Economics UDC 314.174

THE SILVER ECONOMY AND PROBLEMS OF DEVELOPING IT IN THE REPUBLIC OF BELARUS

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Evaluation criteria of population ageing are defined. Causes and factors of population growth in older age groups are defined. The characteristic of silver economy is given, directions and factors of its development are indicated, and problems of development of the silver economy in the Republic of Belarus are revealed.

The general trend for most countries of the world is population ageing. The data presented in table 1, prove the increased process of population ageing. This trend is manifested significantly in developed countries (OECD countries, USA, Japan). The growing population ageing poses to society not only demographic, but also serious economic, socio-psychological, medical, social and ethical issues. The increasing share of older people in the structure of population necessitates the study of their needs, physical and social opportunities. Demographic ageing becomes a state issue, requiring an appropriate solution now and intensive work in the coming years.

	Total population, million people		The proportion of the population 65 years and older, %	
	2004	2015	2004	2015
Total	6389,0	7219,0	7,3	8,4
Developing countries	5093,0	5885,0	5,4	6,5
China	1308,0	1393,0	7,5	9,6
India	1087,0	1260,0	5,2	6,2
Russian Federation	143,9	136,7	13,6	13,3
OECD	1164,0	1233,0	13,6	16,1
Japan	127,9	128,0	19,2	26,0
USA	295,4	325,7	12,3	14,1

Table 1 – People in the older age group in the population of the world.

Source: [1].

Combining the opinions of different scientists, demographers, sociologists, economists, we can say that the process of population ageing has a number of objective reasons. With the increasing standard of living life expectancy is growing too. Scientific and technical progress and implementation of its achievements in medicine, pharmacology and social services leads to the fact that the existence of older people and care about them goes to absolutely new level. At the same time, the increasing availability and quality of education changes the priorities of young people of reproductive age and gives them the opportunity to pay more attention to career and self-realization, moving the care about the reproduction of generations to the second plan. Together both of these processes – increasing life expectancy and declining birth rates – mainly lead to ageing of the population.

Economic consequences of this process are obvious: shortages on the labor market and probability of slowing economic growth, increasing load on the pension system and, most likely, tax increase for the working population, changing demographic structure of the consumer market, increasing load on the health system and so on. But there are some pluses too: declining birth rates may contribute to the further development of individualization and increasing quality of education that will have the result of increasing professionalism and efficiency of work of young specialists [2].

In EU countries where population ageing was proved quite a long time ago and is common to many countries, governments began discussing possible solutions to problems that entails this demographic process. So the concept, called the silver economy, was formed. This implies an economy that fully mobilizes labor potential, meets the needs and streamlines the way of life of older people with regard to the public interests and needs in conditions of population ageing. This economy is called silver because of the obvious similarity of gray hair, which is a hallmark of older people, with silver color. And the silver economy involves not only solving the problems of ageing population, but also increasing economic growth with the active participation of the elderly.

According to the calculations by Accenture and Oxford Economics [3], as a result of stimulation of the silver economy in the United States in 2020 will be 5 million more jobs, GDP will get additional 2.2 %; in Germany – 5 million jobs and additional 2.1 % of the volume of the economy; in England 1.3 million and 2.5 % respectively.

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One of the most important directions of development of the silver economy (Fig. 1) is the increase of production through the employment of pensioners who are still able and willing to work. Staying in the labor market, older will increase their income, will be financially independent for longer; the economy will receive a boost domestic demand; the state budget – growth in tax revenue and lower expenditure on pensions. It is important not only to create new jobs but provide a longer period of work [3]. It is therefore necessary to adapt workplaces to the needs of older people to let them continue sharing their experience and work without sacrificing performance.



Fig. 1. Main directions of development of the silver economy

Source: elaboration of the author based on [2, 3].

However, solving the long-term employment problem of older age people, it is necessary to consider the dynamics of their labor potential, depending on their age. According to experts, the value of labor capacity, depending on the old people health of all ages is divided into three levels [4, p. 37]:

- 60-65 years: the efficiency is maintained at 65-70%;
- 65-70 years: efficiency level 50-60%;
- 70-75 years and older: level of efficiency is about 35-40%.

Therefore this specific dynamics of efficiency of older people must be considered during the attraction them to work. It's possible to use, for example, flexible schedules and modes of work (part-time, flex time), periodic attraction of experienced employees during the most intense periods of work, complicated or bulky orders; the moving of pensioning and other.

The problem of providing more long-term employment of pensioners makes the organization of continuous training in the framework of additional education programs for adults very important and actual, so as to maintain their competence, they should be able to use technical innovations, to navigate in advanced technologies, working methods, etc. In this regard, the institutions of the "third age" are already widespread today in different countries, including Republic of Belarus; they provide training and professional development for older people, social and psychological assistance and other.

In the case when income of elderly people allows them to live, not to survive, we can speak about the formation of a special group of consumers. In this regard, another important direction is development of geront-technologies [5] (from Greek "geront" – the old man), which involves multidisciplinary area of applied research. Its goal is the improvement of technical devices and consumer products tailored to age-related changes of the human body, to create the optimum conditions of life and work, as well as facilitate to better health care for older people.

The results of the geront-technologies use include various pharmacological products, the system of online health monitoring, automated appliances, robots and gadgets, specially adapted for older users, various automated medical products, such as electronic wheelchairs, hearing AIDS, blood pressure monitors, etc. The use of geront-technologies is associated with the desire to realize consumer potential, both of the older people and those who want to take care of them (children, grandchildren, other relatives or even the local authorities); that makes it possible to increase the independent living period of the elderly. However when an elderly person loses the ability to self-sufficiency, silver economy involves the use of geront-technologies to ensure efficient operation of nursing homes, which should be equipped with high-quality diagnostic equipment for health control and support. In recent years nursing homes, which already work on these principles have become more and more similar to the sanatoriums and increasingly are referred as geront-centers in developed countries , which can also pursue commercial goals, providing services for seniors in fields of rehabilitation, diagnostics, tourism, leisure and so on.

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Through the development of silver economy directions mentioned above the decrease of the load on the state budget becomes possible. Employment of retirees enables to restrain the growth of pension payments. The development and use of the geront-technologies, aimed on the improvement of the working conditions, facilitation of diagnosis and medical service and maximal extension of the independent living period and appropriate care for older people, helps to reduce or at least slow down the growth of public expenditure on health and social services.

Development of the silver economy main directions is determined by various factors. The main one is the economic development level of the country. If the underlying problems of working age population employment are not solved, it is difficult to talk about the employment of pensioners; if advanced technologies are not used in a standard set of benefits production, it is difficult to talk about the development and application of geront-technology. Despite the significance of the view of the ageing population by public authorities, none of the state budget is able to provide adequate funding for all areas of the silver economy development, so it is important to involve the private sector, developing public-private partnerships. If the country has all the conditions for business development, it will not stay away from this problem and showing all of its advantages will rebuild itself and will help society to adapt to a new way of living in the face of population ageing. However, the state should provide all the conditions for this by providing certain benefits or incentives.

One more important thing is the level of pension provision, because even with the possible employment of older people, not all of them can work. In order to form a special group of consumers from pensioners their income should let them purchase certain goods. But at the same time, the silver economy involves the reduction of the burden on the state budget; therefore, an important factor is the strong and effective functioning of the pension system.

The development of geront-technologies and geront-centers due to such factors as the development of science, its funding, the pace of scientific and technological progress. Geront-technologies are new and quite high-tech direction, combining the achievements of various fields: medicine, information technology, marketing and many others. That is why they are so closely associated with the rate of technological progress.

One more important factor is the level of cultural and moral development of society, but rather the attitude towards old age and the elderly. It is problematic to implement reforms relating to older people and their welfare, if the society attitudes to them without proper understanding and respect. Also it becomes difficult to implement gerontological goods, if the younger generation does not want to support financially their elderly relatives and to invest in taking care of them. It's necessary to understand that sooner or later each of us will become old, and elderly may have their own peculiarities in behavior that may be different from the concepts and needs of other people. The better the old man is understood, the easier is to make everyone feel comfortable in society.

Based on statistics, Republic of Belarus entered into a state of demographically old population in the early 1970-ies (Table 1, Tables 2, 3). Much time has passed since then, the USSR collapsed, our country gained independence and at the same time, faced serious socio-economic crisis, which had a significant impact on birth rate, and, as a consequence, on population ageing, which continued to gain momentum. At the beginning of 2013 23,5 % of Belarusians were older than working age, and only 16 % of citizens had not yet reached working age [6, p. 45]. Moreover, in the coming decades the trend of reducing the number of working-age population will continue, because this age group will join those who were born in the very beginning of the 90s, when the birth rate was very low, and the category of working age will be left by generation born in the post-war years, a time of growth in the birth rate.

Table 2 – Assessment of population ageing in the Republic of Belarus on the scale of J. Beaujeu-Garnier – E. Rosset

V	Total	Proportion of 60	
Years	population,	years people and	Characteristics of population ageing process
	mil. people	older, %	
1970	8,99	13,2	Initial level of demographic ageing
1979	9,53	14,0	Average level of demographic ageing
1989	10,15	16,1	High level of demographic ageing
1999	10,04	18,9	Very high level of demographic ageing
2009	9,51	18,6	Very high level of demographic ageing
2010	9,50	18,9	Very high level of demographic ageing
2011	9,48	19,1	Very high level of demographic ageing
2012	9,47	19,4	Very high level of demographic ageing
2013	9,46	19,4	Very high level of demographic ageing

Source: elaboration of the author based on [1].

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Years	Total population, mil. people	Proportion of 65 years people and older, %	The level of population ageing
1970	8,99	9,0	Old population
1979	9,53	10,8	Old population
1989	10,15	10,4	Old population
1999	10,04	13,3	Old population
2009	9,51	14,3	Old population
2010	9,50	14,1	Old population
2011	9,48	13,8	Old population
2012	9,47	13,7	Old population
2013	9,46	13,8	Old population

Table 3 – Assessment of population ageing in the Republic of Belarus on the United Nations scale

Source: elaboration of the author based on [1].

As a result, the development of the silver economy can give a powerful impetus to the development of society and increase its prosperity, ensuring a comfortable life for both young and old people. The experience of European countries in the development of the silver economy is useful for the Republic of Belarus. A lot of attention should be directed at increasing of the employment of pensioners, promotion of their work, education "through all life", and the introduction of geront-technology and development of geront-marketing focused on older age groups. However, in the Republic of Belarus, like in other transition economies, it can be done only when other more pressing problems are solved, in particular the problems of providing effective employment, wages, social security, raising the level of innovativeness of the economy, the effective development of industry and agriculture.

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UDC 657.0/5=111

INNOVATION AS THE OBJECT OF ACCOUNTING

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In recent years innovation is more and more often discussed in various spheres of life. However it should be noted there is no precise definition of the term. This is primarily related to the fact that "innovations" affect all the fields of human activities. They reveal the concept of the term in their own way. All this discovers the actuality of the subject 'innovation'.

Misunderstanding of the term also makes fast development of the innovations difficult. This is the result of people being incompetent which causes negative results of their activities. This situation is a problem of the present reality.