

MODELS OF ECONOMIC EFFICIENCY IN THE PROCESS OF GLOBALIZATION

Carina-Elena STEGĂROIU, Lecturer Ph.D.

University "Constantin Brancusi" Targu Jiu

VALENTIN STEGĂROIU, Lecturer Ph.D.

University "Titu Maiorescu" Bucharest

Scientific discoveries are intellectual products of generators of ideas. The preparation of the generators of ideas becomes more expensive every year. This is explained by technology, preparation steps, "growth" of the generators of ideas, their work conditions.

The products of the human intellect, in the age of humanity, have recently appeared. The man came out very difficult from cave in the outdoor home. This idea, the product of the intellect (intellectual product) was only 100,000 years ago. If we imagine a hypothetical man, who lived 2 million years (human population settlements in Africa) then this "poor" only 5% of his life had a good living comfort. Since our period, the mankind's brains were put to "work": in a century 2-3 ideas appeared.

Future ideas generator passes through a series of stages: initiation into knowledge, knowledge accumulation, referral knowledge, knowledge generation. To supplement these costs "to reject": not all aspirants to the status of "generator of ideas" are becoming ideas generators. "Lucky" are thousandths of a percent. Luxury to increase "generator of ideas" can afford only highly developed industrial countries. Currently the research share of GDP for the years 2002-2015 are to: USA - 2.9 to 3.1%, Japan - 2.9 to 3.0%, Germany - 2.7 to 2.9%, France - 2.5 to 2.7%, United Kingdom - 2.4 to 2.6%, Italy - 2.1 to 2.3%, Canada - 1.7 to 2.0%. Poor countries are doomed to become poorer. The statement is based on the lack of intellectual products in these countries. If by some miracle even in a poor country occurs a generator of ideas then its intellectual products can not be requested by the primitive technologies in the country.

Therefore "ideas generator" will be called highly developed industrial countries and poor country will choose to increase spending only intellectual migrants. Successes and failures in the country's economic development successes and failures correlate with the country's scientific research. The presence of generators of ideas ensures burning issues in the country: lack of generators and problem situations worse losses can multiply. Preparation involves expensive generators of ideas their absence can generate more spending. So the presence of generators is expensive, no generators is more expensive. Poor countries are poor because they don't have generators of ideas, ideas generators are missing because they are poor countries.

During the 1500 years e.n. mankind can "boast" only about 30 intellectual discoveries. Evolutionary changes in human brain, life forms, the structure of food and they said the word: human intellect in the sixteenth century "explode". In this century, many scientific discoveries were made both to her when mankind. The next "boom" of the human intellect will take place in this century. Ecological issues, depletion of non-productive material resources, the emergence of incurable diseases will force "intellect" of human society. In XXI century science will occur more than they have been made during the existence of mankind including the twentieth century.

In XXI century GNP between rich and poor will exceed 100. Generators of ideas highly developed industrial countries are the foundation of success. Increasing the generators of ideas is a necessary but not sufficient. The second condition - call (wages) intellectual products. Only in the situation when both conditions are present, the country can be successful in socio-economic development. An example would be of Japan. In 1861 in Japan introduced compulsory primary education in the country and not ignorant people. In 1875 it introduced compulsory secondary education. Japanese society to compare imaginary intellect with intellect on those days where from companies other 1-2 countries per 1000 inhabitants was for scholars. After 1945 in Japan 40% of cities had been destroyed, unemployment exceeded 50% the country is poor material, but not intellectually. In these circumstances Japan nationalized industrial institutions, post, telecommunications, railways, tobacco production, social infrastructure, sends its experts to internships in developed countries, invites consultants, the

focus is made intellectual products. Japan in a hundred years makes two qualitative leap: in 1868-1913, in 1948-1960. Unlike other countries, Japan's "growing" super-specialists. For highly developed industrial countries is characteristic: the development of science and industry tangible funds, diversification of industrial production, diversification of external economic relations, export investment. Export productive fund has three effects: make "place" in their home countries for productive performance funds, importers of funds can not be competing for funds exporting countries usually overcome moral, exporters funds discards a polluting technology low economic efficiency.

As a conclusion we find that poor countries are doomed to remain poor forever, confirming this and dynamic statistics.

Report gross national product of rich countries to poor countries the same indicator in 1870 was - 11 in 1960 - 30, in 1985 - 52, in 2000 - 70.

Poor countries, regardless of membership or not, the various structures are becoming poorer and the world because, in our view, is the lack of generators of ideas in these countries.

Export creates productive fund-exporting countries not only "comfort" but also some problems. Funds importing countries can process raw materials final products still create some competition. Low efficiency of productive funds is complimented by importing raw materials and cheap labor importing countries. As a result of this world prices of raw materials are rising and wages (the poor) is reduced.

YEARS	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
PRODUCTIVE FUNDS	0,5	0,6	0,7	0,8	0,9	1,01	1,2	1,4	1,6	1,8	2,0	2,4	2,8	3,2	3,6	4,1
	10 ⁿ \$															

Export productive funds is increasing, Conformity table above. The increase is due to not wanting to "save" the economy of poor countries, but is "pushed" the scientific and technical progress in the country of origin of these funds. 2015 compared to 2000 exports will increase tangible funds 8 times. The flow of capital (usually moral exceeded) is oriented towards Latin America (97 · 10¹² \$), Asia (49 · 10¹² \$), Africa (11 · 10¹² \$).

Currently over 50% of the work involved in working for an hour or receive only \$ 0.25, 28% receive \$ 0.61 / hour, 8% get 4.6 \$ / hour, 5% receiving more than \$ 35 / hour. Such "bias" tends to be maintained. The explanation is simple: create the final product less effective productive funds may be marketed only if it is low wages. Thus the export of productive funds not only from importing countries reduce poverty, but increase. Increasing poverty in countries importing funds is directly depending on efficiency of production in operation in developed countries. Intellectual products, information (ideas) constitute 50% of GDP in the U.S. 75%.

Administrative expenses in the information found in reverse dependence, well $Y = \frac{a}{X^\alpha}$ where Y – material expenses, X - expense information (intellectual products, ideas). Intellectual products success in science, enabling highly developed industrial countries to develop successfully and agriculture. An example is the export of agricultural products in the U.S. In world exports U.S. exports of rice is 30%, wheat 45%, corn 75%, 85% of peas. In this context it can be stated that the developed agricultural countries in the future will not exist. Success in agricultural development is a consequence of the development of science which in turn becomes possible due to success in industrial development. Agrarian countries are doomed to poverty. Grain production is currently 1.5 · 10⁹ t that each 1.5 · 10⁹ · 10³ : 6.3 · 10⁹ = 238 kg/capita; meat 250 · 10⁶ t, that each 250 · 10⁶ · 10³ : 6.3 = 40 kg/capita. Food consumption in industrialized countries cereal is 90 kg/capita in other countries - 230 kg/capita. A separate issue is the problem of oil resources. Oil reserves are concentrated in: Saudi Arabia - 25.9%, Iraq - 9.9%, Kuwait - 9.6%, UAE (Abu Dhabi) - 9.5%, Iran - 8.8%, Russia - 4.9%. Petroleum resources have become one of the most effective ways of redistributing global capital. Here we should remember that 58.8% of global oil reserves

are controlled by the U.S., profit of U.S. refineries in 10 months of 2005 increased by 60%. This allows us to recognize that Iraq's oil reservoirs filled to assure U.S. crude oil for many years. A country rich in oil and still can not be considered strong. Example are the Arab countries. The country is strong if he has super-specialists, generating ideas, intellectual products. Countries that are rich, for example in oil, but poor "in mind" could become "Iraq".

Total Gross Domestic Product (TGDP), well GDP of all countries has evolved over the years. TGDP growth was conditioned by the general needs of material and spiritual life, demographic trends. These requirements are imposed on a planetary scale growth: TGDP made by mankind in the twentieth century exceeded TGDP made by mankind throughout its existence until the nineteenth century including; TGDP twentieth century exceeded that of the nineteenth century, 38 times. Human population in 1800 was about \$ 1 billion people in 1900 to 1.6 billion people. So the average number of inhabitants in the nineteenth century was $\frac{1+1.6}{2} = 1.3$ (billion) people. The population in 2000 was 6.2 billion people, the environment in the twentieth century the number of people was $\frac{1.6+6.2}{2} = 3.95$ (billion) people.

In the XIX century TGDP = A; in the XX century with 38A. Per capita TGDP in the XIX century back $\frac{A}{1.3}$ units, in the XX century - $\frac{38A}{3.95}$. Per capita GDP in the XX century has returned more than in the XIX century $\frac{38A}{3.95} : \frac{A}{1.3} = 12.5$ times.

In other news, an imaginary man in the XX century has produced more than a man of the XIX century imaginary of 12.5 times. If you admit a share of GDP productive reservoirs in the XIX and XX centuries were the same then it can be stated that a man of the XX century "consumed" more than a man of the XIX century of 12.5 times. Also many times this man has accumulated more productive than funds received from the XIX century. These trends of increasing social wealth and growth activation process is evidence of hommo faber capacity to create, to innovate constantly and to find solutions to problems you face life. Naturally we should realize that the trends which we have referred are generalizations made on a planetary scale but can be made based on economic forecasts, demographic, ecological.

The basis for a concept about the possible planetary scale can be considered demographic indicators:

- Human desire not to have a life worse than in previous years;
- Natural resources by man involved in the economic cycle create a spectrum of problems;
- Resource shortages, environmental pollution, the emergence of incurable diseases etc.

Denote by N the number of inhabitants. Increasing the number of inhabitants $\left(\frac{dN}{dt}\right)$ is proportional to the number of inhabitants (N), namely $\frac{dN}{dt} = mN$ where m - coefficient of proportionality, where $\frac{dN}{N} = mdt$ and $\ln N = mt + c$ respectively $N = e^{mt} \cdot e^c$

From the initial conditions: in 2000 the population was 6.2 billion people (for $t = 0$, $N = 6.2 \cdot 10^9$) a year on Earth 75 million additional people appear ($t = 1$, $N = 6.275 \cdot 10^9$), determine $N = 6.2 \left(\frac{6.275}{6.2}\right)^t \cdot 10^9$.

The number of planet Earth inhabitants in 2010, 2020, 2030, 2040, 2050 that will help:

$$N_{2010} = 6.2 \cdot 1.012^{10} \cdot 10^9 = 6.985 \text{ billion};$$

$$N_{2020} = 6.2 \cdot 1.012^{20} \cdot 10^9 = 7.870 \text{ billion};$$

$$N_{2030} = 6.2 \cdot 1.012^{30} \cdot 10^9 = 8.868 \text{ billion};$$

$$N_{2040} = 6.2 \cdot 1.012^{40} \cdot 10^9 = 9.991 \text{ billion};$$

$$N_{2050} = 6.2 \cdot 1.012^{50} \cdot 10^9 = 11.25684 \text{ billion}.$$

So the population by 2050 compared with 2000 could double.

In XXI century economic, ecological will worsen. Intellectual product development will be directed towards environmental issues, creation of performance information technologies, medical technology development.