POPULATION DEVELOPMENT IN THE CZECH REPUBLIC IN 2017

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ABSTRACT

The article analysis the demographic situation in the Czech Republic in 2017 and sets it in the context of demographic trends in the past decade. The study describes the development of individual components of population change and the effects they have on population size and the age and marital structure. The population of the Czech Republic grew as a result of the positive balance of international migration and positive natural change in 2017, and the total fertility rate and marriage rates increased as well. Life expectancy at birth for men and women stagnated. The total abortion rate also stagnated, although the induced abortion rate slightly decreased. The total divorce rate increased after three years of decline.

Keywords: demographic development, population, age structure, nuptiality, divorce, fertility, abortion, mortality, migration, Czech Republic

INTRODUCTION

Since 2003 the population of the Czech Republic has been increasing (except in 2013, when there was both negative natural change and a negative balance of international migration). In 2017 it further increased by 31,235 (the highest figure since 2009) to 10,610,055 (on 31 Dec.). The increase last year resulted mainly from a positive balance of international migration (28,273), while natural change added smaller number (2,962) to the increase.

There were 3,693 more deaths than in 2016 with the number growing to 111,443 in 2017. However, life expectancy at birth stagnated for both men and women at 76.0 years and 81.8 years, respectively. The infant mortality rate slightly decreased year on year from 2.8‰ to 2.7‰.

The number of live births increased in 2017 for the fourth year in a row to 114,405 live births (the highest values since 2010). However, it remained about 5,000 lower than in 2008, when the intensity of fertility was lower than in 2017. The main reason is the lower number of women of reproductive age at the time than ten years ago. The share of children born outside marriage has been going up every year since 1988 and in 2017 it reached 49.0%. In comparison with the EU as a whole, it is a slightly higher figure (*Eurostat*, 2018a).

The total fertility rate in the Czech Republic rose steadily from 2011 (1.43 live births per woman) to 2017 (1.69 live births per woman). This figure is also now higher than in the EU-28 (1.60; Eurostat, 2018b). In the last decade, the fertility rates of women aged 30 and over in particular increased. The mean age of women at childbirth (live births) rose by 0.9 years from 2007 to 2017 to 30.0 years, but in the last five years it has stagnated at 29.9–30.0 years. The net reproduction rate rose by 0.03 to 0.82 girls per women, which was influenced not only by the increased intensity

of fertility, but also by slightly the better mortality conditions for women of reproductive age.

The number of abortions has declined in the long term because of a decrease in the number of induced abortions. The total number of all abortions in 2017 (35,012) is the lowest figure since 1958, when induced abortion was legalised. Spontaneous abortions have

stagnated at around 13–14,000 in the last decade. The trends correlate strongly with the number of pregnancies.

The number of marriages and the total first marriage rates increased in the last four years. There were 21% more marriages in 2017 than in 2007. The total first marriage rate rose from 51.4% for men

Table 1: Population and vital statistics and the main analytic indicators of demographic development, 2007–2017

Indicator	2007	2012	2013	2014	2015	2016	2017
Population and vital statistics							
Live births	114,632	108,576	106,751	109,860	110,764	112,663	114,405
Deaths	104,636	108,189	109,160	105,665	111,173	107,750	111,443
under 1 year of age	360	285	265	263	272	317	304
Marriages	57,157	45,206	43,499	45,575	48,191	50,768	52,567
Divorces	31,129	26,402	27,895	26,764	26,083	24,996	25,755
Abortions	40,917	37,733	37,687	36,956	35,761	35,921	35,012
induced abortions	25,414	23,032	22,714	21,893	20,403	20,406	19,415
Immigrants	104,445	30,298	29,579	41,625	34,922	37,503	45,957
Emigrants	20,500	20,005	30,876	19,964	18,945	17,439	17,684
Natural increase	9,996	387	−2,409	4,195	−409	4,913	2,962
Net migration	83,945	10,293	−1,297	21,661	15,977	20,064	28,273
Total increase	93,941	10,680	−3,706	25,856	15,568	24,977	31,235
Mid-year population (thousands)	10,322.7	10,509.3	10,510.7	10,524.8	10,542.9	10,565.3	10,589.5
Intensity indicators							
Total first marriage rate - males (%)	64.5	53.2	51.4	53.1	55.1	56.2	57.6
- females (%)	71.1	60.6	59.0	60.8	62.4	64.3	65.4
Mean age at first marriage - males	31.2	32.3	32.3	32.3	32.4	32.2	32.2
- females	28.6	29.6	29.8	29.8	29.8	29.9	29.8
Total divorce rate (%)	48.7	44.5	47.8	46.7	46.5	45.2	47.2
Mean duration of marriage at divorce	12.3	12.8	13.0	13.1	13.0	13.1	13.2
Total fertility rate	1.44	1.45	1.46	1.53	1.57	1.63	1.69
Mean age of mothers at childbirth	29.1	29.8	29.9	29.9	30.0	30.0	30.0
Mean age of mothers at 1st birth	27.1	27.9	28.1	28.1	28.2	28.2	28.2
Share of live births outside marriage (%)	34.5	43.4	45.0	46.7	47.8	48.6	49.0
Net reproduction rate	0.70	0.70	0.71	0.74	0.76	0.79	0.82
Total abortion rate	0.54	0.51	0.52	0.51	0.51	0.51	0.51
Total induced abortion rate	0.34	0.31	0.32	0.31	0.29	0.30	0.29
Life expectancy at birth - males	73.7	75.0	75.2	75.7	75.6	76.0	76.0
- females	80.1	81.0	81.2	81.7	81.5	81.8	81.8
Infant mortality rate (‰)	3.1	2.6	2.5	2.4	2.5	2.8	2.7

Notes: First marriage indicators are based on the nuptiality life tables for singles. Life expectancy at birth is derived from life tables, which are based on a new methodology: https://www.czso.cz/csu/czso/life-tables-methodology
Source: Czech Statistical Office; authors' calculations.

and 59.0% for women in 2013 to 57.6% and 65.4% in 2017. However, the figures were lower than in 2007. The total divorce rate stabilised at the level of almost half of all marriages ending in divorce.

The population of the Czech Republic is ageing. Population ageing started back in the 1980s. This process is reflected in the increasing mean age of the population, the median age, and the index of ageing. Since 2006 there have been more inhabitants aged 65 and over than those aged 0–14. The share of the population of productive age decreased from 71.2% in 2007 to 65.0% in 2017.

POPULATION BY AGE AND MARITAL STATUS

In 2017, the population of the Czech Republic increased by 31,200 to 10,610,055 inhabitants (Table 2). Compared to 2007, the increase amounted to almost 229,000 persons. The population growth is mainly due to the positive balance of foreign[international] migration. In 2017, most of the total increase of 31,200 persons was due to international migration, the balance of which amounted to 28,300 persons.

Since 2009 only the population children and seniors has been increasing. The number of children aged 0–14 years increased by 1% each year between 2012 and 2017 and the number of seniors (65+ years) by 3%. While the category of children has been growing since 2008, the number of people aged 65 and over has been increasing since the mid-1980s. Conversely, the number of people of productive age declined by 1% each year in 2012–2017 (the decline in this category has been occurring since 2009).

At the end of 2017, there were 6,899,195 people in the 15–64 age group. The share of persons this age group represents in the population of the Czech Republic fell to 65.0% in 2017. The share of 15–64 year-olds in the population was at its largest since World War II in 2006 and 2007 (71.2%). The strongest

Table 2: Age distribution of the population, 2007–2017 (31 Dec.)							
Age group/Indicator	2007	2012	2013	2014	2015	2016	2017
Population (thousands)							
Total	10,381.1	10,516.1	10,512.4	10,538.3	10,553.8	10,578.8	10,610.1
0–14	1,476.9	1,560.3	1,577.5	1,601.0	1,623.7	1,647.3	1,670.7
15–64	7,391.4	7,188.2	7,109.4	7,056.8	6,997.7	6,942.6	6,899.2
65+	1,512.8	1,767.6	1,825.5	1,880.4	1,932.4	1,988.9	2,040.2
in: 65–69	473.8	635.9	657.3	671.1	693.0	691.4	684.5
70–74	363.0	423.6	452.8	482.0	495.2	532.7	569.7
75–79	327.5	302.0	303.5	308.6	323.7	340.1	358.6
80–84	223.6	238.0	237.2	236.6	232.0	229.2	226.6
85+	96.6	126.1	128.2	131.3	135.0	138.7	141.8
Share in total population (%)							
0–14	14.2	14.8	15.0	15.2	15.4	15.6	15.7
15–64	71.2	68.4	67.6	67.0	66.3	65.6	65.0
65+	14.6	16.8	17.4	17.8	18.3	18.8	19.2
Characteristics of age distribution							
Average age	40.3	41.3	41.5	41.7	41.9	42.0	42.2
Median age	39.1	40.4	40.8	41.1	41.5	41.9	42.3
Index of ageing[1]	102.4	113.3	115.7	117.4	119.0	120.7	122.1
Age dependency ratio[2]	53.9	57.5	58.6	59.8	61.4	63.2	64.8

Notes: 1) The number of people aged 65 and more per 100 children aged 0–14.
2) The number of children aged 0-19 and people aged 65 and more per 100 people aged 20–64.
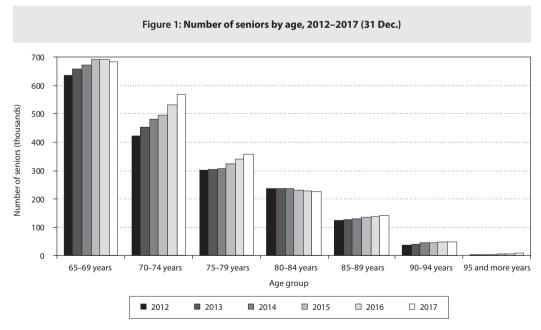**Source:** Czech Statistical Office; authors' calculations.

generations in the Czech Republic, who are people born in the 1970s (1974 and 1975), are currently in productive age. In 2017, these generations, which are numerically the largest ones, were in the 40–44 age group.

The number of children aged 0–14 years has increased since 2008. At the end of 2017, children accounted for 15.7% of the population (equalling a total of 1,670,677 persons). In the year 2017, the number of children increased by 23,400, and since 2007 the number has grown by 193,800. In the children's age category the biggest five-year age group was that of children aged 5–9 (585,200), including the generations born in 2008–2012. On the other hand, the least numerous age is that of children aged 10–14 (524,800), but due to year-on-year growth of 5% the differences between age groups have decreased.

The seniors age group (aged 65 and over) underwent the most dynamic changes in recent years. At the end of 2017, there were an estimated total of 2,040,183 people in this age group; this was 0.5 million more than in 2007 and 51,300 more than at the end of 2016. In 2017, the oldest category of the population made up 19.2% of the total population (4.7 percentage

points more than in 2007). The numerically largest five-year age group in the senior population remains people aged 65–69, who accounted for about one-third of all seniors. Between 2007 and 2017, the group of seniors aged 90-94 years has grown relatively the most (more than doubling). However, it continues to account for a small percentage of the senior population (2.4% in 2017).

All analytic indicators of the age structure provide evidence of the ongoing process of population ageing (Table 2). The average age of the population of the Czech Republic has increased by 0.1 to 42.2 years in 2017. There was a difference of three years between men and women; in 2017 the average age of men was 40.8 years and it was 43.6 years for women. The median age shifted by 0.4 to 42.3 years in 2017 and did not differ much from the average age for the population as a whole. The index of ageing increased to 122.1 seniors aged 65+ per 100 children under the age of 15 (seniors have outnumbered children since 2006). Between 2007 and 2017, the total age dependency ratio increased from 53.9 to 64.8 dependent persons per 100 persons in productive age. The growth of the total age dependency ratio reflects mainly

Figure 1: **Number of seniors by age, 2012–2017 (31 Dec.)**

Source: Czech Statistical Office.

the development of the number of seniors, which has been increasing significantly to the detriment of people in productive age.

The structure of the population in the Czech Republic by marital status has already been changing for several decades, with an increasing share of single and divorced people and a decreasing share of married and widowed people. Married men and married women form the majority, but their share has been decreasing since the early 1980s. At the end of 2017, 46.9% of the population aged 15 years and over were married. The share of widowed people in the population has changed the least. Between 2007 and 2017 the share of widowed people fell from 8.5 to 8.3%, with a decline in the proportion of widowed women owing to the faster improvement of male

Table 3: Population 15+ years by marital status and sex, 2007–2017 (31 Dec.)

Marital status	2007	2012	2013	2014	2015	2016	2017
Population (thousands)							
Single	2,553.4	2,706.5	2,725.3	2,748.5	2,765.9	2,782.3	2,801.3
Married	4,592.7	4,366.2	4,309.1	4,271.8	4,236.1	4,211.8	4,191.8
Divorced	1,003.2	1,123.8	1,144.8	1,164.6	1,180.6	1,193.4	1,206.6
Widowed	754.8	759.3	755.7	752.3	747.5	744.0	739.8
Percentage of the population 15+ years							
Single	28.7	30.2	30.5	30.8	31.0	31.2	31.3
Married	51.6	48.8	48.2	47.8	47.4	47.2	46.9
Divorced	11.3	12.5	12.8	13.0	13.2	13.4	13.5
Widowed	8.5	8.5	8.5	8.4	8.4	8.3	8.3

Source: Czech Statistical Office; authors' calculations.

Figure 2: Population by age, sex and marital status, 2007 and 2017 (31 Dec.)

Source: Czech Statistical Office.

mortality. Convsersely, the share of single people in the population aged 15 years and over increased (by 3 percentage points to 31.3%), as did the share of divorced people (by 2 percentage points to 13.5%).

The structure of the population by marital status significantly differs by age and it gradually changes from year to year in every age group (Figure 2). Between 2007 and 2017 the most pronounced change was among inhabitants in their thirties. The number of de iure single persons has increased progressively and between 2007 and 2017 the age at which married people outnumber single persons shifted from 30 to 35 years. The share of single men grew most in the 35–39 age group (from 21.8 to 46.0%), while for single women it was in the 30-34 age group (from 25.5 to 48.9%). On the other hand, married persons aged 30–34 years recorded the largest decrease in their share (from 49.8% in 2007 to 30.9% in 2017 for men and from 62.6 to 44.8% for women). In the oldest age groups (65 years and over), the structure of men and women by marital status depends mainly on the level of mortality. Men aged 65+ years were mostly married (72.5% in 2017, 76.1% in 2007), while women in this age group were mostly widowed (43.0% in 2017, 52.5% in 2007) due to excess mortality among many (especially among young and middle-aged men).

NUPTIALITY

In the year 2017, there were 52,600 marriages among the inhabitants of the Czech Republic, which was 1,800 more than in the previous year and the most since 2008. The number of marriages has been declining since the early 1990s. The decline stopped in 2013, when the lowest number of marriages (43,500) was recorded. The number of marriages grew in the years that followed, even in 2017, when it rose by another 3.5%.

In 2017, marriages of both single and divorced and widowed persons were added. A total of 20,038 men (76.2% of the total number of grooms) and 40,336 women (76.7% of the total number of brides) married for the first time in 2017. The share of protogamous marriages was 67.7% of the total number of marriages in 2017, and the absolute number of such marriages was 35,600. The number of higher-order marriages is roughly one-third the number of first marriages and account for about a quarter of the total. In 2017, 12,529 men and 12,231 women entered into such a marriage.

The age structure of bridegrooms in 2007–2017 changed towards an increasing number of brides aged 35 or more, and a declining number of couples under the age of 25. The proportion of brides under the age of 25 decreased from 21 to 12.7% between 2007 and 2017 and the proportion of grooms in the same age group decreased from 8.5 to 5.6%. Conversely, the proportion of brides aged 35 and over grew from 19.8 to 30.0% and the proportion of grooms increased from 29.4 to 42.8%.

According to nuptiality life tables for 2017, 57.6% of men and 65.4% of women would enter into their first marriage by their 50th birthday. This was 6.9 percentage

Table 4: Marriages by order, 2007–2017							
Indicator	**2007**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Total marriages	57,157	45,206	43,499	45,575	48,191	50,768	52,567
Marriages of two singles	36,247	29,684	28,877	30,785	32,689	34,284	35,574
Remarriages (for both)	9,620	6,899	6,604	6,514	6,975	7,467	7,767
Male order of marriage - first	41,752	33,816	32,743	34,691	36,884	38,578	40,038
- higher	15,405	11,390	10,756	10,884	11,307	12,190	12,529
Female order of marriage - first	42,032	34,175	33,029	35,155	37,021	39,007	40,336
- higher	15,125	11,031	10,470	10,420	11,170	11,761	12,231
Protogamous marriages (%)	63.4	65.7	66.4	67.5	67.8	67.5	67.7
Remarriages (%) - males	27.0	25.2	24.7	23.9	23.5	24.0	23.8
- females	26.5	24.4	24.1	22.9	23.2	23.2	23.3

Note: Protogamous marriages - both partners are marrying for the first time.
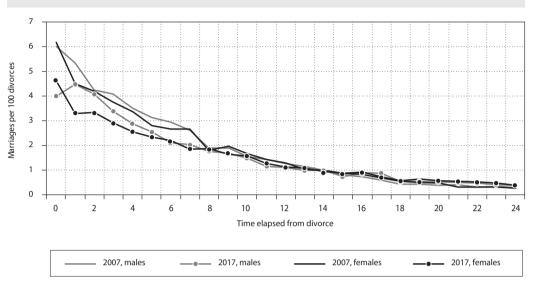**Source:** Czech Statistical Office; authors' calculations.

Figure 3: **The remarriage rates of divorcees by sex and time elapsed since divorce, 2007 and 2017**

Note: Rates of the second kind by the divorce duration.
Source: Czech Statistical Office; authors' calculations.

points lower for men and 5.7 percentage points lower for women than in 2007. Based on the first-marriage probabilities for 2017, the mean age at first marriage would be 32.2 years for males and 29.8 years for females, provided that the probabilities remained unchanged. These figures have not changed significantly in recent years, but compared to 2007 they were higher by 1.0 years for men and 1.2 years for women.

In 2017 the total remarriage rate of divorcees was 42.5% for males and 40.8% for females. Like the total first marriage rate, the lowest rate was observed in 2013 (34.7% for males and 33.5% for females). On average men would remarry 8.6 years and women 9.0 years after divorce (provided that the remarriage rates remained stable in the future). The total marriage of divorced men is slightly higher than for divorced women. The remarriage rate is the highest in the first years after divorce and decreases with the time elapsed since divorce. Compared to 2016, the average time between divorce and remarriage increased by 0.1 year; compared to 2007 it was 1.3 years for men and 1.5 years for women. The shift to an older age was caused by a decrease in marriages within a shorter interval after divorce and an increase in marriages in the interval of 15 years or more after divorce.
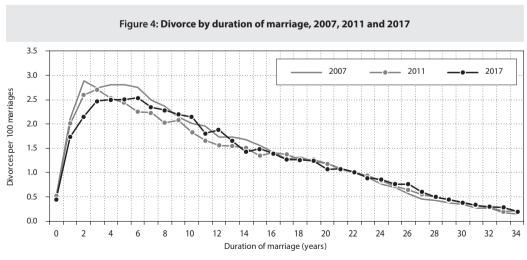
DIVORCE

Statistics compiled from data obtained from the Ministry of Justice of the Czech Republic show there were a total of 25,800 divorces in the year 2017, which is 759 more than in the previous year. Four-fifths of the divorces were a first divorce (80.7% for men and 81.4% for women in 2017). Along with the total number of divorces, there was also an increase in the number of divorces of couples with minor children and in the number of children of divorced couples in 2017. Divorce affected 23,752 minor children, 897 more than in the previous year (but 3,800 fewer than in 2007). Divorces among people/couples with minor children (total of 15,196) accounted for 59.0% of the total number of divorces, while there were no minor children in the case of 10,559 divorces (41.0%). In most cases the divorced families had only one (50.5% in 2017) or two minor children (43.7%). In the 2007–2017 period there was an increase in the share of families with two children (by almost 5 percentage points) to the detriment of single-parent families (a decline of almost 6 percentage points). The average number of children per divorced marriage was 1.5–1.6 children.

Table 5: Divorces, 2007–2017

Indicator	2007	2012	2013	2014	2015	2016	2017
Total divorces	31,129	26,402	27,895	26,764	26,083	24,996	25,755
Percentage of repeated divorces - males	20.0	19.4	20.0	20.1	19.3	19.7	19.3
- females	19.4	19.1	19.1	19.4	18.8	19.2	18.6
Divorces without minor children	12,721	11,213	11,974	11,557	11,090	10,270	10,559
Divorces with minor children	18,408	15,189	15,921	15,207	14,993	14,726	15,196
- percentage of total	59.1	57.5	57.1	56.8	57.5	58.9	59.0
Number of minor children in divorced marriages	27,546	22,983	24,335	23,119	23,187	22,855	23,752
- average number of minor children per divorce with minors	1.50	1.51	1.53	1.52	1.55	1.55	1.56

Source: Czech Statistical Office; authors' calculations.

Table 6: Divorce indicators, 2007–2017

Indicator / Time elapsed	2007	2012	2013	2014	2015	2016	2017
Total divorce rate (%)	48.7	44.5	47.8	46.7	46.5	45.2	47.2
Mean duration of marriage at divorce (years)	12.3	12.8	13.0	13.1	13.0	13.1	13.2
Divorce rates (per 100 marriages)							
0–4	2.2	2.0	2.1	2.0	1.9	1.8	1.8
5–9	2.5	2.1	2.3	2.3	2.3	2.3	2.4
10–14	1.8	1.6	1.8	1.6	1.7	1.7	1.8
15–19	1.4	1.3	1.4	1.3	1.3	1.2	1.3
20–24	1.0	0.9	1.0	1.0	1.0	0.9	1.0
25–29	0.5	0.5	0.6	0.6	0.6	0.6	0.6
30+	0.2	0.2	0.2	0.2	0.3	0.2	0.3

Note: The total divorce rate and mean duration of marriage at divorce are the result of the distribution of reduced divorce rates by time elapsed since entering into marriage.
Source: Czech Statistical Office; authors' calculations.

Figure 4: Divorce by duration of marriage, 2007, 2011 and 2017

Source: Czech Statistical Office; authors' calculations.

In terms of the duration of a marriage until divorce, most divorces usually occur after 5–9 years of marriage (divorce after this duration of marriage has dominated since the beginning of the 21st century). In 2017, there were 5,751 divorces after 5–9 years of marriage, which accounted for 22.3% of all divorces. The second-largest group was divorces after 10–14 years of marriage (4,633, 18.0% of the total). The share of divorces after 25–29 years (9.5% in 2017) and divorces after more than 30 years (8.2%) of marriage has had an increasing trend (since 2007).

If the divorce rate continues to be based on the duration of marriage in 2017, the divorce would be 47.2% of marriages ending in divorce on average after 13.2 years of marriage. Compared to 2016, the total divorce rate increased by 1.9 percentage points, but it was 1.6 percentage points lower than in 2007. The divorce rate was highest after 5–9 years of marriage. However, the number of divorces per 100 marriages after 5–9 years of marriage was lower in 2017 than in 2007 (it declined from 2.51 to 2.36 divorces per 100 marriages). On the other hand, for long-term marriages, the divorce rates show an increasing trend. The average duration of marriage until divorce has increased with fewer fluctuations over the last two decades, reaching 13.2 years in 2017 (0.9 years more than in 2007). The increase in the average length of marriage until divorce is a reflection of a decrease in the divorce rate among shorter marriages and its increase after the interval of 25 years or more since marriage.

FERTILITY

The Czech Statistical Office recorded a total of 114,405 live births in 2017, which is 1,742 more than the year before. A higher number of children born in the Czech Republic was last observed in 2010, when the figure was 117,153. The number of newborns has risen in the last four years (Table 7). Compared to 2007 there was a small decrease in the number of live births, which was caused by the smaller number of women of reproductive age, on the contrary the intensity of fertility rose. The number of stillbirths compared to last year dropped from 420 to 384. The stillbirth rate declined year-on-year from 3.7 ‰ to 3.3 ‰ and reached its lowest level since 2012.

The structure of live births by birth order has not changed significantly in a ten-year perspective. First-order births accounted for 46–49% of live births, second-order births for 37–39%, and third- and higher-births for 14–15%. In the last year-on-year comparison there has been an increase in the number of live births in all birth orders. Most of the increase

Indicator	2007	2012	2013	2014	2015	2016	2017
Live births	114,632	108,576	106,751	109,860	110,764	112,663	114,405
– first order	54,050	51,476	51,092	52,106	53,223	54,918	55,726
– second order	43,400	41,826	40,078	41,196	41,276	41,302	41,832
– third and higher order	17,182	15,274	15,581	16,558	16,265	16,443	16,847
Marital status of mother							
Single	32,026	40,581	41,655	44,985	46,887	48,807	50,379
Married	75,095	61,488	58,751	58,593	57,788	57,930	58,314
Divorced	7,208	6,299	6,134	6,089	5,911	5,730	5,539
Widowed	303	208	211	193	178	196	173
Percentage of live births outside marriage	34.5	43.4	45.0	46.7	47.8	48.6	49.0
– first order	43.9	54.5	55.7	57.3	58.0	58.5	58.6
– second order	24.0	31.6	33.4	35.6	37.5	38.2	39.0
– third and higher order	31.5	38.1	39.3	40.6	40.8	41.7	42.3

Table 7: Live births by birth order and marital status of the mother, 2007–2017

Source: Czech Statistical Office; authors' calculations.

was between firstborns (from 54,918 to 55,726), followed by second-order births (41,302 to 41,832) and third- and higher-order births (from 16,443 to 16,847). The most pronounced relative increase was in the last group (by 2.5%).

The number of live births to single mothers increased from 48,807 in 2016 to 50,379 in 2017. The number rose by 57.3% compared to 2007. Live births to married mothers also rose slightly in a year-on-year comparison to 58,314 in 2017, but in a longer ten-year perspective the figure has declined by 22.3%. The number of children born to mothers with some other marital status slightly declined in 2017. The share of live births outside marriage increased from 34.5% in 2007 to 49.0% in 2017. The largest share was identified among first-order births (58.6% in 2017); among third- and higher-order births 42.3% were born outside marriage and among second-order births it was 39.0%. The share of births outside marriage increased from 2007 in all birth orders, and relative growth was highest among second-order births.

Besides birth order, other major differential characteristics of extramarital births are the age and educational attainment of the mothers. Unmarried motherhood is much more common at a young age, between 15 and 19 years (95.1% in 2017). In contrast, it is least common among mothers in the 30–39 age group (41.2% in 2017). The share of live births outside marriage was higher in all age groups between 2007 and 2017, but the relative growth was greatest among mothers with the smallest share of extramarital births, so there is an evident trend towards homogenisation. Extramarital births are less common among women with higher levels of education, who traditionally have a more conservative approach towards reproductive behaviour (Rychtaříková, 2003). In 2017, 80.9% of births to women with basic education were extramarital. Among tertiary-educated women the figure was only 31.2%. However, in a long-term perspective the share of births outside marriage has increased relatively the most among the highest educated group of women. In 2007 only 16.3% of this subpopulation gave birth outside marriage, and the figure was 68.7% for women with basic education.

The intensity of fertility measured as the total fertility rate (TFR) increased from 1.63 children per

Table 8: Fertility indicators, 2007–2017							
Indicator/Age group	**2007**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Total fertility rate – total	1.44	1.45	1.46	1.53	1.57	1.63	1.69
– first order	0.69	0.72	0.73	0.76	0.79	0.83	0.86
– second order	0.53	0.54	0.53	0.56	0.57	0.58	0.60
– third and higher order	0.22	0.19	0.20	0.21	0.21	0.22	0.23
Net reproduction rate	0.70	0.70	0.71	0.74	0.76	0.79	0.82
Mean age of mother at childbirth – total	29.1	29.8	29.9	29.9	30.0	30.0	30.0
– first order	27.1	27.9	28.1	28.1	28.2	28.2	28.2
– second order	30.1	31.0	31.0	31.1	31.2	31.2	31.3
– third and higher order	33.1	33.3	33.2	33.3	33.4	33.3	33.4
Age group:	**Age-specific fertility rates (per 1,000 females)**						
15–19	11.2	12.0	11.7	11.9	11.7	11.8	11.9
20–24	48.0	42.5	41.9	43.0	45.5	49.4	50.8
25–29	105.8	93.4	92.4	95.6	97.0	99.4	103.7
30–34	89.8	98.1	98.2	104.4	106.3	109.2	111.9
35–39	30.6	38.4	40.0	43.2	45.3	47.6	49.8
40–44	4.6	6.6	7.1	7.4	8.4	8.7	9.1
45–49	0.2	0.3	0.3	0.4	0.4	0.5	0.5

Source: Czech Statistical Office; authors' calculations.

woman in 2016 to 1.69 one year later. It was at its highest level since 1992 and the TFR rose for the sixth year in a row. At the beginning of the observed period, it was the highest in 2008 (1.50 children per woman), after which there was a decline to 1.43 in 2011, and since then it has been growing again.
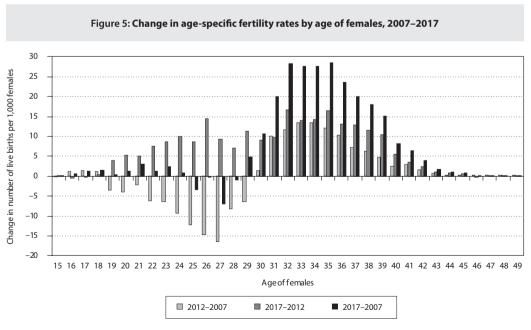
The last year-on-year increase was mainly the result of the increase in the first-order fertility rate, the increase in the age-specific fertility rates among almost all age groups, and the higher intensity of both marital and non-marital fertility. The total first-order fertility rate increased by 0.03 children per woman, while second-order fertility increased by 0.02 and third- and higher-order fertility increased by 0.01. The net reproductive rate also increased from 0.70 in 2007 to 0.82 in 2017, not only because of the rise in the level of fertility, but also because of the slight decrease in the mortality intensity of women of reproductive age.

The mean age of mothers at childbirth has stagnated in the last three years at 30.0 years. The slow-down in the trend of postponing having children to a later age has already been apparent for the last five years. In comparison with 2012 the rise was 0.2 years, while in contrast with 2007 it was

0.9 years. Between 2007 and 2017 the mean age of mothers at second-order birth increased the most, by 1.2 years, while for first-order births it increased by 1.1 years and for third- and higher-order births by only 0.3 years.

The highest intensity of fertility has since 2011 been in the 30–34 age group of women. The average age-specific fertility rate was 111.9 children per 1,000 females at this age in 2017. In a ten-year perspective the highest absolute increases were in the 30–34 and 35–39 age groups, with a slight increase in all other age groups except those aged 25–29. However, the increase is in relative numbers generally higher in the older age groups, e.g. in the 45–49 age group age-specific fertility was 2.6 times higher in 2017 than in 2007.

The highest intensity of fertility shifted to an older age in each birth order between 2007 and 2017 (Figure 6). Younger age groups (i.e. before the peaks in the curves in 2007) had in general lower or the same fertility rates in 2017, but this was not noteworthy enough to eliminate the higher intensity in the older age groups in the same year, which led to a higher intensity of fertility in each birth order.
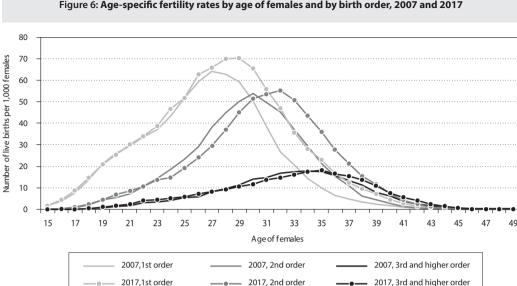
Figure 5: **Change in age-specific fertility rates by age of females, 2007–2017**

Source: Czech Statistical Office; authors' calculations.

Figure 6: Age-specific fertility rates by age of females and by birth order, 2007 and 2017

Note: *) The number of live births of given birth order per 1,000 women of the given age.
In 2007 birth order was surveyed for all births, in 2017 only for live births.
Source: Czech Statistical Office; authors' calculations.

ABORTION

The number of registered abortions[4] was 35,012 in 2017 (which is historically the lowest number since 1958, when induced abortions were legalised). There were 909 fewer abortions than in the previous year and 5,905 fewer than in 2007. The main reason for this trend was the decrease in induced abortions[5] (ČSÚ, 2015e). There were 19,415 abortions of this type in 2017, which was 991 fewer than in 2016 and 5 999

fewer than in 2007 (Table 9). In contrast, the number of spontaneous abortions[6] first rose from 14,102 in 2007 to 14,629 in 2009, followed by a decrease to 13,515 in 2012. In the last five years, the number of spontaneous abortions has increased, with the exception of a slight year-on-year decline in 2017 by 22 to 14,190 (the trends partly reflect the development in the number of live births, or more specifically in the number of pregnancies). The share of spontaneous

4) The data on abortions are obtained from the Institute of Health Information and Statistics of the Czech Republic (IHIS CR).

5) Induced abortions: legally induced abortion by means of vacuum aspiration can be performed in the early stages of gestation (i.e. up to the 7th week in the case of a first pregnancy and to the 8th week in other cases) and by a method other than vacuum aspiration up to the 12th week of gestation, or for health reasons to the 24th week of gestation.

6) Until 31 March 2012 spontaneous abortions referred to: the spontaneous expulsion of a foetus from the uterus, where:
a) the foetus shows no signs of life and its birth weight is less than 1,000 g, or the weight cannot be measured, and the gestation period was shorter than 28 weeks;
b) the foetus shows one or more signs of life but its birth weight is less than 500 g and it does not survive for more than 24 hours after birth;
c) only the ovum without the foetus or only the decidua was extracted.
Since 1 April 2012 spontaneous abortions refer to: spontaneous expulsion of a foetus from the uterus where the foetus shows no signs of life and its birth weight is lower than 500 g, or, the weight cannot be measured, and the gestation period was shorter than 22 weeks.

Table 9: Abortions, 2007–2017							
Indicator	**2007**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Abortions	40,917	37,733	37,687	36,956	35,761	35,921	35,012
– induced abortions	25,414	23,032	22,714	21,893	20,403	20,406	19,415
– spontaneous abortions	14,102	13,515	13,708	13,857	14,082	14,212	14,190
– ectopic pregnancies	1,401	1,186	1,265	1,206	1,276	1,300	1,405
Abortions – single females	16,022	17,373	18,050	17,999	17,852	18,371	18,397
– married females	19,428	15,393	14,705	14,214	13,368	13,150	12,485
– divorced females	4,711	3,949	3,928	3,766	3,505	3,442	3,088
Induced abortions – single females	11,016	11,566	11,883	11,604	11,067	11,463	11,247
– married females	10,716	8,385	7,774	7,459	6,687	6,421	5,891
– divorced females	3,280	2,622	2,620	2,433	2,203	2,061	1,787

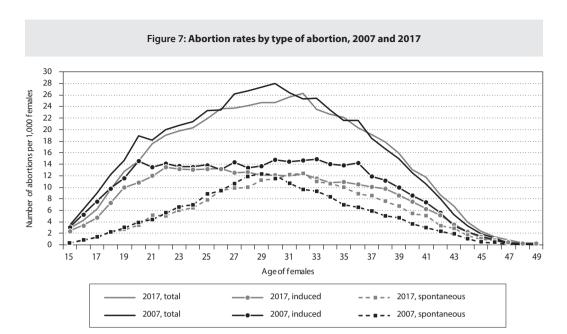**Source:** Czech Statistical Office; authors' calculations.

abortions rose from 34.5% to 40.5% in the last decade, while the share of induced abortions decreased from 62.1% to 55.5%. Ectopic pregnancies were recorded in about 3.0%–3.6% of cases between 2007 and 2016 and the share rose to 4.0% in 2017. The share of induced abortions for medical reasons was 20.2% out of all induced abortions in the last recorded year. The most common method of induced abortion in 2017 was surgical (75.8%), followed by pharmacological (21.0%).

The structure of women of reproductive age by marital status and changes to this structure (see the section on Population by age and marital status) greatly influence the number of abortions by marital status of women. The share of single women has been growing and the share of married women diminishing in this subpopulation. Abortions have been most common among single women since 2011, while previously they had been most common among married women. There were more abortions among single women in 2017 than in 2007. The figure rose from 16,022 to 18,397. The number of abortions to married women declined significantly from

Table 10: Abortion indicators, 2007–2017							
Indicator/Age group	**2007**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Total abortion rate	0.54	0.51	0.52	0.51	0.51	0.51	0.51
Total induced abortion rate	0.34	0.31	0.32	0.31	0.29	0.30	0.29
Total spontaneous abortion rate	0.18	0.18	0.18	0.19	0.20	0.20	0.20
Mean age at abortion	29.9	30.2	30.1	30.3	30.3	30.5	30.5
Mean age at induced abortion	29.6	29.7	29.5	29.7	29.7	29.8	29.7
Mean age at spontaneous abortion	30.4	31.0	31.1	31.2	31.1	31.5	31.6
Age group:	**Induced abortion rates (per 1,000 females)**						
15–19	7.6	6.8	7.2	6.6	6.1	5.8	5.6
20–24	13.9	12.9	12.9	12.4	12.1	12.1	12.5
25–29	13.7	13.3	13.5	13.0	12.2	12.9	12.7
30–34	14.5	13.3	13.0	13.0	12.4	12.5	11.7
35–39	12.3	11.3	11.3	11.0	10.2	10.5	9.9
40–49	3.1	2.9	2.9	3.2	3.1	3.2	3.1

Source: Czech Statistical Office; authors' calculations.

Figure 7: Abortion rates by type of abortion, 2007 and 2017

19,428 in 2007 to 12,485 in 2017; the last year-on-year change was by 665. Divorced women also had fewer abortions – there were 4,711 abortions among divorced women ten years ago and 3,088 in the last recorded year.

The number of induced abortions has decreased significantly in the last decade; however, it did not decrease among single women (Table 9). The figure was 11,016 in 2007 and 11,247 in 2017; the peak number was 11,883 in 2013. A profound drop was recorded among married women (from 10,716 to 5,891; by 230 in 2017) and divorced women (from 3,280 to 1,787; by 274 in 2017). Since 2007 a higher number of single women had an induced abortion than the number of married women.

The share of induced abortions out of all abortions decreased in all categories of women's marital status in the last decade. The lowest figure was among married women (47.2% in 2017), while single (62.1%), divorced (57.9%) and widowed women (60.7%) recorded higher shares. The share of induced abortions decreases as education level rises. The figure ranged from 42.4% among tertiary-educated women to 75.8% among women with basic education. The share of induced abortions has decreased in all educational categories

in the last ten years. The most profound decrease was among tertiary-educated women.

The total abortion rate declined from 0.54 to 0.51 abortions per woman in the last decade (Table 10). The figure stagnated between 2010 and 2017, when the total abortion rate ranged from 0.51 to 0.52. This trend was caused by the development of the total induced abortion rate, which declined from 0.34 to 0.29 between 2007 and 2017 (by 0.01 in 2017). Conversely, the total spontaneous abortion rate increased from 0.18 to 0.20 in the same period (stagnation in 2017). The mean age at abortion stagnated in 2017 at 30.5 years. In the long term, it increased from 29.9 in 2007. The trends differed according to the type of abortion: the mean age of women at the time of an induced abortion stagnated over the last ten years between 29.5 years and 29.8 years, while the mean age of women at the time of a spontaneous abortion increased from 30.4 years in 2007 to 31.6 years. This development was linked to the rising age at pregnancy.

Induced abortion rates declined in the last decade at almost every age, while the most profound relative drop was in the 15–20 and 30–37 age groups (Figure 7). The highest rates were for women aged 21 to 32, where the values ranged from
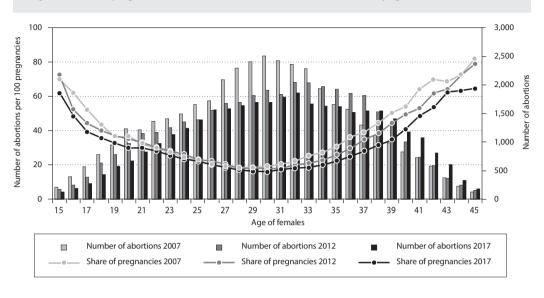
Figure 8: **Share of pregnancies ended in abortion and number of abortions by age of females, 2007–2017**

11.9 to 13.4 induced abortions per 1,000 women in 2017. The spontaneous abortion rates declined between 2007 and 2017 mainly for women under the age of 30, while, conversely, they rose from this age, and the intensity of the increase grew the older the age of women. The spontaneous abortion rates curve was more like the age-specific fertility curve. The highest rate of spontaneous abortions in 2007 was for women aged 29 (12.4 spontaneous abortions per woman). Ten years later, the curve's peak shifted to 32 years (also 12.4 spontaneous abortions per woman).

The total abortion rates were the lowest at the beginning and end of the reproductive period. The highest values were reached in 2017 at the age interval of 26 to 33 years, where the abortion rate ranged between 23.5 and 26.2 abortions per 1,000 women. In the last decade, abortion rates have declined, especially among women under age 36 (except for a few years), while in the case of older women abortion rates increased at every age and the relative increase was higher with older women.

The share of pregnancies that ended in abortion was the highest in the youngest and the oldest age groups (Figure 8). For the age group 15–19, it was 37.5% in 2017 and it was 67.6% for the sub-population

of women aged 45–49 years in the same year. The absolute numbers of abortions at these ages were not high (they accounted for 5.7% of all abortions in 2017). The share of pregnancies that ended in abortion dropped from 26.3% in 2007 to 23.4% in 2017. In the last decade, this indicator has declined at all ages – the least for the 25–29 age group and the most for women aged 40–44.

MORTALITY

The number of deaths increased by 3,693 compared to 2016 (only by 270 compared to 2015) and reached 111,443 in 2017. This was the highest figure since 1998. Male deaths account for 51% of deaths. The number of deceased under 1 year of age decreased by 13 to 304 in 2017. The infant mortality rate also slightly decreased to 2.7 deaths per 1,000 live births, which was 15% less than in 2007.

The share of deaths at the age 80 and over increased in the long term among both men and women. The increase in the last decade was 6 percentage points for both sexes and the proportion of deaths among people aged 80 years and older reached 33.1% for men and 58.1% for women in 2017. The share of deaths

Table 11: Deaths, 2007–2017							
Indicator	2007	2012	2013	2014	2015	2016	2017
Deaths	104,636	108,189	109,160	105,665	111,173	107,750	111,443
- males	52,719	54,550	55,098	53,740	55,934	54,880	56,442
- females	51,917	53,639	54,062	51,925	55,239	52,870	55,001
Deaths under 1 year of age	360	285	265	263	272	317	304
Infant mortality rate (‰)	3.1	2.6	2.5	2.4	2.5	2.8	2.7
Share of deaths at the age 80 and over (%) - males	27.1	31.5	32	32.5	33.2	32.7	33.1
- females	52.3	57.2	57.6	57.9	58.8	57.7	58.1
Share of deaths at the age 90 and over (%) - males	3.9	4.9	5.5	6.2	6.5	6.8	7.3
- females	11.9	14.2	15.4	16.9	18.1	18.2	19.7
Life expectancy of males at age: 0	73.7	75	75.2	75.8	75.8	76	76
65	15	15.6	15.7	16	16	16.1	16.1
80	6.6	7	7.2	7.3	7.5	7.3	7.3
Life expectancy of females at age: 0	80.1	80.9	81.1	81.7	81.4	81.8	81.8
65	18.3	18.9	19.1	19.5	19.3	19.7	19.6
80	7.8	8	8.2	8.5	8.2	8.7	8.6

Source: Czech Statistical Office; authors' calculations.

at the age of 90 and over increased too. It was 3.9% for men and 11.9% for women in 2007 and it rose to 7.3% and 19.7% in 2017. This development is the result of changes in the age structure and the decrease in mortality. The mean age of death for men was 69.5 years in 2007 and 72.6 years a decade later. It was 77.4 and 79.6 for women in the same calendar years.

Life expectancy at birth[7] reached 76.0 years for men in 2017; the increase over the last decade was 2.34 years, with an average rate of growth per year of nearly a quarter of a year. The figures for life expectancy at birth for women are: 81.9 years in 2017, with an increase over the last decade of 1.79 years, and an average rate of growth per year of less than a fifth. The overall rise between 2007 and 2017 was mainly caused by the lower mortality of men aged 50–64 and women aged 75–84. In 2017, women had a life expectancy at birth that was 5.84 years higher than that of men, but the difference between women and men showed a slowly decreasing trend (it was 6.39 years in 2007, and 6.62 years five years earlier). Trends in mortality by sex in the age groups between 45 and 64 years are what most influenced this decrease.

The indicators for the table number of deaths are derived from life tables and are not affected by the changing age structure of the population (Figure 9). Even this indicator reflects the shift in deaths to an older age in both sexes, while for women the largest table deaths are concentrated more within a shorter age span. The most common age at the time of death shifted from 82 to 83 years for men between 2007 and 2017; among women it rose by two years from 85 to 87 years. The table numbers of deceased men exceeded the table numbers of deceased women in the past year up to the age of 80, and after there were more deaths among women than men.

In the last ten years, most people died in the first quarter of the year and in December. By contrast, the lowest number of deaths was recorded in the summer months and in September. The year 2017 did not differ from this trend, but the peak in seasonal mortality in the first two months of the year was much more pronounced, as in January 23% more people died than was the average in the last decade and in February it was 9% more. The increase in the absolute number of deaths in 2017 mainly results in more deaths in January and February.

Figure 9: Life-table deaths by sex and age, 2007 and 2017

Source: Czech Statistical Office; authors' calculations.

Table 12: **Deaths by months, 2007–2017**

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
2007	9,295	9,533	8,791	8,535	8,424	7,870	8,302	7,829	8,242	8,581	8,693	9,164
2012	9,315	9,718	9,591	9,410	8,555	8,479	8,489	8,255	8,247	8,573	8,627	9,189
2013	10,023	10,286	**9,948**	**9,566**	8,479	**8,565**	8,665	8,107	8,213	8,534	8,506	8,866
2014	8,833	8,867	9,031	8,654	8,326	8,243	8,496	8,171	8,579	8,835	8,592	9,586
2015	10,542	**11,371**	9,791	9,261	8,560	8,049	**8,755**	**9,027**	8,302	8,829	8,595	8,710
2016	9,209	9,369	9,313	8,884	8,536	8,381	8,301	8,235	8,193	8,834	8,798	**9,930**
2017	**11,960**	10,724	9,338	8,751	**8,633**	8,399	8,097	8,376	**8,583**	**9,106**	**8,857**	9,177

Note: Standardization on the same number of days (30) in the month. The highest number of deaths by month in given year in bold.
Source: Czech Statistical Office; authors' calculations.

INTERNATIONAL MIGRATION

The number of immigrants was 34,922 (the highest figure since 2008) and it exceeded the number of emigrants (17,684) by 28,273 (the highest value since 2009) in 2017.[8] Positive net migration was 8,209 higher than in 2016. In 2013 the figure was even negative (-1,297), which has happened only once in the last decade. The volume of migration rose by 8,699 to 63,641 in the last year. Males made up 58.4% of immigrants and 56.3% of emigrants in 2017. Last year the figure was 55.5% for immigrants and 54.0% for emigrants.

Migrants aged 15–34 have contributed most to positive net migration in the long term and did

8) Data was provided from the Central Population Register Record (ISEO), administered by the Ministry of the Interior of the CR, and the Foreigners' Information System (CIS), administered by the Directorate of the Alien Police Service of the CR.
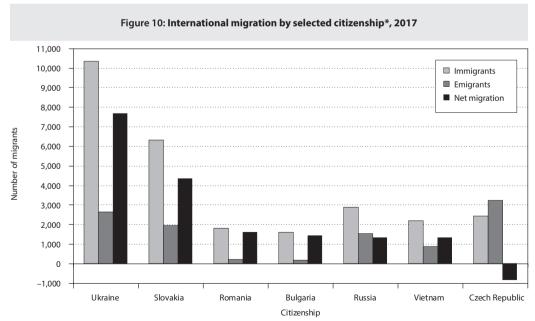
Table 13: **International migration, 2007–2017**

Indicator	2007	2012	2013	2014	2015	2016	2017
Immigrants	104,445	30,298	29,579	41,625	34,922	37,503	45,957
- males	63,721	17,054	16,467	23,115	19,022	20,817	26,839
Emigrants	20,500	20,005	30,876	19,964	18,945	17,439	17,684
- males	12,727	11,901	18,040	11,238	10,502	9,417	9,964
Volume of migration	124,945	50,303	60,455	61,589	53,867	54,942	63,641
Net migration	83,945	10,293	−1,297	21,661	15,977	20,064	28,273
at the age: 0–14	5,174	1,754	1,190	3,685	3,406	3,270	3,328
15–34	51,021	7,932	3,036	13,197	11,023	13,225	18,437
35–64	27,002	420	−5,528	4,571	1,420	3,356	6,311
65+	748	187	5	208	128	213	197

Source: Czech Statistical Office; authors' calculations.

so also in 2017 (Table 13). This subpopulation of net migration has been positive in every year in the last decade. There were 18,437 more immigrants than emigrants in this age group in 2017 (and they accounted for 65% of net migration). By five-year age groups, the highest net migration was in the 25–29 age group in 2017 (6,287). Ten years ago, the figure was highest among those aged 20–24. Net migration was lower among people between the ages of 35 and 64 (6,311 in 2017) compared to those in the 15–34 age group. Negative net migration among this subpopulation was observed in 2010 and 2013. The net migration of children aged 0–14 was positive in all observed years but was nonetheless markedly lower than in the 35–64 age group (3,406 in 2017). Older migrants aged 65 and over contributed only minimally, but positively (in each year), to net migration (by 197 in 2017).

Figure 10: **International migration by selected citizenship*, 2017**

Note: *) Citizenships whose number of immigrants, emigrants or net migration was among the top five in 2017.
Source: Czech Statistical Office.

Net migration rates by age were higher at the beginning of life (migration with parents), among migrants aged 18–20 (migration related to the end of secondary school), and among migrants aged 21–30 (those entering the labour market) than among other ages in 2017.

The positive net migration in 2017 was mainly made up of citizens from Ukraine (7,690), Slovakia (4,356), Romania (1,602), Bulgaria (1,437), Russia (1,346) and Vietnam (1,316; Figure 10), which together accounted for 63% of total net migration,

while migrants with Czech citizenship contributed to net migration negatively (–826).

The largest number of immigrants were citizens of Ukraine (10,340), followed by Slovaks (6,328) and Russians (2,891) in 2017. The majority of emigrants were Czechs (3,256), Ukrainians (2,650) and Slovaks (1,972) in the same year. Romanians and Bulgarians accounted for small numbers of emigrants; however, the numbers of immigrants they accouonted for were high – 1,829 1,620 immigrants, respectively, which resulted in high positive net migration rates for these countries.

References

- Český statistický úřad (Czech Statistical Office). 2015e. *Vývoj potratovosti v České republice – 2003–2014* (Trends in abortion rates in the Czech Republic – 2003–2014). Prague: CZSO.
- Český statistický úřad (Czech Statistical Office). 2016f. *Porodnost a plodnost – 2011–2015* (Natality and Fertility – 2011–2015). Prague: CZSO.
- Eurostat. 2018a. Statistics Explained: Marriage and divorce statistics (cit. 26 July 2018). Available at: <http://ec.europa.eu/eurostat/statistics-explained/index.php/Marriage_and_divorce_statistics>.
- Eurostat. 2018b. Statistics Explained: Fertility statistics (cit. 26 July 2018). Available at: < http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics>.
- Rychtaříková, J. 2003. Diferenční plodnost v České republice podle rodinného stavu a vzdělání v kohortní perspektivě. Praha: Sociologický ústav AV ČR, 2003, 108 s.

Sources of data

- Czech Statistical Office. 2008a…2017a. *Demografická ročenka České republiky v roce 2007…2015* (Demographic Yearbook of the Czech Republic in 2007…2015). Prague: CZSO.
- Czech Statistical Office. 2018. *Stav a pohyb obyvatelstva v České republice v roce 2017.* (Population of the Czech Republic in 2017). Prague: CZSO.
- Czech Statistical Office. 2008c…2018c. *Úmrtnostní tabulky za ČR, regiony soudržnosti a kraje – 2006–2007…2016–2017* (Life Tables for the Czech Republic, Cohesion Regions and Regions – 2006–2007…2016–2017). Prague: CZSO. Available at: <https://www.czso.cz/csu/czso/life_tables>.
- Český statistický úřad (Czech Statistical Office). 2008d…2017d. *Vývoj obyvatelstva České republiky v roce 2007...2016* (Population trends in the Czech Republic in 2007…2016). Prague: CZSO.
- Ústav zdravotnických informací a statistiky ČR. *Potraty 2007…2014–2015* (Abortions 2007…2014–2015). 2008…2016. Prague: ÚZIS ČR.

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