The United States is failing to reproduce its population

by Steven Bardwell, Editor-in-Chief, *Fusion* magazine

Over the past 15 years, the United States has failed to reproduce its existence as a nation. Culturally, educationally, and even biologically, this country is rapidly devolving.

The United States has not maintained the physical plant necessary for a modern industrialized society: the housing stock, economic infrastructure, and the productive machinery of the nation are decaying more rapidly than they are being replaced, let alone upgraded.

The skilled manpower resources of the country are also being eroded. Skilled workers are retiring faster than new workers in critical trades like machinists, and tool and die makers can be trained. Perhaps least understood of all, America, for seven years, has maintained a birthrate and family formation rate which guarantees extinction of this country within a century.

Citydwellers in the United States can see that their own lives are declining because of unrepaired streets, poor city services, and decaying mass transit. But this situation is by no means confined to the nation's major older cities. As **Figure 1** shows, the condition of the infrastructure of the United States is abominable. The country's interstate highway system is falling apart; a large percentage of roads and bridges are beyond repair and in need of replacement, and the urban service infrastructure (i.e. water supply, sewage disposal) is accumulating needed repairs much faster than such repairs are being made.

Figure 1
Capital deficit for United States (1980)

Category	
Capital investment[1]	
Average age machinery	7.1 years
Average age plant	17 years
% older than 20 years	35%
Real investment per year (high)	−$ 72 billion
Real investment per year (low)	−$130 billion
Infrastructure[2]	
% roads beyond service life	20
% bridges beyond service life	13
Cumulative underinvestment (roads and bridges)	$700 billion
Cumulative underinvestment (water services)	$ 60 billion
Cumulative underinvestment (New York City)	$ 40 billion
Cumulative underinvestment (Cleveland)	$ 1 billon
Housing deficit per year	2.5 million units

Notes:
[1] Council of Economic Advisors, 1980 and 1981. Joint Economic Committee to Congress, March 1979.
[2] Council of State Planning Agencies, 1981.

The cultural decline that has shown one form in the decay of the U.S. population takes another form in the decay of the physical plant of the United States. Figure 1 summarizes some of the most shocking aspects of this decay. Comparisons in some categories with other countries are available: the percentage of machinery over the age of 20 years in Japan, for example, is less than 1 percent!

Too little investment, of the wrong kind

The situation with the plant and equipment of the U.S. economy is similar. **Figure 1** also shows some revealing statistics concerning the reproduction of capital investment over the immediately preceding period. For example, the average age of U.S. machinery is 7.1 years. In the past two years, this figure has increased by more than one year; this means that the national rate of capital investment is so low that existing machinery is not being replaced. A series of studies conducted by the *EIR* economics group generated an estimate of actual capital investment being made in the United States. After subtracting the *EIR* estimates for replacement expenses (that is, maintenance and depreciation) of existing capital from the actual investments made, the resulting new capital investment is *negative,* ranging between −$72 billion per year to −$130 billion per year. These studies estimate that each year for the past five, there has been underinvestment of this amount.

It is important to note that the problem is a compound of two different effects. First, there has been a massive underinvestment in quantitative terms; insufficient funds have been spent on capital over the past 15 years. Secondly, tax laws, inflation, and accounting procedures penalize capital-intensive investment. These have completely crippled national investment.

For example, the U.S. steel industry, in many ways a case study for what is wrong with the entire economy, has invested over the past 20 years slightly more in capital equipment and plant than its Japanese competitor. For that approximately $100 billion investment, the Japanese were able to purchase roughly 90 million tons per year additional steel-making capacity. However, for the same investment, the U.S. steel-making capacity actually *decreased.* The investment strategy was totally different in the two countries; the Japanese concentrated their investment in from-the-ground-up greenfield plant construction, using the most advanced technologies of continuous casting, integrated processing and transport, and the like. The U.S. investment, on the other hand, was almost totally in repair of old steel-making capacity—repairing already outmoded technologies. The result for the U.S. industry is an artificially bloated figure of capital stock, a completely unrealistic estimate of depreciation, and, worst of all, a secularly increasing average age of capital and decreasing productivity.

U.S. workforce: smaller, less skilled, less motivated

The reproduction of skilled manpower in the United States has suffered a similar fate over the past 15 years. As many commentators have noted, the U.S. industrial workforce has become less skilled, smaller, and less motivated. These generalized problems have shown up in the tremendous lags in military production, in the very slow productivity growth of American industry, and in the many unfilled skilled jobs.

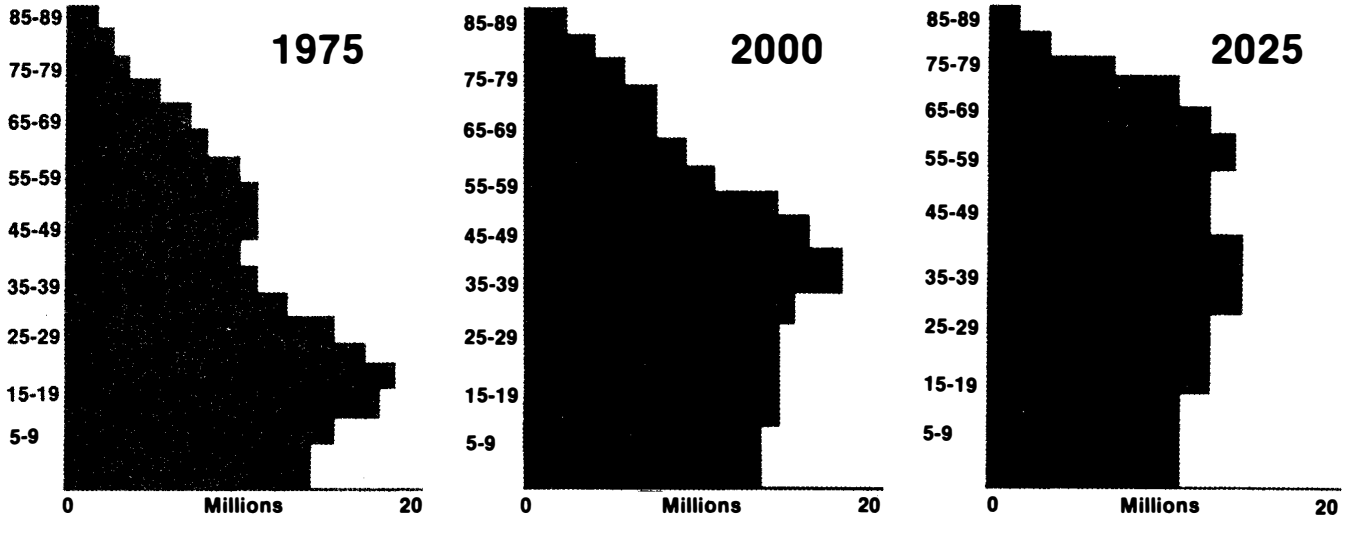
Figure 2
Reproduction requirements for workforce

Category	
Machinists and die makers	
Annual retirement	31,000
Annual trainees k	5,000
Annual graduates	2,400
Mold makers	
Cumulative deficit (1980)	40,000
Metalworkers	
Cumulative deficit (1980)	250,000

The most fundamental prerequisite for cultural and economic reproduction is that the skilled labor force of a nation remain intact. At the very minimum, the number of retirees in a given necessary skilled job classification must be matched by the graduating apprentices in the same field. Figure 2 shows reproduction figures for some key categories of skilled labor in the United States. The cumulative deficit shown in the last two categories is the result of a now-decade-long period of underreproduction of the workforce.

Figure 2 quantifies this situation for some of the most critical skilled job categories in the United States. Although the astounding shortages in these categories are not unique to the United States, they have a very different significance than, for example, in the case of

Figure 3
Age structure of U.S. population.



Japan. Japan is estimated to have at least 850,000 unfilled skilled and unskilled positions in industry. However, these empty jobs are due to a much higher rate of economic growth than population growth, resulting in too few people for the jobs, not too few people of the required skills. This demographic shortfall is due almost entirely to a very successful birth-control program instituted by the Japanesee in the early 1960s. It resulted in a quite predictable effect 20 years later: a dramatically reduced number of new entrants into the job market.

The U.S. labor shortage is *not* demographic. It is a question of *deteriorating skill levels* in the population. This problem extends from the skilled blue-collar jobs into the most highly skilled engineers, computer scientists, and teachers. And statistics indicate that the frightening problem will get worse: last year Minnesota certified only one new mathematics teacher for elementary and secondary schools. Out of 15,000 teachers certified last year in New York, only 30 were certified to teach chemistry.

Zero growth by the year 2000

The underlying causal factor responsible for this lack of material reproduction of the United States is perhaps best demonstrated by **Figure 3,** which shows the population structure of the United States over the next 50 years. The immediate prospects are of a period of negative population growth, increasingly high average age, and fewer and fewer children born each year. These trends will exponentially increase, if we assume only that the present fertility rate and family formation statistics remain constant. That is, we have made the conservative assumption that the recent drop in the U.S. fertility rate will stop, and that the fertility rate will remain constant. Even under this assumption, America will reach zero growth by the year 2000, and the population will begin to fall exponentially after that.

Many commentators have assumed that such a demographic self-destruction by a country is impossible, because as soon as the population reaches zero growth, fertility will rise to replacement rates. This assumption might be plausible—except for the fact that the cause of the present low and declining fertility rate is a *deeply rooted cultural pessimism,* reflected in the economic statistics noted above. Other industrial countries are already far advanced along this road. West Germany, for example, has such a low fertility rate that with every generation the number of native-born Germans decreases by 20%! The ancient civilizations of Hellenistic Greece (about 250 B.C.) and the Roman Empire both collapsed from internal demographic decline before they were externally conquered. History offers little hope for a "natural" reversal for a culture which is not reproducing itself.

The Roman model of mass depopulation

by Kenneth Kronberg

Examination of the demographic features of the Roman Republic and Empire provides a striking commentary on the genocidal effect of the global population policies proposed by the Club of Rome today. The Romans rejected technological innovation in favor of "appropriate technologies," looted the workforce below the economic level required for population expansion, and promulgated a mass culture of Dionysiac cults and homosexuality which discouraged the growth of families. The result was the collapse of Mediterranean civilization into the Dark Ages, from which humanity struggled to recover for a thousand years.

Figure 1 graphs the population of Europe since 400 B.C.; the rapid growth since the Industrial Revolution is evident (note that the horizontal scale is attentuated twice, after A.D. 1000 and A.D. 1550, in order to avoid an almost vertical incline over this period). The scientific development of agriculture and industry since the Golden Renaissance appears here in the ability of European society to support a vastly increased population; we see also the short-term impact on population of the depression and wars of this century (**a**), of the Thirty Years War of the 17th century (**b**), and the devastation of the Black Death precipitated by the collapse of the Italian banking houses of the 14th century, in which at least one-fourth of Europe's population perished (**c**).

The portion of the graph marked (**d**), lying between 400 B.C. and A.D. 1000, shows the period when most of Europe was under Roman control. Here we see a gradual population increase until A.D. 200, followed by a gradual decline until A.D. 600, when the trend reverses and the population begins to grow again. The period following A.D. 200 marks the end of the *Pax Romana* and the beginning of the "decline" of the Roman Empire.

Figure 2(**a**)-(**d**) focuses on this period, and compares the population of Europe to that of the entire territory ultimately dominated by Rome at its greatest extent, to that of Italy itself, and to that of Greece. (The scales of these graphs have been adjusted to facilitate comparison.)

Rates of population growth and reduction appear as anything but gradual in this close-up. The combined