

ECONOMIC GROWTH AND ITS PRICE

Economic growth and progress are the two major themes of our society, representing mankind's wish for well-being and for greater, true equality. It is a spiritual hope as well, because the idea is well-established that a rise in the standard of living is related to a society's cultural, moral, and spiritual progress. If there were doubts about the beneficial character of wealth at other times, such doubts cannot be taken too seriously today when the wealth is that of the society. Starting from this general direction, previous social beliefs have tended to lose their focus or to reorient themselves. Let us take some examples:

For the moment at least Socialism seems to be deserting its original model and some of its values. It is really only a question of organizing the economy in a more or less Socialist fashion to provide the maximum of economic efficiency with the speediest rise in the standard of living of the largest number of people.

The Church is undergoing the same change. It confirms society's beliefs and admits economic growth as the word of the day for human progress, limiting itself to the insistence that it is

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necessary to tame and humanize this movement.¹ With its position on sexual life and relations already modified, it is constrained to alter a model of economic morality which it traced back to the Bible. If the movement towards the “political” and the “collective” leads to the neglect of the problem of personal salvation which was until now its essential element and concern, one must ask if in fact it will be the same religion.

The concept of underdevelopment which obsesses our era has appeared only recently, following the general acceptance by both developed and underdeveloped of Western norms of economic growth and progress. Only twenty years ago, when the condition of an objective difference between developed and underdeveloped countries had existed for centuries, the *problem* of underdevelopment as such did not exist.²

In the domain of the social sciences a heterogeneous mixture of Marx and Rostow and a rather simplistic economic determinism has taken over: Isn't the political system of democracy linked to certain economic conditions? Is democracy workable outside of rich countries? Isn't the best political and economic system related to the state of capital development? Is nationalism not justified in the goal of aiding the economic development of certain countries?

As J. K. Galbraith has underlined, it is indeed the case that many problems stated within the framework of an “economy of want” must be restated differently in an “economy of abundance.” But this really means only the following: the problems posed within the framework of want must be restated within a framework characterized by a system of highly extended means, and by new wants about which we know hardly anything. One of the duties of contemporary social sciences is to study the constants and to single out the changes rendered necessary.

With the basic overturning of habits, institutions and ideas

¹ See the statement of the French bishops on economic growth in *Le Monde* (March 5, 23, and 24, 1966).

² The appearance of the idea of underdevelopment in international conferences and the diffusion of this idea in world opinion goes back to Point Four of the Truman Plan of 1948. The first studies and theoretical articles to develop the idea systematically (Nurkse, Frankel, Sauvy, Colin Clark) were published between 1952 and 1954.

related to growth and to the preconception of continuous economic progress, it seems entirely legitimate to judge economic growth as good, bad, ambiguous, using *a priori* values of metaphysics and morality. Such judgements are valid for what they are, as long as we are aware of the values which underlie them. But they are rare, for in judging growth we do not begin with absolute and stable values, aside from a rather vague concept of progress itself, conceived as the physical and moral well-being of the greatest number, the absence of contradictions or of major problems, and a comfortable level of underlying tensions which somehow is thought to correspond to a high level of spirituality.

Instead of absolute judgements, what our era seeks is a toting up of the advantages which can be clearly seen against the disadvantages which we are only slowly beginning to be aware of. For the illusion that growth and progress are gratuitous phenomena, externally aided by science and new technological achievements, is bit by bit being dissipated. As the phenomena are better known and as it is seen that dissatisfaction does not vanish, the magical hopes begin to vanish. The concept of the cost of growth which has already been around for several years is beginning to have currency. Has the moment come then when we are ready for a more rational approach, refusing more for the most, with a selective and truly meaningful political choice between the possibilities which seem to be offered to us?

Instead of rehearsing the positive aspects of growth which are for one thing well known, and which the works of Fourastié³ for example have more than once discussed, we shall here be concerned with some reflections brought about by the evolution of contemporary economic growth. These reflections and comments will be along the following lines:

1. The costs of growth are more and more apparent: will they increase at a higher rate than growth itself?
2. Our present measuring gauges of quantification are insufficient or wrong for examining progress and growth.
3. Qualitative factors ought to be taken into consideration in

³ *Le grand espoir du XX^e siècle* (PUF 1952); *Machinisme et bien-être* (1951); *La civilisation de 1975* (1953).

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our decisions, even if they cannot be reduced to quantification and even if integrating them remains difficult.

I. THE NATURE OF THE COSTS OF GROWTH

The costs of growth can be said to be direct or internal when they are voluntarily accepted to obtain an increase in revenue or well-being on the personal level, or a rise in the national product on the collective level. They will be considered indirect, lateral or external, when they are the consequence, apprehended only later, *a posteriori*, of the shape taken on by the collective movement.

Direct costs

They are of two kinds: human effort, and necessary investment.

1. Human effort.

This is the first direct cost. We think it is high time to do away with the illusion, maintained by precise but too partial quantitative measurements, that technical and scientific progress reduces human effort and labor. From the subjective viewpoint, this has nothing to do with what people feel in the course of the actual development. With the exception of some rare cases, very few really feel themselves liberated, less alienated from their professional work or offered more choices.

It would undoubtedly be less hazardous to begin with the *a priori* inverse: if one takes into account the physical and nervous effort, the effort of adaptation and the tensions in a complex society, human effort in a society of growth is transformed but never reduced. Probably its intensity increases. Its increase is most often a precondition of increased productivity.

It is certainly not to be disputed that in comparison with the worst periods of the 19th century, when the industrial workday sometimes lasted as long as twelve or more hours, the modern workday is shorter and its physical demands have diminished. But in the face of this fact, there are other, contrasting ones: increased commuting time, whether by subway or private car, represents a demand. The intensity and precision of work are on the increase.

The number of those who must pay out less work and effort seems actually to be less than the number of those from whom added effort is demanded. Between the work, in large part routine, in an average or top-grade position in the middle of the 19th century, and the responsibilities of similar positions in the middle of the 20th century, there seems to be an important difference. The number of workmen and technicians in tertiary positions is on the rise,⁴ while their professional life becomes more and more demanding, and their professional responsibilities, whether civil or criminal, are heavier and heavier in a society which cannot pardon imprecision or error. Actors who have a part in the social game but are deprived of the criteria for judging it, prisoners of its mirages, satisfied with its crumbs, working at the limits of their abilities to obtain these scraps—are the average workmen of today not the basic exploited masses of our civilization?

Nevertheless, let us note that if human effort does not in the least seem to be diminishing, it is not a question here of an absolute cost. Work has its own satisfactions and its own equilibrium. Everything depends on the nature of this work, on the adaptation of the individual to his tasks and his social role. But let us once and for all get rid of the myth of gratuity, of manna! If there is one experience common to all of us, it is that our leisure and our bonuses are not given to us. We pay for them with our efforts, and we pay dearly for them. So dearly that sometimes we cannot enjoy them properly.

2. Necessary investment.

A second cost of growth is the gross investment required, including amortization and secondary investments.

Certain measures, taken as coefficients of capital, show that the usefulness of capital, branch by branch and sector by sector, tends to increase over a long period of time. Thanks to the “residual factor” (technical progress and education), one usually gets a larger concrete result with the same amount of capital, just as one obtains more quantity with the same quantity (but not quality)

⁴ In France in 1975, the number will probably be twice that of today. (See G. Mathieu, *Le Monde*, April 19, 1964).

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of work. Could one therefore expect, as it would seem logical to do, that there might be growth in the national product with an input of less capital than was used in the past? Such an idea, however, is based on too limited a view. For numerous reasons, in the course of national growth, the amount of capital has to increase to the same extent that there is a qualitative rise in the intensity of human work. One thing observable everywhere is that the rate of investment, in ratio to the national product, must not decrease if there is to be economic growth. As a minimum one has to invest the same proportion of national product growth, that is to say more, in terms of absolute value. What are the reasons for this increasing absorption of capital?

One reason, to begin with, is that the technical progress and education which are required to make capital more productive in themselves consume capital and require secondary investments.

A second reason has to do with the growth of amortization, directly related to the rising stock of capital. This stock of growing capital requires upkeep and conservation in order to remain productive. This explains why there are growing charges. Let us imagine an individual who becomes richer and richer and who bit by bit transforms his cottage into a palace, adding wings every year and drawing revenue from this supplementary construction. Every year he has to devote larger sums, taken from his growing revenue, to the upkeep of his steadily enlarging palace. There is the danger that the capital will grow less quickly than the revenue received, that is to say, as far as the usefulness of the capital in terms of revenue does not decrease. If not, the upkeep charges will end up reducing the real revenue of the proprietor. This holds true for society, which has to maintain growing amortization as well as for private economic interests: the rise in the stock of durable or semi-durable goods can be measured by the charges for upkeep and for accrued replacement.

A third reason for the absorption of capital is tied to the rise in population, another aspect of growth. If the level of capital were to remain the same with the population augmenting, productivity per active person would decrease, resulting in unemployment. In effect, one cannot put a new man to work, with his equivalent in productivity, without supplementary capital. Sec-

ondary investments are therefore called for in order to provide work for future, more numerous generations.

A fourth reason for the absorption of capital is that growth necessitates "accompanying" social investments, such as housing, schools, universities, roads, and urban administrative and tourist centers, etc. The crisis in housing is partly explained by the growth itself. The transformation of the rural population into an urban one is evidenced by the abandonment of antiquated rural buildings and by the demand for urban or suburban apartments. Demographic growth increases the needs of families and quickly leads to a need for more apartments. Growing public and private administration absorbs old and new construction.

A fifth reason comes from the fact that the external costs of growth, which we shall try to outline below, require investments for repairs and for arrangements designed to palliate inconveniences.

At this point let us note that capital economies in some sectors are accompanied by accrued consumption on the part of society in other sectors. However, let us remember that it is easier to invest 20-25% of the national product when it is large than when it is small, and that in consequence the real cost of the growing investment is reduced in the course of the development. But, given the various needs of capital in our growing society, the condition for maintaining real revenue over a long period is the continuance of technical progress able to use capital more economically and therefore permitting a response to the growing needs of capital.

External costs

If the above costs are directly related to desired, conscious growth, external costs are those which are not understood or felt at the start and which appear only as the consequences of the general movement itself. To show the nature of these costs, let us take an example from the automobile industry:

Forty years of technical progress have considerably reduced the real price of new and used cars. But automobile insurance, which initially was optional and relatively inexpensive, has become obligatory in many places, and its relative and absolute costs

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increase every year, and will continue to rise, due to the following factors: the growing number of accidents, which rises more than proportionally to the number of insured, given the high density of traffic; the fact that repair costs are not “secondary” industrial prices but artisan charges, and that insurance and hospitalization costs are “tertiary” charges, which are stable or rising in real value and therefore constantly rising in their nominal value; the fact, finally, that indemnities for death or accidents are related to the heightened value of the victims, for as buying power increases, so does the value of human life in a rich society. The result of this sequence of developments is that one can buy a used car in almost new condition for a low price but that the annual costs of insurance can be higher than the initial purchase price.

Similarly, growth gives rise to external costs which initially were barely perceptible, but of which certain increase more than proportionally to the growth of the national product. We shall examine some categories of these costs: the “nuisances” and the pollution growing out of the depredation of natural riches; the costs of overcrowding; the costs of change; and the cost of tension and wishes tied to permanent dissatisfaction.

Nuisance and pollution

Bertrand de Jouvenel⁵ cites the following example:

1. The marked preference for the climate of Los Angeles has created there a large concentration of residences and businesses.
2. This concentration has made the atmosphere of this agglomeration one of the most deleterious in the world.
3. The advantages of the climate have been noticeably reduced, and the protection or improvement of the atmosphere has made it necessary to take steps involving financial outlays for special equipment for cars and factories.

In the same way, the pollution of rivers and the sea, which are becoming, as it has been said, “the dustbins of humanity,” the use of air space and the noise of airports, lead to problems which become more and more obvious and whose cure will require objective costs.

⁵ “Niveau de vie et volume de consommation” (*Bulletin SEDEIS*, Jan. 10, 1964).

De Jouvenel defines external costs as “injuries caused to others whose costs are not paid for by their authors.” He cites the definition of the liberal economist von Mises, for whom “the rights of property meant that the owner should be credited with all the advantages which the use of his property gave to others and should be debited with all the disadvantages which it inflicted.” At present, while the external benefits related to property rights, for example urban supervalues, remain private, the external costs related to the exercise of these rights are not covered or are mainly charged to the collective society. In a truly Socialist economy would not the external costs of private origin be charged to their authors? But this principle, which seems obvious and simple, is difficult to apply: the automobile leads to certain expenses, such as building cities around its needs, but it has become a collective necessity, part of the rhythm of life, of the scattering of work sites, of the need to escape. It is not a luxury anymore. To charge some of its total costs to private individuals would end up as an injustice to some and would restrain the impetus of a key growth industry.

The costs of overcrowding

The cost of human overcrowding is tied not only to the rise in population but to the possibility of mobility. The real density of population rises with prosperity and wealth. In terms of well-being, the optimum population density is obviously not the same for a sedentary people and for a mobile one. From the moment that the population is able to concentrate itself in the same places with great rapidity, there is overcrowding, and the optimum, conceived in terms of well-being and living space—both physical and psychological—is reduced.⁶

These costs of overcrowding are perfectly well felt by their victims. They try to evade overcrowding, to adopt tactics designed to limit it. But to try to leave before the tide of those who are leaving with the tide, to go to the country when one would rather be at the sea, to go to swampy beaches in order to

⁶ See Dennis Gabor, *Inventons le futur* (Paris, Plon, 1963).

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be alone, to visit tourist spots out of season (Greece in the middle of winter): all these solutions involving a spreading out in time and space impose evident losses in ease and pleasure which balance out the gains in less crowding. Certainly, tourists have not taken over every place in the world, and there still remain many places and many natural beauties, sometimes in fact nearby, to discover. But so long as the major historic cultural centers are limited in number, the cost of tourist crowding will remain ever in the increase from a human point of view.

Following overcrowding and concentration, the patterns of everyday life will have to change: one example is that of the continuous workday. But the most serious is without doubt that over a long term there may appear a discongruity between the private and the public costs of bringing additional children into the world. The collective costs, coming from overcrowding, over-concentration, from longer and longer education, from the growth of the necessary capital, may be higher than the family's costs. Will it then be necessary, instead of paying out benefits to families, to tax all children above a given number, considering the additional ones as luxuries?

Under such phenomena, the ties between economic growth and demography will have to be completely revised. Even in wealthy societies, if we start with the self-evident principle that population figures cannot keep on increasing indefinitely, the only long-term growth acceptable from the point of view of well-being, of democracy, of real liberty, appears to be economic growth without numerical growth; and this kind of growth appears now to be a real possibility. But henceforth one will have to be prepared for the inevitable problems that an aging population presents.

Finally, one should include the overcrowding of knowledge and information among the various costs of overcrowding, the "overcrowding of brains," to use the phrase of Pierre Massé.⁷ Their problems correspond to the almost impossible task of keeping up with continually changing knowledge, and faced with the problems of information, they show up as the replacement of information by advertising and propaganda, or public relations. Propaganda, a functional necessity of the contemporary world, is

⁷ *Le plan, ou l'anti-hasard* (N.R.F., 1965).

related to the remolding of unanimity and the search for political efficacy in the midst of growing numbers of men who are in a state of ambiguity due to the multiplication of unassimilable knowledge.

But if knowledge and information are impossible to control and keep abreast of, this is partially a function of their changes, and we are faced here with another category of costs: the costs of change.

The costs of change

These costs do not fit easily into the classification between direct and external costs. Some of them are voluntarily accepted to raise the standard of living. Others appear as the barely noted consequences of general trends.

In many respects change is pleasant, a source of creation and a renewing of the spirit. But this does not deny the existence of human wishes for stable points of reference and for an environment characterized by elements of permanency and continuity. Man's acclimatization to a world in which the only permanent thing is rapid change would have high costs and create important losses.

The instability of situations and habits represents an effort, an element of tension, creative or destructive according to the case. This cost is particularly striking in developing countries where religious customs, ways of life, attitudes related to time and money are contradictory to the tide of economic development.⁸

In wealthy economies the necessary mobility called for by growth, and which we are told is insufficient in France, can require a break with geographic stability, with professional stability, with the social environment.

Along with growth simultaneously go the transformation of ideologies, the erosion of beliefs, the modification of ways of expressing truth. It introduces relativism in innumerable areas of the social universe. The individual is no longer sure of his stock of beliefs. He is no longer sure of what he knows, since it

⁸ On this problem and on the costs of growth in general, see B. Cazes, *La vie économique* (Paris, A. Colin, coll. U., 1965).

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is constantly going out of fashion. The “recycling,” the “permanent formation” which we boast so much of—can they not become one form of alienation if we are not careful? Doesn't modern man risk seeing his brain treated as a machine with a high quotient of obsolescence? Despite all his efforts, doesn't he risk becoming an intellectual proletariat, unable to acquire a nucleus of stable knowledge and an instrument of reasoning permitting him to control the universe in which he lives? Isn't the diminished place accorded to a discipline of synthesis and “wisdom” such as philosophy a sign that we prefer to construct machines for teaching disciplines which will adapt to social needs rather than to mold beings apt to judge from the basis of universal standards? Isn't this growing difficulty in dominating problems and techniques in contradiction with political democracy, if we think of democracy as a system based on the possibility of declared choices and rational decisions?

Certainly, a routine, which by definition is an economy of effort, has no value in itself, but the additional intellectual effort which is asked of the individual ought to have the goal not just of increasing his productivity and his changing technical mastery but of affecting his permanent ability to control the group of problems which concerns him.

Let us finally examine the last group of costs:

The cost of tension, wishes, permanent dissatisfaction

These costs appear most clearly in capitalist economies which are based on the needs and desires of consumers, but it is hard to see how socialist economies, oriented towards the same preoccupation with economic progress, where material wealth is about the only logical goal able to impose itself, can entirely escape this development.

In a social universe where status is changeable, where neither rank nor function is hereditary, where growing consumption is the dominant value, status is determined in large measure by the capacity to consume. Life is conceived of as the continuous acquisition of status, whose outward signs become unfashionable as soon as they are obtained by the masses. It is the phenomenon

of ostentatious consumption.⁹ In a mass consumption society we all want the same things but we want them at different times. Ostentatious consumption is often demonstrated by early acquisition, and so time then becomes the main source of dissatisfaction. Status is established by secondary details such as novelty or difference, by early acquisition which is followed by quick obsolescence which is part and parcel of the economic system. It is important to remember that satisfactions are inter-dependent. To move to a level of high consumption is to lower the satisfactions of others, and if the latter mass catches up, the level of satisfaction of the former is reduced, following the phenomenon of saturation and consequent lowering of his status.

Can one expect to see the time when consumption will be so devalued that it will no longer be the gauge of status? This would more or less be close to the conditions of socialism.

But there is another phenomenon which creates needs and maintains tensions: in order to get away from the slavery and the fatigue of industrial civilization, man has accrued needs for comfort and evasion. He then develops a system of responses, but in such a way that his needs for compensation grow and become more and more costly to satisfy; so that the individual who was satisfied with spending Sunday at Fontainebleau or the weekend at Deauville now has to go to Spain and eventually to Peru, which will require collective or individual means of transportation at an increasing cost. The growth of the transportation network has led to the growth of final goals, and the growth of goals, that of the means. Like Achilles and the tortoise, the goals and the means can never meet and the dissatisfaction remains.

Given these various kinds of costs, what value do our present instruments of quantification for measuring economic progress have? We shall now look at their inadequacies and their mistakes.

II. THE INADEQUACY OR THE ERRORS OF PRESENT QUANTITATIVE MEASUREMENTS

The principal present yardsticks of economic progress and growth are gross national product and national revenue, and the costs of

⁹ Cf. our article, "La consommation ostentatoire et l'usage des richesses" (*Bulletin SEDEIS*, Nov. 1, 1965).

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growth of these aggregates, as well as the standard of living, measured in terms of real buying power, that is, the volume of consumption or its monetary value at stable prices. To begin with, for several years economists and statisticians have shown the inadequacies, the lacunae, or in other words, the errors of these analytical instruments.¹⁰

There is no denying that substantial elements of well-being and comfort have been introduced into the life of the masses, but it was possible in traditional societies to obtain a high standard of living with consumption very different from ours, while we are able to arrive at a standard of living which is in reality very mediocre and dissatisfying, although a large volume of goods is consumed. This is why B. de Jouvenel has so clearly shown the impossibility of any serious comparisons in terms of the volume of consumption: from one period to another or from one country to another, the goods are not the same. As he has said, the process of enrichment "is not vertical but oblique." A working-class family which a century ago wished to live like a similar but well-off family, ten times richer than itself, and which held on to this wish, could not carry it out even if the statisticians said that its wealth had multiplied tenfold. It could not build and live in the same house or have the same servants. But it has goods, now of common usage, whose existence would have been inconceivable to a rich family a century ago. In thinking about wealth, we often think about the elements of privilege which are harder to achieve and which we cannot ever have. What we can have is something else: this is the multiplication of goods whose real price is lowered, and this other form of wealth leaves us dissatisfied.

There is a more precise cause for the inadequacy of the concepts chosen to measure the standard of living: the value of mediate consumption grows with each consumer, and these mediate consumptions are computed as final ones and raise the volume of consumption, the standard of living and the national product.

In the evaluation of productivity, national wealth should not

¹⁰ Cf. M. Gilbert and I. B. Kravis, *Etude comparative des produits nationaux et du pouvoir d'achat des monnaies* (O.E.C.E., 1955); B. de Jouvenel, "Niveau de vie et volume de consommation," cit.; "A Better Life in an Affluent Society" (*Diogenes*, Spring 1961).

include "intermediate consumption" of the various branches of the productive sector. It includes only the sum of the value added by each one of them. But one of the omissions of national measurement is to consider the totality of household consumption as final and not to distinguish utilitarian and mediate consumption from that which is in real fact final. The calculation of national product or revenue ought to be "deflated" by the subtraction of certain values which are in reality costs, or intermediate consumption which is mistakenly taken to be final. Let us cite some examples:¹¹

If daily commuting increases, due to urbanization and overcrowding, the secondary consumption of gas or of commuter trains is reflected as a rise in consumption, just as if the object were pleasure travel. A collective cost is thus added to the national product.

In the United States, Simon Kuznets has estimated that the per capita expense for food, at constant prices, has risen 75 % from 1909 to 1949-1957. But it is materially impossible for the volume of physical consumption to have risen at this rate, and not a more believable one of 12-15 %. The rest, that is to say, four-fifths, comes either from a chance growth of diversity and quality or, principally, from the costs for transport and distribution of food which are the consequence of urbanization and the remoteness of centers of production. In such an example, the charges for transportation are calculated as part of progress and growth.

In the same way, the replacement of the free services of the home by restaurants, canteens, hotels, hospices, etc., is shown as a rise in national revenue. Colin Clark, who has tried to calculate the value in England of gratis home services, has estimated them at the value of the national product in 1871 and at about half the national product in 1956. Consequently, the dislocation of the traditional family, the remoteness of places of work, and the continuous workday are automatically shown by a rise in the volume of consumption by a quantity equivalent to or less than the services obtained.

¹¹ The three following examples are taken from the article cited above by B. de Jouvenel.

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In addition the national product does not include gratuitous goods or natural riches. But on the contrary some costs related to the restoration of natural riches, costs which will increase in importance, are considered part of the national product. As the number of accidents increases (and accidents are the most obvious result of overcrowding), raising the cost of repairs, of hospitalization, of medicine, etc., the national product increases. Using these yardsticks of measure, if one-half of the population were to crash into the other half, all things being equal, there would be a remarkable increase in revenue. The national product therefore adds in external costs, only however to count them in backwards, in reverse. It includes the phenomena of destruction seen only as additions coming out of the expense of partial reconstruction.

As the result of these omissions and these inversions, one can conclude that the route from an economy of subsistence to a technical, complex market economy necessarily leads to the overvaluation of the standard of living and the national product. Our present quantitative expressions bear only a slight resemblance to the real standard of living, the satisfactions, and the real well-being of the population.

An awareness of this phenomenon of obvious and hidden costs and the inadequacies of our measuring instruments should lead to the revaluation of certain of our present measuringsticks and their replacement by ones better suited to their needs.

III. THE CRITICISM OF PRESENT MEASUREMENTS OF GROWTH

Two tendencies, implicit or explicit, ought to be criticized:

- 1) The tendency to consider the size and extent of the national product rather than its composition.
- 2) The tendency to sacrifice the non-measurable to the measurable.

Our era is characterized by a preoccupation with gross national product and the rate of growth. To the extent that the actual situation is felt to be unsatisfactory, or to the extent, even, that growth creates difficulties, tensions, dissatisfactions, we project their resolution into the future, and we believe in the myth that

by progress, by growth, by the rise in means, we can resolve all our problems without seeing very clearly yet that progress and growth obviously pose other problems. This flight into the future is epitomized by the single, numerical, measurable expression of progress to which universal credence is given: the growth rate.

Instead of starting with the proposition that the rise in national product is a good in itself, we should start from different premises:¹²

—Well-being does not depend only or principally on quantity but on quality, which means that the national product includes more than its size and its rate of growth.

—The way in which revenue is earned counts for more than the revenue.

—Work should be envisaged, as the “idealist” Socialists of the 19th century saw it, as being the same as the worker, as the individual himself, as well as from the point of view of the result of his work for the collectivity, that is to say, his productivity.

—We must give up the idea that growth automatically resolves all problems. We should admit that it facilitates the resolution of certain important ones such as inequality, but that it automatically presents new ones, some less serious, some more so than the earlier problems.

—All measurable growth of the national product provokes measurable and nonmeasurable external costs. Some appear to grow at a rate more than proportional to the rise in national product.

—Any actions intended to raise the gross national product should be examined from the viewpoint of their possible negative effects, and it should be remembered that not all increases in national product are desirable independently of their costs.

The second tendency to be criticized is the sacrifice of the nonmeasurable to the measurable.

Our civilization has made a religion of statistics. And statistics are, above all, the measured fact. To count is to be aware of, in a society whose myths are embedded in a layer of rationalist, market-place measurements, with the result that only that which

¹² On this subject, see W. Weisskopf, “Croissance économique et bien-être humain” (*Economie et humanisme*, Sept.-Oct. 1965).

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is countable has full social existence, and that which is not countable is secondary and is not *truly real*. To give something a number is to escape from ambiguity, to arrange the world, to establish priorities between facts. Consequently, between a measurable reality and one which is not easily measurable, the second one, which lacks a complete social existence, tends to be sacrificed to the former.

Many present tendencies and costs of growth are explicable in this way: the nonmeasurable does not exist.

If ugliness is allowed to expand with such impunity, it is not only because we have used our facile, cheap techniques to construct the ugly. It is not only because our civilization appears to have lost in large measure its spontaneous aesthetic creativity. It is above all because ugliness is not measurable and therefore no one has real responsibility for it.

There is no doubt that if the damage and the costs of growth could be measured, the situation would be different and there would be a rapid and general awareness of it. If the damage caused by a particular factory could be given a numerical value, the factory would have to pay for it. It would be obliged to and it could only be in agreement.

Given this present-day tendency, a natural line of attack shows itself: it consists of counting in as much as possible the negative effects and external costs in order to make them apparent. This is a necessary position, not one of choice, but the only possible solution. For replacing a crude quantitavism with a refined one which includes the qualitative is in itself an inadequate solution. If only that is to be changed, the usual formulae tend to make even truer than ever the idea so well expressed by B. Charbonneau: "Tout pour le peuple, rien par le peuple (All for the people, nothing by the people)".¹³ This is in fact the way and pattern of technocracy.

Moreover, it is impossible to relinquish entirely the idea of growth, for institutions and habits cannot be transformed so completely. Any plan which is conceived of as an equilibrium between growing quantities will assume the aspects of the qualitative only with difficulty. For a long time yet, it will seem

¹³ *Le paradoxe de la culture* (Denoël, 1965).

that solely by developing *more*, one can act differently, that one can change without too much difficulty. But let us be on guard lest in this way, by an accumulation of means, the system does not continue to drag along with just as much nonsense as before.

It is necessary to deal with growth with less impatience and more finesse before daring to think at all, perhaps, of not growing. It is the spirit of the times and its sensibilities which have to change. It is the spirit of *more* and its origins, the way in which it is obtained, which has to evolve. It depends upon an awareness, that is to say, a demystification and an increasing attention to the qualitative if economic growth is not to continue to be a process which in certain respects is absurd.