

Voloshyna Yulianna¹

THEORETICAL AND METHODOLOGICAL BASES OF PENDULUM MIGRATIONS AND ANALYSIS OF THE SOURCES OF INTRA-REGIONAL FLOWS OF POPULATION MOVEMENTS (FOR EXAMPLE, TRANSCARPATHION REGION, UKRAINE)

Abstract:

The scientific article analyses theoretical fundamentals of commutation in the region from rural to urban areas, highlights its main reasons and examines some aspects of pendulum migration in the region.

Both positive and negative consequences of the commutation of the population have been studied. The present population size and the scale of arrival and departure of the population in the context of natural economic areas of Transcarpathion region have been analyzed.

Keywords:

commutation, population migration, population size, reasons of migration.

Author's data:

¹ Voloshyna Yulianna - PhD, associate professor of Business Economy of Uzhgorod National University.
E-mail: Yuliannavoloshyna@gmail.com

Introduction

Current demographic situation in Ukraine causes a number of problems to deal with. Studying demographic processes, especially migration, are one of the most urgent. At the time of independence of Ukraine, migrations of population have gone through several stages corresponding to certain periods of state of economy.

Problem of migration has been discussed in research papers of national and foreign scholars: I.M. Pribitkova [2], L.L. Ribakovskij [4], S.I. Pirozhkov, V.V. Pokshishevskij [8], M.D. Romanyuk [5], A.F. Zagrobskaja [7] and others. Those papers cover theoretical and methodological aspects of migration and learn details of motivational causes of migration in both rural and urban areas.

Body of Article

The purpose of the current article is to analyze and clarify the definition of commutations (push-pull migrations, commutations or pendulum migrations), the main reasons of migrations of rural inhabitants to cities, and to define sources of internal regional flows of population (by the example of Transcarpathion region). The methodology of this paper is based on the analysis of statistical information provided by the General Statistical Office of Transcarpathion region. The information has been processed by means of systematization, generalization and comparative analysis.

Concept of migration

Every city is surrounded by suburban settlements between which exists continual interaction that is realized through their communication.

One of the important factors of this interaction is the movement of people between the settlements. These movements are of both centripetal and centrifugal aspects. The population of suburban settlements mostly tries to find work and obtain

appropriate level of education in the city, thus causing them to make daily shuttle trips from home to work or to the place of studying, where in that case they become commuters. Here, after a comprehensive elucidation of the concept of migration is being considered, it has been analysed by numerous scientists and demographers.

There are numerous ambiguous definitions of the concept of migration in the scientific articles. Hundreds of different classifications of migrants in the encyclopaedic definitions are narrowed to the identification of their original features, such as the criterion of permanent residence and duration of stay, space and time migration, type, characteristics, causes of migration, and others.

One of the first researchers who studied migration movements of population was the British scientist E.G. Ravenshteyn (1885). He basically studied migration in Britain and North America. On the base of the research, the scientist identified the main migration laws and regulations: migration is often made for short distances; the larger the settlement is, the more attractive it is; each migration flow corresponds to contra flow; the growth of large cities to a greater extent is implemented by migration rather than by natural increase; the scope of migration increases with the development of trade and industry, especially with the development of the transport network; among all causes of migration, the economical ones are the most crucial. [1, p.103]

In order to describe the term "migration", scientists had previously isolated two approaches: the so-called "narrow" understanding of migration as "resettlement to a new residence", and the "broad" understanding of migration, which includes "all territorial displacement between settlements". Today, the term "migration" becomes of generalized universal nature, in the meaning of which every author sometimes creates quite

different categories related to territorial movement at different stages.

In general, migration is considered as demographic, socio-economical status, which is a combination of relocation of citizens, usually associated with the change of residence. In the economical aspect, demographer and domestic sociologist I.M. Prybytkova gives a definition of migration: "Migration - self-organizing processes of social behaviour of individuals, directed system of benefits and purposeful activity of self-organizing migrants, determined not only by the capacity of labour income, but also by other factors of life." [2, c.46]

According to the Economical encyclopaedia, migration is the "movement of people, ethnic groups, their parts or individual representatives related to the change of residence or return to it". [3, s.385]

Rybakovskyy L.L. defines migration as "any territorial displacement that occurs between different settlements of one or more administrative districts, regardless of duration, frequency and target orientation, and is the main meaning of migration". [4, p.13]

Iontsev VA substantiated the necessity of isolating a narrow and a broad approach to the definition of the term "migration". Migration in the narrow sense is a part of a wider concept - the migration of the population. Migration (territorial, spatial or mechanical) of population is a complex of displacements of people in connection with the place of residence and work. Thus, the concept of migration should distinguish inter settlement and inner settlement movements. Inter settlement movement of population is a complex of inter settlement movements of any kind, i.e. territorial population movements of every degree of duration between countries, regions and localities, connected and not connected with the change of the place of employment.

Various forms of inter settlement migration and inner settlement displacement of population associated with the change of employment (i.e. commutation) and non-economic types of migration related to wars and political factors, relocation of population groups are included in the concept of "migration" thus being defined with a broad approach. [5]

The definition of the term "migration" had been clarified by Encyclopedia, edited by Rymarenko Y., which describes migration as identical, universal concept with terms such as movement, relocation, moving. [6, p.85]. From the historical point of view, migration serves as an integral and permanent part of human history, according to which citizens belonging to the category of migrants often switch from one socio-economic community to another. [7, p.14]

Scientists have not yet found a single universal classification of migration processes in the country, but they only clarify some of its aspects. There are some attempts to classify and isolate specific types of migration on different grounds. The main feature is border crossing (administrative and state borders) of different areas of the locality, region or state. Depending on the features on which they are classified, migrations are: external (inter-state), and internal (inside the country). The method of implementation decided to classify migration into two categories: organized and unorganized. Depending on for how long a person's migration is, scientists classify it as stationary (irreversible, permanent), which stands for moving to a permanent or long-term residence, and temporary, which means moving for a relatively short period of time. Temporary migration includes: seasonal, episodic and commuting migration. Migration processes are also classified by reasons that cause these movements. The main reasons are: economical (the most common), social, political, environmental, cultural, ethnic (national), religious,

racial, military, demographic (family reunion), and so on.

Commutation

In the recent decades, rapid growth has gained pendulum migration from the suburbs (suburbs) in the major cities of Ukraine. Scientists have different approaches to the problem of pendulum migration, some of whom see it as a positive development, while others see a problem which needs to be solved.

The most valuable source on the theory of migration, not only on a national level, but also on international level, is a scientific encyclopedia edited by Y. Rymarenko "Migratory processes in the modern world: international, regional and national dimensions", which gives the following definition of commuting:

Commutations are large-scale daily or regular population movements between places of living and places of work.

Commutations are fixed route movements of people from point A to point B for the purpose of work; therefore, a large portion of urban and rural population is involved in it. The reason for such kind of migration is the absence of jobs in the place of living, and the possibility of finding a job in other close by areas. In the course of commutation, the spatial movement of one of the main productive resources takes place - the movement of working force. Such movement has a cyclic (daily, weekly, monthly) character, and it is not connected with the change of place of living.

However, commutations are not only cyclic movements from the place of work to the place of living. Weekly trips from the village to the city for the purpose of selling foodstuff are also considered as a different type of commutations. In the course of such type of migration, consumer exchange is

conducted between workers and rural inhabitants by means of goods and services markets. In such case, material goods are not produced, but they are transferred from one person to the other [6. c.132]

Famous Russian economic geographer V. Pokshyshevskyy insists that the pendulum movement of people is just a special form of settlement in which the place of recreation and socializing with family sleeping places are remote from places of employment. According to this scientist, the phenomenon of migration is difficult to call, but rather a way of life, accompanied by constant movement. [8, p. 15].

Pendulum migration is a result of discrepancies of placing workplace and resettlement of the population. Commuting is well developed especially in suburban areas of big cities, cities agglomerations, and metropolitan areas. Thanks to pendulum migrators, workforces of cities, suburban and rural settlements can be able to be used more effectively and efficiently.

In general, in the early 90's in Ukraine, the number of rural pendulum migrants in cities was 500 thousand people. In the beginning of 2001, there were 4.4 million workers in the country. There are rural residents, out of whom one quarter worked outside their locality, and almost half of them worked in cities and towns. According to sources [9], most of the pendulum migrants are in Western Ukraine, for example: Ivano-Frankivsk (201.7 thousand people), Transcarpathion (157.2 thousand people) and Lviv (210.4 thousand people), due to relatively high density of rural and urban settlements.

Usually, commuting is considered as the systematic population transfer of residence to the place of employment and back, the frequency of which depends on the regularity of labor.

Pendulum migration often appears as an intrastate movement of population, which does not affect its overall size, but plays an important role in the formation and redistribution of manpower, regions, cities and urban settlements.

An expert survey in the Transcarpathion region established the main directions of intrastate migration processes and calculated their percentage.

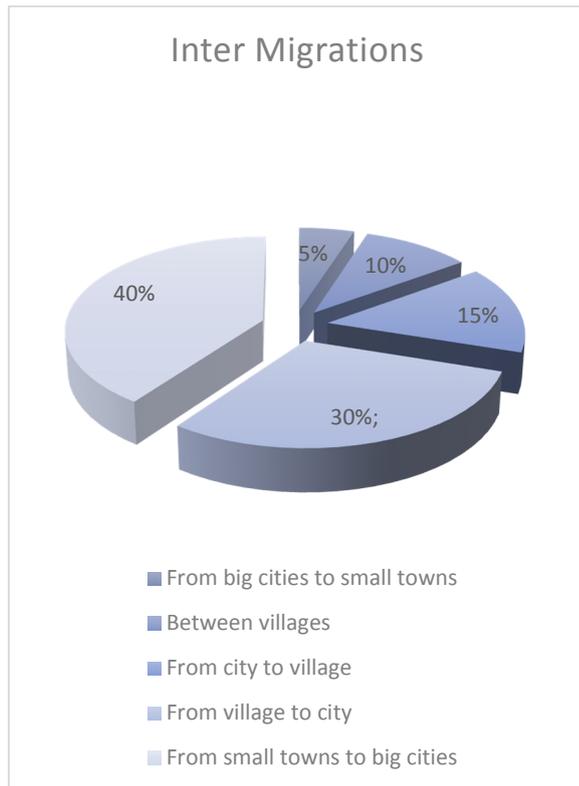


Fig. 1. Directions of intrastate migration processes in the Transcarpathion region (Created by author)

Using a questionnaire which involved 100 residents of the Transcarpathion region (50 people living in the city and 50 in rural areas, of various ages and economic levels), we tried to determine, in their opinion, what is the proportion each of these types of migration in the region. After analyzing the poll, we concluded that: the most popular residents migrating trend is the migration from small towns to big cities (40%). The lowest ranked is from big cities

to smaller towns (5%). As for migration from the countryside to the city is found to be at around 30%.

In terms of economy, dynamic pendulum labor migration is an important factor of macroeconomic development. However, at the same time, when analyzing various literary sources, it appears that both practical and theoretical aspects of this problem have not been given enough attention, so they were poorly analyzed.

Most scientists believe that the phenomenon of "pendulum" migration is found in the suburban areas of big cities and metropolitan areas, although this type of migration is widespread in the area of medium and small cities, rural urban areas, however, in accordance with a smaller radius of attraction pendulum migrants. Radius pendulum migration to large cities is about 40 to 70 km, and for the middle is 25 to 30 km. In addition to a balanced and rational utilization of labor resources in urban and rural settlements, impact from pendulum migration are: social mobility, changing social structure of the rural population and overcoming significant differences between urban and rural areas.

In our scientific article, on the regional level, we define three "attraction zones" for commutation migrants in connection with cities: 1) less than 5 kilometers zone; 2) 5 to 15 kilometers zone; 3) above 15 kilometers zone.

Expert inquiry of people living close to cities of regional level - Uzhgorod, Berehovo, Mukachevo, Khust and Chop - conducted by the author, showed the following results.

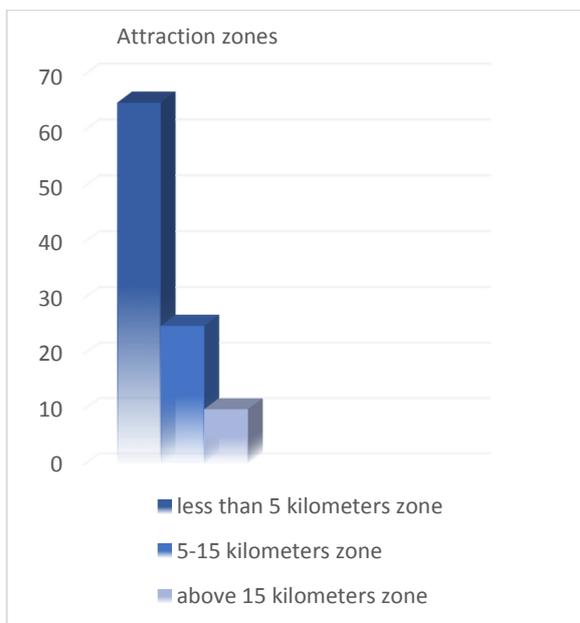


Fig 2. Structure of commutations from "attraction zones"

As it is evident from the figure 2, the first zone attracts 65% of citizen living within 5 kilometres, the second - about 25%, the third - 10%. Therefore, employees living close to the cities prefer to search for jobs in cities rather than in the country. Respectively, rural people migrate daily for work in the cities and return home in the evening. This group of commutations includes also schoolchildren and students of universities. Certainly, the quality of teaching in urban schools is higher than in rural ones, therefore parents, who work in cities, try to send their children to urban schools. Students who live in these zones usually travel for studies every day, which is connected with economical and social reasons. Therefore, better work conditions must be provided to people in urban area, compared to rural areas, as a main reason of commutations.

Scientific articles describe numerous factors that influence the appearance of directions and scope of migration in general. Migration mainly occurs because of social, economical, military, ecological, demographic, political, psychological,

ethnic, educational factors, as well as some other factors. However, it is difficult to distinguish one or two factors that influence migration process since these factors can be interdependent and act simultaneously.

Reasons of commutations

In scientific sources, it is considered that commutations usually occur under the influence of social, demographic and economic factors. As for the motivations of daily commutation from suburbs zones to the city or vice versa, they are usually, the possibility for better employment or education (although commuters who study in high or secondary specialized educational institutions usually migrate to the city).

Having studied foreign literature on this topic, we have come to the conclusion that the main reason of commutation in Germany is an economical factor. Having found a job in some other city, people don't hurry to move to the new city for permanent residence. One of the reasons is that employment contracts can be temporary. Other reasons are of a big importance, such as: attractive house rentals for houses outside the big city, as well as social reasons, such as favorable environment for families or important social contacts, that often serve as an important argument in the favor of commutation to the workplace.

Increasing living standards, deterioration of environmental conditions in large cities (social and natural), the desire to live in their own house - all of these factors often lead to mass migrations of the so-called "middle class" in the suburbs and the suburban small towns that are located outside the formal city borders.

The city definitely has more opportunities to meet the needs of the population. Living in suburban

villages, pendulum travellers receive all welfare services in the city besides administrative and management services. This includes enterprises and institutions trading services, socio-cultural and household products, health care, public transport services, unique, episodic and periodic specialized demand (libraries, theatres, concert halls, museums, circus). About 90% of residents of suburbs arrive every day to work in the city.

Residents of the city, thanks to the well-developed social sector, wide various work opportunities and the type of housing, high levels of various goods and services, suitable living conditions, a certain level of security, education, leisure, get more advantages compared with residents of the surrounding rural areas. The system of public goods in the city forms specific habitat that provides a better standard of living and higher quality indexes compared to suburban settlements.

According to Ukrainian legislation and state building standards, the system provides the social needs of residents of suburban areas to include services that are aimed to meet the most urgent needs of the population in school, raising children, caring for the elderly and disabled, health, trade institutions, culture, physical education and sports, communications and so on. Therefore, we see a significant difference in ensuring the city and suburban settlements necessary institutions for more comfortable living.

In 1974, George Forrester worked on the development of the city and its surroundings (suburban settlements), and in his book "The dynamics of the city", highlights that "... there is always a flow of people migrating to the city from outside, where the city seems more attractive compared to the previous place of residence of these people. Environment at this time has the ability to

take those people for whom the town is less attractive." [10, c.128]

Pendulum migration is the principal mechanism of formation of urban agglomerations, driving the territorial expansion of cities and suburbanization. Results of circular migration on the development of the city depends on its intensity, and it is in turn - from the development of the transport network and the economical potential of the city. Numerous studies have shown that agglomeration is a single organism, merged resilient pendulum labor flows in the middle is almost impossible to distinguish independent parts. In this regard, there is a strong agglomeration division into two administrative units: the city (center) and area (district), which are independent of each other. The latter is a constant source of problems and unresolved situations. As the independent actions of local and regional (district) government, pursuing only their goals and interests, which often can not be optimal for the metropolitan area as a whole.

Studies have shown that only if citizens made shuttle trips for short distances and do not lead to negative economical and social consequences, they should be considered as a positive development, and should be seen as an effective factor in saving labor, material and financial resources for the improvement of social services. All of the above leads to an increased territorial concentration of industry and other sectors of the economy, and hence to new job opportunities in urban areas (in the absence of required reserves of necessary workers).

Advantages and disadvantages of pendulum migration

Having studied many domestic and foreign literature and having grouped the information in figures 3 and 4, we identified the main advantages and disadvantages of circular pendulum from suburban settlements to the city.

Pendulum people's travel often lead to wasteful loss of time travel, causing the so-called transport fatigue (as people need to wake up earlier in the morning), which leads to lower productivity and reduce the vitality of the human body. Although, sometimes on the way to work from the suburbs to the city, people spend less time than the transport displacement in the city. Working away from home limits opportunities to raise children, to take care of the family and limits opportunities for the full development of personality (language school, training, social clubs), because of the considerable time spent on the road.

Pendulum suburb migrants travel to the city with the purpose of finding employment, which leads to more competition in the job market. The large migration flow into the city from surrounding areas leads to a busier public transportation, which often can not properly handle increased load of passengers.

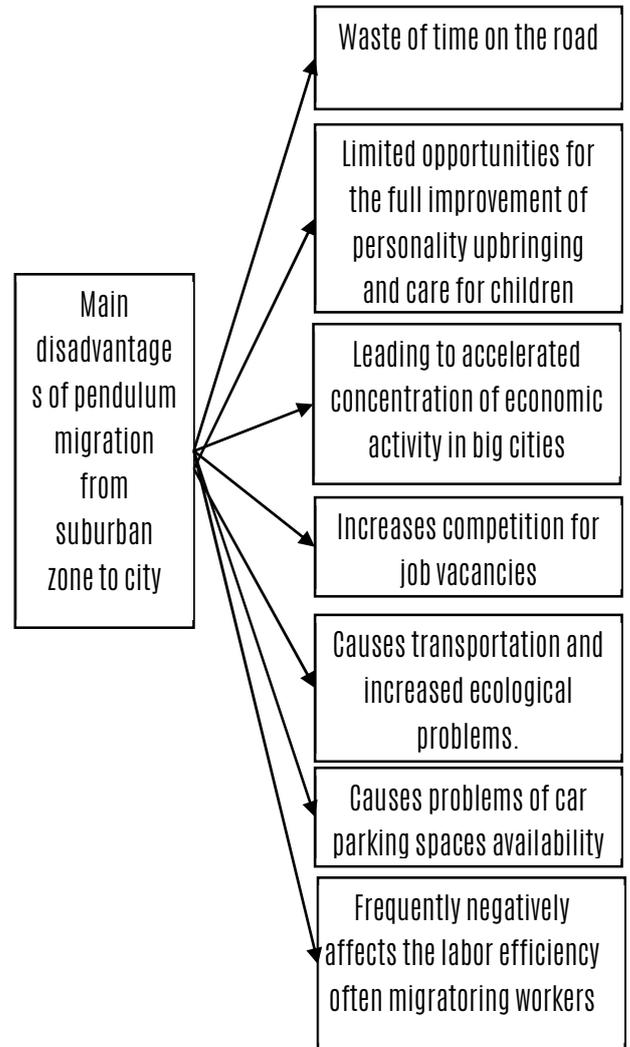


Fig. 3 Main disadvantages of pendulum migration from suburban settlements to city (Created by author based on a synthesis of scientific resources)

Some pendulum migrants go to work or school by public transport, but some others use their own transport, which leads to: problems with car parking not only for them but also for local residents; complicated road traffic in the city; traffic jams; air pollution.

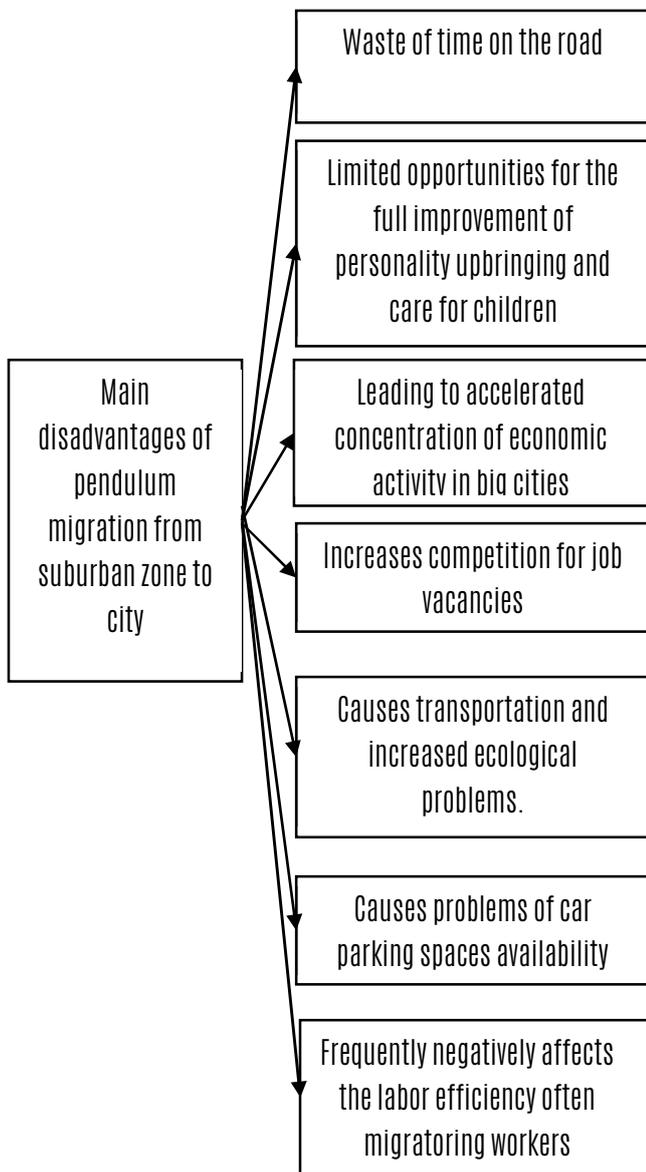


Fig. 4 Main advantages of pendulum migration from suburban settlements to city (Created by author based on a synthesis of scientific resources)

Fig. 4 showed the main benefits (positive consequences) of pendulum migration from suburban settlements to the city. Pendulum migration is an effective factor of economizing of labor, material and financial resources for social development. As a result, it enhances spatial concentration of industry and other sectors of the economy, which in turn leads to new jobs in urban areas (in the absence of required reserves of workers). The inhabitants of the suburbs who have

found work improve their financial condition, since wages are typically higher than in the periphery, and they have more opportunities to find work by interest. This life style increases their circle of acquaintances, friends and colleagues; increasing the possibility of self-improvement and self-development. Comparing the city to the suburban zone or rural areas, there are more jobs, including training courses and opportunities to improve intellectual knowledge. Most residents of suburban areas fill positions that are left vacant by urban residents, such as those of difficult working conditions, labor kind of work and so on. Mechanization and automation of production processes in agriculture lead to the release of a certain part of the working population, which is a source of manpower to cover the deficit of the city. The ability to buy or rent a house with more space and better living conditions in the suburbs for the same price that would be enough for a little apartment in the city center, which in turn leads to a pendulum travel to the city to work.

Some Ukrainian and Russian experts believe that commutation must be fought, and they offer some measures on how to fight it.

For example, in one of the administrative districts in Moscow, in order to reduce commutation, there is a project to build shopping centers, which will provide not only food and shopping services, but also theaters, cinemas and sports complexes. Special zones will be formed close by, where technological companies will be located, which will provide jobs for 10-15 thousand people. Accordingly, employees can use all necessary and appropriate services and benefits in their work area.

One critical problem lies in the study of migration in less urbanized regions where agriculture and connected servicing activities are

considered as important parts of the economy. Modern transformations in economical structure of the country resulted in a high release of the working force; and low living standards and wages have become a strong motivational factor of migrations of population in the region.

Many foreign experts in commutation do not see anything wrong in the pendulum migration, but they recommend implementing new methods to decrease it.

As of beginning of 2015, the General Statistical Office of Transcarpathion region defines five cities of regional level - Uzhgorod, Berehovo,

Mukachevo, Khust, Chop. Our analysis is based on study of commutations towards these cities.

The total population of Transcarpathion region on the 1st of January 2015 was 1,259,600 people: 115,500 of them living in Uzhgorod, 24,600 in Berehovo, 86,000 in Mukachevo, 31,700 in Khust and 9,000 in Chop. [11]

As previously mentioned, low living standards is one of the main reasons of commutations. Let us analyse the level of the monthly average salaries in the Transcarpathion region for the period of 2010 - 2015. [12]

Years	2010	2011	2012	2013	2014	2015
Average monthly salaries per person in Hryvna	1846	2069	2351	2553	2744	3178

(per one full-time employee UAH)

Table 1. Dynamics of average monthly salary by 2010-2015.

* On the 1st of November 2015, the rate of Euro compared to Hryvnia is: 26.45 hrn for 1 Euro. Accordingly, for US Dollar rate - 24.04 hrn for 1 US Dollar.

Comparing between 2010 and 2015, growth shows to be only nominal (more than 72%) while real incomes of population remained without changes or have even declined. Financial crisis has greatly stroke national economy, mostly because of plummeting of exchange rates of Dollar and Euro. Our economy is so closely connected to Dollar that even slight changes of rates cause strong changes of prices for goods in stores and at the market, so this salary is insufficient while taking our prices into account. The crises resulted in strong decline of jobs; the so-called 'restructuring' of personnel took place. Many specialists do not have any job or have to work at lower wages. Situation is complex,

therefore people are used to accept all propositions today regardless of the enterprise location. This means that rural employees have more chances to find a job in cities than in village. This is the main reason of commutations.

Conclusion

Having examined many scientific literatures, the author of the article has comprehensively analyzed multifaceted scientific sources concerning migration between urban and suburban localities including circular migration features that have many ambiguous definitions. The author widely analyzed works of some scientific literature of domestic and foreign scientists about all different kinds of population migration. A survey of migration problems in Ukraine has been carried out. The analysis of the advantages and

disadvantages of circular migration to suburban settlements in the city and vice versa has been accomplished.

Having analyzed the average wages of full-time employees, we have defined that the nominal growth of incomes by more than 72 % over the last 5 years had not really led to their economical growth because of the difficult political situation, which directly proportionally influenced on the currency fluctuations, which in turn is reflected on the purchasing power of citizens.

References

- [1] Современная демография [Modern demography]: Study book / Edition by A.Y. Kvasha, V.A. Sonceva. - Moscow-, 1995.
- [2] Pribitkova I. (2004), Современные миграционные исследования: в поисках новых теорий и концепций [Modern migration research: looking for new theories and concepts] // International migration: Kair + 10: Scientific seria: International migration: Russian modern world. - Moscow: МАКС-Пресс, Edit. 12. - P.39-49.
- [3] Економічна енциклопедія у трьох томах. [Economic Encyclopedia in three volumes] Vol. 2 / Edition by S.V. Mociernij and others. - Kyev: Ed. «Akademija», 2001. - 848p.
- [4] Ribakovskij L.L. (1987), Миграция населения: прогнозы, факторы, политика [Migration of population projections, factors politics] - Moscow - 168 p.
- [5] Rjmanyuk T.M. (2009), Теоретико-методичні засади зовнішніх міграцій населення [Theoretical and methodological principles of external migration of the population] // Visnik prikarpatsjkogo universitet - Edit. 7. - Pp.190-195.
- [6] Міграційні процеси в сучасному світі: світовий, регіональний та національні виміри. Енциклопедія [Migration processes in the modern world: international, regional and national dimensions. Encyclopedia] Edition by Y.Rimarenko - Kyev: "Dovira", 1998y. - 945p.
- [7] Zagrobskaja A.F. (1982), Миграция, воспроизводство и уровень образования населения [Migration, reproduction and the level of education of the population] Kyev - 176 p.
- [8] Poknishevskij V.V. (1973), Миграция населения, как общественное явление и задачи статистического их изучения [Migration is a social phenomenon, and the problem of the statistical study] Moscow, - 15p.
- [9] The social consequences of migration of rural population in Ukraine (1989-2001) Available at, http://revolution.allbest.ru/sociology/00187458_0.html.
- [10] Forrester J. (1974), Dinamika razvitiya goroda [Dynamics of development of the city], Progress, Moscow, Russia. - 288p.
- [11] Regional statistical information. Available at, http://www.uz.ukrstat.gov.ua/statinfo/dem/2015/nasel_0101_2015.pdf
- [12] Regional statistical information. Available at, http://www.uz.ukrstat.gov.ua/statinfo/dohodi/2015/dinam_zar_econ_2010-2014.pdf