'This Little Piggy Went to Market' . . .

by Dennis Small

The following speech was delivered at the Schiller Institute-International Caucus of Labor Committees Presidents' Day Conference, on Feb. 18, 2001.

I know it's impolite to say, "I told you so," but we really *did* tell you so. I mean, if people had been listening to Lyndon LaRouche, they would have known that what you see in **Figure 1** was coming. And now it's actually happening. From May of this past year, the Nasdaq stock index has plummeted by approximately 50%, and this is just the beginning: It's going down.

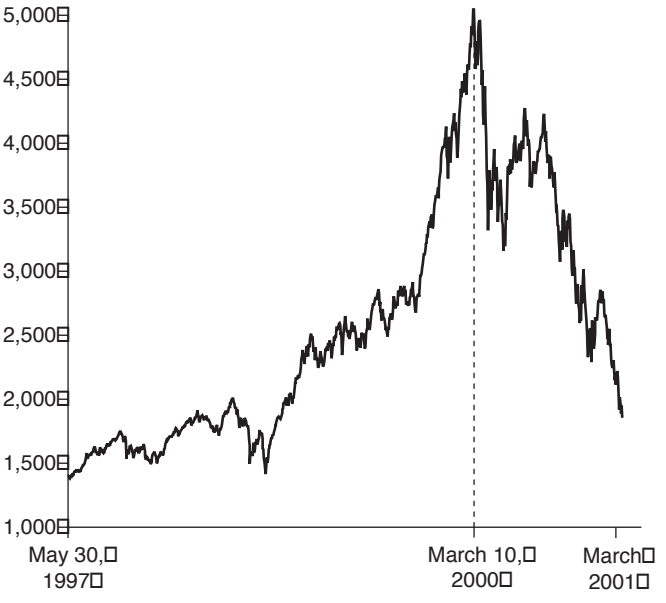
Those of you who have attended past conferences of ours know that we warned you of an imminent debt blowout, globally. We pointed to the examples of what was going on in Asia in 1997, and we said that this would in fact be occurring in other parts of the world. Now, that kind of a debt blowout is in fact happening in the United States.

We warned you that the kind of energy crisis which we documented for countries such as Russia, over the course of the 1990s, would be coming home to the United States. It has now come home to the United States. We documented for you the manufacturing layoffs and massive unemployment breaking out in countries such as Mexico, as a result of the International Monetary Fund policies being implemented there, and we warned you that these kinds of things would be happening in this country as well. Now this, too, has come to the United States.

We have entered a new stage of the global financial crisis, which Lyndon LaRouche has been warning you about for quite some time. The new stage is *not* simply the fact that the crisis is now hitting the United States with a vengeance, but rather, that the process which has been under way globally, is now so far gone that it is beginning to manifest itself inside the United States as well. Up till now, to a certain degree, the bubble in the United States has been kept afloat by a process of looting all parts of the world. That looting process is, of course, continuing; however, that looting process is now beginning to implode inside the United States as well.

And so, the United States, which has become the "im-

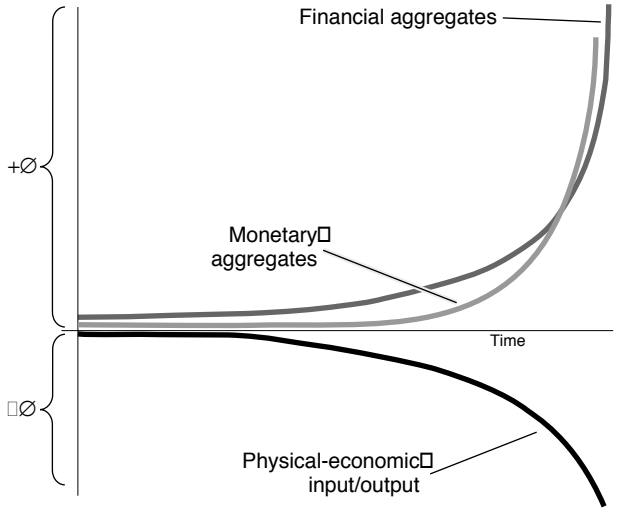
FIGURE 1
Nasdaq Composite Index, 1997-2000



Source: Nasdaq.

FIGURE 2

The Collapse Reaches a Critical Point of Instability



porter of last resort" for countries around the world—absorbing, through the financial bubble, huge imports from country after country around the world—that role which the United States has played, is now ending. And this is one of the ways in which you're going to have a domino effect, in which the meltdown and disintegration of the international financial system is going to spread like wildfire throughout the globe.

We began to enter this new stage beginning in September 1998, with the bailout of the Long Term Capital Management hedge fund, and the Brazilian bailout of early 1999, in which a hyperinflationary process was unleashed by the policies which were adopted in the United States, with the policy guidance for this coming from London, as usual. We entered into a hyperinflationary zone because the process of rolling over debt which was coming due, required the issuance of monetary and financial aggregates *greater* than the amount that was coming due over that period, such that the process of the bailout itself, produced a bigger problem than it was "solving." This stage is represented in LaRouche's "Typical Collapse Function," where the two upper curves cross over each other (**Figure 2**).

This hyperinflationary process, this new stage of the global financial crisis, is beginning to express itself, for example, in the oil, energy, and electricity crises, which you've heard about in the case of California and elsewhere.

Is the Universe Susceptible to Forecasting?

The reason I began by saying that "we told you so," is that a fundamental issue is posed by the question of LaRouche's forecasts. As the crisis sinks in, and people now see around them that what LaRouche had been telling them *would* occur, *has* in fact occurred, you begin to get an interesting kind of reaction—I'm sure that many of you who are out there organizing, are familiar with this. You will get people who agree with what LaRouche has to say toward the *past*—but not toward the *future*. Now, this reveals a very interesting kind of problem, because they're perhaps willing to recognize that LaRouche was right about something he forecast which has now in fact happened, but they absolutely don't want to believe that what he is *now* saying will shortly occur, is in fact what is in store for them.

And you get all sorts of expressions of this, such as: "Well, that was true, because of this; but the other point won't be true, because of that." Or they'll say, "Oh, *They* will solve this." *They*. They with a capital T—that's all you know; you don't know who it is, but *They* will somehow solve this.

So, what I want to pose to you from the outset, is that the real issue in the difficulty that people have in conceptualizing LaRouche's forecasts and his forecasting method, is a very profound problem, and not one of simple solution. That the real issue here is that people have a disagreement, or at least a problem, as to the actual nature of the physical economy and of the humanized universe within which that physical economy develops, or fails to develop, and as to whether or not the nature of that humanized universe is susceptible to forecasting.

In other words, is it in fact possible that different trajectories of outcome in the universe, can be based on different courses of action, different human action? The reason this poses a very basic question, is that the concept that most people have of the physical universe, and of the human economy developing within it, is of a universe of one of two sorts.

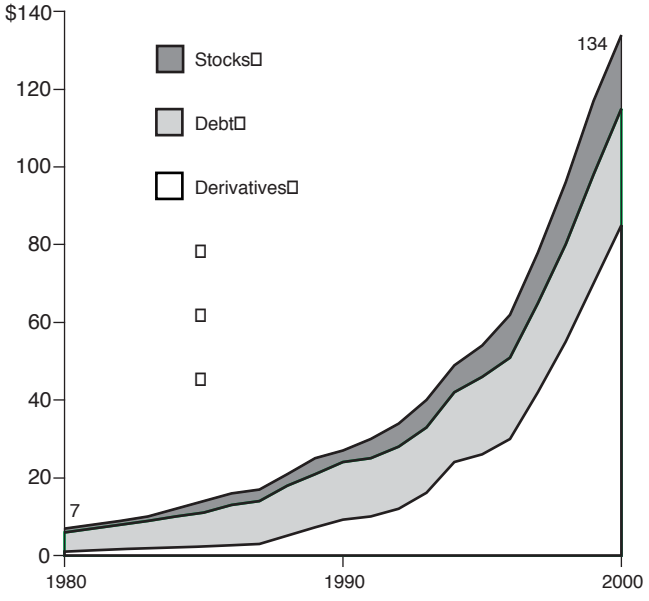
In the first case, they assume fixed laws, which are linearizable in some fashion or other, both toward the past and toward the future—but which are linearizable. Therefore, within that kind of essentially materialist framework, of material bodies moving around in space, there is in fact no room for free will. That is to say, there is no real option of different choices of trajectory of human activity that can change the outcome in the physical universe. And that's ultimately what's behind one of the views that leads to the problems that people have with the issue of LaRouche's forecasting. This leads to a certain kind of fatalism, which you're certainly familiar with, where people say, "Well, it's gonna be what it's gonna be, and there's no way you can actually change this, and that's where it's gonna head, and that's the way it's gonna be." And so on and so forth. There's a problem in the comprehension of the nature of the physical universe and of man within it, which is the underlying problem on this issue of LaRouche's forecasting.

The flip side of the same coin, are the people who view the universe as fundamentally arbitrary. That is to say, that there is no causality whatsoever, that there is no causal relationship between activities within that universe, or if such causality does exist, it's not knowable to man. And for that

FIGURE 3

U.S. Financial Aggregates

(Trillions $)

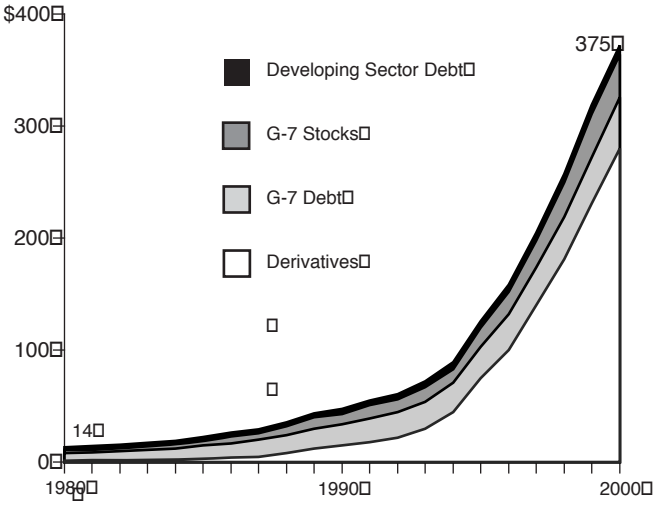


Sources: Federal Reserve Board of Governors, "Flow of Funds Accounts"; OMB, "Budget of the U.S., Fiscal Year 2001, Historical Tables"; Bank for International Settlements; *EIR*.

FIGURE 4

World Financial Aggregates

(Trillions $)



Sources: Federal Reserve Board of Governors, "Flow of Funds Accounts"; OMB, "Budget of the U.S., Fiscal Year 2001, Historical Tables"; Bank for International Settlements; World Bank; *EIR*.

reason, the art of forecasting, or the science of forecasting, is something that cannot actually be applied, looking toward the future, in this universe in which we reside.

I'm posing the issue this way, because I think that the solution to this problem, is actually the key to understanding both the *cause* of the crisis which we're facing today, and also, it is the only possible basis for *founded optimism* that there can indeed be a solution, that there is an answer to this crisis.

In other words, what I want to get at, is two points. First, man is not a "piggy"; and second, the economy is not a "market." So, there's absolutely no reason for this "little piggy to go to market."

The Speculative Bubble Is Out of Control

Let's start by taking a look at the bubble. **Figure 3** shows just the U.S. side of the bubble, and corresponds to the upper of the three curves, financial aggregates, in LaRouche's Typical Collapse Function. It reflects the best estimate that *EIR* has been able to come up with, on the U.S. side of the situation, covering the period from 1980 to 2000. You can see a growth in U.S. financial aggregates from approximately $7 trillion back in 1980, to approximately $134 trillion today. Now, the lion's share of this is financial derivatives, which now total approximately $85 trillion out of the $134 trillion total, or two-thirds ot the total. The other two major components are total debt of all kinds — corporate debt, personal debt, government debt, and so on — and the capitalization value of the U.S. stock markets, which have grown prodigiously, as you know, over this recent period.

The interesting thing is that the period from 1996 to 2000 shows a phenomenal rate of growth of derivatives, in particular. What you're getting is approximately a 30% per year growth rate of all financial aggregates. Now, if your speculative bubble, your cancer, is growing at the rate of 30% per year, you can imagine what's going to happen with the economy.

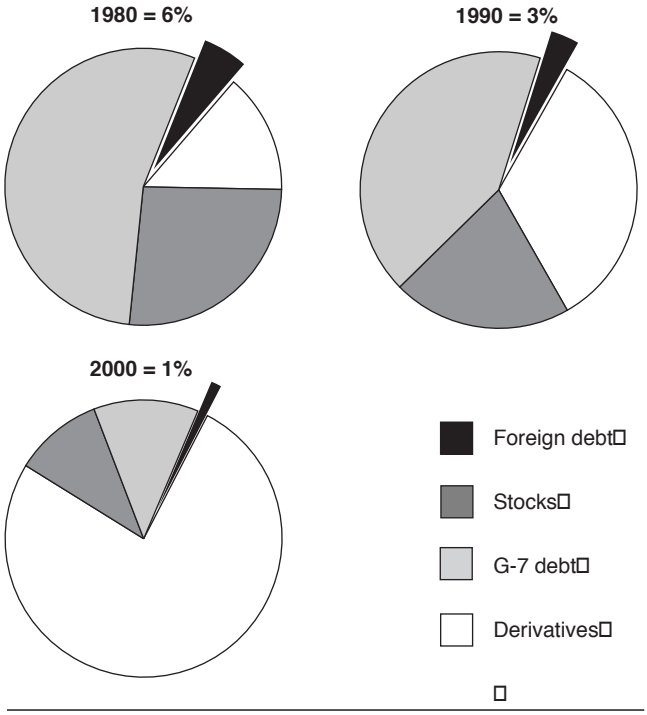
Figure 4 takes a look at the upper curve of the Typical Collapse Function, but for the whole world. A few months back, LaRouche estimated that the total volume of financial aggregates internationally is approximately $400 trillion. Our best estimate, taking a look at what is visible on the horizon, adds up to about $375 trillion. There are undoubtedly additional financial instruments that are *not* readily visible on the horizon, so the ballpark of $400 trillion is a pretty good estimate.

Again, of the total of $375 trillion, $280 trillion are derivatives. And just look at the way the curve has grown, at about 30% per year in the recent period. In this case, we have included the debt of the Group of Seven nations, the so-called "advanced sector" countries; the stock markets of those countries; and also the total debt, foreign and domestic, of the developing sector, or the Third World countries. Five billion

FIGURE 5

Foreign Debt and the Global Bubble

(Percent of Total)

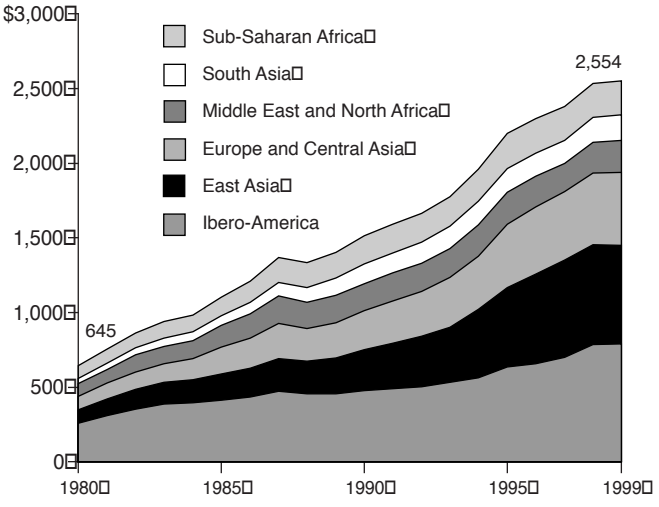


Sources: Federal Reserve Board of Governors, "Flow of Funds Accounts"; OMB, "Budget of the U.S., Fiscal Year 2001, Historical Tables"; Bank for International Settlements; World Bank; *EIR.*

FIGURE 6

World Official Foreign Debt

(Billions $)



Source: World Bank.

out of 6 billion people on the planet Earth are found in those countries.

You cannot actually see this component on the figure as drawn, because it's dwarfed by the size of the rest of the financial bubble. In fact, the total amount of the *real* foreign debt (which is greater than the *official* debt, as we will discuss below) of the Third World countries is approximately $4.5 trillion—"only" $4.5 trillion. **Figure 5** shows that this debt is actually a dwindling percentage of total global financial aggregates, which also tells you something about the political process that has gone on between the 1980s and the year 2000.

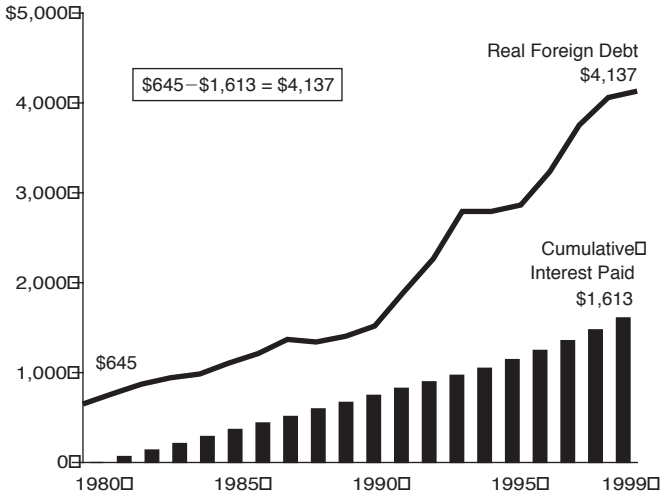
In 1980, the real foreign debt of the developing sector was approximately 6% of the total bubble. So, there was a reason why the center of the financial-political battle in 1980-83 revolved around the issue of the foreign debt of the Third World countries. LaRouche's *Operation Juárez* proposal of 1982 went to the heart of the most explosive part of the global financial system at the time, because although the foreign debt was "merely" 6%, in point of fact it was the only part of the bubble that was in imminent blowout.

Compare that to today, the year 2000: Foreign debt is less than 1% of total financial aggregates, or $4.5 trillion out of about $400 trillion total. And today, *everything* is blowing out. This isn't a question only of the debt of Mexico, or Argentina, or Russia, and so on, blowing out. No! The stock market is blowing out; the derivatives are blowing out; the banks are blowing out; the national debt of the United States is blowing out. Everything is blowing out! The whole kit and caboodle. And there is no solution to this problem, unless the totality is addressed: Nothing less is going to work.

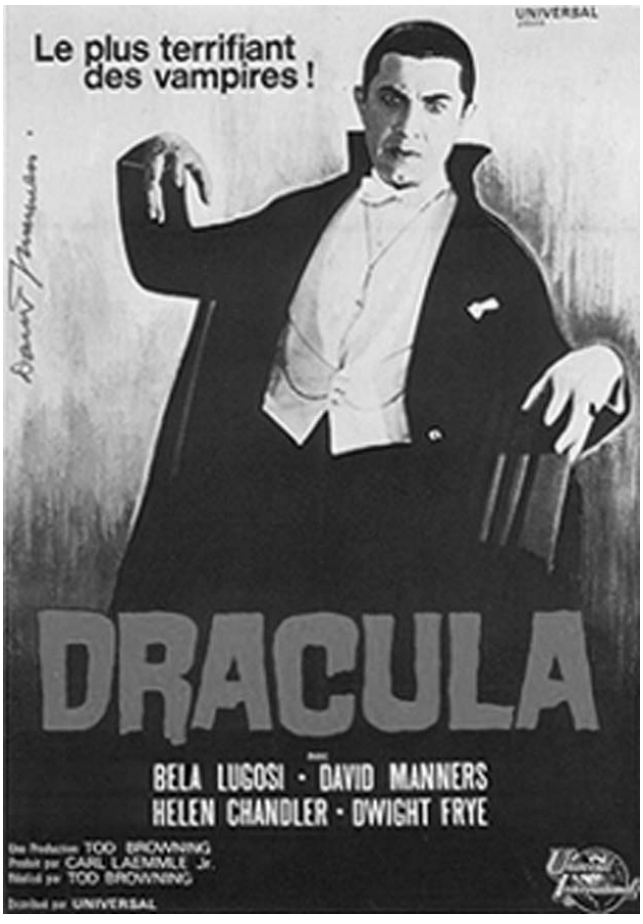
This is something that is important to keep in mind as we analyze and evaluate proposals such as those coming from the Vatican around Jubilee 2000, and other proposals. These proposals are very important; this issue of the Third World debt is very important—it's nations that are at stake, after all. This debt is the way the total global cancer is placed on the backs of five-sixths of the world's population, so it's not a small matter. The whole bubble is transferred in on them, through that mechanism. However, it is not the whole story, and you cannot solve this problem only by measures such as debt moratorium, or otherwise addressing only the debt of these countries. Steps taken in that direction are useful, because it poses the issue. But it is not the solution. There is no solution outside of LaRouche's total New Bretton Woods reorganization. And anyone who simply takes a look at the magnitude of the bubble has got to realize that that in fact is the case.

Figure 6 shows what has happened with the *official* foreign debt of the Third World nations: You can see that it has grown over the last 19 years, up to about $2.5 trillion today. You will note a levelling-off which occurs over the last year

FIGURE 7
World: Bankers' Arithmetic
(Billions $)



Sources: World Bank; *EIR*.



John Q. Market

or two, but this is misleading, because over this period, what has been happening is that the official foreign debt categories have been, shall we say, supplemented by other forms of de facto foreign obligations (for example, dollar-denominated domestic debt) which brought the total *real* foreign debt of the Third World nations, the developing-sector nations, up to approximately $4.1 trillion in 1999 (see **Figure 7**). Today, it is closer to $4.5 trillion.

This debt started out as about $645 billion back in 1980, and over this 19-year period, these countries have paid more than $1.6 trillion in interest payments alone, on $645 billion in original debt. In other words, the original debt was paid about two and one-half times over. And yet the total debt now is about seven times larger than it was initially. So, we have here a typical case or "bankers' arithmetic": $645 minus $1,613 leaves with you with $4,137 in debt. Typical bankers' arithmetic.

And that's the world picture, in that regard.

Supply and Demand? Get Serious

One of the things that has happened, along with this process of Third World indebtedness, is a political drive to convince the victims of this indebtedness, that the way to solve their problems, is to privatize and deregulate. "It's going to work," they assure Third World countries. "There's no problem. It's important to do this. Globalization is with us to stay. You've got to open up your economies, and allow all that capital to come flooding in and help you out." And, of course, they opened up their economies and all the capital went flooding *out*. And the Third World privatized—hear this, Californians—between 1987 and the year 2000, about $400 billion in national assets—oil companies, electricity companies, mines, and so forth—which they sold for a song on the market. They got dollars for it, but the money didn't stay in their economies for more than a split second; it went out immediately in the payment of the foreign debt.

This privatization process, this deregulation process, is exactly the same kind of argument that is being made in the United States today. Now they are telling Americans: "You can't go against the current on this. I mean, these are the rules of the market. This is how things are done. You can't get the market upset. Why, Mr. John Q. Market will be disturbed with you."

You know, you used to hear about John Q. Public. Now it's John Q. Market. You sort of wonder, who is John Q. Market, anyway? So I did an Internet search, and found his picture (see photo).

So, the financial bubble, all $400 trillion of it, is the actual cause of the hyperinflationary explosion which is under way, globally and inside the United States as well. But the United States, and states within the United States, are being told that

FIGURE 8

Supply and Demand

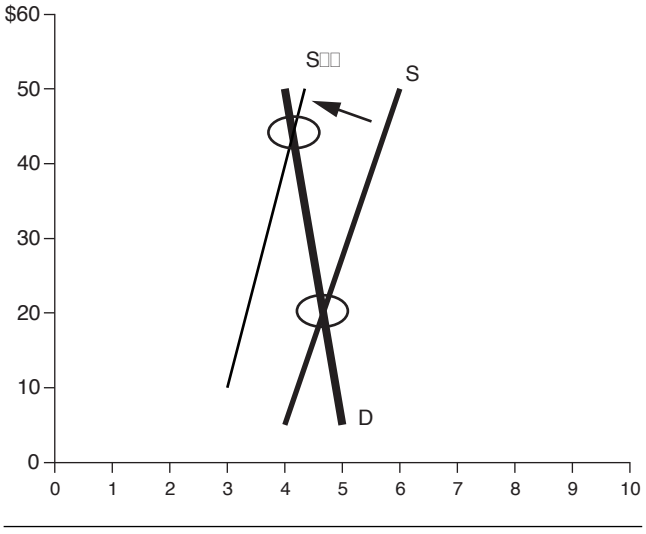
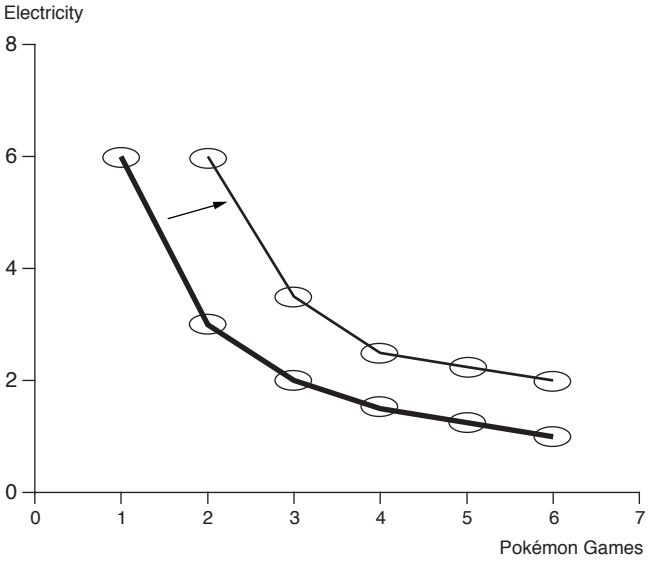


FIGURE 9

Indifference Curves



what has to be done, in order to deal with the hyperinflation, is to privatize and deregulate.

This, of course, is what has happened in California. I'd like to make one or two basic points on this. First of all, *the reason that electricity rates have risen in California has absolutely nothing to do with supply and demand*. Rather, rates have risen because there is a gigantic speculative bubble, a cancerous debt bubble, which is riding on every single kilowatt-hour of electricity produced and sold in the state of California. *That* is why the prices are so high—because on every single unit of physical production which is moving in the real economy, what is riding on that is a gigantic cancer of speculative debt.

To the degree to which you don't challenge the existence and the dominance of that speculative debt, that cancer, if you allow it to exist, there is absolutely nothing you can do by way of supply, or demand, or anything else, to deal with the problem. You can double the number of kilowatt-hours of electricity produced in California, and it won't affect the price, not by one dollar. It won't make any difference, because the price has nothing to do with the amount of kilowatt-hours being produced. Unless you stop the speculative cancer, unless you re-regulate, unless you say, "We will not allow the cancer to dominate the markets of our physical economy, and we're going to close the door to the cancer," unless you do that, there's absolutely nothing else that is going to make any difference whatsoever. There is nothing that's going to work, unless you re-regulate. Because re-regulation is the name that's given to slamming the door closed on the cancer and saying, "Sorry. Not here."

Of course, what people in California and elsewhere are being told is, "No, you can't re-regulate. The problem is supply and demand. The reason that prices have gone up, is because of the market, and supply and demand. You probably don't understand this, because you haven't read Paul Samuelson's textbook on economics. Because if you had, you would know that what's really going on is that supply is limited and demand is increasing. And therefore, as every reader of Samuelson's textbook knows, and as you can see in **Figure 8,** prices are determined where your supply and demand curves intersect. That's market-determined supply-and-demand price.

"Now, when supply is restricted, the supply curve shifts slightly to the left, and as you can see, the new supply curve (S′) intersects the demand curve at a higher price, doesn't it? If people had only read their Samuelson, they would know that this, obviously, is what's going on in California, and that's that."

Well, I've read my Samuelson, I have to confess. And the argument *still* doesn't make any sense. You've got to ask yourself, for starters, where does this demand curve come from? How do you know the amounts that people will demand?

"Aha!" Samuelson enlightens us. "Everybody knows that demand curves are derived from individual *indifference curves*."

You didn't know that, did you? Well, figuring that you were probably grossly uneducated on this subject, I have drawn two indifference curves for you (**Figure 9**). And to remedy your undereducation, I will quote for you what Paul Samuelson has to say about indifference curves, on page 443

of his basic text, *Economics*.

"The curved contour of Figure 9" (in his case, 22-5), "linking up the four points"—I drew six—"is an 'indifference curve.' Every point thereon represents a different combination of the two goods." (In our case, on the y-axis, electricity, much in demand; and on the x-axis, Pokémon games, also much in demand.) "And the indifference curve," Samuelson continues, "is so drawn that, if our consumer were given his choice between any two points on it, he would not know which one to choose. All would be equally desirable to him, and he would be indifferent as to which batch he received."

Get it? In other words, in the middle of the curve, you're willing to trade off approximately one Pokémon game for one unit of electricity. And, since there is a diminishing marginal utility of Pokémon games, you are willing to give up less and less electricity, the more and more Pokémon games you have.

A causal relationship, perhaps a negative one, between Pokémon games and electricity, and even the whole physical economy? Not in Samuelson's linear world.

Now, lest you think that Samuelson and other equally insightful economists have a merely static view of the world—No. They have a view of "dynamic equilibrium." What that is, is that you take two static moments, and you connect them with an arrow. That's dynamics! And then the way you generate a global demand function, is that every one of us, each one of you, has an indifference curve of your very own. You know what you like; nobody else knows what you like. But you like it. I know what I like, very much, and I choose, in proper combinations, what I like. I like some electricity, but I like Pokémon games too. When you get into more sophisticated classes in economics, you need a third dimension to include the batteries for the Pokémon games—that's for when the electricity goes out.

You may think I'm making this up, but that really is what they say. Anyone who has studied economics in any university anywhere in the world, knows that I couldn't possibly be making this up. This is what they teach. Very well; then, let's subject the theory to three small empirical tests.

First, let's look at the world oil market. Because we were told, were we not, that the price of oil plummeted a couple of years ago, because the market was flooded with all sorts of oil supply. Now, if you look at what happened between 1996 and 1998 (**Figure 10**), the price of oil plummeted by 52%. And yet, the supply of oil over that same period rose a mere 6%. Now, I ask you: Do you really think that a 6% increase in the supply of oil produced a 52% drop in its price?

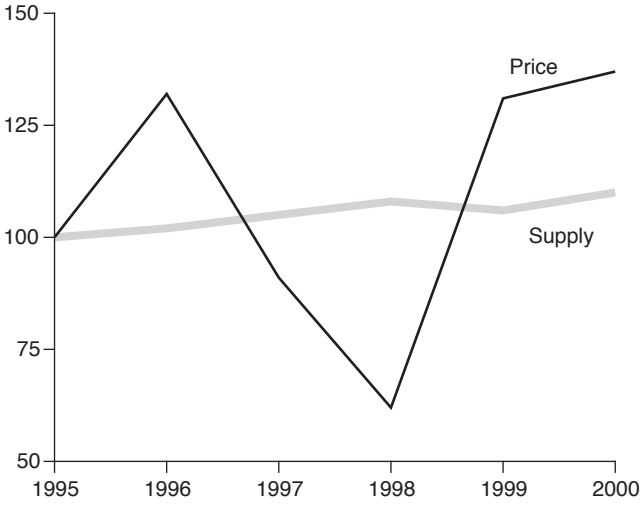
The economists have a comeback on this point too, which is that there is supposedly an extremely "inelastic" demand curve—which means that a small supply rise causes a huge price drop.

Well, in that case, let's look at what happened the next year, between 1998 and 1999, and then in the year 2000. The price of oil, as you may recall, zoomed back up by about 120%—and, according to the theory of supply and demand, this would be a result of a significant drop (or at least of *some* contraction, if demand is inelastic) of supply that would drive the price up. Now, the only problem for their theory is that supply *rose* in this period, by some 2%. An embarrassing problem.

FIGURE 10

World Oil Price vs. Supply

(Indexed to 1995=100)



Sources: California Power Exchange, U.S. Dept. of Energy, *EIR*.

Let's look at the U.S. natural gas market (**Figure 11**). Between 1999 and the year 2000, the price of natural gas rose by more than 50%. Was this because supply contracted dramatically? Hardly; it was dead flat. If you go back to 1996 and 1997, supply did drop—by a monumental 0.15%!

And finally, let's look at California electricity (**Figure 12**). From May 2000 through the end of the year, a seven-month period, the price per kilowatt-hour of electricity in California rose by about 700%. The supply, as you can see, was flat.

So much for Samuelson. And so much for the nonsense you hear about the virtues of deregulation and privatization.

Global Poverty Kills

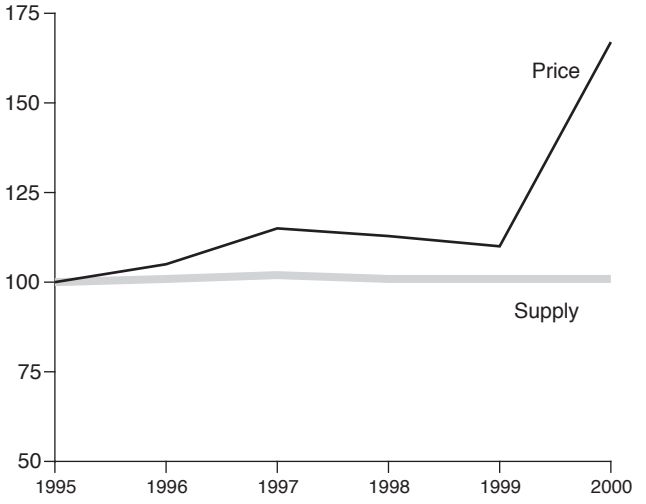
Now, let's turn our attention to the physical-economic curve in LaRouche's Typical Collapse Function. We've looked at the financial aggregates, globally; now let's look at one or two elements of the underlying physical-economic parameters.

In **Figure 13,** we're using 1990 as an index of 100, and we will look at what has happened between 1990 and the year 2000, in two areas. First, is grain production in the developing sector, that is to say, all of the Third World countries plus the members of the Commonwealth of Independent States (CIS),

FIGURE 11

U.S. Natural Gas Price vs. Supply

(Indexed to 1995=100)

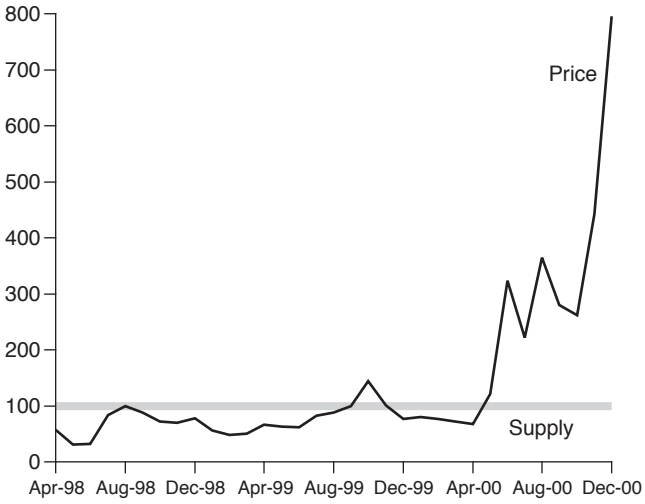


Sources: U.S. Dept. of Energy, *EIR.*

FIGURE 12

California Electricity Price vs. Supply

(Indexed to August 1998 =100)

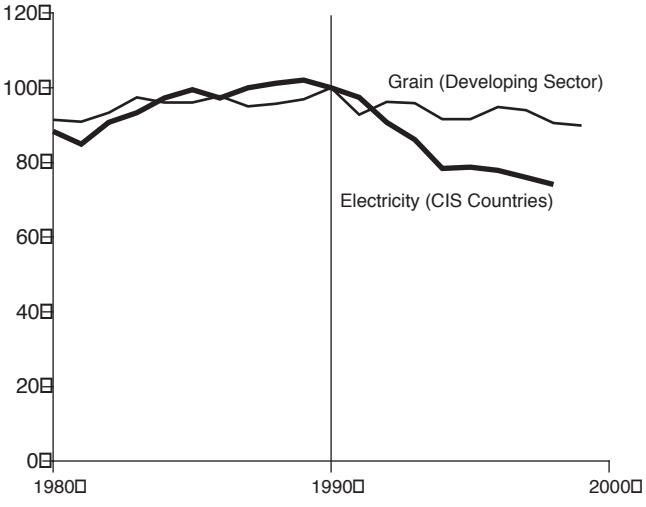


Sources: California Power Exchange, U.S. Dept. of Energy, *EIR.*

FIGURE 13

Grain and Electricity Production, Per Capita

(Index: 1990 = 100)



Sources: FAO; International Energy Agency; *EIR.*

the former Soviet bloc countries. Again, that is 5 billion out of 6 billion people on the planet. You can see that there was a 10% collapse in grain output per capita, measured in physical terms, while the speculative bubble grew, as we indicated earlier, with a derivatives growth rate of about 30% per year. Second, is electricity consumption in the CIS countries. There you have a collapse of 26% in the same period.

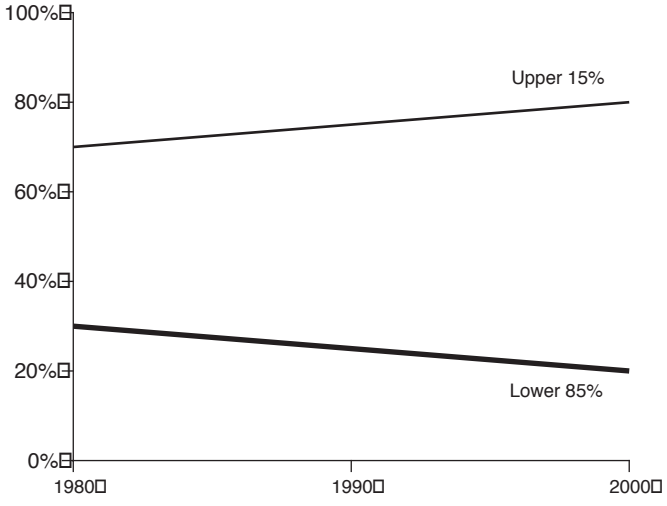
Now, it is correct to *not* take global averages on such parameters, because the global averages actually disguise the truth of what is going on. Because, as you can see in **Figure 14,** what is going on globally is a kind of skewing of income, which is very similar to the process which *EIR* has documented for the United States. On a world scale, the upper 15% of income-brackets of the world's population is today getting approximately 80% of the total income generated globally (measured in GNP terms), up from 70% twenty years ago. And the lower 85% of the world's population, which is the 5 billion people in the developing sector, is getting a decreasing share, dropping from 30% to 20% over 20 years.

One should not read too much into this parameter. This is GNP, and it is done on national averages, so it doesn't tell you the whole story, and it's not in physical-economic terms. But it does give you a window through which to look into what the actual process is.

Figure 15 takes us a step closer to the real issue, showing world poverty in the middle of the 1990s, as measured in monetary income terms. We are looking at the middle of the 1990s only because more current figures are not available. But one can say, from the outset, that it's far, far worse today than what you see here.

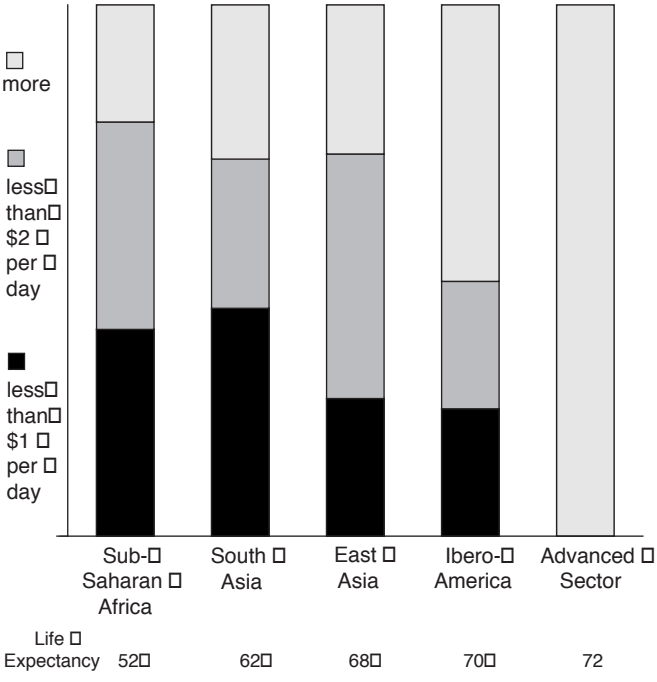
Each bar represents 100% of the population in these five major areas of the world. The lower part of the bar is the percentage of the total population which makes, or lives on—that's "lives" in quotes—$1 a day, or less. That is considered

FIGURE 14
The Global Income Spread Widens
(Percent of Total GNP)



Source: World Bank.

FIGURE 15
World Poverty in the Mid-1990s
(Percent of Population)



Source: World Bank.

to be a condition of "extreme poverty." In the case of Sub-Saharan Africa, that's approximately 40% of the population. The middle part of the bar is the additional percentage that lives on $2 a day or less. That is considered to be a condition of "poverty." In Sub-Saharan Africa, 75% of the population "survives" on $2 a day or less. In South Asia, the percentages are 43% and 70%; in East Asia, 26% and 70%; and in Ibero-America, 25% and 50%, respectively.

So you can see, in the majority of the Third World, you're talking about approximately 3 billion people out of 6 billion people on the planet, getting $2 a day or less. Now, this correlates with a number of poverty parameters, including average life expectancy. In the case of Sub-Saharan Africa, life expectancy in the mid-1990s was 52 years. The last bar is the so-called "advanced sector" nations, where the income is higher and life expectancy is greater.

What this all reflects is the inability of the global economy to maintain a growing and prospering population, as measured by the central concept in LaRouche's economics: potential relative population-density. That is, the potential relative population-density of these societies, all of our societies, is *less* than the current actual population. Therefore, population is collapsing. We are in a demographic implosion, where the total population cannot be maintained.

This shows up in a variety of different ways. First, people simply die, and total population falls. Second, life expectancy declines. Third, the quality of the population, as reflected in skill levels and things of that sort, also diminishes. All of this is going on today.

There is an additional feature to the demographic question, which is closely related to the U.S. role as "importer of last resort." As you know, Mexico sends 90% of its exports to the United States. But Mexico, like many countries, also exports its *population* (**Figure 16**). There are 8 million Mexicans living in the United States, out of a total population of about 100 million—i.e., about 8% have been "exported." In terms of its labor force, 12% has emigrated to the United States in search of jobs, because of Mexico's collapse. So, the United States is the importer of last resort, not only for products, but also for populations. What happens when that importer of last resort collapses in that regard as well?

Invention Is the Mother of Necessity

What is the deeper issue posed by this systemic, global crisis? In a recent article by Lyndon LaRouche, entitled "Look At What Happened in Brazil" (*EIR,* Feb. 9, 2001), he said:

> For this purpose, we may assort societies into two general types. The two types are assorted empirically, by examining the evolution of the demographic characteristics of entire societies, in their approximately "closed-system" relationship to the region of the noösphere which that population inhabits and exploits. Societies

FIGURE 16

Mexico: Emigration and Labor Force

(Percent of Total Population)

Sources: INEGI, Mexico; U.S. Census Bureau; *EIR.*

> in which the localized noösphere is developing anti-entropically, typify one of the two types; societies which may prosper at home, by looting populations and regions abroad, constitute an opposing type.

So, there are two types of societies: those that develop anti-entropically, and those which *may* seem to prosper at home, by looting abroad.

Now, I think pretty much everyone in this room will have little difficulty recognizing, and agreeing, that we are today in the second type of situation described by LaRouche, in this type of process of collapse. But you often run into the problem, as to whether the first type of society identified by LaRouche, that is to say, "societies in which the localized noösphere is developing anti-entropically," is in fact possible on a permanent, ongoing, perpetual basis.

In other words: Can man have such a relationship to the physical universe around him, to the humanized nature within which he develops, where that relationship may be bounded at any given point, but infinite in terms of its potential self-development? Is the physical universe such that it complies with infinite human creativity? *That* is the issue.

Some people say outright, "No, of course not. That's ridiculous. You can't keep developing forever. Man can't do this. Who do you think you are? Man is not God, after all." For example, Prince Philip tells us, with great conviction, that man is a virus. You can read in Luther that man is a worm. Some people will tell you that man is a barking dog. And some people in economics classes argue that man is a piggy. And so they say, "No, it's absolutely not possible."

A seemingly contrary view is sometimes expressed thus: "Yes, you can have continuous progress. Because as you develop, as you grow, and you begin to exhaust your existing resources, you run into a problem. And you then have a crisis, like today, and the circumstances become so critical that, somehow or other, man comes up with a creative solution. After all, Necessity is the Mother of Invention, isn't it?

Right?

Wrong! Necessity is *not* the Mother of Invention. Rather, I submit to you, *Invention is the Mother of Necessity*.

That is a crucial distinction; and to develop that idea, I want to take recourse to Plato and his *Timaeus* dialogue. I believe that this is the only possible standpoint from which one can understand both what got us into this mess, and also what is the basis for founded optimism for getting out of it. Invention is the Mother of Necessity; that is the way the universe is actually organized.

Plato's *Timaeus* dialogue takes place the day after the discussion in the *Republic,* where Socrates has laid out what the proper form of organization of a republic actually is. The issue taken up in the *Timaeus* is the origin of the universe; it's the story of Creation, it's Genesis. Others have written about genesis too, and Plato wrote about it here.

The starting point of the discussion of the *Timaeus,* epistemologically, is where Plato leaves off in the *Theatetus:* What is the nature of knowledge, and how do you know what you know? So, the *Timaeus* begins with a brutal assault on the idea of sense perception: Plato, through Timaeus, argues that sense perception is false, and that the only basis for understanding actual causality in the universe, is Reason.

> What is the difference between that which eternally exists and has no birth, and that which is always coming into being, and never exists? The first, being eternally invariant, is comprehended by mentation, with the aid of Reason; the second, which is ephemeral and never really exists, is imagined by opinion, with the aid of unreasoning sense perception.

With that as a starting point, Timaeus says, now, let's take a look at what, in fact, is the cause, what is the origin, what is the real story of Creation. In other words:

> We also say that what comes into being must necessarily come into being by some cause. To discover the Creator and Father of this universe is quite a task.

At about this point, Socrates interjects—Socrates does

not speak very much in this dialogue, this is heavily a monologue, but Socrates says encouragingly:

> Excellent, Timaeus. And we must by all means agree to do as you bid us; we have heard your prelude with admiration, now do go on with the theme of the music.

The reference to music is not gratuitous, because Timaeus then proceeds to discuss the Creator of the universe as the *Composer* of the universe. At this point you can almost hear Timaeus take a deep breath before plunging ahead.

> Let me tell you then for what particular cause the Composer composed this Creation and this universe. He was good, and the good never has any envy for anything; being thus beyond envy, he willed all things to be created as like himself as possible. Whoever accepts this foremost and most pervasive principle of the Creation and the universe, when it is offered by thoughtful men, is accepting it wisely.

This is a pretty stunning assertion: that the foremost and most pervasive principle of the creation of the universe, is that God created it good. God was good, and he wanted it to be good: That's the starting point, that's causality.

Having said that, Timaeus then goes on to explain further:

> After consideration, God found that among those things which are visible by nature, no whole creature which is lacking in intelligence could ever be better than a whole creature which has Mind, and that Mind cannot come to be in something that has no Soul. For this consideration, he framed the universe by composing Mind inside Soul, and Soul inside Body, so that he might produce a work most beautiful and most perfect by nature.
>
> In this way, according to the language of simile, we ought to say that this world was created by the Providence of God as a living organism truly possessing Soul and Mind.

Consider this from the standpoint of LaRouche's insistence that the cognitive process is the organizing principle from which life flows, and that life in turn is the organizing principle from which non-living matter flows—and not vice versa. The above is what Plato had to say about precisely that topic: Plato has posed here that the universe is composed of the non-living, the living, and Mind, and that Mind is the higher ordering principle of the three.

This idea of the role that Mind plays in the living universe is also elaborated by Nicolaus of Cusa in the 15th Century, for example in his dialogue *The Layman: About Mind,* where he says: "Mind is a living substance. . . . Its function in this body is to give it life and, because of this, it is called Soul. Mind is a substantial form of power."

As for Plato's insistence that God has produced "a work most beautiful and perfect by nature," we are reminded powerfully of Leibniz's concept of "the best of all possible worlds," that God created the world in the most beautiful and perfect way possible.

Plato then summarizes the argument he has made up to this point:

> The body of the universe was created visible, but she, the Soul who partakes of reason and harmony, was invisible, created the most perfect of ever-conceivable and existing creatures, by the most perfect Creator.

But then an interesting inflection occurs in the dialogue, because Plato has Timaeus introduce the following idea. The Creator, the Composer, was very happy with what he had done so far, Timaeus tells us. In fact, he was overjoyed, and he loved it very much. (You may hear in this echoes of other discussions of genesis.)

> When the Father who conceived it, imagined it moving, and alive, and a delight for the everlasting gods, he loved it and, overjoyed, he conceived a plan of how to render it still more like its exemplar. And since the exemplar is an eternal being, he set out to complete this universe as closely to that as possible.

Now, there's a problem here. Because God can't make Mind or man eternal in the same way God is eternal, because then man would be God. But God wants to make him more perfect still. Why? Because he really loved what he had done, and he was overjoyed by it. So what did he do? What would you do?

God created Time, as the moving image of eternity. Listen to it in Plato's words, which are most impressive:

> Given that the nature of the exemplar is eternal, and given that it was impossible to perfectly bestow this eternal quality on a thing which is generated, he invented some moving image of eternity. So at the very same moment in which he set the heaven in order, he also made an eternal moving image of the one and unmoving eternity, an image which moves according to a metric. And this metric we have called Time.

So, Man sees his own actually eternal nature reflected in the movement of Time. Not in the ticking of a clock, but rather, in the way in which Time has been created by the Composer of the universe as a metric to make eternity simultaneous with Man's temporal existence. That's why God did it this way, according to Plato. I find the explanation quite

plausible. I certainly don't have a better idea than that one; certainly, not a more beautiful or striking one.

Later in the *Timaeus,* Timaeus, the astronomer, tells us that God set the planets and the orbs in motion as the means for measuring this presence of eternity as measured through Time. That's why the planets orbit the way they do, for that reason.

Plato then returns to the discussion of the relationship between this most perfect of creations, and the actual physical ephemerals which are present to Man's senses, the things which seem to be moved by material necessity.

> Absolutely nothing which the act of becoming bestows to the changing realm of the senses belongs to eternity, since these are the forms of Time which imitate eternity, and revolve according to a metric.

Mind and Soul, however, are not ephemerals, and are thus the highest forms of the created universe:

> For it must be said that, of all beings, Soul is the only one that has the right to possess Mind, because Soul is invisible, while earth, air, fire, and water are visible. For it is necessary that the lover of Reason and knowledge, seek the first causes of rational nature.

Plato's search for the first causes of rational nature brings him to the following conclusion of decisive importance for our knowledge and our understanding of the physical universe:

> Because the birth of this world came forth as the mixed result of the coming together of Reason and Necessity, Reason rules over Necessity by persuading her to drive the greatest part of the ephemerals toward what is best; and our universe was initially put together when Necessity was defeated by rational persuasion in this fashion, and by these principles.

Reason rules over Necessity, Plato has told us, and drives it to the best results. Translation, if I may be allowed: *Invention is the Mother of Necessity*. It is not that problems which arise from necessity somehow create, from within its bowels, some creative breakthrough or invention. It doesn't work that way, no matter what you were told. It works the way Plato has said.

And since Invention is the Mother of Necessity, and not the other way around, Plato concludes—if I may paraphrase Leibniz from centuries later—that Man is the crown of Creation. In Plato's words:

> God gave each one of us a divine genius, that which, as they say, inhabits the highest part of our body, in order to uplift us from the earth toward our heavenly kinsmen, since we are an offshoot, not earthly, but heavenly.

We are not a virus; we are not a worm; we're not a piggy. We are an offshoot heavenly. And this is not a "market" out there; it's an *economy*. And for that reason, there is no reason whatsoever for this little piggy to keep going to market. It's time for a change.

The Case of California

Energy Deregulation Has Been a Disaster

by Richard Freeman

The following is excerpted from a speech to the conference of the Schiller Institute and International Caucus of Labor Committees, in Reston, Virginia, on Feb. 18. The full speech, titled "No Imports, No Lights," analyzed three forces that have created the ongoing destruction of the U.S. economy: the collapse of the physical economy, as exemplified by layoffs and declining production; energy price hyperinflation, typified by the case of California; and the collapse of the U.S. economy's global function as "importer of last resort." Our excerpts here focus on the second of these three tendencies. For information on the other two, see the following articles by Richard Freeman in EIR*: "The Bursting of the U.S. Import Bubble," Jan. 19, 2001; "Collapse of U.S. Imports Threatens World's Leading Economies," Feb. 16; and "U.S. Economic Breakdown Enters New Phase," March 9, 2001.*

. . . Presently, a ravenous, thieving policy of looting large revenue streams from the energy process in California, is choking California's economy and its citizens to death. This is being done under the name of deregulation and price competition. . . . The well-cultivated story is that that deregulation has something to do with lowering prices—if not now, then at some time in the future. If you believe that it is intended to lower prices, then you probably believe the letter in the mail from Ed McMahon that says you have won a million dollars.

Let us state the truth clearly: Deregulation is a policy that intentionally removes the protective safeguards that existed under electricity regulation, so that now a bunch of thieves, like Enron, or AES, or Reliant, or Duke Power, can charge whatever manipulated high price they wish for electricity on the spot market, and if you don't pay it, they will withhold