# **Analysis of Regional Development in RA in the Context of Subvention Programs of the State Budget**

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### << տարածքային զարգացման վերլուծություն պետական բյուջեի սուբվենցիոն ծրագրերի համատեքստում Մանուկյան <ակոր <.

Հայ-Ռուսական համայսարան

Տնտեսագիտության և ֆինանսների ամբիոն, մագիստրանտ (Երևան, <<) manukyanhakobfizmat@gmail.com

Ամփոփագիր. Երկրի ներառական տնտեսական զարգացման հիմնական խնդիրներից մեկը մարզերի համաչափ զարգացումն է։ Այս խնդիրը հատկապես սուր է Հայաստանի Հանրապետությունում. բնակչության մշտական արտահոսքը մարզերից մայրաքաղաք ներքին միգրացիայի կամ արտագաղթի տեսքով, ներդրումների և տնտեսական ներուժի իրացման ցածր մակարդակը հանգեցրել են Հայաստանի Հանրապետության մարզերի համեմատ մայրաքաղաքի զարգացման զգալի անհավասարակշություն։ 2020 թվականին ծագած երկու բացասական ցնցումները՝ կորոնավիրուսի համաճարակը և Արցախյան երկրորդ պատերազմը, միայն ավելացրին այս խնդրի բացասական հետևանքները։ Այս հոդվածը ուսումնասիրում է տարածքային զարգացման ներկա իրավիճակը ժողովրդագրության և ՀՆԱ-ի ստեղծման գործընթացում մարզերի տնտեսական ներգրավվածության համատեքստում։ Հետազոտողը եկել է այն եզրակացության, որ այս պահին ՀՀ մարզերի և մայրաքաղաքի միջև աճող զգալի տարբերությունը վկայում է տարածքային համաչափ զարգացման պետական ռազմավարության անարդյունավետության մասին։ Նման պայմաններում մարզերում տնտեսական զարգացման խթանման պետական քաղաքականության հիմնական նպատակը պետք է լինի միջոցների գրագետ վերաբաշխումը, որպեսզի դրանք օգտագործվեն կոնկրետ ոլորտներում կոնկրետ մարզերի համեմատական առավելությունները զարգացնելու համար։

**Հանգուցաբառեր**` ժողովրդագրություն, բնակչություն, միգրացիա, ՀՆԱ, զբաղվածություն, նպատակային ծրագրեր

## Анализ регионального развития в РА в контексте субвенционных программ государственного бюджета

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Аннотация. Одним из основных проблем инклюзивного экономического развития страны является равномерное развитие регионов. Данная проблема в Республике Армения стоит особенно остро: постоянный отток населения в виде или внутренней миграции из регионов в столицу, или эмиграции, низкий уровень инвестиций и реализации экономического потенциала привели к значительному перекосу развитости столицы по сравнению с регионами Республики Армения. Возникшие в 2020 году два отрицательных шока, коронавирусная пандемия и Вторая Арцахская война, только усилили негативные эффекты этой проблемы. В данной статье рассматривается текущая ситуация регионального развития в контексте демографии и экономической вовлеченности регионов в процесс создания ВВП. Исследователь пришел к выводу, что на данный момент лишь усиливающийся значительный разрыв между регионами Республики Армения и столицей свидетельствует об неэффективности государственной стратегии равномерного регионального развития. В таких условиях основной целью государственной политики по стимулированию экономического развития в регионах должно стать грамотное перераспределение средств с целью их использования для развития сравнительных преимуществ в конкретных отраслях для конкретных регионов.

Ключевые слова: демография, население, миграция, ВВП, занятость, целевые программы

#### Introduction

Demographic problems caused by a sharp increase in the level of migration and the aggrava-

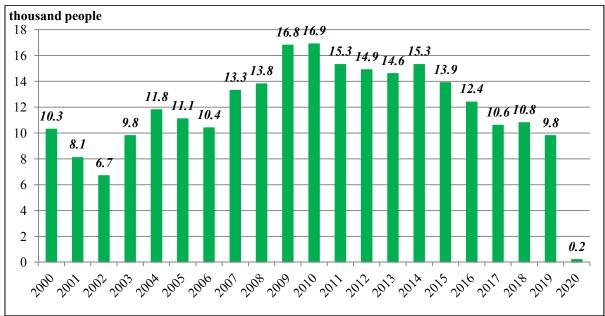
tion of the military situation around the Republic of Artsakh, economic collapses that began with the collapse of the USSR and the impossibility of

continuing the activities of many branches of industry due to the deep interconnectedness of the production process between several countries of the Union and continued already due to the default of the Russian Federation in 1998 and the global and regional crises of 2008-2009, 2014, 2020, as well as the lack of state resources in stimulating the development of individual regions based on the specific advantages of the latter, led to an extremely difficult socio-economic situation in all regions of the Republic of Armenia [1]. Land reform and the privatization process also did not contribute to development: in 1991-92, more than nine hundred collective farms, which created a significant share of agricultural products, were privatized [4]. This step helped to postpone a severe decline in the industry, but did not solve the existing problem - excessive dispersal of land resources and lack of adequate road infrastructure, which led to a sharp drop in early 1995.

Thus, Armenia's external and internal shocks and negative processes over a long period of time had a significant negative impact in the context of deepening the uneven development of the capital and regions.

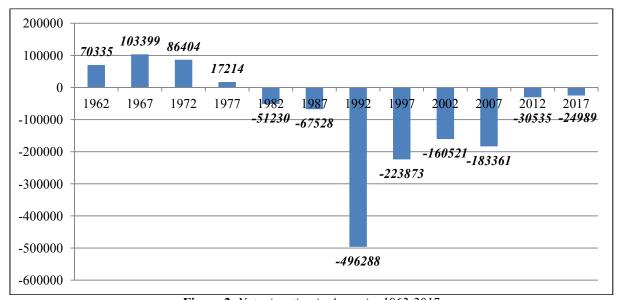
#### **Demographics and labor market**

As mentioned above, one of the main problems of slowing down the pace of regional development has become a demographic problem. In general, if we consider the natural increase of the population of the Republic of Armenia, which is considered the method of subtracting the number of deaths from the number of births, we can see that since 2010, the absolute level of natural increase has been falling in the Republic of Armenia (Figure 1). This is due to a number of reasons: over the past 20 years, the age of first marriage among women has risen from 23.4 years in cities and 21.9 years in rural settlements [5] to the corresponding figures of 27.7 and 25.7 years [6], which leads to an increase in indicator of the age of first motherhood and reduces the birth rate per woman. Another reason is the socio-economic well-being of the majority of the population, which makes it impossible to bring up and support more than one or two children. It is also important to note that the 2020 indicator is associated with the occurrence of two shocks at once: the coronovirus pandemic and the Second Artsakh War, which cumulatively led to an almost complete absence of natural growth.



**Figure 1.** *Natural increase in the population of the Republic of Armenia, 1000 people, 2000-2020 Source:* RA Statistical Committee, Statistical Yearbooks of Armenia 2000-2021, https://www.armstat.am/am/?nid=586

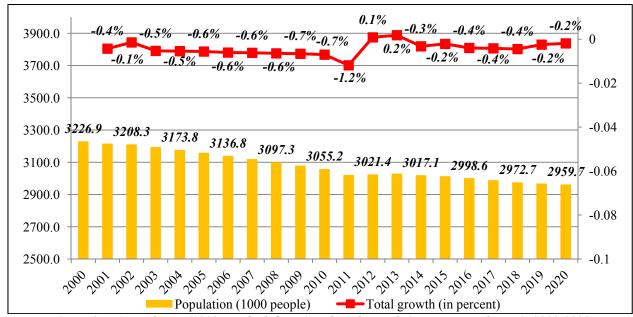
The existing outflow of the population is added to the problem of natural growth: emigration processes have been taking place in the RA since the beginning of independence. In the first decade alone, the number of emigrants exceeded one million (Figure 2). This negatively affects the overall rate of population growth both in the context of a direct population decline and in terms of the possibilities for further reproduction of the emigrated population.



**Figure 2**. *Net migration in Armenia, 1962-2017 Source:* United Nations Population Division. World Population Prospects: 2019 Revision

The above processes ensure the constant reduction of the total population of the Republic of Armenia over the past 20 years. From Figure 3 it can be seen that the process of population decline was recorded almost every year except for 2012 and 2013. This phenomenon primarily has a significant

negative impact on regional cities and villages: over the past 20 years, there has been a significant devastation of the latter, which in turn leads to the impossibility of independent economic development of these regions due to the lack of sufficient human capital.



**Figure 3.** RA population (1000 people, left axis) and total growth (in percent, right axis), 2000-2020 Source: RA Statistical Committee, Statistical Yearbooks of Armenia 2000-2021, https://www.armstat.am/am/?nid=586

Due to the ongoing crisis caused by the coronavirus pandemic, as well as new crisis shocks due to the conflict situation in Eastern Europe, the opportunities for significant economic growth in the near future become difficult to realize, which in turn will lead to the preservation of emigration processes from the Republic of Armenia. As for the natural increase, the study of the demographic pyramid of the Republic of Armenia makes it possible to say

that at the moment we are in the phase of a natural narrowing of the population. This process can be clearly seen in Figure 4: the reason for such regular "pits" on the pyramid is the Second World War. Due to the large number of victims in World War II, the number of people born at this time, as well as the number of their children, grandchildren, etc. (the time period is approximately 25 years) is significantly less than in the next age groups. Due to this

phenomenon, the natural narrowing of the population of the Republic of Armenia will continue

until 2025, which will further strengthen the negative effects presented above.

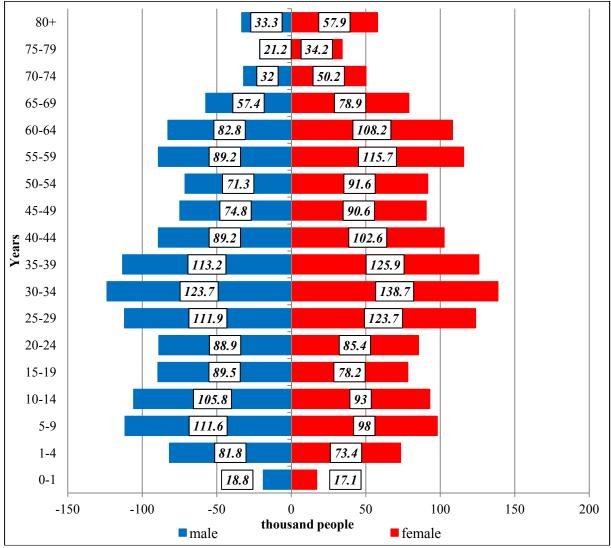


Figure 4. Demographic pyramid of RA, 2020 Source: RA Statistical Committee, RA Demographic Digest, 2020, https://www.armstat.am/file/article/demog 2020 2.pdf

Returning to the issue of migration processes in the region, in order to fully understand the situation in each individual region, the researcher calculated the ratio of migration growth to the population of the regions in percentage terms, which essentially shows the rate of emigration by region. To enable retrospective analysis, this indicator was calculated for three periods with time differences of 5 years. Based on the risk of deviation from the main trends due to health shocks in 2020, which led to a sharp increase in mortality, figures for 2009, 2014 and 2019 were taken.

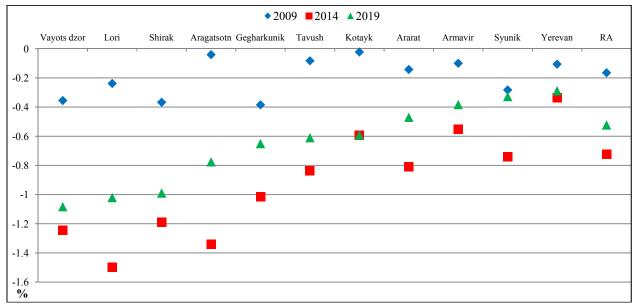
Thus, it can be stated that the rates of emigration are below the average for the Republic of Armenia according to the data of 2019 only in Yerevan, Armavir, Ararat and Syunik. On average, every 200th inhabitant emigrated from Armenia in 2019 across the country. In the case of Yerevan, this

indicator is mitigated by internal migration: a large number of the population moves from the regions to the capital. In the case of the above three regions, a possible factor of low compared to the average emigration rate may be associated with the existence of a constant and stable income (agriculture, mining industry), which allows maintaining the well-being of the family without the need to change residence. The worst indicators are in Vayots Dzor and Lori regions, where every 100th resident left in 2019.

If we consider the situation in the indicated time period, we can see that in all regions of the Republic of Armenia after the crisis there was a sharp jump in the pace of emigration processes from 2009 to 2014, which in most cases was not reduced to the initial level over the next 5 years. Another important conclusion that can be drawn from this figure is that the ratio between regions has not

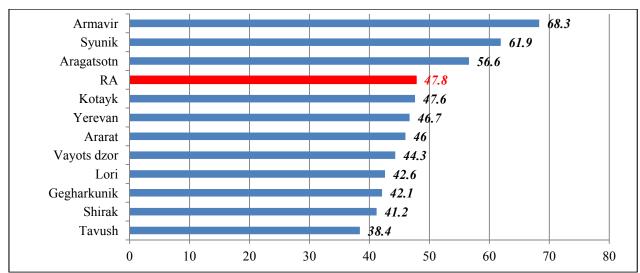
changed much over the past 10 years: the "outsiders" in terms of emigration remained the same regions, while regions with better positions retained them. This means that for a given time, the processes of equalizing the economic opportunities of the regions and raising the level of well-being

have shown almost zero results, since sufficient opportunities have not been created in regions with high rates of emigration, and the population of the latter continues to leave to provide opportunities for living and finding work.



**Figure 5.** The ratio of migration growth to the population of the regions in 2009, 2014, 2019, in percent Source: RA Statistical Committee, Statistical Yearbooks of Armenia 2000-2021, https://www.armstat.am/am/?nid=586, Regional Statistics 2009-2021, https://www.armstat.am/am/?nid=651

In this context, it is also necessary to consider the level of employment in the regions, which will make it possible to understand the state of the labor market in the latter. As shown in the figure below, only three regions have employment rates above the national average. In general, this indicator is quite low in the Republic of Armenia for many reasons, important among which are the high level of the shadow economy, the low involvement of women in the labor activity in the regions, as well as the lack of jobs and enterprises due to the low level of development and investment. At the same time, it is also important to take into account that part of the population in the regions is involved in the agricultural sector and is not officially registered as employed (Figure 6).



**Figure 6.** Employment rate in the regions of the Republic of Armenia, 2020, in percent *Source:* RA Statistical Committee, Statistical Yearbooks of Armenia 2021, https://www.armstat.am/am/?nid=586, Regional Statistics 2021, https://www.armstat.am/am/?nid=651

#### **Economic indicators of the regions**

The study of economic indicators must begin with a consideration of the distribution of the process of creating value added by region. As shown in the figure below, more than half of the GDP of the Republic of Armenia is generated in the capital (Figure 7). This is a consequence of the high

concentration of financial resources, better infrastructure and human capital: Yerevan has an international airport and the highest quality universities; the availability of borrowed funds and financial instruments is extremely high compared to other regions.

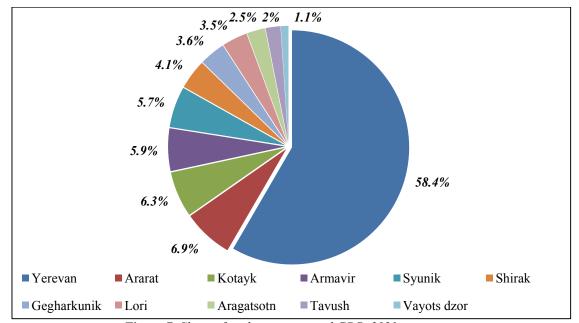
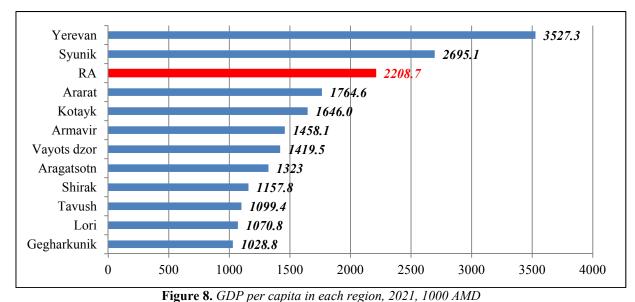


Figure 7. Share of each region in total GDP, 2021, in percent Source: RA Statistical Committee, Statistical Yearbooks of Armenia 2021, https://www.armstat.am/am/?nid=586, Regional Statistics 2021, https://www.armstat.am/am/?nid=651



Source: RA Statistical Committee, Statistical Yearbooks of Armenia 2021, https://www.armstat.am/am/?nid=586, Regional Statistics 2021, https://www.armstat.am/am/?nid=651

If we consider the indicator of GDP per capita by regions of the Republic of Armenia, we can see that only Yerevan and Syunik region have incomes per citizen higher than the average for the country. In the case of Shirak, Tavush, Gegharkunik and Lori regions, the income level of the population of these regions is two times lower than the average level in the Republic of Armenia (Figure 8). Thus, such a high income additionally stimulates internal migration and the flow of labor resources from the regions to the capital, which in turn further increases the possibilities for expanded reproduction of GDP in the capital. From this we can conclude that under these conditions, the resulting vicious circle of a

constant increase in the possibilities of the capital leads to continued impoverishment and loss of economic opportunities in the regions. Under such conditions, the only mechanism can be a targeted redistribution of resources for specific programs for the economic development of specific regions, which will preserve the existing capital and prevent a complete flow of all resources to the capital.

To fully understand the level of centralization of funds in the capital, it is also advisable to consider the ratio of retail trade volumes as a fundamental part of household consumption. As shown in the table below, out of every 100 AMD, 70 are spent in Yerevan, given that only 36.8 percent of the population lives in the capital (Table 1). This shows how sharply the turnover of funds differs in the capital and regions, where this

indicator is much lower. Another reason for such a sharp difference, in addition to the above-mentioned circumstance of significant differences in the incomes of residents of the capital and regions, may be the fact that residents of the regions purchase and consume in the capital: a common practice among regional citizens is the practice of coming to shopping centers in Yerevan for large purchases. Thus, at the expense of households, there is an additional flow of income from the regions to the capital of Armenia: these funds are further accumulated in new opportunities for expanding production in Yerevan, thereby further increasing the already existing gap between the production volumes and the creation of added value of the capital and regions.

|             | Share in the population of the Republic of Armenia | Share in the volume of retail trade |
|-------------|--|-------------------------------------|
| Tavush      | 4.1%   | 2.3%                                |
| Shirak      | 7.8%   | 4.3%                                |
| Gegharkunik | 7.7%   | 2.3%                                |
| Lori        | 7.2%   | 2.5%                                |
| Vayots dzor | 1.6%   | 0.6%                                |
| Ararat      | 8.7%   | 4.4%                                |
| Yerevan     | 36.8%  | 70.3%                               |
| Kotayk      | 8.5%   | 5.3%                                |
| Aragatsotn  | 4.2%   | 1.7%                                |
| Syunik      | 4.6%   | 2.0%                                |
| Armavir     | 8.9%   | 4.3%                                |

Table 1. Shares in population and retail sales by region, 2021, in percent

Source: RA Statistical Committee, Statistical Yearbooks of Armenia 2021, https://www.armstat.am/am/?nid=586,

Regional Statistics 2021, https://www.armstat.am/am/?nid=651

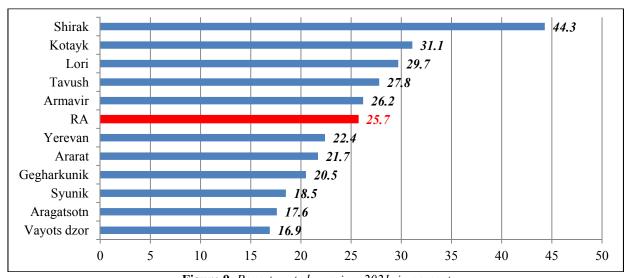


Figure 9. Poverty rate by region, 2021, in percent

Source: RA Statistical Committee, Statistical Yearbooks of Armenia 2021, https://www.armstat.am/am/?nid=586, Regional Statistics 2021, https://www.armstat.am/am/?nid=651

Due to the constantly deteriorating economic situation and the outflow of resources from the regions, the problem of extreme poverty also remains unresolved: this issue is significant at the level of the entire republic, however, in the case of some regions, the poverty level is significantly higher than the national average. Thus, as shown in Figure 9, almost half of the population of the Shirak region (44.3 percent) lives below the poverty line, which is almost twice the average poverty level in the country.

Summarizing the entire study, it should be emphasized that in the current conditions of demographic narrowing, caused both by the processes of natural reproduction of the population, and the constant outflow of the latter due to the socio-economic state of the country, the main blow falls on the regions, since this crisis in the capital is mitigated by internal migration, which allows the capital to fill the necessary demand in human capital. A retrospective analysis of migration rates by region shows that the situation has hardly changed over the past 10 years: regions with high population outflow rates remain so now, which indicates the ineffectiveness of state policy in creating new opportunities for economic development and equalizing the level of socioeconomic well-being in regions. GDP per capita indicators confirm this hypothesis: residents of four of the eleven administrative units of the Republic of Armenia have an income (according to GDP per capita calculations) at a level two times lower than the average for the whole country. In conditions where more than half of GDP is produced in the capital, which is facilitated not only by more favorable conditions for doing business, but also by a direct outflow of funds through the consumption of residents of the regions in the capital, the regions' opportunities for economic development will continue to decrease. Under such conditions, the main goal of state policy to stimulate economic development in the regions should be the competent redistribution of funds in order to use them to develop comparative advantages in specific industries for specific regions. Otherwise, the social nature of the redistribution of funds in the form of direct grants without earmarking or assistance in the implementation of activities not related to the creation of potential for the long-term production of additional value, will simply scatter the initially small funds and resources of Armenia.

#### Conclusion

This study was aimed at a comprehensive analysis of the current situation of the socioeconomic development of the regions of the Republic of Armenia and the main issues for state policy in this area. An analysis was made of the demographic state and labor market of the Republic of Armenia as a whole and the regions separately. As a result, it was shown that both natural growth and migration have a negative trend: these processes are caused by many factors, mainly related to the socio-economic well-being of the population. In such conditions, the reduction of human capital leads to a reduction in the development opportunities for the economies of the regions. A comparative analysis of the economic indicators of the regions and the capital showed that the level of high centralization of funds and resources, as well as a high share in the production of total GDP and fairly high incomes stimulate an even greater flow of resources from the regions to Yerevan, which subsequently only exacerbates the already existing problem of a significant gap between the capital and regions. Thus, the main emphasis in the state budget policy at the regional level and programs to promote equal development should be placed precisely on the targeting of redistribution and specific programs, since otherwise initially small funds can be used to mitigate current social problems, which will not solve, but in some cases further exacerbate these problems.

#### **Bibliography**

- 1. **Agadzhanyan A. V., Manukyan A. A., Melkonyan G. A.**, "Prospects for the even development of the regions of the RA", Scientific journal "Alternative", January-March, 2021, Yerevan, pp. 334-340, URL: http://alternative.am/wp-content/uploads/2021/04/%D5%84%D5%A1%D6%80%D5%BF-2021.pdf
- RA Demographic Digest, 2020, https://www.armstat.am/file/article/demog\_2020\_2.p df
- 3. Regional statistics 2009-2021, https://www.armstat.am/am/?nid=651
- 4. Statistical Yearbook of Armenia, 1996, URL: https://www.armstat.am/
- 5. Statistical Yearbook of Armenia, 2002, Population, URL: https://www.armstat.am/file/doc/650.pdf
- Statistical Yearbook of Armenia, 2021, Population, URL: https://www.armstat.am/file/doc/99526823.pdf
- 7. Statistical Yearbooks of Armenia 2001-2020, https://www.armstat.am/am/?nid=586
- 8. United Nations Population Division. World Population Prospects: 2019 Revision
- 9. Yerevan Municipality, "Urban economy", URL: https://www.yerevan.am/ru/economy/

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