EIR Special Report

The United States on the edge of a general breakdown crisis

by Christopher White

Presented here are the conclusions, and summary argumentation, of a report commissioned in the fall of 1983 by presidential candidate Lyndon H. LaRouche. The report, "The Declining Productivity of the U.S. Household 1960-80," published in full in the June 1984 *EIR Quarterly Report,* analyzes the U.S. economy from the standpoint of LaRouche's criteria of *potential relative population-density*.

The summary conclusions are:

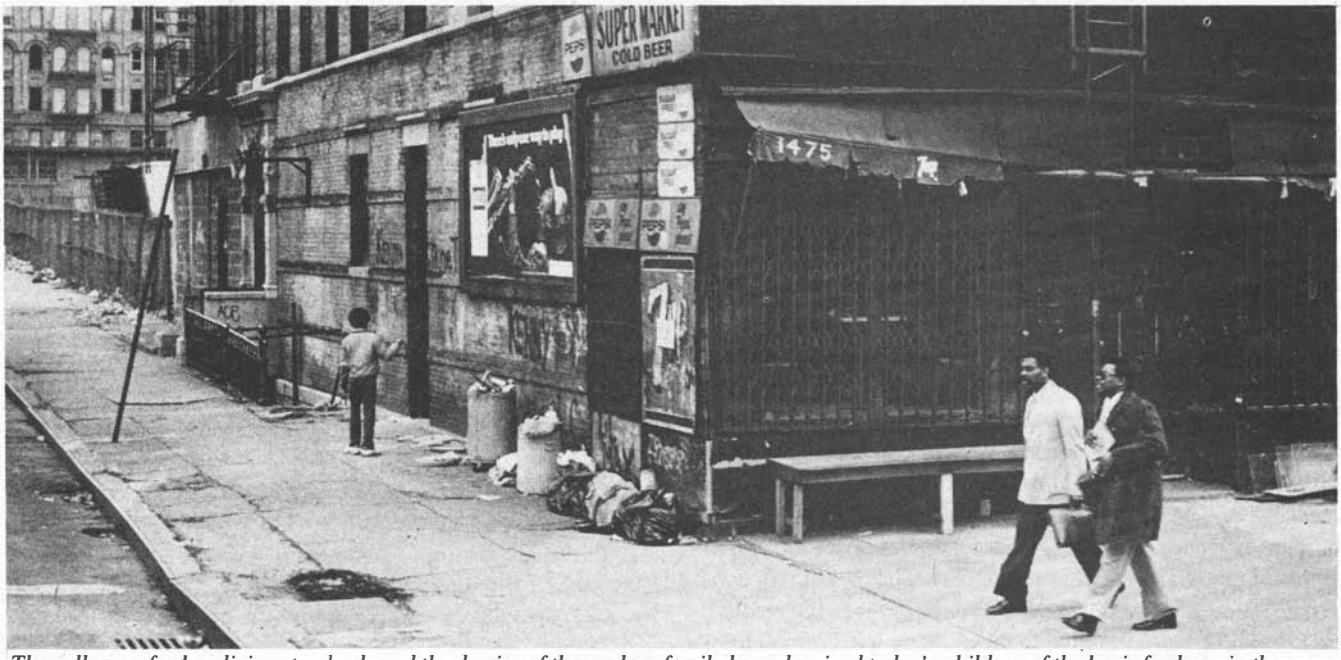
1) The United States is on the verge of a breakdown crisis unparalleled since the 14th century Black Death, or the combined plagues and famines of the first and third centuries of the Christian Era.

> *Over the last 15 years, the U.S. economy has been functioning at a deficit of at least 50% of the level required to sustain healthy growth over the next generation.*

This deficit represents the accumulated potential for the U.S. economy and population to collapse to 50% of current levels or lower. Concretely the report shows that the potential relative population density of the United States, under the policies which have been hegemonic since the mid-1950s turn toward the "utopia" of a post-industrial society, is 50%. The country is on the eve of a collapse from present levels of 230 million people to approximately 110 million people. Such a collapse can be delayed, but to the extent present policies are permitted to continue, cannot be averted.

2) The level of household consumption necessary to assure the existence of another expanded generation of Americans has not been achieved over any period covered by the survey. There has instead been a steady decline from those levels, reflected both in the collapse of female fertility, from 118.3 births per thousand fertile women in 1960 to 68.4 in 1980, and in the declining number of children per married couple, from 1.67 in 1960 to 1.29 in 1980.

> *Over the course of the 1970s, household consumption has been declining toward 40% of the level required to sustain families of a size necessary to secure population growth, and declining toward 60% of the consumption level required to sustain a merely stagnating population.*



NSIPS/Philip Ulanowsky

The collapse of urban living standards and the demise of the nuclear family have deprived today's children of the basis for hope in the future. Lacking the required productive workforce, the United States now functions at a production deficit of 50% of the level required to foster healthy growth. Here, New York's Harlem ghetto.

Continuance of such looting against the necessary consumption levels of the population ensures that either there will not be another generation, or that our successors will not resemble anything considered to be "American" during the 200-year history of the Republic to date.

3) The production capabilities of the national economy have been concomitantly stripped out. During the 1960s we created 7.8 jobs in overhead employment categories for every job that was created in the production of tangible product. In the 1970s we created nine new unproductive jobs for each new productive job. By the end of the 1970s each of the nation's productive workers was "carrying" nearly 2.25 non-productive workers, as well as 7.6 members of the consuming population, compared to fewer than 1.5 non-productive workers and 6.8 members of the consuming population in 1960.

But the "power" of each of our productive workers was reduced, too.

> *The energy produced to power the functioning of the economy, and provide for the consumption of the population, declined between 1960 and 1980 to less than 75% of the level required to merely stagnate, and about 25% of the level required to expand productive capabilities in line with the requirements of an expanded next generation.*

Since society's power to reproduce itself depends on the productive work force's power to produce the necessary means of consumption, the decline in energy production from necessary levels is also a leading indicator of the declining consumption power of the society at large.

The fraud of conventional economics

The *EIR* report was initially commissioned by LaRouche to refute the thesis, more prevalent among official circles during the summer and fall of 1983 than now, that an "economic recovery" was in progress. But more importantly, the study aimed to contribute to shifting the thinking of policy-makers away from the conventional categories of what is misnamed economic science in universities, governments, and among business circles, for the simple reason that the conventional brand of so-called economic science is as much a consumer fraud as was the mythological "recovery" of 1983 and early 1984. If what passes as economics, in its monetarist, supply-side, or other forms, is any use, why—it should be asked—is the world in such a mess?

Commissioned by LaRouche, the report was also assembled according to specifications developed by him to assert those fundamentals of economics for policy-making which are overlooked and ignored by the opposing school of incompetents—with the proviso that the materials presented are based on government statistics, which had already been proven to be fraudulent, and that the delineation of energy consumption is not yet as precise as LaRouche had mandated. Since LaRouche's methodological approach is developed in full in the textbook, *So, You Wish to Learn All About Economics,* and in a companion videotape class series entitled "The Power of Labor," it is only necessary to summarize leading features of the argument here, before we proceed to review the arguments on which the report's conclusions are based.

Contrary to the monetarists of the Milton Friedman school, who assert, insanely, the political primacy of mere paper—

"buy cheap, sell dear"—against the physical economy as such, or the various bestial brands of utilitarianism, which argue that the hedonistic interaction of competing drives to find pleasure and avoid pain leads to a balanced equilibrium, LaRouche argues that the individual's necessary contribution to human historical progress is the primary datum of economic science.

Unlike any other species that we know of in the universe, man alone, since the Pleistocene period, has increased his population potential 450-fold, and thereby distinguishes himself absolutely from the lower beasts. Man's species progress is measured in increasing per capita and per acre flux densities of energy consumption, which reflect the increasing power to master and transform nature to sustain human existence for an increased population at expanded levels of material and cultural progress. The measure of economic value is thus *the rate of increase of potential relative population-density,* relative to the existing level of potential relative population-density.

In this view, for example, there are no limits to human progress imposed by fixed resources; wealth does not lie in the bounteous lap of Mother Nature. Man creates resources using the technologies provided him by his science to continually transform nature. Thus, the irreducible datum of economic science is the culturally and technologically determinate individual, whose activity, as producer and consumer, is the expression of the universalizing power of the species to continue, and improve, progress made by those who came before us for our posterity. Our species' history is the court of judgment which assesses how well we have, or have not, satisfied such requirements in our individual practice. It is a court from which there is no appeal.

Will there be another generation?

By 1980 there were fewer children in the United States, in absolute terms, than there were in 1960. In the period since the 1980 census, the continued growth of the population as a whole is accounted for by immigration into the country from primarily Ibero-America and Asia. **Figure 1** shows the proportional growth of the population by age group. Each of the bars represents 100% of the population, and is sub-divided into the categories of over 65, 18-64 (the adult section of the population from which the work-force is derived), and under 17. We see that over the entire period the population over 65 grew more than twice as fast as the total population, that the population of adults grew almost twice as fast as the total population, and we see the absolute declines in the number of children, divided into pre-school, elementary and junior high, and high school categories.

The total population is divided thus because the productive section of the labor force, drawn from the ranks of adults, must support, from its activity, both those who are not of age to work, and those who are considered, often unjustly, to be too old for further productive work. A healthy such population profile would show the youth population increasing faster than the overall population, the adult population increasing less fast, and the population over 65 still more slowly.

Figure 1

Population Growth

	1960-70	1970-80	1960-80
Total population	13.4%	11.0%	26.0%
Over 65	21.0	31.0	54.0
Adult	16.9	22.4	43.0
Total youth	8.1	−8.8	−1.4
14-17	41.9	1.3	43.8
5-13	11.2	−15.3	−5.8
Under 5	−15.7	−4.2	−19.2

Table 1 shows the energy consumption, that is, the means by which the household consumes (excluding transportation).

TABLE 1
Household energy consumption
(in trillions of kilowatt hour equivalents per annum)

1960	1970	1975	1978	1979	1980
.497	1.103	1.225	1.480	1.465	1.454

This figure, over the period considered, represented between 14% and 15% of the total consumption of the energy produced in the economy. But here we are concerned with the cost of raising our children to the point at which they enter the labor force. For if we do not meet that cost of consumption, then we either have no next-generation labor force, or a generation which is less qualified than its parents. If either of those conditions is permitted to prevail, the society's capacity to reproduce itself is endangered.

It is assumed that over the course of their upbringing children consume as much as their parents do; therefore, once allowance is made within the total of energy consumed for the growing number of adults who remain single, the estimated energy consumption of the child population is shown in **Table 2.**

TABLE 2
Energy consumed by child population
(in trillions of kilowatt hour equivalents)

1960	1970	1975	1978	1979	1980
.175	.370	.370	.418	406	.397

This level of child consumption in turn reflects a percentile of the total work accomplished by the productive labor force over the course of a year. That percentile, representing the amount of work by the total productive labor force we put into the development of each of our children, is as follows:

TABLE 3
Child energy consumption as percentile of total annual productive labor force activity

1960	1970	1975	1978	1979	1980
.000066%	.000073%	.000066%	.000068%	.000068%	.000068%

This figure translates into just over half an hour's work per child during the annual work of the total labor force. Thus during the 20 years considered here, we invested the equivalent of an eight-hour working day by the totality of the work force to produce one child who would enter the work force at the age of 17. If we desired to raise work-force entry to the age of 21, it would cost the country another 2.5 hours of total labor force effort.

If this seems cheap, it should be compared with **Figure 2**, which shows the declining rate of fertility per 1,000 females of fertile age-range, and the declining number of children per married couple. These curves declined the way they did because we did not provide the consumption levels which were necessary to produce enough children to ensure the reproduction of the society as a whole.

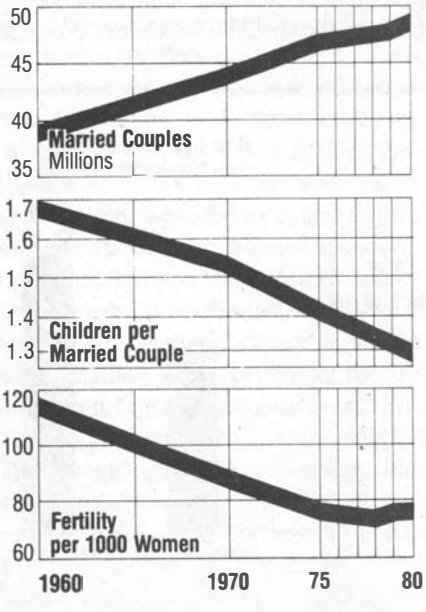
In conventional wisdom of statisticians there is a replacement level for fertility which is calculated on the basis of birth and mortality rates. During the period considered here, that rate has been considered to be at 2.11 children per 1,000 women in the fertile age-range. For actual population growth to occur, the level would have to be well above that, for the elementary reason that not all women of fertile-age range marry. Fertility after all is not a simple biological index, but an index of social productivity. We may then assume that to restore population growth would require a level of between 2.8 and 3 children per married couple, and set a level of child and overall population energy consumption that would reflect that level.

TABLE 4
Household energy consumption as percent of necessary level
1) for 2.8 children
2) for 3 children

	1960	1970	1975	1978	1979	1980
1)	61.1%	60.0%	56.6%	52.6%	51.6%	51.4%
2)	57.2%	56.0%	52.8%	49.0%	48.2%	47.9%

Here, the consumption figures of **Table 1** are expressed as a percentile of the total magnitude obtained by increasing the number of children, while maintaining the energy available to each child as it was for each of the years considered in **Table 2**. The decline is obviously not causal. People de-

Figure 2



The U.S. economy no longer provides the consumption levels necessary for the future generation's productive workers. The children shown here are learning perspective drawing.

cide whether to have children or not depending on what kind of outlook they have on themselves and on their future. Optimists will have children. Those who are pessimistic will not. Optimists fight to change conditions that present obstacles to an envisioned course of action. Pessimists do not. But without making the means available to support an expanded number of children, there is no way that an expanded number can be supported. Nor is there any other way to convert our population of cultural pessimists back to optimism. To provide for an expanded next generation of Americans we have to more than double the energy consumed in the process of household consumption.

But let us see more generally what this means.

Flux density of energy consumption

We have thus far treated household energy consumption, both as it is, and as we have argued it has to be, as an absolute quantity. But it is actually no such thing. Household consumption is relative to the determinate development of the productive powers of labor, and thus to the per-capita and per-acre flux density of energy consumption that defines the productive power of the labor force.

But before we consider those quantities as such, we must review separately the elements that are therein comprised.

Figure 3 shows the proportional division of land use within the United States. It has often been argued, increasingly over the last 20 years, that industrial urban society is destroying the primitive glories of nature. Anyone who flies over the countryside, or drives outside the immediate vicinity of an urban concentration, knows that this assertion is totally untrue.

The United States is undeveloped, underpopulated, and empty. As the figures show, rather more than half of the total land area of 2.268 billion acres is neither cultivated by our vanishing farmers, nor inhabited by any human being, except perhaps for the occasional anti-social recluse. Of the remaining rather less than 50%, all but 1.5% is taken up by farm land, in the proportion of approximately 300 million acres of arable land and 600 million acres of pasture. The remaining 1.5% is the land counted as urban—the part that the environmentalists argue is destroying the integrity of the whole!

Of this area, totaling approximately 30 million acres, 12 million acres or so are employed in residential use, and as much again in urban transportation of all forms. 4.0 million acres were employed for industry in 1970, rising from about 3.1 million acres in 1960. This amount, which the environmentalist lobby considers to be such a threat, is 0.17% of the total land area of the United States, just under 2/1,000ths of the total.

Thus, leaving aside for the moment the area that is uninhabited and uncultivated, and the area that is farmed, we are basically concerned with the approximately 30 million acres on which the bulk of the nation's inhabitants live and work.

Endangered species: the productive worker

Those who work in this urban area are divided into two principal parts: those who are employed in productive activity, and those who are employed in work that represents either necessary overhead cost associated with maintaining the potential of the productive work force (for example, scientists, teachers, and doctors, or law enforcement and government employees) or waste (for example, the millions of our population who have been condemned to useless lives as sales clerks—for we now maintain one sales clerk for every productive worker—who function on the border lines of legality in the administrative categories of employment that police the expansion of usury and ground rent in the economy).

Figure 4 shows both the absolute number of productive

Figure 3

Land Use, United States

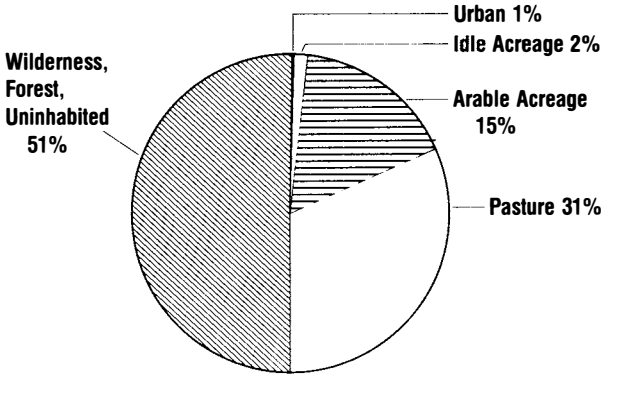


Figure 4

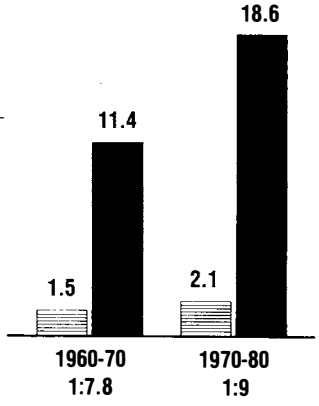
Operatives

Millions

Labor Force

	Total	As % of Total
1960	26.5	40.3%
1970	27.9	35.5%
1975	27.3	31.7%
1978	29.8	31.0%
1979	30.7	31.0%
1980	30.0	30.3%

New Operative Jobs vs. New Nonproductive Jobs



workers, in millions, and their percentage vis à vis the employed population as a whole. We thus see the decline in the productive work force, relative to both the total employed population and the total population. Relative to the overall, if limited, growth of the population as a whole, which we saw in **Table 1**, the productive work force has dramatically declined.

The figure also compares new productive jobs created between 1960 and 1970, and between 1970 and 1980, with new jobs in the non-productive sector. If we looked at this in terms of investment dollars, then for every dollar invested productively in the 1960s, $7.60 was invested in overhead, and in the 1970s, for every productive dollar, we invested $8.85 in overhead. This is one of the basic reasons why we are not producing enough to sustain an expanded population in the way we saw was necessary.

Since it is only the productive sector that produces wealth, an increase in the overhead costs of employment beyond the levels that, employing LaRouche's criteria, we will shortly stipulate to be necessary, represents a subtraction from the society's capacity to reproduce itself. But where **Figure 1** shows us who must be supported on this identified area, **Figure 4** shows who it is that provides such support, and who, in general, is otherwise employed unproductively.

Figures 5 and 6 respectively show how, and how much, electrical energy is produced, and how the energy we produce is consumed. In **Figure 5** we note the collapse in the rate of growth in total electrical energy production in the decade of the 1970s. Where the total production nearly doubled in the 1960s, the growth rate declined to about 25% over the decade of the 1970s, and went into decline after Jimmy Carter appointed Paul Volker to the Federal Reserve Board. If the rate of growth of the 1960s had been merely continued in the 1970s, the economy would have disposed of 3.120 trillion kilowatt hours of electrical energy by 1980. Instead we were at 73% of that level, which in other respects would have meant maintaining rather than destroying capabilities built up in the 1960s, even if not improving them further.

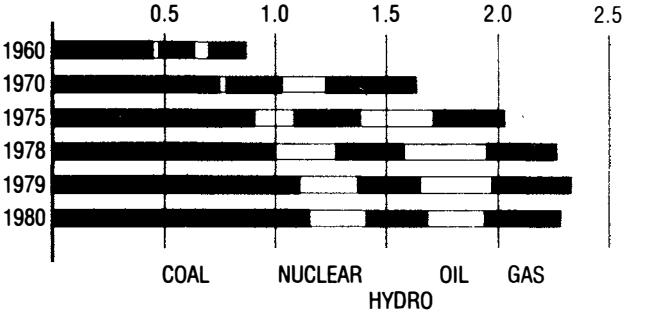
Secondarily, we note the composition of the fuels employed to produce the electrical energy we generate. Coal has maintained itself at about half of the total. In this case, since we have not invested in modern technologies such as MHD extraction, we extract the raw material in the most inefficient form, and consume it inefficiently, too. It will be seen that fossil fuels make up about 75% of the total fuels consumed over the entire period. Equally notable is the growth of nuclear energy, by three orders of magnitude between 1960 and 1978. Though, again, the proportion of electrical power generated from that source went into decline under Jimmy Carter.

Figure 6 shows the proportional division of consumption of energy produced. Here again, we see that the growth rate of total consumption in the '60s matched that of electricity generation, and again declined sharply in the 1970s, absolutely after 1978. We note also the declining share of energy production consumed in industry, reflective of the implementation of the "post-industrial society" policy. The overall numbers are larger in **Figure 6** because fossil fuels are transformed into energy to power work in the process of production. The growth rate in the 1960s, in this case, was over 75%. In the '70s it fell to 26.8%. Again, if the growth rate of the 1960s had been continued, the total consumption of energy produced by 1980 would have been 12.6 trillion kilowatt hour equivalents. After four years of Jimmy Carter, we were at about 75% of that level.

Thus in a relatively tiny corner of the continental United States, a dwindling number of productive workers including farmers, increasingly an endangered species, is struggling to

Figure 5

Electric Energy Production Trillion kwh



% Electricity Generated

	1960	1970	1975	1978	1979	1980
Nuclear	0.09%	1.4%	9%	13%	11%	11%
Coal	53.4%	47%	44%	44%	48%	51%

Figure 6

Consumption of Energy Produced

Percent

	1960	1970	1975	1978	1979	1980
Energy Prod.	19%	22%	25%	24%	24%	26%
Agriculture	24	21	22	21	19	19
Industry	37	34	30	30	32	32
Overhead	6	8	8	9	9	9
Residential	14	15	15	16	16	16
Total kwh	4.1	7.2	8.9	9.4	9.3	9.1

support an increasingly aged but unproductive population, with less and less powerful means at its disposal to do so. **Figures 7 and 8**, which show, respectively, energy flux density of consumption per acre and energy flux density of consumption per capita, provide a measure of this decline, whose content we otherwise saw in our accumulated failure to provide the means for the existence of the next generation.

In **Figure 7** we note the decline of the per-acre flux density of energy consumed industrially, relative to the other branches of economic activity shown. Where in 1960 the flux density of energy consumption per industrial acre was four times as great as the flux density of commercial acreage consumption, by 1980 it had fallen to only 2.5 times as much. We also note, once again, the collapse in the growth rates during the 1970s from the levels achieved in the 1960s. Though as we saw, in comparing the numbers of new productive jobs with new unproductive jobs created in both the '60s and the '70s, industrial investment was disfavored in both the '60s and the '70s. We furthermore see that for the case of industry, agriculture, and residential consumption, an absolute decline sets in by the end of the 1970s from the stagnation of the mid-1970s.

In **Figure 8**, "Flux Density of Energy Consumption Per Capita," we see that in regard to percent change, industry comes last, with the lowest overall growth during the 20-year period of any of the four sectors considered. The power of the farmer increased massively in the 1960s. Where the per-acre consumption of agriculture reflects only a small decline in the arable acreage farmed, the per-capita figures reflect a decline in the number of our farmers from over 5 million in 1960, to under 3 million, officially, in 1980. The rise thus reflects the tremendous advance in power of the individual farmer over the period. The energy input figures employed here are based on studies done by the Pimentel group at Cornell University to convert all agricultural inputs, including fertilizer, water, etc., into energy equivalents. The per-capita figures, even if thus approximate, massively document the case that it is not some presumed natural fertility of the number of acres farmed that accounts for agricultural productivity, but rather the power of a modern scientific industrial culture embodied in the mind and right arm of the farmer as the concretization of the productivity of the labor force as a whole. Until Paul Volcker got onto the Federal Reserve Board, American farming was perhaps the biggest achievement of the country in its history.

The specific case of agriculture typifies the general ar-

The productivity of American farming

gument on productivity and the power of labor, for reasons argued emphatically by Alexander Hamilton in his *Report on*

Figure 7

Flux Density of Energy Production per Acre

(Thousands kwh per acre)

	1960	1970	1975	1978	1979	1980
1) Industry	743.0	1,011.0	1,130.7	1,250.9	1,279.0	1,259.0
2) Overhead	186.9	372.3	421.3	510.6	513.1	516.9
3) Residential	55.5	91.5	88.9	102.9	102.5	101.1
4) Agricultural (Arable land)	2.729	4.504	4.986	5.540	5.263	4.986

Percent Change

	1960-70	1970-80	1960-80
1) Industry	36.1%	24.5%	69.5%
2) Overhead	99.2	38.8	176.5
3) Residential	64.9	10.5	82.2
4) Agricultural	65.0	10.7	82.7

Figure 8

Flux Density of Energy Consumption per Capita

(Thousands)

	1960	1970	1975	1978	1979	1980
Agricultural	181,649	479,846	528,169	694,203	680,272	643,546
Industrial	109,069	162,742	193,977	190,386	188,233	189,439
Overhead	6,343	11,064	11,451	12,651	12,168	11,970
Residential	3,254	5,398	5,681	6,658	6,536	6,395

Percent Change

	1960-70	1970-80	1960-80
Agricultural	164.2%	34.1%	254.0%
Industrial	49.0	16.4	73.6
Overhead	74.0	8.1	88.7
Residential	64.9	18.4	96.5

the Manufactures against the "bounty of nature" and "buy cheap and sell dear" arguments of the free-trader Adam Smith. The just over 1% of the total population officially classed as farmers in 1980, is infinitely more powerful than the over 90% of the population so employed in the 1790s when Hamilton wrote his report, and constitute a living refutation of all those who argue for the primacy of financial instruments, or of naturally imposed limits to economic progress. For without food, not even bankers can live. All such progress has occurred, despite the "economists," as the power of the human mind to innovate has armed itself with the technological capabilities which enable man's dominion over nature to be extended.

Today the argument has to be made that those outside the United States who want to build up their agricultural capabilities to the level epitomized by the United States in the 1960s and early 1970s (and these were not the best periods of American agriculture by any means) have to build up their energy and industrial sectors to support levels of per-capita consumption equivalent to those achieved in the United States. By the same token, as the farmer's capacity to improve land through technology made available by science and industry has been destroyed in the United States, particularly under Volcker's credit policies, and the "free trade policies" pursued by successive Departments of Agriculture, it is similarly industry that has to be revived if farming is to have any hope of recovering.

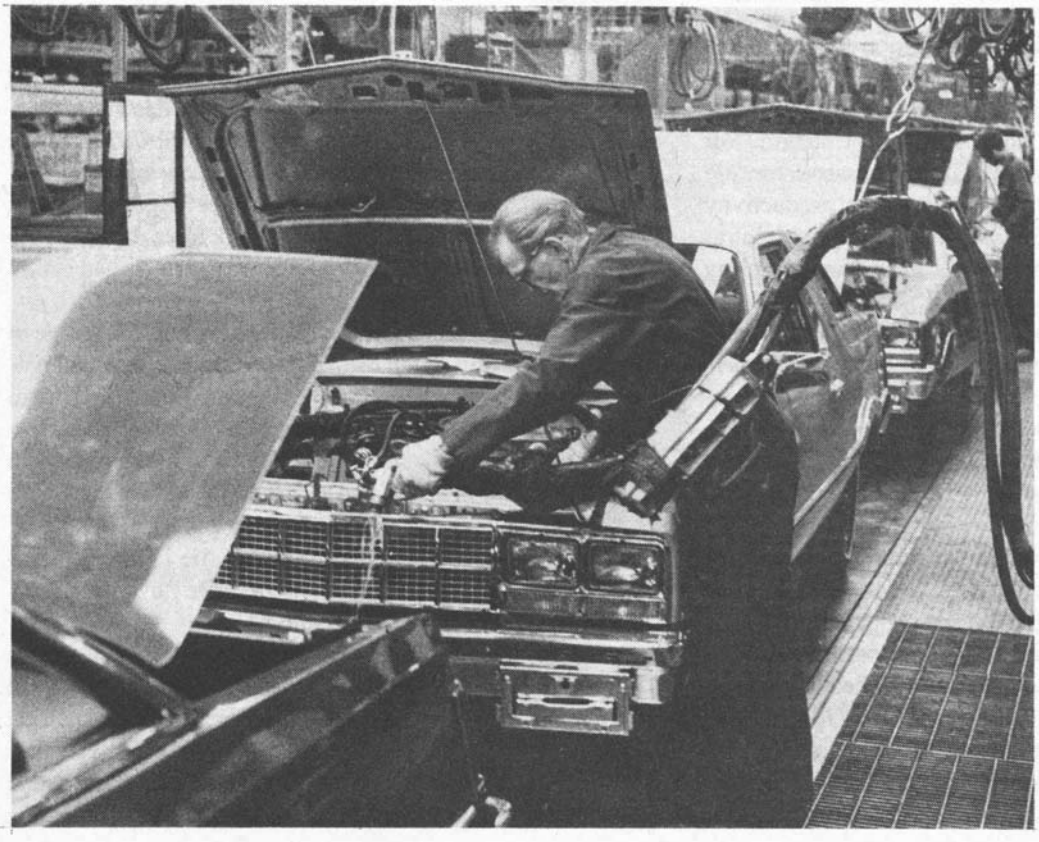
The stagnation and decline in each of the areas covered by **Figures 7 and 8** show the underlying reason why we are not providing for another generation of American youth, for we have turned our back on the injunction to exert our species dominion over nature.

Shift in the work force

We now turn our attention to the work force that is employed under the conditions identified above. We will look at the work force both in terms of how it developed in the period between 1960 and 1980, and how LaRouche specified that the declining numbers and power of the productive work force are to be corrected.

Figure 9 shows the functional divisions between different categories of the productive work force, and the numbers, in millions, of workers employed in each such category. Here we see the shift that resulted in the country being given the name "the society of conspicuous consumption." We see an increase in employment associated with the capital-goods sector and consumer goods of all types, and declines in employment associated with infrastructure and raw materials and agriculture.

The categories are broadly defined to represent the flow



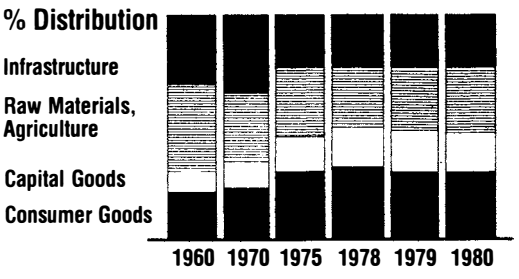
The production of consumer goods has increased at the expense of heavy industry, destroying the productivity of the economy as a whole. Here, a Ford auto plant in Mahway, New Jersey, in 1980. The day after the picture was taken, the factory closed.

NSIPS/Carlos Wesley

Figure 9

Employed Productive Workers Millions

	1960	1970	1975	1978	1979	1980
Infrastructure	8.3	9.8	6.3	7.0	7.4	7.4
Raw Materials, Agriculture	10.1	8.4	8.1	8.1	8.2	8.1
Capital Goods	2.7	3.3	4.6	5.2	5.7	5.7
Consumer Goods	5.3	6.5	8.1	9.4	9.4	8.9



of the production process. Infrastructure, for example, includes water and land management, transportation in all modes, including employment in the construction and maintenance of transportation equipment, energy production, and the maintenance of urban infrastructure. Over two-thirds of the employment in this category is made up of transportation workers of all types; energy production and urban infrastructure account for approximately half a million jobs between them out of the total. As overall employment in this category has declined, employment in transportation has increased relative to the other components of the sub-division.

LaRouche-Riemann Model computer studies have demonstrated the folly of this kind of investment pattern. For increases in the productivity of the nation's infrastructure are followed almost immediately by increases in the productivity of the economy as a whole. But we have had no major infrastructural project since Eisenhower's Inter-State Highway construction program! The next such project considered was the North American Water and Power Alliance of the early 1960s. Had this been implemented back then, our farmers would by now have no water problems, our electrical generating capacity would have been vastly enhanced by the expansion of cheap and efficient hydro-power, and our internal lines of communication, east-west as well as north-south, would have been vastly enhanced.

Raw materials and agriculture denote the processing of raw materials for the economic process; here the decline represents both the shrinking of the farm population referred to above, and the decline in raw materials processing that has accompanied the destruction of the country's heavy industry, at accelerating rates during the decade of the 1970s.

Employment in capital goods has increased as the production of consumer goods has increased. But such employment does not contribute to the productivity of the economy as a whole. For despite the touted expansion in consumer-oriented production, there remains the short-fall we saw above in the consuming population's ability to even produce another generation. The expansion of what is called the consumption side of the economy, at the expense of the productivity of the economy as a whole, is a cruel trick.

LaRouche's recommendations

As we have seen, the productive core of the work force made up approximately 30% of the employed labor force by the end of the 1970s. The corrective policy LaRouche specified for this state of affairs makes even clearer what the decline of the U.S. economy represents. For a functioning economy, LaRouche requires that 60% of the population of labor-force age be employed—levels reached by the end of the 1970s were just under that—and that half of that percentile be employed *productively*. That is, through the late 1970s, had the LaRouche criteria been met, the national economy would have comprised minimally nearly 50 million *productive* jobs, almost 20 million or 40% more than were actually in existence.

However, LaRouche would also change the composition of the productively employed work force. The United States has never, certainly not in the postwar period, been permitted to develop the export potentials of its capital-goods industries, nor has it been permitted to satisfy its internal requirements for capital goods. LaRouche would therefore require that 55% of the productive work force be employed in the highly skilled capital-goods sector. On the basis of the employment profile of the late 1970s, this would provide 27.5 million such jobs. This is almost five times the number officially counted as employed in the consumer goods oriented capital goods sector at that point. The flux-density-of-consumption figures we saw above will be reviewed from the standpoint of providing work places and power for this necessary straightening out of the labor force. Meanwhile, it is sufficient to recall that a productive work force that was 50% or more of the employed labor force was what we had before the 1955-57 period, when the rot set in.

It might be argued that we do not have enough people to effect such a shift to the capital-goods sector. Such an argument would be nonsense for two reasons. First, there are in any case about 10 million once-skilled, former productive workers who were thrown out of their jobs as the percentile of productive workers declined toward the 30% level. These workers are primarily over 35 years old and male. Secondly, we were mis-employing, by the end of the 1970s, approximately 30 million individuals in unnecessary overhead functions, as shown in **Figures 10 and 11**.

These figures represent 100% of the number of people employed in overhead functions. The top portion of **Figure 10** and the top portion of **Figure 11** represent the proportion of overhead cost employment that does not fulfill an economic function. **Figure 10** distinguishes between necessary and unnecessary employment in overhead categories according

to criteria developed below. **Figure 11** compares the existing productive work force, as a percentile, with the corresponding percentiles of necessary and wasteful overhead employment. The bulk of the wasteful category is made up of sales people and people who are employed in administrative functions, primarily associated with the spread of usury and ground-rent, who are actually usurping employment functions constitutionally allocated to the federal government. There were, for example, by the end of the 1970s, almost 30 million people employed in sales functions alone, and almost 30% of this number was employed in areas connected to the fast-food business, which had become the nation's largest employer.

LaRouche proposed, beyond raising employment in productive activity to 50% of total employment, that 5% of those employed be employed in scientific and R&D functions. We now have about 500,000 scientists in the whole country. LaRouche additionally stipulated that sales employment be restricted to 7% of the total employed labor force, whereas it now comprises nearly 30%, and further, that employment in government and administration be restricted to 14% of the total, whereas that number verged on 25% by the end of the 1970s. Levels of necessary employment in teaching and health, without which no work force can function, remain to be determined. Such a reorganization, maintaining employment in health and education as it is, would still leave another 10 million jobs to be created, for example, in upgrading the employment quotient in scientific research and R&D through upgrading skill levels.

Electricity generation: the social cost

Let us now review the decline of the labor force from the standpoint of the social cost of producing the means which enables the labor force to function, namely, electrical energy, which, as the most efficient form of energy, is the organizer of energy processes in the economy as a whole. Over the period considered here, the number of workers employed in the generation of electrical energy rose from 0.95% of the productive work force in 1960 to 1.3% in 1980. The absolute numbers employed in this category increased from 253,000 in 1960 to 391,000 in 1980. This handful of workers consumed energy at a per-capita flux density rising from 3 million kilowatt hours each in 1960, to 5.4 million in 1970, to 6.0 million in 1980. The highest level reached was 6.384 million in 1978. With this per-capita power, this handful of workers produced the totality of electrical output seen in **Figure 5**. The per-capita flux density of consumption should be compared with the average for the industrial worker in **Figure 8**.

However the rest of the productive labor force works to support these workers at this level of flux density, and their productive work is made possible by those employed in overhead cost functions who contribute to their functioning. Thus, the work accomplished by operatives, and those employed in overhead functions, to permit individual generators of electrical energy to function at the indicated level, can be expressed as a percentile of the work of the productive labor force and of the employed population as a whole.

TABLE 5
Social cost of electrical generation
1) as percent of operative activity
2) as percent of employed labor force activity

	1960	1970	1975	1978	1979	1980
1)	.19%	.22%	.24%	.22%	.21%	.21%
2)	.083%	.089%	.079%	.08%	.078%	.078%

Figure 10

Necessary Overhead Requirements vs. Misemployment in Unnecessary Functions

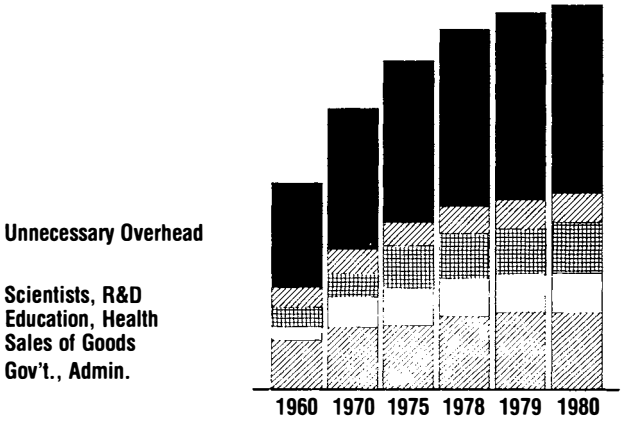
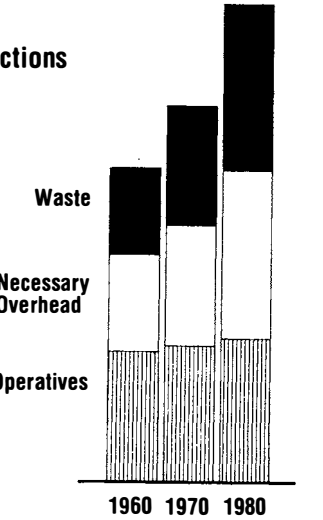


Figure 11

Productive vs. Non-Productive Functions



This percentile of total work can also be expressed in the amount of time the productive workers and employed work force have to spend to enable one such electrical energy worker to function at the level he does:

TABLE 6
Work time required to support one electricity generator
1) time of operatives, hours
2) time of employed labor force, hours

	1960	1970	1975	1978	1979	1980
1)	16.6	19.3	21.0	19.3	18.4	18.4
2)	7.3	7.8	6.9	7.0	6.8	6.8

By comparison, the cost in terms of total labor time of maintaining one farmer at the level of per-capita flux density of energy consumption of 1980 is 9% of the above. That is just over 1.5 hours work by the total productive work force, or just over half an hour's work by the employed labor force. In the case of the electricity generator, however, we see that the cost increased 16% between 1960 and 1970 in terms of work required, but in **Figure 5** we saw that the electricity generated during the same period nearly doubled. The difference between the two reflects an increase in the power of the labor force to that extent. Similarly, the cheapening of the cost of electricity generation after 1975 correlates with the collapse of the growth rate, and then with the beginning of absolute decline. Thus, the cost of electricity generation is actually increasing because we began to produce less for the work we were putting into it. The productive power of the labor force thus went into decline.

But let us consider the requirements to straighten out the labor force in the manner indicated by LaRouche. During the period considered, the ratios of electrical energy generators to capital-goods workers and productive workers in general were as follows:

TABLE 7
Proportion of electrical power workers in the economy
1) electricity generators to capital goods workers
2) electricity generators to productive workers

	1960	1970	1975	1978	1979	1980
1)	1:10.7	1:11.3	1:14.3	1:14.7	1:15.2	1:14.5
2)	1:105	1:97	1:85	1:84	1:82	1:76

Thus we see that the productive work force as a whole declined relative to producers of electrical power by almost as much as capital-goods workers increased, about 35%. But we also saw that in 1980 the productive work force should have offered employment to 50 million operatives, of whom 27.5 million should have been employed in capital goods. If the above ratios were kept constant, in the first case we would require a minimum of 650,000 electricity generators, and in the second a maximum of 1.8 million. The latter case, given the expanded requirements of a necessary five-fold increase in capital goods employment, is nearer the mark. But assuming the per-capita density of the electricity generator remains at the level of 1980, then the actual cost to the labor force of sustaining the increased consumption required to generate electricity would in fact be halved. The expanded productive work force would only have to spend three quarters of an hour in working to support each of the increased number of electricity generators. However, the present consumption of energy to produce electricity is only at 60% of the level required to support such an expansion, such that under such conditions of expansion, the energy consumed in the production of electricity alone would be slightly more than the total energy consumption in 1980.

Cultural pessimism and the declining birth rate

We have reviewed the collapse of family formation, seen in declining fertility rates, and declining numbers of children per family. We have also seen that at present levels of production, family consumption is less than half of what it has to be to restore a trend line to population growth.

These indicators of collapse reflect a demographic shift among our adult population which is the correlate of the decline of the productive work force, and the decline in its productive powers which we saw above. Our population has complied, in its outlook and thus in its practice, with a policy which contains no perspective for the future, and thus provides no basis for hope. We thus find, particularly among those of us who were under 35 years old in 1980, that the nuclear family, whose existence for most of us is based on the effort to realize the hope that the adult life of our children will be better than ours has been, is fast going out of business. The pessimism of this generation, the political base of Walter Mondale, is based on a shift away from the outlook associated with the development of the nuclear family—which can be a 20-year undertaking, from birth through school and college to graduation and employment, and thus requires an optimistically powered sense of purpose, durable over time—into the gratification of immediate felt needs as the locus of existentialist purposeless existence.

Figure 12 shows this tendency, in comparing the growth of the adult population with the growth of the total population, and the growth of unmarried adults with total adults. It will be seen that while the number of adults grew over the period as a whole twice as fast as the total population, the number of unmarried adults grew twice as fast again, to the point that by 1980 unmarried adults comprised nearly half the total adult population.

The swinish immorality thus most concentrated in the cited age group is reflective of the yet more swinish immorality that has been permitted to govern policy as a whole. The results reported are not accidental, nor did they have to happen, through the activity of some unchained, uncontrollable vengeful destiny. About 30 years ago a group of people, typified today by the circles associated with the Club of Rome

and the World Wildlife Fund, the controllers of the Carter administration, embarked on a project to reduce the world's population by half. They did not exclude the United States and its population from this effort, but rather considered that by destroying the capabilities of the most productive sector of the world economy, the whole would be brought under their dominion at a more rapid rate. Despite ups and downs, such circles have worked steadily toward that objective, while most of us were too busy with the immediately felt concerns of the moment to notice what was happening. Now the country has been brought to a turning point.

The underlying process of decline reported here is complicated by the utter bankruptcy of world and national financial institutions. For the last three years, the U.S. internal economy has appeared to continue to maintain the semblance of functioning because of tribute gouged out of especially the undeveloped nations. Meanwhile, the effects of usurious credit have concentrated within the nation to the point where we are threatened with a food catastrophe in the near future. The declining potentials reported here will be brought to the surface under the combined impact of the reality of financial and food collapse, to the point that we are threatened with a massive demographic disaster in the country itself, namely, the threat of genocide against approximately one half of our own population.

The indicated shift in employment and investment policy, if implemented now, together with a general financial and credit reform, would help avert looming catatrophe. But we do not have too much time to delay. We have been living on borrowed time for too long already.