

# EIR's market basket study, 1967-90: the disappearance of the U.S. economy

by Richard Freeman

Consumers' and producers' market baskets that rigorously measure the U.S. economy's capability to reproduce and grow, are collapsing, a study by *EIR*'s economics staff has found. Relative to 1967 market basket standards, today's production levels of many commodities which have been representatively selected from each of the producers and consumers' market baskets, stated on a *per household* basis, have plunged by 40-50%, and some by 80% or more. This means the market baskets as a whole, and thus the economy, are collapsing. Reviewing the interval 1967 to the present, one finds the descent has *not* been steady and smooth. Rather, it has proceeded by violent ups and downs, like a ball bouncing down an inclined plane. Each low point reached is lower than the one before, each "recovery" doesn't rise as high. The trajectory overall is steeply downward.

This process entails two distinct dangers. First, the ravaging of the U.S. economy for the last two and one-half decades cannot be reversed by simply undoing what has been done, i.e., merely "stoking up production" one fine day. In many industrial sectors, once-existing capacity no longer exists—as much as one-third or more of the capacity that existed in 1967 is no longer there, and the skilled work force has been laid off and scattered to the four winds. In the steel industry, blast furnaces have been blown up—50 million tons of U.S. steel-making capacity has been permanently obliterated since 1973. In the machine tool industry in many areas of the once-industrialized Midwest, machine-tool shops have boarded up and the advanced tooling machines sold for scrap or shipped overseas.

Further, this decline that the United States has experienced cannot be suffered indefinitely. In many areas, the internal ordering does not exist to revive the economy. If the accelerating destructive trend of the past is allowed to operate even another three to five years, America will shatter as an economy, and therefore as a nation. Only a broad, sweeping replacement of the method by which fatally flawed policy axiomatics impose bad policies, could reverse the entropic and potentially revolutionary events that are about to ensue.

## Myths

Yet, pick up a newspaper, such as the Nov. 27 *New York Times*, and there is yet another report that a marvelous economic recovery is erupting. Since 1967, America has truly been a miracle economy, experiencing no less than 10

"recoveries." Indeed, America has "recovered" so much, that by now the size of its economy should be bigger than all the other economies on earth combined. Rather it is a junk heap. Why the discrepancy?

The professional economist, armed with numbers all stated in dollar terms, is ready to defend the honor of the specious series of fake recoveries. He ticks off the figures: Gross Domestic Product, in constant 1987 dollars, was \$2.69 trillion in 1967, but it is \$5.14 trillion today. Personal income was \$2.08 trillion in 1967, and it is \$3.55 trillion today.

But the physical economy has not grown at all. Dollars cannot measure anything. When physical goods are measured in dollar terms, the government's Bureau of Labor Statistics has usually found ways, through such oddities as "quality adjustment factors," to disguise the dollar price increase of a good's cost, attributing it to quality improvement. But even were the dollar figures strictly accurate, monetary aggregates tell one nothing of how the *physical economy is organized, nor how it is performing*. The United States 50 years ago, and even 25 years ago, used to have more accurate physical economic figures than it has now. The Commerce Department no longer gives out certain statistics except at a huge cost. This is the "privatization" of government statistics now taking hold: pay, or you don't get them. But there is a reason for this. More and more statistics are kept in monetary figures only so that every piece of garbage, from real estate and derivatives speculation to post-industrial services, can be mixed in with real production. GDP is a worthless concept that only measures the economy's ability to pass money around. As the cancer of usurious speculation devours the skin and flesh of the economy, and starts working on the bones, GDP miraculously steadily becomes bigger—until the economy disappears.

## Market baskets

An alternative method has been developed by *EIR* founding editor and announced presidential candidate Lyndon LaRouche. LaRouche begins the science of economics from physical processes which are causally responsible for the durable survival of the human species. Durable survivability is measured by an increasing rate of growth of the rate of relative potential population density. No monetary figures are used. Rather, we are concerned with how man, acting in the living image of God and His Goodness, uses his spiritual



*Where's the recovery? EIR has constructed a consumers and a producers' "market basket" for 1967, comparing this to the values of successive years, through 1990. The results give a shocking picture of just how far our economy has really collapsed since that benchmark period.*

qualities of creative reason, to order the universe and the economy to enlarge and improve mankind's existence.

First, take the reproductive cycle of the physical economy as a unity. Next, assort the commodities of the economy by flow into either a producers or consumers' market basket. A consumers' market basket is an arrangement of the commodities ingested by the family household directly to sustain and improve its existence, i.e., apparel, such as dresses; food, such as red meat and grains; household appliances, such as stoves and washing machines; and so forth. This market basket contains the requirements needed to reproduce physically and culturally the productive and non-productive portions of the labor force.

A producers' market basket is an aggregate of capital or producer goods as well as intermediate goods and raw materials. It includes machine tools, spinning machines, looms, bulldozers, excavators, cargo ships, locomotives, and so forth. The producers' market basket is that arrangement of goods that does not go into the family household, but reproduces the economy's infrastructural, manufacturing, and agricultural basis for existence. Its final goods directly alter and shape raw materials and intermediate goods into something higher, of greater productivity, which then go into either the producers or consumers' market basket.

The market baskets and the elements of the market baskets are related to each other through the productive activity of the labor force, and through bills of materials and process sheets. A bill of materials specifies input-output relations

locating the reticulated chain of production in an economy. All final goods are worked up through a production chain, which involves intermediate goods earlier in the chain, and raw materials at the beginning. For example, the raw material iron ore is processed into steel, and then shaped, perhaps, into a machine tool. Through this process, the market baskets define causal pathways for the production of any commodity in the economy, and the economy as a whole, doing away with any monetary measurement. By this method, the price of a good is expressed solely in physical terms, not in dollars.

The power of this concept is that any developing nation, using America's 1967 market basket levels as a standard, could scientifically plan out its pathway of development, knowing where it is going. This study calculates the 1967 producers' and consumers' market basket levels for America.

The producers and consumers' market basket values, as with all economic parameters, are expressed on a *per household, per capita, and per square kilometer or per square mile* basis. The per capita or per household measurement expresses the individual's or family's potential power over nature, by showing what he or she "commands" of the productive process of the economy that intervenes on nature.

### **The method of the study**

The method of the study is to construct a consumers and a producers' market basket for 1967, and then to compare its values to the values of successive years, through 1990.

The year 1967 was selected as an exemplar because it

represented a period of "relative normalcy" and functioning, at least compared to what followed.

*EIR* constructed a consumers' market basket of 28 commodities, and a producers' market basket of 46 commodities. This was done by choosing commodities for each basket that were as representative as possible, and vital to the functioning of the economy. Many were commodities in a final form; others were commodities in an intermediate and raw materials form. For each of the total 74 commodities, *EIR* calculated both a production level, how much of a commodity is produced by the United States, and a consumption level, how much of a commodity is consumed by the United States. The two levels are not necessarily the same. Usually, one level would be higher than the other. Whichever of the two levels was higher was considered to be the "energy of the system," the level of activity needed as the minimal level for the functioning of the economy.

In 1967, there were 59,236,000 households in America. Both the 1967 production and consumption levels for each commodity were divided by the number of households, to yield *per household* ratios of production and consumption. For every year after 1967, only that year's *production level* was divided by that year's household level, to yield a *per household level of production*.

Next, the *per household production level* of each commodity for each year from 1967 through 1990, was divided by the 1967 *per household production and consumption level* for that same commodity. So for each commodity, there would be two ratios for each year, for each and every year, 1967 through 1990. This would be true for each and all of the 74 commodities that make up the two market baskets.

Using passenger cars as an illustration, in 1967, domestic consumption of new passenger cars was 8.094 million units, while production was 7.437 million units. This is because the United States net imported 650,000 cars. When a consumption level is higher than production, it usually reflects net imports, and to a lesser extent, a drawdown of inventory. Placed on a *per household basis*, in 1967, domestic new car consumption was 0.137 cars per household, and domestic new car production was 0.126 cars per household. In 1968, domestic new passenger car production was 8.849 million cars produced, divided by 60.815 million households that year, yielding a 0.146 *per household passenger car production level* for 1968. This 0.146 number would then be divided twice, first by the 1967 *per household production level* (0.126), and then by the 1967 *per household consumption level* (0.137), yielding two comparisons (to the 1967 levels) of 116 and 107, respectively (1967 standard levels are set equal to 100). This would be done for every year up through 1990, and so on for all 74 commodities. A system of linear inequalities of the two ratios, *per commodity*, by successive years, arrayed in columns, is constructed.

What one looks for in a system of linear equalities is the transfinite physical causation. LaRouche issued a warning: We should never fall into the nominalist error of assuming

that individual statistics or the simplified mathematics of linear inequalities represents in any way the *causal sequence of developments*. The system of linear equalities only allow us to *compare rates of change*, or further, *rates of change of rates of change*. Most important, the linear inequalities treat change as the primary datum.

The cause for this change lies outside the statistical inequalities as such, and that is what we really desire to know. The linear inequalities can point to the cause. For example, an economy either must grow or contract, it cannot stay the same. If it appears to be staying the same, it is using up resources within a given fixed technological mode, and will collapse. *The cause for either an economy's growth or contraction, is situated in the transfinite ordering of the economy through the fostering, development, and application of science and technology, or the lack thereof*. If man creates and efficiently transmits the fruits of new scientific revolutions, in particular through improved machine tool design, the economy must grow. This demonstrates that the divine spark of reason, *imago viva Dei*—acting in and through man—the "invisible" which orders the visible, is the prime causality. This is realized in investments taking place in infrastructure; in capital-intensive, power-intensive capital-producer goods; and in the rise of man's cultural and material standard of living, which raises his and the economy's productivity. The system of linear inequalities can tell us whether or not such investments, coupled with breakthroughs in science, are taking place.

The system of linear inequalities for any time interval reflects this process, as either a change in the direction toward improvement or collapse for the economy.

The linear inequalities tell us very disturbing news about the American economy for the interval of 1967-90.

### 1967 compared to itself

Before comparing 1967 to other years, it is first compared to itself. While not complete, the comparison of 1967 to itself, to see whether consumption or production levels were higher, is very revealing. In 1967, of the 74 commodities aggregated in the producers or consumers' market baskets, consumption levels were higher than production for 40 of these commodities (a majority); for 34 commodities, production levels were higher than consumption. This would indicate some degree of import dependency even then, though it was qualified. Of the 40 commodities in which consumption was higher than production, the breakdown goes as follows: 8 were of raw materials goods, including iron ore, potash K-20, bauxite, and natural sulfur; 7 were of apparel items, such as men's overcoats and pants, and women's blouses and skirts; 3 were textiles, that is, woollen yarn, cotton yarn, and rayon, and acetate fabric that supply the apparel industry; and 6 were wood products, including plywood, sawn wood (sawed lumber), and woodpulp mechanical. This adds up to 24 items, which is nearly two-thirds of the total of 40 goods in which consumption is greater than production. America's

## 1964 hearings: Build big projects to assure water

*In 1964, Utah Senator Frank E. Moss chaired a Senate Public Works Special Subcommittee on Western Water Development, which held hearings and published, in several reprintings over 1964-66, the proceedings detailing the North American Water and Power Alliance (Nawapa) and other project proposals to guarantee fresh water supplies to meet future needs. Here are excerpts:*

### **From the Foreword by Senator Moss**

Man's dependency on an adequate supply of fresh water is an indisputable fact. It is equally a fact that there is an insufficiency of such water and that this insufficiency has been particularly felt in the Western United States. Many efforts have been and are continuing to be made to solve the problem of limited water supply, and although great strides have been achieved, so great is the problem and so important its solution that it now has become imperative that consideration be given to what at one time seemed unachievable proposals.

The time has passed during which this problem can be solved through traditionally local or piecemeal app-

roaches. The solution must equal in magnitude the problem.

It is for this reason that a concept advanced by the Ralph M. Parsons Co., engineers-constructors of Los Angeles, to divert runoff waters of Alaskan and Canadian rivers through tunnels, reservoirs, and lifts to water-parched areas of North America demand attention.

### **From the Summary**

If all the water resources projects now authorized or contemplated in the Western United States by Federal and non-Federal agencies actually are completed and added to those now in existence, they would total 3,151 individual projects. These would have a total cost of approximately \$60 billion and would provide 2,770,636,208 acre-feet of stored water and 209,795,100 kilowatts of electricity.

If the Nawapa concept is brought to fruition, it would encompass 369 projects, with less than half in the United States, costing approximately \$80 billion and providing 4,338,509,000 acre-feet of stored water and 99,788 kilowatts of electricity.

The water made available by the Nawapa concept would double present supplies, yet if completed by the year 2000 would still fall short of supplying total need. The Nawapa system provides nearly twice the water storage for use in the United States as is provided in current Federal planning.

import dependency in 1967 was centered on clothing at the final goods stage, and mostly intermediate goods and raw materials. By contrast, only 5 commodities in the area of consumption being greater than production were of machinery or capital goods—internal combustion engines, electric motors of less than one horsepower (fractional), metal-cutting machine tools, knitting machines, and compressors.

In 1967, the U.S. economy had 34 commodities in which domestic production exceeded consumption. These are items the United States exported. Fifteen of the 34 commodities in which domestic production exceeded consumption (44% of the total) were machinery or capital goods. The strength of the United States at the time is that it was a capital goods producer, both for its own needs and for export, which helped build, and did not suck from, the rest of the world. To refresh people's memories of what America was once capable of doing, we list these 15 commodities: tractors, metal-forming machine tools, spinning machines, looms, bulldozers, excavating machines, graders and levellers, liquid pumps, electric motors greater than one horsepower, transformers, ocean-going passenger and cargo ships, locomotive diesels, freight trains, trucks, and commercial aircraft.

This physical profile explains why in 1967 the U.S. economy was relatively healthy and why it ran a merchandise

trade surplus of \$3.8 billion that year. *EIR* does not have at hand consumption figures for 1990 (the Commerce Department reports many trade figures only in dollar terms, but not unit or tonnage terms, which makes it difficult to compile export and import, and thus consumption figures). However, it is known that the United States is no longer a net capital goods exporter, but an importer. To a large degree, as a result of this development, America has not run a single month's positive merchandise trade surplus for nearly the past 20 years. Worse, the United States cannot produce enough capital goods to support itself.

### **The devolution of the economy**

Of the 74 representative goods that *EIR* started with in its producers and consumers' market baskets, it could obtain reliable comparison timelines for the period under consideration for only 60 items, or four-fifths of the items selected. Of those, 44 declined and 16 rose, or almost three times as many declined as increased. *EIR* did not start out picking items it thought would decline, or rise. It started by picking commodities which seemed to be the most essential goods needed for the producers' and consumers' market baskets. In fact, there are many food items which *EIR* is compiling for the consumers' market basket which, had they been included

in the representative list, would have declined.

Three times as many declines as increases is a damning indictment of the economy. Moreover, 22 items declined by more than 50% from their 1967 levels to 1990. No policymaker or economist who looks at the economy from the standpoint of physical processes rather than monetary terms could ever claim that the United States is in a recovery now, or ever recovered during the 10 recoveries it was supposed to have experienced since 1967. It is impossible that this devastation of the physical economy could be coincident with a recovery.

Just as important as the number of declines, is that each decline represented a qualitative fall, pulling down the producers' and consumers' market baskets, which represent the reproducibility of the U.S. economy. Cumulatively, so many declines have built up that America cannot reproduce its existence. The strong purchasing power of the speculative "usury dollar" has masked, in part, America's collapse. We will not examine each commodity, but those which highlight the process.

We will also consider the idea of what recovery really means. Between 1967 and 1990, the number of households swelled from 59.236 million to 93.347 million. If the United States is producing the same ratio of goods of a particular commodity *per household* in 1990 as it did in 1967, is that sufficient? Or, should the United States be producing more, to reflect an increasing standard of living and upgrades and expansion in the plant and equipment and infrastructure of the economy?

### **Collapse of infrastructure**

For the last 25 years, the U.S. has desperately needed construction of hard infrastructure—water management, including sewage disposal, freshwater delivery, river navigation, and flood control; transportation, including magnetically levitated trains, a repaired highway system, expanded canal transport; and power/energy delivery, including nuclear fission and nuclear fusion. Unfortunately, little or none of that has been built. There have been only two major water projects undertaken since President Carter effectively imposed a ban on building new river and dam projects in the late 1970s. The \$25 billion in damage inflicted by the Flood of '93 last summer, which could have been prevented had levees, river diversion channels, and spillways been built on the Upper Mississippi River System north of Cairo, Illinois, amply testifies to the lack of river project construction. Also, since the late 1970s, there have been no greenfield nuclear power plants built. Research designs of maglev trains were being worked on in the early 1970s, and were killed in 1975 when all of the seed money for research was cut by the federal government.

The collapse of infrastructure can be discerned by the collapse in the producers' market basket, on two levels: raw materials and machinery, particularly construction machin-

ery. There are five representative basic construction building materials included in the market baskets: crushed stone, sand and gravel, clay, hydraulic cement, and bricks. Of these, four collapsed. In the case of bricks, which are used in infrastructure and to an even greater extent in residential housing, in 1967, the United States produced 7.570 billion bricks and consumed 7.551 billion bricks. Stated on a per household basis, in 1967, domestic new brick production was 128 bricks per household, and domestic new brick consumption was 127 bricks per household. By 1990, the U.S. production of bricks fell to 7.116 billion bricks. Stated on a per household basis, in 1990, domestic new brick production was 76 bricks per household. Comparing 1990 per household brick production to 1967 per household brick production, one gets a ratio of 0.593, that is, 1990 per household brick production was but 59% of what it was in 1967. Comparing 1990 per household brick production to 1967 per household brick consumption, one gets a ratio of 0.598, that is, 1990 per household brick production was but 60% of brick consumption in 1967. This is a fall of 40%.

In the case of cement, in 1967, new hydraulic cement production and new hydraulic cement consumption were the same, as there were virtually no hydraulic cement imports or exports. Highways, concrete platforms for trains, dams on rivers, etc. all require a lot of hydraulic cement, which by weight is 12% of the mixture called concrete, which also includes crushed stone, clay, etc. Cement binds the concrete together. In 1967, domestic new hydraulic cement production was 1.09 tons of cement per household; consumption was exactly the same. In 1990, domestic new hydraulic cement production was 0.76 tons per household. Comparing the 1990 per household cement production to the 1967 per household cement production level (and to the identical 1967 per household cement consumption level), one gets a ratio of 0.697. That is, 1990 per household cement production was but 70% of what it was in 1967. This is a plunge of 30%.

In 1967, clay production and consumption levels were identical. Relative to the 1967 per household clay production and consumption levels, the 1990 per household clay production level fell a staggering 45%.

Crushed stone in 1990 appears to have fallen, relative to 1967 production and consumption levels, by 43%. Sand and gravel apparently rose, relative to 1967 production and consumption levels, by 63%. (Both the crushed stone and sand and gravel changes need further checking.)

It is clear that the fall in the above basic building blocks of infrastructure affects not just infrastructure, but all construction.

But to develop infrastructure, one needs more than raw and semi-processed materials. One needs machinery. The producers' market basket includes three basic pieces of machinery needed in infrastructure-building work: bulldozers, excavating machines, and graders and levellers. These three machine types are from the same family, but have distinct

functions. A bulldozer is a machine with a large blade mounted squarely in front of a tractor unit used to level or clear away excess soil, and sometimes debris. An excavating machine has a boom or jib projecting arm, attached to a large bucket, which often comes from overhead the tractor unit, reaching down into and digging the soil. Excavating machines may have multi-buckets fitted onto endless chains or on rotating wheels, for continuous removal of dirt. A grader or leveller is equipped with a sharp cutting edge designed to slice off top soil, and usually a lift capability to discharge it.

These specialized machines are not manufactured in large quantity, but are essential. If one adds together the production of all three machines, calling the new category "construction/earth-moving machinery," in 1967, domestic new production of construction/earth moving machinery was 0.000238 machines per household, or 0.238 machines per 1,000 households. In 1990, domestic new production of construction/earth-moving machinery was 0.182 machines per 1,000 households. The ratio of 1990 to 1967 is 0.36. This means a stupendous fall in output of these machines of 64%.

These astonishing falls all correlate with the collapse in infrastructure.

### **A nested series of bad policy decisions**

It should be recalled that none of these collapses, relative to the production and consumption standards of 1967, are "natural." Rather, they are the result of *policy decisions* and stem from the *fatally flawed axiomatics governing the choice of policy decisions*.

Many bad policies made in the 1960s and 1970s had long-range effects, such as President Nixon's 1971 decision to take the dollar off the gold standard, and are important to know. But there is a nested grouping of decisions that accelerated the destruction.

In 1973-75, the Seven Sisters, hiding behind OPEC, pulled off an oil hoax, quadrupling the price of oil to \$12 per barrel, and buckling the world economy. In the second oil hoax of 1978-79, the price of a barrel of oil cascaded up to \$35 per barrel, slamming Third World and advanced sector economies alike. In the midst of the second oil hoax, in October 1979, Paul Volcker, the chairman of the Federal Reserve, who had been installed in that post just months earlier, began raising the prime interest rate in the United States until it peaked at 21.5% the following February. Volcker was implementing the Council on Foreign Relations' policy of "controlled disintegration of the economy," whose "theory" Volcker had elaborated a year earlier in a speech in Leeds, England. A liquidation of farmers, machine tool shops, the steel industry, and hundreds of industrial processing firms occurred.

The deregulation of the airlines in 1979, of the trucking industry in 1980, and of the banking industry in 1982, combined with the speculation of leveraged buyouts (LBOs), junk bonds, and leveraged real estate transactions, made the

1980s the decade of uprooting manufacturing. The insane environmentalist restrictions, which blocked nuclear power production and taxed manufacturers for producing, intensified the overall effect. The financial derivatives market, of which the eight largest U.S. commercial banks now have over \$10 trillion on their books, has turned the United States into a post-industrial pigsty.

### **The breakdown of mining and metals**

If one situates the pivotal 1979-82 period, one can correlate with it *an accelerated rate of change of downturn* in the mining industries. Other industries likewise buckled at that time.

In 1967, the United States produced 85.526 million metric tons of iron ore, and consumed an even larger total of 114.690 million metric tons. For 1967, the per household production level was 1.44 tons (3,175 pounds) of iron ore, and the per household consumption level was 1.94 metric tons (4,269 pounds) of iron ore per household. Twelve years later, in 1979, the iron ore per household production level had fallen to 78% of the 1967 level, a sizeable fall, but still some significant ratio of 1967 production levels. However, just three years later, the iron ore per household production level had fallen to a mere 30% of the 1967 production levels; that is, a decline of 70%. Iron ore production recovered some, but not by much. In 1990, the iron ore per household production level was only 41% of the 1967 level.

Likewise, in 1967, the United States produced 2.084 million metric tons of bauxite, the ore from which one extracts aluminum. The United States consumed a far higher level of 13.861 million tons of bauxite. For 1967, the per household production level was 0.0352 tons (78 pounds) of bauxite per household, and the per household consumption level was 0.234 tons (516 pounds) of bauxite per household. For bauxite, relative to 1967 per household production levels, the 1979 level was 80%, the 1982 level was 30%, and the 1990 level was 15%, meaning that bauxite production was off 85%.

Similar steep drops were registered for copper and lead. The United States now has only 15 major functioning copper mines. In the 1979-82 period, the bankers and raw material extraction owners *wrote off the American mining industry*. This reflected two intentions. First, they would rely on imports to a greater degree; and they would reduce the use of newly mined ores. The second option was to be realized by two policies: The United States would melt down scrap, using less fresh ore; and they would simply reduce metals consumption overall. The melting down of scrap, while legitimate up to a point, when used as a policy option reflects the fact that the U.S. economy has placed itself within the straitjacket of the environmentalists' recycling strategy—no new net production growth is to occur; the United States recycles what it has, i.e., a zero growth paradigm, at best.

Of course, the United States guaranteed zero growth—in

reality, negative growth—when it blew up steel blast furnaces in the 1970s and 1980s. Steel plants, from the Republic Steel plants in Buffalo, New York, to the Bethlehem Steel Works in Maryland, to the Kaiser Steel plants in California, are a skeleton of what they were. The United States said it was getting rid of “outmoded plants.” But it did nothing to fill the void with modern plants employing up-to-date steelmaking processes. In 1967, the United States produced 115.3 million metric tons and consumed 124.4 million metric tons of unfinished steel, for per household steel production and consumption levels of 1.95 tons (4,292 pounds) and 2.1 tons (4,631 pounds), respectively. Relative to the 1967 levels, the 1990 per household steel production level was 54%, a drop of 46%.

### **Will manufacturing and agriculture exist?**

The U.S. manufacturing industry is in a similar condition to that of mining and metals processing. Perhaps most exemplary of the state of American manufacturing is the condition of the machine tool industry. Machine tools transmit, in the most direct fashion, ideas from the scientist’s head, and from the laboratory, into the production process. Machine tools, through improved design, *impress* the new scientific ideas into the shape and design of other producer goods machines. These machines then take those most advanced ideas into their respective branches of manufacture. This revolutionizes the production process.

There are two basic, generally recognized types of machine tools: 1) metal-cutting, which includes boring, grinding, drilling, broaching, milling, threading, polishing, and planing machines—mostly machines which pierce metal; and 2) metal-forming, which includes bending, hydraulically and pneumatically pressing, stamping, and forging machines—mostly machines which shape metal.

In 1967, the United States produced 86,014 and consumed 114,793 metal-cutting machines, and also produced 31,637 and consumed 28,186 metal-forming machines. The per household production and consumption level of metal-cutting machine tools was 0.0015 and 0.0019 metal-cutting machine tools, respectively. The per household production and consumption level of metal-forming machine tools was 0.0005 and 0.0005 metal-forming machine tools, respectively. By 1990, per household metal-cutting machine tool production was at 19%, and per household metal-forming machine tool production was at 34% of 1967 levels. This means that they had fallen by an astounding 81% and 66%, respectively. Even if one says that some of the modern machine tools are more powerful instruments, and able to do more work more quickly, there is no way to account for this level of drop.

The process of transmission of advanced ideas through the machine tool has come to an end in America.

Liquid pumps are another essential element of U.S. machinery; they raise and pump out liquids, and are used in

everything from oil fields to construction and industry. The per household production of liquid pumps has fallen 49% from 1967 levels. The story continues. In the realm of transportation equipment, the per household production of sea-going ships, locomotives, and freight cars are each down at least 40% from their 1967 levels.

In agriculture, fertilizer is a key input which, along with mechanized farm equipment, has enabled greatly increased crop yields. The per household production of both nitrogen-based (N) fertilizer and potassium-based (K) fertilizer, relative to 1967 standards, is down 9% and 77%, respectively. There has been an increase in the per household production of phosphate-based (P) fertilizer, but this has not offset the decline in N- and K-based fertilizers. Of course, part of the current environmentalist propaganda is to say that farmers should use less fertilizer; in reality, this is part of a plan to reduce food production, and hence consumption.

### **Loss of household material well-being**

The consumers’ market basket allows one to determine the material well-being of a household, independently of the monetary figures normally used. There are minimum physical intakes that a family, and individuals of a family, need in order to perpetuate their existence at a certain material and cultural level. Lower the inputs below a certain threshold, and the quality and efficiency of the human being and potential worker being brought into the world, or of the current worker already existing in this world, will be drastically weakened.

One can palpably see the effects of the last 25 years. In the area of clothing, the per household production of clothing has fallen across the board. For 1990, relative to 1967 levels, the per household production of the following items has fallen by the following percentages: men’s overcoats, 88%; men’s suits, 71%; men’s pants, 67%; women’s blouses, 31%; women’s dresses, 73%; and men’s and women’s shoes, more than 60%.

One can now see how a bill of materials works, tracing back the chain of production. The fabric intermediate goods that go into clothing also declined. Though firm values are only available for points in the 1980s, still, relative to 1967 levels, the per household production of cotton fabric fell 62%, and the per household production of rayon and acetate fabric fell 70%.

One also sees the deleterious effect on the machinery in the textile industry that produces the fabric. Even by 1979, the per household production of spinning machines, used in textile manufacture, had fallen 89% relative to 1967 levels.

Next, one looks at home appliances, often called the “white goods” industry (because many of these appliances are in either the kitchen or laundry room, and are painted white). This area historically has been America’s preserve because the size of washers, dryers, refrigerators, and the like used in America are bigger than those used in other countries. Usually, only American companies, such as Gen-

eral Electric or Westinghouse, would produce these items. Relative to 1967 levels, the 1990 per household production of refrigerators and washing machines are each down 7%. In the case of radios, America's 1990 per household production, relative to 1967, is down 90%.

In the area of personal transportation, relative to 1967 levels, 1990 per household American passenger car production has fallen 49%.

As shown in another section of this report, America cannot produce the material and cultural basis even for its own household biological existence and reproduction. One can now see why. Even with massive level of imports thrown in, America is still incapable of reproducing itself.

One must ask, what would it be like if America maintained in 1990 the same per household production levels as in 1967, or even, as in the case of some goods, such as compressors, chlorine, and printing, exceeded those levels? Would that be sufficient? The answer is no. Any country's goal is not just to produce and consume at the per household levels it had a quarter of a century ago. The goal is to exceed those levels. The physical economy is constantly depleting "natural resources," as defined by the existing mode of technology and production. Mankind must offset those depletions by "inventing" and utilizing new natural resources, that is, conceptualizing the use of existing or even undiscovered products as the source for a new "natural resource." This means going to a new technological mode of production which will be more capital-intensive, more power-intensive, with a higher energy flux density per square kilometer cross-section of throughput. This requires raising the standard of living. The *per household*, *per capita*, and *per square kilometer* values of the commodities that make up the consumers' and producers' market baskets, and thus those market baskets themselves, so expressed, must rise.

This is not new to America. This country had rising per household market basket values, reflected in rising values for commodities in those market baskets, during those periods of the 19th century when the policies of the American System of dirigistic national economy were in effect, and in the 20th century, when those policies were in effect during exceptional circumstances, such as during wartime. These values did not just rise for a few years, but rose for decades at a time.

Of course, America today is far from maintaining the per household production levels of 1967. Across the board, in every sector of the economy, from infrastructure to mining and metals processing, from manufacturing and agriculture to the goods of the consumers' market basket, America's per household production is down 20%, 30%, and, in the case of more than 20 crucial commodities in the market baskets, down by more than 50% relative to 1967 levels. This is a catastrophe of the first order.

Anyone who says there is yet another "recovery" under way in America is more than just clinically insane. His or her insanity is pushing the nation into oblivion.

# Derivatives: the cancer that killed the economy

by John Hoefle

The Federal Deposit Insurance Corporation released its third-quarter results Dec. 15, amid much fanfare about how the record \$11.45 billion profit for the quarter had pushed the banks' nine-months' earnings to \$32.6 billion, surpassing the record \$32.1 billion for all of 1992. At the current pace, the banks will easily post in excess of \$40 billion for 1993.

Buried in the fine print of the FDIC's statistical tables, however, was a shocking new item called off-balance-sheet derivatives. According to the FDIC, U.S. commercial banks had \$11.99 trillion in these derivatives, compared to total assets of just \$3.63 trillion. The banks' derivatives holdings had risen more than \$1 trillion in the quarter, from \$10.95 trillion at June 30, and more than \$2.27 trillion from the \$9.72 trillion for the third quarter of 1992.

The sudden appearance of an "off-balance-sheet" item more than three times larger than the reported assets of the entire banking system, more than confirms *EIR's* long-standing analysis that the FDIC's banking statistics are fraudulent. More importantly, however, it reflects a growing fear in the international financial community that the derivatives bubble is about to explode. The derivatives bubble is the final phase of the speculative asset-stripping operation known as the Reagan/Bush economic recovery. This so-called recovery was based upon the creation of debt, debt which simply cannot be repaid given the collapse of the real economy, which is documented in this issue.

## Mountains of debt

Between 1980 and 1992, the total credit market debt in the United States grew \$10.2 trillion, from \$4.3 trillion at the end of 1979 to \$14.5 trillion at the end of 1992, according to data from the Federal Reserve **Figure 1**. During this same period, the nation's Gross National Product grew by \$3.5 billion, from \$2.5 billion to nearly \$6 billion. That's roughly \$3 in new debt for every \$1 added to GNP during the period.

The Federal Reserve's policy of low interest rates has disguised the debt-repayment crisis somewhat, by allowing borrowers to refinance their debt at lower interest rates. This rolling over of debts has allowed the debt crisis to look better on paper, at the expense of making it worse in the long run, since the roll-over process actually increases indebtedness.

The most egregious case of debt creation is that of the federal government, whose debt has been turned into what one might call the "house bank" of the worldwide casino