

PROBLEMS OF THE SYSTEM OF INTERNATIONAL ECONOMIC RELATIONSHIPS INCLUDING SCIENCE AND TECHNOLOGY UTILISATION

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Abstract

The necessity of international relations modification in the conditions of revolutionary technologies and scientific-technological innovations, one of the poverty reduction conditions in the less developed countries.

Key words: International economic relations, scientific-technological progress, GATT, UNIDO, FAO.

INTRODUCTION

The system of international economic relationships is one of the most important points for the global problems complex, it is the point in which these problems are not only generated, but also solved. The importance of the international economic relationships system for this and the connected problems grows or declines in direct proportion to the share in which the economic element is represented in the given problem. Since the importance of the economic element is growing in the long – term tendency, also the importance of the international economic relationships (IER) and the need of its modification are growing.

The present system of international economic relationships was, however, created at totally different conditions than those of the present. It functions – with certain, but not basic changes – already since the end of the WW 2, respectively since the first half of the 50s (decolonisation). It is evident, that most of the global problems will deteriorate without the substantial reconstruction of the system since its relative stability is in deep contradiction to the science and technology progress.

Scientific-technological progress

This progress, as a catalyst of the internalisation and interdependency processes, is undergoing, however, a profound quantitative as well as qualitative change. At present, the scientific and technological progress does not go on any more as an improvement, respectively a new wave of classical technologies, but as the introduction of revolutionary technologies and innovations.

It is a much deeper intervention into the man-nature interaction than the waves of industrial revolution or the mechanisation and automation in the field of classical technologies. This period has finished already on the verge between 60s and 70s. The new element in the technological revolution (formerly, it was called scientific and technological revolution) is that, indifference from improvement of the classical technologies mechanism, it goes over to the practical utilisation of the internal structural powers of the living and non-living mass. The most expressive present

examples are the technologies based on nuclear splitting or gene engineering. Theoretical principles of these basic innovations were known already earlier (in the period of the WW 2 and closely after it) but only now they are entering into wide production applications. Together with them, the innovation mechanism is accelerated also by revolutionary changes in the science itself. While before the half of the last century, science served to the improvement of technologies which were only of an empirical origin, now science is the primary resource of the technological revolution. Science is undergoing the jumping development trends, hitherto not experienced in the history of mankind.

In many human activities, there occurred revolutionary innovation changes. The invention of micro-chips and the subsequent miniaturisation led to the enormous acceleration and extension of information flows. However, even these changes belonging by its character still among the classical technologies, are exhausting their possibilities, the further increase of information density on the chip are facing the thermic and induction barriers of micro-potentials. Therefore, also here a revolutionary change is prepared – either the transfer by light (optoelectronics), but rather a new chip quality, so-called bio-chip, when the organic molecule itself becomes a chip. This would further accelerate enormously the development of technological applications and other connected innovations already in the next century horizon.

Many authors of the "globalistics" express an opinion that the enormous acceleration of natural and technical sciences was not followed by the relevant results in social sciences. It can be discussed, but the fact is, that natural sciences influence the human civilisation development by very multiple impacts, on which social sciences are holding very extensive theoretical discussions, but there activities are not of such direct and multiple impacts as the natural sciences activities.

As a very good example, there can serve the hitherto low ability of economic and politology disciplines to reflect the impacts of the revolutionary scientific and technological progress into the solution of the modern political and economic systems, from which the system of the international economic relationships is of the

most important ones. The flows of goods, services, capital, know-how and the human actor have multiplied considerably according to the quantity, but changed only little in quality. On contrary, the asymmetric forms of interdependence are increasing in these flows (they are very strong for example in the area of the scientific and technological knowledge flow).

Thus world economy and its functioning system – international economic relationships – are becoming still more heterogeneous and more polycentric system. The science and technology side is but one of the necessary modification factors, however. For its carrying through, it is necessary to accept a whole series of quite radical changes in the area of the real processes to the limiting of the asymmetric and – on the contrary – strengthening the symmetric forms of international economic relationships. They have to be intensified, made more transparent, rid of certain limitations and, by strengthening of coordination and harmonisation, such a state should be gradually reached when the objectively growing interdependence and internalisation will find a friendly environment in a more complex and symmetrical system of international economic relationships.

This has not succeeded considerably up to now and this state further deteriorates most of the global problems, at least according to their economic aspects. Global problems are multiplying and worsening, but a truly global economy with globalisation of its internal interconnections is created only slowly. The endeavours to overcome the situation when the national, regional and sub-regional subjects – led namely by a very different political motivation – are presenting a strong opposition to the flow of goods, capital and labour by conserving the old and even creating new obstacles, have not been successful.

This general conclusion can be illustrated on the practical fate of a whole series of concrete initiatives leading to the international economic relationships reconstruction. The main goal, but also the stumbling point of all these attempts is – as the American author John Naisbit writes in his well-known book “Megatrends 2000” – “to shift the political structures in such way that it would ease the globalisation of the individual economies” (quoted from translation published by Bradlo Bratislava 1992, p.19).

International economic relations

In this part, we will pay attention namely to the main ones of such initiatives, and that

a) The endeavour on reconstruction of the system of international economic relationships according to the model of the so-called “New International Economic Order” from the mid70s, the title of which was several times changed in the 80s (global negotiation, world economic order, international order etc.), but the core remained basically unchanged – to change the conditions of interaction

between the economically developed countries and the less developed countries (namely developing countries).

- b) The endeavour on removing the tariff and non-tariff barriers in the frame of the GATT negotiations, topped by the so-called Uruguay Round agreements in 1994, which was, however, preceded by a series of similar “rounds” (the most well-known of them are the Tokyo and the Kennedy Rounds) after the WW2.
- c) The endeavour on reaching the elements of the so-called global re-distribution.

ad a)

The new international economic order demands complex was presented and accepted at the 6th and 7th extraordinary U.N. General Assembly in the years 1974 and 1975. The basic documents to it (the Declaration, the Chart and the Action Program) were presented to the DCs (originally to the so-called Group 77) and it is symptomatic, that at first they did not meet with any opposition, on the contrary, they were accepted by the so-called general consensus. It was enabled by the atmosphere of the successful OPEC activities, the transitional boom of raw materials and primary products and also by certain political factors which played into the DCs hands at that time. Nevertheless, the majority of the world academic and theoretical front expressed agreement with the program principles of the initiative, and so did even a part of the liberal decisive political circles and political representations, and that also in the DMEs.

The problems, however, started very soon, almost immediately after the formal passing of the whole concept, as soon as the process went over to the negotiations on concrete steps and mechanisms of introducing the whole complex into real life in the second half of the 70s. After seven years of negotiations, it was stated at the top meeting of the heads of the “South” and “North” countries in the Mexican Cancun, that only a very small part of the original intentions was realised. It cannot say unambiguously, that this failure was caused only by the unwillingness of the “rich” to fulfil the demands of the “poor”, even if, naturally this aspect was strong in the situation of the break between the 70s and 80s recession, the second oil shock etc. However a rather considerable part of the responsibility has to be ascribed also to the breaking negotiation unity of developing countries and pushing through the particular interests of the individual countries or their groups. For example, developing countries were not able to come to any agreement regarding the structure of the product “basket” for setting price indices of their traditional export commodities, what ruined the whole idea of index setting. They were not able to find a common approach in the matter of debt moratorium. They bear a considerable deal of responsibility also regarding the failure in elaboration of the so-called TNK Behaviour

Codex and the Codex on Transfer of Technologies, so that only founding of the so-called Social Fund for Stabilisation of the Developing Countries Export Incomes STABEX, the MINEX (even if in a rather cut down version), some debt relieves, founding of several supporting development funds and reaching some organisational measures (better representation of these countries in the top positions of the U.N. agencies etc.) met with a certain success.

Therefore, we can conclude that the system of international economic relationships has not changed qualitatively, and that notwithstanding certain partial improvements and several attempts of the 80s to renew, under a different name, the negotiations on the "new international economic order". The asymmetrical forms of mutual interdependence have not disappeared; on the contrary, they have deepened in many places. It is especially painful for the world economy in the area of international trade and the scientific and technological co-operation.

ad b)

This obvious failure was reflected in revitalisation of the interest in the GATT negotiations. Also the fate of this long-term negotiation procedure is symptomatic. Even if it is obvious that the amount of the tariff and namely non-tariff barriers of the international trade not only hinders the development of the international trade itself and the necessary trend to the market globalisation, but also the changes in this segment of the international economic relationships are very difficult.

The GATT Uruguay Round was already the eight rounds in succession. The fates of the previous rounds show that the participant countries always found enough space to push through at least a part of their interests, notwithstanding the original agreements, be it the one-sided measures (non-tariff restrictions, application of different protectionist quotas on the base of quality and health-environmental parameters) or, regarding the tariff and non-tariff barriers, utilisation of exceptions and different escape clauses. Looking back at the Kennedy Round, Tokyo Round or the previous rounds, we always found out, that a considerable part of the commodity flows liberalisation (which means the same for the world economy as the blood circulation for living organisms) was additionally blocked by this or another means. Another utilised negation measure was also excluding the whole commodity groups.

A very good example of this is the whole enormous commodity areas of textile, which become regulated as early as in 1962, and that to a great part independently on the GATT. At first, in autumn 1962, the so-called Long-Term Agreement on Cotton Textiles (LTA) was signed, which excluded a great part of this commodity group from the GATT jurisdiction. The diversion which added also the wool and artificial fibres to the cotton fibres. The existence and further extension of the MFA meant, that the whole area of international trade with

textile and clothes and finally also some specific goods with a high textile fibres content was gradually withdrawing from the GATT, since it enabled member countries manoeuvring almost totally independent on the GATT rules. The market erosion concept which this installed was de facto the gravest threat of the gradual breakdown of the GATT as a whole. It is possible to find also several other similar examples of the individual negotiation rounds devaluation

The individual rounds nevertheless represented always a long-term and a very confrontation process. If we only take at present the Uruguay round, it was expected by its opening at Punta del Este in 1988, that it will be finished at the latest in 1990. It was then several times interrupted and in some cases, it threatened with a total collapse, for the last time even at the beginning of 1993. Only by united efforts it finally reached positive results close to the end of 1993 and to the final signature act in Marrakesh in April 1994, which still was submitted to the ratification procedures on national levels. In many countries, however, there are already emerging protests, notwithstanding the obvious and in the exact way provable usefulness of the whole scheme.

On the other hand, it should be stated that the U.R. has overcome, by its complexity, the previous rounds, that finishing of its negotiations was welcomed with a generally positive reflections and that it was supported even by such international organisations which applied considerable exceptions towards the previous rounds (for example UNCTAD). In almost all countries and groups, the U.R. is regarded as a step leading to the international trade stimulation and stability of the international economic relationships in general, in harmony with the ongoing internationalisation objective trends and the mutual interdependence of world economy.

The GATT formally finished its existence by it and has been replaced by the World Trade Organisation (WTO). The real final effect is still to be expected, however, since the whole system will be fully working, after four subsequent steps, only from 2004. Its results should be, however, according to the OCSO, World Bank and other institutions econometric models, considerable. The net world effects should reach, according to the OECD, more than 270 bill. USD, which should be finally reflected also into the lowered consumer prices. Even if the main contributions should be realised by the DCs and China (thus there should be at least partially modified the international economic relationships (IER) system in favour of the "poor"), it has been quantified that all the world economy subjects should profit from the widespread liberalisation, incl. for example the CR (the contribution of 0,8-1,2 bill. USD that is almost 2% of the GDP of the CR in 2002).

In the whole scheme, there is for the first time included to a wider extent the sphere of the so-called intellectual property and technological transfers. From the points mentioned at the beginning of this chapter, it is obvious that this sphere is the most important one and, all in all,

the decisive one for the necessary modification of the IER system. Besides the above described problematic and initiatives of the new international economic order and the GATT, also new forms and phenomena are emerging during the last years, which contribute to the globalisation of many problems, which also will have to be solved in future. Among them, there belong namely new phenomena in the trans-national corporations activities. Still less of their activities are spatially and factually localised.

On the contrary these activities are still more dispersed, what contributes to globalisation. From the enormous mass of products, it is already impossible to locate unambiguously neither the producer nor the place of development and production on the national level, what of course exempts the institutions on this level from the possible control or even regulation. The same regards the sphere of services. The trans-national corporations (TNC) are thus becoming another important actor which has to be counted with in the eventual modifications of the whole IER system.

Another phenomenon of the last years which influences the IER system and complicates it is the ongoing liberalisation, resp. globalisation of the international financial system, which is reflected mainly in the still bigger internationalisation and interconnecting of capital markets. This limits considerably the control of international institutions over financial markets and flows and besides positives, for example higher efficiency of the financial resources allocation in the global measure, it brings about also new risks, such as the absorption ability problem or the so-called foreign capital sterilisation in the periods of its increased inflow, elimination of the inflation influences possibility, etc., what is, among other occurring in the CR at present. The manoeuvring space of national institutions is here objectively narrowing, what also should be taken into consideration in the new system amendments.

ad c)

The endeavour on reaching the elements of the so-called global re-distribution. These are the newest and most radical initiatives. Their realisation probability and chances are not big, regarding what has just been said on the growing power of TNC, financial capital and interconnecting of its markets. On the other hand, they reflect the frustration from the non-successful attempt to reform the IER system in the ways described by the items sub a – b). Their at least partial introduction could theoretically mean the end of the further growth of asynchron forms of interdependence and financing if the non-system, and still more extensive islands of asymmetrical development tendencies and forms of global pauperisation.

These initiatives are most often proposed by the economists and other workers of for example environmental, religious and charity movements of a rather left orientation, disappointed (even if often well

learnt) social sciences experts who are of the opinion that the IER system has already reached the state endangering the whole core and development possibilities of human civilisation, and that in the horizon of several decades. From the multitude of them, we would like to point out to the Czech reader Czechoslovak economist Jaroslav Vanek, an exile author (emigrated in 1948), the only Czech economist ever nominated for the Nobel Prize for economy (for a more detailed information on his person, see the journal *Politická Ekonomie* No.6/2002).

The base of the existing problem is seen by these authors in the changed conditions of the world economy subjects economic interaction, namely in the sphere of trade, which has changed into so-called destructive international trade and is not to be reformed any more by the above mentioned means. Therefore, it has to be changed radically and by the system global re-distribution processes since it is not possible any more to apply to it the classical Riccardo and neo-Riccardo theory definitions of international trade. The countries with expressively lower labour costs are facing destruction of their environment (as well as structural destruction, for example of its agriculture impacted by food imports from the developed countries which are, however, subsidised just from the “destructive trade“ profits) and destroy the conditions of their competition.

How should these processes go on? Their defendants argue that there are several possible ways, both charity and non-charity. It regards for example the “protective tariffs“ for prices exported into the DCs, including labour costs, environmental taxes for environment pollution worsened still more by the fact that a greater part of the production migrates into the DCs after cheap labour, etc. Empirically, these facts are often proved. The difficulty lays, however, in the practical application of such measures in favour of the most handicapped ones. The yields should be, that is to say, re-distributed by a trustworthy, transparent and non-corruptible international institution, the practice testifies, however, that such instructions very often deteriorate into their direct opposite. The theory of “destructive trade“ defendants are often realistic at least in accepting the long-term character, that is the fact that if the present system was created during decades, a new system would ask for at least the same period to be introduced. It is however, difficult to imagine, who would in the interim set the quotas, perform the control, and redistribute the yields etc., if we know how difficult were for example the relatively simple GATT and now WTO negotiation rounds? The whole philosophy of this way of thinking is in a rather basic contradiction to the free competition of the “neo-Riccardo period“ of today and its pushing through is very difficult to imagine. It may, nevertheless, come to the situation when some of the global problems will grow to such an extent in the longer time horizon, that there really will be threatening the danger of the global economic crisis or global confrontation. Then, some of the proposals in this

direction may not perhaps seem as utopic as at present. The world is changing quickly and the consequences of these changes are difficult to foresee.

However, a completely specific importance there belongs to the scientific and subjects with less developed own scientific and technological potential (capital, human and organisational potential). If this does not happen, the majority of global problems will deteriorate also by the fact that the "blood circulation" of world economy, that is the system of international economic relationships and its main part, flows of goods, services, capital and know-how, will stagnate or will reach still more asymmetrical forms.

CONCLUSION

In the present period of explosive scientific and technological progress and changing quality of the science and technological applications quality, it is, of course obvious that the basic innovations in the main directions if the global innovation system will be reserved to only a few countries. It is important, however, that also other countries get the opportunity to participate on the adaptation level of different applications, which are often advantageous to be developed in specific climatic, social or other conditions of these countries (a classical example are biotechnologies – the innovation direction labelled by almost all prognostics as one of the mainstreams for the first decade of new millennium). Global world economy and globally interconnected and harmonically developing system of international economic relationships cannot exist in the conditions of technical and technological dependence of the pronouncedly asymmetrical forms. On the contrary, the after-war science and technology have proven that they had an enormous homogenisation influence on social processes. Therefore there exists such a close connection between the scientific and technological aspects of the human development with the necessary modification of the international economic relationships system, which thus create to a considerable extent the connected vessels. Because of that, there is still more use for the present and namely for the starting society the term of "knowledge society", where the basic development or growth factor is the stress put on education, development of science, research, as well as the development of the cultural sphere with the aim of the complex growth of the human actor quality, so that it is not only able to absorb knowledge, but also to

utilise it in an useful way. The computerisation could be useful in this way, but we can not consider it as an universal aim.

A considerable responsibility for the change of the international economic relationships and scientific and technological progress lays on international organisations both of the governmental and non-governmental type (NGO). Most negotiations in this direction takes place in the U.N. organisations net, which also often initiate and control them, In the sphere of scientific and technological progress, the U.N. created several special organisations and institutions. Among the most important ones, we can mention United Nations Development Programme (UNDP) and United Nations Development Organization (UNIDO), the former of which is aimed above all at projecting and the latter on the industrial development activities. Their activities are subjected to criticism during the last time, the same as the UNESCO, but without them or without their innovated institutional forms, it is hardly possible to imagine any progress in the global problems mitigation. A similar situation is also in the sphere of agriculture (FAO) and environment (UNEP). The technological revolution and its spreading into the developing world is unthinkable without the international investment and financial organisations of the type of the IMF, World Bank, IFC and regional banks (Asian development bank, EBRD etc.). Their activities are also subject to criticism from time to time, but basically there is valid the same as in the previous case.

It is gratifying that the common trend in international organisations becomes a higher understanding and a higher stress on mitigation of the global problems including the international economic relationships reform, even if the practical results are hitherto rather modest.

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