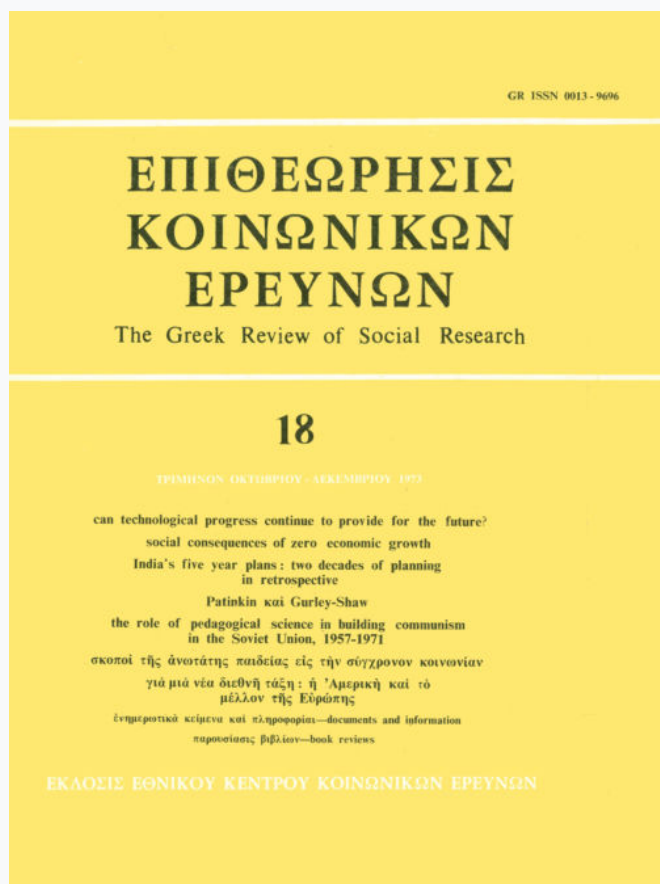


The Greek Review of Social Research

Vol 18 (1973)

18



Social consequences of zero economic growth

Lincoln H. Day

doi: [10.12681/grsr.283](https://doi.org/10.12681/grsr.283)

Copyright © 1973, Lincoln H. Day



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0](https://creativecommons.org/licenses/by-nc/4.0/).

To cite this article:

Day, L. H. (1973). Social consequences of zero economic growth. *The Greek Review of Social Research*, 18, 166–174. <https://doi.org/10.12681/grsr.283>

social consequences of zero economic growth

by
Lincoln H. Day *

*Chief, Demographic and Social Statistics
United Nations, New York*

Acknowledgement: *The Economic Growth
Controversy*. White Plains, New York,
International Arts and Sciences Press,
Inc., 1973

The social consequences of a zero-growth rate constitutes a vast and complex subject. What I intend is to outline an analytical approach for consideration of the topic and follow this with some specific examples of the social consequences most likely to emanate from a condition of zero economic growth. I am not going to discuss how zero economic growth might be either brought about or retained; my focus here will be on the consequences.

basic premises

Let me begin with some basic premises which are sometimes overlooked. First, I think we can all accept as a minimum goal a good standard of health and decency for all of mankind, obtained at a minimum psychological and social cost and with minimum deleterious consequences for the environment. Among some of the world's peoples, the attainment of this goal would mean a lower material level of living; among others, a higher material level of living.

Second, it should be fairly obvious that not everything worthwhile may be obtained in the marketplace. Friendship, health, happiness, intellectual stimulation, beauty, the respect of one's peers, a sense of community, all these and more are measured by no economic indicator and, consequently, figure not at all in the calculation of Gross National Product. Economic goals are but intermediate goals to the attainment of these truly basic ends, and the suitability of economic goals ought to be judged accordingly.

A third basic premise is that many worthwhile things that *can* be measured in economic terms are either already provided in ways that make no demand on nonrenewable resources, or conceivably could be. I would put most educational services in this category, along with most health services; art, literature, music, and drama; housing; outdoor recreation; and a variety of services such as social work, counseling, family planning, probation and parole, and judicial review.

A fourth premise is that many other worthwhile things that can be measured in economic terms and that do require nonrenewable resources could (with a little incentive and effort) be provided not only in ways that would lessen the rate at which nonrenewable resources are used, but also in ways that would involve less harmful effects for the environment.

— Paper first presented at: Symposium on the Problems of Economic Growth, Lehigh University, Bethlehem, Pennsylvania. October 17-19, 1972.

* The views and opinions expressed in this paper are those of the author and do not necessarily reflect those of the United Nations.

There are a variety of means to this end. They include a more efficient use of materials in manufacture; the use of better varieties of seed and livestock and the application of practices more conducive to the conservation of land and water; better storage practices; and the recycling of metals and other materials, as was accomplished on such a wide scale on the home front during World War II.¹

Transportation offers particularly wide-ranging possibilities on this score. Just think of what could be gained for both the environment and the quality of life if we stopped building roads and eliminated the private automobile as a means of mass transit. Or, on a lesser scale, think of the reduction in noise pollution that would come from a curfew on aircraft landings and takeoffs during the hours when most people are trying to sleep—something now in effect in both Australia and Washington, D.C. The control of insects through greater variety in land use and crop planning instead of pesticides is another example. Still another is the prohibition of non-returnable on non-biodegradable containers for food and drink, and of plastics and metal foils for packing.

As for those worthwhile things that *do* require nonrenewable resources, there would seem to be a number of possibilities for improvements in quality and efficiency that would actually result in a *lower* rate of economic growth than that now associated with the provision of these goods and services. The substitution of mass transit systems for private automobiles, and of nondisposable containers for disposable ones, are two examples.

I take it, therefore, that when we proclaim the desirability (or even the necessity) for a zero economic-growth rate, what we have in mind is a zero economic growth insofar as the use of nonrenewable resources is concerned. The possible *moral* gains from Spartan simplicity I shall leave to the discussion of others. Economic growth in certain areas is still possible without additional consumption of nonrenewable resources; such growth is still desirable, especially with respect to the provision of the basic necessities of life in some of the underdeveloped countries—allowing, of course, for cultural differences. The point is to achieve these particular kinds of growth at the

least cost and with the greatest gain in terms of environmental and human well-being. One element of this would obviously be the simultaneous achievement of a cessation of certain other kinds of growth; namely, those that have deleterious social and ecological side effects. But zero economic growth itself is not necessarily to be equated with the absence of economic and social change.

consequences of zero economic growth

What, then, might be the consequences for human society of a zero economic-growth rate? Let me note four basic considerations to help put the question in proper context.

First, it is often assumed that the consequences of a zero growth rate will be so pervasive that the societies with that characteristic will all display an essential sameness. Yet, on the basis of what is known of such societies (e.g., the medieval feudal societies of Europe, nonindustrialized tribal societies studied by anthropologists, and even the world's industrialized societies during much of the present century), it would seem at least possible for zero population growth to coexist with a considerable variety of social conditions. The nature of these social conditions would seem, in fact, to depend far more on the context in which this zero economic growth occurs (on the political, social, and demographic milieu, for example) than on the condition of zero economic growth itself.

So far as the distribution of wealth is concerned, societies with zero growth rates could conceivably range from a state of considerable equality to one of gross inequality. However, at the international level, equality among different countries would seem highly unlikely. This would also be true of the distribution of power, in large part because of the dependence of power on wealth.

Second, a zero overall economic-growth rate would not seem to preclude the existence of considerable variety in the rates of change for the various sectors of economic and social activity. These different rates of change would have different consequences, of course, depending on the different social and economic conditions in which they obtained.

Third, it is doubtful if zero economic growth could proceed for very long in the face of continued population growth. For population growth to continue simultaneously with zero economic growth, food production would have to account for an even greater share of total production. The ultimate result would be an economy of the merest substance. Particularly if the population could remember having earlier experienced a higher-than-subsistence level, the result of continued population increase in conjunction with

1. In this connection, see Kenneth E. Boulding, «The Economics of the Coming Spaceship Earth», in Henry Jarrett (ed.), *Environmental Quality in a Growing Economy* (Baltimore: Johns Hopkins University Press, 1966). Also see the following sophisticated and broad-gauged discussions by Herman E. Daly: «Toward a Stationary Economy», in John Harte and Robert E. Socolow (eds.), *Patient Earth*, (New York: Holt, Rinehart & Winston, 1971); «The Stationary-State Economy», *The Ecologist*, July 1972; and «On the Transition to a Steady-State Economy», in Herman E. Daly (ed.), *Toward a Steady-State Economy* (San Francisco: W.H. Freeman, 1973) (forthcoming).

a zero economic-growth rate would likely be considerable social unrest. In any case, zero population growth is a desirable goal in itself—and an inevitable eventuality, regardless of the rate of economic growth. Barring mass emigration (assuming there would be someplace to go), there are only two paths to its attainment: higher mortality or lower fertility. Many of the apparent consequences of zero *economic* growth are really ascribable to the effects from zero *population* growth. However, these effects will differ in response to such factors as the existing economic and social system, the size of the population at the point when zero growth is achieved, the degree of dispersion or concentration of population, and whether zero population growth is maintained essentially through low birth rates or high death rates.

Fourth and finally, it is absolutely essential that in discussing the likely consequences of a zero economic-growth rate, we deal separately with industrialized and nonindustrialized societies.

In short, zero economic growth would seem to be possible under a variety of living conditions and social systems; the causal relationships between a zero economic-growth rate and various conditions of life are by no means either very obvious or necessarily very clear-cut or straightforward. In the long run, and probably in the short run as well, a zero economic-growth rate will necessitate a zero or even negative population-growth rate. Finally, the consequences of a zero economic-growth rate in industrialized countries are likely to be significantly different from those in nonindustrialized societies.

Although we can make some probable predictions, there is certainly enough possible variety in the answers to make the question of the social consequences of a zero economic-growth rate an intellectually intriguing one, whatever the practical implications of the answers. Moreover, there is a measure of safety afforded the prophet in the fact that no one is likely to be in a position to check on the accuracy of his prophecies. Not only are the causal relationships very complex, but zero economic growth will, I am afraid, be a long time in coming. It may, in fact, be so long in coming that the resource base it is intended to save will have been affected (even used up) to a degree beyond salvation.

the industrialized countries

Given this pessimistic outlook, what can we say about the likely consequences of a zero economic-growth rate in the industrialized (i.e., «developed») countries? Let us begin with the industrialized countries because the social changes associated with attaining a zero growth rate are likely to be of greater magnitude and social pervasiveness in these coun-

tries than in the nonindustrialized countries. One should not minimize the emotional difficulties that may be associated with rejection of the growth ethic in both affluent and non-affluent societies. The idea that further economic growth will alleviate the problems of the poor in industrialized countries and of society in general in the nonindustrialized ones seems widely held and has been systematically encouraged by a variety of persons and agencies. But the pervasiveness of this idea is probably markedly different between the two sets of societies. Certainly there are marked differences between them in the levels of growth contemplated.

Of the several ways in which the likely consequences of a zero economic-growth rate might be presented, I have chosen here to list them according to four, not altogether separate, general categories of relationships, as follows: social structure, personality traits, interpersonal relations, and conditions of life.

the effect on society's social structure

What effect zero economic growth will have on a society's social structure will essentially depend on the value that society places on equality in the distribution of goods and services, and also on the extent to which there exists in that society an equality of power—power not only over others, but also over the social forces that affect one's life and well-being. Are Americans and the Swiss, for example, any happier, any «better off» now than in, say, 1950 when their «real» incomes were substantially lower? To improve the lot of people in the affluent countries, do we need more economic growth or do we need instead a more equitable distribution of wealth? It would seem to me that, in the absence of a more equitable *distribution* of wealth, further *economic growth* in these countries would offer little in the way of social benefit—and it would actually make matters a good deal worse.

There is no shortage of proponents of further growth, however. A frequently offered argument for continued economic growth is that it permits improvements in the lot of the poor without altering relative social positions. However, as the pie grows larger, the proportionate shares remain the same and, though seldom mentioned, the discrepancy in gross amounts becomes ever greater. Presidential advisor, Daniel P. Moynihan put the case succinctly in a report to President Nixon:

There is every reason to be concerned about the costs of economic growth, and (the) need for a balanced national growth policy... But this is quite a different thing from proclaiming the immediate necessity to put an end to growth... In... general terms, how much sense would this make for society, given the great stabilizing role of economic growth which makes it

possible to increase the incomes of less well off groups in the population without having to decrease the incomes of others?¹

Though the adherents of such a view seem still in the majority among the holders of political and economic power, at least in the United States, I get the impression that the social and ecological cost of policies embodying such a view is becoming increasingly obvious. These include the social and economic cost of the status frustration and money worries these policies entail for the majority whose incomes never quite reach a comfortable level; the basic injustice embodied in the obvious divorce of reward from merit and of the social return from social contribution; and, in recent years, the fact that such a system of rewards (and, conversely of punishments) entails so much environmental loss in the form of ever greater consumption of ever scarcer resources on the part of those in the most favored economic positions. As I summarized it in an article published over a dozen years ago:

no group in... society can repay all of the social costs entailed by its excess reproduction—the rich probably least of all, for their style of life requires a much higher consumption of those very things upon which population increase, in whatever class, replaces a premium: raw materials and space.²

An affluent society can take several paths to greater social equality: greater equalization of incomes; distribution of a greater proportion of goods and services outside the market system (e.g., health and medical care, recreation, retirement benefits, schooling, transportation, and housing); or limiting what the rich can do with their money (preventing ownership of seashore and lake front property, and curtailing the use of automobiles, for example).

However, there is no necessary causal relationship between zero economic growth and any of these procedures. It is quite possible for an affluent society to have a large proportion of its population at a position two or three rungs above the bottom, and in no mood to make common cause with those below them. This part of the population is quite capable of reacting to zero economic growth, at least for a while, by endeavoring to distinguish their position even more clearly from that of those deemed their social «inferiors». We see this in the German lower middle class's early receptivity to Nazism³ and in the

United States today, in the union restrictions on minority-group membership and the opposition to bus-ing on behalf of greater educational opportunities for minority-group children. Nor is there any dearth of evidence to demonstrate that even in a political democracy, those at the top of the power structure can be fully capable of manipulating public opinion and voting behavior to their own ends over extended periods of time.

Nonetheless, I should expect that zero economic growth would generally be more conducive to social equality than to social inequality, particularly in a political democracy. For one thing, there would be less with which to «buy off» the have-less portion of the population. For another, there would be less need for capital formation on behalf of future growth; and, therefore, at least the possibility of allocating a greater share of national income to such things as pensions. If this were done, it would cut down considerably on those instances of income inequality (notably in such affluent countries as the United States, the Federal Republic of Germany, and Australia), where the aged occupy a particularly disadvantaged economic position.⁴ A further reason is the likelihood of greater equality of wealth as a result of fewer opportunities for rapid advance in position or income as a consequence of stock market or real estate speculation, or of association with a rapidly growing industry of production process. Finally, there is the age structure of a stationary population. If mortality levels are reasonably low, such a population will offer little opportunity for promotion before age fifty or fifty-five, except as a consequence of business expansion, which, of course, would be less likely in a zero-growth economy. This could, of course, result for a time in heightened competition (and, consequently, heightened frustration); however, eventually one should expect aspirations to conform more closely to actual opportunities, especially if there is little advertising and little general economic expansion.⁵

A further consequence of zero economic growth

Neumann, *Behemoth: The Structure and Practice of National Socialism* (New York: 1942).

4. US Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics, Research Report No. 40, *Social Security Programs throughout the World*, 1971 (Washington: US Printing Office, 1972); A.J. Jaffe, «Retirement: A Cloudy Future», *Industrial Gerontology*, Summer 1972, Chapter 5; Michael Harrington, *The Other America* (New York: Macmillan, 1963), Chapter 6; «Have-nots of the 'Economic Miracle'», *London Times*, July 21, 1972.

5. Lincoln H. Day, «The Social Consequences of a Zero Population Growth Rate in the United States», in US Commission on Population Growth and the American Future, *Report* (Washington: US Government Printing Office, 1972) (forthcoming).

1. Daniel P. Moynihan, «Counsellor's Statements», in National Goals Research Staff, *Toward Balanced Growth: Quantity and Quality* (Washington: US Government Printing Office, 1970), p. 12.

2. Lincoln H. Day, «The American Fertility Cult», *Columbia University Forum*, Summer 1960.

3. Hans Gerth, «The Nazi Party: Its Leadership and Composition», *American Journal of Sociology*, January 1940; Franz

for the social structure would be the changes in the composition of the work force as a result of the changes in the composition of output. Certainly one element in attaining a zero-growth economy would be the pruning back of industries geared to growth (machine tools and engines, advertising, steel, stock markets, and some types of construction) and a corresponding increase in the service sector: maintenance and repair and various professional and semiprofessional services. An increase in the proportion of the work force employed in agriculture is also likely if there is, as one would expect, a return to more labor-intensive methods; and also improvements in pensions of a sort that would enable more of the aged to remain on (or return to) farms where they could be at least partially occupied and could also grow some of their own feed fiber.

As the archetypical industry of the affluent, growthoriented economy, advertising would, in a non-growth economy, occupy a position of little significance; for the main tasks of advertising (product differentiation and the creation of needs¹) would be of little importance. For much the same reasons, there should be a decline in the number of salesmen, though not necessarily of salesclerks and shopkeepers, in the numbers engaged in packaging and commercial design, and in those employed with the media of mass communication. The creative energies of those people, now so highly mobilized in furtherance of the growth ethic, will simply have to be applied to activities more in keeping with the human and ecological necessity of no-growth.

As previously stated, there would be an increase in the numbers employed as maintenance and repair workers, as agricultural workers, and in the provision of a great variety of personal and social services, from birth control to homemaking, from tailoring and dressmaking to day care and supervision of parole and probation. It is in the expansion of such services (and corresponding contraction of manufacturing) that a zero economic-growth rate will have its greatest impact on the occupational structure of the society.

The changes in industrial and occupational composition would contribute to changes in the patterns of settlement as well. Under conditions of zero economic growth, we could expect the population to be less highly urbanized, and the urban portion of the population to be less concentrated in the very large metropolitan centers. (Note that it is *proportions* I am talking about here not members; anticipated population increases are unlikely to

permit much reduction in the actual numbers living in the already existing large agglomerations.)

Under conditions of zero economic growth, there would be less economic need for large concentrations of workers; and if the forecasted changes in pension systems and agricultural methods take place, there would also be more living on the land. Accompanied by greater general equality in the distribution of income, an increase in the proportion on the land could be a factor in providing the economic base necessary to settlement of a higher proportion of the population in the smaller towns and cities.

What the consequences of a zero economic-growth rate might be for another feature of social structure, the delineation of male and female roles, is a bit difficult to foresee. If there is greater income equality (and particularly if this equality arises more from equality of wages than from progressive taxation), I would expect a less rigid division of occupations into «men's work» and «women's work». On the other hand, because the newer occupations have customarily provided more employment opportunities to women than have the older (unless marked by significantly lower pay rates), a slowing down of economic expansion could result in a greater rigidity of job definition according to sex.² The effects of this might be compensated for by the expansion of the service sector; however, there is no assurance that rigid categorization by sex would not occur there as well.

the industrialised countries—personality traits

Let me turn now to consideration of the effect of a zero economic-growth rate on the distribution of personality traits. There are a number of possibilities.

There should be an eventual decline in the emphasis on «getting ahead».³ The desire for a second job and the readiness to accept overtime work, for example, are features of an economy characterized not so much by abundance as by the unequal distribution of wealth and the anticipation of economic growth.

At the same time, there should be a development of a more positive attitude toward work itself. What is undertaken would presumably be of more obvious use, and also more likely to have developed in response to a *genuine* demand and not merely a *created* one. (There could still be some advertising to create

2. Theodore Caplow, *The Sociology of Work* (Minneapolis: University of Minnesota Press, 1954), Chapter 10.

3. See in this connection, A.J. Jaffe, «Retirement: A Cloudy Future», *op. cit.*, pp. 76-77, and also A.J. Jaffe, *The Middle Years: Too Young Nor Too Old*, special issue of *Industrial Gerontology*, September 1971, Chapter 10.

1. David M. Potter, *People of Plenty* (Chicago: University of Chicago Press, 1954), Chapter 8.

demand for certain goods and services; but, as already noted, advertising and zero economic growth are essentially incompatible.) Moreover, the worker, at least in manufacturing, could be expected to take pride in his produce because quality and durability rather than style and obsolescence would have been emphasized in its manufacture.¹ And finally, the individual worker would play a larger role in the total product process and acquire a greater sense of identity with the result of his labors. A zero-growth economy, particularly if combined with a more equal distribution of wealth, would seemingly offer less incentive to substitute machine work for hand-work or to apply the more markedly dehumanizing techniques of minute specialization.

In a zero growth economy, work could come to be considered less as simply a means to an end and more as an end in itself. This would be especially true if the work situation afforded opportunity for creativity and for the development of emotionally satisfying relations with one's associates. Though these opportunities have always characterized many jobs, even in highly industrialized economies, the tendency toward this sort of thing would be considerably enhanced by a lessened emphasis on «efficiency» and specialization in the production process, by a lower level of material aspiration, and by a lessening of competition with one's fellow workers.

Along with these changes in attitudes toward work and toward getting ahead, the members of a zero economic-growth society would probably also be less inept outside their jobs than their counterparts in societies characterized by economic growth.² The decline of specialization would be a factor here; so would the greater experience with repairing things instead of throwing them away, and possibly, also, with producing things for oneself—furniture, clothes, toys, and canned goods, for example.

There would be a greater feeling of being able to cope. Part of this would be due to the development of a wider range of skills. It would also arise from the greater stability, the greater predictability, of a zero-growth society, and from the fact that in such a society there would be less likelihood of personal frustration, whether from thwarted ambition or merely commuter traffic jams.

Unless counterbalanced by the pressure of population on resources, the members of a zero-growth society would be less imbued with the man-versus-nature attitude that underlies the exploitative growth economy.³ A zero-growth economy would appear to offer little support for the view that man's duty

is to bend nature to his will rather than learning to live with it.

Finally, the person reared in a condition of zero economic growth could be expected to place little emphasis on growth and bigness as desirable in themselves, and also on the desirability of «change» and «newness». Not for them the unquestioned assumption that what is new is naturally better.

interpersonal relations

In the area of interpersonal relations, I should expect the major consequence of zero economic growth to be a greater sense of community. A number of factors would contribute: Because private means would be in shorter supply and so much more expensive, we could expect a greater sharing of equipment (from lawn mowers and washing machines to farm machinery and public transportation) with all the possibilities this would offer for informal, psychically rewarding interpersonal contact. There is much more potential for the development of community in doing the wash in a laundromat than doing it in the basement.⁴ Another factor would be the informal mixing of different age groups and social classes which would derive from such sharing, particularly of public transportation. As A.E. Parr has pointed out, it is much more difficult to think of someone as alien, of a different species to be feared or even despised, if you see him every day on the bus.⁵ And as Edward T. Hall has written:

Automobiles insulate man not only from the environment but from human contact as well. They permit only the most limited types of interaction, usually competitive, aggressive, and destructive. If people are to be brought together again, given a chance to get acquainted with each other and involved in nature, some fundamental solutions must be found to the problems posed by the automobile.⁶

Today, eight out of ten American workers go to work in a private automobile, and for three-fourths of them it's a case of one whole automobile encapsulating but one rugged individualist behind the wheel.⁷ Little chance, there, for human contact even of a merely visual sort.

A greater sense of community would also be stimulated by more labor-intensive work processes and a lesser degree of specialization, both of which would

4. See, for example, «Laundrettes», *Which?*, July 1967 (published by the Consumers Association, United Kingdom).

5. A.E. Parr, «Urbanity and the Urban Scene», *Landscape*, Spring 1967.

6. Edward T. Hall, *The Hidden Dimension* (Garden City, New York: Doubleday, 1966), p. 177.

7. *New York Times* (report on the 1970 census), October 15, 1972.

1. Paul Goodman, *Growing Up Absurd* (New York: Random House, 1960), pp. 17-22.

2. *Ibid.*, pp. 71-79.

3. Kenneth Boulding, *op. cit.*

be at least partially supported by the need to share equipment. It would also follow from the lesser emphasis on individual competition that would be a likely consequence of zero economic growth. There might still be ample room for competition in the development of invidious distinctions of status (like those so frequently observed in anthropological studies),¹ but in a condition of no-growth such distinctions would necessarily extend over a much narrower range.

Finally, a greater sense of community should arise because a zero economic-growth rate would produce less individual mobility (both social and geographic) and also less community change, particularly of the type forced upon an area by speculative investment and road-building. With less economic development and less speculation, people could be expected to remain longer in their communities and individual places of residence. They would thus have at least the opportunity to develop greater loyalty to the community and a greater sense of identity with it. And, of course, there would be much less incentive to think of home ownership as nothing but a speculative investment.

Less crime and delinquency would occur under conditions of zero economic growth. Affluence has frequently led to the loss of familiar ways and surroundings and to the creation of artificial distinctions within society and of higher aspirations productive of nothing but individual frustration. Without going into the theory of the causation of crime and delinquency, I should expect that anything that resulted in a greater sense of community, more predictability, less advertising, and more demonstrably worthwhile work would result in markedly less crime and delinquency.

For much the same reasons, we might forecast less industrial strife in a no-growth economy, though we must recognize that it is not necessary to have equality of social power in order to have stability of social relationships. There is nothing inherently unstable about social inequality.

Finally, as far as interpersonal relations are concerned, zero economic growth should lead to less conflict between generations: because there would be less change and, therefore, more predictability and continuity; because there would be more sharing of activities among the generations and more joint participation in the life of the society; and because there would be less advertising and less commercially oriented programming in the media of mass communication to create alternatives, age-specific «life styles».

1. James West, *Plainville, USA* (New York: Columbia University Press, 1945), Chapter 3; Allison Davis, Burleigh B. Gardner, and Mary R. Gardner, *Deep South* (Chicago: University of Chicago Press, 1941), Chapter 3 and 10.

conditions of life

With respect to conditions of life, it is possible to note a large number of likely changes that would attend achievement of a zero economic growth rate.

We can expect, for one thing, a substantial change in patterns of work: a shift to short work days, to part-time work, or to working only part of the year; none of which need necessarily mean more leisure, however, as the time saved from work could be merely transferred to lengthier commuting.

Yet it is possible that the time spent on the job could remain much the same because the lower total output necessary to zero economic growth would be attained through the use of «less productive» methods, such as substituting labor for capital and de-emphasizing minute specialization.

One would forecast more emphasis on preservation and conservation, whether of land or old buildings, although population pressure may reach such extremes in some countries as to prevent any real halt in the drift to total environmental decay.

In some sectors of the economy, zero growth would reduce consumer choice in clothing, food, and consumer durables. But in others, such as recreation and the availability of public transportation, a zero economy might offer a wider choice.

Even with the development of solar and tidal sources of energy, a zero-growth economy would, by definition, involve a lower consumption of energy—industrially and commercially, and also within individual households. At the level of daily living, this would take such forms as the disappearance of the private automobile, the heating of water only for immediate use, less central heating, and less air conditioning.

Despite such inconveniences, I should expect life in a zero-growth economy to be generally more comfortable than it is now.

Along with other factors already mentioned, there would be less air and water pollution, and less waste disposal, although population increases could in both instances cancel the gains inherent in zero economic growth. There should be considerably less noise pollution because there would be fewer cars and airplanes and fewer trucks hauling cargoes of disposable obsolete goods. Public transportation would be more prominent, and traffic jams less. With less forced obsolescence, with a greater emphasis on durability in manufacturing and on ease of repair, and with a larger proportion of the work force engaged in repair and maintenance, there would be fewer breakdowns of equipment and less waiting for repairs. And there would be more possibilities for an attractive environment—the result

of less advertising, fewer motor vehicles, less need for rapid construction (because population would have ceased to increase, and a zero rate of economic growth would require less internal migration), and less incentive to destroy the old to make way for the new. A return to «less efficient» methods of production might well have as one of its first consequences a decided improvement in the aesthetic quality of houses and buildings.

the nonindustrialized countries

Now let me turn briefly to the nonindustrialized countries. Zero economic growth here would involve much less extensive or pervasive changes. Most of these countries are not presently far removed from zero economic growth. Were they to attain it now, they would do so at a largely subsistence level. However, in some instances this level of living has approached the idyllic. Here, for example, is Frances FitzGerald's description of conditions in pre-war Vietnam villages:

For traditional Vietnamese, the sense of limitation and enclosure was a part of individual life as much as life of the nation. In what is today northern and central Vietnam, the single form of Vietnamese settlement duplicated the closed circle of the nation. Hidden from sight behind high hedges of bamboo, the villages stood like nuclei within their encircling rice fields. For the villages, as for the nation, the amount of arable land was absolutely inelastic. The population of the village remained stable, and so to accumulate wealth was to deprive the rest of the community of land, to fatten while one's neighbor starved. Vietnam is no longer a closed economic system, but the idea remains with many Vietnamese that great wealth is anti-social—not a sign of success, but a sign of selfishness.

With a stable technology and a limited amount of land, the traditional Vietnamese lived by constant repetition, by the sowing and reaping of rice and by the perpetuation of customary law... In this passage of time that had no history, the death of a man marked no real end. Buried in the rice fields that sustained his family, the father would live on in the bodies of his children and grandchildren. As time wrapped around itself, the generations to come would regard him as the source of their present lives and the arbiter of their fate. In this continuum of the family, «private property» did not exist, for the father was less an owner than a trustee of the land to be passed on to his children. To the Vietnamese, and land itself was the sacred, constant element: the people flowed over the land like water, maintaining and fructifying it for the generations to come.¹

Unfortunately, such conditions are fast disappearing in the face of contact with other cultures and of rapid population increases. Elsewhere in the nonindustrialized world, life may be more appropriately characterized as «nasty, brutish, and short». Few of these societies can, as yet, really afford zero economic

growth—if only because of political considerations. By almost any criterion, most of them offer much room for improvement in living conditions; «improvement» presumably in terms of their own cultures and aspirations, and not just in terms of some Western viewpoint. They are in need of better nutrition, health care, birth control, and housing; and in many instances, also, of jobs and of more opportunities for people to play a meaningful role in society.

Quite a part from any considerations either of justice or of the politics inherent in the enormous discrepancies in levels of living that separate the industrialized from the nonindustrialized lands, most of the latter will require massive assistance from the former, if only to hold the line against further depredations. In general, these countries lack the social base (e.g., in schooling and productive agriculture) necessary to economic development and are, in most instances, further disadvantaged by a youthful age structure and rapid rates of population increase.

Essentially, the achievement of zero economic growth in these currently nonindustrialized countries would preclude their ever becoming industrialized. With a goal of zero economic growth, their efforts to increase productivity would presumably be channeled into the production of food and services, rather than into activities that would yield revenue for the purchase of goods manufactured from nonrenewable resources.

There is at least a theoretical opportunity for these countries to grow because they have, for the most part, proceeded such a short way along the road to industrialization. But this would seem, in most cases, to be more than outweighed by a number of other attributes. Most of the nonindustrialized countries have but limited resources, even if the goal of development is merely of a strictly nonindustrial sort. Moreover, many have large populations, and all are experiencing rapid population increases—with no migratory outlets and every indication that these increases will continue many decades into the future. And thus far these countries give little evidence of experiencing social changes of a sort conducive to attainment of a reduction in fertility levels commensurate with the need to halt population increase. There is a very practical question here: given the desirability of better health and greater longevity (and, thus, of lower mortality rates), how much, and what kind of, social change is necessary to produce a willingness to limit family size to the degree necessary to keep this low-mortality population stationary? Is industrialization now a requisite? We have some clues, even if we don't know the answer for certain; it takes only a look at the statistics to see that, whatever changes, they are not occurring fast enough to

1. Frances FitzGerald, «Fire in the Lake», Part I, *New Yorker*, July 1, 1972, p. 38.

forestall continuing massive population increases many years into the future. Yet the prospect for any improvement in living conditions hinges very significantly upon when, how, and at what numerical levels the nonindustrialized countries finally succeed in reducing the birth rates to the levels of death rates.

conclusion

A zero economic-growth rate offers the possibility of a better life in the currently industrialized countries; and certainly conditions in these countries have already reached a point beyond which the possibilities for improvement by means of further economic growth are virtually nil. For the nonindustrialized countries, however, there is less certainty about this except, of course, in the long run. Any decline in the extent of that dualism that separates the rich from the poor, both among nations and within them, is to be applauded.¹ But large international differences in living conditions will doubtless remain. Will this be a source of frustration and, therefore, of social and political disruption in the less industrialized countries? With communication as devel-

oped as it now is, this kind of frustration can hardly be avoided; nevertheless, it need not lead inevitably to social disorder. Any reduction in the living-standard gap would probably help, especially if in the nonindustrialized countries this were accompanied in ways that left the basic elements of their cultures relatively intact as a cushion to fall back on, while in the more affluent countries it involved an actual reduction in material levels of living.

Differences in international power are bound to continue. The attainment of zero economic growth will help to reduce these differences, but there will always be the possibility that the leaders of countries with more power will be able to divert economic and social processes within these countries away from the maintenance of zero economic growth and in to economic growth on behalf of some military adventure instead. We will thus continue to need international organizations for the settlement of differences and for the keeping of the peace, whatever the likely economic situation. However, the task of such organizations might be far easier under conditions of zero economic growth. There will be less social and economic room for maneuver on behalf of military action, and it will be far more difficult for a government to divert its people's dislike of a policy of military aggrandizement and carnage by appealing to their fears about losses of jobs or cuts in personal income.

1. United Nations, Department of Economic and Social Affairs, *1970 Report on the World Social Situation* (New York: 1971). pp. xi and 66 (Table 12).

This *Review* is listed in the Ulrich's International Periodicals Directory.

Ἡ Ἐπιθεώρηση Κοινωνικῶν Ἑρευνῶν εἶναι καταχωρημένη εἰς τὸ Ulrich's International Periodicals Directory.