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

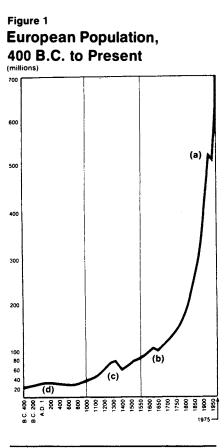
Examination of the demographic features of the Roman Republic and Empire provides a striking commentary on the genocidal effect of the global population policies proposed by the Club of Rome today. The Romans rejected technological innovation in favor of "appropriate technologies," looted the workforce 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

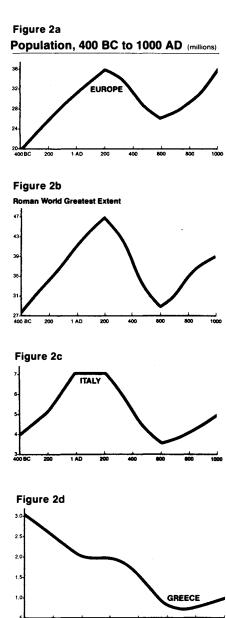


population of Roman and non-Roman Europe in A.D. 600 had plummeted to only slightly above what it had been in 200 B.C., while the population of the entire Roman world, including territories in Europe, Africa, and Asia, was substantially less in A.D. 600 than it had been 800 years before. From a maximum population of about 47 million, the Roman world had shrunk to about 29 million, or almost 40 percent!

The population of Italy during this period rose and fell in a similar manner [see Figure 2(c)], except that the crisis point was reached about 200 years earlier.

The population of Greece [Figure 2(d)] declined almost continuously from the defeat of the Golden Age of classical culture until after A.D. 600, when the Mediterranean world began to recover from the Dark Ages collapse of Rome.

Figure 3 reflects these trends in a



comparison of population densities of Italy and Greece. In 400 B.C., at the height of their power, the Greek city-states were able to sustain an average population density of 23 persons per square kilometer, as a result of their application of scientific techniques to agriculture and industrial production. This was almost five times the average population density of the less-developed areas of Europe overall, and was also the maximum level of population density achieved in Roman Italy. This level was not reached again in Italy until approximately A.D. 1200; England could not sustain this density of population until the early 15th century.

Roman Italy was never able to sustain a greater population density than that of Greece because the Romans never surpassed the level of Greek technology available in agriculture and production. In fact, the Romans refused to introduce available technologies, for instance water mills and mechanical pumps.

The process that led to the stagnation of the Italian population by A.D. 1 is shown even more clearly in Figure 4, where emigration from outside Italy, particularly of slaves, has been discounted. Here we see that although the total population of free adult males counted in the Roman census rose from over 200,000 to almost 800,000 during the period from 200 B.C. to A.D. 1 [Figure 4(a)], the rate of population growth over this period slowed down from an initial 1.5 percent to almost zero [Figure 4(b)]. That is, by the time of the birth

Population density, 1000 B.C.-A.D. 600

	1000	1000 B.C.		400 B.C.		200 B.C.		A.D. 1		A.D. 200		A.D. 400		A.D. 600	
	Total	/km.²	Total	/km.²	Total	/km.²	Total	/km.²	Total	/km.²	Total	/km.²	Total	/km.²	
EUROPE	10m	2.7	20	5.2	26	7	31	8.3	36	9.7	31	8.3	26	7	
GREECE	1	7.7	3	23	2.5	19	2	15.3	2	15.3	1.5	11.5	.8	6.15	
ITALY	2	6.6	4	13.3	5	16.6	7	23.3	7	23.3	5	16.6	3.5	11.6	
Italy, 1200 A	.D. = 24	/km.2													

Ita England, 1377 A.D. = 19/km.²

Figure 3

Figure 4a

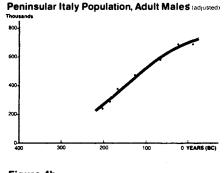
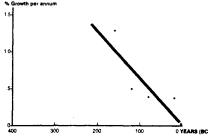


Figure 4b





of Christ, Roman Italy had achieved that dream of the Club of Romezero population growth!

That collapse resulted from combined features of the Roman taxfarming economy: the constant wars over new territories to loot, the extreme immiseration of the mass of the populace, and the degenerate culture which placed little value on individual human life. Infant exposure was the widespread and common method of "family planning," and the prevalent homosexual culture discouraged marriages and childbearing. Although these factors lowered the birthrate, they could not have in themselves resulted in zero population growth were it not for the extremely high death rate during this period [see Figure 5(a)-(c)].

Although we lack statistical data that would allow for a direct calculation of the death rate, we do have

information on life expectancy and longevity which implies an extremely high death rate. Figures 5(a) and 5(b) show two different measures of length of life from selected areas during the period of the Roman Empire: 5(a) shows expectancy at birth, and includes the high infant and childhood mortality; 5(b) shows probable duration of life for individuals who had survived to age 15. Figure 5(c) compares the percentages of total population who died within certain age-intervals.

Here we see that fully a third of the population died between the ages of 15 and 35. In the immediate vicinity of the city of Rome, a mere 14 percent of the population lived beyond their 35th year. These were the conditions under which Roman Italy was able to achieve the depopulation. Enough people were dying fast enough to allow marginal reductions

Figure 5a Life expectancy at birth: Roman Empire

Rome Latium Cisalpine Gaul Gaul Campagna	15.8 year 14.5 20.7 23 24.6 28 2	Northern Italy Bordeaux Danube Britain North Africa Egypt	46 years 40 36 38 49 36
Northern Italy Egypt Spain North Africa	28.3 28.7 32.7 41.8	1931 India 1927 Egypt 1946 England	45 years 50 74

Figure 5c Deaths/Total Population by Age Group: Roman Empire (%)

	0 yrs.	1-14 yrs.	15-34 yrs.	exceeding 34 yrs.
Rome-Latium	31%	28%	27%	14%
Cisalpine Gaul-Provençe	22	22	35	21
Campagna	18	21	32	29
Northern Italy	14	18	33	35
Spain	15	9	36	40
Egypt	15	18	32	35
North Africa	14	10	23	53

Figure 6

Population and land cultivation reduction North Africa: Late Roman Empire

		nan Linpite	% cultivated					
_	Рори	llation	%	on	%			
	AD 100-200	AD 422	reduction	Imperial estates	deserted (sample)			
Africa	750,000	290,000	61	39	39			
Byzacena	510,000	250,000	51	50	50			
Numidia	695,000	347,000	50		_			
Mauretania	1,828,000	914,000	50					
	3,783,000	1,800,000						
Tripolitania	100,000	50,000						
10% non-rural cities	388,000	185,000						
TOTAL	4,271,000	2,041,000						

Figure 5b

Probable duration of

life: Roman Empire

in the birth rate to take hold. Only under similar conditions could the Global 2000 program be successful.

After A.D. 200 the Roman world entered a series of convulsions which mirrored the prior process in the Italian peninsula (Figure 6). This was the process that ushered in the Dark Ages.

Charts and tables based on data in: Colin McEvedy and Richard Jones, Atlas of World Population History (1977); P.A. Brunt, Italian Manpower, 225 B.C.-A.D. 14 (1970); J.C. Russell, "Late Ancient and Medieval Population," Transactions of the American Philosophical Society, NS 48, 3 (1958); A. H. M. Jones, The Later Roman Empire (1964). Figure 1 is reprinted from McEvedy & Jones.