

# KNOWLEDGE BASED INDUSTRIAL ECONOMY AND INNOVATIVE-INDUSTRIAL CIVILIZATION

B. I. Ostapenko

*PhD, Associate Professor*

*National Medical Academy of Postgraduate Education*

*Kyiv, Ukraine*

*Ottawa, Canada*

*Email: [ostabor@hotmail.com](mailto:ostabor@hotmail.com)*

What would be a socio-economic model of society that solves a number of problems of misbalanced global and national economies, distorted by post-industrial con industrial dichotomy? The innovative-industrial civilization, employing the knowledge based industrial economy with social cohesion and vertical mobility is the most effective socio-economic civilization that secures the symbiosis of the creative potential of individuals and society in the entire spectrum of socio-economic activities of human being.

**Keywords:** post-industrial economy, industrial economy, knowledge based industrial economy, innovative-industrial civilization.

Какой была бы социально-экономическая модель общества, решающая ряд проблем несбалансированной глобальной и национальной экономики, искаженной дихотомией противостояния постиндустриальной индустриальной экономик? Инновационно-индустриальная цивилизация, использующая индустриальную экономику, основанную на производстве знаний совместно с социальной сплоченностью и вертикальной мобильностью, является наиболее эффективной социально-экономической цивилизацией, которая обеспечивает симбиоз творческого потенциала личности и общества во всем спектре социально-экономической деятельности человека. .

**Ключевые слова:** постиндустриальная экономика, индустриальная экономика, индустриальная экономика, основанная на знаниях, инновационно-индустриальная цивилизация.

Якою б була соціально-економічна модель суспільства, яка вирішує низку проблем дисбалансу глобальної та національної економіки, спотворених дихотомією протистояння постіндустриальної і індустріальної економік? Інноваційно-індустріальна цивілізація, що використовує індустріальну економіку, засновану на виробництві знань спільно з соціальною

згуртованістю та вертикальною мобільністю, є найефективнішою соціально-економічною цивілізацією, яка забезпечує симбіоз творчого потенціалу людей та суспільства в усьому спектрі соціально-економічної діяльності людини .

**Ключові слова:** постіндустріальна економіка, індустріальна економіка, індустріальна економіка, заснована на знаннях, інноваційно-індустріальна цивілізація.

## **Introduction**

Post-industrial society has reached its limit. Global economy demonstrates sustained trade deficit between post-industrial and industrial countries [5]. The most socially and economically developed post-industrial societies are no longer able to produce the required amount and quality of knowledge, and successfully export it for a balanced import of goods, food and services from industrialized countries [8]. At the same time, the most successful countries of the post-industrial world demonstrate leading socio-economic positions in the global division of labour, for example, Germany, preserving and strengthening the industrial part of their economy [6]. Along with this, the leaders of the industrial world, for example China, have mastered the production of knowledge to such a large extent that they reduce the import of knowledge, increase their production and compete in the world market, exporting their scientific and technological achievements [9]. Moreover, leaders of the industrial world declared the goal to add to the industrial power of their countries the production of scientific and technical knowledge of a level commensurate with the post-industrial world [7]. It is revealing, that in 2012 the leaders of the post-industrial world recognized the need to restore their own industrial production to meet their domestic socio-economic needs and to secure a balance in world trade with industrial countries [1,3,4].

## **Scope**

What would be a socio-economic model of society that solves a number of problems of misbalanced global and national economies, distorted by post-industrial con industrial dichotomy? There are essential needs: to overcome the imbalance in world trade between post-industrial and industrial countries; to include creative potential of each member of society in the socio-economic activities of their country, so dramatically excluded within post-industrial societies; to provide sustained socio-economic and creative inclusion for the folks of nations; and to increase a produce for the own community and vanguard power of the society in global socio-economic competition.

## **Global Shift and Socio-Economic Potential**

The phenomenon of socio-economic development of China, India, Brazil, South Korea and a number of other countries has led to a new situation in the relationship between post-industrial and

industrial economies. Global division of labour between post-industrial and industrial countries, where the former produced and exported knowledge, and the latter produced industrial products based on imported knowledge, demonstrates a sustained imbalance. Post-industrial countries can no longer cope with the task of producing the required amount of knowledge and successfully exporting it to meet their needs for industrial products [2]. Furthermore, leading industrial countries have increased the production of knowledge to the level of a strategic turning point in the global division of labour, importing knowledge less and less from post-industrial countries, gaining more and more productivity based on their own know-how, and creating competition for post-industrial countries in the market of know-how. Leading industrial countries develop into knowledge based industrial economy. Thus, Wang Yuan, Vice President of the Chinese Academy of Science and Technology for Development (CASTED), announced the creation of a knowledge economy in China: "China must move from a low-cost manufacturing economy to a scientific and innovative economy." [7]. Moreover, the initial compensation for the significant loss of jobs in post-industrial countries with the financial and socio-economic benefits of transferring industrial production to regions with a cheap and not subject to an expensive system of social guarantees labour is no longer sufficient to ensure a high standard of living of the post-industrial societies. Post-industrial countries live in debt for decades, unable to retrain and employ millions of workers of industrial professions after transfer of their industries abroad, and gave rise to a whole class of people excluded from socio-economic and professional activities. And this is publicly acknowledged in the speeches of US President Barack Obama and British Prime Minister David Cameron. In February 2012 President B. Obama said that "the key to the American economy out of the crisis is production" [4]. Soon Prime Minister D. Cameron also said that "the restoration of production is necessary for the British economy." [1]. Thus, the leadership in the global economy is shifting towards knowledge based industrial economies while the post-industrial economies lacking behind.

The socio-economic national and global potential of the innovative-industrial socially oriented market economy is the largest and most stable, because it unites the efforts of all citizens of society and motivates them socially and creatively. An innovative-industrial society is a symbiosis of industrial and innovative production capabilities in one socio-economic system uniting human capital in its full creative potential. The key to socio-economic success of an innovative-industrial civilization is the unification in one society of scientific, industrial and agricultural production, and real-time information efficiency for the efficient and sustained provision of knowledge, food, goods and services through the universal employment of the entire folks of nation, for the whole community. Such integrity of the national human capital substantiates the possibility of a systemic solution to a number of socio-economic problems and provides an increase in the avant-garde power of society. Implementation of the knowledge based industrial economy to the height of innovative-industrial civilization provide multiple social and economic benefits: firstly, conditions are being created to achieve a balance of world trade between post-industrial and industrial countries; secondly, systemic opportunities are being created to include folks of a

nation in full creative life; thirdly, integration of the whole national human capital are being secured to employ the creative potential of each and every member of society systematically that empower the avant-garde scientific, technical and social potential and productivity of the nation.

## **Conclusion**

We can conclude that the most viable for global competition and for national development is the socio-economic model of society, which provides a balance of knowledge based industrial economy with industrial and agricultural needs within society itself. That is a society that systematically ensures the simultaneous production of effective and relevant scientific knowledge and technological know-how, national produce of food, energy and industrial products, both for domestic consumption and for export, acquires the possibilities of symbiosis of post-industrial and industrial societies in a knowledge based industrial economy, creating an innovative-industrial civilization. The innovative-industrial civilization, employing the knowledge based industrial economy with social cohesion and vertical mobility is the most effective socio-economic civilization that secures the symbiosis of the creative potential of individuals and society in the entire spectrum of socio-economic activities of human being.

## **Bibliography**

1. Cameron, David. David Cameron prepares economic growth plan / David Cameron. BBC News. UK Politics. Website. 2012. URL: <http://www.bbc.co.uk/news/uk-politics-19454322> (20.09.2020).
2. Khanna, Ro. Entrepreneurial Nation: Why Manufacturing is Still Key to America's Future? / Ro Khanna.– McGraw-Hill, 2012.– 272 p.
3. Nowicki, Dan. Manufacturing key part of Obama economic plan. 2012. URL: <http://www.azcentral.com/arizonarepublic/news/articles/2012/01/25/20120125obama-manufacturing-key-part-economic-plan.html> (20.09.2020).
4. Obama, Barak. Remarks by the President on American Manufacturing. Boeing Production Facility. Everett, Washington. The White House Website. February 17, 2012. URL: <http://www.whitehouse.gov/the-press-office/2012/02/17/remarks-president-american-manufacturing> (20.09.2020).
5. Schramm, Jennifer. Learning to Compete in the Knowledge Economy / Jennifer Schramm. SHRM Research. Workplace Visions, No.3/ 2005.–8 p.
6. The Secrets of Germany's Success. What Europe's Manufacturing Powerhouse Can Teach America. Foreign Affairs. July/August 2011.
7. TWAS. Website. China Seeks to Build Knowledge Economy. 2012.
8. Weinberger, Jillian. Is Manufacturing the Key to Innovation? / Jillian Weinberger. The Takeaway Website. October 16 2012.

9. Zeng, D.Z. China and the Knowledge Economy: Challenges and Opportunities / Douglas Zhihua Zeng, Shuilin Wang. World Bank. 2007.–38 p.