

FIFTY YEARS OF POPULATION DEVELOPMENT IN THE CZECH REPUBLIC^{*)}

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Abstract: The study comprehensively summarises analyses of the population development of the Czech Republic that were continually published in the journal *Demografie* over the past almost fifty years. At first, these were long-term analyses of the course of individual demographic processes. From 1990 on, more thorough assessments of population development in individual years have been appearing. They have been written by demographers from the statistics office.

Looking back at the articles, summaries, reports and other writings published in the fifty volumes of *Demografie* provides a good opportunity not just to remember the first generation of the journal's authors but also to take stock and evaluate. After the decades of secrecy surrounding all demographic data except the rate of infant mortality, some space opened up in the late 1950s to publish analyses of population development. Now is a good time to look back at and reflect on how much the authors were willing just to passively watch and comment on population development and how much they were able to contribute in some way through their analyses and conclusions to 'adjusting' the course of individual demographic processes. On this occasion it is necessary to note that there are two figures mainly responsible for the renaissance of Czech demography: *František Fajfr* and *Vladimír Srb*. They promoted an active pro-natal population policy that contributed to the advancement of all of society. The evaluation of population development always occupied a prominent place on the pages of *Demografie*. Evaluations always drew on long time series in order to more emphatically distinguish short-term fluctuations from long-term trends or multi-year cycles. One of the objectives of these evaluations was to provide demographers and others, especially journalists, interested in demography with accurate information on population development. This worked better in the past than at present and the now often distorted interpretations of demographic information.

In my opinion we can divide the entire fifty years and its several generations into three periods: the first ends around 1969, the second covers the period of normalisation up until 1989, and the third arrives with the rebirth of a free society (albeit with long-term 'difficulties') and all its positive and negative consequences. My assessments and opinions will be largely subjective, based on life-long, personal contacts with *Fajfr*, *Srb*, *Vojta*, *Voborník*, and *Ullmann* and others, and for some my views will probably be questionable and even provocative. As one of the last demographic 'actors' alive, I was of course also influenced by this period. But that is part of the intention of this paper on an unbelievable half century of *Demografie*.

1945–1969

This period began with the wartime and post-war rise in nuptiality and fertility that after years of reproductive depression was sparked by young people's efforts to start a family in order to avoid (especially women) being sent to Germany. The high, compensatory fertility

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Table 1 Characteristics of population development in the Czech Republic in 1950–2007

Indicator	Period (average of years)										Year						
	1950–1954	1955–1959	1960–1964	1965–1969	1970–1974	1975–1979	1980–1984	1985–1989	1990	1995	2000	2005	2006	2007			
Marriages	81 221	70 943	77 233	86 666	95 078	92 029	78 981	81 757	90 953	54 956	55 321	51 829	52 860	57 157			
– per 1000 inhabitants	8.9	7.5	8.0	8.8	9.6	9.0	7.7	7.9	8.8	5.3	5.4	5.1	5.1	5.5			
Total nuptiality rate ¹⁾	99.0	97.4	97.4	95.8	96.9	97.8	96.2	95.7	91.1	73.3	69.6	62.8	62.9	64.5			
Males	98.7	95.9	94.7	94.5	94.5	93.2	89.6	89.6	96.2	80.0	74.5	68.1	69.7	71.1			
Females	25.8	24.3	24.3	25.8	24.5	24.6	24.6	24.0	26.7	28.9	30.7	30.9	31.1	31.1			
Average age of single	22.4	21.3	21.3	21.7	21.6	21.4	21.7	21.8	21.4	24.6	26.5	28.1	28.4	28.5			
Males	10 535	12 872	14 039	18 036	23 553	26 080	28 496	30 623	32 055	31 135	29 704	31 288	31 415	31 129			
Divorces	1.16	1.35	1.45	1.83	2.38	2.56	2.76	2.96	3.09	3.01	2.89	3.1	3.1	3.0			
– per 1000 inhabitants	4.65	5.45	5.83	7.24	9.27	9.98	10.97	11.86	12.4	12.4	12.2	13.5	13.7	13.7			
– per 1000 marriages	21.1	21.1	21.1	33.3	33.3	33.3	38.5	38.5	38.0	38.4	41.2	47.0	49.0	49.0			
Total divorce rate	179 001	150 911	139 343	141 530	168 394	182 386	142 870	132 236	130 564	96 097	90 910	102 211	105 831	114 632			
Live births	19.6	15.9	14.4	14.4	17.0	17.9	13.8	12.8	12.6	9.3	8.8	10.0	10.3	11.1			
– per 1000 inhabitants	2.71	2.40	2.19	1.96	2.16	2.35	2.00	1.92	1.89	1.28	1.14	1.28	1.33	1.40			
Total fertility rate	1.24	1.12	1.04	0.92	1.02	1.12	0.95	0.92	0.91	0.61	0.55	0.6	0.6	0.7			
Net reproduction rate	10 290	8 336	6 565	7 503	8 140	8 497	9 073	9 881	11 167	14 947	19 792	32 409	35 259	39 537			
Live births outside marriage	5.7	5.5	4.7	5.3	4.8	4.7	6.4	7.5	8.6	15.6	21.8	31.7	33.3	34.5			
– per cent	27.1	26.2	25.4	25.2	25.1	25.0	24.6	24.7	24.8	25.8	27.2	28.6	28.9	29.1			
Mothers' average age	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162	45 162			
Abortions	Induced	55 474 ⁵⁾	66 327	68 195	63 698	60 385	73 921	98 011	107 131	49 531	34 623	26 453	25 352	25 414			
Spontaneous ⁶⁾	13 414	17 122	19 482	20 304	19 482	20 304	17 295	15 463	14 671	10 583	11 315	13 570	14 607	15 403			
Total ⁶⁾	53.7	53.7	56.7	59.9	49.1	44.0	63.5	85.4	94.7	62.4	50.4	37.8	36.4	36.4			
Per 100 births	40.6	40.6	43.6	47.8	37.6	32.9	51.5	73.8	83.4	51.4	38.0	25.8	23.9	22.1			
Induced	13.1	13.1	13.1	12.1	11.5	11.1	12.0	11.6	11.3	11.0	12.4	12.0	12.5	12.5			
Spontaneous ⁶⁾	100 412	95 274	99 053	111 141	123 231	126 169	132 674	128 982	129 166	117 913	109 001	107 938	104 441	104 636			
Deaths	11.0	10.0	10.3	11.3	12.5	12.4	12.9	12.5	12.5	11.4	10.6	10.5	10.2	10.1			
– per 1000 inhabitants	46.8	25.1	19.8	22.1	19.7	18.1	15.2	11.6	10.8	7.7	4.1	3.4	3.3	3.1			
Infant mortality	62.16	67.55	67.55	66.12	66.12	66.12	67.14	67.82	67.58	69.72	71.65	72.9	73.4	73.7			
Live expectancy ⁷⁾	14.96	15.12	15.12	14.09	14.09	14.09	14.38	14.59	14.58	15.89	17.02	14.4	14.8	15.0			
Males age 0	66.97	73.41	73.41	73.01	73.01	73.01	74.25	75.03	75.36	76.63	78.35	79.1	79.7	79.9			
Males age 60	16.87	18.34	18.34	17.95	17.95	17.95	18.38	18.81	19.08	20.04	21.21	17.6	18.0	18.2			
Females age 0	78 589	55 637	40 290	30 389	45 103	56 217	10 196	3 254	1 398	–21 816	–18 091	–5 727	1 390	9 986			
Natural increase	8.6	5.9	4.1	3.1	4.5	5.5	0.9	0.3	0.1	–2.1	–1.8	–0.6	0.1	1.0			
– per 1000 inhabitants																	

Note:

¹⁾ Calculation of nuptiality tables for single persons.²⁾ Calculation of nuptiality tables for single persons for the period 1949–1950.³⁾ Total divorce rate, 1960–1961, 1970–1971 and 1980–1981.⁴⁾ Including an unidentified type of abortion, exclusive of ectopic pregnancy.⁵⁾ Average years 1958–1959.⁶⁾ Since 1965, a return to international definitions.⁷⁾ Life expectancy according to mortality tables 1949–1951, 1960–1961 and 1970, for years 2005–2007 aged 65.

rate, mainly among the Czech population, including re-emigrants, peaked in 1947 and was followed by a period of decline, not just as a result of the deteriorative age structure of the reproductively active, young population, but above all in reaction to the political coup in 1948 and the social consequences of that event (emigration, political trials, the imprisonment of tens of thousands of mostly young and educated people). This considerably disrupted the population situation. For the part of the population unaffected by this event (and especially for the enthusiastic supporters of socialism) life continued without any postponement of marriage, but with a decrease in the average number of children in the family. Young families with children suffered another blow with the introduction of currency reform, the end of rationing, and the 'liberation' of prices: what a family with three children could have survived on earlier was in 1953 insufficient to support a family with two children (data calculated but never published by the State Statistical Office). This was the first negative intervention affecting the future of the family, and it was soon followed by the legalisation of abortion – adopted more as a social measure than as a substitute for underdeveloped contraceptives, mainly owing to the inability to raise the low living standard dating from the time of the war.

Settling the border regions, however, demanded an increase in the population size, and this was all the more so given that economic development, though industriously planned, was being hindered by a decreasing labour force and the stagnation of work productivity and by the stagnation of technological development. Continuous arms production and preparations for potential war negatively impacted the life prospects for many families, and the model of the (maximum) two-child family was formed out of this situation in which people had to taken on the responsibility of raising children in uncertain times. Demographic surveys have confirmed the reality of this situation.

Between 1950 and 1957 total fertility fell from 2.8 to 2.5, and then decline further to 2.1 (1959–1962), and after rising again briefly (in 1963–1964: in response to the promised extension of maternity leave) it fell again after 1967 to below 2.0. The pressure all women to work full time, while there was no corresponding infrastructure in place (sufficient capacity nurseries, preschools, school clubs, etc.), meant that women tended to have their children immediately after marrying, usually in quick succession, and before the age of 25. Demographic surveys and detailed analyses of the conditions and course of the reproductive process identified a way out of the reproductive marasmus, but allegedly there were a lack of resources available to make any changes; what was really apparent, though, was that there was a lack of will to make them. The efforts made by some members of the State Population Committee were in vain, and they had no power to assert positive change against the powerful planners of 'bright tomorrows' in the distance future.

The number of children planned before marrying would have decreased to an average of 2.1 children; over 90% of women planned the future size of their family, but roughly two-thirds of them wanted just two children. In reality they tended to have even fewer. After the rapid decline in mortality in the first post-war years there ensued a long period of stagnation, mainly because of the shortage of financial resources, but also owing to the development and production of 'domestic' health technology and medicines when it was impossible to obtain imports from Western countries. Life expectancy – which in 1949–1951 was 62 for men and just below 67 for women – long remained below 66 for men and it was only in 1975 that it permanently surpassed 67. Female mortality decreased more favourably: life expectancy was over 70 in 1954, but until 1976 it remained below 74. This occurred alongside a very favourable decline in infant mortality from 60 per thousand until 1950 to around 20 per thousand in 1959–1969, and the mortality of children aged 15 and under also decreased. According to life tables, in 1949–1951 only 91 200 boys and 92 900 girls lived to the age of 15. In 1970 the figures were 96 900 and 97 700, respectively. These were the only real successes of the integrated health system, given that the life expectancy of 20-year-old remained at 48.4 years for

around two decades and the life expectancy of women increased by just under three years to reach 54.8. To little avail demographers drew attention to and made comparisons with Western countries: indicators of the population's consumption were more significant than improvements to health care and the way of life (e.g. the annual consumption of meat and meat products increased between 1950 and 1970 from 49 kg to 77 kg and sugar from 27 to 39 kg, but the consumption of fruits and vegetables decreased). The ideological and authoritarian objectives of socialism were at that time simply much stronger than the interest in the living conditions of the population and especially young families (e.g. the stagnation of housing construction until the end of the 1960s, unfulfilled promises to solve the housing problem primarily affected young people). On top of this, in the late 1950s some Marxists questioned the very existence of the family in socialist and communist society. The net rate of reproduction decreased in 1967–1969 to a level below 0.9. The first prognoses of population development still showed continued population growth and slow ageing. A warning prognosis based on the situation at end of the 1960s was never published.

The amount of the child allowance remained relatively low during this period. While it was increased in 1957–1968, this only applied to low-income families (even by that time the child allowance had turned into a social benefit for the poor). At the ministerial level, it was not until 1969 that an inter-departmental working committee prepared an analysis of the population and social situation and some possible prognoses, together with proposals for changes ('An Integrated Concept for the Socioeconomic Programme of Active Support for Families with Children') for the government, but the only result of several years of activity by this committee was a substantial increase in the child allowance for second and third children. The problems of Czechoslovak society at that time shifted to an entirely different area.

Between 1950 and 1970 the size of the population grew by around 900 000, but that only slightly compensated for the post-war decline (another cause of this relatively small growth was the mostly illegal emigration, which between 1948 and 1969 is estimated to have involved 450 000 people). While the number of children aged 15 and under decreased only slightly, as a share of the population they decreased from 24% to 21%. By contrast, the number of people over the age of 60 grew from 1.1 million to 1.8 million and as a share of the population grew from just under 13% to more than 18%. Even with the high mortality rate of the older population, the first stage of demographic ageing in the Czech population began when the numerically strong cohorts born around the turn of the century reached the age of 60; this was somewhat mitigated by the active net migration of young people from Slovakia, 160 000 of whom migrated to the Czech part of the country.

On the whole, this was a period of unsuccessful attempts to change the population situation for the better. Population development was supported by words, but almost not at all by deeds.

1970–1989

The well-known political events of 1968–1970 triggered by the invasion of Warsaw Pact troops led to considerable differentiation within Czech society. They led to the emergence of an entirely new social situation, even in terms of reproduction (in Bohemia/Bohemia and Moravia alone more than 300 000 members of the defeated wing of the Czechoslovak Communist Party were expelled – many of them also lost their jobs, as did roughly an equal number of non-party members). Distrust in the new party leadership and in the state led people to shut themselves off within the circle of family and friends, and more people began spending time at country homes or cottages where people who were being politically persecuted were better able to do 'as they pleased' without supervision.

The forced reduction of social activities was one unquantifiable source of the rise in fertility, which began in 1970 (total fertility 1.96) and peaked in 1974–1975 (total fertility 2.45). The

substantial increase in the number of births was due in part to the increase in the number of women of peak fertility age (20–29) from 780 000 in 1970 to 837 000 in 1975, but especially to the better conditions created for families with children. In 1968 the child allowance was increased, paid maternity leave was extended, and gradually the effect of the increased construction of cooperative housing began to be felt. Although the data indicate that in 1980 there was a shortage of more than 150 000 flats, in 1991, the shortage was still 110 000–120 000. There was an increase in the intensity of second-order and third-order births previously postponed. According to my calculations based on the results of the 1980 census, at the time of the demographic wave in 1971–1979, 180 000–200 000 more children were born into marriages than would have been expected in the late 1960s (roughly 5000–10 000 first-order, 120 000–130 000 second-order, and 55 000–60 000 third-order children).

A much larger generation of children was born in the 1970s than before. They are often, erroneously, referred to as ‘Husák’s children’ [after the president – translator’s note] – as though it had been the objective of the political leadership at that time to increase fertility. In reality, it was a matter of people having the second and third children that they had postponed having in the late 1960s, and it was basically made possible by the psychological impact of social measures that were introduced in order to subdue the restlessness in society after August 1968. So it was not about a ‘gift’ from Husák, it was rather the sly realisation that when young people are trying to start a family and look after children they will be too preoccupied to recall the trauma of the recent past and the destruction of any hope for better living conditions for themselves and their children. Essentially this was successful: young people withdrew into the circle of families and friends, and this certainly had a calming effect on society.

Indirectly this provided confirmation of the fact that significantly altering the material conditions of families with children has a positive impact that is reflected mainly in compensatory (and then partly also in anticipatory) second-order and third-order births. However, this may only last for several years, because for the next generation of women trying to plan a family the adopted measures will be taken as a given. What also became apparent was the singular nature of the ‘baby boom’ in the 1970s, owing to the singular nature of the circumstances behind it.

Until the end of the 1980s nuptiality intensity remained high, and according to contemporary nuptiality tables for singles more than 90% of men and 96% of women married by the age of 30, and the average marrying age was around 24.5 years for men and 21.7 years for women. The average number of children young couples planned to have also remained steady at around 2.0 children. Consensual unions and lone motherhood were at that time a rare substitute for legal unions. The intensity of divorce did not grow until the late 1980s.

In the years when fertility increased, the number of abortions decreased substantially, falling from the previous 90 000 to 72 000 in 1970 and to 56 000 in 1975–1976; it then rose again, reaching as high as 108 000 in 1988–1990: this meant 28 – less than 30 – and then again 82 abortions for every 100 births in those years. But these abortions were occurring after family plans were completed, and after rising prices, or more precisely the decrease in subsidies for children’s shoes and clothing, dealt a hard blow to the living standard of families. The previous pro-natal effect turned into an anti-natal effect; the increase of the child allowance was inadequate, and the situation in society became hopeless.

The trend in mortality remained negative until the late 1980s and lagged increasingly behind Western European countries. Male life expectancy grew between 1970 and 1990 by just 1.4 years and female life expectancy by 3.0 years; infant mortality, falling from 20 per thousand to 11 per thousand, no longer had the same weight in reducing the mortality rate as before. The differences between male and female mortality intensity continued to grow until 1990, so that the gap in life expectancy was more than eight years, and the share of those who died at a very old age grew only slowly. As a result increasingly more widowers than widow-

ers survived in the elderly population. In 1970 there were 68 000 widowers and 300 000 widows; in 1991, however, the figures were 74 000 widowers and 367 000 widows, i.e. five times as many widows as widowers. Demographers tried in vain to draw attention to the inauspiciously high mortality rate, especially in international comparison – the last time was after a conference on demography in 1988.

Despite the pronounced increase in fertility, the increase in the population during the intercensal period between 1970 and 1991 decreased to just 500 000. The number of children aged 15 and under increased by just 80 000 and as a share of the population they remained at just 21%. The population over the age of 60 grew by just 40 000 and their share of the population decreased to just under 18%; this was partly caused by the fact that in 1991 the older generation included the numerically small cohorts born during the period of the First World War. More than 100 000 people emigrated – mostly illegally – from the Czech Republic (Czechoslovakia/the Bohemian and Moravian parts of Czechoslovakia) at that time.

In this period of social stagnation, demographic development was generally positive, considering the favourable increase in fertility and thus also in the number of births, and even though total fertility decreased again from the mid-1980s to 1.9 children (part of the initial rise were the children that had previously been postponed in the late 1960s). On the other hand, the mortality trend was very negative: in France and Sweden in 1970 life expectancy was two years higher than Czech life expectancy, but twenty years later it was five years higher.

1990–2008

This last period, spanning almost two decades, is in every respect absolutely incomparable to all the previous ones, including the early years of the First Czechoslovak Republic. For the first time, the conditions existed in which people could decide freely about their own lives, regardless of their social standing, income or property (that of course later gradually changed), whether that meant decisions about their own personal development, their education or qualifications, or decisions about family behaviour, which had an impact on demographic reproduction, especially among young people who were just ‘starting out’ in the early 1990s. The previously uniform way of life – the only possible life course (leaving aside emigration) was a relatively short period of education with few options, followed by marriage at a young age and then the birth of (usually two) children in quick succession – was replaced by a broad range of opportunities in life. Opportunities expanded for education, differentiated by duration, type, and location (even abroad); the borders opened up allowing travel abroad (for work, experiences, and fun); the occupational structure widened substantially and with it wage differentiation; and the conditions for big and small business took shape. Modern health technology and more effective medicines began to be imported. People became ever more aware of the importance of maintaining their health, and they gradually began to take better care of themselves (though here there is differentiation by education). Mortality began decreasing faster than ever before, especially among middle-aged and older men. Good health and higher education started to be seen as essential ‘capital’ in life, and intergenerational differences grew considerably: unparalleled opportunities for the young, protection for the middle generation, inertia and increased risks for the elderly. The response to this among young people especially is very apparent in data on population development.

First of all, nuptiality intensity decreased, because marriage at a young age, especially before the age of 25, lost its previous appeal. The total first-time marriage rate of singles fell from the previously high rate of 96–97% for women and 90% for men to 80% and 73%, respectively, in 1995, and in 2003–2007 it stagnated at 69% and 63%, respectively. The average marrying age of singles gradually rose to over 31 years for men and over 28 years for women. According to nuptiality tables, at the age of 30, 49% of women and 66% of men were still single (previously the figures were around 30% and 40%, respectively), and 30% of

women and 37% of men were permanently single at the age of 50. These figures strongly undermine the findings of studies claiming that marriage still represents an important life value. It is apparent that just a small part of the marriage deficit is compensated by consensual unions. For roughly one-third of single men and women, living life in one marriage has become something of a relic and a yoke on the exercise of personal freedom and the pursuit of personal interests, a career and opportunities for self-fulfilment; there is no need to marry to have a sex life, and better contraceptives and the option of terminating an unwanted pregnancy are available options. It is obvious what kind of impact the decrease in nuptiality and the postponement of marriage to a later age have on the subsequent intensity of reproduction. Even the marriage of divorcees has decreased.

Some people (myself included) assumed that a decrease in nuptiality intensity and a rise in the marrying age (so that people would be marrying at a more mature age) would have a positive impact on reducing the divorce rate. On the contrary: the divorce rate has risen by almost half, so that now almost every second marriage ends in divorce, usually between the fourth and sixth year of marriage – on average only around one year later than twenty years ago.

The most significant change in demographic behaviour was the sharp decrease in the number of births owing to the decrease in the fertility of younger women and thus also in total fertility: from 131 000 in 1990, which represented a total fertility rate of 1.89, to just under 90 000 in 1999 (total fertility 1.13), followed by more stagnation and then a subsequent rise to 106 000 in 2006 (total fertility 1.33) and then to 115 000 in 2007 (total fertility 1.44). The decrease in the number of births was primarily due to the decrease in the number of married women, less so to the decrease in their fertility (119 000 in 1990, 81 000 in 1995, 67 000 in 2003, and, following a rise, 75 000 in 2007). Conversely, the number and especially the share of extramarital births increased (in 1990 there were just 11 000 extramarital births, representing 8.6% of all births; between 2001 and 2004 the number rose from 20 000 to 30 000, and in 2007 to almost 40 000, which accounted for 34.5% of all live-born children). An unascertainable number of these are children of women in a consensual union; similarly, it is impossible to assess the real 'fluctuation' between a mother in a consensual union and a lone mother trying to ensure that she and her child (children) are provided for.

Since the share of young women who marry continues to decline, the entire increase in the number of children born in a marriage in recent years has been caused by an increase in their fertility, mainly by an increase in the number of second- and third-order children born. The numerically strong cohorts of women born in the 1970s have passed the age of 30 and if they want to have a child (children) they evidently see this age as the last chance to have the rest of their children; that is why in recent years the fertility of married women aged 30–35 has relatively increased the most, evidently as a result of the births of second- and third-order children.

The relatively sharp increase in the number of extra-marital births – in absolute figures by one-half – over just seven years was mainly caused by the decline in nuptiality intensity and the postponement of the marrying age: even with a small increase in the fertility of unmarried women the substantial increase in the number of children they had was simply the result of an enormous increase in the number of potential mothers. The increase in their fertility clearly applies across the age span right up to age 38, and even to second- and third-order births. On the other hand, there was a decrease in the share of marital births following pre-marital conception – clearly there is less and less pressure to get married due to pregnancy.

Much of what is now a decade-long rise in fertility is certainly compensatory, but in my view this trend will only last a few years longer, until the strong cohorts of women born in the 1970s complete the size of their families, whether they do so in legal unions, consensual unions, or as lone mothers. As smaller birth cohorts reach peak reproductive age and more stable birth/natality schedules ensue, fertility will again decline, and in my opinion total fertility

will be no more than 1.50 children per woman, so the Czech Republic will continue to rank with the countries that have an insufficient rate of reproduction and weakening reproductive potential in the future (the net reproduction rate in 2007 was 0.70; so without an increase in active net migration the number of potential mothers will fall by almost one-third within one generation).

At the same time the number of abortions decreased considerably, from 110 000 in 1988 (the maximum) to 50 000 in 1995 and to 25 000 in 2006–2007 (the total induced abortion rate was 1.51, 0.68, and 0.34 in the respective years: 16% of the total terminated pregnancies). However, the more widespread use of reliable contraceptive methods is still accompanied by the view on the part of some women that abortion is an 'ex post' contraceptive method: that is why one-half of all abortions are among married women with two children and 60% among women with two or more children. The mirror effect of fertility intensity and the induced abortion rate, wherein the planned and more frequent birth of children leads to a decline in the rejection of (another) pregnancy, has thus again be confirmed.

Between 1990 and 2007 male life expectancy at birth rose by 6.1 years to 73.7 years and female life expectancy rose by 4.5 years to 79.9 years, so the previously large gap between men and women grew slightly smaller, though it is still 6.2 years. The average life expectancy at age 65 increased by 3.4 years for men and 3.0 years for women (calculated figure 15.0 for men and 18.2 years for women). To compare, in Sweden in 2004 the figures for men were 78.4 or 17.4 years and for women 82.7 or 20.6 years. There is no way within a single generation to make up for the large 'debt' incurred by forty years of stagnation. Infant mortality has remained at a level just over 3 per thousand and perinatal mortality at 4 per thousand. Deaths of children under the age of 1 account for just 0.3% of all deaths.

The decline in mortality intensity was influenced most by the decrease in the number of deaths from circulatory diseases and less from neoplasms (these two cause-of-death groups combined accounted for 74% of total male and 78% of total female mortality in 2007). According to a study by Burcin, since 1990 the standardised rate of avoidable mortality and its share of the total mortality of people aged 75 and under has been decreasing faster, but avoidable mortality nonetheless remains high (it still accounts for 51–52% of all deaths). It is the main reason why the Czech Republic continues to lag behind advanced countries in life expectancy.

After many years of natural population decreases in the Czech Republic (1994–2005) in 2006 there was a small increase, and in 2007 there was a natural increase of 10 000 people. The increase from migration in 2005 was more than 30 000, and in 2007 it was 87 000 (31 000 – 37% from Ukraine, 13 000 – 16% from Slovakia, 11 000 – 13% from Vietnam, and so on). The registration of the foreign migration of Czech citizens is unreliable.

As of the end of 2007 the Czech Republic had a population of just under 10.3 million, roughly the same number as in 1991 and just 1.4 million more than in 1950. Of the total, 392 000 were foreigners, making up 4% of the population. Several tens of thousands more foreigners were residing in the Czech Republic illegally.

The age structure of the population has changed as a result of substantial changes to the reproductive regime: while in 1990 children aged 15 and under made up 21% of the population, by the end of 2007 the figure was just 14.2%. Conversely, the share of the population aged 65 and older grew from 12.6% to 14.6% (in absolute figures from 1.3 million to 1.5 million). Since 2006 older people have outnumbered children in the population and in the future this trend will accelerate as the numerically large cohorts born during the Second World War and especially in the years immediately after the war start to reach the age of 65. The Czech Republic does not yet rank among the countries in Europe with the oldest population, but according to prognoses up to the year 2030 it should continue to approach them: at that time it is predicted that one-quarter of the population will be over the age of 65.

Table 2 Population of the Czech Republic by characteristics age groups, 1950–2007

Age group	Census					Balance	Census	Balance		
	1950	1961	1970	1980	1991	1995	2001	2005	2006	2007
Numbers of persons (thousands)										
0–14	2 138	2 429	2 082	2 412	2 164	1 893	1 655	1 501	1 480	1 477
15–59	5 645	5 718	5 926	6 136	6 300	6 571	6 688	6 695	6 684	6 707
60+	1 107	1 418	1 795	1 729	1 837	1 857	1 884	2 055	2 123	2 197
65+	735	912	1 190	1 373	1 302	1 372	1 411	1 456	1 482	1 513
Not identified	6	7	5	15	1	–	3	–	–	–
Total	8 896	9 572	9 808	10 292	10 302	10 321	10 230	10 251	10 287	10 381
Structure (%)										
0–14	24.0	25.4	21.2	23.5	21.0	18.3	16.2	14.6	14.4	14.2
15–59	63.5	59.8	60.5	59.7	61.2	63.7	65.4	65.4	65.0	64.6
60+	12.5	14.8	18.3	16.8	17.8	18.0	18.4	20.0	20.6	21.2
65+	8.3	9.5	12.1	13.4	12.6	13.3	13.8	14.2	14.4	14.6
Ageing index (65+ per 100 children aged 0–14)										
Relation	34.4	37.5	57.2	56.9	60.2	72.5	85.4	97.0	100.2	102.4

Note.: Balance as of 31 December of the given year; since 2001 the data include foreigners with certain types of long-term residence.

Rising life expectancy, the changing age structure, and the predicted stagnation of fertility well below the simple reproduction rate of already numerically weak birth cohorts will lead to continuing demographic ageing. Based on the middle variant of population projections formulated by the Czech Statistical Office in 2004, with a gradual increase in total fertility to 1.6 children per woman and an annual net migration of 25 000, by 2020 the population size should begin to decline, with a decrease in the number of births below 90 000 annually and with growing numbers of seniors. The share of people aged 65 and over could by 2020 reach 20% and by 2050 could exceed 30%.

All this will be the logical outcome of trends that began at the start of the 1990s with the sharp fall in fertility and the slight decrease in mortality. The expected increase in immigration will only have a slight slowing effect on the population decreases and demographic ageing in the Czech Republic.

Conclusion

The third period in the stretch of fifty years examined above ushered in unprecedented conditions for individuals to make free decisions, but also brought about an increased risk of making errors and mistakes, along with the restriction or loss of some of the social security enjoyed previously (unemployment; an unstable family policy and even attempts to cut back on or even question the very existence of family policy as undesirable ‘social engineering’). To date this remains a period of considerable flux, and that certainly has an impact on the decisions young people make about their way of life (marriage, cohabitation, singles) and about how many children they have. These decisions are sometimes made in situations that are very different the situations people are in when they are later caring for and raising children and providing for them materially. If the final outcome of population development in a give period is shaped by the age structure as the foundation for the development of the population in the future (including the population climate), then from the perspective of family formation and the birth of children the current period must be seen as very unsuccessful or, in my view, even risky.

The interests of young people and the general emphasis society places on self-fulfilment and success will, without the requisite moral perspective, lead to a significant decrease in

people's willingness to accept responsibility: short-term interests will override long-term values in life. This is apparent not just from the demographic prognosis for the Czech Republic (accelerated ageing) but especially from the analysis of their effects. With a continued low fertility rate (a maximum total fertility of 1.5 children, a net reproduction rate of 0.70) first the number of children and then grandchildren will decrease in the Czech population. The share of children raised by both parents will also continue to decrease (in 2007 there were 36 000 extramarital births and 26 000 minors from divorced marriages, so that more than one-half of a generation of children living in deteriorating social and learning conditions). As people continue to live longer but with limitations on their standard of living and even with a reduction or loss of independence, weakening family ties within a generation and especially between generations will likely mean that even in the case of older seniors well provided the main problem for an increasing part of the population at the end of their lives will be isolation. Friendships formed in the attractive period of youth, especially among singles living in a 'mamahome' (growing up just with a mother), will grow weaker with time and in old age will only partly be capable of taking the place of the reduced family ties. Rising education levels will lead to a rise in demands but not however to a rise in skills or above all willingness to help others. One day in a society where civic interest is marginal will there be enough willing caregivers around when there can be little increase in the 'productivity' of their work?

The discussion about raising the retirement age has gone on needlessly long, while elsewhere the discussion has turned to the focus, scope, and forms of family policy: this is what could at least slightly mitigate the effects of the impending reproductive trends and help those who want to have children as part of their self-fulfilment and the continuation of their own life.

In my opinion these are the main social issues that for seniors and young people have long constituted the 'rules of the game', and they exist beyond election terms, require responsible statistical study, and are of only limited use to an active electoral programme.

In its age structure every generation passes on something to the next generation, figuratively speaking a kind of partly constructed home. It must unfortunately be acknowledged that the generation of parents today – and the generation of grandparents is also partly to blame – with its far fewer children is leaving the house in a barely inhabitable state, with enormously high demographic debts. Every society in which a low reproductive rate unleashes population ageing will necessarily grow poorer – initially mostly morally, but later increasingly materially so. In this regard we have to see the period since 1989 as one of lost opportunities to take population development in the Czech Republic to a higher level.

References

Twenty years ago *Demografie* began publishing annual analyses of population development in the Czech Republic, in each case in relation to the previous several years of demographic processes. Over time they were written by different demographers from the statistical office and the content was standardised to focus on synthetic indicators. More detailed analyses of population development in the Czech Republic have also been prepared by members of the Department of Demography and Geodemography at the Faculty of Science, Charles University.

Demografie also published a number of synthetic studies, usually on important jubilees in Czechoslovakia, which were written by V. Srb and M. Kučera.

1945–1969

Srb, V. and M. Kučera. Plodnost obyvatelstva ČSSR v letech 1950–1960. *Demografie*, 1962, p. 224–239.

– Úmrtnost v Československu v letech 1950–1960. *Demografie*, 1962, 4 (4), p. 310–320.

– Potratovost v Československu v letech 1958–1962. *Demografie*, 1963, 5 (4), p. 289–307.

Kučera, M. Obyvatelstvo ČSSR v letech 1945 až 1965. *Demografie*, 1965, 7 (2), p. 97–105.

Srb, V. Obyvatelstvo Československa v letech 1918–1968. *Demografie*, 1968, 10 (4), p. 289–306.

1970–1989

Dolejší, V. Vývoj úmrtnosti v ČSR v letech 1960–1971. *Demografie*, 1975, 7 (4), p. 307–313, 1976, p. 33–38.

Srb, V. Obyvatelstvo Československa v letech 1918–1978. *Demografie*, 1978, 20 (4), p. 289–316.

Koubek, J. Populační politika Československé republiky v letech 1945–1980. *Demografie*, 1981, 23 (1), p. 32–50.

Kučera, M. Reprodukce obyvatelstva ČSSR v letech 1961–1980 podle výsledků sčítání. *Demografie*, 1984, 26 (1), p. 19–32.

Finková, Z. Rozvodovost v SSR a ČSR v letech 1950 až 1980. *Demografie*, 1986, 28 (4), p. 299–312.

1990–2008

Kraus, J. Populační vývoj v Československu v roce 1990. *Demografie*, 1991, 33 (4), p. 289–299.

Aleš, M. Populační vývoj v ČSFR v roce 1991. *Demografie*, 1992, 34 (4), p. 273–282.

– Populační vývoj v ČSFR v roce 1992. *Demografie*, 1993, 35 (4), p. 225–235.

Růžková, J., and M. Aleš. Populační vývoj v České republice v roce 1993. *Demografie*, 1994, 36 (4), p. 225–236.

– Populační vývoj v České republice v roce 1994. *Demografie*, 1995, 37 (4), p. 237–253.

Aleš, M. Populační vývoj v České republice v roce 1995. *Demografie*, 1996, 38 (4), p. 233–247.

Kučera, M. and M. Šimek. Vývoj obyvatelstva v roce 1996. *Demografie*, 1997, 39 (3), p. 157–172.

– Vývoj obyvatelstva v České republice v roce 1997. *Demografie*, 1998, 40 (4), p. 233–246.

– Vývoj obyvatelstva v České republice v roce 1998. *Demografie*, 1999, 41 (3), p. 169–183.

– Vývoj obyvatelstva v České republice v roce 1999. *Demografie*, 2000, 42 (3), p. 169–182.

Kretschmerová, T. Vývoj obyvatelstva v České republice v roce 2000. *Demografie*, 2001, 43 (3), p. 233–246.

– Vývoj obyvatelstva v České republice v roce 2001. *Demografie*, 2002, 44 (3), p. 157–170.

– Vývoj obyvatelstva v České republice v roce 2002. *Demografie*, 2003, 45 (3), p. 153–165.

– Vývoj obyvatelstva v České republice v roce 2003. *Demografie*, 2004, 46 (3), p. 153–165.

– Vývoj obyvatelstva v České republice v roce 2004. *Demografie*, 2005, 47 (3), p. 153–168.

Zeman, K. Vývoj obyvatelstva České republiky v roce 2005. *Demografie*, 2006, 48 (3), p. 153–165.

Štyglarová, T. Vývoj obyvatelstva v České republice v roce 2006. *Demografie*, 2007, 49 (3), p. 153–169.

– Vývoj obyvatelstva v České republice v roce 2007. *Demografie*, 2008, 50 (3), p. 153–172.

Published outside Demografie

Srb, V. 2004. *1000 let obyvatelstva českých zemí*. Praha: Karolinum.

Kučera, M. 1994. *Populace České republiky 1918–1991*. Praha: Česká demografická společnost a Sociologický ústav AV ČR.

Populační vývoj České republiky 1990–2002. 2002. Praha: Katedra demografie a geodemografie, Přírodovědecká fakulta, Univerzita Karlova v Praze.

Populační vývoj České republiky 2001–2006. 2007. Praha: Katedra demografie a geodemografie, Přírodovědecká fakulta, Univerzita Karlova v Praze.

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