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ACCUMULATION OF THE NEW FORMS OF CAPITAL AMID GLOBAL ECONOMIC INSTABILITY

Accumulation of the modern forms of capital, namely intellectual, human, social and cultural have been described in the article. Tangible and intangible forms of capital accumulation, manifestation of extensive and intensive ways of capital accumulation have been figured out. Problems have been identified and the main trends of modern forms of capital development have been determined.

New digital economy`s impact on changes in capital essence and the ways of its accumulation have been noted.

It has been emphasized that there is a need for government regulation of these modern forms of capital interaction to support social development and stability and rise the national wealth.

Keywords: intellectual capital, human capital, social capital, cultural capital, accumulation of modern forms of capital.

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НАГРОМАДЖЕННЯ СУЧАСНИХ ФОРМ КАПІТАЛУ В НЕСТАБІЛЬНИХ УМОВАХ ГЛОБАЛЬНОЇ ЕКОНОМІКИ

Розвиток цифрових, інформаційно-комунікаційних та інших нових технологій спричиняє зміни в основних економічних процесах та явищах, що відображається також у накопиченні капіталу. З'являються нові тенденції, явища, які змінюють середовище, виробничий процес, засоби та предмети праці. Тобто робоча сила повинна відповідати новим вимогам, тобто навикам та звичкам агента соціальних відносин.

У статті охарактеризовано нагромадження сучасних форм капіталу: інтелектуального, людського, соціального, культурного. Виокремлено речові і не речові форми нагромадження капіталу, прояв екстенсивного та інтенсивного способів нагромадження капіталу. Виявлено проблеми і визначено основні напрями розвитку сучасних форм капіталу.

Зазначено прояви впливу нової цифрової економіки на зміни самому капіталі та способах його нагромадження

Акцентовано увагу на необхідності державного регулювання взаємодії зазначених сучасних форм капіталу для розвитку і стабільності соціуму і примноження національного багатства.

Ключові слова: інтелектуальний капітал, людський капітал, соціальний капітал, культурний капітал, нагромадження сучасних форм капіталу.

Problem statement

The development of digital, information and communication and other new technologies causes changes in basic economic processes and phenomena, which is reflected in the capital accumulation as well. There are new trends, phenomena that change the environment, production process, means and objects of labour. That is the workforce must meet new requirements, i.e. skills and habits of a social relations` agent.

Recent research and publications analysis

Scholars (Sveiby K., Brooking E.) were interested in the modern forms of capital analysis at the end of the twentieth century. Their studies were motivated by the changes in science, knowledge, technology and business.

Some Ukrainian scholars dedicated their studies to the analysis of certain modern forms of capital. For instance, Antonyuk V.P. has analyzed the problems of intellectual capital formation in Ukraine associating them with deterioration of quantitative and qualitative parameters of higher education, R&D and their weak correlation with businesses [1]. Zakharova O.V. has shown the impact of particular domestic economy`s determinants (demographic, migration, professional) on human capital accumulation over the period of Ukrainian independence [2]. Zvonar R.P. has figured out the changes in the formation of social capital fueled by the development of volunteering, local communities, schools` lifelong learning programmes, etc. [3].

Despite the presence of scientific publications dedicated to the accumulation of human, intellectual and social capital, there is a need for further comprehensive study of the accumulation of modern forms of capital, as they are significantly changing impacted by the development of science and the introduction of new technologies.

The objective of the article is to study the main forms and methods of accumulation of modern forms of capital amid instability of the global economy.

The main material of the research

Capital accumulation in the political economy involves accumulation of assets (money, premises, equipment, gold, currency, etc.) by a means of concentration and centralization of capital. Nowadays it makes sense to some extent for the accumulation of fixed and current assets (accumulation of raw materials and semi-finished products) to start the expanded reproduction.

Modern forms of capital, namely human, intellectual, social and cultural are characterized not but capital accumulation (their concentration in one entity), but rather, their diffusion, replication, distribution, multiplication, etc. [4].

Intellectual capital is intelligence and knowledge, which are productively used by their owners and other entities for profit (income). Intellectual capital accumulation takes place due to quantitative and qualitative changes, shifts in the structure of intellectual capital.

There are tangible and intangible forms of intellectual capital. The tangible ones include new technologies' implementation, intellectual products, registered patents issued as "know-how", trademarks, etc. Intangible forms of intellectual capital are the growth of knowledge, research and development.

There are extensive and intensive ways of accumulating intellectual capital. Extensive is reflected by positive dynamics of the next quantitative parameters like state budget expenditures and private investment in education, the share of the population with higher education, the number of research institutes and scientists, the number of defended dissertations, etc. [4, p. 302–315].

Intensive method of intellectual capital accumulation is represented by the qualitative, effective changes, namely: intensification of advanced technologies' implementation in industrial and agricultural production, as well as in the field of services; introduction of new products and services through innovation; technology transfer outside the country and its share growth in the structure of domestic exports; income growth of enterprises or patent owners who apply innovations, etc.

A scholar (scientific institution) who made an invention and wants to turn it into intellectual capital must obtain a patent for it as an object of intellectual property and sell the patent to the consumer (consumers) who uses (use) it productively, i.e. for profit. To do this, a scholar needs to apply to a public or private institution involved in patenting.

Patenting in Ukraine is carried out by the public enterprise "Ukrainian Institute of Intellectual Property" (Ukrpatent) – an institutional part of the state system of intellectual property legal protection in Ukraine. According to the order of the Cabinet of Ministers of Ukraine dated October 13, 2020 № 1267-p "On the National Intellectual Property Authority" Ukrpatent performs the functions of the National Intellectual Property Authority.

However, one can order a patent service provided by a private entity. For example, IPStyle offers Ukrainian inventors a range of its services in the field of patenting. IPStyle specialists not only prepare applications and apply for a patent, but also protect their rights in court [5].

Patenting of intellectual property objects is a costly business, so intellectual capital accumulation requires significant investment, which an individual inventor or even an enterprise cannot afford. At the same time, the majority of domestic businesses (61.3 % in 2016, 69.9 % in 2019) independently implement innovative products and technological processes. This figure is even higher in manufacturing: 65.9 % in 2016 and 73.8 % in 2019 [6].

The index of innovative development presented by Bloomberg in 2018 revealed that Ukraine ranked 53 among 60 countries. We have the lowest labour productivity (60th); technological capacity of the country ranks 58th; Ukraine is 54th in terms of research and development spending in gross domestic product. Moreover, Ukraine ranks 28th for the efficiency of higher education and 35th in patent activity, which indicates the potential for innovative development [6].

"The strategy for the development of innovation for the period up to 2030", approved by the Cabinet of Ministers of Ukraine on July 10, 2019 notes that during 2013–2018 almost 40 strategic documents at the industry level related to innovation in the field were approved in Ukraine. However, budget funding of innovation activity is still low as well as the R&D effectiveness [7].

The accumulation of human capital demands significant investment being a set of knowledge, abilities, skills and professional skills used to generate income.

The accumulation of human capital is the development of productive human abilities through investment in it, which contributes to the productivity of their owners and increase businesses' income and gross domestic product of a country.

New technologies introduction into production, "shorter" life cycle "of the acquired knowledge application and actualization of their renewal and growth" require constant investment in the workforce development and lifelong learning. There is a need to change professions, skills, the formation of new competencies (abilities, skills) of economically active people: "willingness and ability to self-study, retraining and lifelong learning; readiness for change and desire for something new; ability to adapt to constantly changing living conditions; ability to teamwork; readiness for professional mobility; ability to take reasonable and responsible risks; ability to think critically; ability and willingness to work remotely; ability to work with a large amount of data; ability to formulate and realize the true values of working life" [8, p. 10].

There are tangible and intangible forms of human capital accumulation. The tangible ones include meeting person's physiological needs, and intangible ones include maintaining and increasing health capital, education and its renewal, professional development, labour mobility, etc.

Kolot A.M. notes that the activities of a working person in the era of digital technology "happen in another, different from the previous frame of mobility, autonomy, self-responsibility, transparency and network control" [8, p. 11].

There are extensive and intensive ways to accumulate human capital. Extensive way is shown through positive changes in the quantitative characteristics of labour resources: higher share of economically active population, growth in the number of man-hours worked; lower number of sick leaves, etc. Extensive methods include better qualitative characteristics of labour resources: improvement of skills, professionalism and workforce competence; growing motivation and productivity; high mobility of labour resources; improvement of health and life expectancy of the population [4, p. 314–324].

Ukraine has seen a significant decline in the employed population over the last decade. During 2012–2020, the number of employees aged 15–70 decreased by 3.35 million people (by 17.4 %). In 2020, the employed population was 15.9 million people [9].

The most numerous occupational groups in 2020 were professionals (2854.2 thousand people) and the simplest professions (2848.7 thousand people). The smallest number had the skilled work in agriculture and forestry and in the technical service, which was 192, 7 and 510.5 thousand people, respectively.

Substantial outflow characterizes professional group of "the simplest professions". During eight years, the figure in this group has decreased by 1665.9 thousand people, which is 49.8% of the total reduction in the country's employed population aged 15 to 70 years old [9]. Such a significant contraction can be explained by the change in the industry's sectoral structure, mass bankruptcy of industrial enterprises, mechanization of production processes, labour emigration, etc.

Unfortunately, there is no advanced training and transition of workers to more skilled groups, as it is observed in the context of scientific and technological progress. The introduction of modern computer and digital technologies contributes to radical changes in the structure of labour. "New technologies and systems embody the Fourth Industrial Revolution intensively freeing representatives of not only working professions (characteristic of the preliminary stages of the scientific and technical revolution), but also the management corps of "white collars". So-called mental labour, managerial personnel of all levels and functional groups are being intensively replaced by "smart" information and communication and other technologies" [8, p. 15].

Introduction of the latest technologies is associated with "redundant, super-intensive reduction of labour intensity of low and medium difficulty. Sharp decline in the share of the middle class doing smarter and robotic jobs (functions) is obvious" [8, p. 15].

Human capital accumulation is associated with social capital accumulation. Social capital is a set of relationships that arise between members of social groups supported on the basis of informal values, norms and concepts shared by social groups to be better off.

Social capital accumulation is the development of social ties in a society and enhancement of trust, which contribute to solving social issues. In our opinion, there is intangible form of capital accumulation, which manifests itself through the development of trust, social support, cooperation and interaction.

The extensive way of social capital accumulation is shown by the growth of the number of NGOs and their members; the scope of young people education (including rural); lower number of divorces; growth of GDP per capita; decrease in the share of marginalized populations, etc. The intensive method is characterized by the equal distribution of economic and social benefits among population; lower property differentiation; growth of trust as the basis of national and foreign investors' intensification; socialization and humanization of economic relations [4, p. 324–337]. An individual is more and more close to the world of a new network economy. Everyone has social connections multiplied by the development of civilization, net marketing expansion, labour displacement in manufacturing and the need for income fueled by social ties, etc. "Digitalization, virtualization of the economy, its hybrid character, the emergence of various modifications – the platform economy, the demand economy, the economy of joint consumption – change not only the socio-labour environment in the field of direct employment. There are changes in the entire social structure of entrepreneurship, classical facets between producers and consumers, employees and employers are disappearing; the former polarity of the relationship and interdependence between labour owners and capital owners is changing too. Thus, the social tissue of the new economy and post-industrial society acquires non-classical, atypical, changing and unstable forms" [8, p. 20].

Education plays a key role in the formation and accumulation of social capital. It emphasizes the close link between modern forms of capital and their accumulation. Therefore, one should talk about education as a "source of social capital, which transforms moral and value ideals into active guidelines. An educated individual understands and is able to consciously perceive value orientations that underlie social capital: human dignity, humanism, partnership, etc. An individual can adequately assess the benefits of social behaviour in accordance with these value guidelines, to understand and differentiate the correct and false motives and actions, significant and, conversely, irrelevant circumstances of actions and motivations. Education allows an individual to navigate in social reality and properly interpret it in order to implement certain value guidelines for its social capital growth" [3, p. 26].

Education contributes to the emergence of social groups, establishment of social ties, intensification of contacts between their members, access of these groups into socio-labour, civil and political groups.

Social capital reproduction is provided by the growing trust. The low level of trust in Ukraine can be explained by the absence of positive changes in welfare, quicker litigation of dispute resolution, equal protection by the law, smaller income differentiation, etc. during thirty years of independence in Ukraine.

The study results of the Razumkov Center conducted in March 2021 regarding the level of trust in Ukrainian society are disappointing. The distrust is most often expressed to the state apparatus (officials) (80 %),

judicial system (79 %), the Verkhovna Rada of Ukraine (77.5 %), the Government of Ukraine (76 %), the high anti-corruption court (73 %), political parties (71 %), Prosecutor's Office (71 %), commercial banks (70 %), the National Anti-Corruption Bureau of Ukraine (70%), Supreme Court (69 %), the Constitutional Court of Ukraine (69 %), specialized anti-corruption prosecutor's office (68 %), the National Agency for Prevention of Corruption (NAPC) (68 %), local courts (66 %), the President of Ukraine (61.5 %) and the National Bank of Ukraine (60 %). Respondents express distrust more often than trust to politicians, state officials and public figures [10].

Lack of trust reflects low level of social capital accumulation, which is closely linked to cultural capital.

Cultural capital represents values, norms, techniques and methods of doing business, which minimize the transaction costs of its implementation and form incomes to its participants.

Cultural capital accumulation is aimed to enrich socialization skills, assimilation of institutional restrictions that allow to act according to the rules adopted within a particular social environment. There is tangible form of cultural capital accumulation manifested by the growth of productive forces quality (labour, means and objects of labour). Intangible form of cultural capital accumulation is demonstrated by the development of production relations; improvement of relations between economic entities; adjustment of close internal and international economic ties between representatives of various cultures, nationalities, mentality, etc.

We single out extensive and intensive ways of cultural capital accumulation. The first is revealed by the growing number of libraries, theaters, museums, exhibitions and publishing houses; growth of newspapers and books (including electronic) production per thousand people. The second one is shown by the national mindset adjustment; improvement of corporate culture; higher business reputation; high level of compliance with the norms of behaviour of the counterparties of economic agreements, etc. [4, p. 337–348].

It was noted in the study of the level of culture and cultural institutions development, carried out by the Royal Institute of International Relations, located in London, that "Ukraine's transition to civic identity based on common values took place in close synergy with the activity of its creative class aimed at the development of pluralistic and inclusive cultural space. This cultural pluralism helped to resist the long-term Russia's invasion in the humanitarian sphere, its historical and cultural narrative on Ukraine aimed at exacerbation of the split of society" [11, p. 26]. Growing cultural activism shows its impact on the decentralization processes, especially in the East of Ukraine. Developing cultural sector promotes new jobs and the growth of employment among individuals freed from the production sphere, "stimulates innovation, combines profit with social entrepreneurship and educational initiatives, and thus strengthens social capital and stability" [11, p. 26].

The Royal Institute of International Relations proposed a number of recommendations on the development of cultural environment: growing public financing of artistic projects, state support for public media, which focuses on popularization of cultural diversification concept in the inclusive Ukraine, development of domestic cinema, attraction of investments for the restoration of regional cultural monuments, etc.

Understanding and appreciating the significance of culture, it is necessary to apply for its development aiming at society's consolidation and strengthening. It will certainly better off being the evidence of cultural capital accumulation.

Conclusions

It is necessary to combine the efforts of state, business structures and social partners to promote the development of modern forms of capital in accordance with the requirements of information technologies and global challenges in order to obtain a synergistic effect for society, as well as for the future development of mankind. The need for interference at the state and super-state level in the process of modern forms of capital accumulation is explained by the fact that the new economy is not human-biased, does not contribute to the socialization of relations and social development.

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