

DEMOGRAPHIC PROCESSES IN 2013

(Final data)

Population number and structures

The negative tendencies in the development of demographic processes during the last decades and the resulting from them changes in the population number and structures strongly influence the basic society systems: economy, education, health insurance and social protection.

The current demographic situation in the country is characterised by a continuing decrease of the population number, population ageing, decreasing crude birth rate and still high level of mortality. As positive tendencies in 2013 could be mentioned the decreasing crude death rate and infant mortality rate and the increasing life expectancy at birth.

As of 31 December 2013 the population of Bulgaria was 7 245 677 persons representing 1.5% of the EU population¹ thus ranking the country at the 16^{th} place immediately after Austria (8 452 thousand persons) and before Denmark (5 603 thousand persons). Compared to 2012, the population of the country has decreased by 38 875 persons or 0.5%.

Male population was 3 524 945 (48.6%) and female - 3 720 732 (51.4%) or to 1 000 males correspond 1 055 females. Males prevailed among the population aged up to 52 years. The number and share of females into the total population increased among the elderly.

The process of population ageing continues. By the end of 2013 the number of persons aged 65 and over was 1 417 667 or 19.6% of the country population. Compared to 2012, the share of population aged 65 and over has increased by 0.4 percentage points and compared to 2001 - by 2.7 percentage points.





The aging of population is more intensive among female population than among male. The share of females aged 65 and over is 22.7%, compared to 16.3% - males. The difference is due to the higher mortality among male population and as a consequence – lower life expectancy.

¹ In the international comparisons, data on EU countries refer to 2011, source: Eurostat web site – <u>http://epp.eurostat.ec.europa.eu/</u>





The share of persons aged 65 and over is highest in districts Vidin (27.2%), Gabrovo (25.8%) and Lovech (25.0%). In 15 districts, people aged 65 and over are more than 20% of the district population. Lowest is the share of elderly population in districts Sofia (stolitsa) - 16.3%, Blagoevgrad (17.0%), Varna and Burgas - 17.2% and 17.3% respectively.



Figure 2. Share of population aged 65 and over as of 31.12.2013 by districts

Ageing of population is observed in the bigger part of EU countries. At the beginning of 2013, the share of population aged 65 and over for EU-28 was 18.2% or 0.3 percentage points higher than the previous year. Highest is the share of elderly population in Italy - 21.2%, followed by Germany (20.7%), Greece (20.1%) and Portugal (19.4%) and lowest in Ireland - 12.2%.

As of 31.12.2013, children up to 15 years of age were 996 144 or 13.7% of the total population number. The share of children up to 15 years has increased by 0.1 percentage points compared to 2012.

The share of population under 15 years of age is highest in districts Sliven - 17.8% and Burgas - 15.1% of the district population. There are 14 districts, where the share of children up to 15 years is lower than the country one. Lowest is the share registered in district Gabrovo - 11.4%.

Share of the youngest EU-28 population is 15.6%. Lowest shares are observed in Italy (14.0%), Bulgaria (13.7%) and Germany (13.1%) and highest - in Ireland (21.9%) and France (18.6%). As of 31.12.2013 **the age dependency ratio**² was **50.0%**, or to each persons in "dependent" ages (under 15 and over 65 years) correspond two persons in "independent" ages. In 2005 and 2012 the ratio is 44.5 and 48.7% respectively.

² Number of persons in "dependent" ages (persons under 15 years of age and 65 and more) per 100 persons in "independent" ages (persons aged 15 to 64 years) calculated in percentage.





The ratio is more favourable in urban areas -44.8% than in rural -65.8%. There are 20 country districts where the age dependency ratio is over 50.0%. Most unfavourable is the ratio in districts Vidin (64.8%), Lovech (62.1%) and Montana (61.0%). The districts with most favourable values are Sofia (stolitsa) - 42.0% and Smolyan - 45.1%.

The population ageing leads to increase of the population **mean age**. It has increased from 40.4 years in 2001 to 41.2 years in 2005 and has reached **43.0 years by the end of 2013**.

Ageing of population is observed both in urban and rural areas. In urban areas the mean age of population is 41.9 years, compared to 45.9 years - in rural areas.





The tendency of population ageing influences the distribution of population **under**, at and over **working age**. The last are influenced not only by the population aging, but also by legislative changes³ concerning the retirement age. According to the legislation, in 2013 at working age are women up to completion of 60 years and 8 months and men up to completion of 63 years and 8 months.

The number of population at working age as of 31.12.2013 was 4 472 thousand persons or 61.7% of the total population. Despite the increasing retirement age, the population at working age has decreased by over 33 thousand or 0.7% compared to the previous year.

By the end of 2013, the number of population over working age was 1 718 thousand persons or 23.7% and under working age were 1 056 thousand persons or 14.6% of the country population.

 $^{^{3}}$ Age limits used for distribution of population under, at and over working age are defined according to Ordinance on pensions and length of insurance, adopted by the Decree of the Council of Ministers N 30 (SG 21/17.03.2000). According to the last Ordinance amendments, the upper age limit for population at working age is to be increased by 4 months up to completion of 65 years for male and 63 years for female.





Year	Age groups					
	Under working age - %	At working age - %	Over working age - %			
1990	21.6	55.5	22.9			
1995	19.1	56.6	24.3			
2001	16.3	59.2	24.5			
2005	14.8	62.4	22.8			
2006	14.6	62.8	22.6			
2007	14.5	63.0	22.5			
2008	14.5	63.2	22.3			
2009	14.5	63.1	22.4			
2010	14.6	62.7	22.7			
2011	14.3	61.7	24.0			
2012	14.4	61.8	23.8			
2013	14.6	61.7	23.7			

1. Population under, at and over working age

The reproduction of population at working age is characterized by **the coefficient of demographic replacement**, showing the ratio between the number of persons entering working age (15-19 years) and number of persons exiting it (60-64 years). As of 31.12.2013 the ratio was 62. For comparison, in 2001 each 100 persons exiting working age have been replaced by 124 young persons.

Most favourable is the ratio in districts Sliven - 78, Targovishte and Pazardzhik - 71, Razgrad and Blagoevgrad - 70. Lowest is the ratio in district Gabrovo, where 100 persons exiting working age are replaced by 46 persons entering it.

Territorial distribution of population

As of 31.12.2013, 5 291 675 or 73.0% of the total country population resided in urban areas and 1 954 002 or 27.0% - in rural ones.

There were 5 268 settlements in Bulgaria by the end of 2013, of which 257 - towns and 5 011villages. The distribution of urban and rural population by the end of year is a result not only of the natural increase and migration, but also of changes in the country's administrative structure. Based on the Council of Ministers decisions, 10 settlements are closed in 2013 and 6 of them are annexed to another ones.

In 2013 there are 169 settlements without population. Highest is the number of settlements without population in districts Gabrovo, Veliko Tarnovo and Kardzhali.

The population number is between 1 and 49 persons incl. in 1 127 or 21.4% of the settlements.

There are seven towns with a population above 100 thousand persons and 34.3% of the country population lives there.







Figure 4. Towns with more than 100 000 inhabitants as of 31.12.2013

According to the country administrative-territorial structure there are 6 statistical regions, 28 districts and 264 municipalities in Bulgaria.

Statistical regions

Nearly half of the population of the country (49.4%) lives in Yugozapaden and Yuzhen tsentralen regions. The number of their population is 2 128 thousand (29.4%) and 1 454 thousand persons (20.1%) respectively. The next according to population number are Yugoiztochen and Severoiztochen regions - 1 064 thousand or 14.7% and 955 thousand persons or 13.2% of the country population. The number of population living in Severen tsentralen and Severozapaden regions is 836 or 11.5% and 810 thousand persons or 11.2% of the country population respectively.

The population number has decreased compared to 2012 in all the statistical regions; highest decrease has been observed in Severozapaden region - 1.6% and lowest - in Yugozapaden region - 0.1%.

Districts

Lowest is the number of population in district Vidin – 95 467 persons or 1.3% of the country population and highest in district Sofia (stolitsa) - 1 309 634 persons (18.1%). In 16 districts the population number is under 200 thousand and the population living in them represents 30.8% of the country population. There are 6 districts with a population between 200 and 300 thousand persons and 20.6% of the country population is living there. Six districts have population above 300 thousand persons and in three of them, Sofia (stolitsa), Plovdiv and Varna, lives more than 1/3 of the total country population (34.0%).

Compared to 2011, the population has increased in districts Sofia (stolitsa) by 0.6%, Burgas and Varna - by 0.1%. In all the rest, a decrease has been observed, as highest is in districts Smolyan and Vidin - 2.1% and Kyustendil - 1.9%.







Figure 5. Share of population as of 31.12.2013 by districts

Municipalities

The distribution of population by municipalities is not uniform. There are 65 municipalities with population below 6 000 and 3.5% of the country population lives there. At the same time, there are 9 municipalities with population over 100 thousand people and 39.9% of the country population lives there. Highest is the number of population of municipality Stolichna (1 309 634), followed by Varna (344 663) and Plovdiv (341 041). Lowest is the number of population of municipality Treklyano - 613 persons.

Table 2.	Size of	municipalities	according to the	population nu	mber as of 31.12.2012
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Size of municipality	Municipal	ities	Population	
	Number	%	Number	%
Total	264	100.0	7 245 677	100.0
Up to 5999	65	24.6	252 113	3.5
6000 - 19999	121	45.8	1 340 004	18.5
20000 - 49999	50	18.9	1 438 432	19.9
50000 - 99999	19	7.2	1 320 713	18.2
100000 and more	9	3.4	2 894 415	39.9





Basic factors influencing the changes of population number and structures are the demographic processes - fertility, mortality and migration.

Fertility

There are 67 061 children born in 2013, of which **66 578 (99.3%)** - live born. The number of live births has decreased by 2 543 children or 3.7% compared to the previous year.



Figure 6. Live born children within the period 1950 - 2013

The crude birth rate⁴ in 2013 is 9.2‰, compared to 9.5‰ and 9.6‰ in 2012 and 2011.

The number of live born males (34 044) is by 1 510 higher compared to the live born females (32 534), or 956 females correspond to 1 000 born males.

The number of live born children in urban areas is 49 526 and in rural - 17 052. Crude birth rate in urban areas is 9.3‰ and in rural - 8.7‰. The respective figures for 2012 are 9.7 and 8.8‰.

The crude birth rate for EU-28 is 10.4‰ according to Eurostat data. Highest crude birth rate is observed in Ireland - 15.7‰, followed by Great Britain (12.8‰) and France (12.6‰).

The crude birth rate in Bulgaria is at the level observed in Greece (9.0‰) and Austria (9.4‰). Lowest crude birth rate within the EU is registered in Portugal (8.5‰) and Germany (8.4‰).

In Bulgaria, highest is the crude birth rate in districts Sliven - 12.1‰, Sofia (stolitsa), Burgas and Shumen - 10.0‰. The crude birth rate is higher than the country average (9.2‰) in eleven districts. Lowest crude birth rate in 2013 is registered in districts Vidin and Smolyan - 6.8 and 6.5‰ respectively.

⁴ Number of live born children per 1 000 persons of the average annual population during the year



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Figure 7. Crude birth rate in 2013 by districts

The number of women in fertile age (15-49 completed years) or the size and fertility of the fertile contingents influence considerably the level of crude birth rate and the character of population reproduction.

The number of women in fertile age as of 31.12.2013 was 1 601 thousand. It has decreased by almost 24 thousand compared to the previous year and by 306 thousand compared to 2001.

Changes in the age structure of fertile contingents contribute considerably to the decrease of crude birth rate. It has to be taken into consideration that nearly 90% of births are realised by women aged 15 to 34 years; the number of women aged 15-34 years is 839 thousand in 2013 and a decrease by 2.9% has been registered compared to 2012 and by 23.1% compared to 2001. The number of women in the mentioned age group decreases mainly due to lower number of females, entering fertile age and the emigration processes.

The number of children born by mothers aged below 15 years in 2013 is 298 or it has increased by 52 children compared to 2012. At the same time, the number of children born by mothers aged 40 and more has increased from 1 208 in 2012 to 1 276 in 2013.

Total fertility rate $(TFR)^5$ is one of the basic indicators characterising the fertility. **The average number of live born children per women in 2013 is 1.48.** TFR in 2001 has been 1.24 children and in 2012 - 1.50 children.

⁵ Average number of live born children, whom a mother would give birth to during her entire fertile period according to the age specific fertility rates during the reporting year







The TFR for EU-28 in 2012 is 1.58 children.

The mean age of women at first birth has increased from 26.3 in 2012 to **26.5 years in 2013.** The mean age of women at first marriage has also increased from 27.0 in 2012 to 27.3 years in 2013. Comparing both indicators, a tendency is observed the birth of first child to precede the marriage.

There are 1 118 multi-foetal births registered in 2013. In 1 100 of the cases, two children are born and in 17 - three children. Compared to 2012, a decrease of 20 multi-foetal births has been observed.

Stable tendency of increase of the extramarital births is observed since 1991. The share has increased from 18.5% in 1992 to 42.0% in 2001 and 57.4% in 2012. **The number of children born outside marriage in 2013 is 39 375 or 59.1%** of the total number of live born. The share of extramarital births in rural areas (68.4%) is higher than in urban (56.0%). The high extramarital fertility is due to considerable increase of the number of cohabiting without legal marriage young people.

For 69.9% of extramarital births, data on the father is available, which means that most probably these children are grown up in families, by parents living in consensual union, without marriage.

Highest share of extramarital births is registered in districts Vidin (76.4%), Lovech (74.9%) and Montana (73.8%). The share of extramarital births in all country regions is higher than 50.0% except in districts Kardzhali and Blagoevgrad - 43.5 and 43.0% respectively.

Increase of the extramarital births is observed in most of the EU countries. Highest is the share of extramarital births in Estonia - 58.4% and Slovenia - 57.6%, and lowest in Greece - 7.6%.





Mortality

The number of deaths in 2013 is 104 345 and the crude mortality rate⁶ - 14.4‰. Compared to the previous year the number of deaths has decreased by 4 936 or 4.5%. Despite the decrease of the absolute number, the crude mortality rate remains too high.



Figure 9. Deaths within the period 1950 - 2013

Mortality among males (15.5‰) continues to be higher than among females (13.3‰). In 2013 there are 1 107 deaths of males per 1 000 deaths of females. The considerable differences in mortality in urban and rural areas also remain unchanged. Mortality rate in rural areas (20.5‰) is higher than in urban ones (12.1‰).

The mortality rate for EU-28 in 2012 is 9.9‰. Compared to the European countries, the mortality rate in Bulgaria is rather higher (14.4‰). Lowest is the mortality in Ireland - 6.3‰ and Cyprus - 6.6‰. The mortality rate in Luxembourg, Malta, Netherlands, France, Spain and the United Kingdom is below 9.0‰. Higher is the mortality in Latvia - 14.3‰, Lithuania - 13.7‰ and Hungary - 13.0‰.

Highest is the mortality in districts Vidin (21.1‰), Montana (20.1‰), Pernik and Kyustendil -18.4‰. There are nine districts, with a mortality rate lower than the country average and lowest is the mortality in districts Kardzhali - 11.3‰, Sofia (stolitsa) - 11.5‰ and Blagoevgrad - 11.7‰.

⁶ Number of dead persons per 1 000 persons of the average annual population during the year



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The premature mortality⁷ in 2013 is 22.4%, or an increase by 0.1 percentage points has been registered compared to 2012. There are considerable differences in the premature mortality indicator for male and female population. The dead females aged up to 64 represent 14.2% of all dead females, while among the males the same share is almost twice higher -29.8%.

There are 489 children who die up to 1 year of age in 2013 and the infant mortality rate⁸ is 7.3‰. The infant mortality rate has decreased steadily after 1997, when the highest value (since 1990) - 17.5‰ is registered. The infant mortality in 2001 is 14.4%, in 2005 - 10.4% and in 2012 - 7.8%. The infant mortality observed in 2013 is the lowest one, registered in the country's demographic development.

The infant mortality rate for 2013 is lower than the country average in 12 districts. Lowest values are registered in districts Targovishte - 2.7‰, Varna - 4.2‰ and Sofia (stolitsa) - 4.7‰. Highest infant mortality rate is registered in district Lovech (16.5‰). Rather higher than the country average is the infant mortality in districts Shumen (12.9‰), Sliven (12.8‰) and Pazardzhik (11.1‰).

Despite the positive tendency of decrease, the infant mortality in Bulgaria is still higher compared to the European countries. The only country with a higher infant mortality rate compared to Bulgaria is Romania (9.0‰). In most of the European countries the infant mortality rate is below 5.0‰ and the lowest values are registered in Slovenia - 1.6‰, Finland - 2.4‰ and Luxembourg - 2.5‰.

⁷ Share of deaths of persons below 65 years of age of the total number of deaths

⁸ Number of children who die up to 1 year of age per 1 000 live born.





Figure 11. Mortality and infant mortality

The infant mortality for EU (28) in 2012 is 3.8‰.

The different mortality rates among male and female population, as well as among the urban and rural population determine the difference in the life expectancy for separate population groups.

Life expectancy for the country⁹, calculated for the period 2011 - 2013 is 74.5 years. Compared to the previous period it has increased by 0.4 years.

The life expectancy of male population is 71.0 years, whereas of female - 7 years higher or 78.0 years. The life expectancy of urban population (75.3 years) is 2.7 years higher than of rural one (72.6 years).



Figure 12. Life expectancy by sex and periods

9 Preliminary data





The life expectancy for EU-28 in 2012 is 80.3 years – 77.5 years for male and 83.1 years for female population.

The life expectancy is highest in Spain - 82.5, Italy - 82.4 and France - 82.1 years. As a whole, in 20 EU countries the life expectancy at birth is over 80 years. Lowest life expectancy is registered in Lithuania (74.1), Latvia (74.1) and Bulgaria (74.5).

Marriages and divorces

There are 21 943 juridical marriages registered in 2013, or 776 more than the previous year. 77.7% (17 047) of the marriages are registered among urban population and 4 896 - among rural. The marriage rate¹⁰ is 3.0%, compared to 2.9% in 2012 and 4.0% in 2001.



Figure 13. Marriage and divorce rates (per 1 000 population)

The mean age at first marriage in 2013 is 30.3 years for males and 27.3 - for females. Compared to the previous year, the mean age at first marriage has increased by 0.1 years for males and 0.3 years for females.

Highest is the marriage rate in district Kardzhali (4.3‰), followed by districts Razgrad (4.2‰) and Sofia (stolitsa) - 3.8‰, and lowest in districts Vidin - 1.5‰ and Vratsa - 1.7‰.

The number of divorces in 2013 is 10 908 or 1 039 less than in 2012. Out of the total number of divorces, 83.0% refers to the urban population.

Highest is the number of divorces by "mutual agreement" (63.4%), followed by divorces due to "incompatibility of temperament" (26.5%) and "virtual parting" (7.5%).

The average duration of a marriage before the divorce in 2013 is 14.6 years.

Internal and international migration

86 378 persons have changed their residence within the country in 2013.

Among the migrants within the country, 45.2% are male and 54.8% - female.

¹⁰ Number of marriages per 1 000 population





Highest is the share of internal migrants aged 20 - 39 years (35.2%), followed by persons below 20 years of age (26.7%). Considerably lower (16.0%) is the share of internal migrants aged 40 - 59 years and 60 years and over -22.1%.

The share of flow "town-town" is highest one (45.5%). Considerably lower is the number and share of the flow "village - village" (9.4%). The number of people who have migrated from towns to villages (23.5%) is greater compared to the opposite one - "village-town" (21.6%).



Figure 14. Directions of the internal migration in 2013

As a result of the migration between towns and villages, the urban population has decreased by 1 617 persons and the rural one has increased with the same number of people.

Among the internal migrants, highest is the number of persons who have migrated to district Sofia (stolitsa) - 17 310. The highest number of migrants to district Sofia (stolitsa) is registered in districts Sofia - 9.1%, Blagoevgrad - 6.9%, Plovdiv - 6.3%, Pleven and Burgas - 5.0%. Lowest is the number of migrants to Sofia (stolitsa) from districts Razgrad (0.8%) and Silistra (1.0%).

19 678 persons have changed their current address in Bulgaria with an address abroad in 2013 - 50.0% are male. Nearly 56% of the emigrants are aged 20 to 39 years. Emigrants aged 40 - 59 years represent 21.5%. The youngest emigrants (under 20 years) are 14.2% of the total number and the emigrants over 60 years of age - 8.9%.

Persons who have changed their address abroad with an address in Bulgaria or the immigration flow includes Bulgarian citizens who have returned to Bulgaria and citizens of other countries granted permission for permanent stay in Bulgaria. There are 18 570 persons who have changed their address abroad with an address in Bulgaria in 2013. Male represent 56.5% of the total number of immigrants and female - 43.5%.

Among the immigrants to Bulgaria, 43.3% are aged 20 - 39 years and 27.0% - 40 to 59 years. The youngest immigrants (under 20 years) are 13.4% and the oldest, over 60 years of age - 16.3%.

Population natural and migration growth

The population number and structures are defined by the size and intensity of the natural and migration movement.

The difference between the number of live births and deaths represents the natural increase of population. The country's demographic development after 1990 is characterised by negative natural





increase. Due to the negative natural increase the country population has decreased by 37 767 persons in 2013.

The population decrease, **measured through the natural increase rate is minus 5.2‰**¹¹. The natural increase rate in urban areas is minus 2.8‰, compared to minus 11.8‰ in rural areas, or the decrease of country population is mainly due to the negative demographic tendencies in rural areas.

The natural increase in all country districts in 2013 is negative.

Lowest is the negative growth in districts Sofia (stolitsa) (-1.5‰), Kardzhali (-1.8‰) and Sliven (-2.2‰). Highest is the population decrease due to the high negative growth in districts Vidin, Montana and Kyustendil and the respective values are minus 14.3, minus 11.8 and minus 11.4‰.



Figure 15. Natural growth in 2013 by districts (per 1 000 population)

The natural increase rate for EU-28 in 2012 is 0.5‰.

In 16 EU countries the natural increase is positive and highest is the rate in Ireland (9.5‰) and in Cyprus (5.2‰). Except in Bulgaria, the natural increase is negative in Latvia (-4.5‰), Hungary (-3.9‰), Lithuania (-3.5‰), Romania (-2.7‰), Germany (-2.4‰), Croatia (-2.3‰), Portugal (-1.7‰), Greece (-1.5‰), Italy (-1.3‰), Estonia (-1.1‰) and Austria (-0.1‰), but the values are lower compared to Bulgaria.

Net migration (growth due to international migration) influences considerably the population number and structures. The net migration growth in 2013 is also negative - minus 1 108 persons. The last is the difference between the number of persons who have resided in the country and those who have left it.

¹¹ Difference between the number of live births and number of deaths per 1 000 of the average annual population





The decrease of population due to the international migration measured through the coefficient of net migration is $-0.2\%^{12}$.

There are seven districts with a positive migration growth in 2013: Sofia (stolitsa) - (7.1‰), Varna (3.8‰), Burgas (3.7‰), Plovdiv (3.1‰), Stara Zagora and Shumen - each 0.4‰ and Ruse (0.2‰).

Highest population decrease due to the negative migration growth is registered in the following districts: Smolyan (-15.0‰), Kyustendil (-7.7‰) and Vratsa (-7.5‰).

¹² Ratio of the net migration to the average annual population



Methodological notes

The population number and structures by the end of year are calculated based on the population data for the preceding year and data on the population natural and migration movement during the reference year.

Source of data on population number and structures is the Information System Demography of the NSI.

Data source on natural and migration movement of population (births, deaths, marriages, divorces, migration) is the Unified System for Civil Registration and Administrative Service of Population (Bulgarian acronym ESGRAON). Demographic events are registered through standard documents ESGRAON-CDS (Current Demographic Statistics): notification for birth, notification for marriage, notification for divorce, notification for death and address card for change of a present (current) address.

Data on population number and demographic events are distributed according to the administrativeterritorial division of the country as of 31.12 of the reference year (settlements, municipalities, districts and statistical regions) according to the "present address". The last is the address corresponding to the residence declared by the person and officially registered.

The age of population by the end of year is calculated as of 31.12. in completed years.

The persons' age at occurrence of a demographic event is calculated in completed years based on the date of birth and the date of respective event, i.e. the age completed at the time of event.

The demographic indicators are calculated based on the average annual population. The last is an arithmetical average of the population number by the end of previous and the end of reference year.