

LONGITUDINAL METHOD APPROACH IN ASSESSING THE MOLDOVAN MIGRANT STOCK

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Vitalie ȘTÎRBA,

Scientific Researcher, National Institute for Economic Research, Academy of Economic Studies of Moldova
PhD Student, Department of Demography and Geodemography, Charles University, Czechia

<https://orcid.org/0000-0001-5948-6509>

e-mail: vitalie.stirba@ccd.ince.md

Andrei CRIVENCO,

PhD in Geography, Associate Professor, Shevchenko Pridnestrovian State University, Moldova

<https://orcid.org/0000-0002-3096-6979>

e-mail: crivenco@inbox.ru

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SUMMARY

Estimating international migration is a challenging exercise despite the information technologies used, regular censuses conducted, and available advanced administrative systems in collecting data on vital events. Recent works estimated the stocks and flows of Moldovan migrants mainly by using national administrative sources on population counts and data from the population censuses in the destination countries. This study aims to assess the stock of Moldovan migrants of the 1980–1995 birth cohorts, for which a longitudinal method was applied. Thus, we compared the *de facto* population of the corresponding generations to their initial size, adjusting by survival rate. The results show the existing stock of Moldovan migrants of the 1980–1995 year of birth and the impact of outmigration on the changes in the size of the corresponding cohorts as of 2016 and its trend until 2022. During the analysed period was emphasised a plateau in the migrant stock of the generations born in the early 1980s with a moderate return migration in the 2020–2022. On the other hand, the cohorts of the late 1980s and 1990s registered a significant increase in the number of migrants, because they have reached a high migration mobility ages. The study covers the entire territory of Moldova, including the left bank of the Nistru River and Bender municipality (Transnistria region). The methodological part provides a complete description of the method applied, which might be further considered for estimating the migrant flows and stocks by using vital statistics or population census data.

Keywords: *migrant stock, cohort study, outmigration, Moldova, population dynamics, net migration*

Estimarea migrației internaționale rămâne a fi un exercițiu complex în pofida disponibilității unui spectru larg de instrumente, precum recensămintele populației, resursele administrative de evidență a populației și tehnologiile informaționale avansate. Studiile recente au estimat stocul și fluxurile migranților moldoveni folosind datele naționale și din țările de destinație al statisticii migratorii și al recensămintelor populației. În acest articol sunt prezentate rezultatele cercetării care a avut ca scop evaluarea stocului de migranți moldoveni din cohortele născute în anii 1980–1995 în baza metodei de analiză longitudinală. Astfel, a fost comparată populația *de facto* a generațiilor corespunzătoare cu mărimea inițială a cohortelor, ajustată la rata de supraviețuire. Rezultatele studiului prezintă stocul existent de migranți moldoveni născuți în anii 1980–1995 și impactul emigrației asupra schimbărilor în dimensiunea generațiilor corespunzătoare pentru perioada 2016–2022. În urma cercetării s-au evidențiat schimbări minore în stocul de migranți ale generațiilor născute la începutul anilor 1980, care înregistrează valori moderate ale migrației de reîntoarcere, în special pentru perioada 2020–2022. În același timp, cohortele născute la sfârșitul anilor 1980 - începutul anilor 1990 au înregistrat o creștere semnificativă a numărului de migranți în perioada studiată, dat fiind faptul că au ajuns la vârstele de mobilitate migratorie ridicată. Studiul acoperă întreg teritoriul Moldovei, inclusiv malul stâng al râului Nistru și municipiul Bender (regiunea Transnistreană). Partea metodologică a lucrării oferă o descriere completă a metodei aplicate, care poate fi utilizată în contextul estimării longitudinale a fluxurilor și stocurilor de migranți prin utilizarea statisticilor vitale sau a datelor recensământului populației.

Cuvinte cheie: *stoc de migranți, studiu de cohortă, emigrare, Moldova, dinamica populației, migrație netă*

Оценка международной миграции нередко бывает затруднительной, несмотря на доступность широкого спектра инструментов, таких как переписи населения, административные регистры учета населения и современные информационные технологии. Последние исследования оценили контингенты и потоки молдавских мигрантов, используя национальные данные и статистику миграции в странах назначения, а также данные переписей населения. В этой статье представлены результаты исследования, целью которого была оценка контингента молдавских мигрантов из когорт, родившихся в период с 1980 по 1995 год, с использованием метода лонгитюдного анализа. Таким образом, было проведено сравнение фактического населения соответствующих поколений с исходным размером когорт, скорректированное, используя коэффициент выживаемости. Результаты исследования представляют оценку контингента молдавских мигрантов, родившихся в период с 1980 по 1995 год, и влияние эмиграции на изменения в размере соответствующих поколений в период с 2016 по 2022 год. В результате исследования выявлены незначительные изменения контингента мигрантов в поколениях, родившихся в начале 1980-х годов, для которых характерна умеренная возвратная миграция, особенно в период 2020–2022 гг. В то же время, когорты, родившиеся в конце 1980-х и начале 1990-х годов, показали значительное увеличение числа мигрантов за исследуемый период, так как они находятся в возрастах высокой миграционной мобильности. Исследование охватывает всю территорию Молдовы, включая левобережье реки Днестр и город Бендеры (Приднестровский регион). В методологической части работы предоставлено полное описание используемого метода, который может быть применен для оценки лонгитюдных потоков и контингентов мигрантов на основе данных текущей статистики или данных переписи населения. Имеют актуальность и могут быть полезны для других стран региона с развивающейся экономикой.

Ключевые слова: *контингент мигрантов, когортный анализ, эмиграция, Молдова, динамика численности населения, нетто-миграция*

INTRODUCTION

During the last decades, migration was the main reason for the population decline in Moldova, ultimately affecting other demographic phenomena. Consequently, outmigration caused an exodus of the labour force and depopulation, especially in rural areas, contributing to a population structure deterioration and accelerating the ageing process (Gagauz et al., 2023; Crivenco & von Löwis, 2022).

From the end of the 1980s until the mid-1990s, migration flows from Moldova included mainly ethnic minorities of Jews, Russians, Ukrainians, etc., who were involved in the process of repatriation to the countries of their origin (Tabac & Gagauz, 2020; Dietz, 2000). However, a pronounced outmigration from Moldova was registered since the end of the 1990s, which was mainly driven by the economic crises of 1998, when, in most cases, the decision to migrate was a response to high poverty in Moldova and emerging opportunities in the receiving countries (CIVIS & IASCI, 2010). Initially, the main destinations of the Moldovan migrants were CIS and EU countries (Piracha & Saraogi, 2012), while since the mid of 2010s, migration flows from Moldova have been predominantly to European countries (Tabac, 2021). Moldovan migrants initially opted for a determined period of stay in receiving countries, during which many migrants had an incentive for financial resource accumulation to improve their living conditions and cover current household spending. During the last decades, Moldovan migrants have opted for both seasonal and long-term migration (Görlich & Trebesch, 2008), depending on the destination country. Contrary to the above, migration became a life strategy for the younger generations, who consider early migration and social integration by obtaining higher education and vocational skills in the receiving countries.

Generally, emigration from Moldova is highly age-selective, involving the young and working-age population. Considering the settlement of Moldovan families in the countries of destination, there is an increase in the number of children migrating (Tabac, 2021). On the other hand, a positive net migration is observed among the population above 50, which is primarily involved in return migration.

During the years of independence of Moldova, outmigration has become an integral part of the public and socio-economic spheres of the state, shaping the patterns of the population's economic, social, institutional, and political behaviour (Barsbai et al., 2017), at the same time contributing to economic development through remittances, transfer of know-how and investment, and changes in the population's social values (Tabac & Gagauz, 2020).

The presented research aims to evaluate Moldova's long-term international net migration of the 1980–1995 generations. For this, the 2015–2022 1st January population of the corresponding cohorts were compared to their initial size (number of births) adjusted by survival rate. The study results are based on a longitudinal approach and emphasise the long-term net migration of the analysed cohorts as of 2016 and its trend until 2022. The study covers the entire territory of Moldova, including the left bank of the Nistru River and Bender municipality.

The study uses a new approach to studying international migration in Moldova by comparing the de facto population with the size of the corresponding cohorts. The method used might be further applied to countries with distorted population statistics and disrupted series of annual migration flows.

LITERATURE REVIEW

Migration is a demographic event, the reliable record of which is challenging even in countries with accurate population statistics. Generally, the migrant stocks and flows are often measured using population censuses, which collect information on population ethnicity and place of birth (Abel, 2013). Additionally, data from population censuses could be combined with administrative sources (Raymer et al., 2007). The article by Beer and colleagues describes the method of migration harmonisation when the administrative data on migration flows is available in both destination and origin countries (Beer et al., 2010). Therefore, a set of methods for estimating migration flows are also comprehensively described in the articles by Abel & Cohen (2019) and Azose & Raftery (2018). In recent

times, social media platforms have been utilised to estimate the number of migrants through monitoring groups of expats and tracking migrants based on their place of birth, professional experience, and place of residence (Zagheni et al., 2017; Vieira et al., 2022).

Generally, migration is a highly selective (Rogers, 1981) and repetitive (Aude, 2017) process, which shapes the population structure and reflects on other demographic events in both origin and destination countries (Alho, 2008). In this regard, a longitudinal approach in migration studies allows for assessing the cumulative effect of the migration on changes in the cohort sizes. An eloquent example is the study by Kashnitsky, which assessed changes in the cohorts due

to internal migration in central Russia (Kashnitsky, 2020). Moreover, the article by Willson and colleagues measured the impact of migration on birth cohort sizes in European countries (Wilson et al., 2013). However, these studies rely on net migration as their basis and ignore the step migration.

An estimation of the Moldovan migrant stock was made by Tabac, where the studies were based on population censuses and administrative sources in Moldova and receiving countries. According to the results presented, during the 2001 and 2011 census rounds in receiving countries, the Moldovan migrant stock was estimated at 338 thousand and 657 thousand, respectively (Tabac & Gagauz, 2020). On the other hand, based on data from population censuses, population registers, and national

representative surveys, the United Nations Population Division estimates the 2020 migrant stock originated from Moldova at 1.1 million (United Nations, 2020).

In conditions of distorted population statistics, to adjust the population structure, Penina and colleagues estimated the stock of Moldovan migrants by using administrative data on border crossings from the population register, where is concluded that about 18% of the total population in 2014 were emigrants who did not live in Moldova (Penina et al., 2015). A similar approach in using data on border crossings from the population register was used by Gagauz, where the estimated net migration for the 2005–2013 period was 363 thousand (Gagauz, 2023). Ultimately, this method is used by the NBS for vital statistics evidence.

DATA SOURCES AND METHODS

Using data on birth counts and age- and sex population with usual residence, we estimated the Moldovan migrant stock as of 1st January 2016 and its trend until 2022. In the method used, we subtract the number of usual resident population on 1st January from its initial cohort size. To eliminate the effect of mortality, the life table probabilities of survival were applied. Thus, the arithmetic difference between the expected and *de facto* 1st January population corresponds with the estimated migrant stock. The research includes the entire territory of Moldova, including the left bank of the Nistru River and Bender municipality.

The data on birth counts of the studied cohorts were retrieved from the NBS. The age- and sex population distribution were obtained from NBS and, by request, from the Transnistrian Statistical Office. Considering that

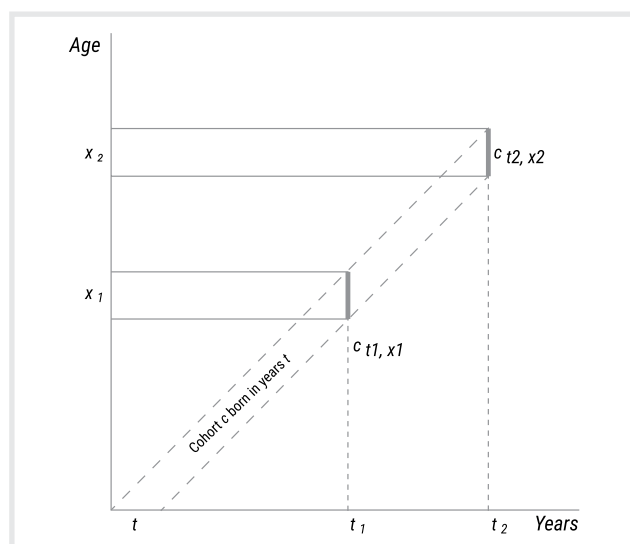
in the Transnistrian region, the vital statistics include the permanently absent population, we adjusted its age- and sex structure according to net migration rates calculated based on data from the Moldovan Border Police.

To adjust the cohort size by survival rate, we used life tables of the generations of the corresponding year of birth calculated by Penina and colleagues (Penina et al., 2015).

Figure 1 shows the Lexis diagram that reveals the applied method, where: (1) c is the hypothetical cohort born in the year t ; and (2) c_{t_1, x_1} and c_{t_2, x_2} are the population stocks of cohort c on 1st January of the years t_1 and t_2 at the age x_1 and x_2 . To exclude the effect of mortality on the generations studied, we adjusted the birth cohort size by survival rate.

Figure 1.

The Lexis chart shows the method of estimation of the net migration within the hypothetical cohort c born in year t on 1st January of years t_1 , t_2 at age x_1 , x_2



The estimation of the net outmigration of the 1980–1995 birth cohorts is made according to the following formula:

$$c_{t_1, x_1} = c_t \times p_{x_1, t_1} - P_{t_1, x_1},$$

where (1) c_t is the initial cohort size; (2) p_{x_1, t_1} is the probability of surviving from birth to the age x_1, t_1 ; and (3) P_{t_1, x_1} is the population of the respective cohort c_t on the 1st of January of the year t_1 .

Table 1 illustrates the applied method of Moldovan migrant stock estimation. There is revealed the initial cohort size of the studied generations, the probability of their survival to 1st January 2016, and the population with usual residency of the corresponding cohorts.

Table 1.

Illustration of the method of estimation of migrant stock by using cohort size, probability of survival, and population with usual residency

Year of birth (1)	Cohort size (2)		Probability of survival to 1st January 2016 (3)		Population with usual residency on 1st January 2016 (4)		Expected cohort size on 1st January 2016, adjusted by survival rate (5)	Estimated migrant stock (6)
	Males	Females	Males	Females	Males	Females		
1980	40687	38893	0.899	0.939	23541	23918	(2) x (3)	(5) - (4)
1981	42210	40069	0.898	0.940	23967	23718		
1982	42751	40507	0.907	0.944	24688	24345		
1983	46594	44710	0.913	0.949	27008	26648		
1984	46234	43403	0.914	0.949	27248	26325		
1985	46366	44087	0.922	0.953	28119	27356		
1986	48821	45905	0.931	0.960	29597	28611		
1987	47190	44572	0.940	0.960	29024	28139		
1988	45473	43095	0.938	0.964	28432	27922		
1989	42212	40009	0.942	0.966	27743	26851		
1990	39499	37586	0.949	0.969	26683	26120		
1991	36946	35074	0.953	0.969	25162	24895		
1992	35727	33927	0.949	0.971	25367	25234		
1993	33975	32204	0.953	0.970	24352	24245		
1994	32030	30055	0.953	0.968	23780	23593		
1995	29044	27367	0.958	0.972	22216	21421		

Source: NBS; Tiraspol Statistical Office; Penina et al., 2015

The applied method encounters a degree of error, given the use of survival rates of the period life tables. However,

the studied generations are still in their youth and have been minimally exposed to the risk of death.

MAIN RESULTS

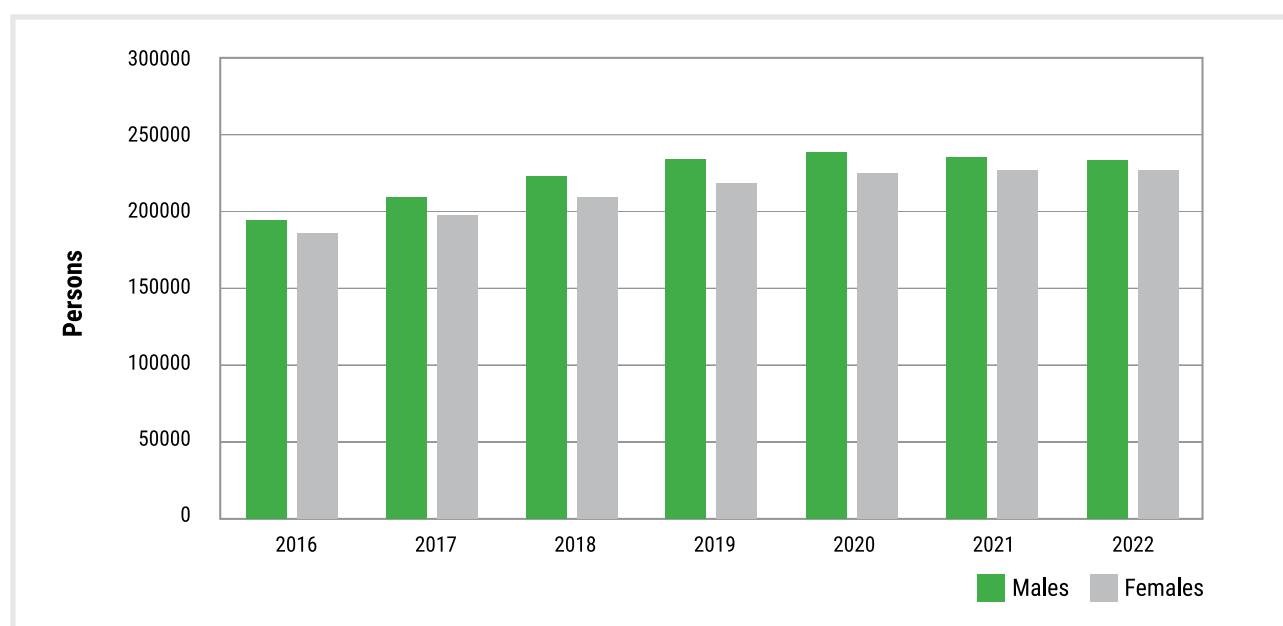
Figure 2 displays the estimated number of Moldovan migrants of the 1980–1995 cohorts during the last available period. Thus, in 2016, the estimated stock of migrants born in 1980–1995 constituted about 380 thousand, out of which 193.4 thousand were males, and 186.1 thousand were females. Gradually, the estimated stock of the corresponding cohorts in males and females increased to 406.3 thousand in 2017, 432.7 thousand in 2018, 452.0 thousand in 2019, and 464.3 thousand in 2020. The observed increase in migrant stock is merely due to the entry of young generations into the age of migration activity. In contrast, the older generations

emphasise a stagnation in outmigration mobility. However, a slight decrease in the stock of Moldovan migrants was observed at the beginning of 2021 and 2022 years, corresponding with the period of migration restriction during the COVID-19 pandemic.

The estimated stock of migrants emphasises a higher degree of male involvement in international migration compared with females in the analysed years. Nevertheless, the most significant gap in male/female migrant stock was observed within the 2017–2020 period, while it narrowed in 2021 and 2022.

Figure 2.

The estimated stock of Moldovan migrants born in 1980–1995 as of 1st January 2016–2022, by sex



Source: NBS and Tiraspol Statistical Office

Among the studied cohorts, males and females (with a slight sex gap) registered a similar trend in changes in the stock of migrants during the 2016–2022 period. Generally, by 2016, the generations born in the early 1980s, to some extent, saturated their degree of involvement in international migration. The estimated stock of migrants of the 1980–1985 cohorts only slightly increased between 2016 and 2022, registering a decline in the last years (Table 2). To some extent, cohorts of the early 1980s are engaged in the process of the return migration, and their proportion in the overall stock of Moldovan migrants is slightly decreasing and likely will decline in the following years.

A significant stock of migrants in 2016 is also emphasised by the generations born in 1986–1991. However, compared with the generations born in 1980–1985, the 1986–1991 cohorts have shown a visible increase in migrant stock between 2016 and 2022 – the trend that could continue in the following years due to the high migration mobility in the young ages.

A notable increase in the 2016–2022 period in migrant stock is observed among the generations born in 1992–1995 that entered the active migration mobility ages in the period observed. However, compared to the 1980–1991 cohorts, the succeeding generations are less numerous, and a high degree of involvement in the outmigration of

the population born after 1991 has a smaller impact on the changes in the migrant stock of the analysed cohorts.

Table 3 presents the proportion of Moldovan migrants of the 1980–1995 year of birth within the cohort size. Among the analysed generations, a visible disparity in the change of the cohorts' sizes was emphasised due to the net migration of the population of the corresponding year of birth. Up to 2016, the generations born in 1980–1988 lost between 31–33% of the initial cohort size due to international migration. In the 2016–2022 period, the 1980–1988 cohorts registered a varied decline in their sizes because of international migration (between -2.1 and -6.9 percentage points in both sexes), where a higher loss in generations' size was observed in younger ages. In the subsequent generations of the 1989–1991 years of birth, due to international migration, the cohorts' size declined as 2016 by 27.2–28.5% in males and by 25.9–29.5% in females, and additionally reduced by 7.7–9.0 percentage points in males and by 7.7–9.3 percentage points in females in the 2016–2022 period. In 2016, the 1992–1995 cohorts emphasised the lowest decline in their size because of the net outmigration (between -18.9% and -23.9% in males and females), and, considering the high level of migration mobility of these ages, by 2022 the overall decline in the size of the corresponding cohorts constituted 31.3–33.3% in both sexes.

Table 2.*The estimated stock of Moldovan migrants by year of birth as of 1st January 2016–2022, by sex*

Year of birth	2016		2017		2018		2019		2020		2021		2022	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1980	13033	12609	13567	12892	14082	13285	14426	13566	14411	13810	14166	13795	13865	13680
1981	13957	13965	14476	14350	15079	14844	15388	15146	15469	15390	15276	15406	15044	15414
1982	14078	13893	14691	14317	15278	14661	15647	15036	15759	15305	15589	15290	15422	15255
1983	15537	15799	16223	16256	16995	16758	17452	17222	17543	17506	17315	17521	17019	17481
1984	15024	14868	15899	15294	16524	15812	16931	16333	17074	16691	16796	16674	16710	16717
1985	14643	14664	15687	15263	16523	15791	17034	16227	17277	16683	17092	16793	17009	16779
1986	15839	15435	16867	16054	17705	16682	18141	17178	18453	17655	18311	17777	18201	17909
1987	15315	14628	16290	15275	17329	15941	17907	16569	18044	17066	17993	17148	17946	17280
1988	14241	13634	15385	14527	16466	15229	17068	15858	17412	16403	17218	16466	17278	16577
1989	12022	11815	13200	12683	14371	13523	15089	14205	15461	14724	15386	14826	15283	14890
1990	10817	10308	11961	11168	13090	11970	13751	12672	14078	13223	13900	13319	13737	13427
1991	10062	9089	11296	10093	12683	10971	13352	11601	13762	12099	13702	12238	13373	12343
1992	8532	7714	9659	8712	10769	9587	11537	10367	11935	10994	11872	11110	11765	11232
1993	8012	6979	9148	8008	10312	8979	11302	9800	11766	10460	11724	10525	11589	10667
1994	6738	5499	7938	6486	9192	7524	10196	8513	10806	9195	10915	9471	10684	9560
1995	5599	5184	6631	5999	7778	6943	8625	7865	9213	8660	9323	8865	9103	9118

Source: NBS and Tiraspol Statistical Office

Table 3.*The proportion of Moldovan migrants of the 1980–1995 year of birth within the cohort size as of 1st January 2016 and 2022, adjusted by survival rate, Moldova, by sex, %*

Year of birth	2016		2017		2018		2019		2020		2021		2022	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1980	32.0	32.4	33.3	33.1	34.6	34.2	35.5	34.9	35.4	35.5	34.8	35.5	34.1	35.2
1981	33.1	34.9	34.3	35.8	35.7	37.0	36.5	37.8	36.6	38.4	36.2	38.4	35.6	38.5
1982	32.9	34.3	34.4	35.3	35.7	36.2	36.6	37.1	36.9	37.8	36.5	37.7	36.1	37.7
1983	33.3	35.3	34.8	36.4	36.5	37.5	37.5	38.5	37.7	39.2	37.2	39.2	36.5	39.1
1984	32.5	34.3	34.4	35.2	35.7	36.4	36.6	37.6	36.9	38.5	36.3	38.4	36.1	38.5
1985	31.6	33.3	33.8	34.6	35.6	35.8	36.7	36.8	37.3	37.8	36.9	38.1	36.7	38.1
1986	32.4	33.6	34.5	35.0	36.3	36.3	37.2	37.4	37.8	38.5	37.5	38.7	37.3	39.0
1987	32.5	32.8	34.5	34.3	36.7	35.8	37.9	37.2	38.2	38.3	38.1	38.5	38.0	38.8
1988	31.3	31.6	33.8	33.7	36.2	35.3	37.5	36.8	38.3	38.1	37.9	38.2	38.0	38.5
1989	28.5	29.5	31.3	31.7	34.0	33.8	35.7	35.5	36.6	36.8	36.4	37.1	36.2	37.2
1990	27.4	27.4	30.3	29.7	33.1	31.8	34.8	33.7	35.6	35.2	35.2	35.4	34.8	35.7
1991	27.2	25.9	30.6	28.8	34.3	31.3	36.1	33.1	37.2	34.5	37.1	34.9	36.2	35.2
1992	23.9	22.7	27.0	25.7	30.1	28.3	32.3	30.6	33.4	32.4	33.2	32.7	32.9	33.1
1993	23.6	21.7	26.9	24.9	30.4	27.9	33.3	30.4	34.6	32.5	34.5	32.7	34.1	33.1
1994	21.0	18.3	24.8	21.6	28.7	25.0	31.8	28.3	33.7	30.6	34.1	31.5	33.4	31.8
1995	19.3	18.9	22.8	21.9	26.8	25.4	29.7	28.7	31.7	31.6	32.1	32.4	31.3	33.3

Source: NBS and Tiraspol Statistical Office

DISCUSSIONS

The estimated stock of Moldovan migrants for the 2016–2022 period represents the net result of the migration flows during the life course of the studied cohorts of the 1980–1995 year of birth. The size of the migrant stock merely depended on the initial cohort size, which shaped the dimension of the migration flows. Consequently, the generations born in the 1980s are numerical because of the large proportion of the reproductive-aged population of their parents, who realised their reproductive intentions in conditions of pro-natalist policies of that period. On the contrary, cohorts of the 1990s are less numerical due to the shift in the population structure that declined the number of the reproductive-aged population of their parents, accompanied by a period of social and economic disturbances.

Numerical cohorts are likely to experience intragenerational competition that serves as a push factor for international migration involvement, while the smaller generations have greater job market and social mobility opportunities (Hatton & Williamson, 2003; Clark et al., 2004; Zaiceva & Zimmermann, 2014). Of course, the impact of pull and push factors on migration flows depends on social, economic, and political factors that favour the opportunities in the countries of origin and destination.

Persons of the studied cohorts perhaps experienced emigration/immigration involvement as part of a family during childhood and as individuals by reaching adulthood. Thus, by presenting the paper's results, we assume a possible early outmigration of the corresponding generations in the case of their parents' involvement in the ethnic or labour migration of the 1980s and early 1990s. However, the majority of migrants are young adults, whose numbers decrease with age.

The accumulated stock of Moldovan migrants by 2016 corresponds with the long period of outmigration in Moldova, which mainly involved large cohorts of the young mobile population. Besides the initial size of the

generations, on dimensions of migration flows influenced economic and legislative factors that allowed migrants to travel, work, and live in the destination countries.

For a certain period, Moldovan migrants were involved in a circular migration (Borodak & Tichit, 2014), which was primarily a solution for accumulating financial resources and improving living conditions. Ultimately, with the increase in the number of people who have obtained citizenship of one of the destination countries (EU, Russia, Israel, etc.), a change occurred from short-term and circular to long-term migration. Moreover, after a period of stay in destination countries, many Moldovan migrants have acquired second citizenship in states such as Canada, the USA, Italy, Portugal, etc. (Tabac, 2019).

The results of this paper distinguish the migration pattern between the cohorts studied, where each generation of males and females have a higher proportion of its initial size involved in international migration. This might be explained by the influence of multiple factors, such as study migration, reduction in travel costs, or widening of the migrant networks, that facilitate social and labour market integration. Additionally, the number of Moldovans with dual citizenship has increased significantly in recent years. Thus, for the young generation, an early outmigration perhaps becomes a life strategy.

During the COVID-19 pandemic, a stagnation in Moldovan migrant stock was observed. This was primarily because of travel restrictions in most destination countries and, to a certain degree, due to return migration. The stagnation in the growth of migrant stock in the last years might also be a consequence of the entry of the early 1980s cohorts into ages with lower migration mobility. On the other hand, the generations born between 1990–1995 are less numerical and have a smaller migration capacity. Therefore, in subsequent years, due to the return migration of the 1980s cohorts, the migrants' stock of the analysed generations might decrease.

CONCLUSIONS

This study estimates the Moldovan migrant stock of the 1980–1995 birth cohorts for the 2016–2022 period, for which an indirect method was used. Thus, the results show the cumulated number of migrants during the lifetime of the cohorts studied. Therefore, the presented estimation of the Moldovan migrant stock complements the existing studies on migration in Moldova.

The results emphasised a considerable involvement of the analysed cohorts in international migration, which contributed to an increase in the migrant stock. The

main number of migrants from the studied cohorts are from numerous generations born in the 1980s. On the contrary, the less numerous generations born in the 1990s have a smaller proportion in the overall migrant stock of the 1980–1995 year of birth. A stagnation in the growth of the migrant stock of the studied cohorts was noticed during the COVID-19 pandemic. However, after removing all border-cross restrictions, no increase in the number of migrants born in 1980–1995 was observed, which can be explained by the exhaustion of the migration resources and the entry of numerical

cohorts born in the early 1980s into ages with low migration mobility.

Even though a significant decline in the population of the 1980–1995 cohorts due to outmigration was observed, further optimistic scenarios may be considered. Thus, in the condition of a favourable environment, the

registered losses in analysed birth cohorts could be compensated by the Moldovan returnees and long-term immigrants.

The method applied in migrant stock estimation might be further applied to other countries and regions by using vital statistics or census data.

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