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## Changes in the structure of Armenia's labour resources between 1993 and 2020

**Abstract.** The article characterises the structure of Armenia's labour resources in the period between 1993 and 2020. It aims to assess the changes on the Armenian labour market by means of a deductive analysis of historical data and observation of changes in the structure of resources based on generally available macroeconomic data. The authors evaluate these processes against the background of demographic and economic changes, by presenting and describing statistical data. Variables such as data on the economic situation of the country (income capita, inflation rate and unemployment), demographic data (employment structure, population structure, migration) are used for the analysis. The analysis demonstrates that the COVID-19 pandemic and the Nagorno-Karabakh conflict led to an economic downturn in Armenia, with GDP per capita falling, and inflation rising. A more rapid decrease in employment could be observed in 2020, manifesting itself in a declining number of employees, self-employed and entrepreneurs. A much more significant drop in employment was observed in urban areas than in the countryside, although the total number of agricultural workers in Armenia decreased compared to the 1990s. The governmental measures and programmes aimed at protecting jobs and businesses and mitigating the effects of the COVID-19 pandemic proved to be insufficient. In 2020, fewer citizens emigrated from Armenia as a result of the state of the emergency maintained from March to June 2020 and the closing of state borders.

**Keywords:** Labour Resources; Reserves of Labour Resources; Labour Market; Labour Market Structure; Employment; Labour Market Efficiency; Demographic Trends; Armenia; COVID-19; Nagorno-Karabakh Conflict

**JEL Classification:** E27; J21; J64

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**Зміни в структурі трудових ресурсів Вірменії в 1993–2020 роках**

**Анотація.** У статті проаналізовано структуру трудових ресурсів Вірменії в період 1993–2020 років. метою дослідження було оцінити зміни на ринку праці Вірменії за допомогою дедуктивного аналізу наявних історичних відомостей і спостереження за змінами в структурі ресурсів на основі загальнодоступних макроекономічних даних. Автори статті дослідили відповідні статистичні дані та їх зв'язок із демографічними й економічними змінами в Вірменії. Для проведення аналізу було використано такі змінні, як відомості про економічне становище країни (дохід на душу населення,

рівень інфляції та безробіття) і демографічні дані (структура зайнятості, структура населення, міграція).

Проведений аналіз показав, що пандемія COVID-19 та нагірно-карабаський конфлікт призвели до економічного спаду в Вірменії, зменшення ВВП на душу населення та посилення інфляційних процесів. Було встановлено, що динаміка зменшення зайнятості населення пришвидшилася в 2020 році, що проявилось в зменшенні кількості працевлаштованих і самозайнятих осіб, а також підприємців. Значно суттєвіше падіння рівня зайнятості спостерігалось у містах, порівняно з тими населеними пунктами, що розташовані в сільській місцевості, попри той факт, що загальна кількість працюючих у галузі сільського господарства Вірменії зменшилася в порівнянні з 1990-ми роками. Ужиті державою заходи та розроблені програми, спрямовані на збереження робочих місць і захист представників бізнесу від наслідків пандемії COVID-19, виявилися недостатніми. Також було виявлено, що в 2020 році з Вірменії емігрувало менше громадян через запроваджений у країні надзвичайний стан, який тривав з березня по червень того ж року, та закриття державних кордонів.

**Ключові слова:** трудові ресурси; резерви трудових ресурсів; ринок праці; структура ринку праці; працевлаштування; ефективність ринку праці; демографічні тенденції; Вірменія; COVID-19; нагірно-карабаський конфлікт.

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### **Изменения в структуре трудовых ресурсов Армении в 1993–2020 годах**

**Аннотация.** В статье проанализирована структура трудовых ресурсов Армении в период 1993–2020 годов. Целью исследования было дать оценку изменениям, произошедшим на рынке труда Армении, с помощью дедуктивного анализа имеющихся исторических сведений, а также наблюдения за изменениями в структуре ресурсов на основе общедоступных макроэкономических данных. Авторы статьи исследовали соответствующие статистические данные и их связь с демографическими и экономическими изменениями в Армении. Для проведения анализа были использованы такие переменные, как сведения об экономическом положении страны (доход на душу населения, уровень инфляции и безработицы) и демографические данные (структура занятости, структура населения, миграция).

Проведенный анализ показал, что пандемия COVID-19 и нагорно-карабахский конфликт привели к экономическому спаду в Армении, уменьшению ВВП на душу населения и усилению инфляционных процессов. Было установлено, что наиболее быстрая динамика снижения занятости населения наблюдалась в 2020 году, что проявилось в уменьшении количества трудоустроенных и самозанятых лиц, а также предпринимателей. Значительно большее падение уровня занятости наблюдалось в городах по сравнению с населенными пунктами, расположенными в сельской местности, и это несмотря на тот факт, что общее количество работников в отрасли сельского хозяйства Армении уменьшилось по сравнению с 1990-ми годами. Принятые государством меры и разработанные программы, которые были направлены на сохранение рабочих мест и защиту представителей бизнеса от последствий пандемии COVID-19, оказались недостаточными. В ходе исследования было установлено, что в 2020 году из Армении эмигрировало меньше граждан, что было обусловлено введенным в стране чрезвычайным положением, которое длилось с марта по июнь того же года, и закрытием государственной границы.

**Ключевые слова:** трудовые ресурсы; резервы трудовых ресурсов; рынок труда; структура рынка труда; трудоустройство; эффективность рынка труда; демографические тенденции; Армения; COVID-19; нагорно-карабахский конфликт.

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### **Zmiany w strukturze zasobów pracy w Armenii w latach 1993-2020**

**Streszczenie.** Badanie przedstawia charakterystykę struktury zasobów pracy Armenii w latach 1993-2020. Celem artykułu jest próba oceny przemian na armeńskim rynku pracy za pomocą dedukcyjnej analizy danych historycznych, obserwacji zmian w strukturze zasobów na podstawie ogólnodostępnych danych makroekonomicznych. Procesy te zostaną przez autorów ocenione na tle przemian demograficznych oraz gospodarczych za pomocą prezentacji i opisu danych statystycznych. Do analiz wykorzystane zostaną takie zmienne jak: dane dotyczące sytuacji gospodarczej kraju (np. PKB, PKB per capita, stopa inflacji), demograficznej (struktura zatrudnienia, struktura ludności, migracje).

W wyniku przeprowadzonej analizy ustalono, iż COVID-19 oraz konflikt o Górski Karabach doprowadziły do załamania gospodarczego w Armenii, objawiającego się spadkiem PKB, PKB per capita i wzrostem inflacji. Większy spadek zatrudnienia można odnotować w 2020 r. Wyrażał się on w zmniejszeniu liczby pracowników najemnych, samozatrudnionych i przedsiębiorców. Znacznie większy spadek zatrudnionych odnotowano w miastach niż na wsiach, choć ogólna liczba zatrudnionych w rolnictwie w Armenii spadła w porównaniu z latami 90. XX w. Podjęte przez rząd środki i programy mające na celu ochronę miejsc pracy i przedsiębiorstw oraz złagodzenie skutków pandemii COVID-19 okazały się nie wystarczające. W roku 2020 z Armenii wyemigrowało mniej obywateli, powodem było wprowadzenie stanu wyjątkowego od marca do końca czerwca 2020 r. i zamknięcie granic.

**Słowa kluczowe:** zasoby pracy; rynek pracy; struktura rynku pracy; zatrudnienie; efektywność rynku pracy; trendy demograficzne; COVID-19; konflikt o Górski Karabach.

## 1. Introduction

The efficiency of the national economy depends on an efficient labour market. Labour resources constitute one of the most important components of the labour market. They depend directly on the demographic situation of the country, i.e. its population and the number of people able to work, who include the economically active population, the unemployed and those who are not seeking employment, including learners.

From a demographic point of view, the working age population constitutes global labour resources, while the population limited to the productive age individuals represents potential labour resources (Labour Market, 2017). Not all people of working age are active in the labour market due to health, education, care-giving or having other livelihoods, therefore they do not have to seek employment.

Nevertheless, regardless of which category of labour resources is taken into account, what matters is the size and the demographic, social and occupational structure of the population forming a particular resource. In addition, labour resources are affected by migration, which can either deplete or augment labour market resources.

## 2. Purpose

The purpose of this study is to answer the question of whether the changes in the structure of labour resources in Armenia in 1993-2018 can be considered sufficient in view of the macroeconomic and demographic situation surrounding the labour market.

## 3. Brief Literature Review

The most comprehensive description of Armenia's labour resources and labour market in the period between gaining independence and the year 2000 is contained in two monographs (Hodzabekan, 2001; Sargsyan A., 2001). The causes of unemployment in Armenia in the period 1992-2003 and the labour market changes during the economic transition period are shown by (Zograban, 2017). There are many factors that affect labour resources in Armenia. Legal regulations can reduce staff shortage and increase productivity. The main labour market problems of the 1990s were high unemployment, low productivity, low wages and a large percentage of agricultural workers (ca. 31.3% of all employees). These factors have contributed to the population's impoverishment. The situation in the labour market may be improved through the introduction of legislation to reorient the activities of small and medium-sized enterprises, attract foreign investment and internationalise the economy of Armenia (Ayrabetan, 2019).

The causes of poverty of the Armenian population are to be found in the breakdown of interstate production links, liquidation of enterprises and indiscriminate privatisation of land (Arturovic, 2009). The Armenian government repeatedly undertook ineffective measures aimed at reducing unemployment, especially among young people (aged 14-29). Its efforts were negatively evaluated at the conference on youth unemployment in Geneva in 2012 (ILO, 2012).

In 2014, the government of Armenia developed a new model for combating unemployment, involving the elimination of meagre unemployment benefits. Ten activation programmes for the unemployed and an assessment of the competitiveness of the unemployed in terms of future employment were introduced (Melkumyan, 2014).

The labour market in Armenia is impaired by excessive and unused agricultural labour resources. The outflow of workers from that sector to other occupations in the 1990s and 2000s was too slow and did not promote the development of agriculture (Akopyan, 2013).

Many authors have addressed the problem of emigration from Armenia. A comprehensive picture of the migration of Armenians to other countries before 2010 was presented in the report titled Armenia Extended Migration Profile. Armenian citizens were pushed to emigrate by the lack of jobs and low wages (Nureev & Manukyan, 2012). Migration has had a huge impact on all aspects of social life in Armenia (Rasuly-Paleczek, 2017). The migration from the countryside to cities, resulting in the severing of family ties, was driven by the desire to seek work or higher wages (Manasyan & Poghosyan, 2012).

In 2011, the European Training Foundation investigated the relationship between emigration and the labour market and education in Armenia. The research subjects were people aged 18-50 who either intended to emigrate or had left and came back to their homeland. The aim of the study was to determine the level of education of the emigrants and the usual period of emigration (European Training Foundation and Caucasus Research, Resource Centers, 2013). The study was repeated in 2014, and the results were published in a report in 2015 (The World Bank, 2015). The survey included migrants to the European Union. The researchers determined how well the qualifications of potential emigrants matched their planned employment in other countries. Later, in 2016-2018 the issue of emigration was dealt with in the reports published by the International Organisation for Migration (Statistical Committee of the Republic of Armenia, 2016, 2017, 2018). The impact of immigration on the size and strength of the Armenian diaspora around the world, mainly in the USA, was analysed by Monique Bolsajian. One of her objectives was to determine the amount of revenues from Armenian migrants (Bolsajian, 2018).

The impact of COVID-19 on Armenia's economy and labour market was analysed in the report of the International Labour Organisation (ILO, 2020).

## 4. Results

### Characteristics of Armenia's Economy

Before Armenia became independent in 1992, its economy was based on the chemical, electrical goods, machinery, food and synthetic rubber industries, and had strong links to other former Soviet republics' economies. The dissolution of the USSR severed these ties and the economic situation in Armenia was worsened by the blockade by Azerbaijan and Turkey in the aftermath of the Nagorno-Karabakh war between Azerbaijan and Armenia in the 1993-1994 and the heavy material losses caused by an earthquake (Vardomskiy et al., 2016). The economic changes were slowed down significantly in those circumstances. By 1998, 65% of medium-sized and large industrial plants had been privatised; after that period privatisation decelerated markedly (Vardanovic, 2017). In the 21<sup>st</sup> century, Armenia's economy is largely based on mining, agriculture and the textile industry (Invest in Armenia, 2016). Since the mid-2000s, Armenian citizens have found employment in new sectors - the jewellery and tourism industries (Caucasian Knot, 2019). Armenia continues to use its resources, such as copper, zinc, lead and molybdenum ores (its main exports). There are also deposits of precious metals such as gold, silver and platinum (Armenia Mining and Minerals, 2019).

Agricultural land accounts for 42% of the area of Armenia, 16% of which is arable land, and more than 50% of the area is artificially irrigated. Armenia is a well-known producer of grape vine, nuts, figs, olives and other fruit and vegetables. The main cereals grown in Armenia are wheat, barley and maize. There are also plantations of industrial crops, tobacco, sugar beet, cotton and geranium. The breeding of sheep, goats and silkworms is of lesser importance. 90% of arable land is privately owned (Hovhannisyan, 2019; The World Bank, 2017).

In the early 1990s, Armenia joined the CIS, but failed to mitigate the economic downturn within that period. Between 1992 and 1995, the country's GDP fell by more than 50%, compared to 1989. Subsequently, it grew until 2008 and then fluctuated up until 2019. The pandemic and the Nagorno-Karabakh conflict resulted in a 9% fall in GDP after the second quarter of 2020 (Trading Economics, 2020). The hyperinflation characteristic of post-Soviet states, including Armenia, ended in the late 1990s, levelling off at an acceptable level after 2012 (Figure 1).

### Demographic Characteristics

Armenia is a country on the border between Europe and Asia, one of the smallest countries in the South Caucasus region with an area of 29,800 km<sup>2</sup>. In 2019 Armenia had a population of 2,939,000 (Statistical Committee of the Republic of Armenia, 2020). In terms of nationality,

Armenians accounted for 98% of the population, the remaining two percent of the population consisting of Yazidis, Russians, Assyrians, Kurds, Ukrainians and Georgians (Statistical Committee of the Republic of Armenia, 2021).

The population of Armenia suffered a slight decline after 2002 and 2012, nevertheless its structure remains unchanged. The rural-to-urban population ratio changed over the period under consideration from 68:32 to 64:36 percent (Figure 2). As to the age structure of the population (as shown in Figure 3), the situation was somewhat less straightforward. A sharp decline in labour resources could be observed in 2002-2003, followed by a recovery after 2008, and then a slow decline since 2011. As to the pre-working age population, a fairly pronounced downward trend (almost linear) is observed over the whole period considered, with a little stabilisation after 2012.

Figure 4 takes into account both the age structure of the population and the place of residence. The graph shows the ratio between the working age population and the pre- and post-working age population in urban and rural areas (in thousands). What is noteworthy, in both cases these ratios showed a distinct upward trend (up until 2010-2011). After 2012, the ratio of working-age population to the rest of the labour resources living in the countryside exceeded the analogous ratio for the urban population. At the same time, however, a clear downward trend of this ratio is observed in both cases.

The employment structure by type (in thousands) is shown in Figure 5. We see a slow decline in employment in the economy over the whole period under consideration (1993-2020). For the employed labour force, after 2008-2009 there was a slight recovery and stabilisation at a level

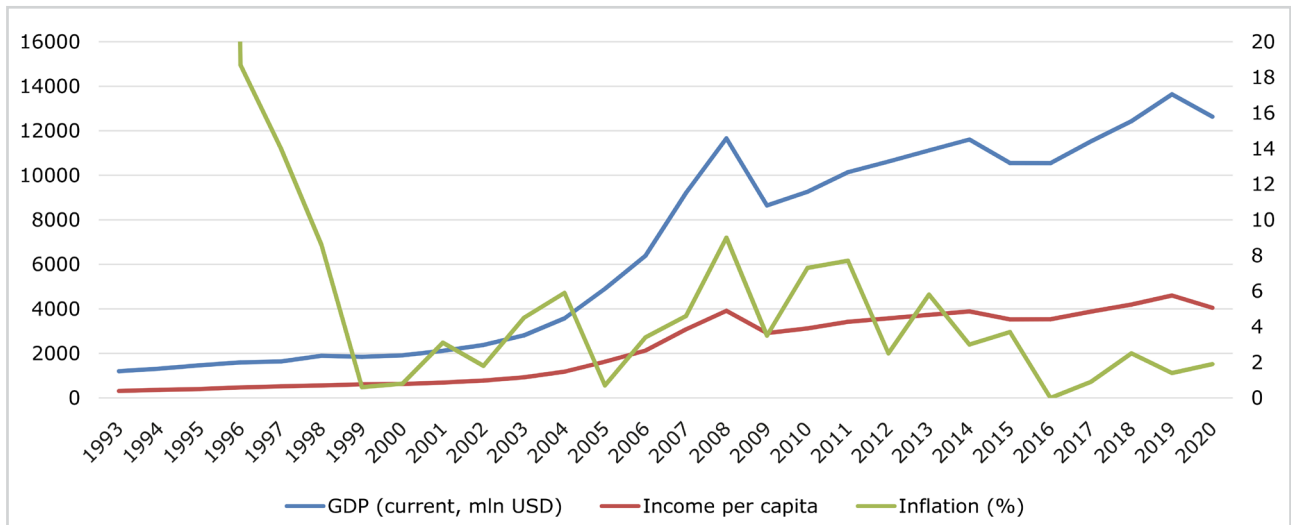


Figure 1:  
**Armenia's GDP per capita (USD thousand) and inflation**  
 Source: Compiled by the authors based on data by The World Bank (2020)

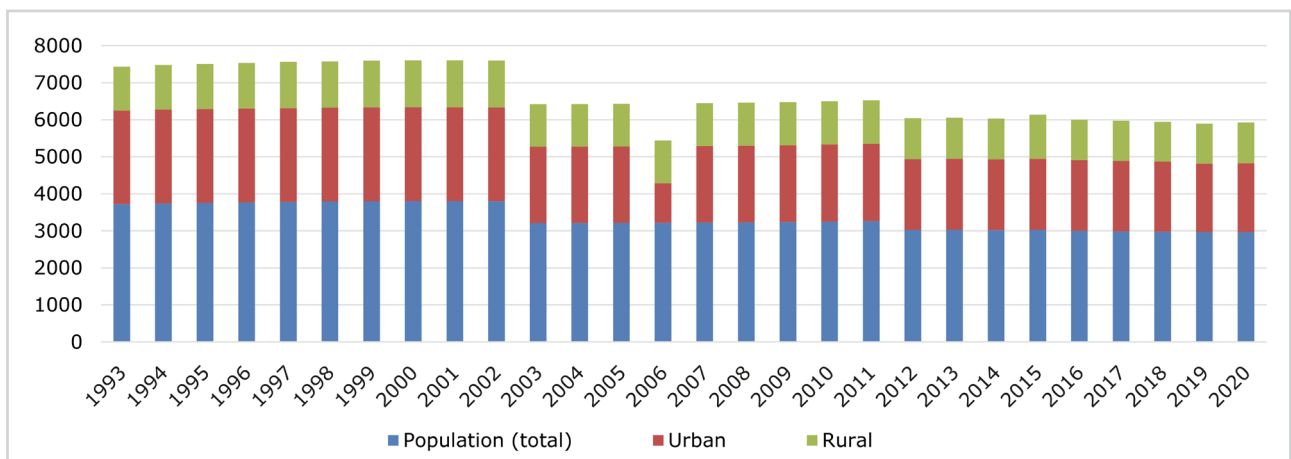


Figure 2:  
**Population of Armenia in 1993-2020**  
 Source: Statistical Committee of the Republic of Armenia (1993-2020)

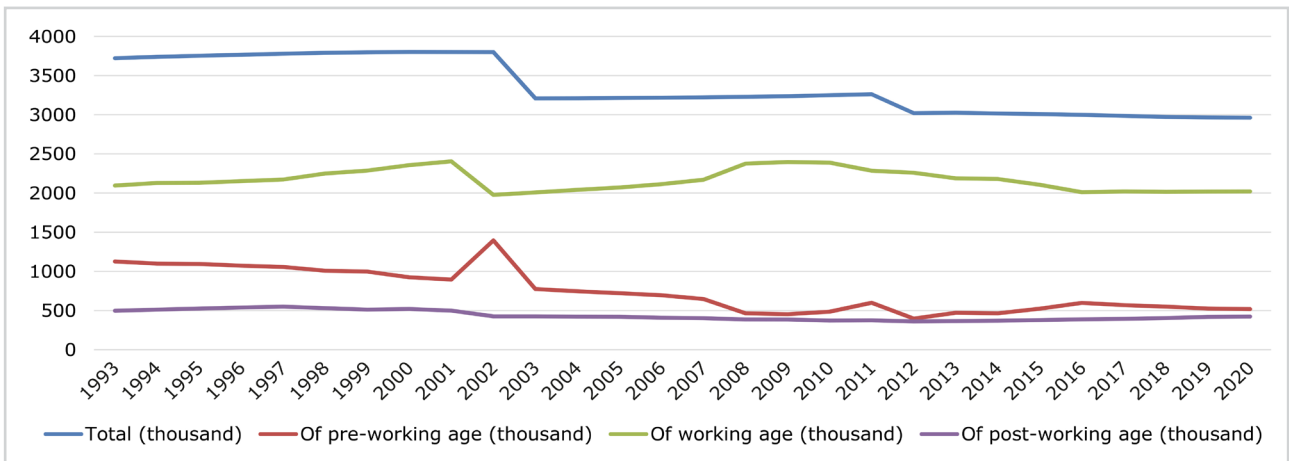


Figure 3:  
**The age structure of the population in Armenia (thousand)**  
 Source: Statistical Committee of the Republic of Armenia (1993-2020)

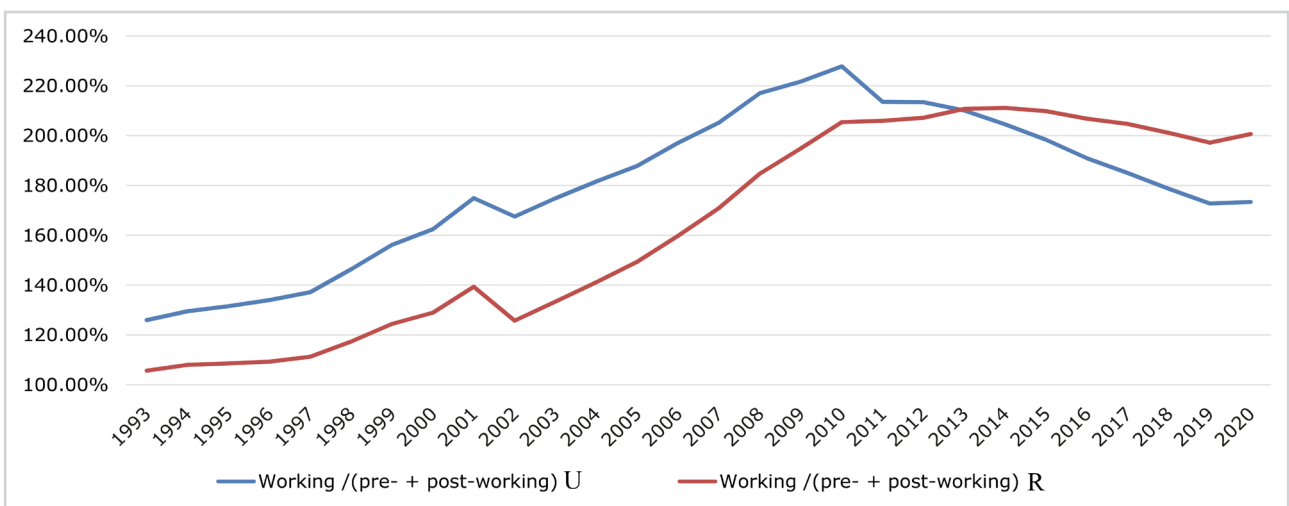


Figure 4:  
**The ratio between the working age population and the pre- and post-working age population in urban and rural areas (thousand)**  
 Source: Statistical Committee of the Republic of Armenia (1993-2020)

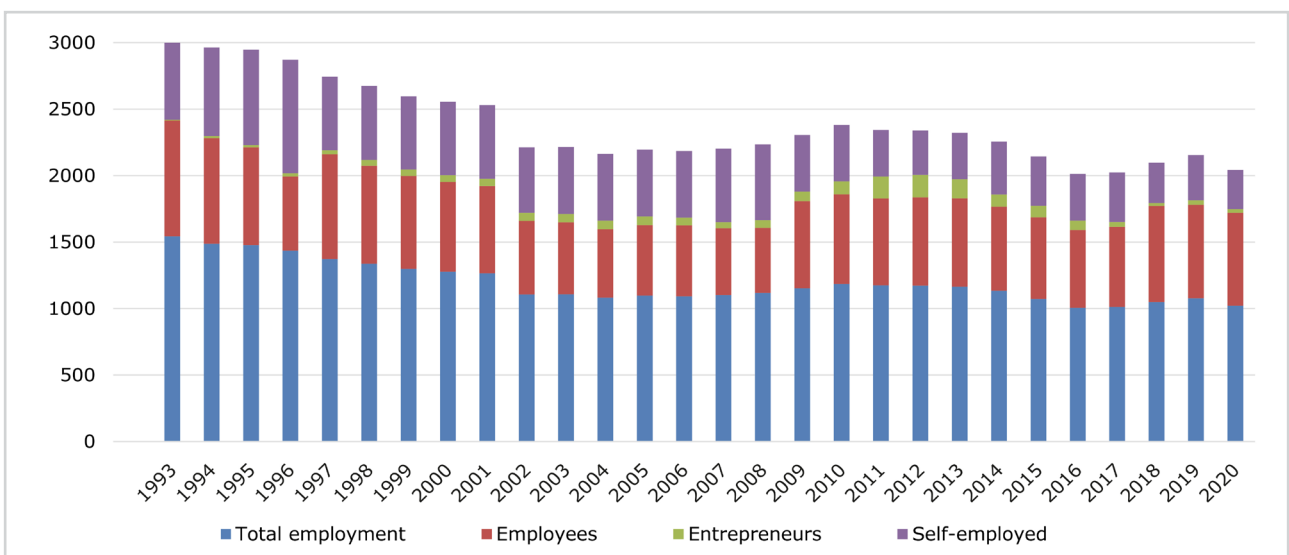


Figure 5:  
**Employment by type (thousand)**  
 Source: Statistical Committee of the Republic of Armenia (1993-2020)

of 600,000-630,000. The situation is slightly worse for the self-employed and entrepreneurs, where a significant decline was observed after 2008-2009 in both forms of employment. The downward trend for self-employed and entrepreneurs is not as strong as for those employed in the economy. As a result of the COVID-19 pandemic, the group that shrank the most in the first two quarters of 2020 were the self-employed. This suggests that the government aid they received was insufficient.

The total number of people who failed to find employment rose steadily until 2010 and then decreased until 2013. After that year, the number of unemployed was between 220,000 and 240,000. A majority of the unemployed were women (between 65% of the total number of employees recorded in 1993, and around 49% in 2020). More than one half of all the unemployed remained out of work for longer than a year. The ratio of unemployed men to the total employed population ranged from around 35% in 1993 to just under 30% in 2020, and was relatively stable over the period considered. The structure of unemployment in respect of gender is shown in Figure 6.

Figure 7 shows the detailed structure of employment by sector of the economy in 1993-2020. At the end of the investigated period, around 35% of workers were still employed in the agricultural, forestry and fishery sectors. Since 2000, agricultural workers have been moving to other sectors. The education and culture sector employs around 11-12% of the workforce. Industry and trade are in the third place in terms of the number of employees, accounting for around 10% of Armenian workforce each. About 8% of the workforce were employed in public administration, 6% in transport and about 5% in construction. The healthcare sector employed 4.5-4.8% of the workforce, whereas about 3% of employees worked in hotels and restaurants. 2% of the workforce were employed in housing services, and 1.5% - in higher education and the financial sector. Significant changes in the proportion of the number of employees can be observed in the last few years of the investigated period. The share of agricultural workers decreased in favour of the public sector (education, public administration), in addition to the decrease observed in total employment.

40% of Armenia's GDP is generated in the sectors that have been severely affected by COVID-19: trade and industry (12.4% of GDP each), and construction (7.3%). The International Labour Organisation (ILO) reported a 50% performance decline in construction in April 2020, compared to April 2019, along with 40% in trade, and 9% in industry. A slight decline was observed in agriculture, storage and transport (ILO, 2020).

Since mid-March 2020, the government has put in place a number of measures and programmes in order to protect jobs and businesses and to mitigate the effects of the COVID-19 pandemic. In March, the government committed 150 billion Armenian drams (AMD), which corresponds to approximately 2.2% of GDP, to implement such actions. Between mid-March and mid-June, about 22 programmes were implemented. Formally employed workers who lost their

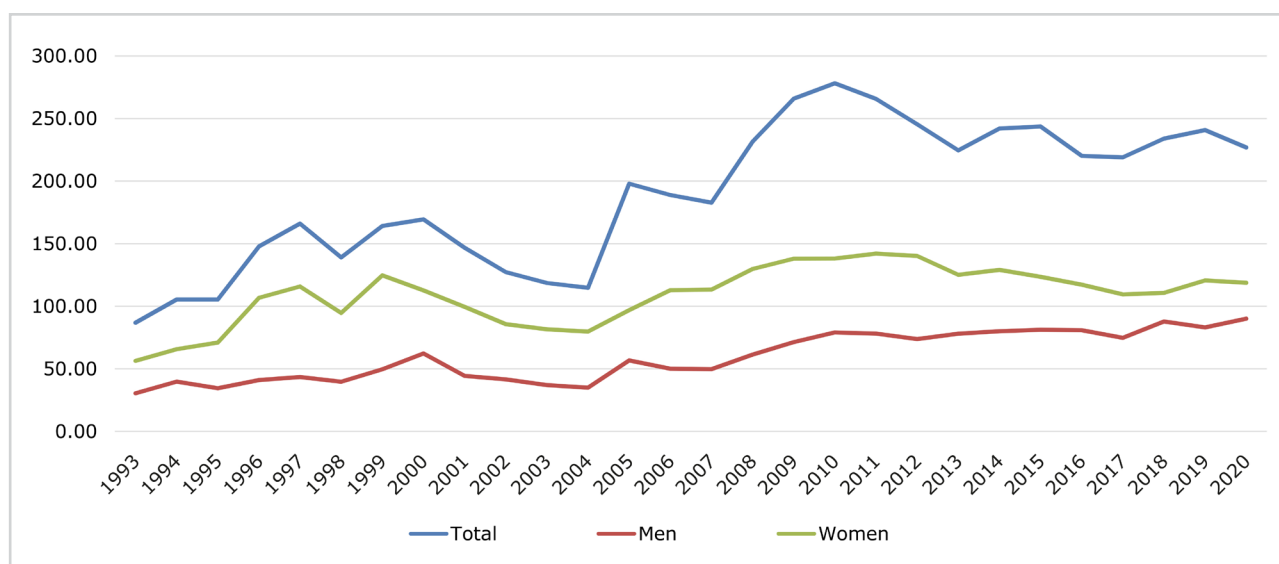


Figure 6:  
**Unemployment among women and men (thousand)**  
 Source: Statistical Committee of the Republic of Armenia (1993-2020)

jobs between 13 March and 30 March 2020 received a lump sum of AMD 68,000 (USD 141), and those with dependent children up to AMD 100,000 (USD 208) per child. Workers in the economic sectors affected by lockdown also received half of their salary as a lump sum, while self-employed persons can apply for the equivalent of 10% of their turnover in the fourth quarter of 2019. A number of non-employment related benefits for households have been introduced as well. The government introduced a flat rate payment for electricity, gas and water bills of 30 to 50% of the amount, as of February 2020.

Companies which took out bank loans may apply for interest subsidies on loans up to AMD 250 million in total (USD 520,000). SMEs can request a loan of up to AMD 50 million (USD 104,000), with interest-free repayments for the first two years. Credit guarantees are available for start-ups and innovative projects. Companies with 2 to 100 employees can receive a one-off grant of 20% of their monthly salary. None of these benefits is conditional upon the employment of workers. IT companies receive special support and can benefit from a lump sum grant of AMD 20 million (USD 42,000). Finally, individual farmers and agricultural cooperatives can receive support in the form of subsidies for loan repayments (ILO, 2020).

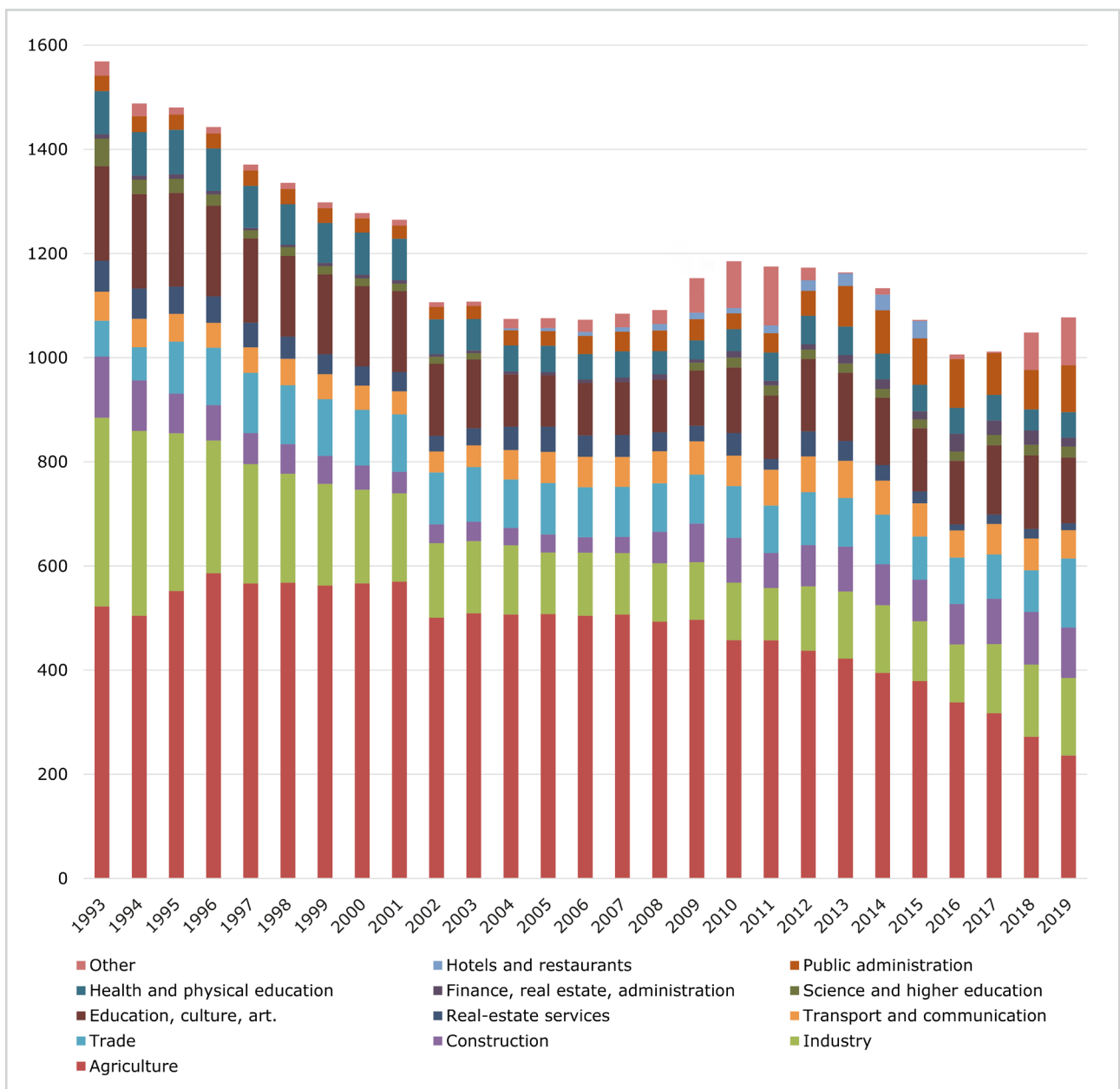


Figure 7:  
**Employment by sector in 1993-2019 (thousand)**  
 Source: Statistical Committee of the Republic of Armenia (1993-2020)



### Migration from Armenia

Before 1992, Armenia was one of the USSR republics and had a low level of migration (European Training Foundation and Caucasus Research, Resource Centers, 2013). The restoration of independence, economic collapse, high inflation, unemployment, pauperisation, paralysis of the transport system, and the Nagorno-Karabakh conflict caused a dramatic increase in the number of emigrants. In 1992-1994, 980,000 people left Armenia and only 370,000 returned. More than 60% of emigrants were economically active men. This changed the demographic structure of the Armenian population. The percentage of the elderly increased, while the marriage and birth rates declined. The emigrants of that period included people with secondary or higher education and average wealth, having sufficient funds to leave the country. From 1994, the number of migrants steadily decreased as a result of gradual improvement of Armenia’s economic situation and the legislation introduced by the neighbour states, limiting the influx of immigrants. From mid-1990s, emigration was largely driven by the processes of family reunification or taking permanent residence outside the country. The number of departures and arrivals of Armenian citizens in 1995-2020 are shown in Figure 8.

The data in Figure 9 suggest that the number of Armenian citizens who left the country in 1995-2020 showed a downward trend. The main destinations were the CIS states; far fewer people left for other countries. There were significantly fewer immigrants than emigrants; their number remained at the same level for the whole period investigated. Those returning to Armenia were emigrants from the former Soviet republics. The overall migration balance in Armenia remained negative. This means that during the whole period investigated Armenia was an emigrant country.

According to the Migration Snapshot of the Republic of Armenia 2016-2018, the largest group among those leaving the country had secondary vocational education. The most significant labour deficit was recorded in view of two age groups: 19-29 and 39-49 (Statistical Committee of the Republic of Armenia, 2018).

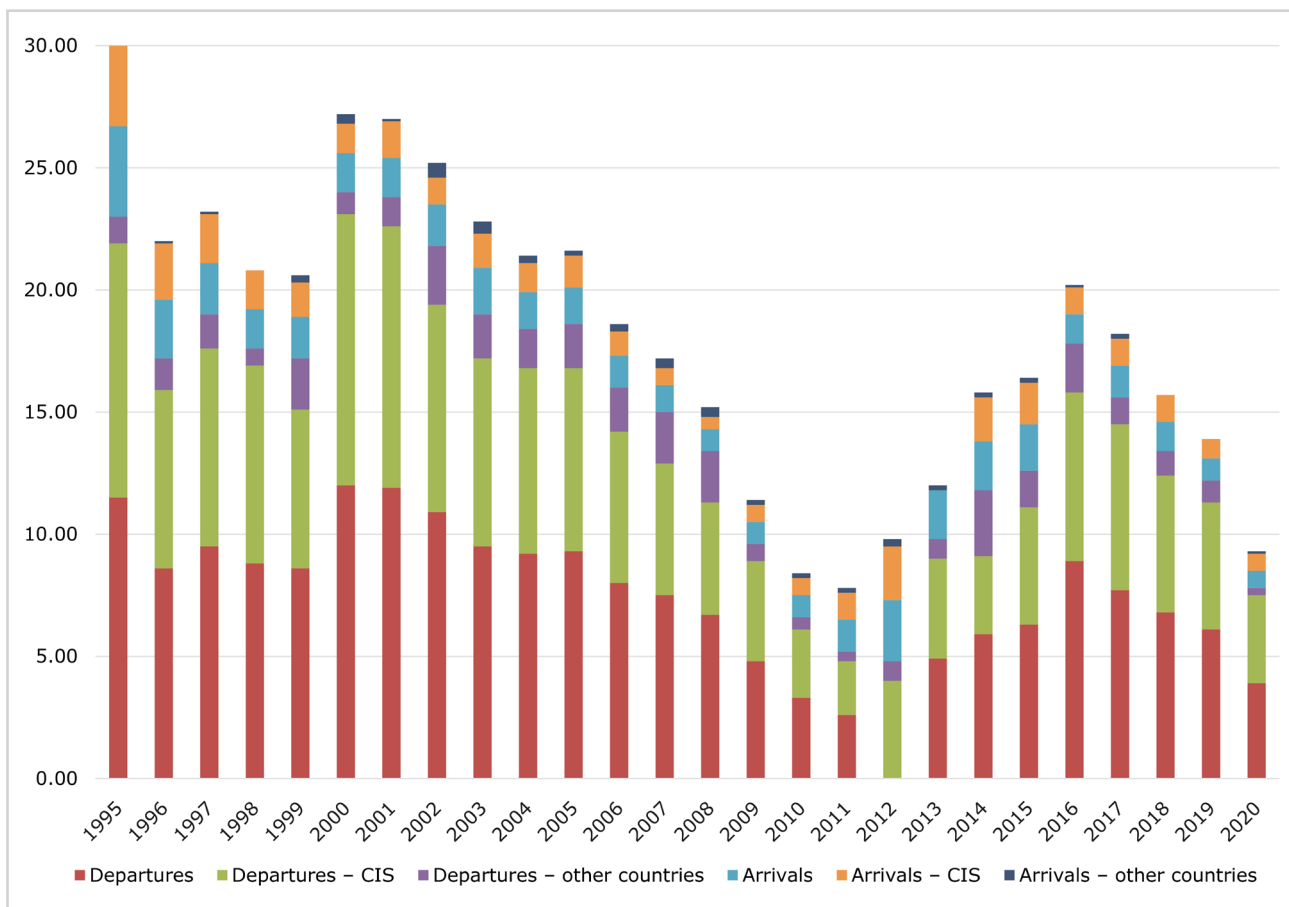


Figure 8:  
**Emigrants and immigrants in Armenia in the period between 1995 and 2020**

Source: Compiled by the authors based on data by Statistical Committee of the Republic of Armenia (1996-2020)

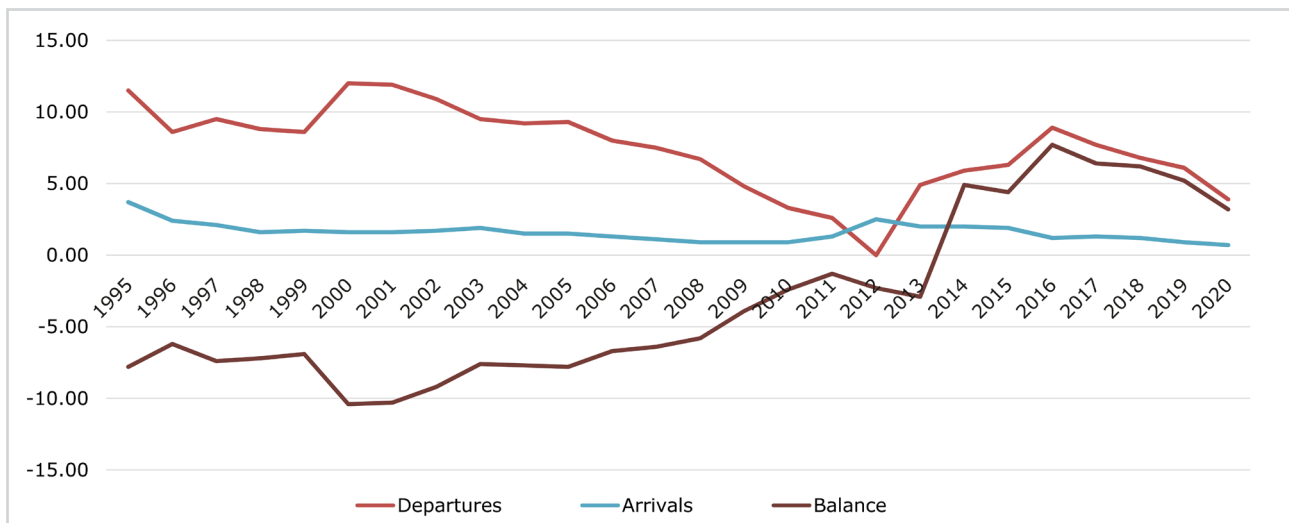


Figure 9:

**Departures/arrivals per 1000 inhabitants and the overall migration balance in 1995-2020 in Armenia**

Source: Compiled by the authors based on data by Statistical Committee of the Republic of Armenia (1996-2020)

Among the university graduates who emigrated because of the absence of jobs were economists, teachers and specialists in humanities and social sciences, mainly lawyers. Those who remained in the country decided to perform work requiring lower qualifications and took up employment in the food, textile and light industries (Statistical Committee of the Republic of Armenia, 2018).

The low rate of migration of IT professionals can be explained by the demand for IT services in Armenia and orders received from other countries, e.g. Russia. Table 1 shows the reasons for the departures of Armenian citizens.

Since the main reason for emigration was work, undertaken mainly in the Commonwealth of Independent States, the Russian Federation in particular, the inflow of cash to Armenia increased steadily. Table 2 shows the amount of money transferred to Armenia in USD between 2005 and 2020.

Table 1:  
**Reasons for emigration in 2016-2018 (%)**

| Reason for emigration | 2016 | 2017 | 2018 |
|-----------------------|------|------|------|
| Work                  | 66.6 | 64.5 | 73.2 |
| Family                | 18.1 | 18.0 | 13.2 |
| Residence             | 1.9  | 2.1  | 2.4  |
| Private visit         | 5.2  | 3.3  | 5.8  |
| Study                 | 5.3  | 8.6  | 3.2  |
| Other                 | 2.9  | 3.5  | 2.8  |
| Total                 | 100  | 100  | 100  |

Source: Statistical Committee of the Republic of Armenia (2016-2018)

Table 2:  
**Cash inflows to Armenia in USD between 2005 and 2020**

| No. | Year | The value of cash inflows, USD million |
|-----|------|--|
| 1   | 2005 | 915                                    |
| 2   | 2006 | 1,169                                  |
| 3   | 2007 | 1,644                                  |
| 4   | 2008 | 1,904                                  |
| 5   | 2009 | 1,440                                  |
| 6   | 2010 | 1,669                                  |
| 7   | 2011 | 1,799                                  |
| 8   | 2012 | 1,915                                  |
| 9   | 2013 | 2,192                                  |
| 10  | 2014 | 2,079                                  |
| 11  | 2015 | 1,491                                  |
| 12  | 2016 | 1,382                                  |
| 13  | 2017 | 1,539                                  |
| 14  | 2018 | 1,488                                  |
| 15  | 2019 | 1,528                                  |
| 16  | 2020 | 1,143                                  |

Source: The World Bank (2020)

In 2020, cash inflows accounted for 8.9% of GDP and significantly augmented the budgets of many Armenian families.

## 5. Conclusions

To conclude the review analysis of the labour resources in Armenia in the period between 1993 and 2020, it should be stressed that the period under consideration was characterized by growing trends, both positive and negative, affecting the status and structure of Armenian labour resources. GDP per capita steadily increased, while the inflation rate levelled off at around 2% in 2018. At the same time, unemployment remained at a steady level of 220,000-230,000 persons. Unfortunately, there was a significant difference between female and male labour market participation (a huge gender gap in employment). There were also clear differences in labour market participation with respect to the place of residence. The biggest barrier to the development of Armenia's labour resources is certainly the demographic structure of its population. A sharp decline in the working age population could be observed. In 1993-2010, the ratio of the number of people of working age to pre- and post-working age population in both urban and rural areas increased steadily. After 2010, the ratio took a downward turn and the working age population living in rural areas began to exceed that of urban areas. In this case, the increase in the post-working age population accompanied by a decline in the pre-working age population has been observed for many years. We have also seen quite rapid changes in the structure of employment, i.e. a slow outflow of employees from the national economy. The employment structure by sector also changed significantly during the period. There was a decline in the share of agricultural workers in total workforce, mainly in favour of employment in public sectors (education, public administration), in addition to the overall decrease in employment. As a result of the COVID-19 pandemic and the Nagorno-Karabakh conflict, Armenia's economy shrunk by 9% in the third quarter of 2020, compared to the third quarter of 2019. GDP and per capita GDP fell, while the inflation rate slightly increased. Following the introduction of the state of emergency, maintained from March 2020 to the end of June 2020, and closure of many companies, the number of employees dropped, increasing the unemployment rate. The most affected were the self-employed, mainly in cities, forced to suspend their business activities. The sharpest performance decline was observed in construction, trade and industry, while agriculture, storage and transport were less affected.

The labour resources in Armenia are being depleted by the negative migration balance. Data show that the number of Armenian citizens leaving the country in 1995-2013 decreased as the economic situation in the country improved. In the 2010s Armenia was one of the countries with the highest emigration rates among people with higher education. The COVID-19 pandemic and the closure of borders inhibited emigration only to a limited extent and for a short time. The declining population of Armenia and the negative migration balance indicate that local labour resources are likely to shrink in the coming years, which may be of great significance for the country's labour market in the future.

## References

1. Akopyan, L. L. (2013). Formation of the labor market and increasing the efficiency of the use of agricultural resources of the republic of Armenia. *Sectoral markets*, 40(4), 131-140.
2. Arturovic, G. V. (2009). Poverty and labor market in Armenia. *Bulletin of Rostov State Economic University*, 1, 313-321.
3. Ayrapetyan, G. R. (2019). Labour market development and economic growth in the republic of Armenia. *Scientific News*, 46(3), 467-473. <https://doi.org/10.18413/2411-3808-2019-46-3-467-473>
4. Barsoumian, N. (2013). *To Greener Shores: A Detailed Report on Emigration from Armenia*. <https://armenianweekly.com/2013/01/22/to-greener-shores-a-detailed-report-on-emigration-from-armenia>
5. Bolsajian, M. (2018). The Armenian Diaspora: Migration and its influence on identity and policies. *Global Societies Journal*, 6, 29-40. <https://escholarship.org/content/qt51x1r30s/qt51x1r30s.pdf?t=pfww8b>
6. Caucasian Knot. (2019). *Has an economic breakthrough begun in Armenia under Pashinyan?* <https://www.kavkaz-uzel.eu/blogs/83781/posts/38117> (in Russ.)
7. European Training Foundation and Caucasus Research, Resource Centers (Armenia). (2013). *Migration and skills in Armenia. Results of the 2011/12 migration survey on the relationship between skills, migration and development*. [https://www.etf.europa.eu/sites/default/files/m/9D759BA5148D99FBC1257B730046F443\\_Migration%26skills\\_Armenia.pdf](https://www.etf.europa.eu/sites/default/files/m/9D759BA5148D99FBC1257B730046F443_Migration%26skills_Armenia.pdf)
8. Hovhannisyan, S. (2019). *Background Report Specific Support to Armenia*. [https://rio.jrc.ec.europa.eu/sites/default/files/report/Background\\_report\\_Armenia.pdf](https://rio.jrc.ec.europa.eu/sites/default/files/report/Background_report_Armenia.pdf)
9. International Labour Organization (ILO). (2012). *The Youth Employment Crisis: Time for Action*. [https://www.ilo.org/emppolicy/pubs/WCMS\\_176866/lang--en/index.htm](https://www.ilo.org/emppolicy/pubs/WCMS_176866/lang--en/index.htm)

10. International Labour Organization (ILO). (2020). *Rapid assessment of the employment impact and policy responses of the COVID-19 pandemic on Armenia*. [https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms\\_762029.pdf](https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms_762029.pdf)
11. Manasyan, H., & Poghosyan, G. (2012, April). *Social impact of immigration and Rural-Urban Migration in Central and Eastern Europe*. [https://www.google.com.ua/url?esrc=s&q=&rct=j&sa=U&url=https://ec.europa.eu/social/BlObServlet%3FdocId%3D8831%26langId%3Dhr&ved=2ahUKewjMkeXM7vjuAhWHyoUKHTO5Dw0QFjABegQICRAB&usq=AOvVaw3Je3-m1Y\\_DfLs86iSBRmX-](https://www.google.com.ua/url?esrc=s&q=&rct=j&sa=U&url=https://ec.europa.eu/social/BlObServlet%3FdocId%3D8831%26langId%3Dhr&ved=2ahUKewjMkeXM7vjuAhWHyoUKHTO5Dw0QFjABegQICRAB&usq=AOvVaw3Je3-m1Y_DfLs86iSBRmX-)
12. Melkumyan, A. S. (2014). *Problems of labour market regulation in the republic of Armenia*. <https://cyberleninka.ru/article/n/problemy-regulirovaniya-rynka-truda-v-respublike-armeniya/viewer> (in Russ.)
13. Nureev, R. M., & Manukyan, A. G. (2012). Factor analysis of the reasons of migration of the population of the republic of Armenia in the beginning of the XXI century. *Journal of Economic Regulation*, 3, 11-27. [http://hjournal.ru/pdf/JER\\_3.3\\_2012/JER\\_3.3-2.pdf](http://hjournal.ru/pdf/JER_3.3_2012/JER_3.3-2.pdf) (in Russ.)
14. Rasuly-Paleczek, G. (2017). Migration and its Impact on Armenia. Introduction. *Austrian Studies in Social Anthropology*, 3-18. [https://www.univie.ac.at/alumni.ksa/wp-content/uploads/ASSA-SN-2017-01\\_Migration-and-its-impact-on-Armenia.pdf](https://www.univie.ac.at/alumni.ksa/wp-content/uploads/ASSA-SN-2017-01_Migration-and-its-impact-on-Armenia.pdf)
15. Sargsyan, A. (2001). *Labor market in the Republic of Armenia*. Erevan (Russ.).
16. Statistical Committee of the Republic of Armenia. (2016). *Migration snapshot of the Republic of Armenia*. <https://armstat.am/en/?nid=81&id=2167>
17. Statistical Committee of the Republic of Armenia. (2017). *Migration snapshot of the Republic of Armenia - 2017*. [https://armstat.am/file/article/migration\\_profile\\_eng\\_2017.pdf](https://armstat.am/file/article/migration_profile_eng_2017.pdf)
18. Statistical Committee of the Republic of Armenia. (2018). *Migration snapshot of the Republic of Armenia*. <https://armstat.am/en/?nid=82&id=2294>
19. Statistical Committee of the Republic of Armenia. (2020). *Statistical Yearbook of Armenia*. <https://www.armstat.am/en/?nid=586&year=2020>
20. The World Bank. (2015). *Migration Remittances Factbook 2015*. [https://globalmigrationgroup.org/system/files/First\\_Four\\_Pages.pdf](https://globalmigrationgroup.org/system/files/First_Four_Pages.pdf)
21. The World Bank. (2017). *Future Armenia: Connect, Compete, Prosper. Systematic Country Diagnostic*. Washington, DC: World Bank. <http://hdl.handle.net/10986/29791>
22. The World Bank. (2020). *Armenia*. <https://data.worldbank.org/country/AM>
23. The World Bank. (2020). *Migration and Remittances Data*. <https://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data>
24. Trading Economics. (2020). *Armenia GDP Annual Growth Rate*. <https://tradingeconomics.com/armenia/gdp-growth-annual>
25. Vardanovic, O. B. (2017). Analysis of the development of the economy of Armenia at the border of the centuries. *International trade and trade policy*, 9(1), 23-49.
26. Vardomskiy, L., Pylin, A., & Ilyina, M. (2016). *Economy of Armenia: the Ideas, Models and Development Results*. Moscow: RAS Institute of Economy. [https://inecon.org/docs/Vardomsky\\_Pylin\\_Ilyina\\_paper\\_2016.pdf](https://inecon.org/docs/Vardomsky_Pylin_Ilyina_paper_2016.pdf) (in Russ.)
27. Zograban, E. L. (2017). Problems of employment and unemployment in the republic of Armenia in 1991-2003. *Scientific thought of the Caucasus*, 4, 85-90. <http://ysu.am/files/2-1544518342-.pdf> (in Russ.)

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