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## INDUSTRIAL REVOLUTIONS: GLOBALIZING OUTCOMES- COORDINATES OF THE RELATION INTERESTS-CONSTRAINT- SEDUCTION

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**Abstract:**

*Industrial revolutions, as a solid foundation of modern globalization, represents the process of transition to mechanization and to the emergence of large mechanized production, manual work being replaced by machine- tools. The industrial revolution will generate deep changes in the world's economic structure. We are dealing, of course, with an extremely complex, dynamic, sharply upward evolution, taking place in several stages- the definition above referring to the first stage-, or we can notice the existence of several „industrial revolutions”*

*This paper try to respond to an essential question like: Is globalization a „new process” or did it originate in the mist of time, having evolved to its present forms?*

**Keywords:** industrial revolutions, globalization, internationalization

*„I have lived long enough to see that differences can breed only hatred, when, in fact, they should be first and uppermost studied” Stendhal*

... When we speak about globalization, we must find its origins, across centuries. Is globalization a „new process” or did it originate in the mist of time, having evolved to its present forms? We are the partisans of the latter hypothesis. Through its spread, free or rather relatively free movement of capitals (money, in the spirit of the time), people, merchandise within its borders – keeping in mind the restrictions of those times-, taking into account its common, imperial policies towards its partners, taking into account the promotion of its beautiful and wise beliefs of Latin civilization on three continents (Europe, Asia, Africa), the Roman Empire can be regarded as a successful attempt at globalization, of internationalization, as a successful attempt at what we understand today by these processes. It was globalization by „seduction” rather than by „constriction”, the Romans’ superior status often being asserted as a model, not as an instrument of oppression. The Roman Empire disappeared in time, but the effects of its spread have persisted and are still persisting, we are benefiting from them today, and it seems we are going to do so for many years to come...

Then, starting with the 15th century, followed the great geographical discoveries- and gains-. With almost unanimous acceptance, Europe was the „starting point”, while the „destination points” were in fact scattered all over the globe. In Asia, in Africa, but especially in the Americas, as a partly novel element- even if we also give credit to the theory according to which the Vikings, led by Erik the Red, were the first to set foot on the American continent, decades before Columbus- promoting European principles of civilization and religion here, establishing colonies, thus setting up an enlarged Europe overseas. „Seduction” was here less manifest, „constriction” playing a much more decisive role. Of course, the old continent received the „news” which its men, the great discoverers and explorers from Spain and Portugal, then from France, England, Germany, etc were bringing to it in word and action. We can include Marco Polo here as well- it is true timidly-, a „per pedes” traveler, not a sailor. There was a tendency in a way, towards a large and relatively single world, even if „torn apart” by countless „internal conflicts” (wars), of the bloodiest and most paradoxical kind. People would die massively, for example in the name of the armed promotion of some „holy ideals”, of some „royal ideals”. All these largely corrupted in their divine spirit by the mirage of gold, which was not seldom criminal, by the edge of bloody swords, by the weapon of poisons (the famous „currara” has not been elucidated to this day), by schemes and plots, and by all sorts of other confrontations...

It is true that in all these respects we speak less of the economy. However, implicitly but many times even explicitly, the economy would reveal its essential place and role, its great influences on society, on the world. Production and productivity were concretely materialized, but not so well felt and asserted at the theory level, they- the respective concepts, vaguely and timidly defined- could not decisively influence the economic development of mankind. The mercantilism school, the „beautiful” school, with its interesting views, with its two stages, the early mercantilism and the developed mercantilism, „saw” the very creation of the plus product only in circulation, an area which actually sublimated it as such, the plus product being largely realized in production. Distinguished and refined physiocrats, the first theoreticians of economic freedom and the world’s first econometrics specialists (Francois Quensay’s famous „Economic Table”), have, however, a better understanding of things, of the actual direction of development. Yet, it seems that this is not enough in order to instill into Europe and into the world the belief in productivity and output growth, which is essential for progress. It is true that both mercantilism and physiocratism significantly contributed through their economic targets to the expansion of the colonial system, in our opinion an advance, even if relative, on the globalization path...

Some steps ahead relative to them, were made from the same perspective by the great Adam Smith. In his book „*The Wealth of Nations. An Inquiry into Its Nature and Causes*”,- first published in London in 1777, and massively republished after that date, today, in most countries of the world in hundreds and hundreds of thousands of editions-, Smith proves more judiciously the economic primacy of labor division and of productivity growth, the growth in welfare, as a sine-qua-non condition, and as a result of output growth. The economic processes, were therefore captured in books. One way

or another, more or less adequately from the perspective of our current thinking, but they were still captured. It was not by chance that Smith, maybe too hastily called by Marx „the economist of the manual labor period”, wrote not for manual work, but for the industrial capitalism to follow, thus surpassing his time through his prospective vision... So, the economic life, the economic practice could not really keep up... Yet, the need for a genuine revolution in production, in activities, a revolution which was to change the economic world, as well as the social, political and cultural one was intuitively felt. A revolution that would be slow to take shape, and would require a long time to be fully understood as such.

It is what we call „the industrial revolution”, (in practice several „revolutions”, or several stages of the same „revolution” seen in its continuous development, in its continuity). Through its effects, this is the most important moment for globalization, even for our globalization today, especially in what it has good. This is the time that has fundamentally changed the world’s configuration and economic structure, and will continue to change it, now and in the future. We are talking about a stage that continues to rely on brute work, but also resorts to brain work, to technical and economic intelligence, to human intelligence in general, which from now on will be fundamentally intertwined with work as it had largely been known until then- mainly brute work. We are going to refer to these things in what follows. We are also talking about the evolution of the „seduction”- „constriction” relation, with the generally desirable increase of the „seduction” proportion, and the development of a „constriction that seduces in time”, followed, even if not always, by palpable positive effects. Because „constriction”- „constriction”, was no longer possible, is no longer possible...

So, „industrial revolutions” as a solid foundation of modern globalization, as I was noting in my course of *„Economic history- The History of the National Economy”*, represents the process of transition to mechanization and to the emergence of large mechanized production, manual work being replaced by machine- tools. The industrial revolution will generate deep changes in the world’s economic structure. We are dealing, of course, with an extremely complex, dynamic, sharply upward evolution, taking place in several stages- the definition above referring to the first stage-, or we can notice the existence of several „industrial revolutions”

In the first instance, the „industrial revolution”, in general, can be defined as the essential and continuous progress in technology, and, of course, in the sciences underlying technologies, as the carrying out of some ample changes in the energetic and logistic support of industrial development, and of development in general, too. What has caused and is still increasingly causing the economic world to „speak” the same language more and more. To have the same objectives, to pursue the same overall goals in a relatively unitary, homogeneous and consistent way. It is only natural, logic that such a matter has evolved from the simple to the increasingly complex, from the primary sector to the secondary, the tertiary, the quaternary one and whatever may come next. „The information technology age” has not fallen out of the sky, it is based on successive increases in the field of production and productivity, of technologies, of industrial infra- and supra-structures, on important mutations in the learning process, in

the social structure, in the fabric of society as such, all these interfering and reciprocally reinforcing each other.

In the second instance, which is only formally different from the first one regarding the „employment” of known and unknown quantities in the „development equation”, a first „industrial revolution” would be that of the transition from manual work to mechanization and to the development of the large mechanized production (see the definition above). A second „revolution” took place almost parallelly, but was extensively influenced at the energetic level and at the level of the industrial logistic support. I am specifically referring here to the „transition from wood to coal and metal”. A third „industrial revolution” will be that of „electricity”, and at the industrial infrastructure level, that of the „railway”, of the „automobile”. Then we could note the „crude oil era”, with its endpoints unfortunately still expanding and booming today. We can note the „aviation era”, the „nuclear era”, etc. Without being able to draw very clear boundaries, the „information technology era” is also relevant, with the creation of specific industrial and economic infra and supra-structures, mainly related to more or less representatively industrialized and post-industrialized economies, but with a high industrialization and post-industrialization potential. Also relevant is the „post industrial” era as such, not separate from information technology, but on the contrary, linked to it, etc.

As I was saying, we are ultimately discussing a complex process, whether it is seen in its stages, or segmentally, each segment illustratively bearing, as a „title”, one of its essential features. Globalization „set in” naturally, gradually, and increasingly as a common denominator, of the cause-effect and effect-cause type, for all these changes. The matter, temporarily delayed, is distinctly visible- of course, intertwined with some important political elements-, in eastern and central Europe as well, although from some moment onwards and as compared to the West, some evolutions have been more confuse, less smooth in this troubled part of the „Old Continent”, there have been more rebounds, stumbles, etc. Yet, in order to arrive at this moment more clear-sighted and in order to „see” and understand it better, let us examine more closely the primary process, the „in nuce” process of „industrial revolutions” and their significant effects on the globalization process. Based on such an analysis of the past, we will be able to make out more correctly what is happening in the present and what the future has in store. And, as always in social history, we will certainly be able to point out a general line of continuity, of course not without ruptures, which have not been overwhelming after all.

Thus, England, the first half of the 18th century. „The industrial revolution” will begin in the field of cotton processing industry. But why England, and why this sector? As early as those times, England had a developed manual labor industry, whose products were consistently demanded both on the domestic market and abroad, an important role being played by England’s colony system, a developing system. At the same time, England had a very high quality educational system, in continuous progress and with the most beautiful traditions. The universities of Oxford, Glasgow, Cambridge, etc provided not only important theoretical breakthroughs, their activities

also revealed a genuine bent to practice, to the real, to applications of the technical and exact sciences. It was also England that had very high quality specialists, passionate about their work, devoted to their calling. Here, in England, were brought from the colonies- as we were saying a developing system- raw materials, very low price materials for industries whose products were in high demand. We are referring mainly to the light industry, to textiles, „fields close to consumption”, with potentialities, with very important development and progress opportunities. The high-life, men or women, required garments made of fine fabrics, large, with refined designs of pleads and folds. It was a fashion which had caught on and was spreading, gaining more and more adepts in England, Europe, the Americas...

So the need existed. Instruments for its satisfaction, for its achievement will be rapidly built. In 1733, John Kay will invent the flying shuttle. The spinning machine will be designed by John Hargreaves, about thirty years later, in 1765. After only a few years, in 1769, R. Arkwright will design the mechanical spinning machine. Finally, in 1804, Cartwright will design the mechanical loom, and this will enter usage. Discoveries, inventions which put together made it possible to use a large quantity of threads, and satisfy the high demand for cloths. A step had been made ahead on the road from manual work to mechanicalism. Others will follow rapidly. Machines were now necessary in order to manufacture other machines, iron, high-power machines capable of working, of using difficult fuels according to the given production and sale capacities. Animal draft transports, relatively few and of small size, could not satisfy the demand either. Important urban concentrations, mining and industrial centers will appear. Or how could industrial quantities of ore, coal (which will replace wood for a source of energy) be carried by cart? Or with the back? The answers to these questions will be equally important.

So, structures and infrastructures. France, 1680. A king- Louis XIV- authoritative and having done many things for his country. In constructions and technology, numerous bridges, viaducts, pipelines, canals, then laboratories with good results, etc. He was a king, a ruler who valued intelligence. A long reign that was drawing to an end. A remarkable physicist and mechanic as well, Denis Papin (1647-1714) becomes in 1680 the inventor of the „steam digester” at that time called „Papin’s pot”. He also invents the centrifugal pump and describes „the thermodynamic cycle of the steam engine”. The beginning had been made... The English James Watt (1736-1819) will perfect the construction, endowing it with an essential element, with a „condensation chamber” maintained at the temperature of the environment. Practically, England and France, hand in hand open new horizons towards industrial development, towards the world’s progress in general. A new driving force will be provided for industrial production development, output and work productivity will be increased.

The manufacturing of machines by machines begins, in other words a genuine revolution of the light industry and the propagation of the technological revolution to the heavy industry, too. As „the use of steam power will require iron machines capable of withstanding higher pressures, the metal industry will acquire new dimensions.” Ore separation begins to be done with pitcoal turned into coke, rather than with wood coal

as it had been done before. The method of coke production had been discovered by Abraham Darby; now were discovered the methods that allowed cheaper steel production- puddling, which made it possible to turn hard and brittle cast iron into pure and malleable iron. Within several decades a huge progress had been made in Europe, which was to further continue...

... Steel becomes essential. In 1856, Henry Bessemer invents the converter, which allows him to obtain liquid steel and in large quantities. However, it is only in 1878, that Thomas Gilchrist discovers the possibility to use ore with phosphor, removing phosphor by lining the converter with magnesium. The effects of his discovery on the extracting industry are impressive. Several figures: in England, the quantity of extracted coal increases from 5 million tons in 1750, to 10 millions in 1800 and 16 million tons in 1829. And iron ore extraction will reach 15 million tons in 1890, the necessary being also ensured from imports of 3-4 million tons of iron ore. Alongside with industry, what else contributed to such stunning dynamics? We have already mentioned transport, that on the „iron road“. This type of transport had become the decisive factor in England's and not only economic development. Animal draft transport was no longer feasible at all. In 1830, the inauguration of the Liverpool-Manchester railway takes place. A grand event, well recorded by the then press and literature. The „barriers“, however many they may have been, had been dismantled for good...

Steam usage actually required more coal: this existed, it was made „available“, „it covered the need“. Steam usage also required, and quite plentifully, iron, steel, so engines and platforms could be manufactured. These existed as well, they „covered the need“. As a matter of fact, the price for one ton of cast iron drops in England from 17 pounds in 1728 to 6 pounds in 1802. Also necessary were the metal processing machinery, the machines, the parts but these too were made available at the right time, as technologies were revolutionized in a manner which had been unconceivable as long as the main raw material was wood. Thus, the drilling machine appears (in 1774), and so does the planing machine (in 1776), the nail machine (in 1790), the cable manufacturing machine (1792), the circular saw (in 1780), the hydraulic press (1795), the micrometer lathe and the pushcart screw threading machine both made by the engineer Henry Maudslay between 1797-1800, etc. The „industrial revolution“, „revolutions“ are booming ...

In such conditions, and inter-conditionally, England's iron production will rise from 700 thousand ton in 1830 to over 2.2 million tons in 1835, the increase being even sharper later. Railway transport will see a genuine „boom“, in England and in the world. In 1850, 35 thousand km of railway line had been built in the world, England holding 10 thousand km. In 1914, however, the world railway network, a network which had been expanded and largely developed in other European states, too, in the United States, in Canada, in countries of South America, in Asian Russia, and in other countries (still colonies) of Asia (India for example), and of Africa, etc- will reach 1 million km.

... Anyway, the specialized industrial language characteristic to the emerging modern capitalism, had become common to almost all states harboring aspirations and velleities in this respect: ore, coke, furnaces, transport, locomotives, carriages, useful substances for ore, energy, efficiency, gross and net profit, technologies, labor force, organization, management etc. We are heading towards eminently new horizons, which would, however, erode fast, the „new” as such being for ever and increasingly fast materialized by something else. As a mater of fact, the bases of „globalism”, of the „mondialization”, of the „internationalization” of economic development had obviously been laid.

Towards 1800, in the conditions of the industrial revolutions, England, France, Germany, the United States, Japan, Russia, etc were speaking almost the same „economic language”, each of them developing, relative to the others, general interests of the same type, general targets of the same type, general processes of the same type. Output, productivity, profit, economic structures had become ordinary words, too, alongside those already mentioned. As there existed a „relatively common denominator”, even if the „numerator” was different, it is without a doubt that important steps were made in the direction of what we now call „globalization”.

In France, tool machines are spreading in the textile industry between 1815-1870, and then rapidly to metallurgy, machine production, sugar industry and paper industry, printing- what a wonderful industry, etc. In 1839, 2,450 steam engines with a power of 33 thousand H.P. were used, while in 1870 were used 27 such engines, with a power of 330 thousand H.P. The growth coefficient is relevant. Still, coal was then available only in small amounts and at a low quality. Even in 1913, 41 million tons of generally low quality coal was exploited in France (little, very little as compared to England, with 279 million tons of coal). This meant that almost 60% of the French coal production had to be used in small furnaces that used charcoal as well, coke becoming widespread mainly after 1860.

As regards iron ore extraction, progress was not very rapid, France becoming a force in siderurgy only some time later. For example, towards 1890, France would make only 500 thousand tons of steel, while England managed to get 3.5 million tons, the USA less than 3 million tons, Germany 1.9 million tons, etc. All this French production was fundamentally marked by the sustained progress of the railway network in France... From the perspective of France's industrialization, of the strong and qualitative industrial development in the country of the Gaelic rooster, two names should be mentioned: a) the great Napoleon, an open spirit, very stimulating for brains, those obvious brains, but not only on the occasion of the „Continental Blockade” in 1806; b) Bonaparte's nephew, emperor Napoleon III, who pursued a policy of development, of support, of protection, of stimulation for modern French industry development and growth. Just like England, the British Empire respectively, the French colonial empire, the second largest in the world after the British one, has its importance, facilitating the procurement of raw materials and low price materials, and the consolidation of strong outlets for products made in the metropolis. And not necessarily as a parenthesis, we have to say that both France, and especially England,

the British Empire, while pursuing the development, consolidation, strong assertion of their national industries, formulated and applied protectionist policies, with the most judicious, irrefutable arguments. They shunted rapidly and became „liberal“ when their manufactured products needed easy entrance on other states' markets. This is why, a French historian of Andre Maurois's stature, wrote in his famous book „The History of England“, that „the principle of the English policy is that of having no principles“. This is a principle, too: „to have no principles“. No comment ...

Germany spurred in its economic development by Friederich List's Zollverein (Customs Union) initiated in 1819 and completed in 1836, develops its metallurgic industry among others, significant through their size and evolution being the Krupp enterprises of Essen. Germany's coal production will rise from 3 million tons in 1840, to 26 million tonnes in 1870, and to 270 millions in 1913. A new star was rising on the economic firmament...

The United States economy has similar evolutions. The political background, generated by essential economic requirements and commandments, was stimulating in this direction. In 1782, the Treaty of Versailles confirms the existence of the United States. Yet, the southern states, such as Virginia, South Carolina, North Carolina, Georgia,- and especially on plantations, with slaves brought relatively recently from Africa on „black ships“-, produced tobacco, cotton, wool, indigo, extracted copper, iron, exploited wood for ship construction, tanned hides. On the other hand, in the northern states, such as Pennsylvania, New – York, New – Jersey, Connecticut, Massachusetts, „fortunes“ were made mainly from trade, from investments in textiles, in industry-related machine constructions, in leather goods, timber, iron smelting, ship construction sites, etc. With a bigger need for free labor and capital investments, the „North“ will impose itself, will win the match, slavery will be abolished, the modern, efficient, and strongly protected industry will „open up“. It is significant that in 1900, the length of railway lines in the United States was 263 thousand km, half of the world network. The construction of roads and navigable canals is developing as well, the bright day of the automobile industry is dawning...

An important, even vital factor in the stimulation of the USA industrial revolutions and industrialization is represented by immigration. For example, between 1847- 1852 a seventh of Ireland's population immigrated to the United States, in 1854 the number of German immigrants reaches 127 thousand, etc. It is also relevant that after the First World War, the USA as well „changes direction“, they are no longer afraid of competition, apparently reduce protectionism and request free entry for American products, merchandise on other markets ...

Japan, with its isolationist traditions but with the western wall „broken“ in 1854 by an American squadron of eight warships, France, England and Russia also being „tolerated“, will „introduce“ and benefit from the best fruit of the „industrial revolutions“. It did not have raw materials but it had „grey matter“. Everything was taking place on the backdrop of the Meiji era, a time of substantial modernization. The development of the Japanese industry will be supported by the state, which will use the cheap labor of impoverished peasants, and benefit from a brilliant Japanese brainpower, capable,



among others, of understanding and applying with high productivity the general, overall achievements of the industrial technology. In the 8th and 9th decades of the 19th century, large financial oligarchies will be built in Japan, even though they show strong familial features: Mi – Tsou –Y; Sumi – Moto; Mi – Tsou – Bechi, etc. The ironworks industry of Yamata stands out in the Japanese space, and after Japan won the Russian-Japanese war of 1905, a weapon industry, largely based on the iron and coal of Manciuia and Koreaa, will also develop here. Yet, the Japanese intelligence ...

Other states of western Europe, of central Europe, Russia, the states of Latin America, will mainly follow on the same path: industrial economy, infrastructures, economic protection as much as possible, education, schools, universities, urbanization and urbanism, etc.

What are the globalization-related effects of this development process in the west, a process of extensive „industrial revolutions“? The world market, seen as the sum of trade relations between countries, is developing noticeably as a result of an increased international division of labor. It is true, the gaps between the west and the countries in the rest of the world, initially and relatively opaque to the „industrial revolutions“, is becoming more obvious. Still, this does not decrease the volume of trading, but actually at that time increases it, it does not promote autarkic economies, but rather „complementary economies“. At the same time, economic relations, even if under the „umbrella“ of states, of the economic policies promoted by them, essentially and primordially constitute themselves between large trusts and companies, the interests and „laws“ of financial markets, of capital markets beginning to prevail, more or less fundamentally, over one or another country's national level, over national interests, etc. Superiority on the world market is increasingly dependent on superiority in industrial development. The United States abolish slavery for good in 1862, thus providing a strong impulse towards freedom to other states, to other people as well. Even if the balance of power is changing- in the world's total industrial output England will go down from around 32% in 1870 to 14% in 1913, but the USA will climb, during the same period, from 23% to around 36%, Germany from 13% to 16%, Russia from 3.7% to 5.5%, etc- the laws as such of industrial development are becoming ever stronger, their core, gravitational point being „the increase in work productivity“ and of course, essentially „profit“. Where this was showing, there was a progress, where it wasn't, there wasn't. Urbanism, in its modern meaning, is mainly connected to industrial development ...

In other words, based on „industrial revolutions“, important globalization benchmarks in its present today sense are now revealed, at the very interference between „free competition“ and „modern development“. The world is becoming smaller and smaller: we have presented the railway. But also representative are the world's great navigation canals, inaugurated in these times of big changes: the Suez Canal (1869), the Corint Canal (1893), the Kiel Canal (1895), the Panama Canal (1914), etc. One would hardly have considered them, had not the industry provided the means, the necessary elements, had it not been for the financial gains thus obtained. More or less inchoate, sometimes even in advanced forms, the vital and general elements of

modern development are showing: the automobile, the plane, the specialized navigation (refrigerated cargo ships, oil tankers, submarines), the wireless telegraph, the telephone, and the tertiary sector is beginning to assert itself strongly as well. All these are supporting and will continue to support globalization in its benefic aspects. It becomes thus „visible”, especially for the West European area, for the USA, Japan, etc. But what was going on in Eastern Europe?

In the center and east of Europe things are relatively different. On the one hand, there are researchers who have "drawn" and are still "drawing" a deep borderline between the "east" and "the west". Especially for the period after the Second World War, but also before it. As if we were talking about different races, different continents, lower intellectual capacities in the east, an inferior spirituality, an essentially different capacity as compared to that of the west. As if the "east" were fundamentally guilty for its rather intricate historical paths, largely designed by others, nevertheless...

All these are, of course, bigger or smaller exaggerations. Yet, I regard as real a series of different evolutions, which depend on the geographical setting and on the historical context, on different efforts. Religions have also made a difference. These are evolutions that, especially after the 18th century and after Europe's west embraced and completed the « industrial revolutions », generated developmental setbacks in the east, as compared to the west's dramatic growth. They have generated less advanced economic forms as compared to those existing in the west. They have generated some delay-specific attitudes and behaviors, less adjusted to the west's thrust towards performance, towards productivity, towards the requirements of mature markets. Things are more complicated, but several characteristics can be outlined : lack of a skilled labor force, lack of more offensive national and individual attitudes on an international market, where the final word belongs to those « economically strong ». But in spite of often adverse circumstances the « industrialist trend » of an emerging, economically educated national bourgeoisie, starts to take shape.

In Romania, this framework includes, for example, P.S.Aurelian, but also Dionisie Pop Marțian, Al.D.Xenopol, George Barițiu, Lazlo Kövöry, Mihail Kogălniceanu etc. They all advocated the necessity of industrial development, the not so small efforts that had to be made, they explained and promoted- sometimes by the force of their own example- actual ways to achieve such an objective. The industrialist trend appears with valuable valences in other east European states as well. It develops convincingly, it has remarkable practical applications and brings to the east many of the positive effects of the « industrial revolutions » present in the west. Machines make their presence in the food industry, in milling, in the paper industry, in the light industry, in metallurgy, in the mining industry. Railway transports see a strong development, etc. Reasonable views are adopted regarding the relations between domestic and foreign capitals, the possibility for a country's natural resources to be exploited by the domestic capital, too not only by the foreign one. An efficiently built structure of industrial production is advocated, the well-known problem of the « price scissors » in foreign trade relations is properly understood, its elements are well placed in the equation. On many occasions political solutions directly answer specific national

interests. On other occasions they do not. In this context, of the clash on interests, a great Romanian economist appears, professor Mihai Manolescu. He is the specialist who irrefutably argues for the necessity of industrial development in all the states of the world. National industries in less-developed countries have to be protected at first, then subject to the rigors of the international market, the quality of their effort and management being the sole generator of real individual and social gain from now on. Yet, not everything was going well...

... The « peak » of pernicious confrontations in the First World War was unfortunately easily surpassed by the more varied confrontations during the Second World War, confrontations which were extremely bloody and resulted in the division of the world between « two parallel and opposed systems », in the « cold war », in the extremely unfortunate economic consequences, etc. Thus, almost everything was against globalization as we know it today. But things have changed, and reality in its evolution pleads for this direction of change. Essential arguments ? The emergence of « global problems » requiring « global solutions », on the backdrop of mutations-industrial revolutions, the global warming and its solutions, the « paradigm crisis », problems posed by « the planetary resource management ». And there are others too, the world is heading towards civilization and globalization, but a globalization to everybody's advantage ...

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