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NEOINDUSTRIAL WAYS OF NATIONAL UKRAINIAN AND DONBAS REGIONAL ECONOMIC DEVELOPMENT

PART I

Introduction

During recent decades the world economy has changed rapidly. Qualitative transformation of the world market institutional foundations rises. National economies are actively integrated into a single global mechanism with a universal system of macroeconomic regulation and appropriate system of assessment. In fact — there is a new world, new economy, not like a traditional old economy of the times of A. Smith's and D. Ricardo's market. What are its specific differences, indeed?

Firstly, there is a rapid development of knowledge market, a role of high-tech sector, of modern high technology manufacturing and marketing is constantly growing, which speeds up the processes of information space computerization of the economy and all social life. In the U.S.A. the costs for buying of computer equipment exceed already the costs for buying of cars, housing and industrial and commercial construction.

Secondly, a new economy is the quick growth of market value capitalization of companies by creating their extensive networks, which carry out groundbreaking research and development in advanced fields of science and technology. These, as a rule, small in number of involved and in amount of capital resources of the company, in essence, define the industrial face of new economy.

Thirdly, a new economy is the economy in which the system of government priorities in science and technology development primarily is aimed at the capitalization of costs, which are invested in a person. Here, the main priority is the policy of promotion of education level and improvement of population health.

Fourthly, a new economy is the economy that provides a high rate of fixed capital renewal, invested in life-supporting sectors of material production and service infrastructure.

Fifthly, a new economy is the economy that provides approximately equal conditions for normal life of every citizen, regardless of the domicile: salary, housing, employment, access to information and transport services and suchlike. Megalopolises become

the most acceptable form of urbanization in these circumstances.

Global structural changes in the world economy are associated with the transition of developed countries to the sixth NEOINDUSTRIAL technological structure, in which a qualitatively new social, resource and high environmental criteria and standards are inherent. They are achieved through structural changes in the economy in general as well as in the individual industries, regions and companies, which provide technological innovation-based breakthrough. Under the globalization the political and corporate elites of various countries build their geo-economic strategies and ways of economy modernization, which are to ensure their worthy place in the new hierarchy of interrelationships. With this the developed countries concentrate the efforts on retaining their leadership in the global innovative production and securing technology leadership over other countries.

The fact that industrial products have become more numerous and have changed and grown more complex during the 200-year history of this epoch is something that we are constantly reminded of as consumers and through the media. The concurrent conversion of the industrial organisation into a new form of organisation, a neo-industrial organisation — or rather into a new form of organising — neo-industrial organising (to stress the becoming rather than the being aspect of industry)—has not received the same attention. This can in part be explained by old ideas having survived within certain spheres of society. In large sections of the educational system, industry is still portrayed as being typified by an old-fashioned factory with massive, fixed capital and assembly-line production controlled by multilevel managerial decisions. This perception—outdated as it is—does not take into consideration the fact that the majority of the well-educated staff of many consulting firms actually work in industry-related projects. In addition, industrial robots and computerised procedures have taken over much of the physical production, which in turn accounts for the trend towards decreased employment but increasing production within industry in most

developed countries. Neo-industrial development is associated with another type of capital-intensiveness in industry, and with other forms of knowledge, as well as with other ways of exploiting available resources. In other words, we are not experiencing the end of industry, of industrial production or of capital intensity in industry, but industry is changing and taking on new, alternative forms in which production per se is less in focus than previously [29, p.3].

Concerning analysis of the situation that is prevailed now in the Ukrainian economy, it is characterized by one word — CRISIS! Ukraine is on the verge of new tests, in the maelstrom of global-scale world challenges, that require the maximum concentration of our joint efforts, consolidation of all society. Very complex realities require prompt and effective response from the leadership of the country, balanced, coordinated actions, aimed at overcoming the crisis. On the other hand, it is also a kind of “moment of truth”, which gives us the opportunity to decide which groundwork can be offered by the economic science to the country, region and government in the short and much longer perspective.

Technological economic development of Ukraine and its regions

About the urgent need for structural reforms of the domestic economy, the power and business have been speaking since the late 90-ies of the last century [4;5;6;13;14]. Therefore, now almost every Ukrainian citizen knows that in the country, besides the constitutional reforms, should be undertaken institutional ones. It is necessary to reform the state apparatus, to simplify a regulatory approval system, to adopt a new tax code, to give serious attention to energy conservation by implementing the reform of industrial enterprises and housing and communal services, and finally to build a legitimate land market [7;9;10;11;12;16]. There is a necessity of these and many other reforms, no doubt. However, in the country their implementation hasn't been succeeded for nearly twenty years...

Technological economic development provides economic development through progressive changes, attracting investments, consistent growth of scientific and technological sector, knowledge economy. Development lagging of the theory of technological structures, disuse of it in the process of state prognostication and control, lead to distortions in the trajectories of the country and regions development. Formation of the post-industrial society in the end of the XX-th century provided a new historical phase in the civilization development, in which the main goods of production became information and knowledge. The features, that distinguished the information society in the developed countries, became: increased role of information

and knowledge in society life; increased proportion of information communications, products and services in the gross domestic product; the creation of global information space, which provides effective informative cooperation of people, their access to the world informative resources and meeting their needs with respect to informative goods and services.

In the modern post-industrial society, information has become the most important value, and the industry of receipt, processing and transmission of information has become the leading sector of activity, where with each year more and more considerable capitals are invested. According to leading scientists, information becomes an important strategic resource, the lack of which leads to considerable losses in the economy. Therefore, the informatization of society acts as one of the crucial factors of economic modernization and the key to the integration of any country in the modern world community.

In the theories of post-industrialism the questions of essence, content, ways and methods of socio-economic transformations in the National and Global scale acquire a specific interpretation, systemic transformations in post-socialist countries, transition period to a new economic system. This is one of the principal differences between theories of post-industrialism, which leaves its mark on the functions of these theories as well.

The French scientist Alain Touraine in the work “post-industrial society” [18] offered not to make any differences between socio-economic systems along an axis of contrasting of different types of property and various social modes of production. Similar thoughts are expressed in the writings of Daniel Bell [1], where the author proposed the so-called multi-axis approach to explaining of the transition from an industrial to a postindustrial society and characterization of the last. The main axes in this case are the development of science and technology, changes in production structure and employment structure, changes in social structure and application of knowledge, changes in property relations.

The American scientist Manuel Castells in the work “The Information Era: Economy, Society and Culture” [27] lays the differences on the other axis — between the pre-industrial era, industrialism and the information civilization. Socio-economic changes take place in the production and knowledge application. “Information Society” appears to be a new name of the postindustrial society in the works of D. Bell. At the core of his approach is not so much a sequence of replacing each other stages of social development, as the changes in social structure, due to increased importance of information, which is associated with the scientific, theoretical knowledge and becomes a base of the economy [1, p. 153]. Transformations in connection with the transition from

industrial society to information society, lead to the isolation and increased social role of the new professional group, which M. Castells outlined by the concept of “informational employees” [27, p. 98]. The activity of the representatives of this socio-professional group and in the Soviet literature is regarded as a cause of changes in the economic, social, political and cultural society life. Castells explains that his term “informational” points “to attribute of a specific form of social organization, in which thanks to new technological conditions, emerged in this historical period, generating, processing and transmission of information have become the fundamental sources of productivity and power” [27, p. 99]. In the system of social division of labor, these employees are concentrated mainly on the Industry Technologies and Software (IT-industry), where they can fully serve as the participants of production. In the studies on the new middle-class, the informational employees play the leading role. O.I. Shkaratan on the basis of an analysis of foreign literature has constructed an ideal model of “informational employee”, highlighting his characterological features. A specific study was conducted by him, the object of which were professionals, managers of companies, engaged in information and communication technology and related industries [28, p. 16-27]. Their responses were compared with views of traditional professionals (which existed before the advent of a new technological structure). As a result, there was a conclusion that such a social-professional group was formed, as a whole.

Differences in definitions of postindustrial society, knowledge economy, as theoretical constructions and the reality indicate some debatable issues, related to the formation and development of post-industrial civilization. The onset of post-industrial stage and the respective society is characterized by a process of creation in the service sector with the increased share of GDP and the concentration in this human activity sphere of more proportion of involved. In countries with high level development in the GDP structure the tertiary sector dominates, and the secondary one is represented by the processing industry, while the share of primary sector is small.

In modern economic literature as to industrialization we can identify such trends in views on the correlation of information and postindustrial societies: 1) the information society — is a certain part of the postindustrial society (Vladislav Inozemtsev[2] and others), 2) the post-industrial and information societies are interchangeable factors (M. Connors and others), 3) the information society is a consequence of industrial development (Daniel Bell [1], J. Martin and others). Noteworthy is the point of view of N. Kondratiev, who connects the post-industrial society not so much with changes in technologies as with a transition to a society, which is based on post-material, information means.

However, no country in the world has reached this development yet.

Technology as an important element of the productive forces always exists in a certain socio-economic form, which is determined by the prevailing production relations. Therefore, with all the unity of all the technological and economic components of social production the inconsistencies and contradictions inevitably occur between them. Capital accumulation and scientific and technological advances change the capital structure, the level of mechanization increases, and consequently, the technical pricing structure of capital changes, which determines the trend of profit rate to reduction. On this basis, the laws of downward productivity of capital are derived. Capital accumulation is a process that combines the economic and technological changes. As far as technological changes have historically allocated limits and go through cycles from growth of its role in economic development to its decay when approaching the technological limit, then these processes correspond to processes of increasing and decreasing of capital productivity ratio. The depth of production decline and reduction of the capital productivity are determined essentially by state of the scientific and technological progress and the degree of usage of its achievements. Such negative processes occur sharply at a constant technical basis. And conversely, the scientific and technical progress, the usage of new technology provides an increasing capital productivity ratio.

Particularly acute the contradiction becomes when one or another technological structure is approaching its limit, exhausting its potential. Therefore, overcoming this technological limit is reached by the transition to a qualitatively new technology and technological structure.

As the assessments of the world’s leading scientists show, now we are exactly on this phase of development — the transition from the downward long wave of M. Kondratiev’s cycle (the fifth technological structure) to the rising wave of new — the sixth technological structure. Therefore, a number of legitimate questions appears: “Has not a modern post-industrial, information society exhausted its potential of breakthrough development? Is the transition to the new sixth technological structure put on the agenda, and at the same time the transition to a new **NEOINDUSTRIAL SOCIETY**? Will this slogan be strategically possible for Ukraine:

“FROM INDUSTRIALISM — omitting the POSTINDUSTRIALISM — to NEOINDUSTRIALISM?”

Today’s neo-industrial economy thus exhibits many of the features that have been described in the futurological books. It is knowledge as well as service intensive, utilising an information technology that is developing and spreading at a rapid pace. We believe, however, that the most radical change in our daily work

is to be found in the way in which economic activities are organised. Old routines, roles and rules are being transformed into or exchanged for new ones. Knowledge and conceptions of work and its organisation are changing. Large production units are being replaced and/or supplemented with flexible organisations.

Temporary organisations and projects are becoming more common as instruments. Rule systems, traditions and other institutions, are becoming obsolete in the same way as in the agrarian society during the traditional industrialism. There are good reasons for asking whether those institutions that handled renewal in traditional industrial societies will also work in a neo-industrial economy. The changes also suggest that the traditional relations between work and leisure of industrialism should be reconsidered [29, p.3].

For example, in less than a year, Russian structures managed to establish control in two of the largest sectors in Ukrainian business: metallurgy and telecommunications. The Russians will also try to squeeze the maximum out of Ukraine in other industries. The future of the acquired assets looks differently. Ukrainian metallurgy could become a raw material appendage for foreign countries, while the telecom sector will become a cash cow for the expansion of Russian business to other regions of the world. In both cases, however, there is clearly a common goal — getting the most out of Ukraine to achieve higher goals in the global economy.

The penetration of Russian capital into the Ukrainian mining and smelting industry began late in 2007. Then, shareholders of the Evraz Group Roman Abramovich, Aleksandr Abramov and Aleksandr Frolov purchased from Ihor Kolomoiskiy the Petrovskiy Steelworks, three by-product coke plants and one and a half ore-enrichment plants.

Calling these purchases successful would be incorrect mainly due to the conflict with the Privat Group, which did its best to put sticks in the spokes of the wheels of the governor of Chukotka Abramovich. However, all the confusion seems to be a thing in the past. Kolomoiskiy is not as omnipotent as his Russian counterparts plus the global economic climate has significantly improved. The surging growth on the global steel market and noticeable warming of relations between top Russian and Ukrainian officials led to a continuation of the Russian crusade for Ukraine's steel industry. In the very beginning of 2010, mysterious Russian buyers with the help of VneshEkonombank acquired a controlling stake in the Donbas Industrial Union from Serhiy Taruta and Oleh Mkrtychyan and in May became the owners of OJSC Zaporizhstal. In the latter case, the new owner risked crossing the paths of Rinat Akhmetov, who also had plans of purchasing the Zaporizhzhya steelworks. In addition, the Donetsk Electro-metallurgical Plant (former Istil) was sold by Alfa Bank to the Russian group Mechel. Given

this, there are two active structures clearly visible in the Ukrainian metallurgy sector — MetInvest owned by Rinat Akhmetov, who fought back Mariupol Illich Steelworks from an unfriendly acquisition, and mysterious Russians who are buying up everything and everyone. Aside from the interests of the Russians and Akhmetov, there is Kryvorizhstal owned by Lakshmi Mittal. However, this plant is in the throes of court trials the outcome of which could influence the alignment of forces. Moreover, the court trials were initiated by the Prosecutor General's Office in the interests of the state, which has become considerably warmer to Russian business than during the presidency of Viktor Yushchenko.

Speaking about the motives of the new investors, it is worth recalling the response of Frolov to the question about the criteria of Evraz when selecting its targets for acquisition: "These should be either assets on developed markets where we will have an opportunity to use our semi-finished products or assets on developing markets where cheap steel can be produced." Clearly, the Ukrainian metallurgy cannot be ascribed to the first category. Ukraine produces 30-35 mn t of steel annually and the share of export accounts for 70-80% of the total output volume. Semi-finished products, slabs and bars account for up to 50% of export. The turnover in this industry are quite impressive. In the record year 2008, steel export brought Ukraine over US \$21 bn. According to the forecasts of the DerzhZovnishInform center, Ukrainian steelmakers will earn US \$14-14.5 bn from the sale of exported metal products in 2010.

This 2010 year, the shareholders of Russian telecom companies basically dominated the Ukrainian market. We are talking about two companies — the Alfa Group and JSFC Sistema (which owns MTS Ukraine). At the end of this summer, the former managed to become the largest owner of VimpelCom Ltd. with headquarters in the Netherlands, which Ukraine's Kyivstar and Beeline are a part of. It seems that the Sistema managed to establish relations with the shareholders of Astelit (TM life:)), the third largest mobile operator in Ukraine. Sistema has yet to make any major acquisitions, but its influence on the Ukrainian market could increase by the end of the year during the privatization of Ukrtelecom.

As a result of a transaction between the Russian Alfa Group and the Norwegian holding Telenor on the merger of Kyivstar and Beeline, the positions of the Scandinavians on our market have weakened significantly. Earlier, they directly controlled over 50% shares of the country's largest operator Kyivstar, while now they indirectly own only 36.03% of the merged VimpelCom Ltd. Meanwhile, Alfa remained its largest shareholder with 44.65% of the voting shares. The merger of Beeline and Kyivstar was not particularly thrilling for the two remaining market players — Astelit and MTS Ukraine.

Astelit management even appealed to the Antimonopoly Committee of Ukraine this past spring requesting it to additionally study the current trend of market concentration. The AMC gladly agreed to do so, thereby putting the deal of the century under threat. However, in the middle of this summer the relations between Alfa and Astelit shareholders (the Turkish holding Turkcell and the Ukrainian SCM of Rinat Akhmetov) apparently improved when the latter recalled its claim from the AMC. Noteworthy is that at the same time Alfa became one of the largest owners of the Turkish holding increasing its stake in it to 13.22%. Thus, Alfa gained the power to influence the decision making process of three operators — Kyivstar, Astelit and Beeline .

ProUA sources claim that in autumn Alfa managed to find a final compromise with SCM, a minority shareholder in Astelit, regarding the distribution of radio frequencies in such a way that none of the parties would look like a monopoly in this sector. The two sides refused to comment on such information. However, if this is the case then the AMC will soon give its final approval to the merger of Ukrainian assets controlled by Russians and Norwegians. “If the opposition of competitors dies out, the regulatory body usually takes this into account,” a source to *proUA*. As soon as the Alfa Group strengthened its position on the Ukrainian market, its offspring VimpelCom Ltd. began realizing its plans of international expansion. Last week, it announced the acquisition of holding of telecom assets of Egyptian businessman Naguib Sawiris — companies owned by the Weather Investments S.p. Group, by the Amsterdam-based holding company. The deal will cost VimpelCom Ltd. US \$6.5 bn. In order to pay such a high price for an acquisition, a company must naturally earn a decent amount. And where else would a company manage to do so than on old markets on which it has had a significant presence? Moreover, the company has practically managed to successfully create an ideal environment for monopolization in Ukraine, one of the most powerful markets, with all the ensuing consequences. For the average Ukrainian, this can mean only one thing — a hike in tariffs for voice communication and Internet services. Notably, the turnover of companies indirectly associated with the Alfa Group in Ukraine is massive even by world standards. In Q2 2010, the turnover of VimpelCom Ltd. united assets in our country was US \$310.6 mn, Astelit — US \$89.5 mn. Based on these indicators, one can assume that the total annual turnover of the aforementioned Ukrainian companies may exceed US \$1.5 bn. To avoid a slightest turbulence, Alfa’s daughter company must simply find a common ground with the second Russian structure on the Ukrainian market — Sistema (MTS). In this case, the sale of the Ukrainian state-run communications operator Ukrtelecom (privatization is scheduled for the end of the year) could

be the ultimate bargaining chip. Nothing can prevent the two Russian companies from discussing privately who acquires this asset in order to not offer too high a price on tender. Moreover, they can agree to not infringe upon each other’s interests on the usurped Ukrainian market [30].

Summing up the total results in both the metallurgy and telecom sectors of Ukraine, it is worth noting that the Russians must take into account at least one Ukrainian structure during their active expansion into the country, namely SCM controlled by Party of Regions MP Rinat Akhmetov. The Russians must either agree to a compromise with him or seek common benefits in their joint businesses. As for average Ukrainians, they are not likely to feel an improvement in the quality of life after the intervention of the Russian cousins into the nation’s key industries. Investors want to see a return on their investments, which is not likely to happen through an increase in social standards and wages. Furthermore, granting Ukraine the status of ‘semi-finished product’ supplier will not increase proceeds to the budget, because these products are cheaper than those that undergo a higher level of processing. Meanwhile, interactive entertainment gaining popularity among Ukrainians by the day — e.g. Internet, calls to friends and relatives — may very soon get be more expensive than it was in the past.

Banks cut interest rates and collateral requirements hoping to secure a successful position in corporate lending. Ukrainian banks are unwilling to unfreeze lending to businesses before the end of the year. However, in order to win future clients they are already starting to lower interest rates. The volume of corporate loans is slowly on the rise. According to the NBU, in June the credit portfolio of corporate clients grew by 0.6% (or UAH 3 bn), in July — by 1.9% (UAH 7.7 bn) in August — 1.3% (UAH 6.5 bn). In the January-August period the loan portfolios of legal entities grew 2.9%. For comparison, in the first six months of 2010 this indicator shrank 0.3%. At the same time, financial experts say real growth in lending to businesses was slightly higher. Despite this, the performance results of banks are being “eaten up” as to are forced to cover the unpaid debts on loans previously issued to borrowers. There are several factors forcing commercial banks to be more generous. “The main engine driving the re-activation of corporate lending is the excess of liquidity. An inflow of deposits is higher, while lending is still somewhat lagging behind,” said Director of the Corporate Loans Department of Alfa-Bank (Ukraine) Svitlana Monastyrska. In addition, sensing that the crisis is quickly coming to an end banks are fighting to secure a place in this potentially lucrative segment. Nevertheless, the number of creditors remains limited. Subsidiaries of Russian banks being stably supported by their parent structures are still in the lead in the Ukrainian banking sector. “At the moment, the most

active players on this market are Russian banks as a result of the thawing of relations between the two countries. In addition our bank such major financial institutions as Prominvestbank (owned by the Russian Vneshekonombank), VTB and Alfa-Bank are most active,” says Deputy Chairman of JSC Sberbank of Russia Marina Bykova. Russia’s Deputy Prime Minister for Finance Aleksei Kudrin, who heads the supervisory board of Vneshtorgbank, the credit portfolio of VTB for loans to Ukrainian companies alone amounted to approximately US \$3.5 billion. The main competitors are domestic state-owned banks, as well as the affiliates of certain Western European banks and domestic majors. However, the market is getting overcrowded even for such a narrow circle of creditors. Banks are no longer as willing to dish out loans as was the case before the financial crisis, fearing a rise in bad debts. At the same time, there are not that many wealthy borrowers that can boast a clean credit history and strong financial performance. According to banking experts, the most prosperous situation can be observed in the food and pharmaceutical industries. “Prospects of receiving loans look good for giants in the agriculture, food processing and production, machine-building and power engineering, transport and communications sectors. Effective infrastructure projects will also receive substantial support,” says Manager of the Loan Management Division of ING Bank (Ukraine) Oleksiy Mostoviy. In the ranks of credit outsiders. As was the case earlier, the construction industry remains an outsider in terms eligibility for loans as the vast majority of banks try to steer clear from enterprises in this sector. Banks are most willing to give short-term loans as working capital up to one year, at most — up to three years. Gradually, financing of the purchase of fixed assets is on the rise. “If a company is stable even in times of crisis, for example, a company operating in the food industry, has reliable distribution channels and is not affected by exchange rate risks, we are even ready and willing to finance investment projects,” says Iryna Mykhailova, Executive Director of Forum Bank (Commerzbank Group), which works with key corporate customers. The shortage of high quality borrowers forces banks to be more flexible. This primarily affects the cost of a loan. In 2009, interest rates on loans in hryvnia were 25-30% per annum. In early spring of 2010, they dropped to 20-25% and today are 18-20%. The requirements for maintenance have also changed. “Initially, real estate that covered a loan twice over or deposits in the loan currency were the only form of collateral at the height of the crisis. Today, banks accept automobiles, equipment and turnover goods as collateral for a loan. It is now also possible to provide “blank” overdrafts popular in pre-crisis times and other goods that carry a minimum credit risk such as tender

guarantees,” noted experts at VTB Bank. According to the forecasts of financial experts, the growth rate of the credit portfolios of legal entities in the banking system this year will not likely exceed 5-8%. Banks unlikely will enliven lending to businesses before early next year. “While 2009-2010 was a period of restructuring of loans, in 2011 all banks that have coped with bad debts and survived the peak of the crisis will gradually restore corporate lending portfolios,” Bykova predicts [31].

The features of such processes more clearly are felt in the modern information economy. After all, information and knowledge as a new production resource remove the questions of limitedness, provide the growth of output, implement the action of increasing productivity law. D. Bell notes: “Replacing of the working machines leads not only to labor savings, but also to investment savings, because each successive unit of capital is more efficient and productive, than the previous one. And therefore, less costs are needed per unit of production” [1, p.164].

Modern information society makes changes in the nature of technological and economic development. Industrial economy is characterized not only by the law of downward capital productivity, but also increased entropy by using matter and energy. However, it is possible if the technical-economic level of production remains unchanged. Qualitatively new technologies are distinguished by providing a rational and more efficient usage of energy and matter, that’s why radical technologies of breakthrough predetermine resource provision and thus reduce the entropy of production systems. At the same time, this leads to increased profit rate, although then may be a gradual decline over a relatively long period.

The methodology of technological development of a country is clearly articulated in the writings of the researcher T. Stouner: “In an agrarian economy the economic activity was associated mainly with the production of enough quantity of food, and the limiting factor usually was the availability of good land. In the industrial economy, economic activity was mainly the production of goods and the limiting factor more of all was the capital. In the information economy the economic activity — it is mainly the production and usage of information in order to make all other forms of production more effective and, thus, to create more material wealth. The limiting factor is the knowledge available” [2, p.64]. There is a question to determine how these factors will look like in conditions of neoindustrial economy.

Returning to the theory of Bell, it should be noted that he has developed a new concept of a sector theory, which separated, except the third, as well the fourth and fifth structures: for this he has cut the third sector, having limited it with transport services and utilities; and trade, finance, insurance and real estate transactions took to

the quaternary sector, and the quinary sector included health, education, recreation, government agencies. This concept of Bell rouses a number of controversies in the modern economic world of science, but its study allows to define more clearly the technological structures and the corresponding leading technologies in each of them.

Notwithstanding these controversies, D. Bell formulated the nature of the transition from industrial to postindustrial society: a new society does not replace industrial or even agricultural one, but gives a new dimension, including the sphere of data and information usage, that are a necessary component of society, that inevitably becomes more complicated. Thus, society loses nothing, but increases production capacity, converts it to a new development level. The transition to a postindustrial society, and from it — to neoindustrial — does not deny the existence of the agricultural and mining sectors. Consequently, we can conclude that neoindustrial society will not deny the achievements of the information one. The developed industry converts agriculture and extractive industries through the introduction of modern machine technology, complex mechanization and production automation. This allows to increase productivity and reduce employment in this area, and to convert a free labor force to a modern industry.

The transition to a new technological method of production is accompanied by profound structural changes in production sectors. Noteworthy are the views of Jeffrey Sachs, who notes that the division of labor in the world in terms of technology development is deeper than ideological differences. A smaller part of the planet with a population of approximately 15% of its whole population (developed countries), in practice provides the rest of the world's countries with technological innovations. The second part, which comprises about half of the whole population, is able to reproduce these technologies. The rest of the planet, which is populated with about a third of its whole population, is technologically divorced — it does not create innovation itself and does not introduce foreign technologies. The main problems of such countries are the widely-spread infectious diseases, low agricultural productivity and environmental degradation. Accordingly, technological changes are above their strength. That's why, the developed countries are at the peak of post-industrial stage of development. The information and intelligent technologies dominate in them, the bulk of computers is concentrated, a high standard of living is provided.

Elvin Toffler describes the features of a modern society: "Societies of "first wave" receive their energy from the living batteries — muscular strength of man and animals — or from sun, wind and water, the goods of usual production are made by piece on a by-order basis, what considerably relates to distribution as well" [3, p. 233]. In

other words, a pre-industrial society is characterized both by primitive mode of production, and low-level production, and hence by the appropriate living and working conditions. Absolutely correct is the statement of Jeffrey Sachs: "To overcome the gap in technologies is much more complicated than the gap in the capital."

Economic views of Joseph Schumpeter define the elements of institutionalism and neo-classical trend of science. In "The Theory of Economic Development" Schumpeter as opposed to Walras explores not the conditions of economic equilibrium, but develops the theories of economic development, in the center of which are those internal factors that cause the economic development of the system. A special contribution of Schumpeter to the economic theory consists in that he explores the factors that cause the balance of the market system inside. These internal factors become the new production combinations, which determine the dynamic changes in the economy: the creation of a new product; usage of new production technology; usage of new production organization. Production, according to the teachings of Schumpeter, can not exist without the constant revolutionary changes in technology and production technology. Such constant innovations, which are implemented in the manufacturing process, are a major source of profit, which does not exist in a situation of production. Profit is possible when the economy is in constant motion, in the process of dynamic development.

(To be continued in № 4, 2011)

References

1. **Белл Д.** Грядущее постиндустриальное общество: пер. с англ. / Д. Белл ; под ред. В.Л. Иноземцева. — М. : Академия, 1999. — 720 с.
2. **Иноземцев В. Л.** Модели постиндустриализма: сходство и различия / В. Л. Иноземцев // Общество и экономика. — 2003. — № 4 — 5. — С. 51 — 96.
3. **Тоффлер Э.** Третья волна / Э. Тоффлер. — М. : БЕК, 2004. — 612 с.
4. **Моделі** ендегенного зростання економіки України / за ред. д-ра екон. наук М. І. Скрипченко. — К. : Ін-т екон. та прогноз., 2007. — 576 с.
5. **Ходаковський С. І.** Методологія наукових досліджень в парадигмі синергетики : монографія / С. І. Ходаківський, В. К. Данилко, Ю. С. Цал-Цалко. — Житомир : Житомирський державний технологічний університет, 2009. — 304 с.
6. **Мочерний С. В.** Методологія економічного дослідження / С. В. Мочерний. — Л. : Каменяр, 2003. — 326 с.
7. **Нижник В. М.** Економічна безпека України в системі євроатлантичних інтеграційних процесів: навч. посібник / В. М. Нижник, М. В. Ніколайчук. — Хмельницький : ХНУ, 2008. — 439 с.
8. **Ойкен В.** Основы национальной экономики / В. Ойкен. — М., 1996. — 462 с.
9. **Філіпенко А. С.** Глобальні форми економічного розвитку: істо-

- рія і сучасність / А. С. Філіпенко. — К. : Знання, 2007. — 607 с. 10. **Чухно А. А.** Сучасні економічні теорії: підручник / А. А. Чухно, П. І. Юхименко, П. М. Леоненко. — К. : Знання, 2007. — 878 с. 11. **Пилипенко Ю. І.** Технологічна структура національної економіки України та стратегія її реформування / Ю. І. Пилипенко // Економіка і держава. — 2009. — № 12. — С. 22 — 34. 12. **Грущинська Н. М.** Теоретико-методологічні засади сучасного економічного розвитку з урахуванням трансформації технологічних укладів / Н. М. Грущинська // Економіка і держава. — 2009. — № 12. — С. 29 — 32. 13. **Економічна** оцінка державних пріоритетів технологічного розвитку / за ред. д-ра екон. наук Ю. М. Бажала. — К. : Ін-т екон. і прогнозув., 2002. — 320 с. 14. **Федулова Л. І.** Перспективи інноваційного розвитку промисловості України / Л. І. Федулова // Економіка і прогнозування. — 2006. — № 2. — С. 58 — 76. 15. **Статистичний** щорічник України за 2008 рік / Держкомстат України. — К. : Консультант, 2009. — 584 с. 16. **Денисенко М. П.** Вплив інновацій на прискорення розвитку економіки / М. П. Денисенко // Проблеми науки. — 2002. — № 2. — С. 14 — 21. 17. **Aron R.** 28 Lectures on Industrial Society / R. Aron. — London, 1968 — 356 p. 18. **Touraine A.** The Post-Industrial Society / A. Touraine. — London, 1974. — 266 p. 19. **Castells M.** Information Technology and Global Capitalism / M. Castells // On the Edge. Living with Global Capitalism. — London, 2000. — P. 59 — 74. 20. **Глазьев С. Ю.** Теория долгосрочного технико-экономического развития / С. Ю. Глазьев. — М. : Наука, 1993. — 348 с. 21. **Шестопапов Г. Г.** Інноваційний потенціал економічного зростання країни / Г. Г. Шестопапов // Інвестиційно-інноваційна стратегія розвитку національної економіки: зб. наук. праць. — К. : Об'єд. Ін-т економіки, 2004. — С. 39 — 55. 22. **Інноваційний** розвиток економіки та напрями його прискорення / за ред. В. П. Александрової. — К. : ІЕП НАН України, 2002. — 77 с. 23. **Пирожков С. І.** Моделі і сценарії структурно-інноваційної перебудови економіки України / С. І. Пирожков // Інвестиційно-інноваційна стратегія розвитку національної економіки: зб. наук. праць. — К. : Об'єд. Ін-т економіки, 2004. — С. 5 — 10. 24. **Райхель Ю.** Тот пример. И не тот / Ю. Райхель // День — 2010, 30 июня. — С. 3. 25. **Савицкий А.** Украинский “конструктор атомов и молекул” будет служить медицине / А. Савицкий // День. — 2010, 21 июля — С. 5. 26. **Чернышев А. Б.** “Информационные работники” в структуре управления отечественных компаний / А. Б. Чернышев // СОЦИС. — 2010. — № 3. — С. 85 — 92. 27. **Кастельс М.** Информационная эпоха: экономика, общество, культура / М. Кастельс. — М. : ГУ-ВШЭ, 2000. — 452 с. 28. **Шкаратан О. И.** Профессионалы и менеджеры в сфере занятости — положение и реальное поведение / О. И. Шкаратан, С. А. Иняевский // СОЦИС. — 2006. — № 10. — С. 16 — 27. 29. **Ekstedt E., Lundin R., Soderholm A., Wirdenuis H.** Neo-Industrial Organising: Renewal by Action and Knowledge Formation in a Project-Intensive Economy / E. Ekstedt, R. Lundin, A. Soderholm, H. Wirdenuis Routledge, UK. — 1998. — 240 p. 30. **Yurasov S., Samofslov A.** Why Russians need Ukraine's business / S. Yurasov, A. Samofslov // www.weekly.ua/pulse/finance & markets/2010/10/25/152903.html 31. **Pysmenna T.** Russian banks take lead / T. Pysmenna // www.weekly.ua/pulse/finance & markets/2010/10/18/173100.html
- Chumachenko M. G., Amosha O. I., Lyashenko V. I. Neoindustrial ways of national Ukrainian and Donbass regional economical development**
- Priorities which have been actually formed in Ukraine in the last decades do not answer those which are widespread in the world. Strategy of economic breach of Ukraine is really can be based on speed-up of the development of those domestic productions which led to competitiveness on the internal and external markets.
- Keywords:* innovation, technology, postindustrialism, neoindustrialism.
- Чумаченко М. Г., Амоша О. І., Ляшенко В. І. Неоіндустріальні шляхи розвитку національної економіки України та регіональної економіки Донбасу**
- Пріоритети, які фактично сформувалися в Україні за останні десятиліття, не відповідають тим, які поширені у світі. Реальна стратегія економічного прориву України може базуватися на прискореному розвитку тих вітчизняних виробництв, що довели конкурентоспроможність на внутрішньому і зовнішньому ринках.
- Ключові слова:* інновація, технологія, постіндустріалізм, неоіндустріалізм.
- Чумаченко Н. Г., Амоша А. И., Ляшенко В. И. Неоиндустриальные пути развития национальной экономики Украины и региональной экономики Донбасса**
- Приоритеты, которые фактически сформировались в Украине в последние десятилетия, не отвечают тем, которые распространены в мире. Реальная стратегия экономического прорыва Украины может базироваться на ускоренном развитии тех отечественных производств, которые довели конкурентоспособность на внутреннем и внешнем рынках.
- Ключевые слова:* инновация, технология, постиндустриализм, неоиндустриализм.

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