pre-specified policy view, but the problem runs even deeper than skewed sample inferences of this kind.

[2] The Condorcet Paradox is that, in a majority rule system, a majority of voters can prefer policy **A** to **B**, **B** to **C**, *but also* **C** to **A**. This so-called "intransitivity" of collective preferences has long been deemed illogical and regrettable. Then, in his celebrated "Impossibility Theorem" of 1950, the economist K. J. Arrow proved that there is no reasonable escape from the Condorcet Paradox. Intransitivity of voting systems is generic and cannot be exorcised.

> *The real problem is the mistaken assumptions that a sufficient amount of data-crunching will reveal such truth as exists. We witness this in everything from the expectation that sufficient data-crunching will yield "patterns" permitting traders to get rich (yes, short-term patterns do often exist for a short while), to the hope of cliometricians that a sufficient quantification of historical phenomena will somehow add up to historic truth, and to the dream of experimental physicists that another fifty years of experiments will somehow confirm the Standard Model of the quantum theory, despite its longstanding conceptual and philosophical problems.*

The sad reality is that due both to non-stationarity or non-identifiability or both, the ability of data analysis to lead us to the truth in any field is extremely limited. This is evidenced by the fact that virtually every new theory of note during the past 300 years has resulted from deduction, not induction. It is not that data analysis does not matter. For of course it does, especially in attempting to empirically confirm the predications of theories.[3]

Unfortunately, the last to understand these points are today's young people. In my travels, I witness an entire generation of young people, often from very fine schools, who blithely assume that data-crunching and spreadsheet analysis will somehow lead them to the truth. These are the prejudices they will carry with them when they become staffers and "policy wonks," determining the future of the nation's most important problems. Their love affair with induction is enhanced by new quantitative technologies, and is not countered by any recognition of the power of deduction, much less of the intrinsic limits of induction so famously described over two centuries ago by David Hume. This intellectual blight is everywhere, and it implicitly encourages biased cherry-picking induction. All this gives new meaning to the old wag "lies, damned lies, and statistics," and it amplifies the Dialogue of the Deaf.

Woody is Not Crazy – Consider the Advent of Cost/Benefit Analysis: At this stage, I know many readers will think, "Woody is going too far. He is asking for far too much. Does he really believe that policy-makers can become more transparent and rational in his sense, adopting better policies as a result?" My answer: They certainly can. Here is one powerful analogy to the way in which an improvement in the *logic* of policy analysis did occur and benefitted society. Before the 1960s, most newly enacted laws required that no Cost/Benefit Analysis be undertaken prior to their adoption. As a result, it was sinfully easy for politicians to hoodwink the public. Once appropriate cost/benefit analyses became mandated in many policy arenas, it was much more difficult for them to do so, and better policies were adopted.

Another example of progress came from the business sector where a stunning advance in both logic and transparency was made possible by the advent of double-entry bookkeeping during the Renaissance. Allegedly, "practical" businessmen were at first highly suspicious of this new accounting logic that was deemed too clever by half. But they did not remain skeptical for long, and any extant objections to the new logic soon melted away. Note, incidentally, that double-

[3] I discussed this entire problem at some length in chapter 2 of our May 2007 ***PROFILE***, "Resolving the Information Overload Problem."

entry accounting is a good example of simple deductive logic (note the role of its "adding up" requirements in this regard) notwithstanding its highly quantitative appearance. Incidentally, would it not be a good first step towards more transparent policy analysis if government were obliged to balance its own books?

To conclude, I have argued in this section that faulty logic of many kinds affords policy makers much too much "wiggle room" within which to adopt highly partisan policies that may benefit special interest groups, but that imperil the Public Interest and amplify the Dialogue of the Deaf. Bluntly, lack of suitable "logic audits" permits them to get away with fraud. I have also proposed a solution to this problem **(i)** by identifying a new paradigm for policy analysis, one stressing the need for deduction from first principles, and **(ii)** by highlighting the need for schools of government and the media to inculcate this paradigm into the minds and hearts of their students. Let us now put everything I have said to a test in the context of the most demanding of policy issues.

The Counterintuitive Truth about Optimal Health Care
– A Case Study Applying the Proposed Paradigm –

Today's Gridlock: Partisanship in Washington has achieved its zenith in the recent and ongoing debate about health care reform. This is not surprising for three reasons. First, the stakes are enormous. When analysts claim, "As goes health care, so goes the future solvency of the US government" they are not far from the mark. Second, the partisan logic utilized in analyzing health care has assumed the form of sloppy induction (see below), with many norms of deductive logic that should have been invoked either ignored or trashed. Finally, such logic as was utilized was introduced far too downstream from the point in the debate where basic assumptions should have been introduced. All this implied a complete lack of that dialectical method so needed to resolve differences and converge towards the truth. Indeed, in the absence of any such dialectic, both sides kicked off the health care debate fully armed with partisan prejudices masquerading as policies. The most likely result will be a very poor policy.

On the Left, the prejudices were that "Full health care coverage is long overdue and needed, regardless of cost. After all, since universal coverage is a God-given right, there will always be *some* way to raise the required funds, even if we have to soak the rich, or borrow from our children, or lie about our ability to save $500 billion by eliminating waste." Or, "Thank God! The Thatcher-Reagan era of limited government is over. Big government is back!" Or, "Doctors and insurance companies alike are the bad guys who fleece the poor. The time has come to cut back on what they are paid, and dictate to them the terms on which they will work if they wish to be reimbursed by us. After all, we hold the health care purse strings." This is a litany of prejudices, not inferences, deduced from any set of clearly enunciated first principles.

On the Right, it is hard to criticize conservatives for their views since they have not revealed that they have any. On the one hand, they shoot down all Democratic proposals. On the other hand, they have not set forth any alternative set of their own except for tinkering with the existing system that almost everyone agrees is poor. There were, of course, well-intentioned Republicans who did attempt to arrive at an opposition plan, but these were largely drowned out by their colleagues' prejudices: "Big government is already too big. Who needs it any bigger?" Or, "This nation is in debt up to its ears. Who needs a vast new entitlement that will further soak the rich, or cause higher levels of debt and taxes?" So weak was the Republican stance in this debate that the party never championed what is *most* needed to properly reform health care (see below): namely, a vast expansion of the supply side. Weren't Republicans the original supply-siders? One can expect Democrats to fail to address supply. They always do. But Republicans?

What *Could* Have Happened: Suppose government policy analysts and legislators had started off by asking: "What do we really want to achieve—all of us? What principles are so basic and compelling that all of us want them respected by whatever plan we end up? And finally, does a health care plan exist that is consistent with these principles?" These are precisely the questions we now answer in the remainder of this essay.

The Basic Assumptions

The assumptions that we introduce are not those of some idealized health care system that would have to be designed from scratch. Rather, they are assumptions that almost anyone on any side of the aisle will find reasonable, and that make sense in the context of the flawed system we now have in place. We then show, in Proposition 1, how improvements in today's existing system can lead to a new plan that satisfies *all* of our Basic Assumptions. In Proposition 2, we demonstrate how President Obama's plan satisfies at most two, though probably only one, of our Basic Assumptions.

Consistent with the new policy analysis paradigm sketched above, the logic we use in deducing a new health care plan is deductive in nature, borrowed from the deductive logic of microeconomics. What is particularly interesting is that our principal assumptions parallel very closely those championed by President Obama. This being true, what Propositions 1 and 2 show when taken together is that the *reasoning process* connecting the administration's goals to its policy conclusions has been very problematic. For the policies it has arrived at are fundamentally inconsistent with its own goals. With economists like Lawrence Summers and Christina Romer in the White House, how could this have been the case?

Basic Assumption 1 – Significantly Increased Access to Health Care for Millions of Americans Currently Uninsured or Underinsured

Justification of Basic Assumption 1: There are both moral and economic justifications for this assumption. On moral grounds, it is widely believed that civilized modern societies should provide universal health insurance of one form or another. Given the largely random occurrence of illness and its high cost, the allure of pooling and sharing risk is great. At the level of moral

philosophical analysis, the question of whether "free" insurance markets or a single-payer government provides coverage is not very interesting. What matters is the right of an individual to possess coverage in the first place. Some theorists claim this right to health care to be analogous to the right to food, embodied in legislation mandating food stamps.

Traditionally, there was never any serious economic justification for widespread health coverage, except for suggestions that a well-insured and healthy work force was somehow good for the economy. But this situation changed radically in the middle of the 20th century when the implications of uncertainty about the future for economic efficiency were first uncovered—and these implications were both surprising and momentous. The first discovery came in 1953 when Kenneth Arrow of Stanford University extended the classic theory of economic equilibrium to include the existence of uncertainty about the future by both consumers and producers. Before his paper, there was skepticism that the great theorems of classical Adam Smith economics would work when the future was unknown.

What would concepts like "price" and "market equilibrium" and "efficiency" even *mean* when agents did not know the location of the various supply and demand curves? Contrary to expectations, Arrow showed that all the traditional results of economics-with-certainty go through, provided existing markets (in corn, labor, wheat, or whatever) are supplemented by a completely new set of hedging markets. Originally, these were markets in so-called Arrow securities. But these rather abstract securities would later be replaced by price options after Steven Ross at Yale showed in 1973 how Arrow-efficiency could be achieved quite effortlessly via portfolios of options. Within a year after Ross's paper was published, Black and Scholes formulated their options-pricing model. With these building blocks in hand, much of modern finance was born.

> *The important point in all this is that the concept of resource allocation efficiency—the moral and philosophical justification of capitalism itself—was broadened to require efficiency not only in the production of goods and services, but also in the optimal reallocation of risk. In particular, Arrow showed that all risks confronting risk-averse agents must be optimally hedged if an efficient allocation of goods and services is to be achieved by the Invisible Hand. Health risks enter into this analysis no differently than other risks, so these too must be insured if systemic capitalist efficiency is to be achieved.*

In 1963, Arrow zeroed in on health care with the publication of a second paper which, to this day, is regarded as the foundational paper in the field. In this paper, Arrow discussed the way in which health care differs from other commodities, and what this implied for the structure of an optimal health care system (e.g., no first-dollar coverage, and catastrophic insurance for all), and for optimal insurance. We need not discuss these issues further for our purposes in this essay.[4]

[4] The two papers by K.J. Arrow to which we have referred are:
K.J. Arrow (1953) "The Role of Securities in the Optimal Allocation of Risk-Bearing", *Econometrie*; as translated and reprinted in 1964, *Review of Economic Studies*, Vol. 31, p.91-6; and
Arrow, Kenneth J. (1963). "Uncertainty and the Welfare Economics of Medical Care." *American Economic Review* **53** (5): 941–73.

A Shock to "Conservatives": Prior to the work of Arrow, conservatives might have been able to object to our Basic Assumption 1 as merely a moral judgment—one with no economic justification, and one promulgated by leftists with a redistributionist agenda. But after Arrow's results, they could no longer claim this. Like the rest of us, they must accept that, in a world of uncertainty, the same concept of efficiency that justifies free market capitalism itself also implies the existence of extended health care insurance, and indeed an optimal sharing of all risks. The irony here is that all forms of insurance are *redistributional* by nature: the lucky winners (those healthy and/or rich) reimburse through their premiums the unlucky losers (the sick and/or poor). A complete rethink of what it means to be a conservative is required given these results, starting off with the startling realization: "We are all redistributionists now."

Basic Assumption 2 – Genuine Access to Health Care, with Minimal Rationing

Justification of Basic Assumption 2: Assumption 1 above is both ambiguous and problematic as it stands. For while millions of people may gain insurance coverage from Obama-care, and thus may *appear* to have gained "access" to health care, they may end up having been deceived. For suppose there are not nearly enough doctors to greet them when they come calling with their new insurance cards in hand. What good, in this case, would greater access mean in practice? In a recent *Wall Street Journal* Op-Ed piece, Dr. Herbert Pardes, CEO of the New York-Presbyterian Hospital, forecast precisely such an outcome from Obama-care.[5] A comparable situation can be witnessed in many countries that allegedly possess universal coverage, but where health care rationing is the de facto result. For this reason, our Assumption 2 mandates a *strong form of access* whereby the supply of health care services is sufficient to meet demand, and rationing is therefore obviated, at least to the extent possible.

Basic Assumption 3 – Significant Reduction of Health Care Spending Growth, with a Longer Run Cap on Spending at 20% of GDP

Justification of 3: The forecast explosion of US health care spending from today's 17% of GDP to upwards of 25% of even 30% by mid-century imperils the fiscal health of the country, and will probably place every other worthy goal of government spending out of reach. Indeed, if current Medicare and Medicaid unfunded liabilities approach $40 trillion (and they do, by the government's own reckoning), then the solvency of the US government itself will be at risk.[6] A flattening out or outright reduction of health care's share of GDP would permit the US to continue to afford infrastructure investment, education funding, and a strong defense system. Moreover the fiscal solvency of the nation would no longer be an issue.

The Apparent Incompatibility of these Three Basic Assumptions: To his credit, President Obama embraced versions of Basic Assumptions 1 and 3 from the outset. [He never addressed the issue of rationing in Assumption 2.] Yet, he was criticized for embracing goals 1 and 3 by

[5] "The Coming Shortage of Doctors," November 5, 2009

[6] The easiest way to understand why is to calculate the trajectory of debt-servicing costs as a share of total tax revenues over the next 50 years under such an entitlements burden (and this does not include Social Security liabilities). The situation is completely unsustainable.

many who, understandably, believed that these two assumptions are mutually incompatible. After all, how *can* significantly increased coverage be compatible with large reductions in the growth rate of national health care spending? The president could never explain away this paradox; neither could senior Democrats in the House and in the Senate. The result was both skepticism and cynicism. Opponents of Obama-care focused on the "unaffordable cost" of extending coverage to tens of millions of uninsured. Such Democratic legislative tactics as attempting to pay for the new system by stealthily reducing future payments to doctors by over $400 billion did not help matters. The public, for its part, has been treated to the cynicism of the editorial pages. To wit:

> *We have now reached the stage of the American health care debate when all that matters is getting a bill passed, so all news becomes good news, more subsidies mean lower deficits, and more expensive insurance is really cheaper insurance. The nonpolitical mind reels!*
>
> *Wall Street Journal* Editorial, December 3, 2009

The good news is that all three Basic Assumptions we have proposed *are*, in fact, mutually compatible, and we have:

Proposition 1 – A health care plan exists that satisfies all three Basic Assumptions.

The bad news is that Obama-care as currently proposed does not fare as well, and we have:

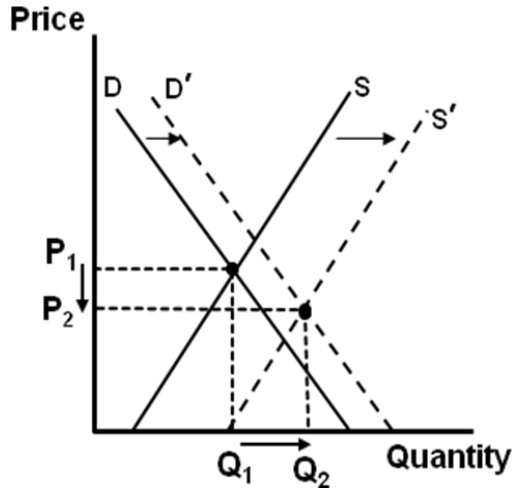
Proposition 2 – The Obama Administration plan satisfies the first of the three Basic Assumptions, and possibly the second, but it does not satisfy the third concerning the growth of future medical spending costs.

Proof of Proposition 1: The proofs will be intuitive and geometric making use of the figures in Figure 1. The challenge posed by our three assumptions is three-fold: first, significantly to increase the effective demand for (or "access to") health care; second, significantly to increase the quantity of health care services *actually provided* at equilibrium; and third, to reduce the growth of the total cost of providing this higher level of service, and, ideally, to cap or even reduce the share of GDP accounted for by total health care spending.

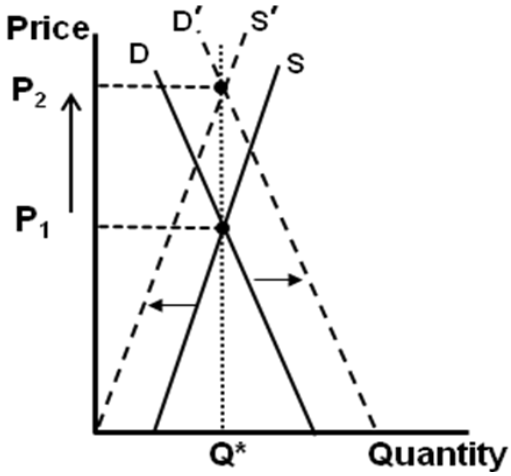
Invoking elementary microeconomic logic, we know that increased demand or access to health care must be represented by an outward shift in the demand curve, as indicated in Figure 1.A. This indicates that, at any given price for services, there is more demand than before, presumably because of increased insurance coverage. We also know from microeconomics that "more services delivered at equilibrium" corresponds graphically to an outward shift of the quantity coordinates **Q1** and **Q2** (appearing on the horizontal axis), corresponding to the old versus the new market equilibrium shown in Figure 1.A.

FIGURE 1: SUPPLY AND DEMAND OF HEALTH CARE SERVICES

1.A: Best Case Outcome



1.B: Worst Case Outcome: Obama-Care?



Source: SED

Next, we know that the "total cost" associated with any market equilibrium is simply the *area* of the rectangle defined by the two coordinates defining the equilibrium, i.e., the *product* of the two coordinates **P**x**Q**. Our goal of reducing the growth of total cost thus translates into the requirement that this area increase ever-more slowly as equilibrium supply increases. Ideally, a point will be reached where the total cost growth will level off or actually decrease *despite* the increase in actual services provided. Exactly how this happiest of outcomes can be achieved is demonstrated below.

A Family of Optimal Plans

> *Our main result is that there exists a family of health plans that satisfies all these requirements. This will be any plan in which the supply function shifts out to the right over time further and faster than does the demand function. An inspection of Figure 1.A will make the benefits of such plans partially clear. Conversely, any plan lacking this property cannot satisfy all three of our Basic Assumptions.*

It is geometrically obvious that, under any such plan, the equilibrium quantity supplied (seen on the horizontal axis of Figure 1.A) will keep increasing, as required by Basic Assumptions 1 and 2. But the phenomenon of supply shifting out *further* than demand will also check the growth rate of total expenditures, as required by Basic Assumption 3. For as the supply curve keeps

moving out faster than the demand curve does, causing equilibrium price (seen on the vertical axis) to keep falling, the growth rate of the areas of the successive "total cost rectangles" defined by the coordinates of the successive market equilibria itself declines. This implies that after a certain point is reached, the total cost of health care will actually start *declining* as a share of GDP—the idealized case postulated in the discussion of Basic Assumption 3, and never once suggested to be possible in two years of partisan debate on health care.

These crucial observations about the capping off or actual decline of health care spending as a share of GDP *notwithstanding a constant increase in the quantity of services delivered* are as important to the nation's economic future as they are counterintuitive. To prove in full generality why this decline occurs would require the introduction of a complex model. But happily, the basic idea can be grasped by utilizing a very simple result from the theory of arithmetic, namely the Product Convergence Theorem. We now invoke this result for our proof that the growth rate of total health care costs declines over time under the plans we are endorsing, and even better, that the actual GDP share of health care costs can flatten out and eventually decline. Since some readers will not be interested in the details of this proof, it appears in a footnote.[7]

> *The important question posed by this analysis is whether it is <u>possible</u> for the supply function to shift out faster than the demand function, as is assumed in the analysis. We demonstrate just below why the answer is, Yes. But first, what is it that goes wrong with Obama-care?*

[7] Consider a family of all iso-rectangles, e.g., rectangles the sum of whose widths and length is a constant. Then the Product Convergence Theorem observes that the *square* element of this set possesses the *greatest* area, whereas the more flat another member of the family is, the less will be its area. In the limit where the rectangle becomes a straight line, its area will tend to zero.

For example, if the sum of the length and width of the elements of this set is always 4, then the square rectangle with each side measuring 2 has the largest possible area 2x2 = 4, whereas the flatter rectangle with sides 3 and 1 has area 3x1 = 3, whereas the very flat rectangle with sides 0.5 and 3.5 has area .5x3.5 = 1.75, and so on until the flattest of all rectangles has area 0.

By applying a slight generalization of this elementary theorem to the contents of Figure 1.A, we obtain our desired result concerning the flattening out of the growth of health care costs. For any given outward shift in demand from **D** to **D′** reflecting greater access to health care as well as more old people, then there will always exist *some* sufficiently large outward shift in supply from **S** to **S***, such that the total cost at the new equilibrium point (where the dashed lines cross) *exactly equals* total cost at the old equilibrium point (where the solid lines cross). If the supply curve shift is *less* than this amount, costs at the new equilibrium point will exceed costs at the old one. Yet, if the supply shift is greater, then total costs will decline—and via the Product Convergence Theorem they will keep declining. Since the optimal health care plan we have identified requires that the supply curve shift out more rapidly than the demand curve, and that it do so continuously over time, we obtain our required result about the deceleration of the growth of total costs, and Assumption 3, will in its weak and strong form be satisfied. This completes our proof of Proposition 1.

Proof of Proposition 2: A proof of the inability of the Obama Administration's current proposals to achieve the last two of our three Basic Assumptions is sketched in Figure 1.B. The outward shift in the demand function is the same as in Figure 1.A. The backward shift in the supply function captures the reality of the administration's plans to bring down costs by *price controls* on doctors' services and drugs, notably the $450 billion of "reduced fees to doctors" over time. [Recall Dr. Pardes' comments on the coming shortage of doctors in his recent column cited above.] The response to price controls of this kind is always one and the same: a backward shift in the supply curve.

Consider the special case shown, where the shifts in the curves are equal in magnitude but opposite in sign, and as a result, the equilibrium quantity **Q*** on the horizontal axis does not change. This means that, despite the putative increase in "access" to health care denoted by the outward shift in the demand curve, not one extra visit to the doctor is generated, violating our Basic Assumption 2. Finally, note that total cost explodes: The new equilibrium price is much higher, and quantity is unchanged, thus violating our Basic Assumption 3. [Compare the areas of the two rectangles corresponding to the two equilibria.]

A more sympathetic portrayal of Obama-care might show the supply curve shifting outward rather than backward, but at a much slower rate than the demand curve is shifting outward. The resulting increase in equilibrium supply would then technically satisfy our Basic Assumption 2, but the rate of increase of supply would be a fraction of what it would be in Figure 1.A. This would be very unsatisfactory for those unable to obtain service. Above and beyond these problems, Obama-care would still violate our third assumption governing the dynamics of total costs.

The $64,000 Question:

Can the Supply Curve Be Shifted Far Enough Out for Cost Growth to be Controlled?

The surprising answer to this question is based upon both economic theory and a vast amount of empirical data is: *How can it <u>not</u> be able to be shifted far enough out?* Consider that people now spend a fraction on food or on clothes of what they did in ages gone by. Why is this the case, and what does this mean? It means that the supply curve of food and clothing has shifted out to the right faster than the demand curve because of productivity growth, thus pushing price down. As a result, people have more of their income left over to acquire either more of the same goods, or else new goods (e.g., travel, computers, etc.). *This is the very definition of rising living standards.*

So if **S** has shifted out faster than demand in almost all markets during the past century, why should the situation in health care be any different? The answer is what it always is: the market in question suffers from "distortions" that should be gotten rid of. Specifically, such markets are almost always characterized by cartelization and regulation, and by the lack of productivity growth that is the hallmark of cartel coziness. Let us flesh this argument out in the case of health care.

The Possibilities for Increased Health Care Supply: Astonishing as it may be, the possibility of significantly increasing supply in the health care market has rarely been discussed during the health care debate, and is scarcely mentioned in the 1994-page House bill passed in November. I personally cannot understand how such an oversight could have happened.

Happily, very good news awaits policy makers if and when attention is turned to the supply-side of health care. For there are two fundamental ways in which greatly increased supply can be achieved. First, industry-wide deregulation is needed. It is widely acknowledged that far too many segments of the health care industry (but not all!) resemble a medieval guild characterized by restrictive supply and other anti-competitive practices. If the Obama Administration is as concerned with "access" and "cost control" as it claims to be, then health care deregulation should become an urgent priority.

A good start could be made by dramatically increasing the number of doctors and other professionals whose services will be needed in the future. Who of us does not know of dedicated pre-med students who simply cannot get into medical schools at all—a reality driven by completely unjustified "enrollment ceilings" dating back decades. Why has the number of practicing physicians been *stable* at about 2.4 per thousand people for over ten years when demand for services has soared—one reason for soaring prices? More supply almost always results in lower costs and increased competitiveness, which in turn leads to higher productivity.

Second, remarkable productivity growth is possible independent of the physician-supply story, and such growth needs to be stimulated throughout the industry by everyone from politicians to Silicon Valley entrepreneurs. Keep in mind here that productivity growth is the principal force propelling the supply curve outward in most markets. This is true because, by definition, greater productivity implies that more products or services are supplied at the same price because of technological change and greater human ingenuity. Note that "more products at the same price" is the literal meaning of an *outward shift* in the supply function. To be sure, medical technology has improved dramatically over the years: just consider the efficacy of an hour of a surgeon's time, or of the power of scanning technologies.

But it is in the servicing of patients that far too little progress has been made. Why for example has there been virtually no improvement of how we call a doctor, make an appointment for three weeks later, fill out the same paperwork, and get routine answers to routine questions most of the time when we visit our doctors? How can this process not have been sped up, or automated?

The potential for increased automation offers one route to dramatically higher health care productivity, just as it has in the delivery of almost all other services. For example, consider that somewhere between 70% and 90% of patient visits to doctors involve routine diagnoses and prescriptions. This being the case, the development of Expert Systems that digitally encode the expertise required for such "consultations" could eliminate a significant portion of patient visits—visits that are time-consuming and expensive. Millions of patients could be serviced 24/7/12 at very low costs by automated professionals located within pharmacies and walk-in clinics across the nation. As the author of the first Expert System ever developed within the

financial sector some twenty-five years ago, I learned the potential power of such systems first-hand.[8] Given arresting advances in technology since that time, the potential for boosting health care productivity via Expert System technology should be stupendous.

Conclusion: Were the market whose irrationalities have just been analyzed the market for fine wines, no one need care. But the market we analyzed is the US health care system, by far the largest segment of the entire economy. In this case, we must all care about what happens. For a continuation of today's irrationalities could well imperil the nation's fiscal future.

To sum up, the government in conjunction with the health care industry should initiate a top-priority project aimed at dramatically increasing the supply-side of this industry. Only by doing so can we achieve two of the nation's most crucial long-run objectives: To provide affordable health care for most Americans, and to avoid the fiscal chaos implied by the current trajectory of health care spending.

[8] "Interest Rate Insight" published in 1986.

