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On the Net Economic Growth Concept

In this paper, the growth, development and economic potential concepts, as well as the relation between them, in the new conditions of world economy evolution, are examined.

One started from the fact that the present way of measuring economic growth by means of gross domestic income by inhabitant (national income) has a series of drawbacks and may deform the real imagery of development.

With a view to analysing, one proposes to use a new concept — net economic growth — which would express the net product by inhabitant, subtracting thus from the G.D.P. (gross domestic product) or from the national income: a) the armament production; b) damages produced to the ecological environment; c) losses from external change relations and d) growth of the debit balance of external debt.

The significance of this new indicator is appreciated to be nearer the actual economic growth, nearer the useful utilization values which were produced, thus expressing the basis of development and of life conditions of the population from different countries.

Within the cybernetic-type socio-economic systems, the definition and delimitation of concepts, of comprehension spheres, of quantifying methods and of their functional relations in the present period, gets a major significance.

This is why we propose to try, in the following paragraphs, to analyse summarily the relation between: a) economic growth; b) economic development and c) economic potential of the country, with a view to clearing up more close to reality the actual evolution of the contemporary world.

We shall remind from the beginning that in the economic specialty literature, as well as in planning practice and development strategy, two concepts are used, as a rule: economic growth and economic development. The general economic potential or the national wealth of the countries, de-

fined in different concepts, is used only scarcely in the specialty literature and much the less in the economic practice of the countries. There are two kinds of difficulties, when introducing this concept: theoretical ones and especially practical ones, as: computation possibilities, quantification methods.

ECONOMIC GROWTH AND DEVELOPMENT CONCEPT

Discussions on the growth and development concept occupy an important place in the contemporary economic thought, new economic currents are put in movement, expressing essentially the complexity of economic life, the appearance of strain phenomena, accompanying the development, and the major problems confronting or facing the contemporary world, in a period of growing interdependence of the national economies.

The concept of economic growth and development gets in the present period a different significance, if we take into account the implications of the world fuel and raw-matter crises, of the food crisis, of the enormous waste of social labour, by the impetuous growth of armaments and of military expenses, of ecologic implications, of instable financial-currency relations between states, and, in general, the contradictory behaviour of the world economy. This is why the theory of economic growth and development, the evaluation of the extensive and intensive factors sustaining it, becomes new dimensions and gets other meanings than those we were accustomed with.

GROSS ECONOMIC GROWTH CONCEPT

Generally speaking — according to the economic literature — the economic growth is conceived as a systematic, firm and long-lasting growth of the gross domestic product (G.D.P.) or of the national income by inhabitant. Thus, the economic growth expresses essentially a certain type of gross growth of certain fundamental magnitudes, characterizing the economic systems in their dynamic evolution. In the last analysis, in a more concise formulation, the economic growth index (Ke) is a function of two factors: magnitude of national income or of gross domestic product (Q) and total number of population (P). The economic growth index will be equal to:

$$Ke = \frac{Q}{P}$$

as level, and to:

$$Ke = \frac{Q_1}{P_1} : \frac{Q_0}{P_0}$$

as dynamic, in comparable prices.

Three types of relations may be met frequently, when analysing the economic growth dynamics:

$Q = P$ — zero economic growth; (1)

$Q > P$ — positive economic growth (2)

$Q < P$ — negative economic growth or non-growth. (3)

It is obvious that, in each of the three typologies, versions stand out which vary in terms of the development level, of the accumulation rate in G.D.P. or of the national income, of the development strategy of each country, etc.

ECONOMIC DEVELOPMENT CONCEPT

We shall remind further down also the economic development concept, which expresses a much wider action than economic growth. It may be defined as a complex process, mainly qualitatively dynamic, of continuous and systematic modification of the whole economic, socio-political, demographic organism, in a long period of time. We shall quote Gunnar Myrdal, in this concern. He wrote: "By development, I understand a modification of the whole social system. In other words expressed, not only production and production distribution are involved, but also production mode, living standard, institution, attitudes and policies" [1].

Consequently, it may be considered that development causes deep changes in the economic and territorial structure, as continuous, persistent processes, modification in the social way of life, in the living standard and in the social institutions, in the environment and quality of life, in the general behaviour of the socio-economic system.

Hence, economic development includes all fields of socio-economic life, marking a continuous process of renewal, of apparition of new branches and subbranches, products, asortments, technologies, distribution of production and population in territory in the conditions of the social division of labour, of rational diversifying and of production specialization, etc.

Differences, as sphere and contents, may exist between economic growth and economic development.

François Perroux is right, when he affirms that a developing economy can be distinct from a growing economy. The gross product in absolute sum by inhabitant — he adds — increased frequently in the past and can increase further, without putting the population and the respective economies in development conditions [2].

This delimitation between the economic growth and economic development concepts can become very important: a zero growth, in an economy with high development standard, may not affect in general the living standard, but a somewhat moderated economic growth can affect the population living conditions, in a country with the development standard.

Examined in a systemic approach, economic growth is a general factor of the economic development and, in its turn, the latter considerably affects the economic growth behaviour by the complex phenomenon of feedback. This is why economic growth, though it mainly characterizes quantitative sides, is integrated organically in the qualitative sides of the system, under economic, technological, social, political, demographic aspects.

GENERAL ECONOMIC POTENTIAL CONCEPT

The characterization of the present socio-economic development stage of the countries, especially as long-lasting effect, cannot be satisfactory, if not integrated in the general concept of general economic potential.

We discern, as general potential: a) a static one (national wealth) and b) a dynamic one.

The static general potential will be assimilated to the general concept of national wealth, defined as totality of material and spiritual values, accumulated as a consequence of human labour, together with the exploitable material resources and human resources. Consequently, in this case, a pecuniary expression of the three national wealth subsystems is involved, i.e.: a) human resources; b) accumulated resources in human and spiritual values and c) exploitable natural resources.

The dynamic potential could be understood as a capacity of utilization and valorization of the static potential of the countries, the capacity of organizing production and labour, efficient utilization of material, natural and human resources, the society disposes of.

RELATION BETWEEN GROWTH, DEVELOPMENT AND ECONOMIC POTENTIAL

It goes without saying that, in normal conditions, a real economic growth must lead to modification in economy structure (economic development), and hence to an increase of the general economic potential, of the national wealth. But, in certain conditions of the present evolution of the contemporary world, the somewhat paradoxal phenomenon may appear, that the economic growth can not lead, in all cases, to an economic development. There may be also cases, when the economic growth can be artificial and lead, essentially, even to a diminution of the national wealth, of the general potential of some countries.

A particularly important problem is certainly that of the measurement, as really as possible, of the economic growth, of the increase, of the economic potential, and of the factors sustaining it. The specialty economic literature and the practice of many countries, as well as the U.N.O. specialty publications, agreed to take the gross domestic product (G.D.P.) by inhabitant (in prices), for the market economy countries, and the national wealth by inhabitant, for the socialist countries, as economic growth indicator.

Thus, for instance, according to data published by the World Bank, the economic growth at world level is characterized by the data in Table 1. It is not difficult to ascertain the powerful discrepancies which — according to the data in Table 1 — are there between the countries in the higher group (7000 $ and over) and the ones in the lower group (under 300 $). According to studies carried out by U.N.O., by extending the comparison on a wider plane — the income by inhabitant in the developed countries is 12 times higher than in the developing countries.

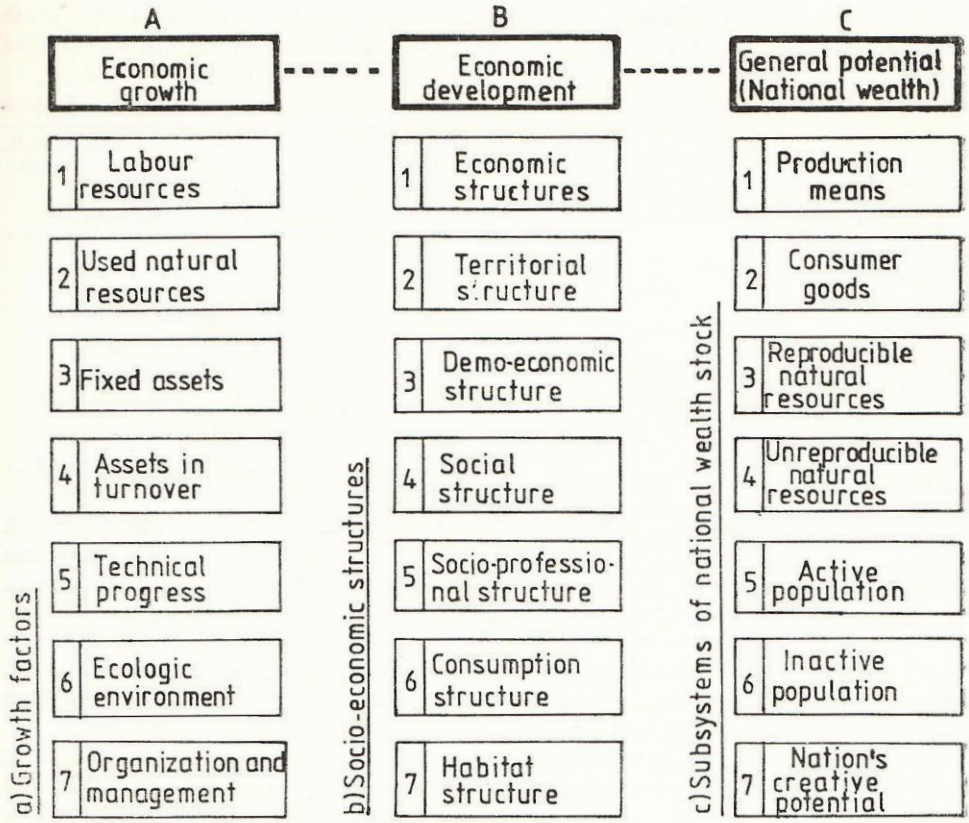

Fig. 1

Table 1

Income group	Number of countries	Population, to the middle of year 1978, millions	Gross national product (billions USA doll.)	Average G.N.P. by inhabitant 1978 (USA doll.)
Under 300 $	36	2008	415	210
300 — 699$	38	493	232	410
700 — 2999$	50	571	841	1470
3000 — 6999$	29	536	2222	4150
7000 § and over	25	552	5083	9220

Source: 1980, World Bank Atlas. page 4.

The fundamental idea, prevailing at present, is that if the necessity of reducing these discrepancies, of bringing nearer, in a certain time, the development levels of rich and poor countries. It is clear that this trend is given by the economic growth rates, recorded in various countries. According to

the same data published by the World Bank, Table 2 contains the gross national product by inhabitant, and the average growth level, in the period 1970—1978.

Table 2

Growth rate	Number of countries	Population to the middle of year 1978 — millions —	Gross national product 1978 (billions USA doll)	Average G.N.P. by inhabitant 1978 USA doll.
Under 0.0%	38	169	98	580
0.0% — 2.0%	45	1168	1053	900
2.0% — 4.0%	45	1699	4731	2790
4.0% — 6.0%	31	862	1842	2140
6.0% and over	19	262	1069	4090

Source: 1980 World Bank Atlas — page 6.
(Data for Campuchia, Iran, Laos, Lebanon and Vietnam were not included in the total)

It is easily noticed, from the data in Table 2, that the highest growth rates are recorded just in the developed countries, a fact which predicts already that, in these conditions, the development level difference becomes much deeper, instead of diminishing.

But also these data, which reflect in general the economic growth, must be examined critically, as in some cases they hide the real development level of the countries, the true economic discrepancies, which are much deeper than the ones considered at present.

An even succinct examination of the indicators expressing the economic growth can lead us to some conclusions, worth to be taken into account, for expressing the real growth level, as well as for comparison with other countries, in this field.

Thus, the indicators used in international comparisons hide many aspects of incomparability, as are the comprehension sphere of the gross domestic product and of the national income, the problem of the used prices, the rate of exchange of the national currency in dollars, the quality of the information provided by the national statistics, etc. But beyond the indications given above, and which are generally known, other new problems may arise, which if not distinctly analysed, can misrepresent the real level of economic growth and distort the image of the world economy evolution.

These restrictions concern, in our opinion, the following four points.

a) Armaments production

The armaments production, the unproductive expenses for arming, included in the G.D.P. and in the national income, sometimes strongly distorts the indicator expressing the economic growth in various countries: instead of a real growth, an artificial one is recorded, with earnest implications upon development, socio-economic balances, and living conditions of the population.

For instance, in the last three decades, the states of the world anually devoted between 5 and 8% from their available resources, at world level, for armings. In 1980 only, the world military expenses reached 500 thousand million dollars, a sum equal with total of investments achieved in all developing countries.

Going further with the comparison, we shall establish that, in the last 20 years, the growth of the financial resources devoted to armings, recorded an average annual rate of over 3%, hence higher than the economic growth rate.

b) **Ecologic environment**

The production processes have a negative influence upon the ecologic environment, a fact which leads to the degradation of the latter. In certain countries the value of the ecologic environment deterioration is as high as 8—10% of the gross national product, which was created during one year. The share of the damages caused to ecologic environment is included in the obtained national product, instead of being substracted from the G.D.P. or the national income (being considered, in fact, as a "wear" of the environment, which must be "amortized", hence subtracted from the produced value).

c) **Inequitable change relations**

In those cases, when losses are recorded in the international relations, the negative action of foreign trade is reflected in the fact that the G.D.P. or the effectively utilized national income is less than the created one, as a consequence of insufficient foreign trade, for certain countries, especially developing countries.

d) **Growth of the external debt balance**

Economic growth, expressed by indicator G.D.P. or national income, appears deformed when this growth is due to unrefunded external credits. In certain cases, the unrefunded credits, to which the considerable growth of interests must be added, sensibly reduce the economic growth and even the accumulated national wealth.

A NEW INDICATOR: NET ECONOMIC GROWTH

Taking into account the above presented considerations, we think that, for a complex analysis of the economic growth models, it is necessary to use a new indicator, at macroeconomic level, called by us net domestic product or net national income, instead of the indicators used so far. This new indicator will be computed according to relation:

$$Q_n = Q_b - (A + Ce + Me + De)$$

where: Q_n represents the net domestic product or the net national income;
Q_b — gross domestic product or national income;
A — armament production;
Ce — foreign trade losses;
Mc — losses (degradation) in the ecologic environment;
De — growth of external debt balance.

The net economic growth could be computed as a ratio between net domestic product (net national income) and population. In this case, in contrast to gross economic growth, which could be, in certain casses, an artificial growth, the net economic growth would be the real growth, expressing more faithfully the economic development, the growth of the population living standard.

Consequently, the significance of this indicator is closer to the real economic growth, to the utilization values, to the indicators expressing the basis of development and of living conditions of the population in various countries.

Beside the factors examined above, and which can distort the actual calculation of economic growth, the relation between economic growth and unregenerable natural resources or exhausting natural resources, can be examined too. The fact seems obvious, that a strong, intensifying of attracting own unregenerable natural resources into the economic circuit may lead to a conjunctural economic growth of short duration, as this may bring about the exhaustion, in a relatively short time, of the main unregenerable natural resources. Consequently, the mean-term economic growth can be impaired, and the economic potential will be reduced.

In these conditions, on our opinion, it seems necessary that any economic growth rational model be integrated into the concept of national wealth (economic potential), the latter being the basis of the complex development of economy, the starting and finalizing point of any complex economic system, taking into account certain constraints, namely:

a) economic growth integration in the socio-economic structure system with long-lasting effect;

b) taking into account the population dynamic factor;

c) rational utilization of natural and human resources, by preserving, within certain limits, the unregenerable natural resources;

d) using, as much as possible, the own efforts and limiting external credits to a minimum;

e) maintaining an unaltered ecologic environment;

f) the economic growth must aim at increasing the population living standard.

No doubt that, in any other situations, not the actual economic growth, but an artificial, distorted and forced growth is involved, the latter impairing gravely the mean and long-term economic development, the living standard and the socio-economic balances.

The bringing of the quantification problems as close as possible to the economic evolution, means, essentially, to penetrate deeply into the long-term problems, on whose solution depends the existence mode of the peoples.

The adoption of a long and mean-term strategy, able to put economic growth of the development level, of reducing economic discrepancies, cannot be obtained in a close space, but for the whole world.

This would mean to support those actions and projects, able to create the necessary conditions for a real development, the extension of commercial exchanges, of international co-operation, reduction of armaments, of economic discrepancies, and the directing of peoples energy toward a new approach of economic relations between all states of the world.

REFERENCES

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CONCERNANT LE CONCEPT DE CROISSANCE ÉCONOMIQUE

On fait l'analyse des concepts de croissance, de développement et de potentiel économique, ainsi que des relations qui s'y établissent dans les conditions nouvelles de l'évolution économique internationale.

On prend pour point de départ le fait que le mode actuel de mesurer la croissance économique à l'aide du produit national brut par habitant (revenu national) présente une série d'inconvéniants et peut déformer l'image réelle du développement. En vue de l'anaylse, on propose l'emploi d'un nouveau concept — la croissance économique nette — qui exprime le produit net par habitant, soustrayant du produit intérieur brut ou du revenu national: a) la production des armes; b) les dommages causés à l'énvironnement écologique; c) les pertes dues aux relations d'échange international et d) l'augmentation du solde de la dette extérieure. On apprécie que la signification de ce nouveau indicateur est beaucoup plus proche de la croissance économique réelle, des valeurs d'emploi utiles produites, exprimant ainsi la base du développement et des conditions de vie de la populations des différents pays.

К ПОНЯТИЮ ЧИСТОГО ЭКОНОМИЧЕСКОГО РОСТА

В работе рассматриваются понятия экономического роста, развития и потенциала, а также их соотношения при повых условий мирового экономического положения.

Исходным пунктом является факт, что настоящий способ измерения экономического роста с помощью валового внутреннего продукта (национального дохода) на делённые недостатки и может искажать реальную картину развития. В целях анализа, предлогается использование нового понятия — чистого экономического роста —, которое относится к чистому национальному продукту, т.е. к валовому общественному продукту или национальному доходу с вычетом: а) продукции оружия; б) стоимости вреда, причинённого окружающей среде; с) потерь от внежне экономических отношений и д) роста сальдо внежнего долга. Этот показатель ближе к реальному экономическому росту, к произведённым полезным потребительским стоимостям, выражая основу развития и условий жизни населения разных стран.

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