

The False Myth of Unlimited Economic Growth

A FUNDAMENTAL FAULT

The explosive proliferation of the human species in the last two centuries caused a constantly increasing production of food resources, construction of houses and infrastructures, and manufacturing of all sorts of products. Thus the whole of modern society and all national economies, of developed, developing, and undeveloped countries alike, are currently based on the presupposition of *unlimited growth* — if only in appearance, as will be seen below. Growth has indeed become a basic principle, an untouchable myth, and almost a categorical imperative: a company that is not producing or selling more than it did in the preceding year is apt to be talked about as 'in trouble', and actually (because of the way entrepreneurial activities are currently set up and measured and 'news gets around' especially with modern devices), in these circumstances the company's profits generally diminish or become losses, and if the process continues for several years, the road fatally leads to bankruptcy, or liquidation, or acquisition by a stronger company.

By the same token, the economy of a country whose 'Gross National Product' (GNP) doesn't grow, or grows insufficiently from one year to the next to be noticeable, is considered to be in critical condition, whereupon the words used to describe it range from 'stagnant' to 'in recession' or 'economic depression'. The government of that country normally strives to 'prime the development of the economy' by manoeuvring in turn the interest rates, the tax system, the amount of circulating money, and/or the foreign exchange rates, etc.

The trouble is that the methods currently used world-wide to calculate the GNP of a country, and the 'bottom line' of a company's activities, suffer from a fundamental fault: they do not take into any account, as *negative items*, such considerations as the depletion of natural resources, the squandering of non-renewable fossil fuels and minerals, and the environmental degradation caused by the activities to which the calculations refer. Generally such negative items are not even measured — and admittedly they are difficult to measure in any reliable way, except in terms of the cost of actions that would be required to redress the injuries caused.

Thus the end result of the calculations is distorted: it may indicate a *growth* when it actually should show a *decline* — a *profit* when in reality there is a *loss*.

NORMAL PLANETARY STATE: STAGNATION

The myth of unlimited growth is a recent ideology: much as with the demographic explosion, it can be traced back to the industrial revolution of two centuries ago. Before, and during most of Man's history, the normal state of the economy on Earth, measured on the basis of current economic standards, was *stagnation*. For example, it has been calculated that the real purchasing power of the wages of building-industry workers in Southern England was greater in AD 1500 than it was in AD 1850.

Yet the above is scarcely surprising: in fact, if in past centuries the *per caput* GNP had grown by an average of just 1% per year (a rate which today's economists and politicians universally would consider totally unsatisfactory), in AD 1000 the yearly income of the average Italian, which was the equivalent of about 14,000 US\$ in 1990, would have been only two-thirds of 1 US\$, and in the year in which Christ was born, as little as three thousandths of 1 US cent (all in AD 1990 values!).

RESOURCES CAN ONLY BE TRANSFORMED, NOT CREATED

In effect, how could continuing and unlimited growth materialize in *an enclosed and finite economic system* such as our world, in which no resources can be supplied from outside (apart from the solar radiation that is used for Biospheric purposes including conversion to chemical energy by plants through photosynthesis), but only the transformation of existing resources is possible? Even on a planetary scale, 'nothing is created, nothing is destroyed': if anything *grows*, something else must necessarily *shrink*.

So, if a country's GNP increases in a certain year, it surely does so at the expense — for example — of the consumption of non-renewable and non-replaceable natural resources (of the same country, or of others'), or at the cost of degradation of other natural resources such as air, water, and/or soil, which thereby have lost part of their value in terms of life-supporting capability for future generations.

An economic system based on the premise of unlimited growth would make sense only if it had unlimited physical space at its disposal for expansion; on the contrary, the physical space available on Earth is *circumscribed and finite*, consisting exclusively of the terrestrial globe of which some 71% of the surface is water. It is exactly as if Humankind were aboard a ship isolated in a vast ocean with no harbours or landing places and with no possibility to escape or get help from outside. The ship is fairly large if measured on our scale, but finite and not expandable.

There is good reason to believe that under certain optimistic conditions, this ship of ours could durably accommodate no more than 800–900 million individuals of the human species (*see* my Guest Editorial in this Journal's Winter issue of 1994, pp. 289–91). The rest of the space on board must be left at the disposal of what

else ultimately makes the long-term survival of Man himself possible on the ship: vegetation, other living species, and a natural environment that is uncontaminated enough to be self-regenerating.

NEW RULES WANTED

In a nutshell, a planetary economic system that is based on the premise of growth without limits is simply inconceivable. In the long run, a way must be found to replace the principle of *growth* by the principle of *conservation*: companies must learn to live and prosper even without any increase of production and sales, and countries must no longer consider a stationary GNP as a dreadful calamity but rather as a fully normal and actually desirable condition.

But is even *conservation* really adequate today? Actually, the ship mentioned above does no longer carry only the desirable few hundred million human passengers, but almost six thousand millions, whose impact is perceived by the environment as being that of at least 106 thousand million people of the AD 1790 impact-level, as was pointed out in the same Guest Editorial mentioned above. Therefore today, when no nation has even started thinking seriously about how to tackle the problem of global overpopulation (with the possible isolated exceptions of China, India, and Brazil), *it is already too late for simple conservation*.

To recover a durably sustainable natural equilibrium on Earth, what is urgently needed is a drastic *shrinking* of the human presence on the planet. During the expectably bumpy transition from the present situation to the hopefully regained equilibrium, companies and national economies must nevertheless find a way to function and survive — and if possible even prosper — in a framework of prolonged *general contraction*. Serious difficulties are certainly to be expected, among other things because of the ensuing marked increase of all costs and prices.

If we are to comply with the above — needs, as the present writer sees them — the general economic contraction will inevitably involve a sizeable reduction of all markets, hence a volume decrease in the production and sale of all products; as a consequence, product unit costs will increase, and correspondingly so will sales prices. Further increases of production costs and prices will result from stringent new rules which will have to be enforced to get all products manufactured with a minimum of environmental impact; to make products easily recyclable and reusable at the end of their useful lives; and to reduce energy consumption to a minimum both in the course of manufacturing and during the utilization of the finished products. Still other price increases will come from the internalization of environmental costs in the price of all products, as specified below.

The countries of the former Soviet Union have been going through very hard times when, after three-quarters of a century of subsidized economy, with no regard for real costs and market values, or for environmental impacts, those countries strove to adopt the rules of the market, with abrupt and sharp price increases as an early and inevitable consequence. But the whole world will almost certainly find itself soon in a situation in many respects similar. Indeed, up to now the world economy has been allowed to develop without taking into account the environmental costs which each activity involves, simply transferring such costs to future generations — again, in an artificial context, far removed from physical reality. For example, the selling price of most products doesn't cover the environmental impact of their manufacture, their use, and their disposal at the end of their useful life; it is therefore in reality a *subsidized price*, reduced at the expense of the environment and of whoever will inhabit the planet after us.

When these sins finally find Mankind out, they seem likely to cause a trauma comparable with, or greater than, that suffered by the former Soviet countries: in addition to the effect of volume reductions and more demanding manufacturing rules, many costs and prices will soar abruptly because of the inescapable internalization of environmental costs, and people will suddenly realize that what they had allowed themselves before was a series of luxuries that they were not entitled to, enjoyed at the expense of their children and subsequent generations.

However, as the most urgent measure is reduction of the number of humans on Earth, the total volume of goods and services — briefly, global wealth — currently distributed among approaching 6 thousand million individuals, will be at the disposal of fewer and fewer human beings, and ultimately the planet's hoped-for residual population of 800 million people or thereabouts will undoubtedly live much better, on average, than the nearly 6 thousand millions of today.

True, the advocated transformation has not as yet even started, and the chance that it may take place at all in the future seems slim, considering the giant interests that are vested in preservation of the *status quo*; but simply abstaining from trying would be criminal and suicidal, to say the least.

One of the key conditions to make that transformation possible is the urgent general recognition that an economic planetary system based on the premise of a steady upward trend makes no sense: that the myth itself of unlimited growth is *false* and *deceiving*, and that Humankind had better get rid of it without delay.

GIACOMO DE SABATA
Via Bigli 4
I-20121 Milano
Italy.