# POPULATION GROWTH, ECONOMIC GROWTH, AND FOREIGN AID

Julian L. Sim n

#### Introduction

It is a great honor, as well as a great pleasure, for me to contribute to this Festschrift honoring Peter Bauer and his pathbreaking work on economic development. My acquaintance with Bauer's point of view goes back to about 1970 when I first taught a graduate course in development economics. At that time I fortunately discovered *The Economics of Underdeveloped Countries*, coauthored by Bauer and Basil Yamey (1957). Its analyses and case studies gave me confidence in saying to the class what my survey of the literature had already suggested, namely, that development economics is no different than any other economics. Still, my appreciation of Bauer's point of view has taken years to deepen and ripen, in conjunction with my reading of F. A. Hayek on related topics. Only in the past few years have I absorbed it enough to give it nearly proper place in my own work. It is therefore gratifying to see Bauer's work gaining increasing recognition in the field of development economics.

I am also grateful that, just as I have learned so much from Peter Bauer, he has been kind enough to say that he has learned something from my work—that population growth is not inimical to economic development, as early on he had written it is. Indeed, this idea fits perfectly with the rest of his thinking. So this Festschrift is an unusual opportunity for me, because it is the perfect occasion to discuss the juxtaposition of Bauer's central idea about the importance of markets and liberty in economic development and the place of population

Cato Journal, Vol. 7, No. 1 (Spring/Summer 1987). Copyright © Cato Institute. All rights reserved.

The author is Professor of Business Administration at the University of Maryland. The paper draws on a variety of the author's other writings on the subjects at hand, especially Simon (1985a, 1985b). The author wishes to thank David Boaz and Theodore W. Schultz for their helpful comments on an earlier version of the paper. Stephen Moore helped prepare Tables 1–5, and Mike Waters helped prepare Table 6.

growth in that process. This juxtaposition is especially appropriate because population growth has been the topic on which development "planners" have focused the world's attention to the neglect of, and perhaps as a device for being able to avoid attending to, the key role of economic freedom and market processes. This Festschrift is also an excellent opportunity to use as a backdrop and as a foil the recent report of the National Academy of Sciences, *Population Growth and Economic Development* (1986).

The main points of my paper are the following: First, it is the processes that Bauer emphasizes that account for the speed of a country's economic development. I will adduce some data on three pairs of countries that I think are strong added evidence for that view: North and South Korea. East and West Germany, and China and Taiwan. Second, the rate of population growth does not determine the rate of economic development; the same data set supports this point. A corollary is that a more dense population does not hamper population growth; this is attested to by the same data as well as by other data that I will mention. Third, though intentions may be benign (though they certainly are not always so), some aspects of U.S. foreign aid programs for "family planning" are not just wasteful, not just fraudulent, not even just politically dangerous for the United States: but they may well be extremely damaging on net balance by offering a palliative that distracts from the all-important issue of the economic system of the country receiving the aid.

All three points can be subsumed under the single lesson that Henry Hazlitt (1962, p. 17) tried to teach in *Economics in One Lesson:* "The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy; it consists in tracing the consequences of that policy not merely for one group but for all groups."

## The Role of Population Size, Growth, and Density in Economic Progress

Tables 1–5 compare pairs of countries that have the same culture and history, and had much the same standard of living when they split apart after World War II: North and South Korea, East and West Germany, China and Taiwan. The tables make it abundantly clear, despite the frequent absence of data for the centrally planned countries, that the market-directed economies have performed much better economically, no matter how economic progress is measured. Income per person is higher. Wages have grown faster. Key indicators of infra-structure, such as telephones per person, show a much higher

TABLE 1
POPULATION DENSITY AND GROWTH, SELECTED COUNTRIES, 1950–83

	East Germany	West Germany	North Korea	South Korea	China	Taiwan	Hong Kong	Singapore	USSR	USA	India	Japan
Population per Sq. Km., 1950	171	201	76	212	57	212	2236	1759	8	1 16	     110	224
% Change in Pop., 1950	1.2	1.1	-7.8	0.1	1.9	3.3	-10.4	4.4	1.7	1.7	1.7	1.6
% Change in Pop., 1955	-1.3	1.2	3.5	2.2	2.4	3.5	4.9	4.9	1.8	1.8	1.9	1 1 1 1.0
% Change in Pop., 1960	-0.7	1.3	3.0	3.3	1.8	3.1	3.0	3.3	1.8	     1.7	     2.0	     0.9
% Change in Pop., 1970	-0.1	1.0	3.0	2.4	2.4	2.2	2.2	1.7	1.0	1.1	l l 2.2	1.3
% Change in Pop., 1983	-0.3	-0.2	2.1–2.6	1.4-1.6	1.3–1.6	1.8	1.5	1.2	0.7–0.9	0.9	2.1–2.2	0.6

Sources: Population per square km.: United Nations Educational, Scientific, and Cultural Organization, UNESCO Yearbook (1963, pp. 12–21). Percentage change in population: U.S. Department of Commerce, World Population (1978); United Nations, Report on World Population (1984).

TABLE 2

REAL INCOME PER CAPITA, SELECTED COUNTRIES, 1950–82

	East Germany	West Germany	North Korea	South Korea	China	Taiwan	Hong Kong	  Singapore	USSR	USA	India	Japan
Real GDP per capita, 1950	1480	1888	n.a.	n.a.	300	508	n.a.	n.a.	1373	4550	333	810
Real GDP per capita, 1960	3006	3711	n.a.	631	505	733	919	1054	2084	519 <b>5</b>	i   428	1674
Real GDP per capita, 1970	4100	5356	n.a.	1112	711	1298	2005	2012	3142	6629	450	4215
Real GDP per capita, 1980	5532	6967	n.a.	2007	1135	2522	3973	3948	     39 <b>4</b> 3	1     8089	1     498	1     5996
Real GNP per capita, 1950 <sup>b</sup>	Same as W. Germ.	2943	Same as S. Korea	193	n.a.	417	1053	     n.a.	   n.a.	7447	217	649
Real GNP per capita, 1960	n.a.	3959	n.a.	473	n.a.	429	979	     1330	     n.a.	8573	!   220	1403
Real GNP per capita, 1970	6584	6839	556	615	556	868	1807	l 1 2065	4670	10769	l 219	1 1 4380
Real GNP per capita, 1982	9914	11032	817	1611	630	2579	5064	5600	5991	12482	i 235	9774

<sup>&</sup>lt;sup>a</sup>Figures for real gross domestic product (GDP) per capita are based on 1975 international prices.

Sources: Real GDP per capita: Summers and Heston (1984). Real GNP per capita: International Bank for Reconstruction and Development (IBRD), World Tables (1980). GNP deflator: Council of Economic Advisers (1986, Table B–3).

<sup>&</sup>lt;sup>b</sup>Figures for real gross national product (GNP) per capita are based on 1981 constant U.S. dollars.

TABLE 3

LIFE EXPECTANCY AND INFANT MORTALITY, SELECTED COUNTRIES, 1960–82

	East Germany	West Germany	North Korea	South Korea	China	Taiwan	Hong Kong	   Singapore	USSR	USA	   India	Japan
Life Expectancy at Birth, 1960	68	69	54	54	53	65	65	   64	   68	   70	43	   68
Life Expectancy at Birth, 1982	73	74	_65	_68_	67	73	76	73	69_	i !75	5 <u>5</u>	. 77_
Infant Mortality, 1960	39	34	78	78	165	32	37	35	33	26	165	30
Infant Mortality, 1982	12	12	32	32	67	18	10	  -   11	1 1 28	11	     94	7

Source: IBRD, World Development Report (1985, pp. 260-61).

TABLE 4
INDUSTRIALIZATION AND URBANIZATION, SELECTED COUNTRIES, 1960–82

	East Germany	West Germany	North Korea	South Korea	China	Taiwan	Hong Kong	   Singapore	l USSR	l USA	     India	l   Japan
% Labor Force in Agric., 1960	18	14	62	66	n.a.	n.a.	8	8	42   	7	<b>74</b> 	33
% Labor Force in Agric., 1980	10	4	49	34	69	37 (1978)	3	2 	14   	2	71 	12
% Urbanized, 1960	72	77	40	28	18	58	89	100	49 !	70	18	63
% Urbanized, 1982	77	85	63	61	21	70 (1980)	91	100	63 	78	24	78 !

Sources: Labor force in agriculture: IBRD, World Development Report (1985, pp. 258–59). Urban population: IBRD, World Development Report (1985, pp. 260–61).

TABLE 5
EDUCATION AND CONSUMPTION, SELECTED COUNTRIES, VARIOUS YEARS

	East Germany	West Germany	North Korea	South Korea	China	Taiwan	Hong Kong	   Singapore	USSR	USA	India	   Japan
Higher Education Enrollment, 1960	16	6	n.a.	5	n.a.	n.a.	4	 	 	     32	       3	       10
Higher Education Enrollment, 1982	30	30	n.a.	22	1	n.a.	12	 	! ! ! 21	       56	 	 
Newsprint per Person, 1950–54	3.5	5.1	n.a.	0.6	n.a.	0.9	4.3	n.a.	1.2	35.0	0.2	i 3.3
Newsprint per Person, 1982	9.6_	21.5	0.1	5.8	1.2	n.a.	16.4	32.1	4.5	44.1	0.4	24.0
Telephones per 100 Pop., 1983	20.6_	57.1	n.a.	14.9	0.5	25.8	38.2	36.7	9.8	76.0	0.5	52.0
Autos per 100 Pop., 1960	0.9	8.2	n.a.	0.1	0.005	0.1	1.0	1     4.2	0.3	1 34.4	0.1	0.5
Autos per 100 Pop., 1970	6.7	24.1	n.a.	0.2	0.018	n.a.	2.8	   7.2	0.7	43.9	0.1	     8.5
Autos per 100 Pop., 1984	18.9	41.3	n.a.	1.1	0.010	3.1	4.6	9.3	3.9	55.5	0.2	22.8

Sources: Higher education: IBRD, World Development Report (1985, pp. 266–67). Newsprint: UNESCO Yearbook (1963, pp. 400–409). Telephones: U.S. Department of Commerce, Statistical Abstract (1986, p. 845). Automobiles: Motor Vehicle Manufacturers Association of the U.S. Inc., World Motor Vehicle Data (various years).

level of development. And indicators of individual wealth and personal consumption, such as automobiles and newsprint, show enormous advantages for the market-directed enterprise economies compared to the centrally planned, centrally controlled economies. Furthermore, birth rates fell at least as early and as fast in the market-directed countries as in the centrally planned countries.

The first line in Table 1 shows that in each case the centrally planned communist country began with less population "pressure," as measured by density per square kilometer, compared to the paired market-directed noncommunist country. And the communist and noncommunist countries in each pair also started with much the same birth rates and population growth rates. There is certainly no evidence here which suggests that population growth or density influences the rate of economic development.

The most important evidence on the relationship between the rate of population growth and the rate of economic growth is the global correlations, the data that first shook my conventional belief that population growth was the twin of war as the world's great evils. There now exist perhaps a score of competent statistical studies, beginning in 1967 with an analysis by Simon Kuznets covering the few countries for which data are available over the past century, and also analyses by Kuznets and Richard Easterlin of the data covering many countries since World War II. The basic method is to gather data on each country's rate of population growth and its rate of economic growth, and then to examine whether—looking at all the data in the sample together—the countries with high population growth rates have economic growth rates lower than average, and countries with low population growth rates have economic growth rates higher than average. Various writers have used a variety of samples of countries, and have employed an impressive battery of ingenious statistical techniques to allow for other factors that might also be affecting the outcome.

The clear-cut consensus of this body of research is that faster population growth is *not* associated with slower economic growth. Of course one can adduce cases of countries that seemingly are exceptions to the pattern. It is the genius of statistical inference, however, to enable us to draw valid generalizations from samples that contain wide variations in behavior. The exceptions can be useful in alerting us to possible avenues for further analysis, but as long as they are only exceptions, they do not prove that the generalization is not meaningful or useful.

This body of literature is now almost two decades old, researched by scientists with the best possible credentials (many of whom expected to find a negative effect), and published in well-known scientific journals. Yet, not one of these studies is commonly mentioned in the newspaper reports, by the United Nations Fund for Population Activities documents for the 1984 Mexico City Conference or other mainline statements on the subject, nor by the extensive 1984 World Development Report of the World Bank.

The recent National Academy of Sciences (NAS) report on *Population Growth and Economic Development* (1986, p. 7) at least took notice of this body of literature, but dismissed it as follows:

[S]imple correlations between population growth and per capita income, although intriguing, ultimately provide little insight into the causal impact of a policy-driven decline in fertility. A scientific assessment of the impact requires that one identify the major mechanisms by which population growth is hypothesized to affect economic development; assess the evidence for each hypothesis; and, finally, synthesize the net effect of the simultaneous operation of these mechanisms.

An examination is badly needed of the reliability of those studies and the validity of their conclusions in light of the best statistical-econometric thinking, because on the rare occasion when these studies are mentioned, they are dismissed as either unpersuasive (as in the NAS report) or as completely without scientific value. For example, Robert Repetto (1985) called all of these studies "meaningless," saying: "Everyone knows that statistical correlations between two variables don't tell which is influencing the other, or whether a third variable is influencing both." A full-scale assessment needs badly to be done, but I cannot undertake it here. Nevertheless, four points seem to be in order.

First, it is true that two-variable correlation studies do not indicate the forces that do causally influence economic development. But a two-variable zero correlation can be very strong evidence—especially when buttressed with multivariate studies with a variety of specifications—that one variable (population growth) does not cause the other (economic development).

Second, many of the studies of population and economic development have gone far beyond the simple two-variable correlations.

Third, not only does a correlation not "prove" causation, as the popular saw has it, but no other scientific procedure—not even a lengthy series of experiments—can "prove" causation, either (see Simon 1970).

Fourth, simple correlations of the rate of economic growth and the rate of population growth are biased toward a more negative (less positive) correlation, because the appropriate measure of economic

development is the rate of change of output *per worker* while the usual variable is *per person*. Substituting the former for the latter pushes the correlation coefficient in a positive direction.

It has been suggested (for example, Conner 1984) that the studies showing the absence of a relationship between the population rate and the economic growth rate also demonstrate that additional people do *not* imply a *higher* standard of living in the long run. That is, because these studies do not show a *positive* correlation, one is said to make claims beyond the evidence if one says that over the very long sweep of human history a larger population in the world (or, perhaps, in what is the developed part of the world at any moment) has meant faster rates of increase in technology and the standard of living.

It is indeed the case that existing empirical studies do not prove that rapid population growth in the more developed world as a whole increases income per person. But this is not inconsistent with the proposition that more people raise the standard of living in the long run. Recall that the studies mentioned above do not refer to the very long run, but rather usually cover only a quarter of a century, or a century at most. The main negative effects of population growth occur during perhaps the first quarter or half of a century, so that if these effects are important the empirical studies referred to should reveal them. These shorter-run effects on the standard of living include the public costs of raising children—schooling and health are the main examples—and the costs of providing additional production capital for the additional persons in the work force. The absence of an observed negative effect on economic growth in the statistical measures, therefore, is enough to imply that in the very long run more people have a positive net effect. This is because the most important positive effects of additional people—improvement of productivity through both the contribution of new ideas and also the learning-bydoing consequent on increased production volume—happen in the long run and are cumulative. To put it differently, the statistical measurements of the relationship of population growth to economic growth are biased in favor of showing the shorter-run effects, which tend to be negative, and not showing the longer-run effects, which tend to be positive. If such negative effects do not appear, one may assume that an unbiased measure of the total effect would reveal a positive effect of population growth on economic growth.

There is still another reason why the studies mentioned above do not imply an absence of positive effect in the long run: they focus on the *process* of population *growth*. If we look instead at the *attained level* of population—that is, the population density as measured by

the number of persons per square mile—we see a somewhat different result. Studies of more developed countries (MDCs) are lacking. But Everett Hagen (1975) and Charles Kindleberger (1965) show visually, and Simon and Gobin (1979) show in multivariate regressions, that higher population density in less developed countries (LDCs) is associated with *higher* rates of economic growth. This effect may be strongest at low densities, but there is no evidence that the effect reverses at high densities. Again, the statistical evidence directly contradicts the common-sense conventional wisdom. That is, if you make a chart with population density on the horizontal axis and either the income level or the rate of change of income on the vertical axis, you will see that higher density is associated with better rather than poorer economic results.

Check for yourself. Fly over Hong Kong—just a few decades ago a place seemingly without prospects because of insoluble resource problems—and you will marvel at the astounding collection of modern high-rise apartments and office buildings. Take a ride on its excellent smooth-flowing highways for an hour or two, and you will realize that a very dense concentration of human beings does not prevent comfortable existence and exciting economic expansion, as long as the economic system gives individuals the freedom to exercise their talents and to take advantage of opportunities. And the experience of Singapore demonstrates that Hong Kong is not unique. Two such examples do not prove the case, of course. But these dramatic illustrations are backed by the evidence from the aggregate sample of countries, and hence do not mislead us.<sup>1</sup>

The data showing a positive effect of density on economic growth constitute indirect proof of a positive long-run effect of population *growth* on economic growth, because density changes occur very slowly, and therefore the data pick up the very long-run effects as well as the short-run effects.<sup>2</sup>

<sup>1</sup>Hong Kong is a special thrill for me because I first saw it in 1955 when I went ashore from a U.S. Navy destroyer. At that time I felt great pity for the thousands of people who slept every night on the sidewalks or on small boats. It then seemed clear to me, as it must have to every observer, that it would be impossible for Hong Kong to surmount its problems—huge masses of impoverished people without jobs, total lack of exploitable natural resources, more refugees pouring across the border each day. And it is this sort of picture that has convinced many persons that a place is "overpopulated" and should cut its birth rate (for example, Paul Ehrlich at the beginning of *The Population Bomb*). But upon returning in 1983, I saw bustling crowds of healthy, vital people full of hope and energy. No cause for pity now.

<sup>2</sup>It may at first seem preposterous that greater population density might lead to better economic results. This is the equivalent of saying that if all Americans moved east of the Mississippi, we might not be the poorer for it. Upon reflection, this proposition is

In the very short run, additional people are an added burden. But under conditions of freedom, population growth poses less of a problem in the short run, and brings many more benefits in the long run, than under conditions of government control. To illustrate, compare China with Singapore.

China's coercive population policy, including forced abortions, is often called "pragmatic" because its economic development supposedly requires population control. For example, typically in a recent Washington Post supplement (in the context of an article on an eight-year-old Chinese dancer; every writer an expert on population!) the author tells us that "China strictly enforces a policy of one child per family [which] seems unnecessarily harsh and dispiriting. . . . [But] then one encounters the reality. . . . What does one do in a country that has 1.3 billion people, 27 percent of the world's population, to be fed from only 7 percent of the world's arable land?"

Contrast Singapore. Despite its very high population density, Singapore suffers from what it considers a labor shortage and imports workers. The country is even considering incentives for middle-class families to have more children, in contrast to its previous across-the-board anti-natality policy. This raises the question whether there are economic grounds for China to even *ask* people to have only one child.

Tables 1–5 include data on Hong Kong and Singapore for additional comparisons with China. The experience of these countries, whose people largely share with China their language, history, and culture, give additional proof that China's problem is not too many children but rather a defective political-economic system. With free markets China might soon experience the same sort of labor shortage as found in Singapore, which is vastly more densely settled and has

not as unlikely as it sounds. The main loss involved in such a move would be huge amounts of farmland, and though the United States is a massive producer and exporter of farm goods, agriculture is not crucial to the economy. Less than 3 percent of U.S. income comes from agriculture, and less than 3 percent of the U.S. working population is engaged in that industry. The capitalized value of all U.S. farmland is a little more than a tenth of one year's national income, so even if the United States were to lose all of it, the loss would equal only about one year's expenditures upon liquor, cigarettes, and the like. On the other hand, such a change would bring about major benefits in shortening transportation and communication distances, a factor that has been important in Japan's ability to closely coordinate its industrial operations in such a fashion as to reduce costs of inventory and transportation. Additionally, greater population concentration forces social changes in the direction of a greater degree of organization, changes that may be costly in the short run but in the long run increase a society's ability to reach its economic and social objectives. If we were still living at the population density of, say, 10 thousand years ago, we would have none of the vital complex social and economic apparatuses that are the backbone of our society today.

no natural resources. (This does not mean a "free" system such as China is talking about now; it is quite unlikely that a truly free market can coexist with a totalitarian political system, because a free economy is too great a political threat.)

It is said, however: Hong Kong and Singapore are different because they are city-states. But what does that mean—that if large hinterlands were attached to those "city-states" they would then be poorer, as China is?

At this point the question frequently arises: If more people cause there to be more ideas and knowledge, and hence higher productivity and income, why are not India and China the richest nations in the world? Let us put aside the matter that size in terms of population within national boundaries was not very meaningful in earlier centuries when national integration was much looser than it is now. But there remains the question of why so many human beings in those countries have produced so little change during the last few hundred years. In earlier writing I suggested that low levels of education of most people in China and India prevented them from producing knowledge and change, though noting the very large (in absolute terms) contemporary scientific establishments in those two countries. But though education may account for much of the present situation, it does not account nearly as well for the differences between the West and the East over the five centuries or so up to, say, 1850.

William McNeill (1963), Eric Jones (1981), and others have suggested that over several centuries the relative instability of social and economic life in Europe, compared to China and India, helps account for the emergence of modern growth in the West rather than in the East. Instability implies economic disequilibria, which, as Theodore Schultz (1975) reminds us, imply exploitable opportunities that then lead to augmented effort. (Such disequilibria also cause the production of new knowledge, it would seem.)

The hypothesis that the combination of a person's wealth and opportunities affect the person's exertion of effort may go far in explaining the phenomenon at hand. Ceteris paribus, the less wealth a person has, the greater the person's drive to take advantage of economic opportunities. The village millions in India and China certainly have had plenty of poverty to stimulate them. But they have lacked opportunities because of the static and immobile nature of their village life. In contrast, villagers in Western Europe apparently had more mobility, less stability, and more exposure to cross-currents of all kinds.

Just why Europe should have been so much more open than India and China is a question that historians answer with conjectures about

religion, smallness of countries with consequent competition and instability, and a variety of other special conditions. This matter need not be pursued here. But I should at least mention Deepak Lal's forthcoming book on India's economic development over thousands of years, which suggests that it was only the rapid population growth starting around 1921 that cracked the "cake of custom" and the Hindu caste system, and caused the mobility that allowed India to begin modern development.

Most, if not all, historians of the period (for example, Nef 1958; Gimpel 1976) agree that the period of rapid population growth from before AD 1000 to the beginning of the mid-1300s was a period of extraordinary intellectual fecundity. It was also a period of great dynamism generally, as seen in the extraordinary cathedral building boom. But during the period of depopulation due to the plague (starting with the Black Death cataclysm) and perhaps to climatic changes from the mid-1300s (though the change apparently began earlier at the time of major famines around 1315–17, and perhaps even earlier, when there also was a slowing or cessation of population growth due to other factors) until perhaps the 1500s, historians agree that intellectual and social vitality waned.

Henri Pirenne's magisterial analysis ([1925] 1969) of this period depends heavily on population growth and size. Larger absolute numbers were the basis for increased trade and consequent growth in cities, which in turn strongly influenced the creation of a more articulated exchange economy in place of the subsistence economy of the manor. And according to Pirenne, growth in population also loosened the bonds of the serf in the city and thereby contributed to an increase in human liberty (though the causes of the end of serfdom are a subject of much controversy).

A corollary, of course, is that once the people in the East lose the shackles of static village life and get some education, their poverty (absolute and relative) will drive them to an extraordinary explosion of creative effort. The events in Taiwan and Korea in recent decades suggest that this is already beginning to occur.

This explanation would seem more systematic, and more consistent with the large body of economic thought, than are explanations in terms of Confucianism or of particular cultures, just as the Protestant-ethic explanation for the rise of the West (discussion of which goes back at least to Hume) now seems unpersuasive in the face of religious counter-examples (for example, the Catholic Ibo in Nigeria) and shifts in the behavior of Protestant nations.

Contemporary Africa is cited as an example of population growth hampering economic development—for example the quote from the NAS report cited earlier, and Lester Brown's recent statement that Africa "is losing the ability to feed itself.... Slowing population growth, conserving soils, restoring forests and woodlands, and enhancing subsistence agriculture are sure to be cornerstones of successful efforts to reestablish working economies in Africa" (Brown and Wolf 1985, p. 7). Changing the economic and political system is not mentioned.

We ought to learn from the fact that exactly the same dire assessments were heard in the past, and have proven false. For example, in 1965 Brown applied virtually the same words to Asia: "The less-developed world is losing the capacity to feed itself. . . . Only in Africa . . . has a downward trend been avoided" (as quoted in Tierney 1986, p. 38). Population growth did not prevent Asia and the rest of the less-developed world from "feeding itself" better and better with the passage of years (though self-sufficiency is not a sensible economic goal in a world where trade is possible). Of course, Asia's development might conceivably have been even faster with slower population growth, but no evidence supports such speculation.

### The Role of Foreign Aid for "Family Planning"

I wish to say as loudly and clearly as possible: I believe that a couple's ability to have the family size the couple chooses is one of the great goods of human existence. And I am not in principle against a government's giving "family planning" assistance to its own citizens or to citizens of another country if they so desire. I especially cheer efforts to strengthen commercial organizations that provide such assistance through market channels. I emphasize this even though it should not even require saying, because many persons in the population "movement" disingenously and maliciously assert that people who hold such views as expressed here are against "family planning." But it does *not* follow from being in favor of informed, responsible parenthood that the United States should automatically give foreign aid to organizations that request funds in the name of "family planning," on the grounds that *some* good will be done by the funds even if they are largely wasted or used perversely.

If you ask the population "establishment" why we should and do give such "aid," the answer almost invariably is a masterpiece of doubletalk, arguments made out of both sides of the mouth. On the one hand, the United Nations Fund for Population Activities (UNFPA) and such congressional population-control enthusiasts as James Scheuer and Sander Levin say that their aim simply is to supply "family planning" in order to help people achieve the family size

that they wish. Everyone that I know of—including the Vatican, as I understand it—agrees with the aim that families should have the number of children that they wish and believe they can raise well. If family planning were all there is to the matter, we could all easily agree on a one-page statement of goals and means (putting aside the troublesome but obfuscating issue of abortion), and we would not need multi-million dollar conferences and reams of documents and bushels of expensive research reports and fancy organizational publications financed directly and indirectly by the American taxpayer. We could simply say that as an act of plain helpful generosity, we recommend that governments do what they can to provide contraceptive information and devices through private and public channels, and we will do what we can to help.

The arguments of the population organizations are another matter. however. They wring their hands over population growth rates, economic development, natural resource availability, unemployment, social conflict, and the like. A typical example is from a January 1986 cover letter to the annual report from Bradman Weerakoon, the secretary general of the International Planned Parenthood Federation (IPPF): "IPPF believes that knowledge of family planning is a fundamental human right and that a balance between the population of the world and its natural resources and productivity is a necessary condition of human happiness, prosperity and peace." It is clear, especially in the UNFPA statements, that their aim is not simply to help individuals achieve the family size that the individual couples would otherwise like. Rather, these organizations aim at population growth-rate goals-more specifically, at zero population growththat the leaders of these organizations have decided are desirable for the world.

Furthermore, even the most "moderate" group, the recent NAS Committee on Population, is prepared to go beyond simple provision of information and devices: "When a couple's childbearing decision imposes external costs on other families—in overexploitation of common resources, congestion of public services, or contribution to a socially undesirable distribution of income—a case may be made for policies that go 'beyond family planning'" (NAS 1986, p. 93). The policies discussed include persuasive campaigns to change family size norms as well as combinations of incentives and taxes related to family size.

Cynical observers have suggested that talk about population growth rates is just eyewash to obtain more support for the laudable goal of effective family planning. There are two things wrong with this argument. First, how do we know that these cynics are not manipu-

lating the family-planning appeal to obtain the goal of population reduction rather than vice versa? Second, and more important, can false rhetoric be justified if the end is thought to be good? What about the terribly costly ill effects of the false forecasts of resource gloom and doom over the past two decades? For example, our airlines, airplane manufacturers, and automobile industries have lost tens of billions of dollars in design and manufacturing expenses because they relied on—or were forced by government regulation to rely on—forecasts that the price of gasoline would soon be three dollars a gallon. The banks that lent money to oil ventures now find they are eating tens of billions of dollars in bad loans made on the basis of those forecasts of increasing scarcity. The U.S. agriculture industry, and therefore Congress and the taxpayers, are now suffering greatly because farmers believed that population growth would push up prices for food and increase demand and prices of farm land; former Secretary of Agriculture John Block is a prominent example. Many U.S. paper manufacturers came crying to the federal government for relief from contracts they bid on with the assumption that wood prices would rise, as the U.S. Department of Agriculture had foretold to them—on grounds that it was the government's responsibility because of its faulty forecasts. And so on.

Many of the young people in the Western world—I saw this most recently in a survey of high school students in Australia, of all places—have been thrown into despair by the belief that the world is running out of resources and must inevitably get poorer, a course supposedly exacerbated by selfish consumption in the countries they live in. Should we consider such spirit-destroying rhetoric as acceptable because it leads to a reduction some wish in the number of brown, black, yellow, and—yes—white human beings on the face of the earth, justified by the false belief that such a reduction has on balance positive economic effects? And should we assume no cost to the impact of false propaganda on public credibility and belief in the political process?

Those who call for aid to family planning have usually assumed that poor couples in poor countries do not have their fertility rates under reasonable control as a result of sensible decision making, and need guidance from Western population-planning experts. But couples tend to recognize that in the short run an additional person—whether a baby or an immigrant—inevitably means a lower standard of living for everyone. And the parents who carry almost all the burden, as well as the communities that also carry a small part of the burden, at some point say "enough," even while recognizing that more children would be good to have in the longer run.

Parents in poor countries may overshoot, having more children than they would if they knew that the infant mortality rate had fallen as fast as it has, and that education is accessible but also expensive. If there were a superbeing who knew the present and future with perfect prescience, and also understood perfectly the preferences and feelings of each set of parents, perhaps such a superbeing could choose an "optimum" level of childbearing for each couple and country better than they will achieve by themselves. But such a superbeing does not exist. And to think that, say, the UNFPA is such a superbeing, and that its "recommendations"—always well circumscribed with pious statements about "voluntarism," "sovereignty," "individual human rights," and the like, but clearly intended to influence the practices of parents and countries—will be closer to such an "optimum" than will decisions arrived at independently by individual couples and countries, is both arrogant and ridiculous.

When fighting for foreign aid that goes beyond the simple provision of basic family planning services and includes persuasion and coercion, the population establishment resorts mainly to name-calling and associating their opponents with an administration they dislike. For example, commenting on a draft of the Reagan administration's Mexico City statement, former senators Taft and Tydings, "both affiliated with the Population Crisis Committee, decried the White House draft in a recent letter, saying that it would represent the adoption of a 'fundamentalist, know-nothing' political philosophy with respect to population and development in the less developed nations" (Washington Post, 14 June 1984, p. A3). Another example is a gratuitous casual remark in the midst of a book review on another topic by a senior staff member of the Population Council, one of the most dignified organizations in the population establishment: "The Reagan administration's confident expectation, expressed at the 1984 Mexico population conference, that government restraint (voluntary incapacitation?) will speed fertility decline by allowing market forces to shape and build the economy, here meets its match in simplemindedness" (McNicholl 1986, p. 46).

## Criteria for Giving Foreign Aid

What are reasonable grounds for giving foreign aid, or charity in general? Economics does not supply the criteria. "There is no generally accepted economic rationale for foreign aid," wrote Schultz (1981, p. 124). And, in an essay labeled "a systematic reexamination of aid and its role in development," Anne Krueger (1986, p. 58) referred only to "the rationale for aid, 'aid effectiveness'—that is the

degree to which different types of aid are conducive to accelerating development." Nor have I found a set of criteria in the literatures of other disciplines. Therefore, I hazard the following test: Charity is appropriate when the following conditions are present: First, the recipient person or nation "needs" the help. (The caveat here is that the presence of need is not always clearcut. The "need" of a bleeding child for medical assistance is not arguable, but the "need" of an unconverted person for religious salvation depends on the values and worldview of the potential giver.) Second, the recipient wants the help. Third, the gift will not have bad effects in the long run on the recipient or others. Fourth, the charity will be used more-or-less efficiently rather than largely wastefully or simply to obtain more money in a pyramid scheme. Fifth, the charity will not produce hate toward the giver. Let us test foreign aid to family planning against these criteria.

#### Do LDCs "Need" Family Planning Assistance?

In ordinary welfare programs, the criterion of need usually involves a means test. A person who owns a yacht is thought not to be an appropriate recipient for welfare, and a similar test might be applied to countries. In this spirit let us look at Table 6, which contains data on public expenditures for education, defense, and family planning in various countries, as well as public expenditures on family planning that include foreign donations, for those countries for which I could find data. In no case is the public expenditure for family planning, with or without foreign funds, more than a tiny fraction of spending for education. The implication is that if family planning is a high priority item, it is within the discretion of governments to redirect needed funding from other educational expenditures. Lest one worry about the social loss involved in shifting funds from other educational uses, in almost every case the large sizes of the "defense" budgets relative to the education budgets make clear that there is a pool of public expenditures into which countries could dip without causing social loss by reducing education expenditures. It would seem that the potential recipients own gunboats if not yachts, and therefore flunk the means test for charity.

Another standard criterion of need is that the good or service being provided be something that is thought by the giver to be of a nature that will improve the life of the recipient. Agricultural know-how has this nature. Birth-control capacity might be another. One might then wonder whether or not *individual* women and couples need assistance and have no way to pay for it, even if their governments could afford to provide it. Perhaps there are some such cases. But the actual

TABLE 6

DEFENSE, EDUCATION, AND FAMILY PLANNING EXPENDITURES
FOR 25 COUNTRIES

		Family Planning					
Country	Defense	Education	Domestic		reign		
•	\$/Person	\$/Person	\$/Person		Person		
	(Range	1978-81)	(Most Red	cent E	stimate)		
Bangladesh	1-2	2	0.06	0.12	(1976)		
Bolivia	27-34	29-35	0.00	0.02	(1977)		
Brazil	14-17	61–64	0.00	0.05	(1985)		
Colombia	9–16	21-34	0.13	0.13	(1983)		
Dominican Rep	. 17–23	19-26	0.18	0.20	(1977)		
Egypt	61 - 78	25 (1977)	0.06	0.25	(1983)		
El Salvador	16-28	23-30	1.25	0.38	(1980)		
Ghana	13-26	33	0.13	0.02	(1977)		
Hong Kong	n.a.	83-140	0.10	0.20	(1983)		
India	6–7	7	0.46	0.06	(1983)		
Indonesia	16-19	7–12	0.34	0.12	(1983)		
Iran	202-456	75–198	0.92	0.00	(1977)		
Kenya	10-16	21-24	0.15	0.39	(1978)		
Korea, South	87-103	32-61	0.42	0.04	(1980)		
Malaysia	54-102	108-117	0.60	0.19	(1980)		
Mauritius	1–6	72–77	0.66	0.25	(1982)		
Pakistan	16-17	5-6	0.12	0.10	(1979)		
Philippines	14–16	12-13	0.25	0.18	(1983)		
Rwanda	3-4	4–6	n.a.	n.a.			
Singapore	234-304	84-207	0.76	0.00	(1983)		
Taiwan	n.a.	n.a.	0.33	0.00	(1983)		
Tanzania	7-27	n.a.	0.00	0.03	(1976)		
Thailand	24-28	17–28	0.18	0.09	(1983)		
Tunisia	7–16	49-73	0.10	0.26	(1980)		
Zimbabwe	16–57	28	0.25	0.00	(1978)		

Sources: Defense per person: U.S. Arms Control and Disarmament Agency (1985, Table 1). Educational expenditure: United Nations Statistical Office, Statistical Yearbook (various years); United Nations Educational, Scientific, and Cultural Organization, UNESCO Yearbook (various years). Population: Nortman (editions 9–12). Family Planning Expenditures: Nortman (editions 9–12).

cost of contraceptive information and devices is exceedingly small (which is, incidentally, a major problem in commercial distribution). The funds devoted to "family planning" programs overwhelmingly are spent for things other than "hardware" and straightforward services. What is called "information" and "education," but which is to a considerable degree persuasion, accounts for a large proportion of

the expenditures that actually reach the field. Often, it is forced upon societies by U.S. efforts; there is plenty of documentation of this in the recent book by Jacqueline Kasun (1986). The most startling occurrence was reported by Joseph Califano (in Kasun, p. 56):

[President Lyndon Johnson] repeatedly rejected the unanimous pleas of his advisors from Secretary of State Dean Rusk to National Security Advisor Walt Rostow to ship wheat to the starving Indians during their 1966 famine. He demanded that the Indian government first agree to mount a massive birth control program. The Indians finally moved and Johnson released the wheat over a sufficiently extended period to make certain the birth control program was off the ground.

When reminded of such events, officials at AID routinely admit that they occurred in the past, but assert that the "present" policy would not allow them. However, that assertion has been made over and over again, each one implicitly giving the lie to the past ones. It is this propaganda that many proponents of family planning activities believe that people "need" (compare the quotation from the NAS report above). I consider this to be at best arguable rather than obvious. But I do not believe that to be against propaganda implies that one is against to true family-planning assistance.

Still, if a true family-planning program were to provide information and devices to some couples to whom they would not otherwise be available, this might be seen as filling a true social need. And the program might be viewed as passing this test.

#### Do the Potential Recipients Want the Assistance?

One test of whether people "want" something is whether they allocate their resources to that good. Table 6 does not indicate any massive allocation of countries' own funds to family planning.

But do not foreign politicians, and persons involved in family planning activities abroad, often express the desire for these funds? Of course they do. We must ask what these expressions mean, however. To a politician, any foreign dollar coming into the country is another dollar to allocate to one constituency or another, or even to be turned to personal use. (Does anyone doubt that some foreign aid dollars went to buy shoes for Imelda Marcos?) Therefore, more such dollars are always welcome. And for those who work for family-planning organizations, cutting aid funds breaks their rice bowl, and removes such perks as trips to Mexico City for a UNFPA conference.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>Allegations about motives are difficult to substantiate and are often odious, and hence I seldom make them. But in this case there is a nice piece of substantiation. At the 1985 International Union for the Scientific Study of Population (IUSSP) conference in Flor-

#### Does the Assistance Do Harm?

Economic thought contains few apparent contradictions. One such contradiction, however, is between the fundamental assumption (actually a definition) that an increase in assets ("endowment") increases welfare,<sup>4</sup> and the common-sense observation that giving gifts sometimes harms recipients in the long run by changing their attitudes and habits.<sup>5</sup>

Resolving the apparent contradiction requires the recognition that a person's propensity to exert effort is a function of that person's wealth (as well as of the opportunities facing him or her).<sup>6</sup> General foreign aid programs may have this ill effect on recipients by reducing their propensity to exert effort (for example, the compensation to the natives of Bikini and the payments to certain Native American tribes), but the funds for family planning assistance surely are too small to have this sort of ill effect.<sup>7</sup>

Another ill effect that may flow from foreign aid is damage to a key industry. The dumped food aid of P.L. #480 apparently damaged the

ence, the chair and the past chair of the Population and Family Planning Section of the American Public Health Association (APHA) circulated a form "facilitating" IUSSP members to have a telex sent to their senators and congresspeople in opposition to the Kemp amendment, which was intended to prevent funds from going to any organization that "supports or participates in the management of a program of coercive abortion." The initiators attempted to "facilitate" the matter by providing the language for the telex and stated: "Your message, sent by telex, will be adapted by APHA to suit the Senate and House situations. . . . All you need do is put your name, home address and zip code on this sheet and place it in boxes being distributed for the purpose." The telex senders with whom I talked denied that the act of telexing might be influenced by the signers who wanted to keep funds flowing to such organizations as IUSSP, which finance a large part of the travel to the conference. He who pays the piper does not call the tune among IUSSP demographers, I was told. But the circulated form also said: "If you are willing for a telex to be sent in your name, at no cost to you. ... "Clearly the persons who drafted the request thought that the tiny cost of the telex could affect people's propensity to telex their senators. And, if a handful of dollars for a telex—less than the cost of a cheap meal—could influence IUSSP members, is it unreasonable to think that thousands of dollars of travel money and/or grant funds might influence them,

<sup>4</sup>An example in the context of foreign aid: "Clearly, a recipient's potential welfare could always be increased by a grant" (Krueger 1986, p. 63).

<sup>5</sup>The famous mathematician Mark Kac wrote in his autobiography (1985, pp. 7-8): "My great-grandfather... amassed what in those days must have been a sizable fortune and at his death, sometime early in the century, he left every one of his eighty grandchildren enough money to relieve them of any need to work for a living. All of them, with the exception of my father, chose a life of idle leisure until the First World War, when their inheritance was wiped out."

<sup>6</sup>This is the subject of my latest book, *Effort, Opportunity, and Wealth* (Simon 1987). 
<sup>7</sup>Doug Bandow (1985) made a similar point in his introduction to *U.S. Aid to the Developing World*, which contains much interesting discussion on the general subject of foreign aid.

agricultures of India, Egypt, and South American nations by lowering prices and reducing incentives for farmers to produce crops (Schultz 1981 and citations therein). But again this sort of harm is not relevant to family planning assistance.

Foreign aid programs can also do damage by directing policymakers' attention away from the fundamental mechanism of economic growth, and away from the obstacles to growth that may exist in a society. This is the gravamen of Bauer's charge (1984, ch. 5) that the Pope and the proponents of a New International Economic Order caused people to dwell on envy and redistribution rather than on personal hard work together with societal changes that would promote liberty and enterprise. And here I think that concern about population growth, and for family planning programs that are intended to reduce population growth, have caused great damage.

For 25 years our institutions have misanalyzed such world development problems as starving children, illiteracy, pollution, supplies of natural resources, and slow growth. The World Bank, the State Department's Aid to International Development (AID), the United Nations Fund for Population Activities (UNFPA), and environmental organizations have asserted that the cause is population growth—the population "explosion" or "bomb" or "plague." This error has cost dearly. It has directed our attention away from the factor that we now know is central in a country's economic development: its economic and political system.

For a recent example, consider this sentence in the press release from the National Research Council about the NAS report: "[T]he recent widespread famine in Ethiopia and other African nations and similar food shortages in China during 1959-61 can be attributed in part to 'very badly functioning markets combined with rapid population growth." That sentence leaves a very different impression than a report that food shortages were caused by dictatorial governments that beggared farmers by appropriating their land and heavily taxing their output, together with denying them the right to move freely to wherever they wished to work and live. That sentence sounds as if "market failure" is being used to justify more government interference and control of the activity in question rather than calling for reduction in interference that would allow markets to function more effectively. And such a sentence in the press release contradicts statements in the report that properly emphasize the ill effects of food subsidies, credit market distortions, and even the property rights mentioned elsewhere in the release. Even worse, it suggests that attention be paid to population growth rather than to fighting tyranny and working for economic freedom.

#### CATO JOURNAL

Another ill effect of foreign aid for population control is suggested by Alan Rufus Waters (1985, p. 3): "Foreign aid used for population activities gives enormous resources and control apparatus to the local administrative elite and thus sustains the authoritarian attitudes corrosive to the development process." This sort of effect is difficult to demonstrate statistically, but Waters's vantage point as former Chief Economist for the U.S. Agency for International Development (USAID) gives him credentials as an expert witness on the subject.<sup>8</sup>

I have my own candidate for the title of worst harm from foreign aid: the advice that goes along with it. The root of the damage lies in the idea that artful manipulation by clever economists is the way to produce economic development. International organizations such as the World Bank have finally realized that prices matter in influencing economic activity. And they have proceeded from this realization to the proposition that countries should "get the prices right." But for them this does not mean that markets should be allowed to set prices, but rather that governments should set the prices with the help of the World Bank and its expert economists. Warren Baum and Stokes Tolbert (1985, p. 51) provide the following summary of the Bank's attitude toward intervention:

As to the appropriate level of prices, the basic principle, dictated by the need to make the most efficient use of the economy's resources, is that the price of any product should equal the marginal cost of producing the last unit sold. A free competitive market would achieve the desired result of bringing prices into line with marginal costs, thereby allocating resources efficiently. In the real world, however, market conditions nearly always diverge from the competitive ideal. Even where there is a high degree of competition, the results produced by the market are efficient only for a given distribution of income. They may, therefore, not be consonant with other objectives, such as greater equity or social justice. Governments can intervene to improve the distribution of income by such means as imposing taxes or providing subsidies. The price system, if it is functioning properly, will then help to establish an allocation of resources which again is broadly efficient, but with a greater degree of social justice. In general, the best results will be obtained when producers face prices based on efficiency criteria, with indirect taxes and subsidies applied to consumer prices to achieve social objectives.

Under the stewardship of Robert MacNamara and A. W. Clausen, the World Bank—along with USAID—has been the strongest force

<sup>&</sup>lt;sup>8</sup>It is of some interest that other persons who have been involved in USAID activities have also come out strongly against programs of "family planning" aid. These include Peter Huessey, author of a Heritage Backgrounder, and Nicholas Demerath, who wrote Birth Control and Foreign Policy (1976).

pushing population-control programs. In the name of "getting the prices right," persons who work for the World Bank advise governments—backed by the threat that recipient countries could lose Bank funds—about the appropriate set of prices to stimulate production and generate economic growth. The "experts" at the Bank, in other words, substitute their judgments for the free market's most important function: automatically producing the prices that give the correct signals to producers. That is, the advisers at the Bank believe they know better than a freely operating market what the "right" prices should be. The implicit grounds for this belief, I would guess, are faith in their own cleverness and the assumption that markets will fail to do the job correctly.

This phenomenon particularly horrifies me because in the name of economics, these persons deny the birthright of Western economists since Mandeville, Hume, and Smith, of whom the present-day prophets are Hayek, Bauer, and Friedman—the vision of the hidden hand that spontaneously produces benign results which central planning cannot accomplish. And the continuation of this practice of advising countries about appropriate prices seems inexorable as long as organizations such as the World Bank exist and (inevitably) employ economists who must find something to do. Giving the advice that governments should stop interfering with markets does not require time-consuming and expensive research, with "missions" from Washington to the capitals of benighted poor countries. But advice to free up markets would render unnecessary many jobs, and therefore it has no chance of coming about as long as the World Bank exists.

The belief that population growth slows economic development is not a wrong but harmless idea. Rather, it has been the basis for inhumane programs of coercion and the denial of personal liberty in one of the most valued choices a family can make—the number of children that it wishes to bear and raise. Also, harm has been done to the United States as donor of foreign aid, over and beyond the funds themselves, by way of money laundered through international organizations that comes back to finance domestic population propaganda organizations, and so on (see Simon 1981, chaps. 21–22).

One of the reasons the population-bogey idea stays in currency is that this has been the rare issue upon which everyone in this ideo-

<sup>&</sup>lt;sup>9</sup>Baum and Tolbert (1985, pp. 213, 217) provide the following up-to-date statement of the World Bank's policy position: "Rapid population growth slows development.... For population, the principal objective of most developing countries should be to slow the rate of growth."

#### CATO JOURNAL

logically divided world could agree. I ran into this perverted amity not long ago at a meeting in India on population economics, which was attended by many employees of international agencies. During four days, there was not a single mention of the role of the economic system, whether market-directed or state-controlled. When I suggested that the subject should at least be aired, I was met by silence in the formal meeting and was told informally that the issue simply was outside the scope of attention. ("It's like talking about religion," someone said.)

#### What Kinds of Foreign Assistance Are Most Beneficial?

Lest the reader think that I am against any foreign aid in principle, a few unoriginal words seem in order about programs that can make economic sense. Agricultural research, including the organization and development of foreign agricultural research, has the great advantage that it puts no fungible funds or goods into the hands of bureaucrats, and causes no distortions in prices or other disruptions in markets. And the benefit/cost ratios have been calculated to be high. The provision of education in the United States to talented foreigners, especially if they are chosen by objective test, has many of the same advantages, as well as the advantage of making bright students familiar with the United States, and leaving them with impressions and ideas that they can take home with them. This also provides the opportunity for the United States to recruit valuable young persons of skill, energy, and imagination as temporary or permanent immigrants.

#### Conclusion

If we apply Hazlitt's central lesson on economics to the nexus of population growth and economic development, and take account of the indirect and lagged effects of economic freedom as well as the most obvious Malthusian effects that occur in the very short run, we can see that on net balance, additional persons being born are not a drag on progress in the long run. And foreign aid given for "family planning" programs may have more ill effects than good effects, and should not simply be viewed as a charitable act that improves the situation of poor people in poor countries.

#### References

Bandow, Doug, ed. U.S. Aid to the Developing World. Washington, D.C.: Heritage Foundation, 1985.

- Bauer, Peter T. Reality and Rhetoric. Studies in the Economics of Development. Cambridge: Harvard University Press, 1984.
- Bauer, Peter T., and Yamey, Basil S. The Economics of Underdeveloped Countries. Chicago: University of Chicago Press, 1957.
- Baum, Warren C. and Tolbert, Stokes M. Investing in Development: Lessons of World Bank Experience. Oxford: Oxford University Press, 1985.
- Brown, Lester R., and Wolf, Edward C. "Reversing Africa's Decline." Worldwatch Paper 65. Washington, D.C.: Worldwatch Institute, June 1985.
- Conner, Roger. How Immigration Affects Americans' Living Standard: A Debate between Julian Simon and Roger Conner. Heritage Lecture No. 39. Washington, D.C.: Heritage Foundation, 30 May 1984.
- Council of Economic Advisers. *Economic Report of the President*. Washington, D.C.: Government Printing Office, 1986.
- Demerath, Nicholas J. Birth Control and Foreign Policy. New York: Harper and Row, 1976.
- Gimpel, Jean. The Medieval Machine. New York: Penguin, 1976.
- Hagan, Everett E. The Economics of Development. Homewood, Ill.: Irwin, 1975.
- Hazlitt, Henry. Economics in One Lessson. 2d ed. New York: Arlington House, 1962.
- International Bank for Reconstruction and Development. World Development Report 1984. New York: Oxford University Press, 1985.
- International Bank for Reconstruction and Development. World Tables, 1980. Baltimore: Johns Hopkins University Press, 1980.
- Jones, Eric L. *The European Miracle*. Cambridge: Cambridge University Press, 1981.
- Kac, Mark. Enigmas of Chance. New York: Harper and Row, 1985.
- Kasun, Jacqueline R. The War Against Population: The Economics and Ideology of World Population Control. Ottawa, Ill.: Jameson Books, 1986.
- Kindleberger, Charles P. *Economic Development*. 2d ed. New York: McGraw-Hill, 1965.
- Krueger, Anne O. "Aid in the Development Process." World Bank Research Observer 1 (January 1986): 57-78.
- Lal, Deepak. Cultural Stability and Economic Stagnation: India 1500 BC-1980 AD. New York: Oxford University Press, forthcoming.
- McNeill, William H. The Rise of the West. New York: Mentor, 1963.
- McNicoll, Geoffrey. "Higher Taxes, Lower Birthrates?" Family Planning Perspectives 18 (January/February 1986): 46-47.
- Motor Vehicle Manufacturers Association of the U.S. Inc. World Motor Vehicle Data. Detroit, Mich., various years.
- National Academy of Sciences (NAS), National Research Council, Working Group on Population Growth and Economic Development. *Population Growth and Economic Development: Policy Questions*. Washington, D.C.: National Academy Press, 1986.
- Nef, John V. Cultural Foundations of Industrial Civilization. Cambridge: Cambridge University Press, 1958.
- Nortman, Dorothy L. *Population and Family Planning Programs*. Editions 9–12. New York: The Population Council, 1978, 1980, 1982, 1985.

- Pirenne, Henri. Medieval Cities. 1925. Reprint. Princeton: Princeton University Press. 1969.
- Repetto, Robert. "Why Doesn't Julian Simon Believe His Own Research?" Letter to the Editor. Washington Post (2 November 1985): A 21.
- Schultz, Theodore W. "The Value of the Ability to Deal with Disequilibrium." *Journal of Economic Literature* 13 (September 1975): 827-46.
- Schultz, Theodore W. Investing in People. Chicago: University of Chicago Press, 1981.
- Simon, Julian L. "The Concept of Causality in Economics." Kyklos 23, fasc. 2 (1970): 226-54.
- Simon, Julian L. The Ultimate Resource. Princeton, N.J.: Princeton University Press, 1981.
- Simon, Julian L. "The War on People." Challenge (March/April 1985a): 50-53
- Simon, Julian L. "Why Do We Still Think Babies Create Poverty?" Washington Post (12 October 1985b); op-ed.
- Simon, Julian L. Effort, Opportunity, and Wealth. Oxford: Basil Blackwell, 1987
- Simon, Julian L., and Gobin, Roy T. "The Relationship between Population and Economic Growth in LDCs." In Research in Population Economics. Edited by Julian L. Simon and Julie daVanzo. Greenwich, Conn.: JAI Press, 1980.
- Summers, Robert, and Heston, Alan. "Improved International Comparisons of Real Product and Its Composition: 1950–1980." Review of Income and Wealth (June 1984): 207–62.
- Tierney, John. "Fanisi's Choice." Science 86 (January/February 1986): 26-42.
- United Nations. Department of International Economics and Social Affairs. Concise Report on the World Population Situation in 1983: Conditions, trends, prospects, policies. New York: United Nations, 1984.
- United Nations Educational, Scientific, and Cultural Organization. UNESCO Yearbook. Paris: UNESCO, various years.
- United Nations Statistical Office. Statistical Yearbook. New York: United Nations, various years.
- U.S. Arms Control and Disarmament Agency. World Military Expenditures and Arms Transfers. Washington, D.C.: ACDA, 1985.
- U.S. Department of Commerce. Bureau of the Census. World Population 1977: Recent Demographic Estimates for the Countries and Regions of the World. Washington, D.C.: Government Printing Office, 1978.
- U.S. Department of Commerce. Bureau of the Census. Statistical Abstract of the United States, 106th edition, 1986. Washington, D.C.: Government Printing Office, 1986.
- Waters, Alan Rufus. "In Africa's Anguish, Foreign Aid Is a Culprit." Heritage Backgrounder No. 447. Washington, D.C., 7 August 1985.
- World Bank. World Development Report 1984. Washington, D.C.: World Bank, 1984.

## Is Population Growth the Dominant Force in Development?

### D. Gale Johnson

Sometimes the best defense is a good offense. That seems to be an especially appropriate tactic when one attempts to respond to one who displays such certitude as Julian Simon. Thus I start my remarks with the following quotations from *The Ultimate Resource* (Simon 1981):

- When these important elements are included rather than excluded ... and when reasonable assumptions are made about various dimensions of the LDC economy, the results are very different than they were with past models. The simulation indicates that a moderate population growth produces considerably better economic performance in the long run (120 to 180 years) than does a slower-growing population, though in the shorter run (up to 60 years) the slower-growing population performs slightly better. A declining population does very badly in the long run. And in the experiments with the "best" estimates of the parameters for a representative Asian LDC (the "base run"), moderate population growth has a better long-run performance than either fast population growth (doubling over 35 years or less) or slow population growth [p. 279].
- Using those parameters that seem most descriptive of LDCs today, the model suggests that very high birthrates and very low birthrates both result in lower long-run per-worker outputs . . . than do birthrates in between [p. 280].
- Perhaps the most important result of this simulation is that it shows there are some reasonable sets of conditions under which fairly high fertility has better economic performance at some times than does low fertility, but there are also other reasonable sets of conditions under which the opposite is true... the results depend upon the choice of parameters with ranges that seem

Cato Journal, Vol. 7, No. 1 (Spring/Summer 1987). Copyright © Cato Institute. All rights reserved.

The author is Eliakim Hastings Moore Distinguished Professor of Economics at the University of Chicago.

quite acceptable. This implies that any model of population that concludes that any one fertility structure is unconditionally better or worse than another must be wrong. . . . The sole exception to this generalization is fertility below replacement [p. 291].

The final quotation of the three comes very close to the conclusions of the report of the National Academy of Sciences (NAS) on *Population Growth and Economic Development* (1986). The NAS report makes the case that the effects of population growth upon per capita real income depend on the economic, political, and social policies and institutions within which population grows. According to the report (NAS 1986, pp. 89–90):

Population growth can, and often does, trigger market reactions. Many of these reactions move a country in a "modern" direction, that is toward better-defined property rights, larger integrated markets, more agricultural research, and so on. However, the marketinduced adjustments to higher growth do not appear to be large enough to offset the negative effects on per capita income of higher ratios of labor to other factors of production. Nor is population growth necessary to achieve these forms of modernization: the fact that rates of return to agricultural research are already extremely high—in both developing and developed countries—implies that there is little need for additional stimulus from population growth; the evolution of property rights is stimulated by many factors population growth being only one among them; and the scope of many markets can be enlarged by removing trade barriers. That these other devices exist does not imply a minimal role for population growth, but it does caution against advocacy of growth as the only way to achieve them.

It might be argued that the above three quotations from *The Ultimate Resource* are the conclusions from a model that was used to refute another model. At least Simon has so argued and that therefore the particular results should not be taken too seriously. But in his earlier book on *The Economics of Population Growth* Simon (1977, p. 474) concludes:

In the context of LDC's: Moderate population growth leads in the long run to higher per-worker income than does a constant-size population or very fast population growth.... The optimum LDC population growth rate differs fairly widely with the positive growth range depending upon the parameters chosen, which suggests that no simple analytic model is acceptable and no single answer about the rate of population goals is reasonable.

Later in the context of explaining why his 1977 book arrives at conclusions that differ so sharply from mainstream population analysis, he states three propositions about population growth in the LDCs (1977, p. 483):

- Population growth in LDC's produce many positive economic effects as well as negative effects.
- In LDC's, *some* population growth is beneficial in the longrun, as compared to *no* population growth.
- Over a wide range of "moderate" population growth rates of population growth in LDC's, the rate of population growth has a relatively small long-run effect upon per-worker income.

Perhaps Simon has revised his views over the past several years about the effects of population growth rates on economic development in the LDCs. But whether he has or not, I conclude that the differences between the major conclusions of the NAS report and those expressed in Simon's two books are relatively small. While Simon could take some comfort in the substantial narrowing of opinion on the effects of population growth, he apparently is unwilling to accept anything short of perfect agreement with his views. This is a mistake in my opinion, but obviously he is entitled to his own views.

An example is given in the NAS report of the possible effect of slowing the population growth rate by one percentage point per year. The example indicated that in 30 years per capita income would be increased by 16 percent compared to what it would have been with unchanged population growth. It was then noted that while this would be a significant gain "it would not be enough to vault a typical developing country into the ranks of developed countries" (p. 90). Over the same period if per capita income grew by 2 percent annually, per capita incomes would increase by 81 percent. There are numerous policy changes in an economy that could increase per capita income growth by 2.5 to 3 percent annually, resulting in income growth over three decades of 110 to 142 percent.

It is of some interest to note that the NAS report's conclusions are similar to those obtained by Simon from his models—for periods of 30 to 60 years, slower population growth results in higher per worker incomes than higher population growth rates. The report did not consider effects that extended for a century or two, which is how long it took Simon's model to generate significantly higher incomes from rapid than from slow population growth rates. But even over so long a period, he apparently found that moderate growth rates yielded the highest per worker incomes, higher than rapid population growth rates. So population growth rates do matter, even in the very long run.

Personally I do not feel that any projection of outcomes of human behavior for a period of a century or more have any validity or merit any measure of belief. How many projections for as long as two decades or even one decade do you have confidence in? I know of very, very few. In his paper, Simon singled out projections of energy shortages and \$3.00 gasoline as an example of projections that went astray. How can he be so sure his own models will not suffer the same fate from the passage of time, especially over such a long period of time?

The NAS report supports family planning efforts as a means of assisting families to achieve desired fertility levels. Simon (1987) agrees with this: "A couple's ability to have the family size the couple chooses is one of the great goods of human existence. And I am not in principle against a government's giving 'family planning' assistance to its own citizens or to citizens of another country if they so desire" (p. 173). But he hastens to add: "It does not follow from being in favor of informed, responsible parenthood that the United States should automatically give foreign aid to organizations that request funds in the name of 'family planning,' on the grounds that some good will be done by the funds even if they are largely wasted or used perversely" (p. 173). Would you support assistance for family planning under these conditions? I know I would not. But surely Simon must have something else in mind for him to make such a peculiar statement. I am not sure what it is.

Simon (p. 174) quotes with disfavor a sentence from the NAS report (1986, p. 93): "When a couple's childbearing decision imposes external costs on other families—in overexploitation of common resources, congestion of public services, or contribution to a socially undesirable distribution of income—a case may be made for policies that go 'beyond family planning.'" It may be noted first that the sentence does not state that the external effects of more children are negative. The closest the report comes to such a statement is that "these effects are likely to result in a negative external effect of childbearing in most developing countries." And, it is noted: "Current data and theory are inadequate to quantify the size of external effects; certainly, there is no evidence to suggest that drastic financial or legal restriction on childbearing are warranted" (NAS 1986, p. 84).

What neither the NAS report nor Simon has been able to do is to provide a generally accepted answer for how you compare the benefits of, say, lower per capita or per worker incomes from 2000 to 2010 to higher per capita incomes from 2110 and beyond. If we take present values and assume a real rate of interest of 2 percent, a dollar 20 years hence has a present value of \$0.67 while a dollar 125 years

from now has present value of just \$0.084. Thus a dollar 20 years from now has a present value of nearly 8 times a dollar 125 years from now if the real rate of interest were 2 percent. Faster population growth, according to Simon, results in a lower per capita income in periods up to 30 to 60 years than does slower growth. Is the value of the lower income in the reasonably near future more than offset by the higher income many years in the future? I do not know. And who is to make the decision?

The relative importance of factors other than population growth rates in affecting economic development is illustrated by recent income changes in China. Population growth rates started to slow down in the early 1970s but it was not until the major rural policy reforms of 1979 that rural incomes started on an entirely new path. In just six years farm output increased by more than 50 percent, the production of all products by rural people by approximately 60 percent, and rural real income per capita probably doubled (NAS 1986, p. 89). Population growth rates, whether rapid or slow, could have had little effect in modifying these outcomes.

Simon uses the economic success of the densely populated city states of Hong Kong and Singapore to support his conclusion that population density has a positive effect on per capita income growth. But I believe a question that should be asked is whether the strong economic performance of these two states has been a development that could have occurred only during the middle part of the 20th century with an open world trading economy and the development of low cost ocean transportation.

And what do we say about Japan? Japan had a very slow rate of population growth from 1880 to date. It had a relatively slow rate of economic growth until 1960. True population density was quite high by world standards throughout the period. But the point I wish to emphasize is that even with a low rate of population growth, after 1960 Japan entered a period of rapid economic growth perhaps unparalleled in the history of the world. The density of population changed little from 1920 to 1960. A primary source of Japan's rapid growth after 1960 was the existence of an open trading world that Japan decided to participate in; during the 1950s it was inwardly oriented and grew slowly. Other factors, such as a high rate of saving, technological catching up, hard work, and the transfer of millions of workers out of an inefficient agriculture, made their positive contributions. But their effects would have been much more modest were it not for the reduction of barriers to trade so prevalent before World War II combined with the sharp decline in ocean transport costs.

It is perhaps appropriate to note that the NAS report not only does not satisfy Simon but also fails to satisfy the "professional demographers" (as classified by Simon) or those in political positions who support international support of family planning efforts. Let me quote another evaluation of the NAS report (Demeny 1986):

[T]he thinking epitomized by the NAS report gives us a construct with all the daring and charm of a Levittown house. It is distinctive chiefly in pronouncing the near irrelevance of rapid population growth to anything really important in development and development policy. The invisible hand wins here by default, with earnest gestures toward family planning programs as the sole right manifestation of statecraft in matters concerning population. I fear, however, that if the economic analysis of the report is accepted, the endorsement of family planning programs is hollow and will not long sustain political and financial support for them.

The quotations from *The Ultimate Resource* seem to me to contradict Simon's conclusion that "There is certainly no evidence here which suggests that population growth or density influences the rate of economic development" (p. 166). Which Julian Simon are we to believe, namely the one who says (a) that high rates of population growth (with high rates being defined as in excess of 2 percent per annum) as well as low rates have adverse effects on economic growth compared to moderate rates of economic growth, or (b) that population growth does not matter? (A slow rate of growth is less than 1.4 percent annually—doubling in 50 years.)

The World Bank (1984, pp. 254–55) gives estimates of the average annual growth of population for 34 of the 35 lowest income countries in the world (less than \$400 GNP per capita in 1983) for 1965-73 and 1973-83. For the first period, 26 of the countries had population growth rates of 2 percent or more and for the second period, this was true of 29 of the countries. According to Simon's prior work it would appear that most of the very poorest countries have population growth rates that will have an adverse effect on economic development. And of the 37 middle-income economies, 34 had annual population growth rates in excess of 2 percent for 1973–83.

I have seen nothing to indicate that Simon has repudiated the models he developed in *The Economics of Population Growth* (1977) and summarized in *The Ultimate Resource* (1981). Thus are we to conclude that in most developing countries recent and current rates of population growth are too rapid and have adverse effects on economic growth and development?

I know of no better population policy than seeing that people have access to the information and means that are required for them to

have the number of children that each family or couple desires. If this leads to a 1 percent, 2 percent, 3 percent, or a 0 percent population growth rate, so be it. Whatever effects population growth may have on economic development, the effects are relatively small within one or two generations, either plus or minus, compared to the effects of other variables such as the role of markets, the macro management of the economy, the openness of the country to international trade, and policital and social freedoms.

#### References

- Demeny, Paul. "Population and the Invisible Hand." Presidential Address, Annual Meeting, Population Association of America, San Francisco, Calif., 3–5 April 1986.
- National Academy of Sciences (NAS), National Research Council, Working Group on Population Growth and Economic Development. Population Growth and Economic Development: Policy Questions. Washington, D.C.: National Academy Press. 1986.
- Simon, Julian L. The Economics of Population Growth. Princeton, N.J.: Princeton University Press, 1977.
- Simon, Julian L. The Ultimate Resource. Princeton, N.J.: Princeton University Press, 1981.
- Simon, Julian L. "Population Growth, Economic Growth, and Foreign Aid." Cato Iournal 7 (Spring/Summer 1987): 159-86.
- World Bank. World Development Report 1984. Washington, D.C.: World Bank, 1984.