POPULATION DEVELOPMENT IN THE CZECH REPUBLIC

1990–2002

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INTRODUCTION

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The present analysis is the ninth and final evaluation of the Czech Republic population development throughout the period following 1989. As preceding analyses, it was prepared within the frame of scientific and pedagogical activities of the faculty of the Department of Demography and Geodemography at Charles University Faculty of Science in Prague. The first one was published in 1994; this last one comprehensively sums up the most significant trends throughout the last decade, i.e. since 1990 up to now. It is published in English as well thus becoming the third English version following the 1996 and 1999 ones. It is intended for foreign readers abroad, institutions as well as specialists, with whom our department has established long term contacts, and for additional scholars in the field of demography and related social disciplines. Submitted analyses interpretative processing and their publication was continuously supported by the Czech Republic Grant Agency, grants # 205/94/0686, 206/97/0229 and 205/00/1091; without this support this long term project would have remained unachievable.

The rather broad interest in population evolution analyses can be explained by its position within social and economic global development. All theoretical as well as practical reflections and evaluation regarding this development always start with population, changes in the extent of its size, age structure and its demographic behaviour; on the one hand it is the reflection of all ongoing social, economic and political transformations and on the other hand an important condition of its further development in all these spheres. This markedly happened during the last decade when the Czech Republic has been undergoing a deep political, economic and social transformation. People's behaviour has changed in all spheres of their existence and significant changes took place also in their demographic behaviour and within the general population climate.

Social, economic and political living conditions in a totalitarian system led, not only in our country but in other socialist countries as well, to the formation of demographic behaviour patterns, significantly different from the prevailing demographic behaviour of democratic countries with an advanced market economy. The Czech Republic, as other socialist countries, was lagging behind as to mortality intensity improvement, maintained a high nuptiality rate, a low future spouses average age at marriage contracting thus a corresponding young average age of mothers specifically at first childbirth and a high induced abortion rate. At the European level less significant differences concerned the divorce rate, the Czechia traditionally belonging to countries with a higher intensity, as well as the natality rate which did not differ much from the European average.

Population demographic behaviour former pattern was, as in other socialist countries, conditioned by a marked state paternalism, significant social benefits in diverse fields and existing sometimes even unbearable social certainties. The latter situation did not provide sufficient space for personal decision making and sense of responsibility. Young people would extensively uniformly contract marriage at a young age, only about 5% women remained single and the prevailing pattern of a two children family was favoured. The transition onto a market economy and all its social consequences, but also its new opportunities of self-realisation, led to demographic behaviour changes. Singles as well as families faced a highly competitive environment by means of living style present changes and individual development preference. Increased efforts of achieving personal success, higher income and an improved social situation, which in the past used to be inaccessible or extremely hard to gain for most people, rose. Due to the current curbing of social benefits aimed at families with children, the scope of social security narrowed and unemployment appeared as a new reality, negatively affecting particularly potential spouses and parents age groups. These new conditions for singles and families were weighed within a free and sensible decision-making process concerning family lifestyle and its inherent children position.

The newly created situation was somehow a period of demographic behaviour changes which took place during the 70's and 80's in European democratic countries. These transformations taking place decades after the demographic revolution end were unexpected and due to their significant character, sometimes labelled as a second demographic transition, the demographic revolution being the first one. However comparing these two processes leads to underestimating the demographic revolution importance, bearing a universal character as the unique, genuine demographic reproduction transformation revolution gradually affecting all world populations and further overestimating fertility rate changes and marital relations creation, pertaining to some European countries; thus merely marginally do they concern mortality process and mere changes in fertility rate are de facto much less significant. The

nature of demographic reproduction changes within the demographic revolution is not as much in the extent of mortality and fertility rate decrease as in the mere quality of this process. Individually and within families unplanned children numbers are changing due to planned parenthood. If population climate prior to demographic revolution reflected a certain fatalism – the number of children per family was the outcome of natural behaviour or due to a supernatural being, after this process completion it is foremost a woman's or a couple's own decision, specifically enabled by the sheer separation of sexual life from reproduction. A similarly revolutionary characteristic pertains to mortality conditions improvement triggered by a global higher standard of medical and health care within the frame of modern era global revolution.

Changes occurring during the so-called second demographic transition are mostly the continuation though partial of qualitatively diverse trends which were characteristic for the demographic revolution. First and foremost it is a further strengthening of individualism though the latter widely differs amidst diverse world cultures. The same applies to marriage contracting intensity which is not even identical in every European country. It seems that in certain countries, where this process evolved the most, the relationship to children has changed. If during the demographic revolution children were meant to ensure primordial survival and their social upward mobility was interpreted as an expression of their whole family success as well, after the demographic revolution parents themselves strive for their personal, individual success concerning their social position and can consider children as a restricting factor in terms of their future projections or even as an obstacle preventing them from achieving their goals. To a certain extent this can explain nuptiality and fertility low rates in numerous European countries where an ever increasing percentage of young people live without a permanent partner and deliberately refrain from taking part in demographic reproduction. Yet it is difficult to judge whether this is a permanent or temporary state. Though we must admit that nothing points to this state's temporariness so far, under no circumstances it is a universal world trend.

In post-communist states the altered situation due to the 90's political, economic and social change created conditions for accelerated demographic behaviour transformations which had already taken place in European democratic countries. These changes rapidity was unexpected in our country and its main cause was marriage and childbirth postponement, or so-called timing. If differences in future spouses and mothers average age were respectively 4–6 years between these two groups in European countries, the explanation of low nuptiality and fertility rates is made easier due to the fact that most marriages and childbirths within marriage take place later, after the realisation of so far postponed demographic events. It is harder to just estimate how many postponed marriages will be contracted, actually how many postponed childbirths will take place. Research analyses have so far indicated that it would concern their majority. Demonstratively one-child families do not increase but three or more children families are still declining. Most young families plan and do end up having two children, but their percentage within total population has narrowed.

There are numerous specific conditions contributing to the global situation description. Nowadays many more young people study at universities or specialised higher institutions. A certain free time span during studies allows them to travel and gain experience particularly after graduation and prior to starting their first job. Young people face higher demands on the labour market, domestic but specifically international experience is valued and a significant work flexibility is expected. Furthermore the endeavour to achieve a higher position, better income and the concurrent risk of not finding or losing one's job have become important conditions in the decision-making process, whether, when and how to start a family, when to have children and how many. The continuous increase of so-called two-carreer marriages has led to a decrease of traditional marriages, favouring the female role as caring for and educating children. A non-negligible role is also played by the opportunity of obtaining financially affordable housing, and unemployment level differentiated according to age concerning more young women, specifically after childbirth.

The given situation is defined by a few data. So far an appropriate housing policy concept has not been found, has not actually been enforced according to market economy conditions. A drastic slump in housing construction took place concurrently with the present phasing out of more affordable cooperative flats construction. Only in the past few years, following the indisputable result of long term housing savings and opportunities of getting a low-interest housing construction, purchase or reconstruction loan, has the situation improved. However it will take many more years until all taken measures effect will be obvious (e.g. non-profit housing agencies renewal as well). Certainly the current rent deregulation leads to negative consequences, a flats shortage due to their commercial use, social housing uncertain range and structure etc. For some young people their present, actually future family housing situation remains a serious issue in their decision-making concerning children planning. Changes

in unemployment rate represent a similarly marked condition of demographic behaviour. Almost 10% young men and 7% young women belong on a long term basis to the job-seekers category and we can estimate that at least temporarily one fifth young men and one third young women will be confronted to unemployment. A particularly adverse situation has evolved in regions of higher unemployment. For the time being efforts in this field have not brought about significant results.

Table 0.1: Selected Features of Population Development Specific Conditions

		1990	1995	1996	1997	1998	1999	2000
Completed Flats (thousands)		44.6	13.0	14.5	16.8	22.2	23.7	25.2
– Percentage of Cooperative Ones		17.1	1.2	0.4	0.1	0.1	0.1	0.5
University Students[1] (thousands)		96.4	123.5	136.8	145.1	151.7	159.7	166.4
– per 100 Persons Aged 20–24		14.0	14.3	15.3	15.9	16.7	18.0	19.5
Unemployment (job-seekers)								
– thousands (31.12.)		39.4	153.0	186.3	268.9	386.9	487.6	457.4
– %		0.7	2.9	3.5	5.2	7.5	9.4	8.8
out of Total Number Aged Till 25 (thousands)		.	42.7	51.9	89.9	127.9	143.8	120.0
Share of Job Seekers[2] (%)								
– Aged 20–24	Men	.	6.0	4.8	6.1	10.3	14.3	14.5
	Women	.	4.4	4.1	9.0	12.6	15.5	13.8
– Aged 25–29	Men	.	3.4	2.9	3.8	6.0	6.5	6.5
	Women	.	7.3	5.1	9.8	12.9	14.2	13.7
Sick and Medical Leave								
– Average Share (%)		4.80	6.15	6.05	6.25	5.82	5.95	6.46
– Average Time Span (days)		18.4	24.4	25.8	26.3	26.8	26.1	28.0
– Number of Cases out of 100 Insured		95.3	91.9	85.8	86.7	79.2	83.3	84.4

[1]Czech Republic citizens, daily study.
[2]4th term data.

Increased competition on the labour market leads to more frequent studying and further qualified preparation. For example, in the early 90's one seventh young people of appropriate generations studied at universities, in the late 90's it was already a fifth though still more candidates show interest in entering universities. It is logical that long term studying leading to internships and further qualifications do postpone, even in the case of a positive attitude towards family, marriage contracting and childbirth onto an older age. Former student marriages, markedly socially supported and sometimes facilitated course of studies curses, became an obsolete past phenomenon; apparently they have not even been replaced by common-law student marriages, mainly due to financial or housing reasons.

Causality relations of above mentioned Czech Republic demographic behaviour conditions in the 90's are not directly quantifiable. One cannot prove to what extent the current situation is due to unsatisfied, socially required, not merely financial, projected conditions needed to start living together (whether legally or not) and mainly decide upon having a child (children). One cannot ignore that the often more comfortable young people's living arrangement, their parents de facto providing free "hotel" services, can lead to a certain habit of a lifestyle without responsibility towards a partner or children thus to a later more frequent total rejection of a joint shared living with a partner and of children. Only in a few years will these open questions be answered, first of all when average age at contracting marriage and of mothers at childbirth will become even with Western European countries already existing current values. That is why, taking into account all these points of view, the present young generation behaviour can be evaluated as globally responsible including an attempt at minimising personal life risks.

Population evolution knowledge and its causality can lead to discussing the need of a population policy as an independent one or part of a social, family, migration one etc. These issues are unquestionably important as to every state policy orientation, though exceeding the frame of demographic processes objective analysis and are rather reflected in diverse political parties programs. That is why, as in the past few years, we did not dwell on these aspects.

The present Czech Republic population development analysis covers the complete period since the early 90's. Chapters were individually prepared by: Miroslava Mašková (Age Structure), Lenka Beranová (Nuptiality), Kryštof Zeman (Divorce), Vladimíra Kantorová (Natality), Tomáš Sobotka (Abortion), Tomáš Kučera and Boris Burcin (Mortality), Dagmar Bartoňová (Migration and Shifts in Population Size), Milan Kučera (Population Movement in 2001–2002), and Boris Burcin and Tomáš Kučera (Czech Republic Population Development Forecast until 2050).

Population development analysis was based on yearly population movement data processing, as published by the Czech Statistical Office (Population movement in given year, Population survey according to family status, Population states in regions and towns, Basic information according to 2001 population, houses and flats census final results). Some data from non-standard processing were submitted by Miroslav Šimek, head of the CSO demographic statistics department, who deserves our grateful thanks. Preliminary data concerning population movement in 2001 were taken from Terezie Kretschmerová's article "Czech Republic Population Development in 2001", published in the journal, Demografie, #3,2002. Data on abortion were processed and published by the Institute of Health Information and Statistics (ÚZIS) of the Czech Republic Ministry of Health.

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Not precisely specified and not totally corroborated figures of 1991 and specifically 2001 censuses, as well as incomplete data concerning numbers of expatriates particularly since 1994, led to differences between late 2000 population survey and new census results. Furthermore among census data 70 000 foreigners holding a long term residency permit were "added". The difference between the survey and population census results was also obvious in population age distribution and in the structure of older than 15 individuals according to family status. A limited part of the difference can be explained by the fact that age was neither established for 3 500 surveyed individuals nor was family status for 56 500.

Despite these discrepancies conducted population surveys accuracy was globally confirmed, thus we do not need to overevaluate population development analyses conclusions, based on indicators calculated according to age, sometimes age and family status as well. On table 1.11, late 2000 population survey as well as 2001 census results data and figures are listed side by side, as they were published, without any additional detailed specifications, by the Czech Statistical Office. Hence a comparative analysis can occur, further slightly specified by census data as of 1.1.2001.

Table 0.2: Characteristics of the Czech Republic Population Development during 1950–1989 Period

Indicator		Period (years average)							
		1950–1954	1955–1959	1960–1964	1965–1969	1970–1974	1975–1979	1980–1984	1985–1989
Marriages		81 221	70 943	77 233	86 666	95 078	92 029	78 981	81 757
– per 1 000 Inhabitants		8.9	7.5	8.0	8.8	9.6	9.0	7.7	7.9
Total Nuptiality Rate[1]	Men	99.0[2]	.	97.4	95.8	96.9	97.8	96.2	95.7
	Women	98.7[2]	.	95.9	94.7	94.5	93.2	89.6	89.6
Average Age	Men	25.8[2]	.	24.3	24.3	24.4	24.5	24.7	24.6
	Women	22.4[2]	.	21.3	21.7	21.6	21.4	21.7	21.8
Marriage Frequencies	Men	.	.	98.6	91.0	96.5	99.5	91.3	93.0
	Women	.	.	105.6	95.4	92.3	88.8	84.6	88.1
Divorces		10 535	12 872	14 039	18 036	23 553	26 080	28 496	30 623
– per 1 000 Inhabitants		1.16	1.35	1.45	1.83	2.38	2.56	2.76	2.96
– per 1 000 Marriages		4.65	5.45	5.83	7.24	9.27	9.98	10.97	11.86
Total Divorce Rate		.	.	21.1[3]	.	33.3[3]	.	38.5[3]	.
Live Births		179 001	150 911	139 343	141 530	168 334	182 386	142 870	132 236
– per 1 000 Inhabitants		19.6	15.9	14.4	14.4	17.0	17.9	13.8	12.8
Total Fertility Rate		2.71	2.40	2.19	1.96	2.16	2.35	2.00	1.92
Crude Reproduction Rate		1.31	1.16	1.07	0.95	1.05	1.15	0.97	0.94
Net Reproduction Rate		1.24	1.12	1.04	0.92	1.02	1.12	0.95	0.92
Out of Wedlock Births									
– %		5.8	5.6	4.7	5.3	4.9	4.7	6.4	7.5
Mothers Average Age		27.1	26.2	25.4	25.2	25.1	25.0	24.6	24.7
Abortions		.	45 162	79 741	85 317	83 180	80 689	91 216	113 474
Including:	Induced	.	55 474[5]	66 327	68 195	63 698	60 385	73 921	98 011
	Spontaneous[4]	.	.	13 414	17 122	19 482	20 304	17 295	15 463
Per 100 Live Births	Total[4]		53.7	56.7	59.9	49.1	44.0	63.5	85.4
	Induced		40.6	43.6	47.8	37.6	32.9	51.5	73.8
	Spontaneous[4]		13.1	13.1	12.1	11.5	11.1	12.0	11.6
Induced Abortions out of 100 Completed Pregnancies		.	26.4	27.8	29.9	25.2	22.9	31.5	39.8
Deaths		100 412	95 274	99 053	111 141	123 231	126 169	132 674	128 982
– per 1 000 Inhabitants		11.0	10.0	10.3	11.3	12.5	12.4	12.9	12.5
Infant Mortality[6]		46.8	25.1	19.8	22.1	19.7	18.1	15.2	11.6
Stillbirth Rate[6]		22.3	14.0	12.8	16.2	15.2	13.4	10.5	8.0
Perinatal Mortality[6]		31.3	21.4	19.2	21.2	19.8	17.3	13.9	10.5
Natural Increase		78 589	55 637	40 290	30 389	45 103	56 217	10 196	3 254
– per 1 000 Inhabitants		8.6	5.9	4.1	3.1	4.5	5.5	0.9	0.3
		1949–1951		1960–1961		1970		1980–1984	1985–1989
Life Expectancy	Men Aged 0	62.16		67.55		66.12		67.14	67.82
	Men Aged 60	14.96		15.12		14.09		14.38	14.59
	Women Aged 0	66.97		73.41		73.01		74.25	75.03
	Women Aged 60	16.87		18.34		17.95		18.38	18.81

[1]Computed from nuptiality tables of single persons.
[2]Computed from nuptiality tables of single persons during 1949–1950.
[3]Total divorce rate during 1960–1961, 1970–1971 and 1980–1981.
[4]Including unidentified abortion types, excluding extrauterine pregnancies.
[5]Average for 1958–1959 period.
[6]Since 1965 return to international definitions.

Table 0.3: Natural Population Movement during 1960–2001 Period

Years Average, Year	Mean Population	Marriages	Divorces	Live Births	Abortions[1]		Deaths		Natural Increase
					Total	Induced	Total	Till 1 Year of Age	
1960–1964	9 653 680	77 233	14 039	139 343	79 741	61 327	99 053	2 761	40 290
1965–1969	9 847 972	86 666	18 036	141 530	85 317	68 195	111 141	3 130	30 389
1970–1974	9 883 684	95 078	23 553	168 334	83 180	63 698	123 231	3 315	45 103
1975–1979	10 184 415	92 029	26 080	182 386	80 689	60 385	126 169	3 296	56 217
1980–1984	10 319 525	78 981	28 496	142 870	91 216	73 921	132 674	2 175	10 196
1985–1989	10 348 786	81 757	30 623	132 236	113 474	98 011	128 982	1 531	3 254
1990–1994	10 331 200	72 292	30 232	121 845	98 544	85 352	121 870	1 166	25
1995–1999	10 305 496	55 041	30 547	91 441	55 761	44 996	112 547	541	–21 106
1981	10 303 208	77 453	27 608	144 438	89 373	71 574	130 407	2 226	14 031
1982	10 314 321	76 978	27 821	141 738	91 531	74 531	130 765	2 130	10 973
1983	10 322 823	80 417	29 319	137 431	92 033	75 037	134 474	1 997	2 957
1984	10 330 481	81 714	30 514	136 941	96 638	79 534	132 188	1 932	4 753
1985	10 336 742	80 653	30 489	135 881	99 357	83 042	131 641	1 694	4 240
1986	10 340 737	81 638	29 560	133 356	99 452	83 564	132 585	1 639	771
1987	10 348 834	83 773	31 036	130 921	122 822	107 717	127 244	1 577	3 677
1988	10 356 359	81 458	30 652	132 667	125 331	110 031	125 694	1 463	6 973
1989	10 362 257	81 262	31 376	128 356	122 110	107 403	127 747	1 280	609
1990	10 362 740	90 953	32 055	130 564	121 802	107 131	129 166	1 410	1 398
1991	10 308 682	71 973	29 366	129 354	117 039	103 124	124 290	1 343	5 064
1992	10 317 807	74 060	28 572	121 705	106 763	93 435	120 337	1 204	1 368
1993	10 330 607	66 033	30 227	121 025	82 477	69 398	118 185	1 028	2 840
1994	10 336 162	58 440	30 939	106 579	64 640	53 674	117 373	847	–10 794
1995	10 330 759	54 956	31 135	96 097	60 114	49 531	117 913	740	–21 816
1996	10 315 353	53 896	33 113	90 446	58 402	48 086	112 782	547	–22 336
1997	10 303 642	57 804	32 465	90 657	55 421	45 022	112 744	531	–22 087
1998	10 294 943	55 027	32 363	90 535	54 099	42 959	109 527	472	–18 992
1999	10 282 784	53 523	23 657	89 471	50 567	39 382	109 768	413	–20 297
2000	10 272 503	55 321	29 704	90 910	45 938	34 623	109 001	373	–18 091
2001	10 224 192	52 374	31 586	90 715	43 646	32 528	107 755	360	–17 040

Years Average, Year	Marriages	Divorces	Live Births	Deaths	Natural Increase	Abortions	Induced Abortions	Divorces per 100 Marriages	Infant Mortality
	Per 1 000 Inhabitants					Per 100 Births			
1960–1964	8.0	1.45	14.4	10.3	4.1	56.7	43.6	18.2	19.8
1965–1969	8.8	1.83	14.4	11.3	3.1	59.9	47.8	20.8	22.1
1970–1974	9.6	2.38	17.0	12.5	4.5	49.1	37.6	24.8	19.7
1975–1979	9.0	2.56	17.9	12.4	5.5	44.0	32.9	28.3	18.1
1980–1984	7.7	2.76	13.8	12.9	0.9	63.5	51.5	36.1	15.2
1985–1989	7.9	2.96	12.8	12.5	0.3	85.4	73.8	37.5	11.6
1990–1994	7.0	2.93	11.8	11.8	0.0	80.6	69.8	41.8	9.6
1995–1999	5.3	2.96	8.9	10.9	–2.0	60.8	49.0	55.5	5.9
1981	7.5	2.68	14.0	12.7	1.3	61.6	49.3	35.6	15.4
1982	7.5	2.70	13.7	12.7	1.0	64.2	52.3	36.1	15.0
1983	7.8	2.84	13.3	13.0	0.3	66.6	54.3	36.5	14.5
1984	7.9	2.95	13.3	12.8	0.5	70.2	57.8	37.3	14.1
1985	7.8	2.95	13.1	12.7	0.4	72.8	60.8	37.8	12.5
1986	7.9	2.86	12.9	12.8	0.1	74.3	62.4	36.2	12.3
1987	8.1	3.00	12.7	12.3	0.4	93.4	81.9	37.0	12.0
1988	7.9	2.96	12.8	12.1	0.7	94.1	82.6	37.6	11.0
1989	7.8	3.03	12.4	12.3	0.1	94.7	83.3	38.6	10.0
1990	8.8	3.09	12.6	12.5	0.1	92.9	81.7	35.2	10.8
1991	7.0	2.85	12.5	12.1	0.4	90.1	79.4	40.8	10.4
1992	7.2	2.77	11.8	11.7	0.1	87.4	76.5	38.6	9.9
1993	6.4	2.93	11.7	11.4	0.3	67.9	57.1	45.8	8.5
1994	5.7	2.99	10.3	11.4	–1.1	60.4	50.2	52.9	7.9
1995	5.3	3.01	9.3	11.4	–2.1	62.4	51.4	56.7	7.7
1996	5.2	3.21	8.8	10.9	–2.1	64.3	53.0	61.4	6.0
1997	5.6	3.15	8.8	10.9	–2.1	60.9	49.5	56.2	5.9
1998	5.3	3.14	8.8	10.6	–1.8	59.6	47.3	58.8	5.2
1999	5.2	2.30	8.7	10.7	–2.0	56.3	43.9	44.2	4.6
2000	5.4	2.89	8.8	10.6	–1.8	50.4	38.0	53.7	4.1
2001	5.1	3.07	8.9	10.5	–1.7	48.0	35.8	60.3	4.0

[1]Data concerning abortions during the 1987–1994 period are taken from the Czech Republic Institute for Health Information and Statistics and concern abortions performed only on Czech Republic permanent female residents ("locals") excluding extrauterine pregnancies; since 1995 women holding a permanent residence permit are concerned too.
p – preliminary data.

Table 0.4: Analytical Characteristics of Population Development during 1981–2001 Period

Year	Share of Singles[1] (%)				Single Average Age at Marriage		Total Divorce Rate	Total Fertility Rate	Share of Childbirths (%)		Mothers Average Age		Premarital Conceptions[3] (%)
	Men		Women						Out of Wedlock	3.+ Parity[2]	Total	First Child	
	Aged												
	23	50	20	50	Men	Women							
1981	58.6	10.8	55.4	3.7	24.8	21.7	31.5	2.00	5.9	18.1	24.7	22.4	51.7
1982	58.3	11.0	56.5	4.3	24.7	21.7	32.1	2.00	6.4	18.0	24.6	22.4	53.7
1983	56.2	10.2	56.1	3.9	24.5	21.7	34.2	1.97	6.8	17.6	24.6	22.4	55.8
1984	55.7	9.8	56.4	4.0	24.5	21.7	35.8	1.97	7.3	16.9	24.6	22.4	56.1
1985	56.4	10.3	57.2	4.1	24.5	21.8	35.9	1.95	7.3	16.4	24.6	22.4	55.8
1986	56.5	10.5	56.7	4.1	24.6	21.7	34.9	1.94	7.4	16.1	24.6	22.4	55.7
1987	55.9	9.9	56.4	4.0	24.5	21.7	36.7	1.91	7.2	15.6	24.7	22.4	55.3
1988	56.2	10.7	56.6	4.4	24.5	21.7	36.3	1.94	7.6	15.8	24.7	22.5	54.6
1989	56.0	10.8	57.5	4.7	24.6	21.8	37.2	1.87	7.9	15.2	24.8	22.5	54.2
1990	48.8	8.9	51.8	3.8	24.0	21.4	38.0	1.89	8.6	15.1	24.8	22.5	54.4
1991	57.3	15.1	61.6	8.6	24.7	22.2	34.8	1.86	9.8	14.4	24.7	22.5	50.6
1992	58.0	14.3	63.5	8.2	24.8	22.5	33.9	1.72	10.7	14.4	24.8	22.5	54.1
1993	64.7	18.2	70.4	12.1	25.4	23.2	36.2	1.67	12.7	14.8	25.0	22.6	54.5
1994	72.4	23.6	78.1	17.5	26.2	23.9	37.5	1.44	14.5	15.4	25.4	22.9	54.0
1995	77.0	26.8	83.2	20.0	26.7	24.6	38.4	1.28	15.6	15.1	25.8	23.3	50.8
1996	80.6	28.6	86.7	22.9	27.1	24.9	41.7	1.18	16.9	15.0	26.1	23.7	49.0
1997	83.0	26.9	88.6	21.3	27.7	25.4	41.9	1.17	17.8	14.7	26.4	24.0	48.1
1998	85.8	29.4	90.7	24.4	28.1	25.8	42.9	1.16	19.0	14.4	26.6	24.4	45.4
1999	88.4	31.2	92.3	25.9	28.5	26.2	32.3	1.13	20.6	14.3	26.9	24.6	43.0
2000	90.1	30.4	93.5	25.5	28.9	26.5	41.2	1.14	21.8	14.4	27.2	24.9	41.6
2001	92.1	34.0	94.7	27.5	29.2	26.9	44.6	1.15	23.5	14.5	27.5	25.3	39.5

Year	Total Induced Abortion Rate[4]	Spontaneous Abortions per 100 Live Births	Life Expectancy at Age				Perinatal Mortality[5]	Increase (decrease) per 1 000 Inhabitants		
			0		60			Natural	Migration	Total
			Men	Women	Men	Women				
1981	0.96	12.3	67.18	74.30	14.47	18.46	14.4	1.3	0.1	1.5
1982	1.00	11.9	67.31	74.39	14.41	18.45	14.1	1.0	0.1	1.2
1983	1.01	12.3	67.05	74.26	14.28	18.34	13.3	0.3	0.2	0.5
1984	1.08	12.4	67.35	74.45	14.42	18.46	12.6	0.5	0.2	0.7
1985	1.13	12.0	67.51	74.72	14.42	18.58	11.3	0.4	0.2	0.6
1986	1.14	11.9	67.48	74.62	14.40	18.52	10.9	0.1	0.3	0.4
1987	1.49	11.5	67.86	75.12	14.65	18.90	10.7	0.4	0.3	0.6
1988	1.51	11.5	68.14	75.28	14.79	19.04	10.2	0.7	0.2	0.9
1989	1.50	11.4	68.12	75.39	14.71	19.01	9.3	0.1	0.1	0.2
1990	1.51	11.2	67.58	75.36	14.58	19.08	9.8	0.1	0.1	0.2
1991	1.45	10.7	68.25	75.72	15.02	19.47	9.2	0.4	0.3	0.8
1992	1.32	10.9	68.44	76.14	15.16	19.82	8.4	0.1	1.1	1.3
1993	0.98	10.8	69.20	76.41	15.56	19.85	7.8	0.3	0.5	0.8
1994	0.75	10.2	69.54	76.58	15.91	19.98	6.4	–1.1	1.0	–0.1
1995	0.68	11.0	69.72	76.63	15.89	20.04	6.3	–2.1	1.0	–1.1
1996	0.65	11.3	70.37	77.27	16.25	20.39	6.0	–2.1	1.0	–1.2
1997	0.61	11.4	70.50	77.49	16.39	20.67	5.0	–2.1	1.2	–1.0
1998	0.58	12.3	71.13	78.06	16.71	21.00	5.2	–1.8	0.9	–0.9
1999	0.53	12.4	71.40	78.13	16.85	20.99	5.3	–2.0	0.9	–1.1
2000	0.47	12.4	71.65	78.35	17.02	21.21	4.5	–1.8	0.7	–1.1
2001	0.44	12.2	72.07	78.41	17.41	21.23	4.3	–1.7	–0.8	–2.5

[1]Nuptiality tables data.
[2]Out of total live births.
[3]Live births 8 months after wedding per 100 live births of first parity.
[4]Data concerning Czechia permanent female residents ("locals"), since 1995 including women holding Czechia permanent residence permit.
[5]Stillbirths and children dying up until 7 days following birth per 1 000 live births.

AGE STRUCTURE

1

In demographically advanced countries, i.e. countries having completed their transition onto low natality and mortality rates within the frame of the demographic revolution process thus including the Czech Republic, structural population changes bear a much greater significance compared to sheer total number evolution. Population composition transformations according to age, sex, and family status are becoming an increasingly substantial factor, underlying its complete social and economic development. In these countries, due to a long term low fertility rate and growing life expectancy, the process of demographic aging is developing and will gradually keep on deepening, concurrently leading to, as this process is most often characterised, a change in main age groups relative representation within population. Children total number and percentages are dropping and gradually, absolutely as well as relatively, there will be fewer people at reproductive age and the mere numerous, increasing age group within population, will be represented by persons from older age groups. A worsening of the economic relation between population productive stratum and non-productive stratum will take place. Population aging is fast becoming the most researched demographic process in advanced countries. Its outcome will penetrate all spheres of social and economic development; most significantly within present, social and medical care systems functioning, since the latter emerged amidst totally different demographic conditions. At present advanced countries economists and politicians are specifically focusing on expected, accelerated population aging, resulting from numerous postwar generations shifting into post-active age during the next few years.

Figure 1.1a: Population Composition according to Age and Family Status (1.1.1991)

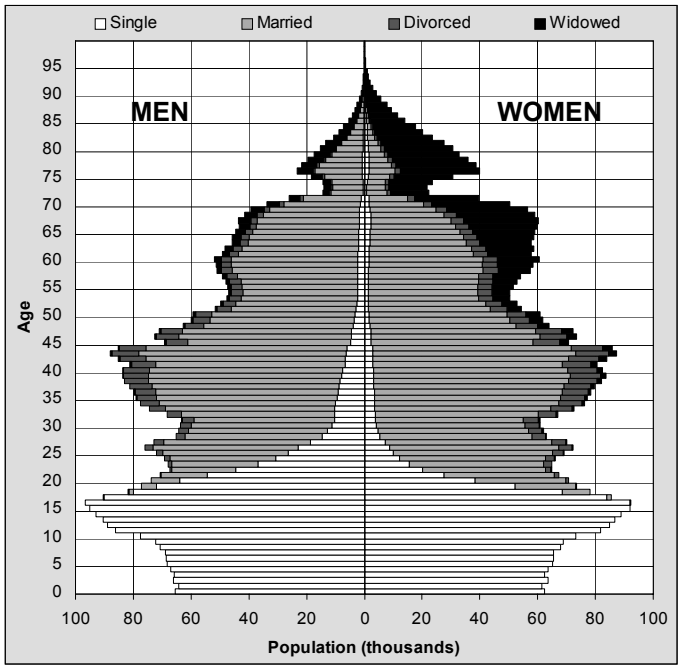
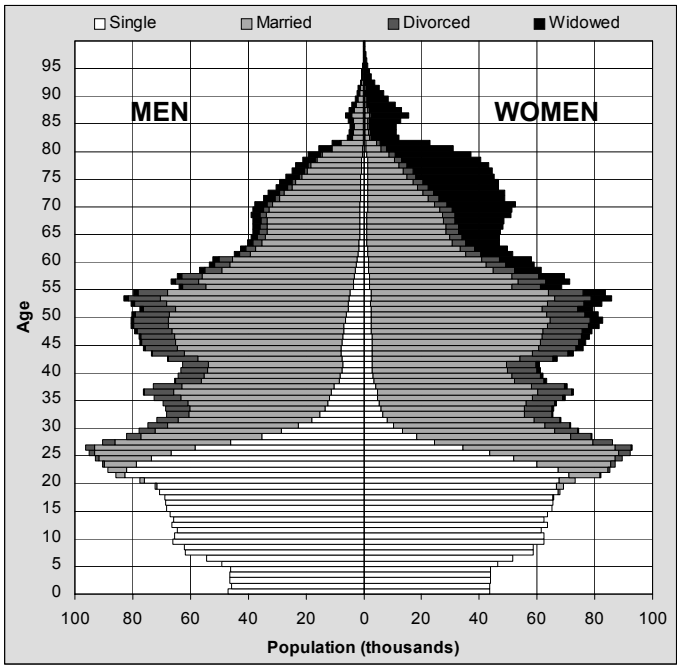


Figure 1.1b: Population Composition according to Age and Family Status (31.12.2000)



Long Term Natality Rate Decrease Is Increasingly Obvious in Age Structure

Every population age structure ensues from natality, mortality and migration rates development as long as the latter were significant approximately during the past hundred years. A characteristic feature shared by most European populations is that their age structures at the turn of the 21st century are thoroughly irregular, reflecting ongoing events influence throughout the 20th century. These events led to numbers of children born in specific calendar years – generations whose future number was influenced by mortality intensity and migrations. First and foremost age structures deformations reflect natality rate shifting and these generation total number irregularities have influenced and will even keep on influencing population aging increase. The impact of both world wars, the thirties economic crisis when natality rate was low and postwar compensatory natality waves can be traced in most European populations; some further influences are specific for each population. Besides, as far as the Czech Republic is concerned, there has already been a natality rate decrease in the early 40's during the Nazi occupation, an early 60's slump stemming from abortion legalization, a mid-sixties slight rise triggered by pronatal policy measures and a renewed decrease at the end of this

period reflecting the socio-economic crisis. The early to mid-70's natality rate sharp increase, subsequent to governmental, pronatalist legal measures (1974 and 1975 being the Czech population most numerous generations), significantly appears within the Czech population age structure, as well as, since the mid 90's, its present, substantial slump, reflecting young people's reaction to the post 1989 political and socio-economic transformation. The above mentioned natality rate fluctuations are, in most cases, side effects of earlier generation total number development influencing potential mothers' total number at a given time. In the 90's, external conditions impact on reproduction was significantly more considerable than the 70's natality wave potential mothers total number increase thus a second increased natality wave did not occur.

The 60's Natality Rate Decrease Became Evident in Middle Age

Above mentioned fluctuations within each generation total number have also left their mark on Czech population aging development from post-war years to 1990. Even though Czech population age structure aging linked to demographic revolution completion in the Czech Republic had already started in our country in the interwar years, its further postwar development was slow and far from smooth. In the 50's it was held back at the age pyramid base by postwar high natality wave and infant and children mortality fair development. Thus in the early 60's total children rate within population rose above 25% and people over 65 years of age did not reach 10%. The 60's was an intensive aging period from the base as well as at the top of the age pyramid, due to the significant decrease of younger than 15 children rate within population and the elderly total number increase. The 70's natality wave again broadened the age pyramid base and slowed down aging during subsequent years. It was reflected as well in temporary, slight improvement of age structure global composition characteristics such as average age, median age and aging index. In the 80's development at the top of the age pyramid contributed to this as well, due to the impact of older than 65, scant generations born during WWI and increased mortality at middle and older age, specifically concerning men. Hence the older than 65 population total number temporarily fell, indicated by their relative representation narrowing within total population in the 80's from 13.5% in 1980 down to 12.6% in 1991. In fact we can state that throughout the postwar period into the early 90's, the age structure was fair: children under 15 represented more than one fifth of total population and productive age population rate towered over 60% while elderly population percentage grew merely slightly. Economic burden indexes were relatively low and within dependants structure, children under 15 outnumbered the over 60 elderly. Not even during intensive aging years did aging index exceed 100, i.e. children under 15 remained more numerous than the older than 60 elderly within population.

Table 1.1: Development of Main Age Groups and Population Age Composition Characteristics according to 1961–2001 Census Data

Age Group	1961	1970	1980	1991	2001[1]
0–14	25.4	21.2	23.4	21.1	16.2
15–59	59.7	60.4	59.6	61.1	65.4
60–64	5.3	6.2	3.5	5.2	4.6
65+	9.6	12.2	13.5	12.6	13.8
Total	100.0	100.0	100.0	100.0	100.0
Average Age	35.0	35.8	35.4	36.3	39.0p
Median Age	32.2	33.4	33.0	35.4	38.0p
Aging Index	58.7	86.5	72.3	84.4	113.8
Dependency Index I	42.5	35.1	39.3	34.6	24.7
Dependency Index II	24.9	30.4	28.4	29.2	28.2
Economic Burden Index	67.4	65.5	67.7	63.8	52.9

[1]1.3. 2001 census.
Aging index – number of persons aged 60 and older for 100 children aged 0–14.
Dependency index I – number of children aged 0–14 for 100 persons aged 15–59.
Dependency index II – number of persons aged 60 and older for 100 persons aged 15–59.
Economic burden index – number of children aged 0–14 and number of persons aged 60 and older for 100 persons aged 15–59.

In the nineties shiftings of diversely numerous generations onto older ages continued within age composition which further affected total number development and relations between main age groups as well as population aging increase during this period (due to research long term trends, we still use age limits of 15 and 60 to delimit main macro-economic groups even though they no longer fully correspond to reality; specifically entrance into economic activity usually occurs later than at 15 years of age). The most substantial change within population concerns under 15 years of age children total number and representation. Since 1991 under 15 years of age children total number has registered a continuous, almost stable decrease of approximately 50 000 yearly. First of all the 70's baby-boom

numerously strong generations shifting from child categories to productive age population groups, subsequently replaced by scant generations born in the 80's and early 90's came to an end. During the second half of the nineties continuous children segment dwindlings were due to 1994–1996 natality rate plunging slump which led to an additional incisive notch in age composition. During the 20th century last decade, Czech population was reduced by more than half a million children aged 0–14 (23% of early 90's total number). Due to population total number stagnation, this age group percentage sharply decreased by almost 5 percentage points from 21% to 16%, its historically lowest registered value so far.

Population category at potential economic activity age underwent positive changes. Throughout the nineties its total number grew though at a reduced rate and its percentage within total population as well. However its 2000 total number stabilization indicates that it was a temporary state. More numerous generations born in the 40's have started leaving this age category and according to the age pyramid one should not expect any situation change. Consequently after 2005 further generation transfers must be expected (over the 60 years of age limit as well as over the 15 years of age one) including productive age population gradual decreases.

The Elderly Total Number and Representation Have Not Changed So Far

Despite 1930–1939 generations irregular total numbers and their reaching 60 years of age during the 90's, post-productive age population total number remained almost the same; it oscillated at above 1.8 M and this age group percentage stabilized at 18%. 65 or older total population slow growth was more or less compensated by 60–64 age group decreases, due to the 30's reduced yearly population entering this age. Deformation gradual upwards shifting onto an older age started modifying this situation. Since the late 90's, the 60–64 years old elderly total number has started rising again, significantly obvious from total post-productive age group substantial rise (amounting to a 22 000 people increase) in 2000. Elderly population total number stagnation during the last decade was affected as well by high middle age mortality intensity during the last thirty years, on the contrary a positive mortality intensity development at middle or elderly age after 1990 is beginning to appear as a contributing factor of the elderly total number growth.

Table 1.2: Population Composition according to Main Age Groups (as of 1.1. of given year)

Age Group	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001[1]
	Population (thousands)										
0–14	2 176	2 121	2 065	2 010	1 948	1 893	1 843	1 795	1 752	1 707	1 655
15–59	6 292	6 347	6 406	6 466	6 526	6 571	6 609	6 647	6 674	6 698	6 688
60–64	535	530	527	515	503	485	469	456	453	455	473
65+	1 302	1 315	1 328	1 343	1 356	1 372	1 388	1 402	1 411	1 418	1 411
60+	1 837	1 845	1 855	1 858	1 859	1 857	1 857	1 857	1 864	1 873	1 884
Total	10 305	10 313	10 326	10 334	10 333	10 321	10 309	10 299	10 290	10 278	10 230
	Population (%)										
0–14	21.1	20.6	20.0	19.4	18.9	18.3	17.9	17.4	17.0	16.6	16.2
15–59	61.1	61.5	62.0	62.6	63.2	63.7	64.1	64.5	64.9	65.2	65.4
60–64	5.2	5.1	5.1	5.0	4.9	4.7	4.5	4.4	4.4	4.4	4.6
65+	12.6	12.9	13.0	13.0	13.1	13.3	13.5	13.6	13.7	13.8	13.8
60+	17.8	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.2	18.4
	Age Composition Characteristics										
Average Age	36.3	36.5	36.6	36.8	37.0	37.3	37.6	37.9	38.2	38.5	.
Median Age	35.4	35.6	35.9	36.0	36.2	36.4	36.6	36.8	37.1	37.3	.
Aging Index[1]	84.4	87.0	89.8	92.5	95.4	98.1	100.8	103.5	106.4	109.7	113.8
Dependency Index I	34.6	33.4	32.2	31.1	29.8	28.8	27.9	27.0	26.3	25.5	24.7
Dependency Index II	29.2	29.1	29.0	28.7	28.5	28.3	28.1	27.9	27.9	27.9	28.2
Economic Burden Index	63.8	62.5	61.2	59.8	58.3	57.1	56.0	55.0	54.2	53.5	52.9

[1]1.3.2001 census (3 481 persons of undetermined age).

From an economic burden perspective the nineties were even more favourable than the previous period for productive age population. Number of dependants corresponding to 100 persons at active economic age dropped from 64 to 53 during this period. Continuous diminution of under the age of 15 children total number contributed to it in a significant manner. However among mentioned trends within main age groups development a turnabout is emerging and active population economic burden will rise again. First and foremost relations between population postproductive and productive strata will worsen. From an economic point of view not only mere economic burden index rise will be substantial

Czech Population Holds a Higher Number of the Elderly than of Children

but so will dependants structure change. Postactive age population will represent a more marked percentage and according to analyses, 2–3 times higher social expenses are linked to one person at this age as compared to one underage child.

In the 90's population aging evolved in a rather peculiar manner caused by historically triggered age structure deformations due to the 70's natality wave slowing down impact and present, sharp and accelerated natality rate slump. Measured by the over 65 elderly relative representation, aging grew at a very slow pace and only in the second half of the nineties did it reach the same percentage as at the turn of the 80's, its highest so far (13.5%). However intensive aging appeared primarily at the age pyramid base, due to children percentage drop within population. Ongoing aging since 1990 has been characterized by a continuous rise of average age, median age and specifically aging index. Since 1977 total adult number older than 60 years of age has become higher than children under 15 years of age.

However from the aging level point of view, the domestic situation is not homogeneous. As a consequence of domestic migration activity during the second half of the 20th century (completed border region settlement, immigration to Ostrava and later to Northern Bohemian coal basin), these regions counties still maintain a relatively young age structure including aging population low percentages. Furthermore the Romany ethnic community higher percentage plays a substantial role here. On the contrary Prague and other cities (Brno, Pilsen) counting more than one fifth older than 60 inhabitants, primarily due to these cities low fertility rate and a low immigration level, have the relatively oldest population. A noticeably older age structure can further be observed in a string of western, central and southern Bohemia and Moravia counties, marked by young people long term emigration to larger urban centers.

Table 1.3: Districts with Lowest and Highest Shares of over 60 Years of Age Population (2001 census data)

Lowest Rates Districts				Highest Rates Districts			
District	%	District	%	District	%	District	%
Česká Lípa	14.3	Bruntál	15.2	Hl.m. Praha	20.7	Kolín	20.0
Český Krumlov	14.8	Jeseník	15.9	Brno-město	20.5	Písek	19.9
Tachov	14.8	Nový Jičín	16.3	Plzeň-město	20.3	Plzeň-jih	19.9
Sokolov	14.8	Cheb	16.4	Rokycany	20.2	Hradec Králové	19.9
Chomutov	14.9	Most	16.4	Pelhřimov	20.1	Pardubice	19.8

Regional Differences at Demographic Aging Level Remain Unchanged

The 90's most powerful consequence of population evolution on age structure is embodied by 1994–1996 childbirths total number considerable slump, stabilized since 1996 at 90 000 births yearly, amounting to almost one third less than in the late 80's. This development fully hit total numbers of the youngest as well as preschool children. Nowadays our population counts 30% less 0–2 and 3–5 years old children than in the early 90's. Childbirths plunging decrease always temporarily underlined year to year children dwindling within concerned age categories. In 1994–1996, the most intensive drop concerned the youngest children and in 1997–1999, 3–5 years old children. In 2000 a sharper curtailment occurred concerning six-year old children enrolling at primary schools including first-formers more significant total number shrinking which had otherwise registered mere minimal changes during the last decades.

Table 1.4: Age Composition up to 23 years of age (as of 1.1. of given year)

Age Group	Population (thousands)						Shares of Total Population (%)					
	1991	1995	1998	1999	2000	2000*	1991	1995	1998	1999	2000	2000*
0–2	384	346	276	271	270	270	3.7	3.6	2.7	2.6	2.6	2.6
3–5	392	382	347	322	291	276	3.8	3.7	3.4	3.1	2.8	2.7
6–9	548	522	512	503	498	476	5.3	5.1	5.0	4.9	4.9	4.6
10–14	852	698	661	656	648	643	8.3	7.1	6.4	6.4	6.3	6.3
15–18	711	701	598	565	549	541	6.9	7.0	5.8	5.5	5.3	5.3
19–23	699	862	909	889	853	811	6.8	7.9	8.8	8.7	8.3	7.9
Total	3 586	3 511	3 303	3 206	3 109	3 017	34.8	34.4	32.1	31.2	30.2	29.4

Note: 2000 (*) data listed in this table and all subsequent ones result from end of 2000 balances calculated since 1991 census. Data as of 1.1.2001 will be drawn from 2001 census results unavailable in their detailed forms during present research study analysis. As opposed to 1991–2000 time span data as of 31.12.2000 and 1.1.2001 ones will differ.

The 1973–1979 natality wave gradual shift onto an older age and its replacement by less numerous generations born in the 80's played a keyrole on older children and youth total number development.

The most intensive shrinking concerned 10–14 years old children during the first half of the nineties followed by 15–18 years old teenagers during 1995–1998. Total numbers of persons in these age groups have fallen by one fourth. The 1980 radical change in continuous natality rate decrease appeared in 1995 sharp year to year 15 year-olds total number slump and consequently in 1998 18 year-olds one as well. Total numbers of 19–23 years old young people thus at the usual age of entering the workforce or university kept on increasing intensively till 1997; during the 1991–1996 period their total number rose from 700 000 to 911 000. However in the past few years this increase gave way to a total numbers renewed shrinking thus there were again 100 000 less young people of this age at the end of 2000.

Children and Youth Total Numbers Have Stabilised at Ongoing Lower Levels

The 70's baby-boom numerous generations gradual shifting did not merely significantly change total numbers of pupils, students and young people entering the workforce but productive age population total numbers as well. From a demographic point of view, it is essential that female and male total number within population, at a high intensity nuptiality and fertility age considerably grew during the 90's. In early 1995 the natality wave crest reached the age of 20 thus in comparison with 1991, 20–24 year-olds total number grew by 138 000, i.e. 20%. Taking into account that into the late 80's, the 20–24 age group was still characterised by the highest nuptiality and fertility rate, one expected a much higher rise in young marriages and subsequent childbirths. These projections of an occurring secondary natality wave proved to be erroneous. Change in external socioeconomic conditions had been so powerful since the transformation process beginning that young people started delaying their first marriages and consequently their first child as well. The much expected natality wave did not occur. During the following years, all the 70's numerous generations reached above 20 years of age and maintained a still numerous 20–24 years old group. In late 2000 the wave crest reached the age of 26 thus increasing by more than one fourth the 25–29 years old young people total number in the late 90's.

Table 1.5: Children in Selected Preschool and School Age Segments (thousands; as of 1.1. of given year)

Age	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000*	2000*–1991 Difference
3	128	130	126	128	128	121	120	106	96	90	90	–38
6	134	133	131	128	130	126	128	129	121	120	106	–28
15	187	182	177	174	168	151	141	139	135	134	134	–53
18	160	176	189	187	182	177	174	168	151	141	139	–21

By postponing marriage, possibly even refusing it, percentages of young singles have considerably risen whereas inversely proportional percentages of married couples specifically until 25 years of age have sharply fallen. Yet at 25–29 years of age more than half of men and almost one third of women are presently still single while at the transformation process beginning corresponding percentages represented 28%, respectively 11%. Divergences in single male and female percentages stem from a younger female age at marriage. Thus a huge potential of young singles occurred though remaining reproductively unexploited so far due to the fact that almost 80% of children total number are still born within marriages. Percentages of divorced young men and women till 25 years of age shrank, primarily a consequence of this age group single nuptiality intensity sharp decrease.

Marriage Postponement onto an Older Age is Still Going on

Striking irregularities of Czech population age composition even affected development within population large age group at productive age and led to changes in its structure. Throughout this whole period the most significant change was represented by the rise of the 45–54 years old population segment amounting to almost 400 000 people, corresponding to a 33% rise. Development within this category, for the first time the most numerous among active age population, depended on war and specifically 1946–1951 postwar numerous generations shift to a given age strip. On the contrary postwar natality wave shift to an older age led to an intense decrease of 35–44 years old population, the most numerous age group within productive age population in the early 90's, since during the last decade this age was being gradually reached by men and women born in the fifties and early sixties when natality was decreasing. In the second half of the nineties, due to the 70's numerous generations, the 25–34 years old age segment started rising again and at present, it represents the second most numerous productive age group. In the coming few years, one must expect their numbers to keep on growing while the whole natality wave will gradually reach above the 25-year limit. Almost throughout the nineties the smallest group on the job market showing merely minor year to year changes was the 55–64 years of age group. It was made of generations born during the thirties economic crisis. However in the late nineties this was a mere provisional phenomenon since stronger war generations started crossing over the lower limit of this category, thus total population number close to the end of economic activity and on the verge of retiring, started growing more significantly.

Figure 1.2: Number of Children and Youth according to Preschool and School Age Groups (1.1. of given year balance)

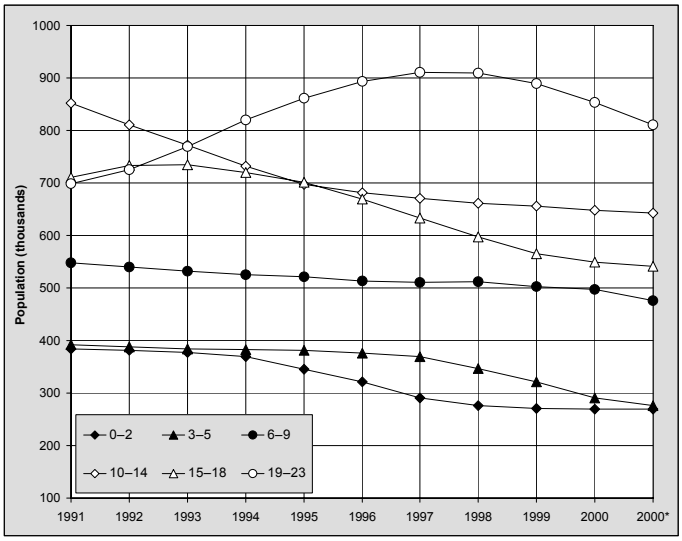
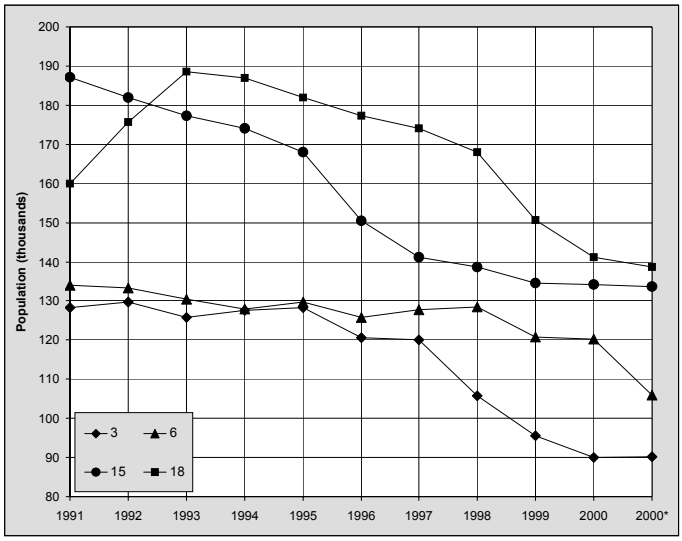


Figure 1.3: Number of Children in Selected Preschool and School Age Segments (1.1. of given year balance)



The 70's Demographic Wave Crest Shifted to 25–26 Years of Age

Generally a change in sex relations takes place in middle age. A biologically given slight preponderance of male babies, obvious from a higher representation of men as to women at a younger age, is gradually reduced due to male population segment higher mortality intensity throughout life and at approximately 45 years of age, women start prevailing within total population. This is a characteristic feature shared by all advanced countries. In our country, prior to 1990, women preponderance at middle and pre-retirement ages took on somewhat more specific forms due to more intensive male mortality in the 70's and 80's and more male emigration prior to 1989. In the nineties sharp sex differences as to mortality intensity moderately lessened thus female preponderance within the 45–59 age group decreased as well.

Table 1.6: Population at 20–30 years of age (thousands; as of 1.1. of given year)

Year	Age										
	20	21	22	23	24	25	26	27	28	29	30
	Men										
1991	73.9	70.8	67.5	67.9	69.1	72.1	75.9	72.8	65.3	64.4	63.6
1995	96.2	90.2	81.8	77.3	74.2	71.1	67.7	68.1	69.2	72.2	76.0
2000	86.0	88.8	90.4	92.9	95.1	96.4	90.5	82.2	77.8	74.7	71.7
2000*	77.4	85.9	88.7	90.4	92.9	95.1	96.4	90.5	82.2	77.9	74.8
	Women										
1991	70.7	67.4	64.8	65.0	66.1	69.2	72.3	70.1	63.1	62.0	61.0
1995	92.3	85.5	78.4	73.7	71.1	67.8	65.1	65.3	66.3	69.4	72.4
2000	82.0	85.3	87.0	89.5	92.3	92.8	86.1	79.0	74.3	71.7	68.2
2000*	73.3	82.0	85.3	87.0	89.5	92.4	92.9	86.2	79.1	74.4	71.7

Mortality level improvement in middle age translated as well into this age group widowed people decrease, specifically widows. However it did not lead to an increase in married population. On the contrary a decrease in married men and women percentages across all age groups till sixty years of age was recorded due to long term nuptiality rate decrease, continuous divorce increase and ever since the nineties repeated marriages intensity reduction. Consequently middle-aged single and divorced men and women percentages recorded a rising tendency. Within population total number the relatively most numerous divorcees belong to the 40–49 age group – up to 15% men and 17 % women in late 2000. We may assume that some of the latter live with partners in common-law marriages. Their total number will be better specified as well as young people informal marriages after 2001 census data processing.

In the nineties retiring age population age structure was marked by a gradual shifting thus leading to a weakening influence of the deep dent representing the unborn during WWI. During the first half of the nineties a temporary decrease of 75–79 years old population total number occurred while during the second half total number of older than 80 years of age population registered a gradual shrinking over several years. Among 70 years old total population those born during the twenties natality wave

gradually started to prevail though their numbers were affected by a higher mortality level in the 70's and 80's and much weaker generations born in the thirties were reaching 60–69 years of age, the latter significantly indicating a positive mortality development during the past decade. Consequently older population age structure did not change much: while sixty-year olds number and percentage kept on moderately decreasing, seventy-year olds number and percentage increased. Older than 80 population percentage within the postproductive age group as well as within population total number was relatively low due to above mentioned generation shifting and past high mortality level. For example in 2000, 80-year old and older population represented a mere 13.2% of above 60 population and 2.5% of total population. The 2000 change – more numerous generations from the 40's started reaching above the 60 years old limit and generations born in the 20's reaching the 80 years old one – due to life expectancy at an older age prolongation in the last decade, does indicate that our population is entering a period of renewed total increase in elderly population and in the eldest total number as well.

Table 1.7: Sex Ratio (female share per 100 men)

Year	Age Group							Total
	0–14	15–29	30–44	45–59	60–69	70–79	80+	
1991	95.3	95.7	98.4	105.6	129.8	165.4	240.7	106.1
1995	95.2	95.7	98.0	104.5	126.2	163.7	235.7	105.8
2001	94.9	95.8	96.7	103.4	121.1	161.7	236.2	105.3

1991 census, 1995 balance as of 1.1., 2001 census.

After reaching above the 60 years of age limit, when domestic male mortality intensity is already high, female preponderance starts to rise significantly and rapidly increases with age. In 2000, 100 men corresponded to 121 women within the 60–69 age group yet at over 80 years of age there were 234 women thus representing 70% of this age group total population. In the nineties elderly men and women total numbers discrepancy, specifically at the ages of 60–69, moderately decreased due to male high mortality decline at this age. In the early nineties female preponderance was even more striking in older age categories (at 60 years of age 100 men corresponded to 130 women). Besides long term significant differences in male and female mortality rates during the 1960–1986 period, female preponderance within elderly population during the nineties was a consequence of male war casualties and already mentioned, men greater percentage among emigrants during the 1948–1989 period.

Figure 1.4a: Shares of Married and at least Once Married Men according to Age, 1991 and 2000

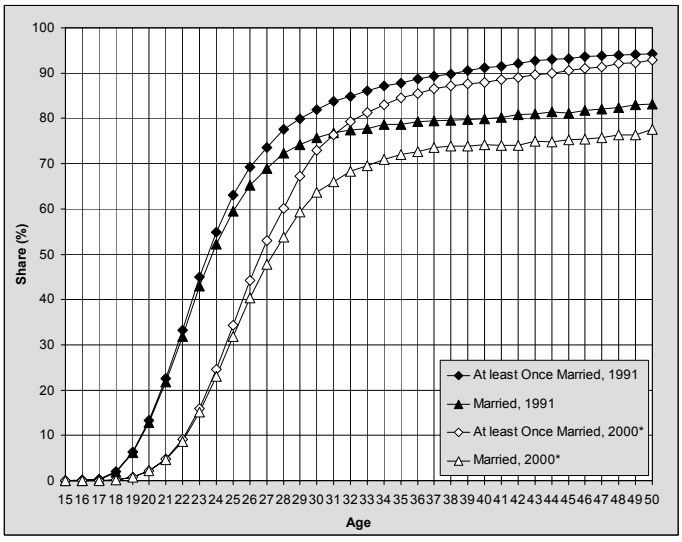
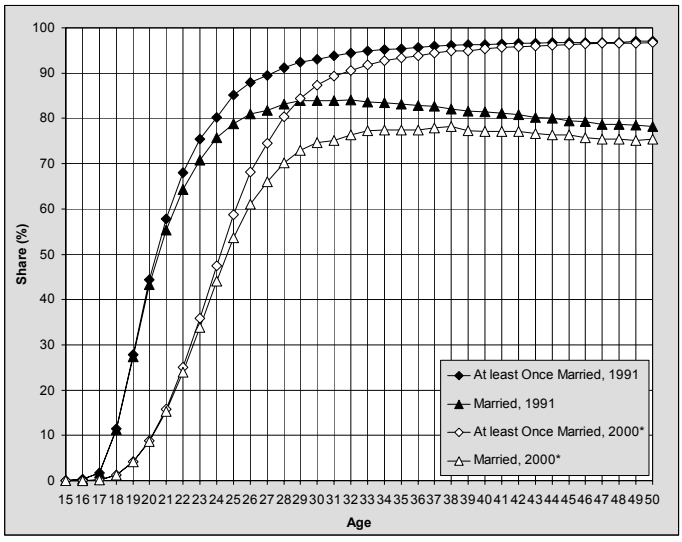


Figure 1.4b: Shares of Married and at least Once Married Women according to Age, 1991 and 2000



Higher female representation among the elderly is further reflected in composition according to family status. Differences according to sex are significant and increase at older ages. Even at an elderly age, men are preponderantly married while married women percentages rapidly decline and widow representation grows. Women indicate as well a higher percentage of divorcees. These considerable differences in elderly male and female structure according to family status are, apart from male high mortality, similar as to younger population, due to differences between spouses' ages (most women marrying older men) and a lower intensity of repeated marriages concluded by women. Even though widows preponderance remained substantial among elderly population, a powerful change occurred

Within Czech Population Married or Formerly Married Percentages Keep on Shrinking Until 60 Years of Age

in the nineties. Percentages of elderly men and women living within marriage (as opposed to younger age categories) increased primarily at the expense of a slump in widows percentage. On one hand it reflects improving mortality conditions within elderly population since the late eighties, the late fifties and early sixties high nuptiality rate influence and on the other hand these marriages low divorce intensity. Elderly divorced representation has moderately increased so far. Elderly married rising rate must be analysed as a positive phenomenon. Married life boosts the elderly quality of life from an economic and psychological point of view translating into a lower mortality and illness rate compared to that of unmarried ones. Mutual help and care in case of one partner's health problems are meaningful as well. Thus higher percentages of married persons contribute to lowering state, social and medical care expenses concerning the elderly. However this positive situation will again be modified due to singles rising rate. Generations counting a high percentage of divorcees are going to start reaching 60 years of age and above.

Table 1.8: Population over 60 Years of Age in Selected Years

Age Group	1991			1995			2000*			2001		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
	Population (thousands)											
60–64	535	241	294	503	230	273	472	219	253	473	220	253
65–69	507	212	295	478	203	274	439	193	246	435	191	244
70–74	260	103	157	417	162	256	408	165	244	406	164	242
75–79	278	100	178	176	63	113	326	116	210	324	115	209
80-84	175	55	120	185	59	126	131	42	88	133	43	90
85+	82	20	62	100	26	74	119	33	87	113	30	83
Total	1 837	731	1 106	1 859	743	1 116	1 895	767	1 129	1 884	763	1 121
	Population (%)											
60–64	29.1	33.0	26.6	27.1	31.0	24.5	24.9	28.5	22.5	25.1	28.8	22.6
65–69	27.6	29.0	26.7	25.7	27.3	24.6	23.2	25.1	21.8	23.1	25.0	21.7
70–74	14.2	14.1	14.2	22.4	21.8	22.9	21.5	21.5	21.6	21.6	21.5	21.6
75–79	15.1	13.7	16.1	9.4	8.5	10.1	17.2	15.1	18.6	17.2	15.1	18.7
80–84	9.5	7.5	10.8	10.0	7.9	11.3	6.9	5.5	7.8	7.0	5.6	8.0
85+	4.5	2.7	5.6	5.4	3.5	6.6	6.3	4.3	7.7	6.0	4.0	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Shares out of Total Population (%)											
60–64	5.2	4.8	5.5	4.9	4.6	5.1	4.6	4.4	4.8	4.6	4.4	4.8
65–69	4.9	4.2	5.6	4.6	4.0	5.2	4.3	3.9	4.7	4.2	3.8	4.7
70–74	2.5	2.1	2.9	4.0	3.2	4.8	4.0	3.3	4.6	4.0	3.3	4.6
75–79	2.7	2.0	3.3	1.7	1.3	2.1	3.2	2.3	4.0	3.2	2.3	4.0
80–84	1.7	1.1	2.3	1.8	1.2	2.4	1.3	0.8	1.7	1.3	0.9	1.7
85+	0.8	0.4	1.2	1.0	0.5	1.4	1.2	0.7	1.6	1.1	0.6	1.6
Total	17.8	14.6	20.8	18.0	14.8	21.0	18.5	15.3	21.4	18.4	15.3	21.4

1991 and 1995 – balances as of 1.1., 2000* balance as of 31.12., 2001 census.

During the nineties population composition according to family status was markedly transformed. Within adult population singles and divorced percentages and total numbers grew whereas married and widowed persons percentages and total numbers shrank. Age structure global aging linked to nuptiality behaviour and mortality rate fluctuations were reflected on older than 15 male and female average age increase according to family status. The most significant shift affected married women and men average age. First during the 1991–2000 period singles marriage age rose by more than 4 years, second elderly marriages lasted longer due to mortality intensity decrease. Unexpected widowers average age decrease was caused by structural influences within older than 70 population total number fluctuations. Population structure shifts according to age and family status corresponded to census households composition change – decrease of complete family households representation within society, ongoing rise of incomplete family households percentage and temporary slackening of former, sharp increase in elderly singles households.

Despite demographic aging spreading to all European countries (excluding Albania situated at a demographic development lower level), its intensity – measured according to older than 65 inhabitants percentage within total population – is distinctive in each country. First and foremost we find differences between advanced Western countries and former communist bloc countries. They are the outcome of a few factors. Elderly population lower percentages in postcommunist countries stem from the

demographic revolution delayed ending in most countries of this part of Europe (excluding the Czech Republic) and mostly from fertility and mortality distinct development during the second half of the 20th century. Since the mid-sixties fertility rate in Western Europe has continuously decreased within the frame of the second demographic transition under sheer reproduction limit and concurrently mortality rate at middle and older age has gradually dwindled thus leading to accelerated population aging. On the contrary in Eastern bloc countries a so-called Eastern European reproduction pattern originated: total fertility stabilised at approximately 2 children per woman and mortality rate either stagnated or worsened, thus due to both factors aging developed at a mere slow pace. Even in the nineties when a reproductive conditions transformation occurred in these countries, mainly regarding fertility rate significant decrease, the elderly percentage within population still remained relatively low due to a long term, continuously worse mortality situation compared to other advanced countries, and the fact that fertility rate decrease has been going on for a relatively short time and has not yet significantly emerged within age structure. These past few years have seen the most intensive aging process specifically in Southern European countries. Even though the second demographic transition started there later than in Northern and Western Europe (not till the late 70's) its fertility rate slump occurred faster and deeper. Children percentage within population started to ebb and senior citizens percentage is sharply rising due to improved mortality rate. For example, Italy counting 18.2% older than 65 years of age population overtook in the late 20th century the hitherto traditionally, demographically oldest European country, Sweden. Swifter population aging in Germany and Austria – countries with a long term, low natality rate – has been hindered by another factor applied to age structure formation, intensive immigration. Immigration rejuvenating influence can be traced in France as well where total fertility rate has furthermore indicated a more moderate decrease. Compared to the Czech Republic senior citizens lower percentages in Poland and Slovenia ensue from their long term, higher fertility and mortality levels still maintaining relatively high children strata percentages and low elderly percentages within their population.

Figure 1.5: Population Older than 60 Years of Age

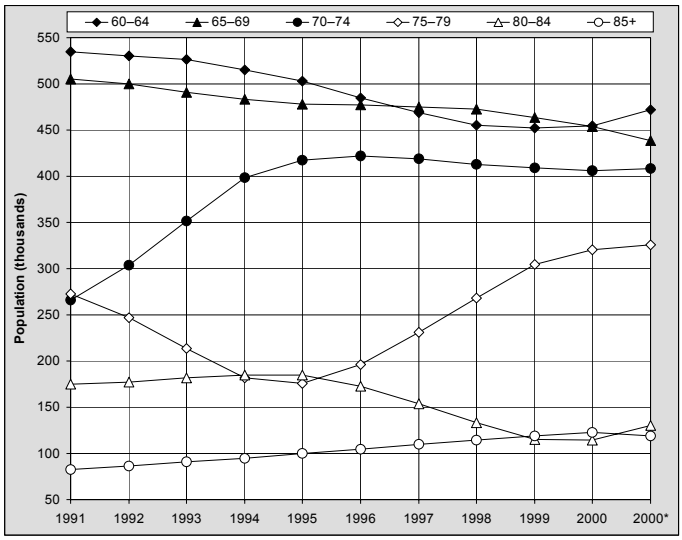


Table 1.9: Population over 15 Years of Age according to Family Status

Family Status	Men				Women				Men		Women	
	1991	1995	2000*	2001	1991	1995	2000*	2001	1991	2000*	1991	2000*
	Population (thousands)								Average Age			
Single	973	1 096	1 251	1 258	668	779	922	920	25.3	26.6	25.2	25.3
Married	2 545	2 525	2 432	2 371	2 549	2 527	2 430	2 373	46.8	49.8	43.7	46.9
Divorced	241	281	350	352	330	375	455	459	46.0	46.8	47.2	48.5
Widowed	127	120	110	122	695	682	652	663	71.4	70.8	70.2	71.4
Total	3 886	4 022	4 143	4 133	4 242	4 363	4 459	4 442	42.2	43.1	45.5	46.2
	Population (%)								2000*–1991 Difference			
Single	25.0	27.2	30.2	30.6	15.7	17.9	20.7	20.8	5.2		5.0	
Married	65.5	62.8	58.7	57.8	60.1	57.9	54.5	53.8	–6.8		–5.6	
Divorced	6.2	7.0	8.4	8.6	7.8	8.6	10.2	10.4	2.2		2.4	
Widowed	3.3	3.0	2.7	3.0	16.4	15.6	14.6	15.0	–0.6		–1.8	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	–		–	

1991, 1995 – balances as of 1.1., 2000* balance as of 31.12., 2001 census (56 514 persons of undetermined family status).

Table 1.10: Population over 65 Years of Age in Selected European Countries (as of 1.1. of given year; %)

Country	1991	1995 (1996)	2000 (2001)	Country	1991	1995 (1996)	2000 (2001)	Country	1991	1995 (1996)	2000 (2001)
Czechia	12.6	13.3	13.8	Poland	10.1	11.2	12.3	France	14.6	15.2	16.1
Slovakia	10.3	10.9	11.5	Germany	15.4	15.7	16.3	Sweden	18.0	17.5	17.2
Hungary	13.4	14.2	14.7	Austria	15.2	15.0	15.5	Italy	14.6	16.4	18.2

During the 1990–2000 period, the Czech Republic population age structure registered a noteworthy stabilization at the top of the age pyramid, a deep notch at its base and an increase of population representation at economic activity age. From macroeconomic perspective it was a favourable state,

The Czech Republic Is on the Threshold of Long Term Population Aging

productive population being relatively moderately burdened by dependants. However late development had already foretold major, unavoidable age structure changes. Within the next few years (according to forecasts in 2007) this period will come to an end under the influence of numerous postwar generations transition into retirement age. Total number of retirees will begin to rise sharply whereas total number of productive age population will ebb. According to demographic forecasts research findings, one is to expect that in 2010 almost 2 400 000 persons will be older than 60 and their percentage within population will rise from 18% at present to 23%. Senior citizens total number increase will be enabled by further life expectancy rise onto an older age. Total number of postproductive age dependants per person at economically active age will sharply rise even in the case of further retirement age increase. The most intensive rise within the frame of the elderly population will concern highest age groups, persons who represent a significant group in terms of higher family, social and medical care demands. Thanks to present, sharp natality rate slump and further expected, positive mortality development the Czech Republic will gradually rank among the first from the aging process level perspective.

Table 1.11: Population Older than 15 Years of Age according to Age Groups and Family Status

Age Group	Total (thousands)	Men – Family Status (‰)															
		Single				Married				Divorced				Widowed			
	2001	1991	1995	2000*	2001	1991	1995	2000*	2001	1991	1995	2000*	2001	1991	1995	2000*	2001
15–19	349	985	992	998	998	15	8	2	2	0	0	0	0	0	0	0	0
20–24	431	667	741	903	909	320	247	92	86	13	12	5	5	0	0	0	0
25–29	442	275	319	532	547	680	623	423	408	44	57	45	45	1	1	0	0
30–34	351	152	170	231	249	775	745	660	647	72	84	108	103	1	1	1	1
35–39	351	107	120	142	152	795	772	722	717	95	105	134	129	3	3	2	2
40–44	342	79	92	111	115	808	782	737	734	107	121	147	146	6	5	5	5
45–49	394	63	70	88	89	821	799	752	749	106	121	151	153	10	10	9	9
50–59	708	50	52	60	59	843	829	793	788	83	97	127	131	24	22	20	22
60–69	411	43	40	39	40	825	830	832	820	57	61	71	78	75	69	58	62
70–79	279	37	38	33	34	723	754	775	750	40	43	42	49	200	165	150	167
80+	73	34	33	35	30	502	548	637	543	24	24	20	33	440	395	308	394
Total	4 133	250	272	302	306	655	628	587	578	62	70	84	86	33	30	27	30

Age Group	Total (thousands)	Women – Family Status (‰)															
		Single				Married				Divorced				Widowed			
	2001	1991	1995	2000*	2001	1991	1995	2000*	2001	1991	1995	2000*	2001	1991	1995	2000*	2001
15–19	334	927	958	991	992	72	42	9	8	1	0	0	0	0	0	0	0
20–24	413	351	485	762	771	616	485	225	214	32	29	13	15	1	1	0	0
25–29	423	109	139	315	320	817	772	608	599	70	85	74	78	4	4	3	3
30–34	336	57	68	108	108	839	817	749	746	95	107	136	139	9	8	7	7
35–39	338	41	45	60	61	825	811	769	765	117	128	158	160	17	16	13	14
40–44	335	35	37	44	44	808	793	763	761	127	142	169	170	30	28	24	25
45–49	396	32	32	36	36	790	779	752	749	123	139	171	172	55	50	41	43
50–59	744	28	29	30	30	736	737	726	721	97	111	143	145	139	123	101	104
60–69	497	34	28	25	24	533	555	592	583	77	83	93	96	356	334	290	297
70–79	452	42	37	29	30	261	299	330	312	51	63	73	74	646	601	568	584
80+	173	56	47	38	37	84	94	113	82	32	36	42	50	828	823	807	831
Total	4 442	157	179	207	208	601	579	545	538	78	86	102	104	164	156	146	150

1991, 2001 censuses (shares of persons of determined family status), 1995 balance as of 1.1., 2000* balance as of 31.12.

NUPTIALITY

2

For The Past Eight Years Nuptiality Has Stabilized at a Low Level

Demographic behavior in the Czech Republic, even into the late 80's, was a display of the communist regime conservative tendencies during the past 40 years. The post-war majority age lowering from 21 to 18 years of age, the political regime continuity and dictatorship linked to the low pressure set on education final level (foremost priority given to blue-collar jobs), the limited opportunity for individual self-realisation, narrow access to contraception, priority of attributing flats to families, newlyweds loans (from 1973 on) and additional material and financial advantages granted to married couples through full employment created a framework for a standard and unified nuptial behaviour. This was demonstrated on one hand by a high rate of registered marriages (90–95% of men and 96–97% of women) and concurrently by a young age at marriage conclusion (during the 1961–1988 period average female first marriage age range was within 21.4 and 21.8 while average male age was within 24.2 and 24.9). Former Czechoslovakia belonged to countries with the earliest bridal marriage age, 9–12% of single women contracting marriage before the age of 18 (as to only 1–2% of single men) but also with the highest number of marriages contracted on the basis of bridal pregnancy (so-called premarital conception). Generally good access to divorce and relative social acceptance of divorced persons strongly influenced the final percentage of young people who, at least once in their lifetime, contracted first marriages and second ones regarding divorced or widowed people. Within the frame of the former communist bloc the above-mentioned pattern of our nuptial behaviour was not a specific exception since the mere reality of "real socialism" did not actually provide any other opportunities for self-realisation.

Although the numbers of registered marriages drastically changed during the 1960–1989 period (specifically due to the extent of marriageable population and some pro-family measures), characteristics of an early and frequent nuptiality were maintained throughout the whole period. Furthermore there was an obvious relation between nuptial age and education, as well as residence or nationality, since low educated, rural male and female and non-Czech population (specifically concerning Slovaks or Romanies) would enter marriage earlier. The quest for self-realisation and main family roles (specifically regarding women) were undisputed, that is why the term "family golden age" was more than symptomatic for this specific period. Later it would particularly denote the post-1968 so-called normalization period when a return to family values would palliate for hundreds of thousands their inability to reach self-fulfilment in public life.

Table 2.1: Nuptiality 1989–2000

Indicator	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Number of Marriages[1]	81 262	90 953	71 973	74 060	66 033	58 440	54 956	53 896	57 804	55 027	53 523	55 321
Crude Nuptiality Rate[1]	7.8	8.8	7.0	7.2	6.4	5.7	5.3	5.2	5.6	5.3	5.2	5.4
First Female and Male Marriages												
Number of Marriages	55 958	65 116	49 778	51 883	46 107	39 538	36 756	35 544	36 866	35 896	34 927	36 228
Share of Total Marriages (%)	68.9	71.6	69.2	70.1	69.8	67.7	66.9	65.9	63.8	65.2	65.3	65.5
Single Male Marriages to Divorced or Widowed Females												
Number of Marriages	6 587	6 727	5 708	5 710	5 212	4 836	4 751	4 913	5 589	5 093	4 892	5 132
Share of Total Marriages (%)	8.1	7.4	7.9	7.7	7.9	8.3	8.6	9.2	9.7	9.3	9.1	9.3
Divorced or Widowed Male Marriages to Single Women												
Number of Marriages	6 779	7 243	5 970	6 113	5 343	5 103	4 923	5 033	5 516	5 240	5 189	5 300
Share of Total Marriages (%)	8.3	8.0	8.3	8.2	8.1	8.7	9.0	9.3	9.5	9.5	9.7	9.6
Bilateral Subsequent Marriages												
Number of Marriages	11 938	11 867	10 517	10 354	9 371	8 963	8 526	8 406	9 833	8 798	8 515	8 661
Share of Total Marriages (%)	14.7	13.0	14.6	14.0	14.2	15.3	15.5	15.6	17.0	16.0	15.9	15.6

[1]2001 preliminary data: number of marriages – 52 374, Crude Nuptiality Rate – 5.1‰.

The November 1989 political upheaval did not merely open the way to democracy for the people of the Czech Republic but to new individual opportunities and goals as well. Its aftermath also led to a modified social climate and the newly established market economy frame gradually weakened general

family support. The January 1, 1991 cancellation of advantageous newlyweds loans and reduction of compulsory military service drastically affected the 1990 total marriage rate, the total number of registered marriages (90 953 i.e. almost 10 000 more than in 1989) approaching the early 70's rate. This identical indicator 1991 decline was the obvious compensatory effect of the above-mentioned administrative measure. Since 1992 when the total number of registered marriages rose above the 74 000 limit (even though by comparison with the 1989 rate it decreased by almost 9%), a definitely decreasing tendency of registered marriages total number appeared. The latter challenged the indicator's much awaited growth resulting from the 70's natality wave numerous young singles reaching the so far most intensive marriage rate age. The 1997 marriage rate slight slump seemed to reveal a reverse expectation though the following year and particularly the 1999 marriage rate totally refuted it. Thus in 1999 total marriage rate reached its lowest level in all our population evolution history. As in 1996 it fell below the 54 000 marriages limit though the 1999 rate (53 523 marriages) denoted an absolute minimum; by comparison with 1989 it meant a decrease of approximately one third (34%). The 2000 total marriage rate rise of 1800 remains within registered marriages total number oscillating values of the past 6 years, the 53 000–58 000 annual total marriage rate limits indicating the early 70's still hesitating generations marriage behaviour.

The 1989–2000 dynamic monthly distribution of registered marriages reveals two fundamental features: the first one related to marriages total number decrease bears no influence on the comparative proportional representation and the second one reflects the ever-increasing preference of contracting marriage during the early April to late September period (obviously excluding May). In 2000 more than half of marriages total number (52%) took place between June and September. This frequently elected wedding alternative during "warm" months is definitely linked to the greater travel opportunity thus of seaside honeymoons abroad.

Table 2.2: Registered Marriages Monthly Distribution in Selected Years (%)

Year	January	February	March	April	May	June	July	August	September	October	November	December
1989	4.8	5.6	8.3	13.4	2.3	11.5	8.9	7.5	12.1	9.5	8.7	7.2
1995	4.6	5.2	7.6	13.7	2.2	13.5	9.7	8.4	13.3	8.9	7.3	5.5
2000	3.4	4.7	6.4	11.6	3.0	15.1	11.6	10.0	15.3	8.4	5.8	4.8

Registered marriages total number decrease during this specific period caused an adequate decline of the crude marriage rate. Therefore minimum values (5.2‰) reached in 1996 and 1999 as well as 5.1‰ in 2000 are not surprising, representing again almost a two thirds level of the 1989 identical indicator.

Marriage Contracting according to Family Status Has Not Significantly Changed

Decrease in nuptiality intensity is primarily due to drop in singles registered marriages. While in 1989 56 000 singles registered marriages represented 69% of all registered marriages, in 2000 this percentage was lowered to 65.5%, even though it had started to steadily increase ever since 1997 when it reached its minimum. However marriages contracted by singles are still the most widespread among women under 30 years of age and men under 35 years of age. An increased number of previously divorced partners contracting marriage occur past this age limit. Furthermore this feature corresponds to age structure interpretation according to family status at a specific age when cohorts older than 30, respected and still reproduced the late 80's demographic behaviour "old" pattern. The percentage of unilateral repetitive marriages according to sex is almost identical (9.3% of single men married divorced or widowed partners and so did 9.6% single women) even though within a time frame comparison its rise in relation to 1989 is evident. In 1997, an increase in registered marriages of divorced partners even led to a global rise in marriage intensity. Bilateral subsequent marriages have represented almost 16 out of 100 registered marriages since 1997 when their number gradually started to decrease.

Its cause seems to be rooted at a rational level: the decision to remain in an open relationship with a new partner thus keeping specific social benefits guaranteed by the state (such as widow pension, financial support granted to self-supportive mothers etc), seems a financially more profitable alternative to a legalised marriage. At a certain age and according to social status, the accommodation issue is no longer relevant (as opposed to younger couples) particularly due to the fact that in most cases, the mother and her child (or children) remain in the former family flat.

The lack of financially affordable flats on the market is mainly responsible for the absence of a more widespread young couples common marriage cohabitation or household sharing. Sociological surveys have confirmed that the majority of unmarried couples are economically active, relying on their income to cover their shared living expenses. As opposed to divorced or widowed partners, young couples

do plan on a future legalization of their current shared living arrangements by getting married and according to population census sources consider household sharing as a step towards marriage – a so-called "trial-marriage". They sometimes base their reasons for eventually getting married on the female partner's pregnancy or on having reached a certain, providing level for their future family after childbirth within marriage. Czech society liberal attitude towards premarital conception within long-term relationships shows tolerance regarding unmarried couples. Their occurrence is more frequent amidst urban housing estates anonymous environment, in mainly industrial regions (Northern Bohemia and Ostrava region) and among non-religious citizens. On the contrary this type of shared living pattern is poorly represented in rural Christian southern Moravia. Though the range of common law marriages is widening, indicated as well by the increase of children born out of wedlock total number and percentage, one cannot consider it as a significant cause for total marriage number decrease.

Table 2.3: Unmarried Couples[1] according to Age and Family Status in the Czech Republic in 1999

Partners Family Status	Composition (%)	Duration (years)	Age Group	Composition (%)	Duration (years)
Single	54.3	3.0	18–29	48.9	2.3
Divorced	41.0	6.5	30–49	32.4	5.3
Widowed	4.7	.	50–69	18.7	9.4
Total	100.0	4.5	Total	100.0	4.5

[1]Unmarried couples represented 5.8% of all households.
Source: 10 Years of Social Transformation in the Czech and Slovak Republics (in Czech), 1999.

Nuptiality decrease rate in the last decades of the 20th century was mainly due to the reduction of nuptiality intensity regarding singles younger than 25 years of age even though within the frame of population climate analysis, young people still attach a great importance to family. First and foremost this was caused by a change in cultural and moral patterns in a liberated society but with a still limited level of consumption. While deciding upon contracting marriage and founding a family young people require a solution to certain economic issues (securing an appropriate flat or house, a financial income from a steady job, a lowering of risks regarding unemployment) as well as a certain level of self-fulfilment (particularly regarding education and travelling) since by getting married they will have to give up or even curb some of these values. Taking into account that in the 90's an environment fostering individualism growth and favouring social success was gradually created within the existing social frame, fulfilling family values was often delayed to a future time. The question whether long-term marriage postponement will turn into its rejection, remains open. The pattern of early and repetitive nuptiality (as pertaining to communist regime times) does not occur in economically advanced countries and it is highly possible that it will no longer apply to the Czech Republic population.

Total Marriage Rate Decrease Is a Significant Feature of Demographic Behaviour Change

Figure 2.1a: Single Men Marriage Probability

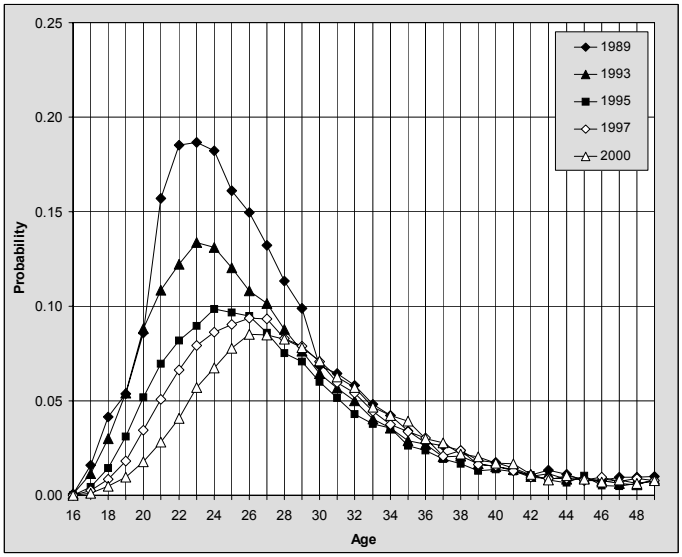
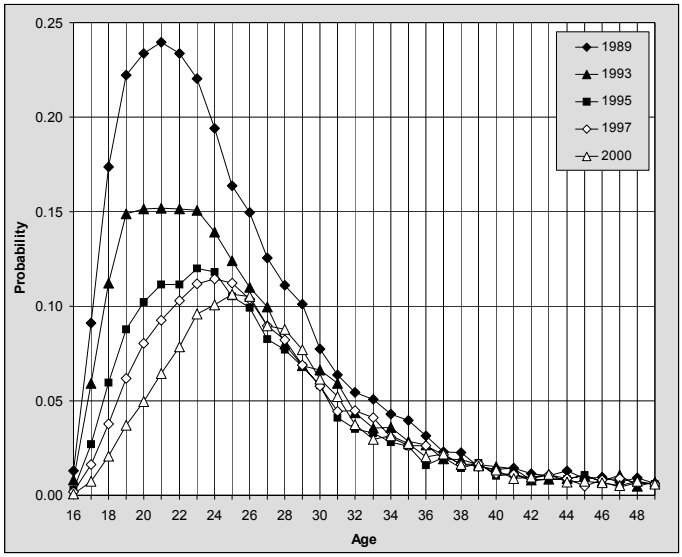


Figure 2.1b: Single Women Marriage Probability



Data concerning changes in married women first-born children natality rate indicate that marriage is less delayed by two groups of women: first of all already pregnant women (though the percentage of premarital conception first-born children is constantly decreasing) and women expecting to reach their main life fulfilment through childcare (that is also why considering 100 first-born children to married couples there are 90 second-order children). Women who do not long for children or do not

want to bear any due to personal or career growth often delay their getting married. They do not have to get married to have a sexual life.

New features of marriage behaviour pertaining to the Czech Republic population during the 90's led to a change in chart configuration of singles marriage probability according to age: continuous long-term decrease in singles nuptiality intensity caused its flattening out and marriage postponement onto an older age within a greater age range eventually appeared in maximum probability values position and "sharpness" change. The different quantitative nature of pre- and post-November 1989 marriages is obvious when comparing maximum values of first marriages indicator in 2000 and 1989, when single men marriage probability was only between 26 and 27 years of age and its value reached 0.085 (as far as single women were concerned the maximum value was reached at 25 years of age at a level of 0.106). The then 0.150 and 0.132 values concerning men and 0.164 regarding women give evidence of the 1989 probability chart configuration nature and position as well as 2000 maximum values and of the general nature of marriage intensity decrease.

Table 2.4: Single Partners Marriage Probability

Age	Men					Women					2000–1989 Difference		2000–1989 Change (%)	
	1989	1993	1995	1997	2000	1989	1993	1995	1997	2000	Men	Women	Men	Women
16	0.001	0.001	0.000	0.000	0.000	0.013	0.008	0.003	0.002	0.001	–0.001	–0.012	–98.4	–94.2
17	0.016	0.011	0.004	0.003	0.001	0.091	0.059	0.027	0.016	0.008	–0.015	–0.083	–92.1	–91.7
18	0.041	0.030	0.015	0.009	0.005	0.174	0.112	0.060	0.038	0.021	–0.036	–0.153	–88.0	–8(.1
19	0.054	0.054	0.031	0.018	0.009	0.222	0.149	0.088	0.062	0.037	–0.045	–0.185	–82.3	–83.4
20	0.086	0.088	0.052	0.034	0.018	0.234	0.151	0.102	0.080	0.050	–0.068	–0.184	–79.5	–78.7
21	0.157	0.108	0.070	0.051	0.028	0.240	0.152	0.111	0.093	0.064	–0.129	–0.176	–82.0	–73.1
22	0.185	0.122	0.082	0.066	0.041	0.234	0.151	0.112	0.103	0.078	–0.144	–0.156	–78.0	–66.5
23	0.187	0.134	0.090	0.079	0.057	0.220	0.151	0.120	0.112	0.096	–0.130	–0.124	–69.5	–56.5
24	0.182	0.131	0.098	0.086	0.068	0.194	0.139	0.118	0.114	0.101	–0.114	–0.093	–62.9	–48.0
25	0.161	0.120	0.097	0.091	0.078	0.164	0.124	0.105	0.112	0.106	–0.083	–0.058	–51.7	–35.1
26	0.150	0.108	0.095	0.094	0.085	0.150	0.110	0.099	0.104	0.105	–0.065	–0.045	–43.2	–29.6
27	0.132	0.102	0.086	0.093	0.085	0.126	0.100	0.083	0.089	0.090	–0.047	–0.036	–35.8	–28.8
28	0.113	0.088	0.075	0.083	0.083	0.111	0.080	0.077	0.082	0.088	–0.030	–0.023	–27.2	–21.0
29	0.099	0.076	0.071	0.079	0.078	0.101	0.068	0.068	0.069	0.077	–0.021	–0.024	–21.1	–23.8
30	0.069	0.064	0.060	0.071	0.071	0.077	0.066	0.058	0.058	0.061	0.002	–0.016	3.5	–20.6
31	0.064	0.057	0.051	0.060	0.062	0.064	0.059	0.041	0.044	0.052	–0.002	–0.012	–3.1	–17.9
32	0.058	0.050	0.043	0.054	0.057	0.055	0.044	0.035	0.045	0.038	–0.001	–0.017	–2.0	–31.2
33	0.048	0.040	0.038	0.044	0.047	0.051	0.035	0.033	0.041	0.030	–0.001	–0.021	–3.3	–41.7
34	0.042	0.036	0.036	0.037	0.042	0.043	0.036	0.028	0.031	0.031	0.000	–0.012	0.0	–26.9
35	0.034	0.029	0.026	0.034	0.039	0.040	0.028	0.026	0.026	0.027	0.005	–0.013	15.0	–30.9

Since 1993 singles marriages decreasing number in parallel with singles increasing percentage within the population led to singles marriage probability decrease across almost the whole age range until 2000. The most significant decrease (more than 90% for men and women) occurred within the youngest age group i.e. till 18 years of age but marriage intensity regarding men of up to 25 and women of up to 23 fell below half of its 1989 level. The expected rise in singles marriage intensity to an older age has still not been clearly revealed; on the contrary since 1999, marriage probabilities concerning persons older than 25 years of age have more or less stabilized though at a much lower level than in 1989. In the last selected year a slight turning point is noticeable regarding relatively "old" 34–37 year-old men and specifically 28–31 year-old women (who contracted marriage with a slightly greater probability than in 1999). Subsequent years will show whether this is a mere carrying out of "postponed" marriages.

Decrease of First Marriage Intensity Leads to Singles Percentage Hypothetical Increase up to 25–30%

The absence of older age probability compensatory growth clearly shows from a transversal approach a total first marriage rate decrease. If nuptiality conditions and its 1989 rate were maintained, first marriages would have been contracted by more than 89% men and 95% women in 2000 yet total hypothetical first marriage rate did not even reach the 70% for men and 75% for women limit. This means that within the population more than 30% men remained single and so did 25% women. Taking into consideration that an absolute majority of children (76% in 2000) are still born to married families, it is probable that more than one fourth of "still singles" markedly influences the Czech Republic natality rate. Postponing marriage to an older age directly affects average age at first childbirth and the decision regarding children final number since older mothers present more health problems thus objectively influencing the very number of born children. From this point of view it is

noteworthy to study first marriages rate at a specific age since it indicates a lot as to individual steps timing in family planning. According to charts interpretation first marriage rate global tendency at a chosen age is obvious: following a somewhat stabilized period during the second half of the 80's, first came a slight increase caused by above-mentioned conditions due to advantageous newlyweds loans cancellation ensued by a sharply decreasing tendency of registered marriages percentages development. The total first marriages rate decline corresponds to probability changes in singles registered marriages in individual age groups, i.e. most evident in precocious and early table marriages shares ebbing, accompanied by marriage intensity at an older age complete shrinking as well. By comparison with 1989 when already almost 11% of men and even more than 42% of women had acquired married family status by the age of 20 (based on simple decrement nuptiality tables), in 2000 registered marriages percentages reached less than 2% for men and 6% for women of the same age. During the late 80's highest natality period, i.e. until 25 years of age, almost 63% single men (total first marriage rate being 89%) and almost 84% women (single women aged up to 50 total marriage rate being 95%) contracted marriage; at the end of the second millennium their percentages slumped down to almost 21% concerning men and 38% women.

Figure 2.2a: Percentages of Men Contracting First Marriage at a Given Age (nuptiality table data)

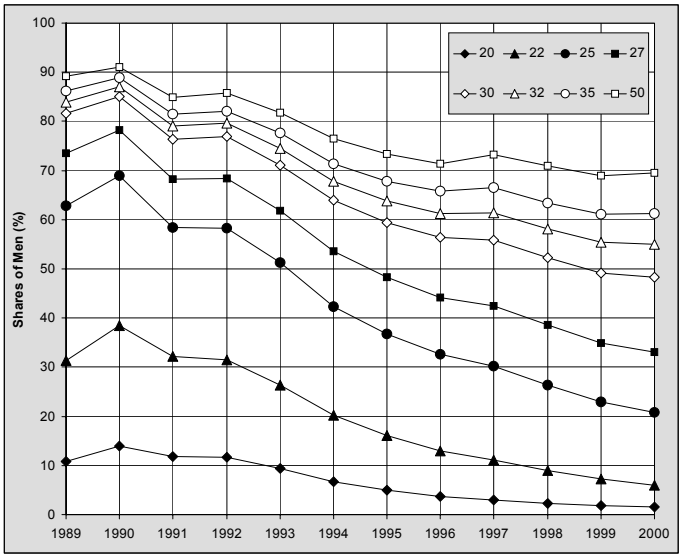
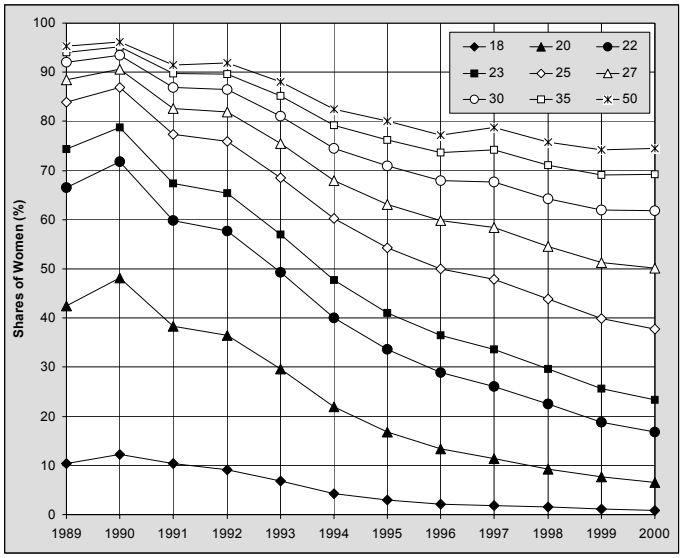


Figure 2.2b: Percentages of Women Contracting First Marriage at a Given Age (nuptiality table data)



Neither future spouses social structure nor their education background according to age is known. Yet research results assume that more frequently early marriages are mainly contracted by persons having reached a lower level of education belonging to the lowest and sometimes average income group, living in rural areas or in smaller towns.

Future Spouses Average Age at First Marriage Keeps On Rising Though Still Remaining below Western Countries Level

Compulsory education one-year extension, secondary school students increase, higher specialised education development as well as university students and graduates increment represent objective and significant factors of the 90's, causing young people to postpone marriage to an older age. If we take into account additional years spent language learning abroad to gain presently more and more expected foreign language skills, job-training and the time needed to secure an optimal work position providing financial independence, maximum nuptial intensity age (27 for single men and 25 for single women) is a logical compromise. The need for unskilled jobs was drastically reduced by the new economic and social order thus specifically uneducated and unskilled young people have a very slim chance of getting a steady job jeopardizing their acquiring material conditions needed to found a family. The impossibility of finding one's own residence or job – even temporarily or concerning only one partner – often lead to further marriage delaying. Self-fulfilment opportunities on one hand and securing a certain living standard on the other hand compel responsible young people to postpone their decision to contract marriage. The present first marriage average age (calculated on the basis of singles nuptiality tables) reached almost 29 years of age for men and 26.5 for women. Contrary to 1989 it is a 4.3 increment for men and 4.6 for women since average age continuously rose from year to year throughout this period (except in 1990). This tendency went on in 2001 as well. A similar developing pattern was that of the age median (the age at which exactly half of all persons hypothetically contract marriage according to marriage intensity conditions of a given year) which rose from 23.6 (1989 value) for men to almost 29 in 2000; as far as women are concerned the specific indicator last researched value (25.4) denoted a difference of 4.5 years as compared to 1989. Furthermore the quartile values position

combined with the inter-quartile difference support nuptial age rising variability. Thus a greater differentiation of nuptial behaviour is confirmed as well as the former even pattern complete disappearance. Nuptial age shift in median values of nuptial age demonstrates that young people are very likely to contract marriage once they have already been engaged in economic activity thus freeing themselves from direct parental influence and lessen the latter opinion as to their choice of partner. Future spouses age difference has slightly narrowed down and remains stable (2.2–2.4 years).

Table 2.5: Recapitulative Indicators and Features of Singles Marriage Timing

Sex	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	Total Period First Marriage Rates[1]											
Men	89.2	91.1	84.9	85.8	81.8	76.5	73.3	71.4	73.2	70.9	68.9	69.6
Women	95.3	96.2	91.5	91.8	88.0	82.5	80.0	77.1	78.7	75.8	74.3	74.5
	Cumulative First Marriage Frequencies[2]											
Men	87.6	100.9	76.9	78.6	68.1	56.8	52.0	49.7	51.4	48.9	46.9	48.4
Women	91.4	103.1	76.3	76.7	65.4	54.8	50.5	48.6	50.4	48.8	47.7	49.7
	Average Age at Marriage[1]											
Men	24.6	24.0	24.7	24.8	25.4	26.2	26.7	27.1	27.6	28.1	28.5	28.9
Women	21.8	21.4	22.2	22.5	23.2	23.9	24.6	24.9	25.4	25.8	26.2	26.5
	Single Persons Having Contracted Marriage Below Average Age at Marriage (%)[1]											
Men	74.2	75.3	73.1	73.2	71.9	70.9	70.1	69.3	69.1	68.8	68.2	68.4
Women	76.6	77.8	75.1	74.6	73.3	72.5	71.3	71.1	70.8	70.5	70.4	70.2
	Lower Quartile of Table Marriage Distribution											
Men	21.8	21.3	21.5	21.6	21.9	22.4	22.8	23.3	23.7	24.1	24.5	24.9
Women	19.4	19.2	19.4	19.5	19.9	20.4	20.9	21.3	21.7	22.0	22.5	22.8
	Median Age at Marriage											
Men	23.6	23.1	23.5	23.6	24.2	24.9	25.5	26.0	26.5	26.8	27.4	27.8
Women	20.9	20.5	21.1	21.3	21.9	22.7	23.4	23.8	24.3	24.7	25.1	25.4
	Upper Quartile of Table Marriage Distribution											
Men	26.2	25.4	26.4	26.6	27.4	28.4	29.1	29.6	30.2	30.8	31.3	31.6
Women	23.1	22.5	23.7	24.1	25	25.9	26.7	27.1	27.7	28.3	28.5	28.8
	Inter-quartile Difference											
Men	2.2	2.1	2.5	2.5	2.8	3.0	3.2	3.2	3.3	3.3	3.4	3.3
Women	1.9	1.7	2.2	2.3	2.6	2.8	2.9	2.9	3.0	3.2	3.0	3.0

[1]Calculation according to nuptiality tables; [2]Calculation according to single marriage frequencies – data used in international comparative studies.
[3]2001 preliminary results: Total Period First Marriage Rates – men 65.4%, women – 72.3%; average age at marriage – men 29.3, women 26.9.

Table 2.6: Marriageable Population according to Age and Sex (as to January 1st of given year)

Year	Men						Women					
	Single			Divorced and Widowed			Single			Divorced and Widowed		
	20–24	25–29	30–34	20–24	25–29	30–34	20–24	25–29	30–34	20–24	25–29	30–34
	Persons (thousands)											
1989	241	92	56	4	14	29	117	33	20	10	22	39
1993	253	103	51	5	18	25	140	40	19	12	27	33
1995	311	111	58	5	20	29	194	46	22	12	30	38
1997	368	136	66	5	22	35	259	62	26	11	33	44
1999	398	178	72	4	23	39	305	90	30	9	35	48
2000	401	208	75	3	21	38	318	112	32	7	33	48
2001	389	239	87	2	20	36	316	134	36	6	34	49
	Out of One Thousand Persons in Given Age Group											
1989	677	273	144	12	42	76	344	104	52	28	69	103
1993	681	286	158	13	50	76	393	117	61	32	79	106
1995	741	319	170	12	58	86	485	139	68	30	89	115
1997	806	378	184	11	62	99	592	180	76	26	95	130
1999	859	449	202	8	58	109	684	238	88	20	92	142
2000	884	493	214	6	50	108	728	276	97	15	83	142
2001	909	552	249	5	46	104	771	320	108	15	81	146
	2001–1989 Difference (points)											
Difference	232	279	105	–7	4	28	427	216	56	–13	12	43

2001 census data (1.3.2001)

Singles nuptiality intensity long-term decline is the main cause for population structure change according to family status. The outcome of marriage postponement to a later time, possibly linked to an eventual rejection of marital ties, transpires in the growth of singles percentages and vice versa in married men and women percentages decrease in population. Whereas within 1989 real population 30-year olds represented approximately 17% of single men and 6% of single women, their total number in 2000 reached above the limit of 30% for men and 14% for women. The whole situation is due to the generation born during the 70's natality wave extreme number who is now 25–29 years old and has postponed marriage so far.

Figure 2.3a: Percentages of 16–35 Years Old Single Men at Given Age (as to January 1st of given year)

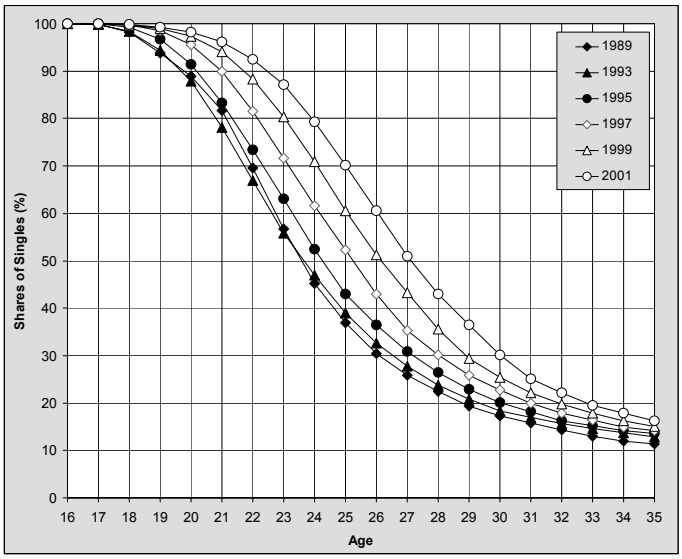
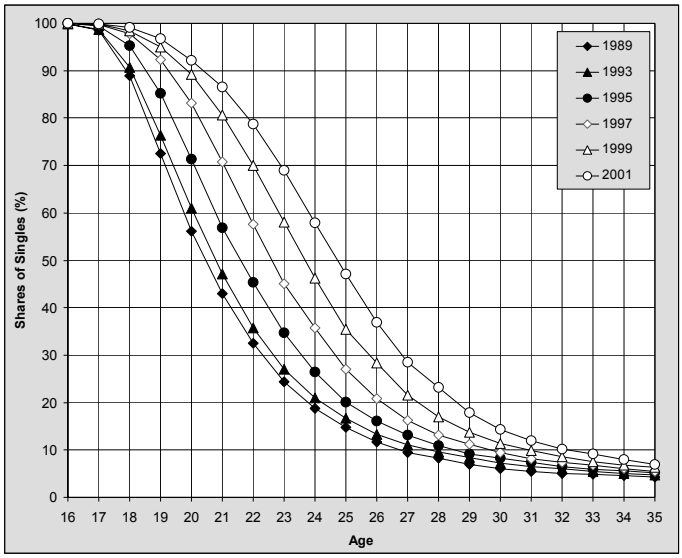


Figure 2.3b: Percentages of 16–35 Years Old Single Women at Given Age (as to January 1st of given year)



The shift in total number of persons born during the 1973–1977 demographic wave created at the period onset and at its end a disproportion between numbers of men and those of 2–3 years younger women. During the 90's the gap in numbers of men of the generation born in 1972 (in relation to women born in 1974 and 1975) gradually narrowed (with greater intensity brides found partners among older, divorced or widowed men) hence nowadays there is a preponderance of men of all age groups on the marriage market. It corresponds to the usual representation of persons within the population according to sex and age. The variable disproportion of potential grooms and brides numbers has already lost any influence on the marriage "market" course since future married couples age difference plays a mere minor role. Social differences (such as a steady job or a higher income) can be more significant but are statistically unnoticeable.

Table 2.7: Disparity[1] between Numbers of Potential Grooms and Brides according to Age (thousands, as of January 1st of given year)

Year	Age of men											
	20	21	22	23	24	25	26	27	28	29	30	31
	Single Persons											
1989	–2.7	6.9	11.9	13.3	13.1	10.4	6.4	6.5	7.3	6.6	7.0	7.8
1993	–11.7	–4.8	1.8	5.0	6.5	8.3	9.0	9.2	9.2	7.6	5.1	5.0
1995	3.1	–3.2	–5.9	0.2	3.4	4.9	5.9	7.4	7.8	8.0	8.0	6.8
1997	5.6	5.3	4.3	–0.3	–2.7	1.9	3.9	5.2	5.6	6.6	7.1	7.1
1999	14.4	7.1	5.9	6.3	5.7	1.2	–0.7	3.2	4.2	5.0	5.2	5.8
2001	8.6	15.8	14.5	7.7	6.4	6.7	6.5	2.6	1.1	3.9	4.2	4.6
	Unmarried Men (Unmarried Women)											
1989	–2.6	7.1	12.1	13.3	13.0	9.9	5.4	5.4	6.4	5.9	6.5	7.9
1993	–11.6	–4.6	2.0	5.0	5.9	7.6	8.1	8.6	8.7	6.5	3.3	3.1
1995	3.2	–2.9	–5.6	0.3	3.1	4.5	5.1	6.5	6.9	7.4	7.7	5.6
1997	5.7	5.6	4.8	0.1	–2.8	1.5	3.3	4.6	4.5	5.5	6.1	6.6
1999	14.5	7.2	6.2	6.8	6.3	1.6	–1.0	2.3	3.5	4.1	4.0	4.6
2001	8.6	15.9	14.6	8.0	6.7	7.2	7.2	2.9	0.5	2.7	3.4	3.6

[1]Number of men of the age mentioned in heading minus number of two years younger women. The minus sign in the table means that at a given age the number of men was lower than the number of two years younger women thus there was a greater "availability" of women.

Second Marriage Intensity Has Decreased as well

The slump in the total number as well as in the percentage of persons living in matrimony consequently narrows individuals possibility of becoming widowed or of divorcing. However repeated marriages specifically due to first marriages indicator decline play a significant role regarding nuptiality rate. Similarly as to single men and women, changes in analysing nuptiality took place concerning repeated marriages. Throughout the 90's, except 1991 and 1997 temporary rise of indicators, widowed and divorced persons marriage intensity decrease took place; again most intensively within the lowest age groups while low numbers of noticeable and demographic events call for prudence in changes scope and promptness analysis. Yet we can state that younger than 50 divorced persons subsequent marriages total intensity rate is presently one half lower than in 1989, regarding widowed men the specific indicator fell more drastically – almost 57%, as opposed to widowed women repeated marriages who presently contract a mere 13 marriages out of 1 000 widowed women (the change as to 1989 amounts to less than one fourth). Parallel to divorcees rising number amidst total population, nuptiality rate decline regarding second and subsequent marriages is an obvious proof of opinion change as to the institution of marriage concerning at least once formerly married men and women. However it would be absurd to assume that divorcees live alone following their divorce, or occasionally with their "won over" children. On the contrary studies have shown that precisely in these cases the possibility of cohabitation with another partner is widely used. The former frequent habit of contracting a new marriage right after the first one came to an end (in other words: grounds for divorce were based on a previous relationship with another partner) does not seem to prevail due to divorcees reduced nuptiality rate in the first years following marriage breakup. Since 1995 the indicator has been increasing in the case of repeated marriages taking place merely four years after the divorce, concerning men as well as women.

Table 2.8: Numbers and Shares of 16–35 Years Old Single Men and Women within Total Number of Persons according to Sex and Age in Real Population[1] (as of January 1st of given year)

Age	Men						Women					
	Number of Persons			Percentage out of Total			Number of Persons			Percentage out of Total		
	1989	1995	2001	1989	1995	2001	1989	1995	2001	1989	1995	2001
16	81 857	88 930	68 657	100.0	100.0	100.0	77 911	85 036	65 521	99.8	99.9	100.0
17	76 655	90 452	69 022	99.9	100.0	100.0	72 598	86 249	65 592	98.5	99.5	99.9
18	72 327	92 270	70 643	98.2	99.3	99.9	63 049	84 909	67 374	88.9	95.3	99.1
19	66 977	91 960	71 651	93.8	96.8	99.3	49 130	78 288	66 779	72.5	85.2	96.7
20	60 372	87 975	75 984	89.0	91.4	98.2	36 656	65 895	67 558	56.2	71.4	92.2
21	56 060	75 129	82 609	81.7	83.2	96.1	28 103	48 609	71 023	43.0	56.8	86.6
22	48 534	60 028	82 013	69.5	73.4	92.4	21 650	35 522	67 241	32.4	45.3	78.8
23	41 396	48 846	78 769	56.7	63.1	87.2	16 928	25 586	60 079	24.3	34.7	69.0
24	34 728	38 940	73 643	45.2	52.5	79.3	13 755	18 799	51 834	18.8	26.5	57.9
25	27 350	30 508	66 807	37.0	42.9	70.2	10 493	13 603	43 541	14.8	20.1	47.1
26	20 127	24 708	58 373	30.4	36.5	60.5	7 403	10 459	34 223	11.6	16.1	36.9
27	16 954	21 018	46 120	25.8	30.9	50.9	5 950	8 598	24 536	9.5	13.2	28.5
28	14 672	18 301	35 310	22.5	26.4	43.0	5 072	7 258	18 343	8.3	10.9	23.2
29	12 525	16 567	28 463	19.4	22.9	36.5	4 260	6 389	13 337	6.9	9.2	17.9
30	12 025	15 292	22 529	17.2	20.1	30.1	4 129	5 944	10 279	6.1	8.2	14.3
31	12 061	13 206	17 956	15.9	18.1	25.1	4 034	5 181	8 174	5.5	7.4	12.0
32	11 297	10 597	15 122	14.3	16.2	22.2	3 888	4 091	6 656	5.1	6.5	10.1
33	10 530	9 792	13 378	13.0	15.2	19.5	3 800	3 624	5 996	4.9	5.8	9.1
34	9 695	9 049	12 397	12.0	14.2	17.8	3 692	3 434	5 301	4.7	5.6	7.9
35	9 490	8 519	11 814	11.4	13.5	16.3	3 457	3 145	4 889	4.3	5.2	7.0

[1]Data based on population balances according to family status.

Single, divorced and widowed persons marriage intensity decrease linked to the change in registered marriages total number as well as in potential spouses during the analysed time is creating a new representation structure of registered marriages according to family status. Percentages of registered marriages of widowed persons did not markedly change; a slight growth in the mid 90's was due to a shift in importance within total marriage number decrease but to widowed men and women diminution as well. From 1992 to 1997 single men registered marriages percentages continuously lessened from year to year down to a 73% value. Single women registered marriages representation development was different in the early 90's – their percentage was above the 1989 level well into 1993. Then came a similar decline (as regarding single men) of even more than one fourth between 1992 and 1997. In

the past few years single men and women registered marriages have been oscillating at about 75%. The 1989–2000 decrease in singles registered marriages percentages is mainly compensated by the increase in divorcees registered marriages percentages, its maximum level attained in 1997 stemming from divorcees marriage rising rate.

Table 2.9: Divorced and Widowed Persons Nuptiality Rates

Age group	Men						Women					
	1989	1993	1995	1997	1999	2000	1989	1993	1995	1997	1999	2000
	Divorced						Divorced					
–25	285	154	118	101	77	79	318	184	152	146	122	129
25–29	221	139	104	101	84	83	182	125	97	103	89	95
30–34	126	96	79	81	67	70	97	73	63	64	55	58
35–39	82	62	52	56	49	49	59	42	35	41	34	36
40–44	61	44	38	42	35	35	41	30	25	30	26	27
45–49	49	38	33	35	29	31	32	24	23	26	22	22
Total[1]	95	66	55	57	47	48	82	56	47	51	42	44
	Widowed						Widowed					
–25	348	34	103	91	73	–	80	38	36	48	56	33
25–29	251	141	122	96	110	92	44	28	26	31	35	36
30–34	124	71	57	66	102	81	22	22	15	10	16	16
35–39	86	41	26	55	50	39	13	14	10	10	12	10
40–44	50	36	26	25	21	31	18	14	11	12	12	15
45–49	62	32	25	24	25	23	14	11	12	9	9	10
Total[1]	72	39	30	32	33	31	17	14	13	13	12	13

[1]Marriages registered prior to 50 years of age per 1 000 persons of adequate sex and family status.

Table 2.10: Divorcees Nuptiality Frequencies according to Number of Years Following Former Marriage Breakup

Number of Years Since Divorce	Men						Women					
	1989	1993	1995	1997	1999	2000	1989	1993	1995	1997	1999	2000
0	0.173	0.122	0.097	0.092	0.071	0.085	0.161	0.120	0.094	0.094	0.073	0.087
1	0.103	0.076	0.068	0.065	0.057	0.047	0.097	0.074	0.065	0.063	0.055	0.048
2	0.069	0.054	0.049	0.055	0.045	0.047	0.067	0.053	0.048	0.054	0.044	0.047
3	0.048	0.042	0.038	0.045	0.041	0.041	0.050	0.038	0.037	0.045	0.038	0.037
4	0.038	0.030	0.030	0.037	0.034	0.033	0.038	0.029	0.030	0.033	0.031	0.033
5	0.028	0.023	0.023	0.030	0.026	0.030	0.030	0.023	0.022	0.028	0.027	0.027
6–7	0.021	0.016	0.016	0.023	0.021	0.023	0.023	0.017	0.016	0.021	0.021	0.022
8–9	0.014	0.011	0.010	0.013	0.015	0.016	0.015	0.012	0.010	0.013	0.014	0.016

Part of Registered Marriages Decrease Is Compensated by More Frequent Common-law Marriages

Marriage behaviour ten-year development within the Czechia new market economy has undergone a major regeneration. When comparing 1989 to 2000, registered marriages total has decreased by almost one third and average age at first marriage has increased to 28.9 concerning men and 26.5 concerning women. Thus it became closer to the European level. In relation to middle-aged or young singles nuptiality intensity decrease, singles percentages within the population grew. Furthermore the general climate of a social situation worsening for low and middle income strata contributes to an additional marriage postponement to an older age which from a transversal perspective means a decrease of the total first marriage rate (regarding men from 89% to 65–70%, and women from 96% to 72–75%). The population now counts more marriageable persons. The 90's global trend has not yet interfered with the 70's natality wave numerous generations advance across the marriage market. For the time being education opportunities, professional skills sharpening, travelling and additional self-fulfilments do win over the wish to found a family. On the other hand the rise of individualism creates among the young generation a sense of responsibility as to materially securing their family. Due to compulsory education prolongation (linked to the tendency of a generally increased education), financial unavailability of even small flats and ever-present unemployment, young couples are faced with lengthy issues dealing with securing an adequate, shared household. Numerous couples either live at their parents' or in a jointly rented flat in a so-called trial-marriage. Both partners reciprocal testing ends up in their relationship "legalization" most often due to the future bride's pregnancy or following future spouses well-thought over decision. Even though marriage and the marriage institution are still perceived as the best legal frame to raise children, the rising rate of out-of wedlock children demonstrates another way of achieving

a shared lifestyle. Unmarried couples cohabitation (including their children as well) is most frequent in the case of persons who already do not consider marriage, widowers and widows or single couples who having postponed marriage to an older age ended up refusing it.

Table 2.11: Marriages according to Grooms and Brides Family Status

Family Status	Men					Women				
	1989	1993	1995	1997	2000	1989	1993	1995	1997	2000
Single	62 545	51 862	41 507	42 455	41 360	62 904	51 977	41 679	42 382	41 528
Divorced	17 396	13 755	12 563	14 498	13 239	17 407	13 733	12 395	14 558	13 020
Widowed	1 321	1 055	886	851	722	1 179	962	882	864	773
Total	81 262	66 672	54 956	57 804	55 321	81 490	66 672	54 956	57 804	55 321
	Percentages out of Marriages Total Number									
Single	77.0	77.8	75.5	73.4	74.8	77.2	78.0	75.8	73.3	75.1
Divorced	21.4	20.6	22.9	25.1	23.9	21.4	20.6	22.6	25.2	23.5
Widowed	1.6	1.6	1.6	1.5	1.3	1.4	1.4	1.6	1.5	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Not only transformations throughout the whole society, changes in cultural and ethical norms but specifically concrete social situations directly influence some demographic processes. Nuptiality is one of them. This was also proven by research results analysing relations between life plans, specifically including marriage, and reality – the long-term postponement of founding a family. That is possibly why a first marriages rising rate, subsequently reflected in a natality rate increase though at an older age could only occur after a slackening of current, social pressures on the young generation. Only in a few years we shall find out whether and to what extent marriage postponement turns into its refusal, replaced either by common-law marriage or permanent single life without a partner.

DIVORCE

3

In the Czech Republic since the 1980's approximately 30 000 couples get yearly divorced and this rate has remained stable through the years in spite of a decreasing marriage rate and the new ongoing population structure according to family status. Contrary to other demographic processes which in the 90's encountered a decrease of former extensively high rates of mortality, nuptiality, abortion and natality, we notice a rather opposite tendency as to divorce. Since the mid 70's the total divorce rate had reached a percentage of about 30% rising till 1990 to 38% and in the late 90's to 42%. This means that more than 4 out of 10 marriages in the Czech Republic eventually end in divorce. 1999 remained an exception when a decrease took place triggered by a legislative change but at the turn of the century the rising tendency is going on. Particularly since 1992 the divorce index is on the rise (from 38.6 to 53.7 divorces out of 100 registered marriages in 2000). The divorce rate oscillates at approximately 11–13 divorces out of 1 000 yearly marriages. In 2001, 31 586 married couples got divorced representing a total divorce rate of 45%.

Following a Two-year Decrease the Total Number of Divorces Is Approaching its Former Level

Table 3.1: Divorces 1989–2001

Indicator	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Number of Divorces	32 055	29 366	28 572	30 227	30 939	31 135	33 113	32 465	32 363	23 657	29 704	31 586
Crude Divorce Rate	3.09	2.85	2.77	2.93	2.99	3.01	3.21	3.15	3.14	2.30	2.89	3.07
Number of Divorces per 100 Marriages	35.2	40.8	38.6	45.8	52.9	56.7	61.4	56.2	58.8	44.2	53.7	60.3
Divorce Rate per 100 Married Women	12.4	11.4	11.2	11.9	12.2	12.4	13.3	13.1	13.1	9.7	12.2	13.2
Total Divorce Rate	38.0	34.7	33.9	36.1	37.5	38.4	41.7	42.0	42.9	32.3	41.2	45.0

Within the international context the Czechia belongs to countries with a high divorce rate, such as Scandinavian countries, Russia and the Baltic states, Great Britain and Germany. On the contrary among countries bearing a strong Catholic tradition with Europe's lowest divorce intensity, one can find first of all Italy, Spain and Poland. In Slovakia the total divorce rate is, in comparison to the situation in our country, close to one third lower.

The high divorce rate in the Czech Republic is caused by a few factors. Civil divorce has been available in Czech lands ever since 1919, first of all as a bed and board divorce, then a separation and since 1950 as a single-step one; thus divorce is rooted in a long tradition in the Czech lands. After WWII marriage was thoroughly secularized and both partners rights to obtain divorce were underlined. Throughout the period we analysed, couples were granted a divorce according to a rather liberal legislation dating from the sixties. The law concerning family # 94/1963 and the civil law # 99/1964 gained jurisdiction as of April 1, 1964; thus legally based divorce commissions were cancelled due to the # 49 Civil Code bill in 1973. Divorce practice was gradually simplified as divorce became socially tolerated. Czech society is very tolerant towards divorce which is considered as an acceptable solution to marital controversies. Over 40% of divorcing couples state difference in characters, opinions and interests as grounds for divorce which implies a smooth divorce following a mutual agreement. Extreme causes for divorce are declining, their rate is decreasing. For example male alcoholism was, according to court proceedings, the cause for 16.4% of divorces in 1980 and down to a mere 5.8% in 2000; violent male behaviour and crime was the cause for 6.7% of divorces in 1980 and down to a mere 1.6% in 2000. One of the reasons for a high divorce rate was also due to a high marriage rate at a young age, linked to an early fertility of young women due to a low contraception rate. Half of first-born children of married couples were conceived prior to marriage which indicates a high number of forced weddings. Such marriages often ended in divorce either after a few years or after children were grown up and the genuine reason for maintaining marriage became obsolete. We can also consider among mediators of the high divorce rate the lack of flats, often leading to sharing a household with one set of in-laws, and female high employment rate which contrasted with the traditional housework division but also brought about a certain level of relative economic independence.

Figure 3.1: Total Divorce Rate in Selected European Countries in 2000

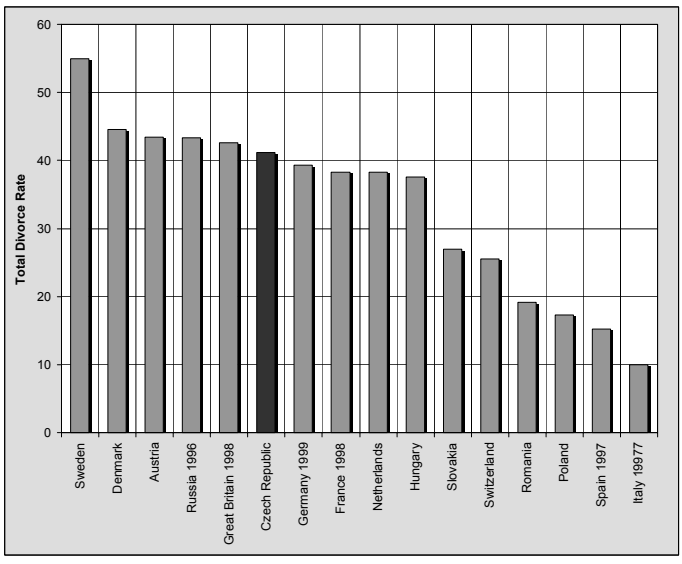
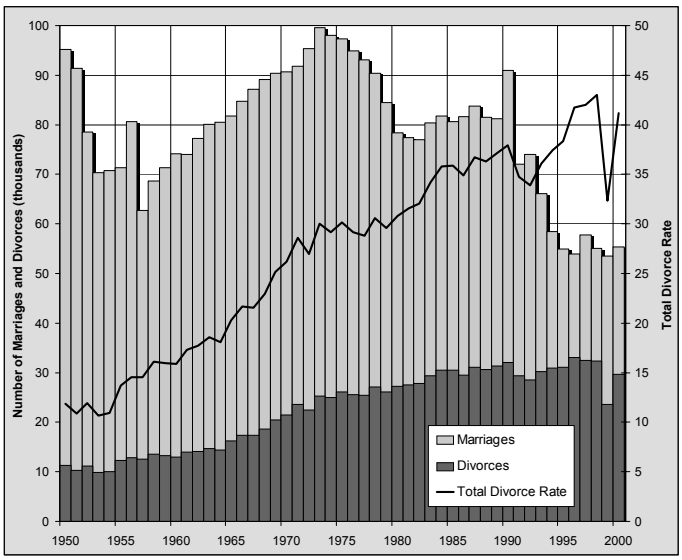


Table 3.2: Married Couples' Registered Grounds for Divorce (%)

Grounds for Divorce	On the Husband's Part			On the Wife's Part		
	1990	1995	2000	1990	1995	2000
Rash Marriage	5.6	4.4	2.2	5.6	4.5	2.2
Alcoholism	10.3	9.4	5.8	0.9	0.7	0.5
Infidelity	15.0	12.9	8.0	13.2	10.5	5.6
Indifference Towards Family (incl. Family Desertion)	7.6	7.3	5.3	2.5	1.8	1.2
Violent Behaviour, Criminal Conviction	2.7	2.1	1.6	0.1	0.2	0.1
Difference in Characters, Opinions and Interests	40.5	48.8	47.0	40.5	49.9	49.1
Health Reasons	1.0	0.5	0.3	1.3	0.5	0.3
Sexual Incompatibility	2.7	1.7	0.6	2.7	1.7	0.6
Other Reasons	7.9	9.3	22.3	9.4	12.6	26.6
No Fault Found by Court	6.8	3.7	6.9	23.8	17.5	13.7

A factor of the Czech Republic high divorce rate is its population low religiosity which is furthermore obvious according to regional divorce distribution: besides big cities the maximum is reached in the North specifically in the Karlovy Vary, Ústí nad Labem and Ostrava regions. The 2000 crude divorce rate which represented 2.89 divorces out of 1 000 inhabitants, reached its maximum in the Karlovy Vary region (3.81) while the lowest was in southern Moravia and in the Czech-Moravian uplands (Jihlava region 2.23) where a higher percentage of inhabitants acknowledge a religious belonging.

Figure 3.2: Number of Marriages and Divorces and Total Divorce Rate during 1950–2000 Period



In 1998 a new law on family # 91/1998 was passed coming into effect as of 1 August 1998 thus significantly modifying divorce legislation. First of all it established divorce based on mutual agreement. As long as spouses had not lived together for at least half a year and had sorted out their property issues and their relation towards their underage children, the court would declare an undisputed divorce without establishing grounds for divorce. However the bill barred divorce during the first year of marriage and limited divorces running counter to underage children interests. Thus the law enables to end so-called dead marriages when following three years of mutual separation, divorce can be pronounced even without one of the parties agreement. In addition to undisputed divorce there is disputed as well as aggravated divorce. The cause for marriage breakup is researched but no longer its fault. As far as undisputed divorces are concerned no cause is established thus data regarding the cause for marriage breakup are not completely comparable with the former period. The only cause for divorce according to Czech legislation is "a relational breakup between spouses".

Due to the new legislation a decrease in the number of divorces took place from 32 363 in the last year to 23 657 in 1999, most of which being specifically marriages with underage children. However the following year in 2000 the number of divorces regarding families with children, which represent roughly two thirds out of all divorcing marriages, rose again towards its former level. Due to a sharp fertility level decrease in the 90's the rate of single child marriages divorces increased as opposed to numerous children marriages.

Childless Marriages End Up Divorcing Sooner than Marriages Bearing Children

The greatest social problem brought about by divorce is the fact that underage children lack daily contacts with one parent. During the 1990–2000 period over 340 000 children lost one parent (usually their father), representing almost one fourth of 1.4 thousand children born to married mothers during the 1980–1990 decade. The mentioned decade is roughly the divorced couple average marriage duration which gradually expanded to twelve years during the late 90's. The greatest breakup risk looming over married couples in their third year of marriage shifted during this same period to their fourth year while childless couples generally divorce earlier. During the 90's a decrease in early divorces number during the first three years of marriage occurred, primarily caused by a high marriage rate at an early, immature age often triggered by pregnancy. First marriage year divorce was banned under the new law. However this phenomenon mostly shifted onto the second year of marriage.

Table 3.3: Divorces according to Number of Underage Children (%)

Number of Children	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
0	8 920	8 313	8 086	8 467	8 650	9 027	9 675	9 862	10 727	9 480	10 637
1	12 709	11 638	11 365	12 415	12 902	12 880	13 690	13 274	12 607	8 199	11 084
2	8 956	8 076	7 873	8 119	8 124	8 003	8 504	8 144	7 802	5 248	7 015
3+	1 470	1 339	1 248	1 226	1 263	1 225	1 244	1 185	1 227	730	968
Total	32 055	29 366	28 572	30 227	30 939	31 135	33 113	32 465	32 363	23 657	29 704
Divorced Marriages with Underage Children (%)	72,2	71,7	71,7	72,0	72,0	71,0	70,8	69,6	66,9	59,9	64,2
Average Number of Children – All Divorces	1.10	1.09	1.09	1.08	1.07	1.05	1.05	1.03	0.99	0.89	0.96
Average Number of Children – Families with Underage Children	1.53	1.52	1.52	1.50	1.49	1.48	1.48	1.48	1.49	1.48	1.47

Divorces Occurred after Longer Duration of Marriage and at Advanced Ages

Married females and males get mostly divorced between 20 and 25 years of age following a maximum nuptiality intensity three to four years earlier. As opposed to the late 80's, divorce distribution level according to age did not change much since divorce rates grew proportionally across the whole age range. Only the 25–29 male age range got closer to the 20–24 age range as to its intensity during the early 90's. Between 1980 and 2000 maximum divorce rate shifted from 28 up to 33 years of age for men and from 24 to 29 for women. Divorcees average age rose between 1990 to 2000, from 36.3 to 38.6 for men and from 33.1 to 35.9 for women, stepping up during the decade second half. This is primarily due to marriage age increase and to a lesser degree to postponing divorce to later marriage stages as well. The difference in both sexes average ages is due to the fact that on average men marry two to three years younger women.

Table 3.4: Divorce Rate according to Duration of Marriage (number of divorces per 100 original number of marriages)

Marriage Duration	Total					With Dependent Children[1]			Without Dependent Children[1]		
	1990	1995	1998	1999	2000	1998	1999	2000	1998	1999	2000
0	0.75	0.37	0.57	0.41	–	0.12	0.04	–	0.45	0.37	–
1	2.69	1.89	2.26	1.90	2.33	0.70	0.31	0.44	1.56	1.58	1.88
2	3.38	2.97	3.01	2.49	2.88	1.47	0.88	1.09	1.54	1.61	1.79
3	3.16	3.46	3.15	2.51	3.21	1.88	1.22	1.69	1.27	1.28	1.51
4	2.83	3.05	3.19	2.34	3.00	2.16	1.33	1.88	1.03	1.01	1.12
5	2.50	2.61	2.91	2.13	2.66	2.09	1.38	1.83	0.82	0.75	0.84
6	2.14	2.34	2.70	1.99	2.44	2.04	1.43	1.79	0.66	0.56	0.65
7	2.00	2.09	2.48	1.74	2.29	1.95	1.30	1.80	0.53	0.45	0.49
8	1.66	1.86	2.18	1.66	2.14	1.77	1.27	1.72	0.41	0.39	0.42
9	1.53	1.69	1.91	1.45	1.98	1.56	1.13	1.65	0.35	0.32	0.33
0–4	12.80	11.75	12.18	9.65	11.42	6.33	3.78	5.11	5.85	5.85	6.30
5–9	9.83	10.59	12.18	8.97	11.51	9.41	6.51	8.79	2.77	2.47	2.73
10–14	6.08	6.52	7.54	5.39	7.45	6.52	4.52	6.38	1.02	0.88	1.07
15–19	4.41	4.37	4.96	3.48	4.78	4.35	2.94	4.14	0.61	0.54	0.65
20–24	2.89	3.00	3.38	2.51	3.26	1.53	1.05	1.51	1.85	1.46	1.75
25+	1.94	2.13	2.62	2.31	2.75	0.35	0.26	0.33	2.27	2.01	2.42
Total Divorce Rate	37.95	38.37	42.86	32.27	41.18	28.49	19.06	26.26	14.37	13.21	14.92
Average Marriage Duration	10.19	10.87	11.69	11.83	12.09	.	.	.	.	.	.

[1]Per 100 marriages: indicators express course of divorce intensity according to marriage duration but not its level.

Divorces Have Been more often Initiated by Women

Between 1980 and 1990 the number of divorces gradually increased from 27 218 to 32 055. During the 1990–2000 period some interesting fluctuations in the divorce rate year to year development took place. In 1990 approximately 9 000 more couples got married as compared to the preceding year due to the planned future cancellation of newlyweds special loans as of the beginning of the next year. The hypothesis of a significantly higher divorce rate of this group has not yet been confirmed providing it mainly involved hastened marriages originally planned for 1991. During the 1991–1992 period, the indicators decrease created an optimistic forecast as to the Czech Republic divorce rate budding transition onto a lower level. The 1992 total divorce rate decreased down to 33.9%, its lowest value since 1982. Nonetheless in the following years the number of divorces as well as divorce rate standardized indicators started increasing anew and, in 1996, the highest historical number of divorces was recorded towering at 33 113. The announcement of the preparation of a new law regarding family led to a hastened divorce of long term broken up marriages since unofficial information was forecasting a strict law banning divorce during the first three years of marriage. Eventually the bill was not that restrictive even

though it led to a sharp decline in divorces as of October 1998; nevertheless this consequence significantly lessened during the next two years. In 1999, 23 657 couples were granted a divorce, a total number similar to the early 70's situation. However the following year this figure rose again to 30 000 reaching 31 586 in 2001.

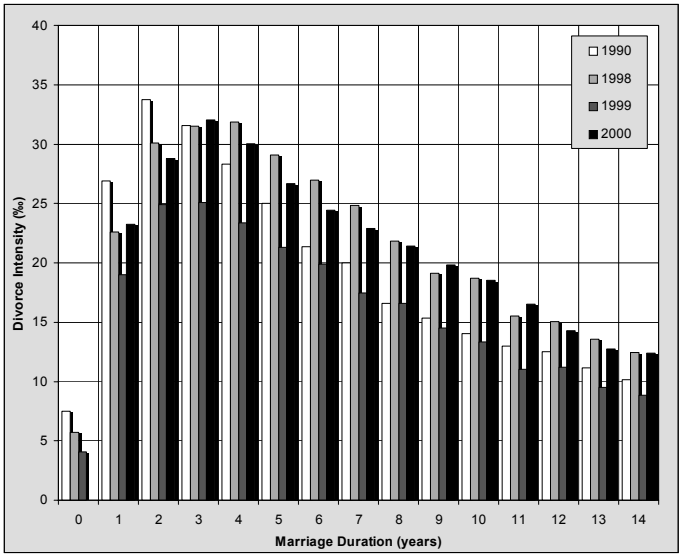
Tab. 3.5: Divorce Rate according to Age and Sex

Age Group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	Number of Divorces per 1 000 Married Women in Given Age Group										
15–19	15.2	13.6	14.2	13.0	14.1	13.3	13.0	13.1	17.8	9.0	19.5
20–24	30.7	28.7	28.4	29.6	30.3	31.0	32.4	31.8	31.3	23.2	30.5
25–29	24.5	23.3	23.2	25.4	26.0	26.3	29.3	29.1	28.3	21.2	27.2
30–34	19.1	16.9	17.2	19.0	19.8	20.7	22.6	22.6	23.2	16.8	22.7
35–39	16.0	15.0	14.2	15.3	16.0	16.4	17.8	18.7	19.3	13.9	18.1
40–44	12.3	10.9	10.7	11.4	12.3	13.0	13.9	13.9	14.5	10.9	13.8
45–49	7.3	6.6	6.7	7.1	7.6	7.8	8.9	9.1	10.2	7.8	9.7
50–54	3.6	3.4	3.3	3.5	3.9	4.0	4.9	4.8	5.3	4.6	5.4
55+	1.0	1.0	0.9	0.8	0.8	0.9	1.0	1.2	1.2	1.1	1.2
Total	12.4	11.4	11.2	11.9	12.2	12.4	13.3	13.1	13.1	9.7	12.2
Average Female Age at Divorce	33.1	33.1	33.1	33.2	33.5	33.9	34.3	34.8	35.4	35.9	35.9
	Number of Divorces per 1 000 Married Men in Given Age Group										
15–19	11.6	10.7	8.8	11.5	10.6	10.4	13.1	5.9	16.7	7.7	15.2
20–24	30.9	27.4	27.2	27.6	29.1	30.9	32.1	32.0	32.2	24.2	31.8
25–29	26.5	25.6	25.9	27.7	28.7	28.9	31.6	31.4	29.9	22.1	28.3
30–34	21.9	20.1	19.7	21.8	22.6	23.3	25.6	25.4	26.0	19.2	25.3
35–39	18.5	16.6	15.9	17.7	17.8	18.6	20.3	20.8	21.0	15.5	20.6
40–44	14.3	13.4	13.0	13.9	14.6	15.3	16.2	16.6	17.2	12.5	16.3
45–49	9.9	8.8	9.0	9.5	10.3	10.4	11.8	11.8	12.9	9.6	12.0
50–54	5.4	5.0	5.0	5.6	6.0	6.1	6.9	7.0	7.5	6.2	7.4
55+	1.6	1.6	1.4	1.3	1.4	1.4	1.6	1.7	1.9	1.6	1.9
Total	12.4	11.5	11.2	11.9	12.2	12.4	13.3	13.1	13.1	9.6	12.2
Average Male Age at Divorce	36.3	36.3	36.2	36.2	36.5	36.8	37.2	37.5	38.1	38.6	38.6

According to cohort analyses, divorce intensity per 100 marriages concluded in the fifties, one fifth ended in divorce compared to one fourth in the sixties and one third in the seventies. Still the least successful marriages remain those concluded in the eighties though a situation slight improvement took place from this point of view in the nineties.

A high divorce intensity is reflected in the rising proportion of divorced persons within the population but also in subsequent matrimony. Ten per cent of female adult population and eight per cent of the male one are divorced and this proportion is still growing. At the age of forty, one woman out of six is divorced while proportions of divorced men are lower due to the fact that men more often conclude subsequent marriages. As to one third of marriages, at least one partner is already divorced, in thirteen per cent of cases both partners were previously divorced. Consequently one fifth of divorcees experience a subsequent divorce indicating a chronic incapacity to find a permanent marriage partner or to become one. Subsequent marriages are generally more prone to failure than the ones concluded by single partners. Furthermore divorcees more frequently tend to remain in common-law marriages with their new partners bypassing any later matrimony. This is particularly obvious concerning women who raised children during their first marriage.

Figure 3.3: Divorce Intensity according to Marriage Duration



Divorce petitioners have long been women in two thirds of cases. Out of 34 946 divorce proceedings concluded in 2000, 85% of divorces were granted, 12% of couples were reconciled and a mere 192 divorces were rejected. These figures contrast with 1990 when one fifth of divorcing couples were reconciled; the question remains whether it was for good. Thus the proportion of rejected

divorces was higher representing approximately 1.5% and eventually 77% of divorce proceedings were effectively concluded.

Table 3.6: Share of Divorced Couples from Individual Marriage Cohorts according to Marriage Duration (cumulative data in % out of original number of marriages)

Duration of Marriage	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	1998
0	0.6	0.3	0.4	0.5	0.5	0.9	0.8	0.7	0.7	0.4	0.5
0–1	1.5	1.1	1.6	2.1	2.5	3.1	3.1	3.1	3.1	2.4	2.6
0–2	2.6	2.3	3.2	4.4	4.8	5.6	6.0	6.2	6.1	5.4	5.5
0–3	3.7	3.7	4.7	6.6	7.3	8.1	8.8	9.2	9.2	8.2	
0–4	4.7	4.9	6.0	8.6	9.3	10.2	11.4	12.0	12.1	10.9	
0–5	5.9	6.1	7.4	10.7	11.3	12.2	13.6	14.4	14.9	13.5	
0–6	6.8	7.0	8.6	12.3	12.8	14.1	15.6	16.4	17.6		
0–7	7.7	8.0	9.8	13.9	14.3	15.7	17.4	18.3	20.0		
0–8	8.5	8.8	10.7	15.2	15.6	17.4	19.1	20.1	21.9		
0–9	9.3	9.6	11.8	16.5	16.8	19.0	20.6	21.8	23.6		
0–14	12.3	13.0	16.4	21.1	22.3	24.9	26.4	28.7			
0–19	14.8	16.0	19.7	24.9	26.6	28.9	30.9				
0–24	16.7	18.2	22.0	27.5	29.1	32.0					
Cumulated Proportion Divorced	18.6	20.2	24.2	29.5	31.4	34.8					

In 1980 three quarters of divorce requests were granted. Thus there is an obvious tendency leading to a gradual simplification of divorce proceedings still continuing even after the new law ratification. The latter significantly extended the investigation of divorcing marriages with underage children since it requires the settlement of legal property relations and rights as well as parental duties towards children even before marriage termination. On the other hand, it hastened the procedure of agreed upon divorces; former partners pragmatically consent to divorce proceedings without any emotion, better prepared than in the past.

Table 3.7: Share of Divorced Persons within Population (as of January 1st; %)

Age Group	Men						Women					
	1990	1995	1998	1999	2000	2001[1]	1990	1995	1998	1999	2000	2001[1]
15–19	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
20–24	1.2	1.2	1.0	0.8	0.6	0.5	2.8	2.9	2.3	1.9	1.5	1.5
25–29	4.3	5.7	6.0	5.7	5.0	4.5	6.5	8.5	9.1	8.8	8.0	7.8
30–34	7.5	8.5	10.3	10.8	10.7	10.3	9.6	10.7	12.8	13.5	13.4	13.9
35–39	10.0	10.5	12.1	12.6	12.9	12.9	11.5	12.8	14.3	15.0	15.3	16.0
40–44	10.8	12.1	13.5	14.0	14.2	14.6	12.5	14.2	15.7	16.2	16.4	17.0
45–49	10.4	12.1	13.8	14.4	14.8	15.3	11.8	13.9	15.5	16.1	16.6	17.2
50–54	8.7	10.6	12.3	12.8	13.2	14.2	10.0	12.1	13.9	14.4	14.8	15.5
55–59	7.2	8.4	9.7	10.2	10.7	11.8	9.0	9.9	11.0	11.7	12.3	13.2
60–64	5.9	6.7	7.2	7.5	7.8	8.7	8.2	8.8	9.2	9.5	9.8	10.3
65–69	4.8	5.5	5.6	5.6	5.8	6.7	7.2	7.9	8.2	8.3	8.5	8.9
70+			3.8	3.8	3.8	4.5			5.9	6.1	6.3	6.8
Total 15+	6.2	7.0	7.9	8.1	8.2	8.6	7.6	8.6	9.5	9.8	10.0	10.4

[1]Census data (1.3.2001) after excluding not stated family status.

Due to the decline of marriage significance and the rapid growth of cohabitation as alternative forms of shared living even the importance of divorce is decreasing from a demographic behaviour point of view. Even though common-law marriages disintegration is not registered in official statistics, it is definitely more frequent compared to that of officially married couples. In the nineties, matrimony rate decreased approximately by forty per cent and cohabitation phenomenon is on the rise. If we take into account that two fifths of marriages are divorced and that as to cohabitation, the same rate is even higher, we reach the conclusion of a family crisis or more exactly of a crisis in partner relationships in its present form of a programmed lifelong monogamy.

Table 3.8: Order and Type of Marriage and Divorce (%)

Indicator[1]	1990	1995	1996	1997	1998	1999	2000
First Marriage for Both Partners	71.6	66.9	65.9	63.8	65.2	65.3	65.5
One Divorced Partner	16.4	19.0	19.7	20.5	19.9	20.0	20.0
Both Divorced	11.2	13.2	13.5	14.9	14.1	13.9	13.7
Other	0.8	0.9	0.9	0.8	0.8	0.8	0.8
First Divorce	81.5	81.8	81.7	81.2	80.4	79.7	80.7
Second Divorce	15.8	15.8	15.9	16.2	16.9	17.5	17.2
Third and Additional Divorce	2.7	2.4	2.4	2.6	2.7	2.8	2.1

[1]Order of divorce: average for men and women.

Contrary to public belief marriages concluded after a certain period of partners cohabitation are more prone to end in divorce than legally concluded, direct marriages. So far it is impossible to evaluate whether a certain selection of concluding marriage at an older age will have a positive outcome on reducing the divorce rate. Still premarital cohabitations are becoming very frequent and the number of legal marriages with no prior cohabitation is actually declining. Furthermore additional factors leading to a higher divorce rate, as for example one's own parents past divorce, can be found in still greater numbers among the young generation.

Linked to marriage postponement to an older age and persons entering marriage structural change, one would expect that young couples would be more responsible and more mature and would less frequently end in getting a divorce. However the Scandinavian countries experience does not confirm this hypothesis. The total divorce rate will more likely continue to rise gradually. The latter is furthermore corroborated by 2001 data indicating a so far record high rate of 45% divorced couples.

FERTILITY

4

During the last decade of the 20th century, significant changes in reproductive behaviour took place in the Czech Republic leading to a sharp birthrate decline. Thus the Czech Republic population reacted to changes in demographic reproduction external, social and economic causalities triggered by 1989 political upheaval.

Low Fertility Rate Period Has Already Been Going On For Six Years

This period can be divided into two stages. During its first one (1991–1996) fertility rate yearly decline was extremely significant and total fertility dropped from 1.89 in 1990 to 1.18 in 1996. The 1994–1996 turning point registered a total birthrate decline of a whole fourth (from 126 000 in 1993 to 90 000 in 1996). During its second stage (1996–2000) the situation stabilised to total live births rate low values (at approximately 90 000 yearly) and to a low total fertility rate (below 1.2 child per woman). Total birthrate within the population does not merely depend on fertility rate but on female population at reproductive age extent and structure as well. Given mid to late 90's situation when total female number at former highest fertility rate age (20–24) increased – mid 70's fertility wave female generation (1973–1977) – yearly fertility rates were expected to gradually start rising. The late 90's evolution indicated nothing of the sort and in 1999 even fewer than 90 000 children were born, representing the Czech Republic total births historical minimum throughout its statistical analysis period. In 2000 a slight fertility level increase of 91 000 live births was registered and total fertility rate was of 1.14 child per woman. In 2001 live births total slightly decreased again. An adequate female age structure will significantly contribute to a rising birth rate only in future years when these women reach the highest assumed age-specific fertility rate (25–29).

Table 4.1: 1990–2001 Fertility

Indicator	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001p
Live Births	130 564	129 354	121 705	121 025	106 579	96 097	90 446	90 657	90 535	89 471	90 910	90 715
Stillbirths	530	496	437	445	336	300	317	273	294	303	259	263
Total Births	131 094	129 850	122 142	121 470	106 915	96 397	90 763	90 930	90 829	89 774	91 169	90 978
Live Births per 1 000 Inhabitants	12.6	12.5	11.8	11.7	10.3	9.3	8.8	8.8	8.8	8.7	8.8	8.8
Stillbirth per 100 Live Births	4.0	3.8	3.6	3.7	3.1	3.1	3.5	3.0	3.2	3.4	2.8	2.9
Out of Wedlock Live Births	11 167	12 703	13 008	15 323	15 507	14 947	15 288	16 125	17 209	18 426	19 792	21 276
– Share out of Total (%)	8.6	9.8	10.7	12.7	14.5	15.6	16.9	17.8	19.0	20.6	21.8	23.5
Total Fertility Rate	1.89	1.86	1.72	1.67	1.44	1.28	1.18	1.17	1.16	1.13	1.14	1.14
Share of First Children in Wedlock Born within 8 Months of Marriage	54.4	50.6	54.1	54.5	54.0	50.8	49.0	48.1	45.4	43.0	41.6	39.5
Mothers' Average Age												
– at Childbirth	24.8	24.7	24.8	25.0	25.4	25.8	26.1	26.4	26.6	26.9	27.2	27.6
– at First Childbirth	22.5	22.5	22.5	22.6	22.9	23.3	23.7	24.0	24.4	24.6	24.9	25.3
Net Reproduction Rate	0.91	0.89	0.82	0.80	0.69	0.61	0.57	0.56	0.56	0.55	0.55	0.55

The Czech Republic Belongs to Countries with the World's Lowest Fertility Level

Even though it is possible to characterise the 1996–2000 period by fertility basic indicators continuity bearing no significant changes, fertility structural indicators (births order and legitimacy, fertility distribution according to maternal age or time span since wedding) point to considerable changes in reproductive behaviour throughout the 90's. From a long-term point of view as to the Czech Republic population development, the nineties situation appears to be an exceptional period though a similar evolution has been observed since the mid sixties in Western and Northern Europe and with a certain delay in Southern Europe. This evolution is usually explained within the frame of the second demographic transition theory. The main effect of these changes on young people living conditions has been delayed, as well as less frequent marriages and family postponement to an older age. Contraception modern forms as well as modern abortion technology shared a great influence yet not as fertility decrease grounds but as possibilities of effectively influencing birth timing and number thus really separating sexual life from reproduction. In Central and Eastern European countries, i.e. former socialist countries, this European general tendency was influenced by former state population policy and the absence of a few mechanisms which conditioned this evolution (change in young people values orientation, diverse self-realisation opportunities, education lengthening, higher education and professional career build-up motivation, change in gender roles within society). Hence in the eighties the Czech Republic population belonged with other socialist states to populations with a relatively higher fertility rate and stood out due to fertility concentration at a young female age (20–24 years) and first time

mothers very low average age (less than 22.5). In the nineties fertility rate decrease and effective fertility postponement to an older age were in comparison with other European countries unusually fast. At present the Czech Republic belongs to countries with the lowest fertility rate and has reached deep below the hypothetical preservation limit of 2.1 children per woman. Comparison with other former socialist bloc countries is noteworthy since in some countries this process had already started in the eighties (e.g. Slovenia) or fertility rate decrease was linked to mere slight changes of first time mothers average age (Bulgaria and Slovakia in early to mid-nineties).

Table 4.2: Total Fertility Rate and Average Maternal Age at First Childbirth International Comparative Study[1]

Country	Total Fertility Rate			Average Maternal Age at First Childbirth		
	1990	1995	1999	1990	1995	1999
Czech Republic	1.89	1.28	1.13	22.5	23.3	24.6
Bulgaria	1.82	1.23	1.23	22.0	22.4	23.0
Slovakia	2.09	1.52	1.33	22.7	23.0	23.8
Hungary	1.87	1.57	1.29	23.1	23.8	24.8
Slovenia	1.46	1.29	1.21	23.7	24.9	26.1
Austria	1.45	1.40	1.32	25.0	25.6	26.3
Ireland	2.11	1.84	1.88	26.6	27.3	27.6
Sweden	2.13	1.73	1.50	26.3	27.2	27.9
Netherlands	1.62	1.53	1.65	27.6	28.4	28.7
Italy	1.33	1.20	1.19	26.9	28.0	...
Poland	2.05	1.62	1.37	23.3	23.8	...

[1]Countries selected on the basis of available data regarding childbirth biological parity.

Since the main outcome of reproductive behaviour changes within the European context is besides limiting total children number within family rather their postponing to an older female age thus total fertility rates do not have to show a mere decreasing tendency or a long term stability at a very low level (currently the case of the Czech Republic population) but can also denote a short term rise (e.g. Sweden in the early nineties or France in recent years) or reach a higher level stability (the Netherlands in the eighties and nineties). During the period when childbirths postponed throughout the nineties will actually take place, childbirths total number and total fertility rate increase are expected within the Czech Republic population. All expected childbirths planning voluntarily postponed to an older female age may not take place. It is inappropriate to search for an analogous evolution in other European countries since identical, common principles of changes within European societies had a diverse outcome on each population reproductive behaviour in relation to its own cultural, historical and social features.

Figure 4.1: Age-Specific Fertility Rates in Selected Years

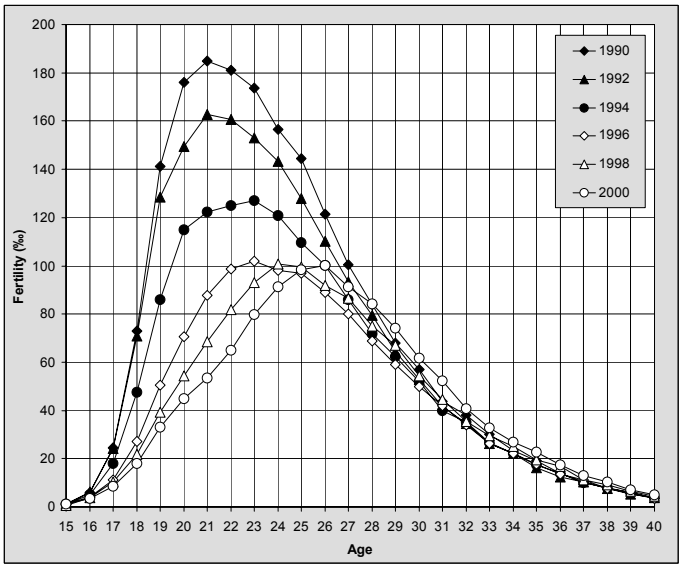
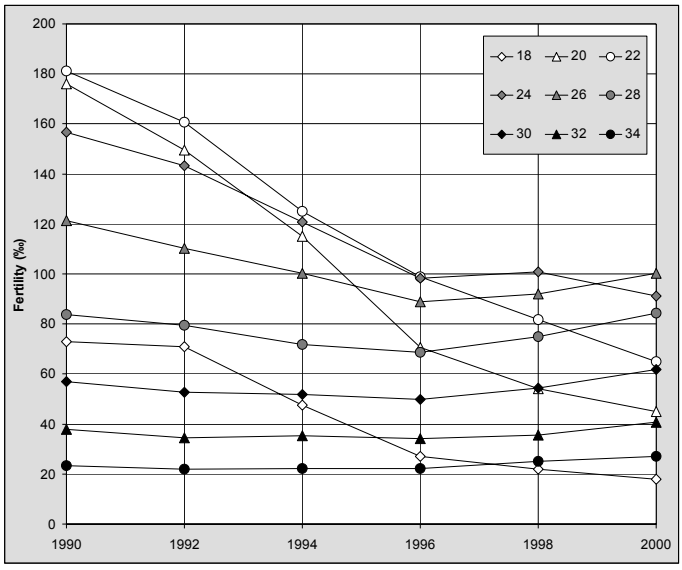


Figure 4.2: Age-Specific Fertility Rates in Selected Ages



Reproductive behaviour changes and gradual transition to Western European countries usual fertility pattern markedly affected fertility according to age. Since the early nineties a gradual fertility intensity decrease has taken place specifically within youngest age groups. Compared to 1990 female fertility between the ages of 18 and 21 fell to one half of its value in 1995 and to one fourth in 2000. Till the

early nineties this age group (19–21) concentrated the highest first parity fertility rate. High female nuptiality and fertility rates of this age group was due to numerous reasons. Besides insufficient sexual education in schools and restricted availability of efficient contraception, starting one's own family as one of young people's few available opportunities of self-fulfilment and independence contributed to such a behaviour. In addition state population policy measures concerning young married couples played a significant role (thus 90% first order children were born in wedlock). Ever since the early nineties these factors have lost their importance and a sharp fertility rate decline has naturally characterised this age group.

Table 4.3: Fertility Rates and Share of Realized Fertility

Age	Fertility Rates					Share of Realized Fertility (%)		
	1990	1995	2000	Index 1995/1990	Index 2000/1990	1990	1995	2000
15	1.3	1.3	1.1	100	85	0.1	0.1	0.1
16	6.0	4.6	3.6	77	60	0.4	0.5	0.4
17	24.4	13.4	8.6	55	35	1.7	1.5	1.2
18	73.0	34.5	17.9	47	25	5.5	4.2	2.7
19	141.1	65.6	33.2	46	24	13.0	9.3	5.6
20	176.0	85.3	44.9	48	26	22.3	16.0	9.6
21	184.9	102.3	53.5	55	29	32.0	24.0	14.2
22	181.1	109.4	65.0	60	36	41.6	32.6	19.9
23	173.6	110.7	79.9	64	46	50.8	41.2	26.9
24	156.6	107.4	91.3	69	58	59.0	49.6	34.9
25	144.3	102.5	98.2	71	68	66.7	57.7	43.5
26	121.4	94.6	100.2	78	83	73.1	65.1	52.2
27	100.4	79.5	91.4	79	91	78.4	71.3	60.2
28	83.9	70.8	84.3	84	100	82.8	76.8	67.6
29	68.0	59.0	74.0	87	109	86.4	81.5	74.1
30	56.9	49.9	61.7	88	109	89.4	85.4	79.5
31	43.6	40.6	52.4	93	120	91.7	88.5	84.0
32	38.0	33.3	40.8	88	107	93.7	91.1	87.6
33	30.1	26.8	32.7	89	109	95.3	93.2	90.5
34	23.4	22.8	27.0	97	115	96.5	95.0	92.8
35	19.2	17.5	22.7	91	118	97.5	96.4	94.8
36	14.0	13.8	17.5	99	125	98.3	97.5	96.3
37	10.4	10.8	13.1	104	127	98.8	98.3	97.5
38	7.6	7.2	10.3	95	136	99.2	98.9	98.4
39	5.6	5.5	7.1	98	126	99.5	99.3	99.0
40–44	8.6	8.5	11.1	98	129	100.0	100.0	100.0

Table 4.4: Total Fertility Rate and Average Maternal Age according to Parity

Parity	1990	1995	1996	1997	1998	1999	2000
	Total Fertility Rate						
Total	1.89	1.28	1.18	1.17	1.16	1.13	1.14
First	0.90	0.56	0.52	0.53	0.53	0.53	0.54
Second	0.71	0.51	0.47	0.46	0.45	0.43	0.43
Third	0.21	0.15	0.13	0.13	0.13	0.17	0.18
Fourth and Subsequent	0.07	0.07	0.06	0.06	0.06		
	Average Maternal Age						
Total	24.8	25.8	26.1	26.4	26.6	26.9	27.2
First	22.5	23.3	23.7	24.0	24.4	24.6	24.9
Second	25.6	26.4	26.8	27.1	27.4	27.7	28.1
Third and Subsequent	29.9	30.5	30.8	31.0	31.3	31.5	31.7

Since 1996 total fertility rate stabilization below 1.2 child per woman as well as fertility curve according to age has not changed anymore and fertility specific values have reached maximum values of approximately 100 children per 1 000 women at a given age. However maximum age has shifted from 23 in 1996 to 26 in 2000. This evolution is an additional sign of female fertility postponement to an older age. A similar finding emerges from 1990 and 2000 fertility rate comparative studies according

to age when values of up to the age of 27 gradually decreased while values above the age of 28 increased though moderately so far. At the precise moment when fertility rate at an age superior to 25 and specifically above 30 would more than compensate for the decline to low values at a younger age, total number of births and total fertility rate would rise again. It is logical that these tendencies have a greater time span than the mere few years of change within the Czech population so far.

Figure 4.3a: Age-Specific Fertility Rates according to Parity of Birth in 1990

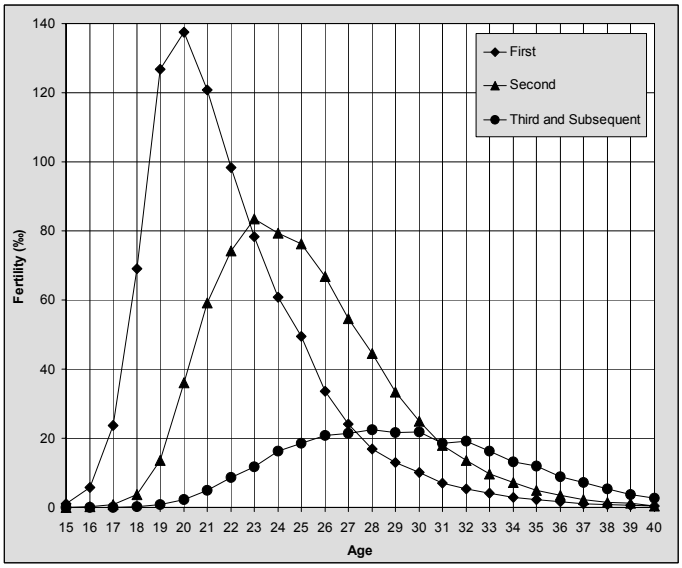
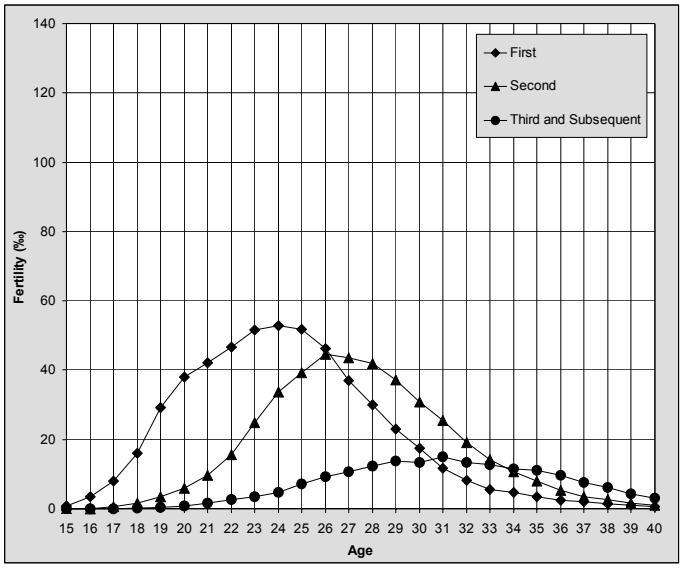


Figure 4.3b: Age-Specific Fertility Rates according to Parity of Birth in 2000



The outcome of fertility intensity evolution during the nineties is depicted by utterly modified fertility curves according to parity. It is significantly obvious as to fertility of first parity, first of all a high fertility decrease until the age of 20 but a shifting of fertility marked concentration restricted to a narrow age interval. Even though fertility intensity values according to parity have no longer decreased since 1996 the highest fertility intensity focus concerning all parities keeps on shifting onto an older age. In 2001 average female age at childbirth was 27.6 which was 2.8 years older as compared to 1990 and 1.8 more than in 1995. From the point of view of fertility decline analysis the most striking is female age at first childbirth since postponing family onto an older age contributed to a greater extent to present birth rate decline. First time mothers' average age increased by 2.8 years in comparison with 1990 though women in the Czech Republic are still a few years younger compared to other European populations (excluding other post-communist countries) according to international comparative studies.

Table 4.5: Cumulative Fertility Rates in Selected Female Generations

Age	Generation											
	1966	1968	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
	First Parity											
Until 18	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.08	0.07	0.05	0.04	0.04
Until 20	0.38	0.38	0.37	0.36	0.34	0.32	0.27	0.21	0.17	0.14	0.12	0.11
Until 22	0.59	0.60	0.57	0.54	0.49	0.45	0.39	0.33	0.28	0.24		
Until 25	0.78	0.77	0.72	0.67	0.63	0.60	0.54					
Until 30	0.88	0.87										
	Total											
Until 18	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.09	0.07	0.05	0.04	0.04
Until 20	0.44	0.44	0.43	0.41	0.39	0.36	0.31	0.24	0.19	0.16	0.14	0.12
Until 22	0.81	0.81	0.76	0.71	0.65	0.59	0.50	0.41	0.34	0.29		
Until 25	1.27	1.23	1.12	1.03	0.95	0.89	0.79					
Until 30	1.65	1.60										

Values of total fertility rates can be significantly influenced by changes in childbirth timing; thus this indicator bears a hypothetical characteristic to a greater extent. On the contrary completed fertility indicates the actual number of childbirths within an analysed female generation. At present the female generation whose completed fertility can be computed, assuming 45 as its final reproduction age, was

born prior to 1955 (completed fertility for the 1940 to 1955 generation reached values oscillating between 2.0 to 2.1 children per woman). However amidst the Czech population the main fertility part is carried out prior to 35 years of age thus to a certain degree projections may present data concerning the female generation born prior to 1965: as far as the latter are concerned a certain decrease down to 1.9 child per woman of the 1965 generation occurred. Within the frame of an international comparative analysis this generation completed fertility is lower as compared to the same female generation in France or Sweden but higher than in Southern Europe. As to other generations data establishing fertility delay by the former highest fertility rate age group may be presented. Whereas at the age of 22, 60% of female generations born in the late 60's had at least one child, generations born in the late 70's (1977–1979) indicated a 15% decrease (at 25 years of age the situation is similar: 75 % for older generations and less than 25% for younger ones). As to the 1966 generation at the age of 25 the ratio was 1.27 child per woman as opposed to generations born after 1972 down to less than one child. Even this finding bears witness to fertility level sharp decline at a female younger age and specifically to 1973–1977 generations marked influence (and still ongoing) on fertility age structure modification. Divergences in actual fertility according to age concerning 1966–1980 generations compared to the 1965 generation are clearly visible on the chart representation. As to the 1966–1971 generation we may observe not only a decrease of actual fertility level in relation to the 1965 generation but even an indication of a later compensation due to a relative higher female fertility level after the age of 28. Still fertility level increase of women in their early thirties has been so low that it fails to compensate for the decrease occuring until 25 years of age. So far the 70's fertility wave generation has not yet revealed itself as to fertility level. That is why the slow increase of average maternal age is due to the fact that marriage and childbirth postponement to an older age is still going on.

Figure 4.4: Cumulative Fertility Differences according to Age between 1966–1980 Generations and 1965 Generation

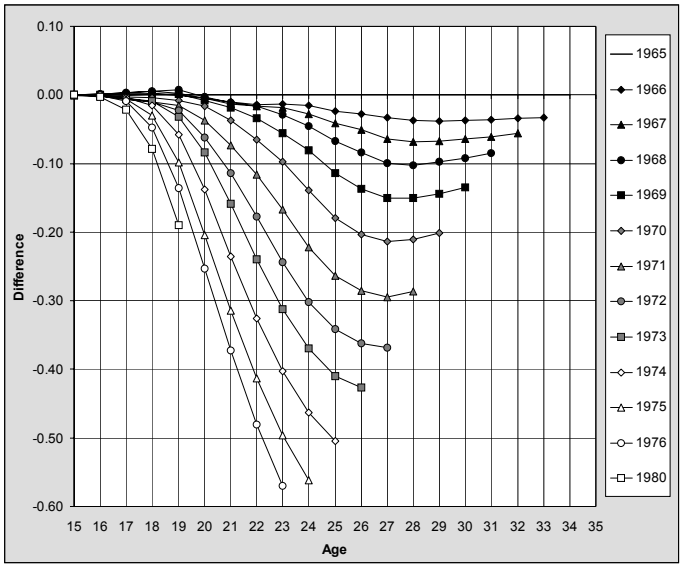


Table 4.6: Out of Wedlock Births Percentages out of Total Births according to Birth Parity, Age and Mother's Education

	1990	1995	1996	1997	1998	1999	2000
Total	8.6	15.6	16.9	17.8	19.0	20.6	21.8
	Parity						
First	10.9	19.4	20.6	21.8	22.8	24.9	26.6
Second	4.4	9.2	10.4	10.8	12.1	13.1	14.0
Third and Subsequent	11.5	19.8	22.3	23.0	24.8	25.8	25.5
	Age Group						
14–19	17.9	36.2	42.4	48.8	53.3	58.9	65.8
20–24	6.0	13.0	15.2	16.5	19.0	22.0	25.3
25–29	5.8	10.8	11.2	12.0	12.5	13.8	14.6
30–34	10.6	14.7	15.8	15.6	16.6	17.6	18.1
35–39	17.1	20.1	22.2	23.1	23.9	23.7	25.0
40–44	22.7	30.0	28.3	31.7	28.0	30.2	28.6
	Mother's Education						
Primary (including incomplete)	26.6	44.5	48.6	50.4	53.4	55.5	55.9
Secondary without Graduation	7.7	14.4	15.8	17.3	19.0	21.3	23.1
Secondary including Graduation	4.1	7.8	8.7	9.2	10.1	11.8	13.5
University	3.3	5.7	5.7	6.2	6.8	7.7	8.0

One Child out of Five Is Born Out of Wedlock

Until the early nineties the Czech Republic (with less than 9% children born out of wedlock) belonged along with countries of Southern Europe, Slovakia, Lithuania and Poland to the group bearing the lowest number of out of wedlock newborns. However, throughout the nineties the share of out of wedlock births gradually grew and since 1999 more than one fifth of newborns are to unmarried mothers. Thus in 2000, Czech population ranks among the group of countries bearing average values as to newborns pertaining to married couples as for example Germany (22.1%) and the Netherlands (24.9%). Within the European context these are rather low values since in countries with the most numerous common-law couples out of wedlock share of births is 40–60% (Northern Europe, Estonia and France).

Out of wedlock birth proportion is markedly culturally and historically influenced thus it significantly differs in comparison to European countries and underlines diverse stratification within the frame of characteristics specific to each population as well.

Average Maternal Age Remains on the Rise

In the Czech Republic out of wedlock fertility is a distinctive fertility feature restricted to a few female groups. The first one concerns very young women (14–19 years old) who proportionally indicated throughout the nineties the most significant change: in 1990 unwed women represented 18% of mothers within this age group but already 66% in 2000. An identical rise can also be observed even within the 20–24 age group from a value of 6% to more than 25%. Out of wedlock newborns mothers average age has been somewhat lower on a long term basis than that of married women and did not register a significant rise during mid to late nineties. This fact is specifically obvious as to first parity, married mothers average age increasing during the 1990–1999 by 2.6 years (from 22.5 to 25.1 years of age) whereas out of wedlock first parity newborns mothers age during this same period grew a mere 1.1 year (from 22.1 to 23.2 years of age). In 2000, the lowest out of wedlock newborns fertility level was registered in the 25–29 age female group (15%). In early 1991, the 20–24 age group registered 117 000 single women (35% of this female age group) whereas in late 2000, its number rose to 318 000 (76%). At the same time its fertility intensity decreased. Simultaneously within the 25–29 age group single women share grew from 11% to 32% indicating a globally identical fertility level.

The second female group indicating a higher out of wedlock birth rate is an older one (30 years of age and older) whose higher parity fertility is taking place within a new partner relationship following a divorce. A higher out of wedlock birth rate is traditionally specific to this group reaching higher values already in 1990 though without any significant rise during the nineties. This is corroborated by out of wedlock birth rates according to each order, third and higher parity birth rates being traditionally high (12% in 1990 and 26% in 2000). This primarily concerns divorcees and widows fertility due to the fact that within the 30–34 age group divorcees or widows birth rate represents 60% of total out of wedlock birth rate.

Table 4.7: Fertility Rates of Married and Unmarried Women

Age Group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Index 2000/1990
	Total											
15–19	44.6	46.7	44.7	42.9	32.6	24.9	20.0	17.9	16.4	15.3	13.2	30
20–24	174.3	171.3	154.0	145.4	121.8	102.3	91.0	85.5	80.0	72.6	67.8	39
25–29	105.2	101.1	94.8	94.3	85.5	81.4	79.2	82.7	84.8	86.4	90.5	86
30–34	37.4	36.5	35.1	37.1	35.7	35.2	35.1	36.2	37.5	39.4	43.1	115
35–39	11.2	11.1	10.3	11.2	10.7	10.6	11.0	12.0	12.7	13.1	14.4	128
40–44	1.6	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.9	2.1	127
	Married Women											
15–19	507.1	514.1	518.1	515.8	454.5	443.7	443.0	454.8	464.3	471.8	440.7	87
20–24	263.5	260.1	241.4	236.8	210.9	194.5	189.7	197.9	203.5	204.5	209.6	80
25–29	120.6	115.1	108.6	108.1	98.7	95.3	95.4	102.3	108.5	113.7	123.7	103
30–34	39.8	38.6	37.1	38.8	37.3	37.0	37.0	38.7	40.2	42.4	46.7	117
35–39	11.3	11.2	10.1	10.9	10.4	10.5	10.7	11.6	12.3	12.9	14.0	124
40–44	1.6	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.7	1.7	2.0	125
	Unmarried Women											
15–19	8.6	10.1	10.0	11.5	10.6	9.4	8.7	8.9	8.9	9.1	8.8	102
20–24	27.6	30.3	29.4	31.4	29.1	24.5	23.3	22.0	22.3	22.1	22.6	82
25–29	34.1	38.9	36.6	40.0	38.7	37.0	33.7	34.2	33.5	34.5	35.2	103
30–34	25.0	25.4	25.0	29.0	28.7	27.6	27.8	26.7	27.9	29.6	31.8	127
35–39	11.0	10.9	11.2	12.9	12.3	11.1	12.3	13.5	14.2	14.1	15.9	145
40–44	2.0	2.0	2.3	2.3	2.3	2.4	2.2	2.5	2.3	2.5	2.6	130
	Share of Married Women (%; as of July 1st)											
15–19	7.2	7.3	6.8	6.2	5.0	3.6	2.6	2.0	1.6	1.3	1.0	14
20–24	62.2	61.2	58.8	55.5	51.0	45.8	40.7	36.1	31.8	27.7	23.0	37
25–29	82.1	81.6	80.8	79.7	78.1	76.1	73.7	71.1	68.4	65.5	61.1	74
30–34	84.2	83.9	83.5	82.9	82.1	81.2	80.1	78.9	77.7	76.6	73.5	87
35–39	82.6	82.3	82.2	81.9	81.4	80.8	80.2	79.4	78.6	77.9	75.6	91
40–44	80.9	80.6	80.4	80.0	79.6	79.1	78.6	78.0	77.6	77.1	77.1	95

The rise of the share of newborns within single mothers below 20 age group may be grounded in society's altered approach to early marriages. There is a growing awareness of the fact that at this age it is difficult to start and secure a family committed to create a suitable child rearing environment. That is why the nuptiality rate of women younger than 20 years of age sharply decreased, followed by a fertility slump thus within this age group fewer children were born to married women. Furthermore a substantial role is played by complex living conditions faced by young families with children specifically concerning younger partners with a low level of education leading to an inadequate economic situation and greater problems on the job market. This is further corroborated by research findings that almost 60% of newborns whose mothers have completed the lowest level of education (9th form) are born out of wedlock. Most frequently university educated women give birth to children within a married union and this tendency is still prevailing; thus in this aspect better educated women are not the closest in terms of behaviour to women of other European populations who would foremost decide upon non-traditional forms of shared family life. Furthermore the significant rise of share in second parity out of wedlock newborns (from 4% in 1990 to 14% in 2000) pinpoints to an existing female group living within the frame of common-law unions while giving birth and raising second or additional children.

Table 4.8: 2000 Live Births Standardization in Relation to 1990

Female Age	Number of Live Births according to:					Number of Live Births:		
	1990 Fertility Rates and Female Structure according to Family Status			1990 Fertility Rates		within Real Population in 2000		
	Total	Married Women	Unmarried Women	Married Women	Unmarried Women	Total	Married Women	Unmarried Women
14–19	15 060	12 373	2 688	1 760	2 867	4 468	1 529	2 939
20–24	74 400	69 957	4 444	27 133	8 923	28 898	21 576	7 322
25–29	43 573	41 041	2 532	31 199	5 318	37 467	31 979	5 488
30–34	12 612	11 279	1 333	10 118	2 064	14 506	11 886	2 620
35–39	3 749	3 107	642	2 905	840	4 822	3 615	1 207
40–44	569	440	129	417	158	723	516	207
45–49	18	15	2	15	3	26	17	9
Total	149 982	138 211	11 770	73 547	20 172	90 910	71 118	19 792
	Difference as to Number of Live Births within Real Population							
	–59 072	–67 093	8 022	–2 429	380			

Till the late eighties the Czech population characteristic pattern of universal early fertility occurred within the frame of marriage (92% of all children were born to married women). Thus taking into account our population conditions, changes occurring within number of births depend on female total number living in married unions and wedding age even though out of wedlock fertility became more significant during the nineties. Live births decline within marriage is still going on (in 1990, 119 000 live births within marriage dwindling down to 81 000 in 1995 and 69 000 in 2001) mainly due to the fact that married female rates within all age groups keeps on decreasing. In 2000 within the 20–24 age group less than one fourth of women were married (62% in 1990), within the 25–29 age group 61% of women (82% in 1990) and within the above 30 age group 73% of women (approximately 82% in 1990). Married fertility intensity decrease stopped in 1997 and is slightly increasing, thus in 2000 the number of live births per 1 000 women older than 25 years of age was slightly higher than in 1990.

Main Cause for Fertility Level Decrease Is the Dipping Married Female Proportion Thus Narrowing Reproductive Potential

The relation between the number of births decrease and marital and out of wedlock fertility evolution is best shown by applied standardization. On the basis of an assumed, unchanged structure according to female at a reproductive age family status and 1990 values of marital and out of wedlock fertility, 150 000 children should have been hypothetically born, i.e. 59 000 more than the actual number born in 2000. This decrease was primarily due to female structure change according to family status though married and single women fertility only slightly varied. The difference in total number of newborns to married women in 2000 (assuming an identical structure according to family status and married fertility as in 1990) and actual number of births is a mere 4% primarily caused by married fertility level decrease and reduced married female representation within total population. As to 1990–2000 comparative study, unmarried fertility level merely slightly decreased but due to the fact that unmarried female representation is increasing within total female population at reproductive age, total number of out of wedlock births keeps on rising.

Stemming from married women fertility evaluation according to birth parity it was deduced that since 1997, there is an intensity increase regarding all age groups as to first parity, regarding second parity only in age groups older than 25 years of age and in third parity and additional parities there is a decrease in all age groups. The rise in higher age groups as compared to the early nineties is due to the fact that following marriage postponement onto an older age, more married women of this age live their first married years characterised by a higher fertility intensity as well. This is different from past situations when older married women were already mothers of two or more children and fertility intensity was declining in long term marriages. Due to general intensity decrease of first time registered marriages, women who overwhelmingly want to have two planned children are primarily entering marriage: that is why married fertility rate has not decreased so much.

Table 4.9: Married Women Fertility Rates according to Age and Birth Parity

Age Group	1990	1995	1996	1997	1998	1999	2000
	Total						
15–19	507.1	443.7	443.0	454.9	464.3	471.9	440.7
20–24	263.5	194.5	189.7	197.9	203.5	204.5	209.6
25–29	120.6	95.3	95.4	102.3	108.5	113.7	123.7
30–34	39.8	37.0	37.0	38.7	40.2	42.4	46.7
	First Parity						
15–19	469.4	411.1	412.5	426.1	432.8	444.5	405.8
20–24	148.3	111.0	112.5	121.2	128.1	133.4	141.5
25–29	31.1	26.6	29.5	34.0	39.6	44.3	51.3
30–34	5.4	5.4	6.0	6.9	7.5	8.2	9.6
	Second Parity						
15–19	36.3	31.7	29.0	27.4	29.4	25.3	32.6
20–24	102.8	75.9	70.5	70.0	69.3	65.0	62.2
25–29	66.1	52.4	51.9	54.3	55.8	57.1	59.7
30–34	15.8	17.0	17.2	18.1	19.4	20.8	23.2
	Third and Subsequent Parity						
15–19	1.4	0.9	1.5	1.4	2.1	2.1	2.3
20–24	12.4	7.6	6.8	6.7	6.1	6.1	5.9
25–29	23.4	16.3	14.1	14.0	13.1	12.4	12.7
30–34	18.6	14.6	13.8	13.7	13.4	13.4	14.0

Table 4.10: Reduced Married Fertility Rates per 1 000 Marriages according to Time Span Subsequent to Wedding

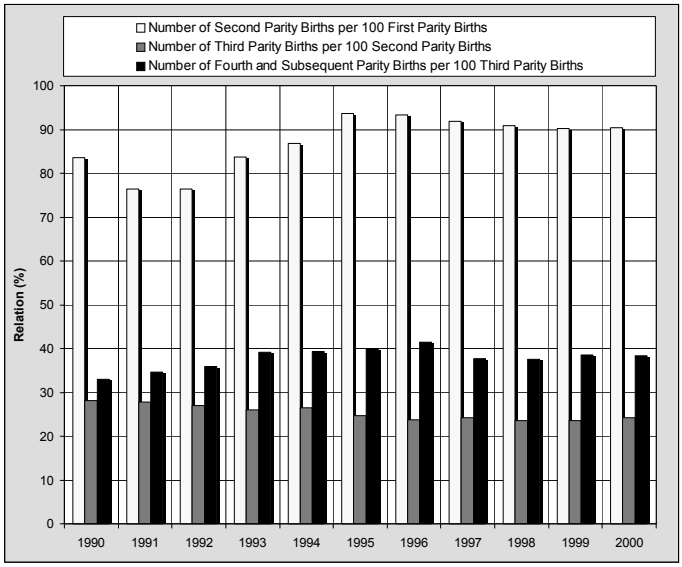
Marriage Duration	First Parity				Second Parity			
	1990	1995	2000	Index 2000/1990	1990	1995	2000	Index 2000/1990
0	493.5	454.0	363.2	74	10.3	4.4	4.6	45
1	143.4	121.7	136.5	95	52.7	22.4	14.9	28
2	55.9	53.5	73.0	131	116.8	58.4	42.9	37
3	24.4	28.0	43.1	177	110.6	95.0	71.7	65
4	12.9	16.0	27.3	212	82.0	67.8	77.5	94
5	6.6	9.8	16.4	248	58.3	48.3	59.6	102
6	4.2	5.3	9.8	235	39.2	33.5	50.0	127
7	2.2	3.7	6.3	285	23.3	23.2	36.0	155
8	1.7	2.3	3.7	215	13.8	13.9	24.8	180
9	1.0	1.6	2.7	269	8.2	8.9	16.9	206
Total Married Fertility Rate	748.6	699.2	686.4	92	530.5	391.0	425.9	80
Average Time Span Following Wedding (years)	1.18	1.29	1.68	142	4.27	4.77	5.53	130
Difference between First and Second Parity (years)	.	.	.	.	3.09	3.48	3.85	125

Children conception within a partners' union may have become a planned event according to the fact that – thanks to available contraception – unplanned conception occurs less frequently, the latter would then force partners to adapt their further decision process. At present it is rather a coincidence of simultaneous life events. While considering childbirth partners also weigh their decision concerning their union structural change – in fact possible marriage. This situation differs from young people's decision

process back in the eighties when in many cases partners decided upon marrying pressed by their expecting their first child. Premarital conceptions (according to first parity birthrate within 8 months subsequent to wedding) until 1994 reached values of approximately 55%. Since 1995, this rate has gradually decreased to 40% in 2001.

Young people are delaying not only marriage but childbirth within the frame of marriage as well. An appropriate indicator of evaluating changes in childbirth timing subsequent to wedding are first and second parity marital birth frequencies decrease according to time span following wedding. First parity marital fertility intensity decrease is not significant (8% comparing 1990 to 2000) but the change in childbirth timing is significant since first year fertility drastically decreased then on the contrary rose after a two-year period subsequent to wedding. Regarding second parity fertility, the decrease in total marital fertility rate during the 1990–1997 period was more significant (from 531 in 1990 to 386 second children per 1 000 marriages in 1997, i.e. 27%). Since 1998 second parity total marital fertility rate has turned around (in 2000 second parity total marital fertility rate reached values of 426 children per 1 000 marriages) due to postponing second childbirth within marriage. This is evident as well from the shifting of second parity fertility level maximum values from third married year in 1990 to fifth married year in 2000. Throughout the nineties postponement of second parity childbirth to a later time within marriage was common (average interval between wedding and second childbirth grew from 4.3 years to 5.5 years) and is more substantial as to first parity. An additional indicator of postponing second childbirth within marriage is the rising difference of average time span between first childbirth and second one since wedding date from 3.1 years in 1990 to 3.9 years in 2000. More substantial changes in second parity childbirth timing within marriage led to a modified relation of second parity number of births to first parity births, showing a slump in early nineties followed by a subsequent rise (in 2000 to 100 first parity children corresponded 90 second parity children).

Figure 4.5: Proportions of Children Born to Married Women in Subsequent Parities



Young people's confrontation to recently arisen conditions to conclude marriage or start a common-law marriage and subsequent childbirth (regarding mainly whether they will have children and during which life cycle phase) is significantly confirmed by childbirth distribution according to parity.

Table 4.11: Live Births according to Parity and Maternal Family Status

Parity	1990	1995	1997	1998	1999	2000	2001p	1990	1995	1997	1998	1999	2000	2001p
	Total Numbers							Distribution (%)						
	In Wedlock													
Total	119 397	81 150	74 532	73 326	71 045	71 118	69 439	100.0	100.0	100.0	100.0	100.0	100.0	100.0
First	55 580	35 877	33 492	33 297	32 353	32 209	30 873	46.5	44.2	44.9	45.5	45.5	45.3	44.5
Second	46 423	33 606	30 775	30 239	29 191	29 127	29 026	38.9	41.4	41.3	41.2	41.1	41.0	41.8
Third	13 074	8 333	7 449	7 117	6 859	7 067		11.0	10.3	10.0	9.7	9.7	9.9	
Fourth	3 013	2 204	1 780	1 715	1 736	1 732	9 540	2.5	2.7	2.4	2.3	2.4	2.4	13.7
Fifth and Subsequent	1 307	1 130	1 036	958	906	983		1.1	1.4	1.4	1.3	1.3	1.4	
	Out of Wedlock													
Total	11 167	14 947	16 125	17 209	18 426	19 792	21 276	100.0	100.0	100.0	100.0	100.0	100.0	100.0
First	6 794	8 645	9 320	9 827	10 716	11 695	12 464	60.8	57.8	57.8	57.1	58.1	59.1	58.6
Second	2 123	3 420	3 745	4 155	4 415	4 746	5 190	19.0	22.9	23.2	24.1	24.0	24.0	24.4
Third and Subsequent	2 250	2 882	3 060	3 227	3 295	3 351	3 622	20.2	19.3	19.0	18.8	17.9	16.9	17.0

Since 1990 first order childbirths total number and proportion within married couples decrease is obviously the most significant phenomenon due to a certain degree to nuptiality intensity reduction linked to marriage postponement to an older age. If a married woman gives birth to her first child, as a rule she will give birth to a second one: that is why there is such a relatively slight difference (to 100 first born children more than 90 second ones are born). Thus one cannot assume that one-child families are becoming more numerous. Third and fourth parity children numbers are continuously decreasing: they are rarely planned and a higher parity unwanted pregnancy more frequently ends

As Long As a Married Woman Gives Birth to a First Child, in Approximately 90% of Cases She Will Give Birth to a Second Child

in abortion than in childbirth. That is why to 100 second children a mere 33 third and subsequent parity children are born.

On the contrary there is an increase of out of wedlock children from the first three parities. Since 1990 second ones are the most numerous, expressing more frequently unmarried couples fertility. The continuous significant difference in first and second children representation indicates that as opposed to lawful couples, common-law couples more frequently have only one child and tend to get married before their second child. To 100 out of wedlock first born children a mere 40 second ones correspond, but on the contrary to 100 second ones more than 70 higher parity children do (unregulated fertility of small population groups).

Figure 4.6a: Fertility Rates in the Czech Republic Selected Regions in 1992

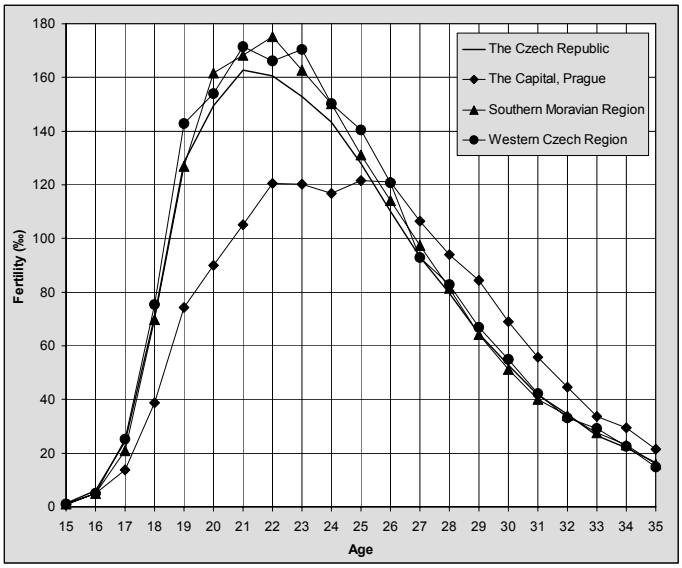
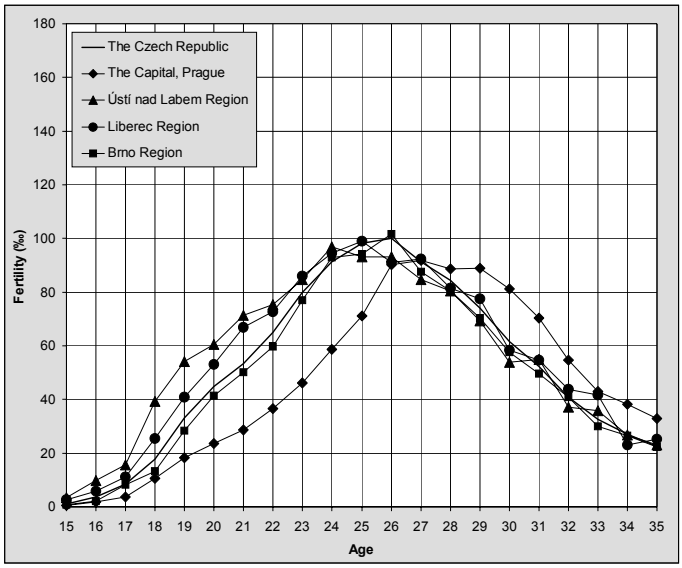


Figure 4.6b: Fertility Rates in the Czech Republic Selected Regions in 2000



In 1992 when total fertility rate within the whole population reached 1.72 child per woman, only the capital, Prague (1.52) and the Western Czech region (1.63) were below average value; the Southern Moravian region (1.77) and the Eastern Czech region (1.81) were on the opposite side. During the nineties it is obvious that fertility from a regional perspective partially changed. Prague with its low fertility level (total fertility rate 1.07 in 2000) and an older fertility age profile (with maximum fertility level values according to female age between 25–30) remains an exceptional case. During recent years next to total fertility rates regional differentiation, more significant differences in reproductive behaviour, e.g. according to female social groups and level of education, definitely took place.

Fertility Postponement onto an Older Age Can Lead to More Frequent Childlessness

By analysing the Czech Republic fertility development during the past ten years we may infer that changes in reproductive behaviour can partially be explained within the frame of general tendencies already occurring in other parts of Europe since the mid sixties even though in the Czech Republic given factors suddenly occurred at a higher intensity during a relatively short period in the nineties. Society reacted by means of an extreme behaviour change from the point of view of our country global population development. It was specifically confirmed by young people demographic behaviour who delay family starting onto an older age and more often choose non-traditional forms of family life. Positive social changes simultaneously occurred with young people unemployment, lack of financially accessible flats, mothers' difficult reintegration after maternity leave, de facto parental leave, into the job market etc. That is why such a fast change in demographic behaviour took place. However we can merely speculate about the total number of women remaining childless and about the average of completed fertility at the end of 1973–1977 female generation reproductive period, the latter being a current pioneer in reproductive behaviour changes.

Consequences of yearly newborn children numbers decrease directly affects the Czech Republic population age structure. Ever since the second half of the nineties the age pyramid apparent notch is significant and has already greatly influenced the school system by a decreasing number of children enrolled in primary schools. In the future this will occur at all significant stages of this generation life (at future education stages, at the entrance into the job market etc) and will also affect the Czech Republic population social and economic situation (retirement pension system process and job market) in future decades.

ABORTION

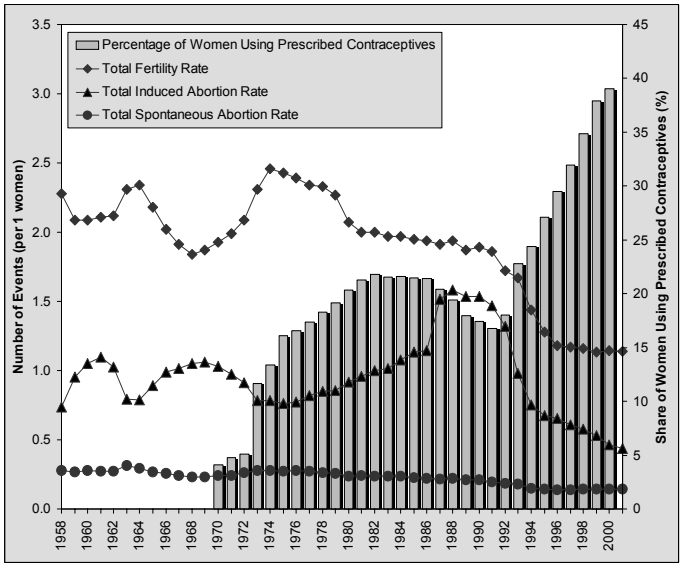
5

Ever since 1988 when the highest abortion rate was recorded, abortion total number and rate have been decreasing. This tendency has been characteristic throughout the whole analysed period until 2001. Abortion rate sharpest slump, primarily due to induced abortion fast reducing number, took place during the 1992–1995 period when total abortion rate reached less than half its 1991 value. In 2001, 33 000 abortions were recorded, the lowest number since the 1957 liberalization. Since 2000, total abortion rate reached below the 0.5 per woman, i.e. less than one third of its 1988 value (1.56). Evaluation of induced abortion tendency remains the most significant, spontaneous abortion intensity being influenced by fertility rate thus almost independent of induced abortion frequency.

Total Number of Abortions Decreasing Tendency Is Still Evolving

The nineties represent a radical transition from the socialist era, when induced abortions was a common method of unwanted pregnancy additional prevention, onto a situation when mainly prophylaxis is stressed thus of reliable contraceptives use. Abortion is rather used as an emergency solution to a crisis situation. Past abortion behaviour, typical of the whole former soviet bloc region, must be understood within its period context and totalitarian government system. Abortion was legalised according to the # 68/1957 law many years earlier than hormonal and intrauterine contraception became available, produced in Czechoslovakia only since 1966. Ever since its legalization induced abortion has been widely accessible; induced abortions were performed following other than health grounds for a minimal fee, according to broadly interpreted economic and social reasons. The lack of social discussion, concerning not only the abortion issue per se but sexual behaviour as well as sexual education including contraception questions, was characteristic of the whole period of widespread induced abortions. This went on in the early seventies even after the beginning rise of hormonal and intrauterine contraception. Almost nonexistent sexual education, limited information about modern contraception, unavailability of adequate, comprehensive hormonal contraception range as well as fear of side-effects led to the fact that less than 20% childbearing age women would use prescribed contraception till the early 90's. Even though abortion legislation reflected a tendency to restrict induced abortions access (1962 and 1973 decrees) and abortion request had to be approved by a so-called abortion board, 90% requests were granted and most abortions were requested on "social grounds". Abortion boards were rendered obsolete as of 1987 (law # 66/1986) thus granting all women free access to abortion until the 12th week of pregnancy. Due to contraception insufficient use, bordering to fatalism, induced abortion tendencies until the 80's were the opposite reflection of fertility ones. Specific restriction to induced abortions (1962, 1973) as well as pro-natality climate (mainly during the mid 70's) brought about fertility rate short-term rise and induced abortion temporary reduction. During several years, brought to term pregnancies total rate reached 3.1–3.5 per woman. 1987 legislation liberalization triggered a less responsible behaviour reflected in contraceptives use temporary decrease and abortion frequency increase, however the latter did not significantly influence fertility rate decrease.

Figure 5.1: Development of Fertility, Abortion and Percentage of Women Using Modern Contraceptives during 1958–2001 Period



Already in the nineties, abortion tendencies evolved independently from fertility shifts, and fertility as well as abortion rates significantly dropped leading to a marked decrease in brought to term pregnancies total number. Since 1990, total intensity of brought to term pregnancies decreased to less than half and in 2001 (1.74 rate) it was lower than its ten years earlier fertility rate value. Abortion intensity slump was precipitated by abortion fees since 1993. Merely abortions on medical grounds are still performed for free. The most significant factor in induced abortion decrease was modern contraception widespread use. Whereas in 1990 only 17% women used medically prescribed contraceptives in 2000, already 39% of childbearing age women did. First of all hormonal contraceptives use was on the rise from mere a 4% to 31%. As two decades earlier in Western Europe, young female generations got used to taking the pill since the beginning of their sexual life. The wide product range lets women choose a hormonal contraceptive with minimum side effects; furthermore many gynaecologists preferentially prescribe it since it implies a more frequent relationship with their patients and besides it helps regulating menstrual cycle of women suffering from its irregularity. On the contrary the percentage of women using an IUD fell from 13% to 8%, partly due to the fact that the sharpest increase of contraceptives

concerned young and therefore mostly childless women, for whom the IUD is inappropriate. After the early 90's particular increase, condom use stabilized (approximately 15% couples), in contrast traditional contraception methods were fading out, especially coitus interruptus still used by one fifth of childbearing age women in 1993.

Table 5.1: Abortion 1990–2001

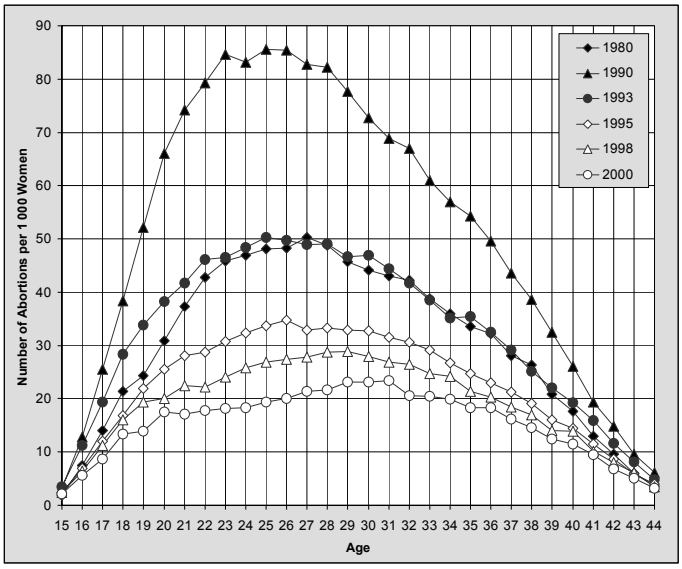
Indicator	1990	1992	1994	1995	1996	1997	1998	1999	2000	2001p
Induced Abortions[1]	109 375	94 180	54 836	49 531	48 086	45 022	42 959	39 382	34 623	32 528
Spontaneous Abortions	14 772	13 401	11 109	10 571	10 296	10 392	11 128	11 173	11 300	11 116
Other Abortions	15	19	11	12	20	7	12	12	15	2
Ectopic Pregnancies	1 893	1 681	1 478	1 476	1 560	1 552	1 555	1 536	1 432	1 411
Total Recorded Abortions[1]	124 162	107 600	65 956	60 114	58 402	55 421	54 099	50 567	45 938	43 646
Total Births	131 094	122 142	106 915	96 397	90 763	90 930	90 829	89 774	91 169	90 978
Total Brought to Term Pregnancies	257 149	231 423	174 349	157 987	150 725	147 903	146 483	141 877	138 539	136 035
Per 100 Births[1]										
– Induced Abortions	83.4	77.1	51.3	51.4	53.0	49.5	47.3	43.9	38.0	35.8
– Spontaneous Abortions	11.3	11.0	10.4	11.0	11.3	11.4	12.3	12.4	12.4	12.2
– Total Recorded Abortions	94.7	88.1	61.7	62.4	64.3	60.9	59.6	56.3	50.4	48.0
Induced Abortions per 100 Brought to Term Pregnancies[1]	42.5	40.7	31.4	31.4	31.9	30.4	29.3	27.8	25.0	23.9
Induced Abortions on Medical Grounds[1]	9 533	10 332	13 217	11 838	11 036	9 709	8 896	7 756	6 472	.
– Share out of Total Abortions (in %)	8.7	11.0	24.1	23.9	23.0	21.6	20.7	19.7	18.7	.
Miniabortions	87 933	77 566	46 609	41 735	40 333	37 882	35 752	32 579	28 418	.
– Share out of Total Abortions (in %)	80.4	82.4	85.0	84.3	83.9	84.1	83.2	82.7	82.1	.
Total Induced Abortions Rate[1]	1.54	1.32	0.75	0.68	0.65	0.61	0.58	0.53	0.47	0.44
Total Spontaneous Abortions Rate	0.21	0.19	0.15	0.14	0.14	0.14	0.15	0.15	0.15	0.15
Total Fertility Rate	1.89	1.72	1.44	1.28	1.18	1.17	1.16	1.13	1.14	1.14
Total Brought to Term Pregnancies including Ectopic Pregnancies	3.67	3.25	2.37	2.12	2.00	1.94	1.91	1.83	1.77	1.74

[1]Excluding ectopic pregnancies.

Abortions Amount to Less than a Fourth of Brought to Term Pregnancies

Induced abortion rate sharp decrease was gradually reflected on decrease of total abortion indicator per 100 births and on spontaneous abortion rate increase within total abortion rate. Abortion total number per 100 births specifically decreased in early 90's (85 in 1989 to 51 in 1994) and later following fertility rate decrease stop since 1997 to a value of 36 in 2001. Abortion rate out of brought to term pregnancies total number decrease (at present less than one fourth) testifies to a long term decrease of unwanted pregnancies as well. After 1994, the slight rise in spontaneous abortions per 100 births did not indicate pregnant women physical state worsening but rather childbirth postponement to an older age, thus increasing the risk of spontaneous abortion. Furthermore the sharp increase in induced abortion rate on medical grounds, doubling between 1992 and 1993 (from 11% to 23%) was not due to women health state but to some doctors "social concern", who following required payment for abortion on non-medical grounds thus "freed" some women from paying. Since 1987, the widespread practice of abortions known as so-called abortion by suctions (vacuum method, much gentler than classical surgical methods) took place. Abortion by suctions rate, cheaper than other methods, represents more than 80% of all performed induced abortions since the early 90's. The rapid decrease of terminated pregnancies total intensity per woman from 3.67 in 1990 to 1.74 in 2001 is largely due to induced abortion intensity decrease (57%) followed by, to a lesser degree, fertility decrease (39%); spontaneous abortions total number decrease (3%) and ectopic pregnancies and stillbirths decrease (less than 1%) bore a merely minor influence.

Figure 5.2: Age-Specific Abortion Rates



Though induced abortion sharp decrease affected all female age groups, induced abortion development according to age is relatively surprising. The sharpest decrease, down to 78% during 1990–2001 period, took place within the female 20–24 age group, concurrently registering a drastic fertility intensity reduction. In contrast within the older than 30 female age group, and specifically within the 40–49 one, induced abortion rate decrease was relatively slower, of

65% for the 35–39 and 57% for the 40–44 one. The two-thirds decrease within the youngest female age group (15–19) can be very positively evaluated, since this age group is theoretically the most endangered due to insufficient contraception experience and unplanned, unprotected sexual intercourse, frequently leading to unwanted pregnancy. Induced abortion intensity curves according to age demonstrate an extremely high abortion rate decrease since 1990, first close to its 1980 level, again on the rise in 1993 then down to present low values. Differences in induced abortion intensity at 20–36 years of age almost merged, abortion maximum rates – though insignificant – were postponed from 23–26 to 29–31 age group. Against the expectation that induced abortion core would shift onto a younger age, at present the highest abortion rate is that of women who mostly live in long term couples thus protecting themselves from an unexpected, unwanted pregnancy should not be a problem. Induced abortion, reaching almost the same values within the 40–44 age group as within the 15–19 years old teenagers' one, is an anomaly probably possibly unparalleled in Europe.

These trends are reflected in gradual rise of female average age at abortion, first and foremost as far as spontaneous abortion is concerned (+2.5 years between 1990 and 2000), copying childbirth postponement onto an older age, similar to married women abortions (+2.6 years), affected by marriage postponement onto an older age as well as mothers "aging". Thus abortion – somewhat illogically – as well as marriage contracting and childbirth occur at an older female age as compared to the past.

Table 5.2: Induced Abortion Rates (per 1 000 women)

Age Group	1990	1992	1994	1995	1996	1997	1998	1999	2000	2001p
15–19	24.5	24.3	14.8	12.4	12.5	11.2	11.6	10.3	8.9	8.5
20–24	76.2	63.0	33.1	28.9	27.6	25.2	22.9	20.6	17.8	16.6
25–29	81.2	68.0	37.3	33.5	32.3	29.8	27.9	24.8	21.0	19.8
30–34	63.6	55.4	32.0	30.3	29.1	27.4	26.0	23.8	21.5	19.9
35–39	42.8	36.7	22.6	20.6	19.4	19.2	18.3	17.9	16.1	15.0
40–44	15.1	14.0	9.8	8.8	8.8	8.2	8.2	7.7	6.9	6.5
45–49	1.4	1.3	0.9	0.8	0.8	0.8	0.9	0.7	0.7	0.7
15–49 Total	42.1	35.8	20.6	18.6	18.1	17.0	16.3	15.1	13.3	12.6
Total Induced Abortion Rate	1.54	1.32	0.75	0.68	0.65	0.61	0.58	0.53	0.47	0.44

Since 1990 gradual narrowing of married (including common-law) and single women induced abortion rate has been taking place. However age-specific percentages remain higher for married women, particularly concerning younger ones, yet again referring to a certain surviving abortion behaviour characteristic of the "real socialism" period. Divorced and widowed women abortion rates remain relatively high, even though there is a sharper decline past 25 years of age. The concerned group is mostly composed of divorced women who traditionally view childbirth as unwanted thus their continuously higher future induced abortion rate is expected. Whereas single women register their highest induced abortion rates at 30–34 years of age, married women at 15–19, the youngest age group (at present already reduced and very specific as far as composition is concerned) similarly to divorced women experience their maximum at a young age.

Table 5.3: Average Female Age at Abortion and Childbirth

Abortion Type, Childbirth	1990	1992	1994	1995	1996	1997	1998	1999	2000
Induced Abortion	28.7	28.7	29.1	29.3	29.3	29.5	29.5	29.6	29.8
– First	26.8[1]	26.6	26.8	27.0	27.0	27.1	27.1	27.2	27.2
– Married Women	29.7	29.9	30.7	31.0	31.2	31.6	31.9	32.1	32.3
Spontaneous Abortion	26.4	26.6	27.2	27.6	27.9	28.0	28.2	28.5	28.9
Childbirths	24.8	24.8	25.4	25.8	26.1	26.4	26.6	26.9	27.2
– First Child	22.5	22.5	22.9	23.3	23.7	24.0	24.4	24.6	24.9
– within Marriage	24.8	24.9	25.5	25.9	26.3	26.6	26.9	27.2	27.5

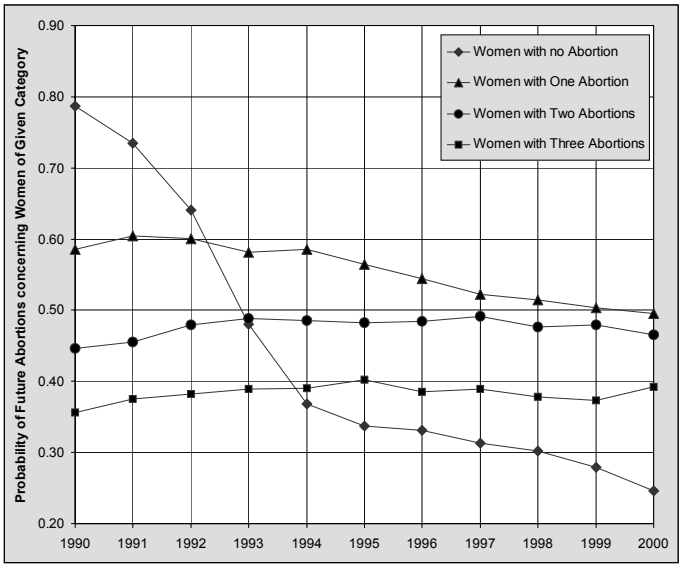
[1]Including ectopic pregnancies.

Table 5.4: Induced Abortion Rates (abortion total number per 1 000 women of given age and according to family status)

Age Group	Single Women				Married Women				Divorced and Widowed Women			
	1990	1995	1998	2000	1990	1995	1998	2000	1990	1995	1998	2000
15–19	21.4	11.6	11.2	8.6	63.6	33.6	33.5	32.0	x	x	x	x
20–24	56.5	24.3	20.5	16.3	85.2	32.4	26.2	21.0	120.7	53.7	50.9	43.6
25–29	54.7	26.9	23.5	18.3	82.8	33.0	27.6	20.6	102.7	48.6	40.6	34.5
30–34	45.3	22.6	22.0	19.7	63.7	29.3	24.8	20.4	72.0	41.6	35.2	28.8
35–39	26.5	15.6	15.5	14.4	42.7	20.3	17.7	15.3	48.8	23.9	22.2	20.5
40–44	9.0	6.0	6.0	6.0	15.1	8.7	8.0	6.6	16.4	9.9	9.4	8.4
45–49	1.4	0.3	0.9	0.6	1.4	0.9	0.9	0.7	1.5	0.8	0.8	0.7
15–49 Total	30.6	16.4	16.0	13.2	46.3	19.2	16.1	12.9	40.5	20.4	18.4	15.5

x – extremely small events clusters.
Note: Throughout the 1994–2000 period, common-law wives and unspecified family status women were registered as single.

Figure 5.3: Probability of Future Abortion according to Previous One



Widespread Reliable Contraceptives Led to a Sharp Reduction of First Abortion Risk

Abortion distribution shifts according to order are highlighted by an unexpected tendency – first order abortion rate growth. Nevertheless this tendency merely evolves very gradually; half of 1990 first order abortion percentage grew merely to 54% in 2000. Too many women who underwent an abortion, still remain not motivated enough to use modern contraceptives. According to available data, the main cause for unwanted pregnancies is still undisputedly the absence of birth control and not its failing: 94% women who underwent an abortion in 2000 did not use any contraception. Among married women more than half of all abortions are of the second or higher order, as far as unmarried women are concerned this percentage is close to 40%. There still is a specific group of women who use abortion as a long-term substitute for contraception; a stable percentage of 7% concerns fourth or further order abortions. Future abortion probability based on past abortion figures, computed according to induced abortion frequencies by order, show that most significant shifts occurred concerning women with no past abortion. From a transversal perspective, the reduced probability that each woman would experience at least one abortion during her reproductive period, appeared as decidedly positive. According to 1990 abortion figures, a mere 21% women would have never undergone an abortion whereas in 2000 it concerned 75%. On the other hand probabilities of future abortions did not change much. The probability that a woman with one past abortion would experience another one was somewhat reduced down to 50% (59% in 1990), whereas further abortion probabilities slightly rose – third abortion probability to 47%, fourth abortion probability still to 39%. The former abortion behaviour pattern, bearing a high probability of experiencing at least one abortion and high, nevertheless gradually decreasing probabilities of an additional abortion, was replaced by a low probability pattern of undergoing a first abortion and relatively much higher probabilities of undergoing future ones concerning women who had already undergone a first one. Obviously this is due to the increasing number of women using modern reliable contraceptives (no abortion) as opposed to the decreasing number of women not using birth control or limiting themselves to unreliable methods of preventing unwanted pregnancy (repetitive abortions).

Table 5.5: Induced Abortions according to Order and Family Status (%)

Abortion Order	All Women				Married Women				Unmarried Women			
	1990	1995	1998	2000	1990	1995	1998	2000	1990	1995	1998	2000
First	50.2	51.5	53.9	54.3	46.5	46.0	47.6	48.7	60.8	61.3	62.3	61.0
Second	29.4	27.4	26.4	26.3	31.6	30.2	29.6	29.4	23.1	22.3	22.3	22.5
Third	13.3	12.9	12.2	11.9	14.4	14.7	14.4	13.6	10.0	9.9	9.2	10.0
Fourth	4.8	5.2	4.6	4.6	5.1	5.7	5.1	5.1	4.0	4.2	3.8	4.0
Fifth and Further	2.3	3.0	2.9	2.9	2.4	3.4	3.3	3.2	2.1	2.3	2.4	2.5

Note: Concerning 1990, including ectopic pregnancies.

Table 5.6: Induced Abortion Distribution according to Live Births Number Prior to Induced Abortion (%)

Number of Children	All Women			Married Women			Unmarried Women			Share of Unmarried Women		
	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000
None	14.4	19.6	23.8	1.4	2.4	3.6	51.5	50.3	47.5	92.6	92.4	91.9
One	21.8	24.3	25.1	22.0	24.6	24.8	21.2	23.8	25.5	25.2	35.3	46.7
Two	47.7	41.7	38.4	57.6	54.9	55.0	19.4	18.3	18.9	10.6	15.8	22.6
Three	13.2	11.4	9.8	15.8	14.6	13.1	5.9	5.7	5.9	11.5	17.9	27.6
Four and More	2.9	3.0	2.9	3.2	3.5	3.5	2.0	1.9	2.2	17.8	23.5	35.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	25.9	36.0	46.0

Induced abortion distribution according to live births number reflects a gradual abortion increase concerning childless women (24% in 2000), however the most important female group undergoing induced abortion remains mothers of two children (38%). This behaviour pattern still specifically concerns married women, since 55% of induced abortions are performed on married mothers of two children. Regarding unmarried women, abortion is primarily used as a means to end childless women unwanted pregnancy (48%) thus due to the increasing importance of common-law marriages and out of wedlock fertility, a very slow growth of mothers abortion is occurring. Abortion indexes enable to thoroughly analyse differences as to women decision between abortion or childbirth. All age groups show a decreasing number of abortions per 100 childbirths and married as well as single women abortion behaviour narrowing. Single women abortion indexes significant slump not only depends on induced abortion decrease but on more frequent out of wedlock births. In 1990, abortion was more frequent concerning single women than childbirth regardless of children number: twice more frequent regarding mothers of two and twice or three times more frequent regarding other women. At present childbirth is more frequent than abortion even among childless or mothers of one child single women. Abortion indexes are still the highest as to mothers of two children, in 2000 they reached values of 145 per 100 childbirths, concerning married as well as single women. These high values illustrate the ongoing orientation towards a two-children family pattern; most women try to prevent a third childbirth in case of a pregnancy. First and foremost, under the influence of population distribution shifts according to family status, single women increased percentage as to performed abortions number occurred, primarily obvious concerning abortions performed on mothers. However in 2000, married women still globally presented a higher than average percentage (54%) out of performed abortions total number.

Unwanted Pregnancy and Thus Abortion Risk Is Significantly More Frequent Concerning Childless or Uniparous Single Women Than Married Women

Figure 5.4a: Induced Abortion Ratios according to Childbirths Number prior to Abortion in 1990

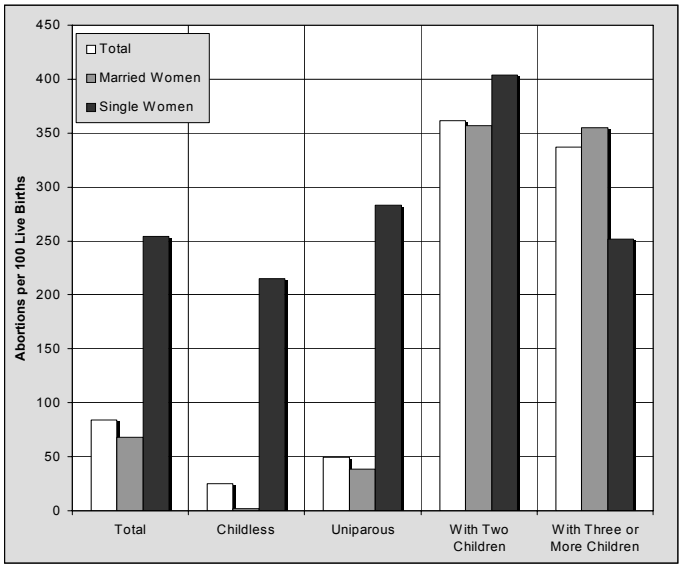
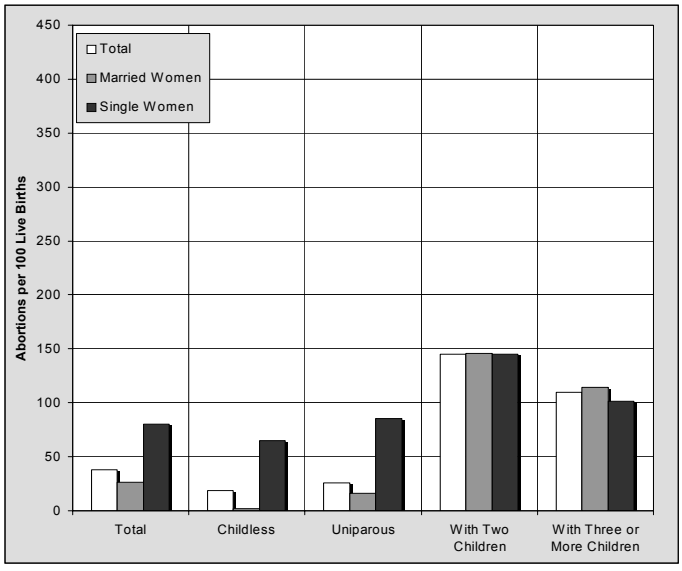


Figure 5.4b: Induced Abortion Ratios according to Childbirths Number prior to Abortion in 2000



How did percentages of women, who decided to end their pregnancy by means of an induced abortion, change? Due to youngest women fertility and abortion ongoing fast decrease, these percentages did not practically change regarding women up to 20 years of age: most 15 and 16 years old give priority to an abortion, subsequently abortion decision sharply decreases with age. In 1990, the minimum concerned 19 years old (25% conceptions ended in induced abortions), in 2000, an additional decrease occurred down to 15% concerning 25 years old and subsequently a gradual rise, nevertheless at a

Figure 5.5: Conceptions Ending in Abortion (%) and Number of Spontaneous Abortions per 100 Births according to Age

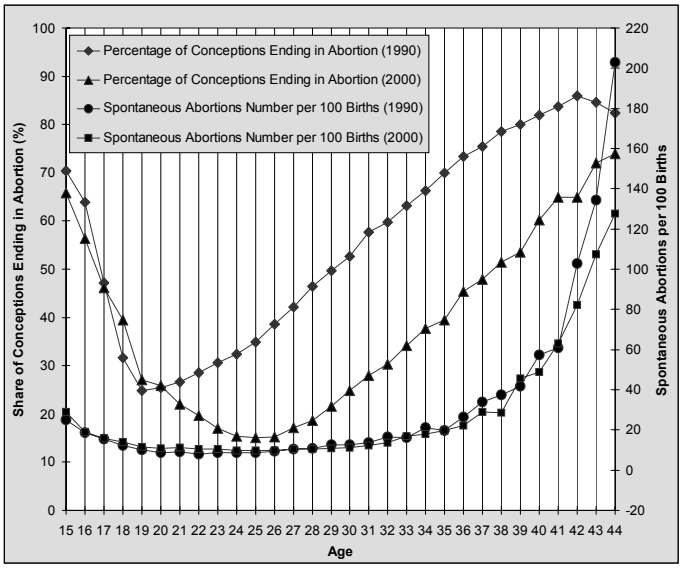
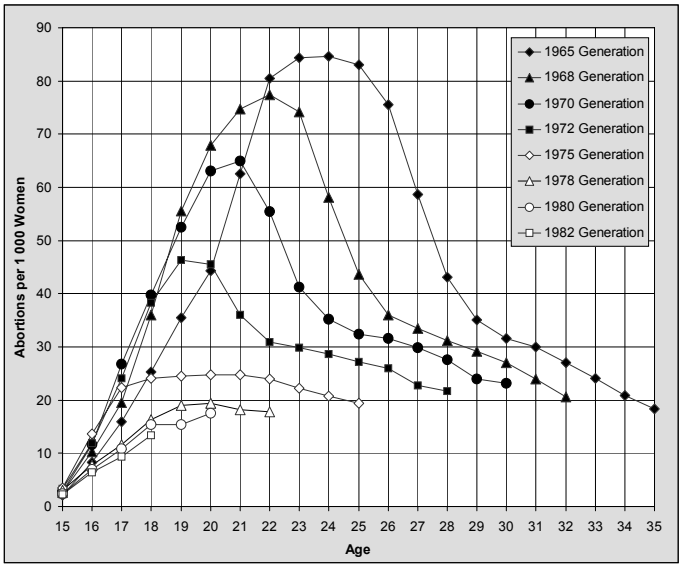


Figure 5.6: Induced Abortion Rates of Selected Female Generations



significantly lower level than in 1990. More than half of total pregnancies ended in abortion only at 38 years of age and older (in 1990 already at 30 years of age and older). Curves of spontaneous abortion figures per 100 births according to age illustrate spontaneous abortion intensity long-term stability. Spontaneous abortion fluctuations may be the direct outcome of childbirth timing and in the future, a gradual growth of spontaneous abortion is foreseeable as a negative effect concerning women in their thirties and older growing percentage. In 2000, per 100 childbirths, there were 11 induced abortions of women in their early thirties, 20 of women aged 35 and 49 concerning 40-year old ones.

During the last decade the number of foreigners rose in the Czechia thus did their percentage within performed abortions total number. In 2001, women of other nationalities represented 3.1% of spontaneous abortion total number and 6.7% of abortion total number. A "foreign women" increased percentage out of induced abortions total indicates either their lower fertility rate or possibly their higher abortion rate; most probably both, concurrently with "abortion tourism".

Individual female generations induced abortion rate went through an interesting evolution. Induced abortion curves according to age of selected generations born in 1965 and later show significant differences between generations. Besides, the chart reflects the mutual linking of three effects – age, calendar year and generation – which influenced induced abortion resulting generation rates. Age distribution of abortion rate was backing away from its obvious maximum at the age of 25 for the 1965 generation to its maximum at 19 and 22 years of age, quite significantly for the 1972 generation and very insignificantly for the 1975 generation and younger ones. The calendar year effect is obvious first due to abortion intensity rapid growth concerning women coming of age in the second half of the 80's (specifically the 1967–1970 generation) and mainly to induced abortion rate sharp decline during the 1992–1995 period which intensively revealed itself among all female generations born during the 1965–1973 period. The generation effect reflects on induced abortion rate fast decrease from generation to generation, leading to the fact that female generations at the age of previous maximum rates (for example the 1975 generation) have a lower abortion rate than older generations at an older age. It seems that women born after 1975 have adopted, right from the beginning of their sexual life, reliable contraception methods and thus have very low abortion rates. It concerns generations whose sexual life started after 1990, at the time of reliable contraceptives greater availability. Still among women born in 1965, the resulting rate is one abortion per woman. As long as abortion curve orientation concerning women born in 1978 and later remains unchanged, the average will merely be 0.3 abortion per woman.

Due to Its Induced Abortion Rate the Czech Republic Ranks among European Countries with Low Intensity

According to international comparative research, it is obvious that due to its induced abortion rate the Czech Republic belongs to advanced European countries. Moreover our data come from complete abortion registration, rather a disadvantage as far as the Czech Republic position is concerned among other countries which data are frequently incomplete. In 1990, in terms of abortion rate, Europe was clearly divided into East and West; in Northern, Western and Southern Europe total induced abortion rate rarely reached above a 0.5 value – in contrast, in postcommunist central and Eastern Europe it rarely fell below a 1.0 level. In certain East European countries abortion level was significantly high; soon after abortion legislation liberalization and due to modern contraception absolutely insufficient information and availability, total induced abortion rate in Romania reached values higher than 6 abortions per woman in 1990, according to certain data these were the same in Russia and other European republics of the former Soviet Union. In European Union countries and in Norway, abortion intensity did not vary much in the 90's whereas in almost all East European countries a sharp decrease was recorded. By 2000 induced abortion rate in the Czech Republic and in Slovakia was lower than in Norway, Great Britain and Sweden whereas total induced abortion rate in Slovenia and Lithuania were close to values in Sweden where it remained the highest among European Union countries (0.56).

Table 5.7: Total Induced Abortion Rate in Selected European Countries in 1990 and 2000

Country	2000	1990	Women to 25 years of age (%)[1]	Country	2000	1990	Women to 25 years of age (%)[1]
Belgium	0.18 (1998)	.	45.0	Great Britain	0.51 (1998)	0.41 (1992)	52.5
Spain	0.19 (1999)	0.13	44.1	Sweden	0.56	0.65	42.8
Germany	0.24 (1999)	0.20 (1992)	38.1	Slovenia	0.58	0.96	29.8
Netherlands	0.25	0.18 (1992)	43.9	Lithuania	0.59	.	30.7
Italy	0.33 (1998)	0.40	32.4	Hungary	0.83	1.22	35.5
Finland	0.33 (1999)	0.34	45.2	Latvia	1.04	.	33.2
France	0.36 (1997)	0.37 (1992)	37.4	Bulgaria	1.25 (1999)	2.37	37.7
Denmark	0.45 (1999)	0.50 (1992)	38.1	Estonia	1.33	.	36.8
Slovakia	0.45	1.23	28.8	Romania	1.51	6.07	29.2
Czechia	0.47	1.54	28.7	Belarus	2.04 (1997)	.	35.6
Norway	0.49	0.49 (1991)	48.7				

[1]Percentage of total induced abortion by 2000.
. – data unavailable.
Note: Except Czechia and Slovakia, indicators are calculated according to induced abortion rates of five-year female age groups.

Even though induced abortion rate in the Czech Republic is already relatively low, abortion distribution still recalls abortion behaviour previous Socialist pattern. Whereas in Western European countries most induced abortions concern women to 25 years of age (typically about 40%, in Great Britain even up to 53%), in the Czech Republic as well as in Slovakia, Slovenia and Romania it still amounts to less than 30%. Difference in age intensities between the Czech Republic and Western Europe is obvious from 2000 comparative index of induced abortion rates in the Czech Republic and in the Netherlands, known for its long term induced abortion low rate and Great Britain (1998). 15–19 years old Czech women shared a similar induced abortion intensity with their Dutch counterparts and 60% lower than in Great Britain, then at the age of 25–29 induced abortion rate was similar to the one in Great Britain and twice higher than in the Netherlands. Abortion rate of Czech women aged 30 or more remains high as compared to the Dutch and British ones.

Figure 5.7: Czechia Index of Induced Abortion Rates according to Age Compared to the Netherlands and Great Britain

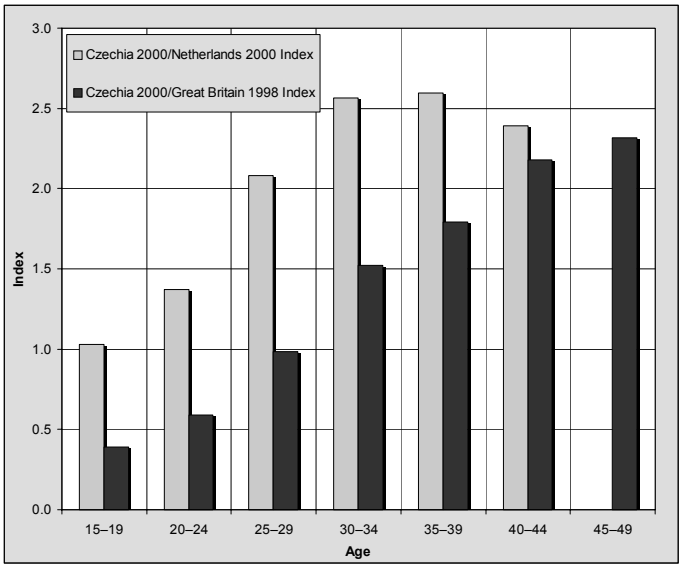
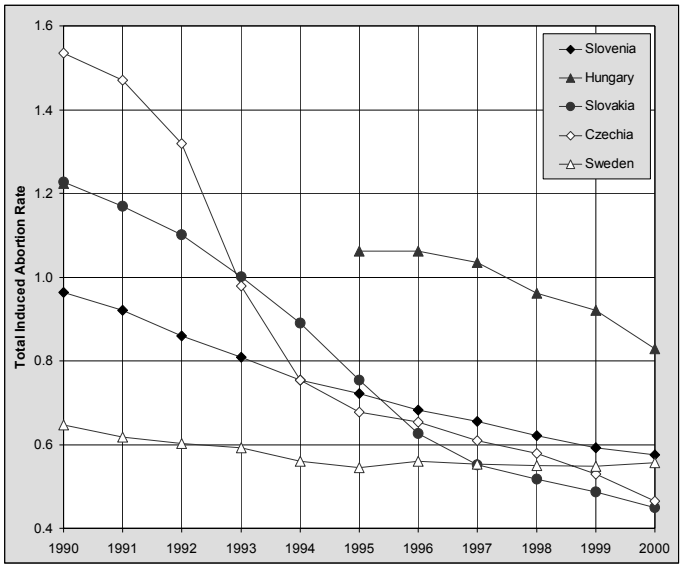


Figure 5.8: 1990–2000 Total Induced Abortion Rate in the Czechia, Slovakia, Hungary, Slovenia and Sweden



Induced abortion rate decreased more significantly in the Czech Republic as compared to other Central European postcommunist states with the exception of Poland where, due to the Catholic Church and conservative political circles pressure, abortion has been almost totally banned since 1993. In 1990 the Czech Republic had a significantly higher total induced abortion (1.54) than Slovakia (1.23), Hungary (1.22) and Slovenia (0.96). Primarily due to its 1993 sharp decrease, until 2000 this indicator has decreased to almost Slovakia's level and below Slovenia's (0.58) and Hungary's (0.83). Excluding the 70's, the Czech Republic induced abortion rate remained on a higher level than in Slovakia. At present these differences have merged and the Czech Republic not only has the same induced abortion level as Slovakia but almost an identical induced abortion rate distribution according to age.

Future Generations Will Have a Different Age Structure of Women Undergoing Abortion

Throughout abortion rate decrease, liberal abortion legislation was maintained and political attempts at limiting women's access to abortion were rather individual. It is possible to drastically reduce abortion level even without legal restrictions, i.e. while respecting women's right to decide about their pregnancy outcome. According to diverse research studies, highly secularised Czech society remained tolerant towards abortion; for example according to European Union 1991 and 1999 studies of values, the population majority approve of abortion as long as married couples do not want to have an additional child. Abortion approval in this situation even rose from 66 to 76%, while differences between male and female opinions were insignificant. It seems that induced abortions sharp decrease is ending, however its gradual further decline can still go on. Present, actual abortion structure indicates this as well, still reflecting totalitarian era abortion behaviour: too many women repeatedly undergo abortion and most abortions concern married women with children. These features, in contrast with abortion distribution in most advanced countries, as induced abortion intensity peak at 29–31 years of age, are rather a temporary outcome of abortion behaviour generation shift. Whereas female generations born after 1975 got into the habit of using modern contraceptives since the beginning of their sexual life, women born five or ten years earlier less frequently prevent unwanted pregnancy and tend to refuse an unwanted childbirth by means of an abortion. Since it is unlikely that younger generations would turn away from using effective contraceptives, it seems that with the coming generation variant even induced abortion characteristics will get closer to a more logical structure: most abortions would then concern young, unmarried and childless women who had never undergone any abortion. Besides, it would be positive if the Czech Republic extremely strict sterilization regulations could be loosened, as well as the so-called "abortion pill" RU 486 legalized; the latter is a cheap and safe means of triggering a spontaneous abortion.

Table 5.8: Abortion Statistics according to the Czech Statistical Office and the Institute of Health Information and Statistics

Year	CSO Data concerning Permanent Female Residents Czech Republic				
	Induced Abortions			Spontaneous Abortions	Other Abortions	Ectopic Pregnancies (EP)
	Total[1]	For Health Reasons	Abortions by Suction			
1989	109 743	10 008	86 732	14 805	19	1 940
1990	109 375	9 533	87 933	14 772	15	1 893
1991	104 293	8 929	84 711	13 985	23	1 749
1992	94 180	10 332	77 566	13 401	19	1 681
1993	70 634	15 896	57 938	13 228	23	1 560
1994	54 836	13 217	46 609	11 109	11	1 478
1995	49 531	11 838	41 735	10 571	12	1 476
1996	48 086	11 036	40 333	10 296	20	1 560
1997	45 022	9 709	37 882	10 392	7	1 552
1998	42 959	8 896	35 752	11 128	12	1 555
1999	39 382	7 756	32 579	11 173	12	1 536
2000	34 623	6 472	28 418	11 300	15	1 432
2001	32 528	.	.	11 116	2	1 411

Year	IHIS Data concerning Czech Female Citizens ("natives") and Foreign Female Citizens											
	Induced Abortions						Spontaneous Abortions		Other Abortions		Ectopic Pregnancies (EP)	
	Total[1]		For Health Reasons		Abortions by Suction							
	C	F	C	F	C	F	C	F	C	F	C	F
1989	107 403	2 436	9 871	130	85 216	1 595	14 689	140	18	1	1 940	0
1990	107 131	2 231	9 428	76	86 444	1 489	14 656	116	15	0	1 893	14
1991	103 124	1 157	8 836	55	83 915	798	13 892	94	23	0	1 749	15
1992	93 435	769	10 270	44	77 040	546	13 324	96	4	0	1 681	15
1993	69 398	1 237	15 738	135	56 982	957	13 076	152	3	1	1 560	19
1994	53 674	1 162	13 046	171	45 694	915	10 958	151	8	3	1 460	18
1995	48 286	1 245	11 679	159	40 755	980	10 397	174	12	0	1 448	28
1996	46 506	1 580	10 884	152	39 125	1 208	10 129	167	19	1	1 530	30
1997	43 261	1 761	9 578	131	36 497	1 385	10 188	204	6	1	1 516	36
1998	40 935	2 024	8 742	154	34 193	1 559	10 844	284	12	0	1 507	48
1999	37 157	2 225	7 634	122	30 834	1 745	10 824	349	11	1	1 477	59
2000	32 530	2 093	6 338	134	26 785	1 633	10 972	328	15	0	1 377	55
2001	30 358	2 170	5 877	.	24 483	.	10 769	347	2	.	1 352	59

[1]Excluding ectopic pregnancies.
C – data concerning Czech female nationals.
F – data concerning foreign female nationals.

MORTALITY

6

Even during the 20th century last decade, the Czech Republic population evolution was first and foremost set by natural reproduction. The unparalleled fertility intensity decrease brought about a sharp fertility level decline despite a significant increase of potential mothers thus reacting against population number growth reverse orientation; in contrast mortality intensity positive development supported population growth hence partially compensating fertility low level. If mortality had remained at a level corresponding to the first half of the 80's in the nineties, then the resulting population number would have counted 150 000 people less. This mere figure testifies to mortality situation very significant shift bearing in mind that, at present, fewer than 110 000 inhabitants yearly die in the Czech Republic. Even more meaningful than population total number change, natural reproduction elements reverse development has modified population age structure composition.

However, the mortality rate decrease we have witnessed for the past fifteen years does not translate into a mere increase of living beings. Mortality rate significantly structural differences were due to a diverse transformation range of mortality intensity indicators according to age. In the past few years the elderly mortality intensity has been primarily decreasing thus population demographic ageing is accelerating.

Healthcare More Propitious Conditions Triggered Mortality Rate Decrease

The Czech Republic postwar mortality evolution was characterised by a few specific features. The first postwar life expectancy relatively swift increase was replaced by a long term stagnation at the turn of the sixties which lasted almost three decades. Concerning male population, the late sixties brought about a two-year life expectancy decrease as compared to the early sixties. The analysed development was in sharp contradiction with changes going on in most advanced countries, among which Czechoslovakia definitely belonged in the late fifties, concerning its mortality situation. That is still the reason why we still significantly lag behind these countries up until today. The beginning of mortality rate evolution third stage, characterised by a long term life expectancy rise and by its closing up on advanced countries group, is most often dated 1987. From the point of view of mortality total intensity shifts, this year is specifically considered as a turning point.

Mortality shifts subsequent to 1987 can be characterised as rather smooth, though not entirely balanced. This new trend setup was initially limited and its actual existence was merely confirmed as of the early 90's. Mortality rate and structure decisive shifts are thus connected to particularly significant socioeconomic changes following 1990 which have affected population health state as well. Mortality level overall improvement at this period in time is the outcome of numerous factors combined effect. A tentative list of a few major ones would definitely include the following:

- End of healthcare monopolization and liberalization, free selection of doctors, significant widening of range of means directed to healthcare sector translating into specialised care increased offer, implementation and improvement of accessible, state of the art technology and medicine quality as well as provided health services marked rise and general availability.
- More efficient health education adopting some advertising methods.
- Rising awareness of individual healthcare, partially due to the apprehension of a possible income downsizing or even loss, thus leading to an increased active concern about a healthy lifestyle.
- Substantial changes in population lifestyle leading to healthy life habits.
- Large offer and current availability of quality food products.
- Significant improvement of environment quality basic parameters.
- Shifts in population economic activity (industry workers decrease, service industry workers increase) and to related health hazardous work environments narrowing.

Improving mortality conditions during the last analysed period are further documented e.g. by total deceased number indicators value decrease of approximately 127 000 persons in 1987 to less than 108 000 persons in 2001, not taking into account concurrently ongoing demographic ageing. However deceased total number as well as crude mortality rate are influenced by age structure evolution that is why they do not reflect mortality process ongoing shifts real intensity. Their accurate extent is defined on the age structure by independent indicators – standardized mortality rates and life expectancy at diverse age levels. If in 1987, there were 12.3 deaths per 1 000 living persons then in 2001, it was a mere 10.5 deaths. However if an increased representation of the elderly had not occurred within the population and the 1987 age structure had remained identical, in 2000 95 000 persons would have died due to present mortality intensity which de facto is close to 13 000, less than in reality (age structure ageing outcome) and 32 000 less than in 1987 (mortality level decline outcome). On the

contrary, if the 1987 mortality level had been maintained and only age structure would have changed, deceased total number in 2000 would have almost reached 145 000 persons. It means that subsequent to mortality intensity decrease from its 1987 level to its 2000 one, only in 2000 an approximate increase of 37 000 human lives occurred. Thus the latter divergence is more than an eloquent proof of the extent of changes within the Czech Republic population mortality after 1987.

Table 6.1: 1987–2001 Mortality

Indicator		1987	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001p
Number of Deaths		127 244	129 166	124 290	120 337	118 185	117 373	117 913	112 782	112 744	109 527	109 768	109 001	107 755
Mortality Crude Rate		12.3	12.5	12.1	11.7	11.4	11.4	11.4	10.9	10.9	10.6	10.7	10.6	10.5
Standardized Crude Mortality Rate[1]		12.3	12.2	11.7	11.3	11.0	10.8	10.7	10.1	10.0	9.6	9.5	9.2	.
Life Expectancy at Birth	Men	67.86	67.58	68.25	68.44	69.20	69.54	69.72	70.37	70.50	71.13	71.40	71.65	72.14
	Women	75.12	75.36	75.72	76.14	76.41	76.58	76.63	77.27	77.49	78.06	78.13	78.35	78.45
	Difference	7.26	7.78	7.47	7.70	7.21	7.04	6.91	6.90	6.99	6.93	6.73	6.70	6.31
Life Expectancy at 65	Men	11.66	11.61	11.95	12.09	12.40	12.75	12.71	13.09	13.19	13.41	13.60	13.72	14.00
	Women	14.97	15.18	15.54	15.89	15.90	15.99	16.05	16.36	16.63	16.92	16.91	17.09	17.13
	Difference	3.31	3.57	3.59	3.80	3.50	3.24	3.34	3.27	3.44	3.51	3.31	3.37	3.13

[1]Standard – population age structure as of 1.7.1987.

Throughout the analysed period, due to mortality intensity decrease life expectancy at birth concerning men rose from 67.9 to 72.1 and concerning women from 75.1 to 78.5, i.e. men would on average live 4.2 years longer and women 3.4 years longer than in 1987 while maintaining 2000 mortality parameters. Though these life expectancy hopes do not belong to the absolute highest, as to our domestic mortality evolution context, they are yet comparable to interwar and postwar maxima, when within a comparable time sequence 10–12 years, life expectancy at birth reached above 0.5 year on average. In the 90's, this indicator value concerning both men and women in the Czech Republic, rose faster than in other European countries. The only similarly intensive life expectancy at birth increase occurred in Austria where, throughout the 1986–1999 period it reached values of 4.1 years for men and 3.2 years for women, for example comparable to Italy (3.4 and 3.1 years) or France (3.5 and 2.9 years), though with a higher life expectancy. Within post-communist countries, the Czech Republic mortality level evolution has had no comparison for the last ten or fifteen years.

Higher Life Expectancy at Birth Implied Significant Infant Mortality Level Decrease

Mortality intensity shifts were not identical within each age group. One of the most significant shift occurring after 1987, was mortality rate decrease during the first year. Infant mortality percentage out of total mortality computed according to deaths absolute number decreased from 1.2% in 1987 to a mere 0.3% in 2001. If at the beginning of the analysed period in 1987, 12 infants out of every 1 000 live born ones died before reaching their first birthday, in 2001 infant mortality rate reached the even recently quite unbelievable value of 4‰ on average and for both sexes. This indicator last published value represents 4.6‰ for boys and even 3.4‰ for girls.

From the point of view of time and of changes inner structure, infant mortality rate decrease went on rather smoothly throughout the analysed period. Yet decisive changes occurred in the mid 90's. Between 1992 and 1997, infant mortality rate value decreased from 9.9‰ to 5.9‰, representing half of this indicator total decrease between 1987 and 2001. A significant and from the intensity perspective comparable decrease occurred across infant mortality total structure. However it was somewhat more intensive concerning infant mortality and most accute between the first and sixth full days following birth. Actually until 2001, infant mortality intensity decreased exactly down to a third of its 1987 final value while early neonatal mortality intensity (0 to 6 days) decreased to 22%, including within its frame, mortality at the age of 1 or 2 complete days down to a mere 18% of final rate. Besides one ought to repeat that not even one of the above mentioned cases was due to unexpected fluctuations within the frame of the analysed year but to a long term, regular decrease down to its reached level.

Perinatal mortality, concerning still births and deaths during the first week of life (0–6 days), underwent similar changes as infant mortality did. Perinatal mortality current index of 4.3 children out of 1 000 births represents a mere 40% of this indicator 1987 value (10.7%). In 2001, total number of still born and deceased prior to 7 days infants was not only lower (395 children) than 1987 mere number of deceased prior to 7 days (857 children) but of stillborn as well (548 children) and the mere fact that total births number decreased by 30% during the same period, does not change this reality at all.

Table 6.2: Infant Mortality Characteristics

Indicator	1987	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Number of Stillborn	548	530	496	437	445	336	300	317	273	294	303	259	263
Number of Deaths Prior to:													
– 24 hours (0 day)	263	236	238	181	171	108	92	73	62	66	62	48	47
– 3 days (0–2 days)	639	553	513	431	359	251	230	158	137	128	119	101	95
– 7 days (0–6 days)	857	753	704	585	505	348	309	224	186	175	172	150	132
– 28 days (0–27 days)	1 094	1 003	902	749	692	505	475	347	326	289	261	231	212
– 1 year (0–364 days)	1 577	1 410	1 343	1 204	1 028	847	740	547	531	472	413	373	360
Share of Total Deaths Till 1 Year (%) – Died Prior to:													
– 24 hours (0 day)	16.7	16.7	17.7	15.0	16.6	12.8	12.4	13.3	11.7	14.0	15.0	12.9	13.1
– 3 days (0–2 days)	40.5	39.2	38.2	35.8	34.9	29.6	31.1	28.9	25.6	27.1	28.8	27.1	26.4
– 7 days (0–6 days)	54.3	53.4	52.4	48.6	49.1	41.1	41.8	41.0	35.0	37.1	41.6	40.2	36.7
– 28 days (0–27 days)	69.4	71.1	67.2	62.2	67.3	59.6	64.2	63.4	61.4	61.2	63.2	61.9	58.9
– between 28 days and 1 year (28–364 days)	30.6	28.9	32.8	37.8	32.7	40.4	35.8	36.6	38.6	38.8	36.8	38.1	41.1
Share of Deaths Prior to 1 Year out of Total Deaths (%)	1.2	1.1	1.1	1.0	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3
Rate (per 1 000 live births):													
– first day mortality (0 day)	2.0	1.8	1.8	1.5	1.4	1.0	1.0	0.8	0.7	0.7	0.7	0.5	0.5
– postnatal mortality (0–2 days)	4.9	4.2	4.0	3.5	3.0	2.4	2.4	1.7	1.5	1.4	1.3	1.1	1.0
– early neonatal mortality (0–6 days)	6.5	5.8	5.4	4.8	4.2	3.3	3.2	2.5	2.1	1.9	1.9	1.6	1.5
– neonatal mortality (0–27 days)	8.4	7.7	7.0	6.2	5.7	4.7	4.9	3.8	3.6	3.2	2.9	2.5	2.3
– postneonatal mortality (28–364 days)	3.6	3.1	3.4	3.7	2.8	3.2	2.8	3.2	2.3	2.0	1.7	1.6	1.7
– infant mortality (0–364 days)	12.0	10.8	10.4	9.9	8.5	7.9	7.7	6.0	5.9	5.2	4.6	4.1	4.0
Perinatal mortality:													
Stillborn and Deceased Prior to 7 Days Number	1 405	1 283	1 200	1 022	950	684	609	541	459	469	475	409	395
Perinatal Mortality Index (per 1 000 births)	10.7	9.8	9.2	8.4	7.8	6.4	6.3	6.0	5.0	5.2	5.3	4.5	4.3

Within the international context, the Czech Republic alongside Japan and Western European countries, ranks among the top ones as to its infant and perinatal mortality rates. All introduced indicators very low values stabilized throughout the last years, bear witness to foremost prenatal and neonatal quality medical healthcare. The prevention of some genetic defects and conditions, classified as mortality endogenous factors still represent the most severe threat to infant life, has been particularly successful. By reaching first year infants very low mortality rate, practically all reserves of this age category concerning life expectancy values increase at birth were used up. That is why, the Czech Republic population mortality current studies primarily focus on highest age groups within the last decade.

Figure 6.1a: Differences in Male Mortality Intensity between the Czech Republic and a Group of Advanced Countries[1]

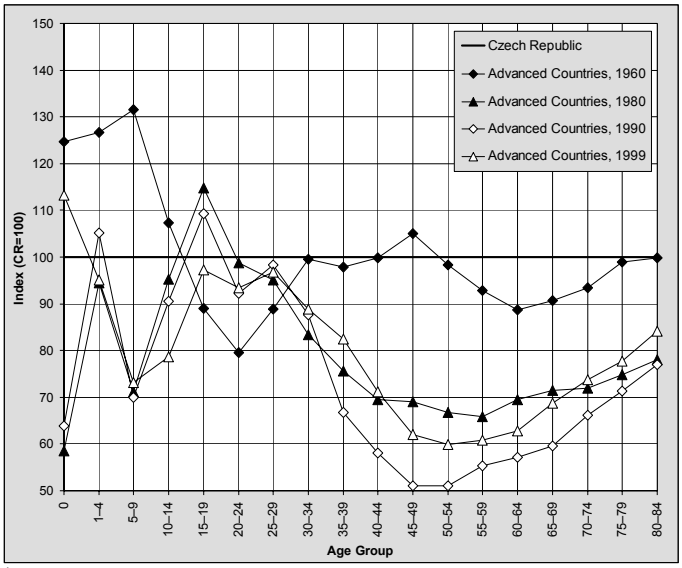
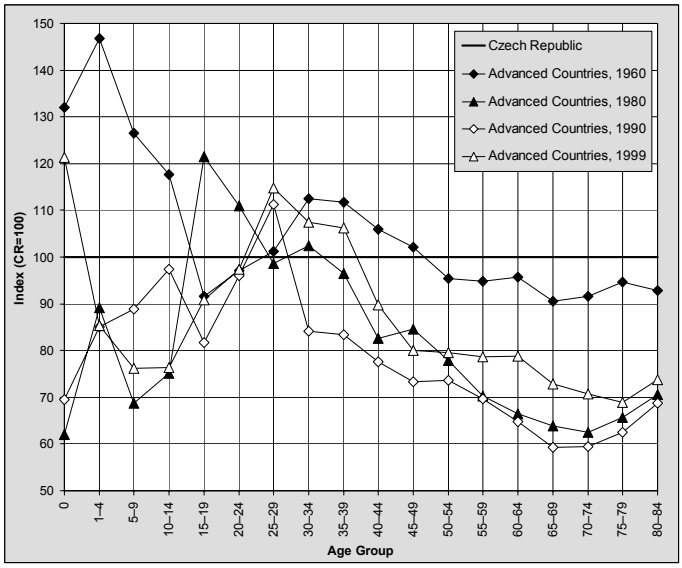


Figure 6.1b: Differences in Female Mortality Intensity between the Czech Republic and a Group of Advanced Countries



[1]"Advanced Countries": England, Denmark, Finland, France, Italy, Japan, Canada, Germany, the Netherlands, Norway, Austria, the United States, Sweden and Switzerland..

The Czech Republic mortality structure according to sex and age has, apart from general regularities such as a higher male mortality intensity in all age groups, a few significant specificities. First of all there is a markedly higher middle-aged (45–64 years of age) male mortality indicating up until now an approximately double intensity as compared to mortality in advanced countries. Our population shows one half higher mortality values in wide age segments 15–44 and 65–74 concerning men and 50–79 concerning women than these countries.

Changes in mortality total level that we have been witnessing during the last fifteen years, occurred in all age groups. Aside from the first year, the greatest relative decrease concerned men and women at 30–44 years of age, of more than a quarter. An identical evolution was detected concerning males aged up to 70. A mere slightly less intensive decrease took place within all other age groups. Still, the change was of up to tenths per cent as compared to the starting year. Concerning men, changes were generally always somewhat greater than concerning women corresponding to a significant developmental lag of their mortality level prior to 1987.

Table 6.3: Mortality Probabilities according to Sex and Age (x 1 000)

Age	Men				Women				Index 2001p/1987		Index Men/Women	
	1987	1995	2000	2001p	1987	1995	2000	2001p	Men	Women	1987	2001p
0	13.6	7.3	4.6	4.6	10.2	5.3	3.5	3.4	34	33	133	137
1–4	1.9	2.3	1.2	1.0	1.4	1.9	1.0	0.9	52	64	136	110
5–9	1.7	1.2	1.0	0.9	1.1	1.0	0.7	0.7	51	60	155	132
10–14	1.5	1.2	1.1	0.9	0.8	1.0	0.9	0.7	59	81	188	136
15–19	4.1	3.5	3.4	3.3	1.8	1.7	1.6	1.4	80	77	228	237
20–24	5.5	5.9	5.2	5.3	1.7	1.8	1.7	1.6	96	94	324	331
25–29	5.9	6.0	5.0	4.8	2.1	2.0	1.6	1.8	82	86	281	268
30–34	7.5	7.3	6.1	5.7	3.1	2.8	2.3	2.3	77	74	242	252
35–39	11.9	10.8	9.0	8.6	4.8	4.5	3.7	3.8	72	78	248	229
40–44	21.2	17.5	15.8	15.1	8.4	7.7	6.9	7.2	71	85	252	212
45–49	34.9	29.6	27.5	25.8	14.7	12.6	12.2	11.5	74	78	237	224
50–54	56.9	49.6	44.6	42.2	23.5	21.2	19.1	18.9	74	81	242	223
55–59	90.2	76.0	68.8	67.7	39.5	33.3	29.2	29.6	75	75	228	228
60–64	142.9	115.3	105.3	99.3	62.2	52.4	45.1	44.2	69	71	230	224
65–69	210.0	175.7	156.6	149.2	111.3	88.3	77.4	75.2	71	68	189	199
70–74	290.7	272.2	228.8	222.3	178.4	154.5	132.4	130.0	76	73	163	171
75–79	425.2	389.5	336.8	326.8	296.4	264.7	230.3	229.7	77	78	143	142
80–84	576.7	511.8	472.5	462.0	469.9	409.1	373.8	374.6	80	80	123	123
85–89	752.2	649.3	634.9	622.7	685.0	602.0	579.2	584.8	83	85	110	106

2001p – probability from CSO 2001 mortality tables; computation based on 2001 population census preliminary results.

Excess Male Mortality Remains High

Male unfavourable mortality structure according to age does not stem from international comparisons but from male versus female mortality level differences. Three times higher male mortality intensity compared to the female one within the 20–29 age group, and more than twice higher in all other age groups within the 15–69 segment, is more than meaningful. High excess male mortality thus creates to a certain extent, a logical frame meant for monitoring mortality intensity development differentiation according to sex and age since 1987. Furthermore, the fact that in a decisive manner, these differences still survive, points to a certain potential of mortality future changes.

Since within individual age groups, a usually different number of persons dies depending on living beings total number and corresponding mortality intensity, and due to living potential (life expectancy) fluctuation according to age, mortality intensity identical relative changes according to age can have a different meaning from the point of view of general mortality development. Thus mortality level significant improvement within the 30–39 age group has had practically no repercussion on male general mortality, since the one third decrease in mortality intensity meant an overall contribution of less than two tenths in life expectancy at birth. In contrast a comparable relative change within the 60–69 age group meant a contribution superior to 0.9 year. From this point of view, the most significant changes in mortality intensity during the past approximately fifteen years, occurred concerning men aged 50–85 and women aged 55–85, obviously not taking into account mortality decrease during the first year of life. The latter represented the utmost contribution to life expectancy increase, reaching approximately two thirds for men and half a year for women. However in conversion to a comparable time segment, infant mortality level decrease significance was even a few times greater.

Figure 6.2a: Age Groups Contribution to Male Life Expectancy at Birth Change during 1987–2000 Period

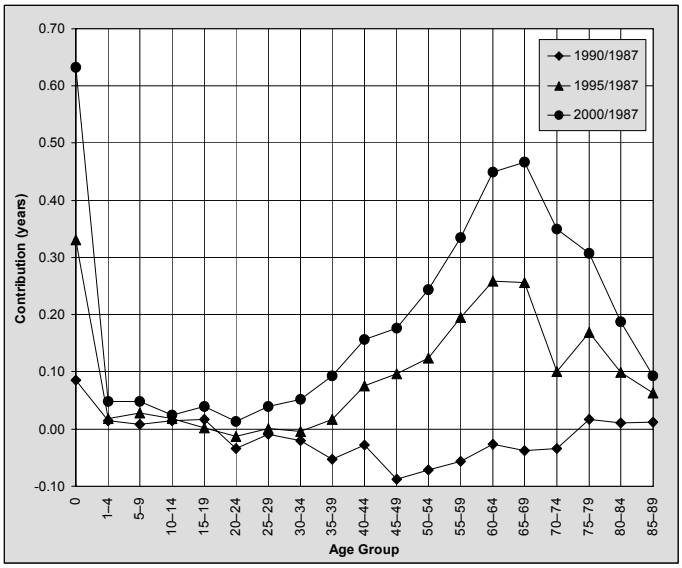
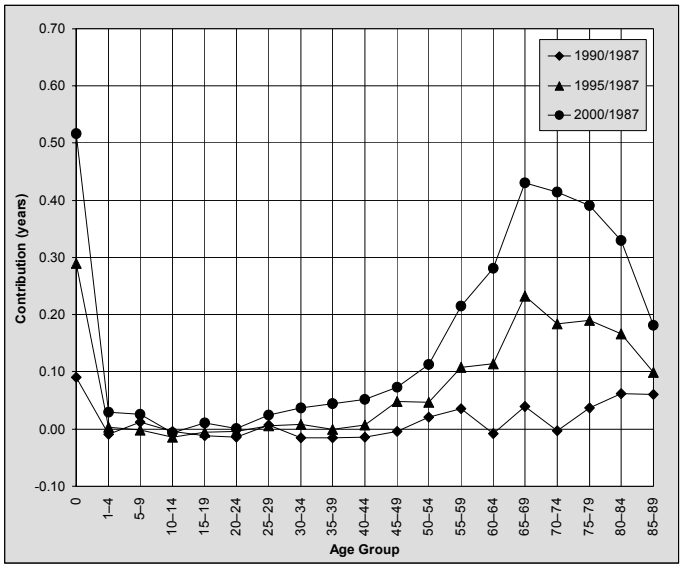
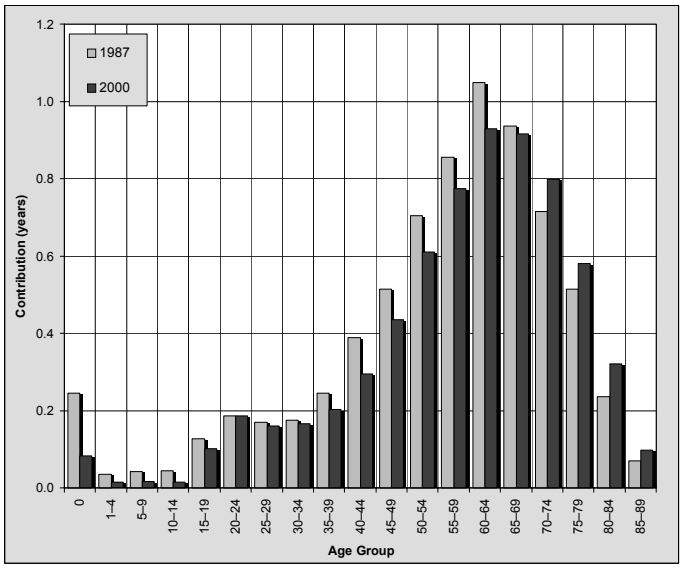


Figure 6.2b: Age Groups Contribution to Female Life Expectancy at Birth Change during 1987–2000 Period



Men's more intensive mortality level decrease as compared to women's contributed to a relatively significant reduction of their life expectancy difference from 7.3 years (1987), respectively 7.8 years (1990) to 6.3 years (2001). Age groups percentage of established differences is relatively stable timewise and due to identical reasons as in life expectancy at birth does not correlate to mortality intensity relative differences according to sex within individual age groups. The 20–29 age group does not contribute as much to total difference with a three times higher excess mortality, but the 60–69 age group does, since men "only" die twice more frequently than women.

Figure 6.3: Age Groups Contribution to Life Expectancy at Birth Differences between Women and Men



Age and sex are basic as well as traditional signs of mortality differences study. Apart from them, there is a relatively wide range of signs, according to which mortality is differentiated according to period, age and sex. That is why a more detailed knowledge of mortality process context requires a more thorough analysis of its additional structural characteristics, such as e.g. differences according to death causes or according to social, educational and professional categories, in a regional cross-section and in relation to environment separate physical or social elements, individually according to distinctive signs as well as in the light of their mutual interaction.

Specific differences in mortality level according to sex and age are connected to mortality particular structures according to causes. The cause of most deaths is the resulting interaction of each individual biological (internal) conditions and external factors long term activity. That is why mortality intensity in relation to a concrete cause often depends on, apart from specific conditions according to which members of a given population lived and live, exposure time to specific external influences as well. Exposure intensity can also depend on age and a few additional features of exposed persons, as well as to their past living experiences. Due to the deceased rising age, there are more frequent cases of several illnesses combination thus impeding death causes identification and codification. Besides, death causes statistics can be influenced by diagnostic practice differences, which can bear a significant, time and regional range consequently hindering data analysis and obtained findings interpretation. However despite these facts, mortality level and structure analysis according to causes produce valuable and interesting information, leading to a better understanding of mortality differences according to sex and an identification of this process further development reserves.

Similarly to global population development, its individual elements development undergoes specific, historical stages or phases, thus changing their intensity and transforming their structure. Within mortality context, one most frequently mentions epidemiologic transition. In the 80's, the Czech Republic population had already been for a longer while in its third phase since civilisation and degenerative

diseases, mainly cardiovascular system ones, prevailed amid mortality causes. Mortality intensity sharp, past decrease due to infectious diseases control led to mortality structure significant transformation, life expectancy further growth and contributed to population gradual ageing. Linked to the elderly rising percentage, circulatory system diseases and cancers, are logically prevailing among death leading causes.

Mortality Level Decrease Was Mainly Due to Total Number of Deaths Caused by Circulatory Diseases Reduction

Circulatory system diseases are the most frequent cause of death of the Czech Republic inhabitants. In 2001 they led to more than 57 000 death cases. More than 28 000 persons died of tumor diseases and other causes led to 22 000 deaths out of a total number of approximately 108 000 deceased. In 2001, more than 53% of all deaths belonged to the group of cardiovascular system diseases, first acute myocardial infarction (10 700 deaths), other forms of heart ischemic diseases (12 300) and brain vascular diseases (16 800). More than one fourth of deaths was caused by newly coined cancers though a mere 0.5% were classified as benign tumors. In 2001, malignant tumors leading to death most frequently attacked bronchial tubes and lungs (5 600 deaths), the colon (2 600), the breast (1 900), lymphatic, blood and related tissues (1 900). Other groups of death causes were mostly due to external causes, concerning a rather high death rate (6 900) at a definitely younger average death age. Former leading groups of respiratory system diseases (4 700 deaths) and digestive system ones (4 400) are at present the last ones. In 2001 other causes, such as the group combining a relatively numerous and diverse diseases range, led to 5 900 death cases.

Table 6.4: Mortality Structure according to Main Groups of Death Causes

Death Causes	1987	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001p
	Number of Deaths												
Neoplasms	27 506	28 434	28 258	28 018	28 102	28 446	28 631	27 879	28 008	28 015	28 185	28 705	28 455
Circulatory System Diseases	72 071	72 396	69 488	67 054	65 986	65 132	65 951	63 145	63 334	60 397	60 286	58 192	57 404
Respiratory System Diseases	5 879	5 423	5 134	5 093	4 808	4 636	5 076	4 667	4 314	4 105	4 659	4 959	4 653
Digestive System Diseases	4 621	5 023	4 674	4 435	4 155	4 470	4 326	4 146	4 024	4 158	4 248	4 239	4 418
External Causes	8 487	9 049	8 786	8 692	8 496	8 556	8 502	7 793	7 847	7 013	6 925	7 070	6 910
including:													
– Traffic Accidents	1 244	1 571	1 583	1 715	1 691	1 827	1 667	1 528	1 584	1 428	1 568	1 572	..
– Other Accidents	5 307	5 481	5 299	4 986	4 888	4 877	5 102	4 697	4 597	3 972	3 747	3 849	..
– Suicides	1 936	1 997	1 904	1 991	1 917	1 852	1 733	1 568	1 666	1 613	1 610	1 649	1 623
Other Causes	8 680	8 841	7 950	7 045	6 638	6 133	5 427	5 142	5 217	5 839	5 465	5 836	5 915
Total	127 244	129 166	124 290	120 337	118 185	117 373	117 913	112 782	112 744	109 527	109 768	109 001	107 755
	Share (%)												
Neoplasms	21.6	22.0	22.7	23.3	23.8	24.2	24.3	24.7	24.8	25.6	25.7	26.3	26.4
Circulatory System Diseases	56.7	56.0	55.9	55.7	55.8	55.5	55.9	56.0	56.2	55.1	54.9	53.4	53.3
Respiratory System Diseases	4.6	4.2	4.1	4.2	4.1	4.0	4.3	4.1	3.8	3.8	4.2	4.5	4.3
Digestive System Diseases	3.6	3.9	3.8	3.7	3.5	3.8	3.7	3.7	3.6	3.8	3.9	3.9	4.1
External Causes	6.7	7.0	7.1	7.2	7.2	7.3	7.2	6.9	7.0	6.4	6.3	6.5	6.4
including:													
– Traffic Accidents	1.0	1.2	1.3	1.4	1.4	1.6	1.4	1.3	1.4	1.3	1.4	1.5	..
– Other Accidents	4.2	4.2	4.3	4.1	4.2	4.1	4.3	4.2	4.1	3.6	3.4	3.5	..
– Suicides	2.5	1.6	1.5	1.7	1.6	1.6	1.5	1.4	1.5	1.5	1.5	1.5	1.5
Other Causes	6.8	6.9	6.4	5.9	5.6	5.2	4.6	4.6	4.6	5.3	5.0	5.4	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

From the point of view of 1987–2001 mortality total number development, an important change took place within the circulatory system diseases group, its deaths total number decreasing by 15 000. These 15 000 cases represented three fourths of total deaths number decrease. The change extent was further underlined by the fact that it happened at a period when population was ageing. The number of deaths due to other causes decrease by 2 800 was less significant from an absolute perspective through similar. Within a relative statement this decrease represented the absolute, greatest change down to 32% as to former state. Concerning circulatory system diseases, an analogous change represented "only" 20%, which was the same concerning two additional groups, respiratory system diseases and external causes. During the past six years, suicides sharp decrease was equally significant.

Death high concentration within the first two main groups of death causes, representing almost 80% of all events since the analysed period onset, did not leave sufficient room for further changes. That is why the 1.5 per cent point increase between 1987 and 2001 should be evaluated as significant. This change was reached due to a 3.3 per cent point decrease of circulatory system diseases and an almost five per cent increase of tumor diseases amid death causes. Neoplasms represented the only

group of causes which percentage significantly rose, since it increased by almost 1 000 its total deaths number and at the same time total deaths number within population fell by 15%. Though in 1987, tumor disease was the cause of almost every fifth death, in 2001 it represented approximately every fourth. Considering slower death decrease caused by digestive system diseases, this group of causes percentage also rose by half a per cent point. Other groups percentages, i.e. other causes, external causes and respiratory system diseases, decreased during the analysed period. Together these groups lost almost two per cent points, their common percentage out of total number decreased from 18% to 16%.

During the whole analysed period, the Czech Republic population was undergoing a relatively intensive demographic ageing process. That is why mortality level development according to causes should be cleared of ever-changing age structure influence so as to objectively evaluate its intensities and trends. In our case, the method of direct standardization combined with age structure corresponding to World Health Organization (WHO) European standard was used to compute comparable indicators.

Mortality standardised intensity level and structure according to main groups of death causes correspond in their main outline to male and female mortality structure according to number of deaths. A decisive share of mortality total intensity is due to circulatory system diseases and neoplasms. Cancer deaths mostly concern men; as to circulatory system diseases leading to death excess male mortality is lower. The group of other causes indicates a higher female mortality intensity as compared to the group of external causes. As far as men are concerned, their order is reversed due to a higher accident proneness and specifically a higher suicide rate.

Table 6.5: Standardised Mortality Rates per 1 000 Inhabitants according to Sex (WHO European standard)

Deaths Causes	1987	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Index 2000/1987
	Men												
Neoplasms	352.9	361.1	356.0	353.4	344.1	348.3	345.1	338.6	332.2	330.0	321.4	326.7	93
Circulatory System Diseases	833.1	834.1	791.4	765.5	729.7	707.3	708.1	666.2	660.8	615.7	602.8	576.9	69
Respiratory System Diseases	85.1	81.3	73.2	71.3	65.1	59.7	62.5	56.6	51.7	52.0	54.6	56.9	67
Digestive System Diseases	58.9	67.6	61.7	56.9	52.1	54.5	53.6	51.3	47.9	50.6	50.5	48.5	82
External Causes	103.4	117.4	112.9	114.6	109.4	106.7	106.2	99.4	102.3	91.8	90.8	93.0	90
including:													
– Traffic Accidents	19.0	23.8	23.5	26.0	24.8	26.7	23.2	21.9	23.0	20.4	22.6	22.2	117
– Other Accidents	55.0	62.9	60.1	57.7	55.4	52.7	57.2	53.4	53.5	46.7	43.2	45.9	83
– Suicides	29.4	30.7	29.3	30.9	29.2	27.3	25.8	24.1	25.8	24.7	25.0	24.9	85
Other Causes	104.0	103.7	92.3	81.6	75.0	69.0	60.0	56.5	56.6	62.8	58.8	59.6	57
Total	1 537.3	1 565.3	1 487.5	1 443.4	1 375.4	1 345.5	1 335.6	1 268.6	1 251.4	1 202.9	1 179.0	1 161.6	76
	Women												
Neoplasms	187.8	191.6	191.8	188.1	191.8	188.4	191.4	179.8	180.9	178.5	180.3	178.7	95
Circulatory System Diseases	529.7	512.5	492.1	468.5	468.1	456.8	455.0	430.7	428.2	407.4	401.5	379.0	72
Respiratory System Diseases	34.8	29.7	30.8	30.0	29.0	28.6	31.6	29.1	26.7	23.0	27.9	29.1	84
Digestive System Diseases	30.0	29.7	28.7	27.6	26.3	28.3	26.3	24.9	24.8	24.2	24.6	25.4	85
External Causes	57.6	54.1	53.4	49.7	49.0	50.3	47.9	42.3	40.4	35.2	34.1	34.2	59
including:													
– Traffic Accidents	5.7	6.9	7.1	7.1	7.5	7.9	8.2	6.9	6.7	6.0	6.5	7.0	123
– Other Accidents	42.4	37.6	37.4	34.0	32.9	33.6	32.2	29.5	27.7	23.5	22.3	21.4	50
– Suicides	9.5	9.6	8.9	8.6	8.6	8.8	7.5	5.9	6.0	5.7	5.3	5.8	61
Other Causes	70.3	70.7	63.4	57.4	54.8	51.1	46.8	43.3	43.4	46.0	42.3	44.2	63
Total	910.2	888.3	860.1	821.3	819.0	803.4	798.9	750.1	744.3	714.4	710.5	690.5	76
	Index Men/Women												
Neoplasms	188	188	186	188	179	185	180	188	184	185	178	183	97
Circulatory System Diseases	157	163	161	163	156	155	156	155	154	151	150	152	97
Respiratory System Diseases	245	274	238	238	224	209	198	195	194	226	196	196	80
Digestive System Diseases	196	228	215	206	198	193	204	206	193	209	205	191	97
External Causes	180	217	211	231	223	212	222	235	253	261	266	272	151
including:													
– Traffic Accidents	333	345	331	366	331	338	283	317	343	340	348	317	95
– Other Accidents	130	167	161	170	168	157	178	181	193	199	194	214	165
– Suicides	309	320	329	359	340	310	344	408	430	433	472	429	139
Other Causes	148	147	146	142	137	135	128	130	130	137	139	135	91
Total	169	176	173	176	168	167	167	169	168	168	166	168	100

Standardised rates comparison outcome shows that mortality intensity is markedly higher concerning men than women in all main causes groups. Differences are such that for example in 2000, general mortality level concerning men was by two thirds higher than the one concerning women. In 2000, the greatest difference in mortality intensity according to sex appeared in external causes group and within its frame, the greatest difference concerned suicides. Men in a comparable age structure died four times more frequently committing suicide than women, and three times more than women of traffic accidents whereas they died only twice more frequently of other accidents.

Excess Male Mortality Is Obvious in All Age Groups and in All Death Causes Groups

Despite the significant discrepancy between men and women mortality corresponding characteristics, any assumption of a satisfactory situation regarding women mortality is erroneous. According to international comparative studies, Czech women mortality level is significantly higher than the European Union 15 countries average in all death causes groups except respiratory system diseases. According to a comparative study with the European Union average covering 1996-1999, women ended up with an even lower evaluation than men since their total mortality was 33% higher than men's at "only" 31%. If we take as an evaluation standard, EU countries with the lowest mortality intensity – Sweden for men and France for women – then the result for our female population is even less favourable. If male general mortality difference between the Czech Republic and Sweden was of 46%, then women living in the Czech Republic had a general mortality intensity 60% higher than women in France. Concerning both sexes, the greatest differences were in circulatory system diseases and external causes mortality rate. The only group of causes, bearing a definitely positive mortality intensity evaluation concerning the Czech Republic, was the respiratory system diseases one due to its low representation.

Mortality rate and structure established differences indicate the Czech Republic future mortality evolution possible direction and intensity. This latter evolution very trends within recent years can tell us even more. Comparing mortality standardised rates, we can infer that tumor illnesses leading to death stagnation or slow growth and their percentage increase out of total mortality did not trigger a mortality intensity increase within this group but were the outcome of a changing age structure. During the 1987–2000 period, mortality distinctive intensities due to tumor illnesses indicated a relatively smooth decrease down to values lower than 7% for men and 5% for women, but in comparison with other causes, this remained a relatively minor change. Indeed circulatory diseases analogous mortality intensity decreased down to 31, respectively 28%. The most significant mortality intensity decrease occurred as to respiratory diseases concerning men (33%) and external causes group concerning women, decreasing down to 41% during the 1987–2000 period. This substantial decrease took place regardless of female mortality intensity 23% increase due to traffic accidents. Male mortality rate due to external causes decreased by a mere 10% whereas in 2000, mortality rate within the frame of traffic accidents subgroup was 17% higher than in 1987. Within the frame of all death causes main groups concerning both sexes, a 5–41% range mortality rate decrease occurred throughout the analysed period while total mortality standardised indicator decreased concerning both men and women down to 24%.

The identical mortality intensity relative decrease concerning men and women led to this indicator somewhat diverse transformations, taking into account life expectancy at birth different resulting values. During the 1987–2000 period, life expectancy at birth increase reached 3.8 years for men and 3.2 years for women while contributions to this change were significantly differentiated according to age. We encounter a similar differentiation as to individual death causes groups. However their contribution to total life expectancy at birth modification implies a real meaning of mortality intensity changes on mentioned causes groups. This significance is given by the deceased specific age structure, given population death order and mortality intensity changes extent on given cause during the analysed period.

Table 6.6: Death Causes according to Age Groups Contributions to Life Expectancy at Birth Changes during 1987–2000 Period

Death Causes	Men					Women				
	0–34	35–64	65+	Total	%	0–34	35–64	65+	Total	%
Neoplasms	0.07	0.32	0.03	0.42	11.1	0.03	0.17	0.01	0.21	6.5
Circulatory System Diseases	0.05	1.01	1.05	2.11	55.8	0.03	0.50	1.35	1.88	58.2
Respiratory System Diseases	0.06	0.07	0.11	0.24	6.4	0.03	0.02	0.04	0.09	2.8
Digestive System Diseases	0.03	0.04	0.05	0.11	2.9	0.01	–0.03	0.07	0.05	1.5
External Causes	0.07	–0.07	0.06	0.06	1.6	0.07	0.01	0.21	0.29	9.0
Other Causes	0.63	0.09	0.13	0.84	22.2	0.48	0.11	0.12	0.71	22.0
Total	0.90	1.47	1.42	3.79	100.0	0.64	0.79	1.80	3.23	100.0

During the 1987–2000 period, the Czech Republic mortality significant improvement due to respiratory system diseases subsiding, played a decisive role as to life expectancy growth: concerning men it contributed to a total modification of 2.1 years (56% life expectancy at birth total change) and concerning women, to 1.9 year (58%). Concerning men, this increase was equally divided between middle and elderly ages whereas concerning women 72% of the increase went to the 65 and older age group, thus depending on changes internal structure within the frame of a given group. Concerning men, acute myocardial infarction mortality rate recorded a decisive improvement, since this mere cause contributed to a total change increase of 1.02 year (out of which 0.60 year in 35–64 age group). Concerning women, an identical role was played by brain vascular diseases contribution of 0.88 year. Mortality intensity decrease due to cancers meant a life expectancy substantial increase concerning men (0.42 year) less substantial concerning women (0.21 year), yet for both sexes, this change decisively occurred at middle age. Mortality rate changes in two most significant groups of death causes together secured approximately 90% of life expectancy increase at middle age resulting value and two thirds of increase taking place across all age groups. Apart from age groups and causes which mortality intensity decreased between 1987 and 2000, one can also find groups and individual causes which mortality rose thus their increase is negative. Yet mere traffic accidents are worth mentioning with a loss of 0.11 year concerning men and 0.02 concerning women.

First and Foremost Mortality Intensity Due to Circulatory System Diseases Decrease Led to Life Expectancy Increase

Diverse biological conditions as well as men and women different exposure extent to risks due to diverse gender roles lead to differences in mortality intensity according to causes and consequently to mortality intensity differentiation according to sex. The question why are life expectancy differences between men and women so significant, could be partially answered by these differentiations distribution into individual causes groups contributions. In 2000, life expectancy at birth between men and women was of 6.7 years, more than a third of this difference was attributed to men higher mortality intensity due to circulatory system diseases, over a fourth to cancers and one fifth to external causes. At the same time excess men mortality concerned all death causes except sexual organs malignant cancers, the latter narrowing life expectancy difference between sexes of a mere 0.08 year. Almost half the difference (3.27 year) went to mortality at middle age. The first age group counted the largest contributing part of external causes total difference (0.59 of 0.74 year) while two thirds went to mortality due to traffic accidents deaths and suicides. At middle and elderly ages, it was again mainly circulatory system diseases and cancers and at middle age external causes as well.

Table 6.7: Death Causes Contributions to Life Expectancy at Birth Difference between Men and Women according to Age Groups (years)

Deaths Causes	1987					2000				
	0–34	35–64	65+	Total	%	0–34	35–64	65+	Total	%
Neoplasms	0.05	0.86	0.74	1.66	22.7	0.01	0.77	0.99	1.77	26.4
Circulatory System Diseases	0.06	1.81	1.32	3.19	43.5	0.03	1.28	1.28	2.60	38.8
Respiratory System Diseases	0.05	0.18	0.23	0.45	6.1	0.02	0.14	0.18	0.34	5.0
Digestive System Diseases	0.03	0.31	0.07	0.42	5.7	0.02	0.29	0.07	0.38	5.6
External Causes	0.57	0.50	0.03	1.10	15.0	0.59	0.65	0.11	1.34	20.0
Other Causes	0.27	0.13	0.11	0.51	7.0	0.08	0.15	0.05	0.28	4.2
Total	1.03	3.79	2.51	7.32	100.0	0.74	3.27	2.68	6.70	100.0

The fundamental feature of life expectancy at birth difference between sexes development throughout 1987–2000 period was due to circulatory and respiratory systems diseases and other causes increase transfer to cancers and external causes, and from younger age levels onto older ones. This development corresponds to mortality intensities development registered tendencies according to age and death causes main groups.

Diverse studies of mortality and its changes during the past ten or fifteen years have confirmed that higher educated people bear a lower mortality intensity as well as married people compared to others. The shaping of a modern lifestyle linked to a growing education level, but with a more frequent single life pattern brings about positive and negative sides to mortality rate changes. Mortality intensity decrease, specifically concerning elderly men also appeared within elderly population structure according to family status, because it led to less female widowhood thus to the elderly current marriages duration extension.

The course of separate demographic processes, including mortality, remains in a rather narrow correlation with population separate structural features and is influenced by its concrete living conditions. If these conditions are different in diverse regions or if population territorial distribution according to

mentioned characteristics and signs is unbalanced, then regional differences appear in demographic processes development. That is why regional differences in population mortality can be a significant indicator of quality of life differentiation and mortality development newest tendencies in centers or regions spreading innovation, and indicate a great deal about this process perspectives in other regions and at the national level. Since the Czech Republic districts population extent is not, from the point of view of representative yearly tables computation, sufficient we had to resort to several years data, concretely to a five-year period.

Table 6.8: Life Expectancy at Birth Differentiation in 77 Districts

Indicator	Men			Women		
	1986–1990	1991–1995	1996–2000	1986–1990	1991–1995	1996–2000
Minimum Value	64.9	66.2	68.7	72.3	73.2	75.3
Maximum Value	69.7	70.5	72.9	76.3	77.3	79.2
Range	4.8	4.3	4.2	4.0	4.1	3.9
Coefficient of Variation	1.46	1.44	1.41	1.11	1.08	1.05
Czech Republic	67.8	69.0	71.0	75.2	76.3	77.8

Since 1987, regional differences evolution of mortality process intensity has significantly influenced market relations renewal and its subsequent weakening of subdividing mechanisms, leading to a deepening differentiation between the country's separate regions. However conditions of people's daily lives have not yet significantly impacted to a greater extent on mortality intensity differentiation evolution in the Czech Republic regions. On the contrary regional complexes diversification according to life expectancy at birth has somewhat decreased since the range has narrowed and variation quotient has been brought down too. We can further interpret this fact since differences in medical care availability due to its quality transformation process have rather abated and outweighed the negative effect of other conditions increasing regional differentiation. Nevertheless the issue remains whether it will remain so in the future. Namely, a few living conditions which differentiation has increased, could more substantially affect mortality in the longer term.

Table 6.9: Districts with the Highest and Lowest Life Expectancy at Birth

Highest Values							
Men				Women			
1986–1990		1996–2000		1986–1990		1996–2000	
Třebíč	69.7	Hradec Králové	72.9	Vyškov	76.3	Hradec Králové	79.2
Brno–město	69.2	Plzeň-město	72.8	Třebíč	76.1	Jihlava	79.1
Pardubice	69.0	Náchod	72.7	Zlín	76.1	Pardubice	79.1
Vyškov	69.0	Hl.m. Praha	72.7	Tábor	76.0	Brno-venkov	79.0
Hradec Králové	69.0	Brno-město	72.4	Hradec Králové	76.0	Náchod	79.0
Brno-venkov	68.9	Ústí nad Orlicí	72.3	Břeclav	75.9	Vyškov	78.9
Blansko	68.9	Žďár nad Sázavou	72.2	Brno-venkov	75.9	Šumperk	78.7
Hl.m. Praha	68.9	Pardubice	72.2	Žďár nad Sázavou	75.8	Hodonín	78.6
Žďár nad Sázavou	68.9	Tábor	72.1	Blansko	75.7	Třebíč	78.6
Jihlava	68.7	Třebíč	72.1	Hodonín	75.7	Hl.m. Praha	78.6
Lowest Values							
Men				Women			
1986–1990		1996–2000		1986–1990		1996–2000	
Teplice	64.9	Most	68.7	Sokolov	72.3	Teplice	75.3
Most	65.4	Jeseník	68.9	Teplice	72.7	Most	75.8
Chomutov	65.6	Sokolov	69.0	Cheb	73.1	Chomutov	75.9
Český Krumlov	65.9	Chomutov	69.0	Most	73.1	Cheb	76.2
Cheb	65.9	Karviná	69.1	Česká Lípa	73.4	Rakovník	76.4
Sokolov	66.0	Děčín	69.1	Tachov	73.5	Děčín	76.5
Litoměřice	66.0	Teplice	69.2	Chomutov	73.6	Česká Lípa	76.5
Louny	66.1	Česká Lípa	69.3	Děčín	73.7	Litoměřice	76.6
Ostrava-město	66.2	Tachov	69.5	Karviná	73.7	Ústí nad Labem	76.7
Karlovy Vary	66.3	Louny	69.6	Litoměřice	73.7	Tachov	76.8

The fact that substantial internal changes in the Czech Republic mortality geographic structure occurred, even though corresponding statistical collections variability did not significantly change, is supported by exchanges of counties order at both ends of corresponding variability columns for 1986–1990 and 1996–2000 periods. Hradec Králové, Pardubice and Třebíč districts steadily belonged to regions with the highest life expectancy for both sexes as well as Náchod and Prague districts more recently. Concerning men, during mentioned periods, five regions names changed out of the first ten districts and concerning women four, excluding the new Šumperk district. During both periods, first and foremost Teplice, Most and Chomutov districts belonged to the end of the column, among lowest life expectancy total figures, and during 1996–2000 Děčín, Česká Lípa and Tachov districts as well, concerning men – mostly border districts with a specific population composition and deteriorated environment. Women's life expectancy indicated a somewhat greater territorial structures stability as compared to men's which primarily points to male population mortality level changes higher potential.

Strong Reserves Remain as to State of Health Improvement Thus to Mortality Rate

The Czech Republic mortality structure and rate analysis results represent from most perspectives a very optimal further development promise. The transformation process started in mid 80's and considerably speeded up due to the 90's political and social development, brought about a whole range of tangible, positive results. At the same time, mortality rate transformations established tendencies use main existing reserves, identified according to international comparative studies and partially research findings as well, concerning differences between male and female mortality intensity. A comparative study shows that, despite the past 10–15 years significant progress, main reserves remain strong. In the Czech Republic or elsewhere in the world, this development is contingent upon external conditions. Mortality level steady decrease will require additional stimuli by means of new financial and ideological investments directed not only to health but health education, senior citizens care, traffic safety, work safety and other lifesaving forms as well, including education and lifestyle.

Throughout the past fifteen years, due to its mortality level positive evolution and its corresponding life expectancy increase within all age groups, the Czech Republic grew more and more apart from other post-communist countries, since some of them even suffered a worsening of their mortality situation. Currently due to its indicator values, life expectancy has started to approach advanced countries, but this approaching process will probably continue for a long time.

resident population miscalculation is estimated of up to a few tens of thousands inhabitants by the Czech Statistical Office.

Table 8.6: Comparison of Districts and Large Towns Inhabitants Numbers according to Population Balance and 2001 Census Preliminary Results

Districts with a Definitely Lower Population Size according to Census as Opposed to 31.12.2001 Balance		Districts with a Definitely Higher Population Size according to Census as Opposed to 31.12.2001 Balance	
Town/District	Census-Balance Difference	District	Census-Balance Difference
Prague (capital)	–26 505	Nymburk	1 583
Brno (city)	–5 886	Prague-West (capital suburban district)	1 582
Teplice	–3 784	Prague-East (capital suburban district)	1 426
Ostrava (city)	–2 169	Jičín	870
Pilsen (city)	–1 401	České Budějovice	815
Karviná	–1 389	Mladá Boleslav	724
Karlovy Vary	–1 300	Opava	719
Most	–1 028	Benešov	553
Frýdek-Místek	–972	Písek	498
Nový Jičín	–865	Kolín	467

Resident Inhabitants Real Number Is Distorted due to Incomplete Registration of 1991–2001 Migration and Miscalculation during 1991 and 2001 Censuses

By comparing balance figures with districts permanent residents numbers according to 2001 census, it ensues that in 36 districts there were fewer than 100 (Prostějov) and even 26 500 inhabitants less (Prague), according to the 31.12.2000 population balance numbers (the 100 inhabitants limit was estimated regarding the needed tolerance stemming from a two-month difference between 31 December and census date). Census established lower inhabitants numbers were mainly detected in large towns and Ostrava industrial districts as well as in a few Krušné Mountains districts; in contrast, Prague urban area and Central Bohemia districts as well as a few Southern Bohemia districts and Opava district had more inhabitants than according to balance. If we take into account suburban trends, it seems that the most significant errors occur due to incomplete registration of newly moved in inhabitants into urban areas, respectively to some migrants reluctance to register their permanent residency change (thus the reverse situation of migrants' neglecting to call off their former residency); that is why the census included additional inhabitants in these municipalities whereas in large towns they were fewer. Apparently inhabitants lower estimated number in large cities depend on frequent attempt at evading census – people live there in greater anonymity and more frequently consider census as a major infringement upon their privacy. The institution of so-called "second residences" is perhaps also reflected in census results, concerning certain urban population strata who spend part of the year in their country residences, and who may have declared the latter as their main residences.

Table 8.7: Population Distribution according to Municipalities Size Groups

Municipality Size Group	Share of Population in Size Group (%)			Municipality in Appropriate Size Group (%)		Population Distribution Difference	
	Census		Balance	Census		Census 2001–1991	Census 2001–Balance 2000
	1991	2001p	31.12. 2000	1991	2001		
–500	7.8	8.4	8.3	3 283	3 691	0.6	0.1
500–999	8.3	8.7	8.5	1 224	1 283	0.4	0.2
1 000–1 999	8.6	8.8	8.8	647	657	0.2	0.0
2 000–4 999	10.2	11.0	10.8	347	367	0.8	0.2
5 000–9 999	8.8	8.6	9.0	131	128	–0.2	–0.4
10 000–19 999	9.7	9.3	9.3	71	68	–0.4	0.0
20 000–49 999	11.6	12.1	12.2	41	42	0.5	–0.1
50 000–99 999	11.4	12.1	12.1	17	17	0.7	0.0
100 000+	23.4	20.9	21.0	7	5	–2.5	–0.1
Total Number of Inhabitants (thousands)	10 302.2	10 292.9	10 266.5	x	x	x	x
Total Number of Municipalities	x	x	x	5 768	6 258	x	x

Within the group of cities, census greatest miscalculations as opposed to balances occurred in large cities and in the Sub-Krušné Mountains region (Prague, Brno, Ostrava, Pilsen, Teplice, Most, Sokolov, Karlovy Vary). A relatively important population miscalculation concerning Jihlava, Hradec Králové and Kladno (500–700 town-dwellers) cannot be adequately explained; it could have been either a census evading or a non functional reverse registration of permanent residence change by district administration during the inter-censuses period. On the contrary, significantly higher population numbers were reached in Opava during the census, possibly indicating inadequacy of migration registration, actually former residences non functioning reverse calling off registration. Since these are census preliminary results, one should not overrate mentioned differences.

Evolution of population number, living in municipalities of diverse size groups according to census and balance data concerning 2000, partially reinforces the assertion of supporting the percentage of inhabitants living in municipalities of up to 5 000 inhabitants: however this percentage rose by only 2 points, from 35 to 37%. Similarly, the percentage of inhabitants living in towns counting more than 50 000 inhabitants decreased as well (from 35 to 33%). Yet data are distorted due to municipalities changing number and their endemic discrepancies, furthermore one has to consider inadequacies stemming from possible oscillations at size groups limits, if municipalities due to population slight number changes transfer from one group to another. Thus one may mention suburban trends in relation to Czech large cities, but there are no breaking through trends shifts as to residence concentration so far. Population distribution comparison according to municipalities size groups established on the basis of 2001 census and ongoing balances has showed mere negligible differences.

MIGRATION

7

Permanent Residence Registered Changes as a Basic Analyzing Tool Regarding International as well as Internal Migration Keeps Track of a Mere Part of Real Migration Movements

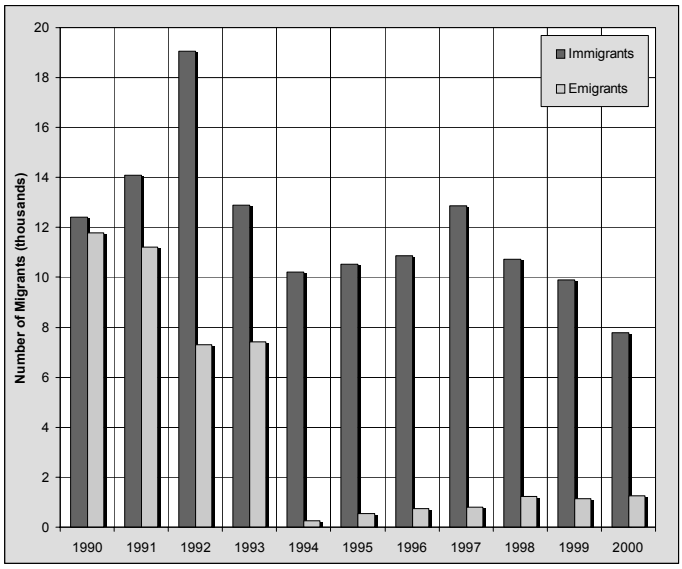
Contrary to the past, the significance of migration within the Czech Republic population development throughout the 90's has considerably increased. 1989 political orientation changes affected international migration from a quantitative as well as qualitative perspective. Borders opening enabled population free movement, former illegal emigration became legal already in 1991, the Czech Republic turned from an emigration country into an immigration one. In contrast to the totalitarian period, immigrants total number has multiplied; emigrants total number registered decrease particularly as of 1994 has indicated an incomplete registration of the latter. Due to the 1993 state separation, internal movement between Bohemia, Moravia and Slovakia turned into international immigration thus simultaneously, to an increase in immigrants inaccurate registration. Hence migration balance remains overestimated on a long term basis, total international migration volume can be rated as underestimated and that is why the picture of administratively registered international immigration to the Czech Republic developmental character is certainly distorted. Since 1994, official migration balance moderated population shrinking due to natural movement within population global balance. However according to present data and despite inaccurate information concerning emigrants, one may infer that throughout the 90's, total increase of permanent residents due to international migration was evidently active.

During the 90's, international migration nature real situation gradually and increasingly differed from administrative registered data. The Czech Republic migration attractiveness gradually rose. Total number of temporary economic immigrants grew, the latter not being registered in international migration official statistics (see note at chapter's end). For certain groups of immigrants, the Czech Republic turned from a transit country into a target country – however specifically at the beginning it was caused more by European Union immigration laws tightening than by Czech economy needs and opportunities. Total number of political asylum seekers grew as well and the country has been facing a high illegal immigration. The outcome of increasing total numbers of legal and illegal immigrants and the European Union countries tightening legislation led to Czech migration legislation modifications as well, leading to a stricter and more appropriate international immigration regulation. These are connected to our legislation adaptation to the European Union states set of measures, agreements and laws (so-called acquis EU concerning the field of migration and asylum, including for example the Schengen Agreement, the Dublin Treaty and the Amsterdam Agreement).

Since 2001 international migration analytical methodology has changed thus data on emigrants and immigrants have lost their connection to the past years. Ever since that year, international migration has comprised, in addition to persons changing their permanent residence, foreigners having been delivered a longer than 90-day visa whose stay extended beyond one year; if upon their visa expiration they leave the Czech Republic, they are registered as having moved abroad. Due to this adjustment, migrants registered numbers are closer to reality, but in the case of our citizens having moved abroad, their registration remains incomplete. Since 2001, persons who obtain political asylum are included as well; however their total number is very low.

Throughout the 90's internal migration trends and its regional structure have significantly changed due to economic and social transformations, public housing construction sharp slump and still undeveloped housing market. Though migration mobility decrease continued, already noticeable in the 70's and 80's in regard to longer distance moving volume diminution and migration "locking" of territorial units at districts level, but mainly to population concentration process halting. Smaller towns of up to 5 000 inhabitants migration attractiveness rose in contrast to larger and gradually even small towns became loss-making in terms of migration. Deconcentration tendencies are becoming perceptible in the vicinity of large cities. Population movement transitional forms are again gaining significance – daily commuting across a large area and punctual commuting linked to temporary urban housing in rented flats or housing accommodations.

Figure 7.1: Registered Migration[1] across Czech Republic Borders, 1990–2000



[1]Including migration with Slovakia (1990–1992 still an internal migration); incomplete emigrants numbers.

INTERNATIONAL MIGRATION

Three phases can be differentiated as to migration across the Czech Republic borders in the 90's. The first was genuinely triggered by late 1989 political transformations. Already in 1990, emigrants numbers increased three-fold and immigrants numbers doubled as compared with preceding year and the following year, due to increasing turnover for the first time since 1954, immigrants numbers exceeded emigrants numbers (until 1992, migration to and from Slovakia was part of internal migration within the frame of Czechoslovakia and migration balance always remained in favour of Czech lands). In 1990 migration balance with then foreign countries was still negative, becoming positive only in 1991. This period came to an end in 1992 due to Czech and Slovak migration exchange resulting from state division. During this year, migration turnover between both parts of Czechoslovakia represented 18 600 persons. Simultaneously total number of immigrants from other countries reached its first peak (7 300 persons) as well, in contrast inadequately low numbers of emigrants indicated that these records were incomplete.

Throughout the 90's Migration Volume Gradually Decreased Due to Simultaneously Immigrants from Slovakia Shrinking Numbers and Immigration from Other Countries Increasing Significance

Since 1993 migration to and from Slovakia became a foreign one but its nature kept on distinguishing itself from other countries. The powerful migration wave linked to the republic division was still going on in 1993, concerning numerous balanced flows (more than 7 000 persons) of migrants in both directions so that turnover fell to 14 500 persons, then until 1997 persons migration gradually stabilised. In contrast, numbers of immigrants from other states after their 1993 decrease down to 5 600 rose and in 1997 reached a peak at almost 9 800 persons. Thus during the 1993–1997 period a migration reversal took place concerning Slovakia and other foreign countries. In 1997, when approximately 13 000 persons settled in the Czech Republic, migration from other countries represented three fourths. However moving volume merely represented almost two thirds of migration range during the independent Czech Republic first year, whereas foreign moving balance more than doubled (12 100 persons). First and foremost this was due to migration incomplete records. During this period emigrants registration even deteriorated since emigrants passports were cancelled in 1994 and emigration to Slovakia registration became unreliable as well. According to the law # 9/1995 of the Civil Code, individuals who upon leaving the Czech Republic surrender their identity card are considered as emigrants. During the 1993–1997 period 57 400 persons settled in the Czech Republic and approximately 10 000 individuals moved abroad, out of which officially a mere 1 862 emigrants moved to other countries than Slovakia.

Migration development last phase during the 1998–2000 period is characterised by international migration intensity decrease on the basis of people's permanent residence changes registration: Slovak immigration numbers dwindling, respectively stagnation, linked to immigration from other countries intensity shrinking, representing in 2000 already a mere half of 1997 immigrants numbers. At the same time immigrants total number decreased by 40%. In 2000 immigration intensity swifter decrease as compared with preceding years was directly tied to introduction of stricter immigration regulations concerning a range of Eastern European countries. Until 2000 migration volume decreased down to 9 000 persons, and in 2000 the Czech Republic allegedly gained 6 500 inhabitants due to positive migration balance. In contrast to 1993, migration across Czech borders total number amounted to less than half whereas migration balance was one fifth higher.

Table 7.1: Registered Migration across Czech Republic Borders

Indicator	1990[2]	1991[2]	1992[2]	1993	1994	1995	1996	1997	1998	1999	2000[3]
Number of Immigrants	12 411	14 096	19 072	12 900	10 207	10 540	10 857	12 880	10 729	9 910	7 802
Number of Emigrants[1]	11 787	11 220	7 291	7 424	265	541	728	805	1241	1 136	1 263
Net Migration[1]	624	2 876	11 781	5 476	9 942	9 999	10 129	12 075	9488	8 774	6 539
Gross Migration[1]	24 198	25 316	26 363	20 324	10 472	11 081	11 585	13 685	11 970	11 046	9 065
Net Migration per 1 000 Inhabitants[1]	0.06	0.28	1.14	0.53	0.96	0.97	0.98	1.17	0.92	0.85	0.64
	Migration Movement concerning Slovakia										
Number of Immigrants	10 073	8 334	11 740	7 276	4 076	3 845	3 450	3 088	2 887	3 235	2 826
Number of Emigrants[1]	7 674	7 324	6 823	7 232	56	140	213	260	356	336	413
Net Migration[1]	2 399	1 010	4 917	44	4 020	3 705	3 237	2 828	2 531	2 899	2 413
	Migration Movement concerning Other Countries										
Number of Immigrants	2 338	5 762	7 332	5 624	6 131	6 695	7 407	9 792	7 842	6 675	4 976
Number of Emigrants[1]	4 113	3 896	468	192	209	401	515	545	885	800	850
Net Migration[1]	–1 775	1 866	6 864	5 432	5 922	6 294	6 892	9 247	6 957	5 875	4 126

[1]Incomplete records of emigrants abroad.
[2]During 1990–1992 internal migration concerning Slovakia within the frame of Czechoslovakia is included in international migration.
[3]2001 methodically incomparable data are presented in subsequent paragraph.

According to official migration registration there were 131 400 immigrants and 43 700 emigrants to and from the Czech Republic during the 1990–2000 period. Since the Czech Republic independence it amounted 85 800 immigrants and 13 400 emigrants, thus creating a 72 000 net migration. In comparison with Czech immigration data to certain neighbouring countries (Slovakia, Germany) though only partially comparable, yearly real emigrants quota can be estimated to 4–6 000 individuals.

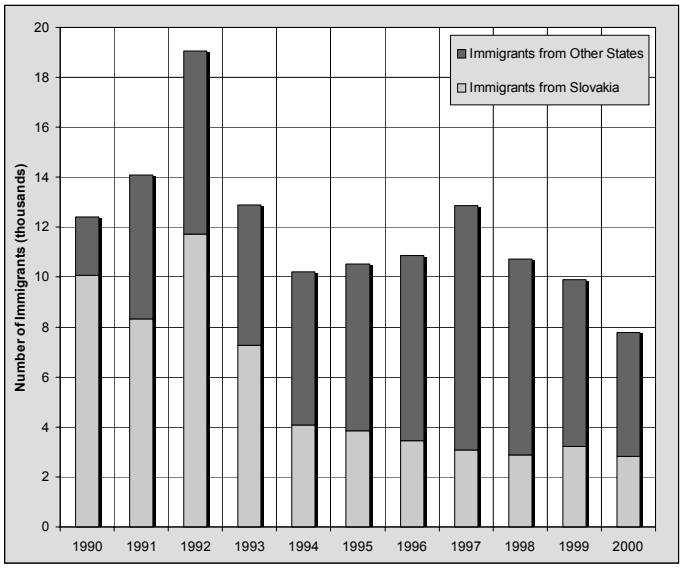
Already in the late 90's incomplete registration of emigrants led to questioning migration positive balance. This was partially confirmed by 2001 migrants numbers registered according to international migration updated methodology. Immigrants total number (individuals who were granted permanent residence in the Czech Republic and foreigners who on the basis of a longer than 90-day visa reside longer than one year) increased to 12 918 persons, thus by almost two thirds. However emigrants total number increase was much greater – from 1 263 persons in 2000 to 21 469 in 2001, leading to a net migration decrease of almost 8 600 persons, obviously within the ongoing incomplete registration of the Czech Republic citizens moving abroad and additional discrepancies in records (filing into migrants register only after one revolved year abroad creates a time incomparability between emigration and immigration, immigrants registration past this time span might not be precise). Nevertheless international migration decrease in 2001 concerned all main source countries (Slovakia, Ukraine, Russia and Germany) excluding Vietnam, according to new methodology.

Due to Incomplete Registration of Emigrants the Czech Republic Has Probably Had a Deficient Migration Balance Already Prior to 2001

More detailed data on migration in the 90's are available concerning only international immigration defined as a permanent residence change, thus only about a number of foreigners, consequently international migration characteristics do not clearly determine migrants group real structure. In addition due to emigrants incomplete registration, international migration more reliable analyses can be conducted only concerning its immigration component.

Throughout its independent existence since 1993, differences between immigrants from Slovakia and from other countries have been cast on the Czech Republic immigrants structure. Numerous family relations exist among the Czechia's and Slovakia's populations and due to a long term coexistence within a common state tight cultural, social and economic ties have been created. Thus, even after Czechoslovakia's division somewhat specific legislative measures have been applied concerning this migration, including a more liberal structure as compared with migration from other states – particularly regarding temporary and work migration, and permanent residence on grounds of family reunification has been more frequently granted.

Figure 7.2: Czech Republic Immigrants Numbers and Composition



Out of immigrants total number, reaching approximately 86 000 in 1993, approximately 31 000 were from Slovakia thus more than one third. However immigration from Slovakia importance was slackening – in 1993 it still represented 56% of immigrants, from the next year on immigrants from other countries permanently gained preponderance, their share reaching even three fourths of total immigration in 1997. Afterwards immigrants from Slovakia share grew again thus at the turn of the century they represented over a third of all immigrants though at a much lower immigration intensity – 2 826 immigrants in 2000 not even representing two fifths of 1993 total. These data include actual moving as well as mere changes in type of residence when Slovak citizens living here temporarily gained permanent residence permits and registered themselves as permanent residents.

During the 1993–2000 period, immigrants representation according to country of origin changed in a radical way. Receding intensity of immigration from Slovakia, a logical outcome of both independent states gradual disengagement, guaranteed even despite immigrants from Slovakia lowest representation (24% in 1997) an exceptional permanent priority. Concerning immigrants from other countries, modifications in their representation based on country of origin reflected several factors effect, of a logically varied impact. At the beginning immigration structure was influenced by a so-called "re-emigration", a reverse wave of long term post-war emigration from totalitarian Czechoslovakia. European and non European countries current political and economic situation, particularly local armed conflicts in the Balkans and the Eastern bloc disintegration unfavourable economic consequences for many of its former members were an additional group of factors generating a political and economic emigration wave, originally oriented across the Central European region as transit further towards the

West. Restrictive legislative measures introduction to limit this immigration to European Union states meant that the Czech Republic became for a significant number of these immigrants a target country. The most recent and third most influential group of factors is a set of restrictive legislative measures introduced by the Czech Republic first to regulate immigrants tide onto its territory, second to harmonise its legal norms with European Union regulations (for example compulsory visa for former USSR countries, re-entry agreements).

Table 7.2: Most Significant Immigration Currents to the Czech Republic

Country of Origin	1993		1995		1997		1998		1999		2000	
	Number of Persons	Order	Number of Persons	Order	Number of Persons	Order	Number of Persons	Order	Number of Persons	Order	Number of Persons	Order
Slovakia	7 276	1.	3 845	1.	3 088	1.	2 887	1.	3 235	1.	2 826	1.
Ukraine	279	8.	846	3.	1 524	3.	1 595	2.	1 676	2.	1 213	2.
Germany	1 391	2.	1 198	2.	859	4.	688	4.	560	5.	537	3.
Russia	310	6.	364	7.	759	5.	593	5.	701	4.	433	4.
USA	314	5.	372	5.–6.	388	7.	255	7.	265	6.	395	5.
Vietnam	205	10.	372	5.–6.	1 707	2.	1 204	3.	808	3.	312	6.
Canada	421	3.	390	4.	234	11.	187	11.	144	10.	141	7.
Bulgaria	63	20.	203	11.	236	10.	247	9.	171	9.	140	8.
Switzerland	404	4.	315	8.	196	14.	153	13.	115	14.	117	9.
Great Britain	106	16.	112	17.	102	20.	90	21.	68	21.	103	10.

Compulsory Visa Requirements Affected Migration Range Change and Structure according to Immigrants Country of Origin

Whereas in the first years the strongest waves of immigrants subsequent to totalitarian regime fall primarily came from Germany, Canada and Switzerland, concerning a mostly return immigration of former fellow citizens, in the following years economic immigrants wave from the former USSR, Vietnam, Romania and Bulgaria gained impetus. In 1996, Ukraine replaced Germany as the second country among the most significant source countries keeping its second rank until 2000, except in 1997 when the second strongest wave was represented by immigrants from Vietnam. This occurred in spite of immigrants number decrease (introduction of visa requirement) down to more than one fourth, Ukrainians representing approximately 16% out of immigrants total number. Introduction of visa requirement with Ukraine, Russia and other UIS states led to immigrants coming from these countries number decrease, partially changing the order of states where immigrants most frequently came from as well. Due to immigrants from Vietnam and Russia drastic decrease in 2000, as compared with 1999, immigration from Germany (7%) became again the third most important immigration wave. Immigrants from Russia (approximate total number decrease of 40%) remained the fourth most numerous group (6% out of immigrants total). Two years later immigrants number from the United States increased again and in 2000 immigrants from Vietnam became the sixth most numerous group. During the second half of the 90's and in 2000 as well, the Czech Republic mainly became a target country for Eastern European immigrants.

Table 7.3: Immigrants Bearing Czech Citizenship

Immigrants	1995	1996	1997	1998	1999	2000
Total of Immigrants Bearing Czech Citizenship	4 637	3 449	2 931	2 786	3 100	3 575
– Share out of Immigrants Total (%)	44.0	31.8	22.8	26.0	31.3	45.8
Including:						
From Slovakia	1 289	900	720	906	1 503	1 847
– Share out of Immigrants from Slovakia Total (%)	33.5	26.1	23.3	31.4	46.5	65.4
From Other Countries	3 348	2 549	2 211	1 880	1 597	1 728
– Share out of Immigrants from Other Countries Total (%)	50.0	34.4	22.6	24.0	23.9	34.7
Out of which from European Advanced Countries	1 702	1 182	1 031	836	737	769
– Share of Immigrants Bearing Czech Citizenship from Other Countries (%)	50.8	46.4	46.6	44.5	46.1	44.5

Since 1995 (until then immigrants nationality was registered) distribution of immigrants according to citizenship, de facto reflecting return immigration process, is being analysed. Immigrants bearing Czech citizenship still held in mid 90's a key position among immigrants from other countries since in 1995 they represented 3 348 persons thus half of immigrants total number. Parallel to re-emigration wave fading out, their numbers receded by more than half until 1999, but their share decreased down to an approximate fourth. In 2000, their total number increased again and their share rose to 35%. If we merely consider European advanced countries (European Union states, Switzerland and Norway)

where in 1995 half of immigrants from other countries bearing Czech citizenship came from, decrease of re-emigrants was faster thus in 2000 their share decreased down to 45%. In 1995, persons bearing Czech citizenship among immigrants from Slovakia represented one third, until 1997 their share decreased down to less than one fourth. Since 1998 the trend has reversed and in 2000 immigrants from Slovakia were again holding Czech citizenship in two thirds of cases. Czech citizenship is easier to gain for citizens of Slovakia and more frequent compared with other foreigners; one of the possibilities to obtain Czech citizenship is marriage – for example in 2000 almost 1 000 marriages were contracted, one member of the bridal pair being Slovak and the other one, Czech.

Throughout the 1990–2000 period, immigrants age structure was very favourable. A moderate increase in productive age persons, whose share was higher concerning immigrants from other countries than from Slovakia, may be explained to a certain extent by economic immigration increasing importance and re-emigrants decreasing share. Among immigrants from Slovakia, children age group was significantly preponderant as compared with immigrants at post-productive age (older than 60), whereas among immigrants from other countries children and senior citizens shares were much more even as to the tendency of older than 60 immigrants increasing share. Still seven years after the federation division, immigrants from Slovakia indicated a more frequent move of families with children, a more likely feature of internal migration. From the point of view of distribution according to sex, men still slightly prevail though differences have almost evened out in the past few years.

Table 7.4: Immigrants to the Czech Republic Composition according to Age and Sex (%)

Age Group	Immigrants Total Number				Immigrants from Slovakia				Immigrants from Other Countries			
	1993	1997	1999	2000	1993	1997	1999	2000	1993	1997	1999	2000
0–14	14.5	10.6	13.1	9.1	20.4	14.9	14.9	12.6	6.9	9.2	12.2	7.1
15–59	75.9	82.4	78.8	81.8	72.5	79.3	78.2	79.9	80.2	83.4	79.2	82.9
60 and more	9.6	7.0	8.1	9.1	7.1	5.8	6.9	7.5	12.9	7.4	8.6	10.0
Total Number	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Absolute Number	12 900	12 880	9 910	7 802	7 276	3 088	3 235	2 826	5 624	9 792	6 675	4 976
– share of women (%)	47.8	45.0	49.0	49.3	47.2	45.3	47.9	49.5	48.5	44.9	49.5	49.5

The 90's migration representation would not be complete if we were not to mention a more numerously important group of immigrants than those coming from abroad registered on the basis of a permanent residence declaration. These are foreigners, residing temporarily on grounds of a longer than 90-day visa (formerly long term residence). This one-year visa can be extended after its expiry as long as the foreigner's purpose is ongoing; until 2000, these foreigners were not included in international migration balance. Since 2001, those who have lived here for at least one year are included in migration statistics and will be included in population total number balance as well.

Table 7.5: Numbers of Foreigners Bearing Residence Permits on the Czech Republic Territory (thousands; as of 31.12.)

Type of Residence	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000[4]	Index 2000/1993
Over 90-Day Visa Residence[1]	7.7	20.4	46.1	71.2	120.1	152.8	153.5	155.8	162.1	134.1	291
Permanent Residence	27.2	29.5	31.1	32.5	38.5	45.8	56.3	63.9	66.8	66.9	215
Unspecified Residence[3]	x	x	0.5	0.7	0.6	0.5	0.5	0.5	x	x	x
Total	34.9	49.9	77.7	104.4	159.2	199.2	210.3	220.2	228.9	201.0	259
Total per 1 000 CR Inhabitants[2]	3.4	4.8	7.5	10.1	15.4	19.3	20.4	21.4	22.3	19.6	.
Foreigners with over 90-Day Visa per 1 000 CR Inhabitants[2]	0.7	2.0	4.5	6.9	11.6	14.8	14.9	15.1	15.8	13.1	.

[1]Until 1999 long term residence.
[2]Foreigners granted permanent residence are included in the Czech Republic total population number.
[3]Until 1998 unspecified type of residence concerning foreigners without data regarding citizenship, since 1999 included in groups according to type of residence.
[4]Slovak Citizens are included among persons granted a longer than 90-day visa, residing here according to 3 March 2000 governmental decree #77 on grounds of temporary residence certificate.
Source: Ministry of the Interior, Foreign Affairs and Border Police.

Obtaining a longer than 90-day residence visa is much easier than getting permanent residence that is why there are more foreigners with this type of authorization than those gaining permanent residence. In 2000, approximately 21 000 foreigners were granted this temporary residence permit on grounds of a longer than 90-day visa in addition 113 000 were granted a longer than 90-day visa extension, so that these 134 000 foreigners total more than doubled the number of permanent resident foreigners (66 900 in 2000, mid-year increase of up to 137 persons). For the first time since 1990, in 2000

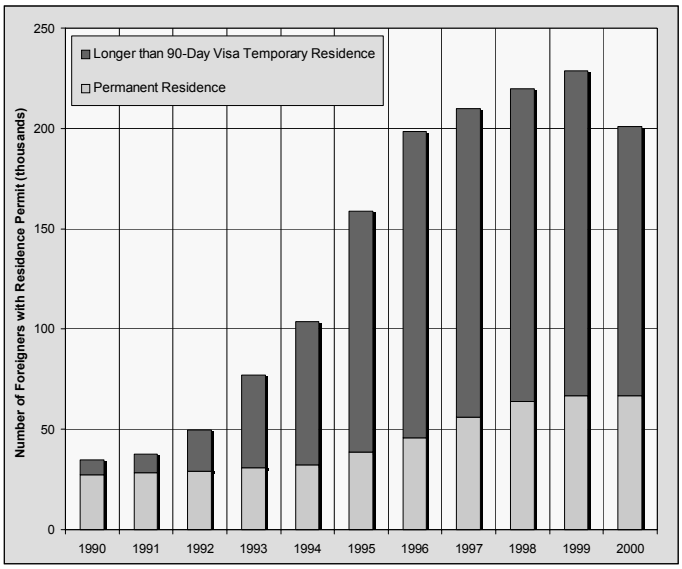
There are 200 000 Legal Foreign Residents and according to Unofficial Estimates 100 000 Illegal Foreign Residents in the Czech Republic

foreigners with a longer than 90-day visa yearly number increase turned into a decrease. The 28 000 persons decrease can be explained as an outcome of residence regulations modification concerning Slovak citizens in 2000 (see note at chapter's end). The fact that Slovak citizens do not have to either apply for a longer than 90-day residence visa or register their temporary residence on our territory, was the main reason for evidently incomplete records concerning them. Above mentioned decrease additional cause was triggered by stricter measures regarding other foreigners obtaining longer than 90-day residence visa, leading visa (respectively visa extension) applicants shift to asylum seekers group (mainly concerning citizens of Ukraine, Moldavia, Vietnam and Russia).

Numbers of foreigners with longer than 90-day visa (long term residence permit) were very low in early 90's and at the beginning their growth was very dynamic; during 1991–1993 these foreigners number more than doubled yearly and during the 1993–2000 period, it almost tripled. In 1990, there were three times more permanent resident foreigners than long term resident ones, though their increase was much more gradual. Already in 1993, long term resident foreigners outnumbered the 31 000 permanent resident ones and in 2000, to one permanent resident foreigner corresponded more than two longer than 90-day visa holders. In 2000, per 1 000 inhabitants corresponded almost 20 permit holding foreigners, 13 out of them having been granted temporary residence according to a longer than 90-day visa. Regarding these foreigners only data concerning their residence purpose, country of origin and local place of residence are available. Evidently their numbers and professional activities are significantly regionally differentiated. However additional detailed demographic data concerning them are not being determined.

2000 updated legislative measures effect is obvious on development of foreigners, temporarily residing in the Czech Republic on a longer than 90-day visa composition according to citizenship, specifically as to decrease of foreigners, granted residence on a longer than 90-day visa, numbers from Ukraine, Russia and Vietnam.

Figure 7.3: Foreigners Numbers Development according to Type of Residence Permit in the Czech Republic



The most frequent reason for residence permit granting to foreigners was business or job related. Since 1997, when these foreigners numbers reached a peak at 125 000 persons on our territory (not including almost 70 000 registered Slovak citizens), and when for the first time, trade businesses registration granted to foreigners outnumbered work permits, their total number started decreasing primarily due to subsequent regulation of work permits issue. In 2000, there were more than 40 000 foreigners with work permits, representing only 56% of 1996 total number. In contrast, following its 1998 slump, foreigners granted a business licence total yearly number increased up to 61 000 in 2000, though still not reaching its 1997 maximum. Regulation measures were enforced in the field of work permit issue, specifically within the frame of bilateral agreements with countries, whose numerous foreigners come to look for labour market opportunities, first and foremost out of consideration for our citizens employment. The above mentioned regulation did not concern business authorization issue.

Although Slovak citizens employment is not regulated in the Czech Republic, ever since 1996 it indicated a decreasing trend; not until 2000, due to government measure concerning Slovak citizens employment enforcement, did it indicate a certain upsurge. In 2000, 63 600 employed Slovak citizens were registered in the Czech Republic. According to the Ministry of Labour and Social Affairs, out of more than 40 000 work permits delivered to foreigners from other states, most went to Ukrainians (38%), then Poles (16%) followed by Moldavians, Germans and Bulgarians. Whereas work permits numbers decreased by almost four thousand compared with 1999, approximately 3 000 more entrepreneurs (5%) than in 1999 were registered at the end of the year. Among more than 61 000 persons granted a trade licence, citizens of the Ukraine (35%) were moderately prevailing over citizens of Vietnam (31%) and in third place, citizens of Slovakia (11%). Although in 2000, foreigners did not even represent 2% of population total number (indeed compared to 1999 their share decreased) on the labour market, their share increased to 3.2% of total workforce. However their distribution in the Czech Republic was very unbalanced and reacted very rapidly to present economic situation and workforce demand (e.g. 1999 Ostrava region outflow).

Figure 7.4a: Foreigners Granted Longer than 90-Day Residence Visa in the Czech Republic according to Citizenship

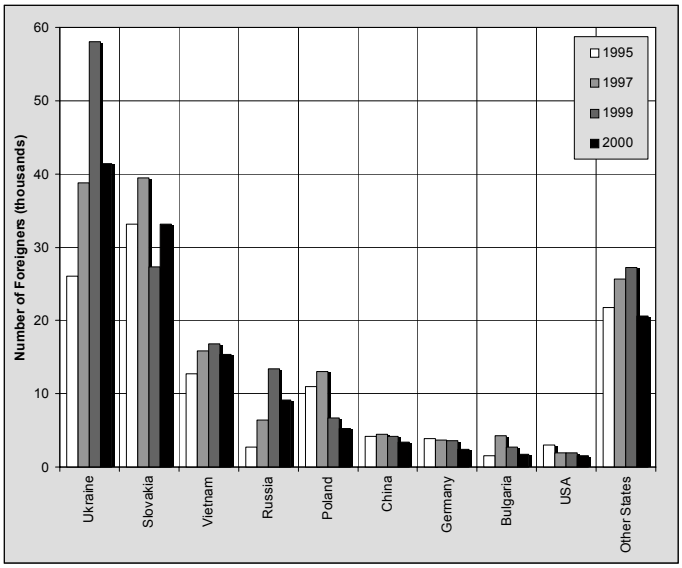
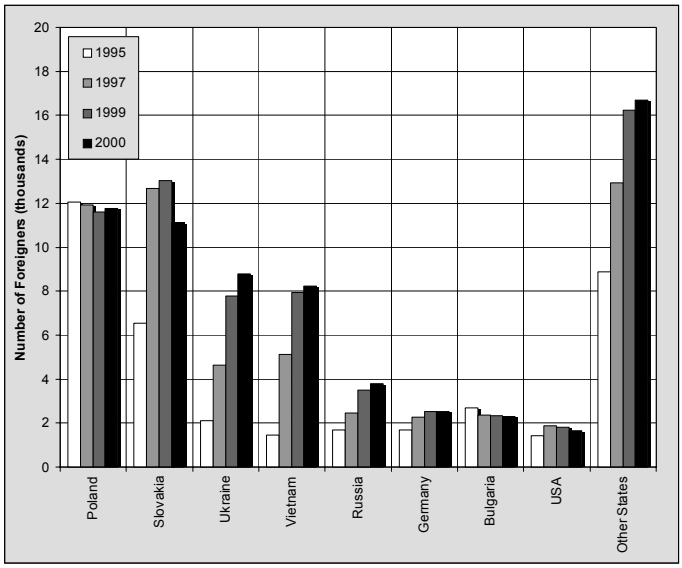


Figure 7.4b: Permanent Resident Foreigners in the Czech Republic according to Citizenship



Foreigners economic activity high concentration, though bearing a decreasing trend, remained located in Prague and its area. In 2000, more than 30% foreigners (one third being Slovaks) were concentrated in Prague and its vicinity and their share represented almost 8% out of Prague's total workforce; fewer were located in the districts of Prague West (5.4%), Prague East (6.4%) and Mělník (4.3%). However their highest share out of employed workforce was in Mladá Boleslav county (9.4%). Globally, foreigners were to be found on large cities labour markets: Ostrava (4.2% out of the employed – mainly Slovaks), Brno (4.3%), Liberec county (5.6%), Vsetín county (3.7% – mainly Slovaks) and in other border districts such as Cheb, Karlovy Vary and Tachov particularly in trade activities.

Strict Asylum Policy Is Curbing Immigration of Political Asylum Seekers

Foreign political asylum seekers are also part of current legal international migration. Since 1990, almost 52 000 persons have applied for political asylum on the Czech Republic territory though only 2 114 persons did actually obtain it. In late 2000, 1 268 persons having been granted political asylum lived in the Czech Republic, as of 31.10.2001 there were 1 279. The majority came from Romania (22%), Afghanistan (10%), countries of the former Soviet Union and Vietnam. In 2001, 18 000 asylum claims were filed and 83 were granted. The number of claims more than doubled compared to 2000 (due to visa introduction for some Union of Independent States countries, part of visa claims shifting to asylum claims group – see above). Since the mid 90's, particularly since 1998, an increase in applicants number can be observed, in addition since 2000, applicants composition according to country of origin has been changing. Applicants from Ukraine came to the fore (in 2000 almost 4 500 applications), Moldavia, Russia, India, Slovakia and citizens from Romania are stably represented; there has been a decline in share of applicants from Sri Lanka, Afghanistan and additional Asian countries as well as Yugoslavia and Bulgaria. Asylum seekers number development not only reacts to political situation, armed conflicts and global unstableness in applicants country of origin but to current legislative regulations in the field of asylum policy as well as migration policy of host countries in general.

Table 7.6: Political Asylum Seekers in the Czech Republic

Indicator	1990–1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Number of Applicants	4 669	2 207	1 187	1 417	2 211	2 109	4 085	7 220	8 788	18 093	51 986
Number of Granted Asylums	1 057	251	116	59	162	96	78	79	133	83	2 114
– share out of Applicants Number (%)	22.6	11.4	9.8	4.2	7.3	4.6	1.9	1.1	1.5	0.5	4.1

Source: Czech Republic Ministry of Interior, Department of Refugees and Foreigners Integration.

To accurately present international migration total range, one needs to mention the quite significant number of foreigners illegally residing on our territory; however illegal migration quantitative assessment is considerably problematic. For the most part, it concerns persons from the former Eastern bloc, Southern and Southeastern Asia. Estimates range up to 100 000 workers, mainly in construction and services. In 2000, the police registered 22 000 illegal foreigners on the Czech Republic territory. Apart from these illegal immigrants, our republic still serves as a transit country for foreigners trying to

illegally cross the Czech Republic borders with the European Union. In 2000, 28 000 illegal crossings by foreigners were registered, slightly more than in the preceding year.

During the 90's international migration took on a new nature. Migration became mostly a matter of foreigners temporary even if longer lasting stays. Although numerous immigrants goal remains permanent residence, i.e. at least obtaining a permanent residence permit, within migration nature, still more temporary, mainly work residences prevail and immigration in the perspective of permanent resettlement stopped reflecting migration global situation. Numerous immigrants with longer than 90-day residence visa extend their residence permit several times, frequently maintaining here only a temporary accommodation thus residence length cannot be determined. According to their activity here, they can be differentiated into:

- Blue-collar workers and unskilled workers (immigration mostly from countries of the former Soviet Union, Poland and the Balkans; counting secondary school and university educated people);
- Shopkeepers and entrepreneurs, mostly from Asian countries, such as Vietnam, Thailand, Pakistan and China;
- Immigrants from advanced countries, mostly highly qualified, with a higher education, most frequently employed in companies management such as advisers, entrepreneurs or in the educational sphere.

Note:

Until 2000, international migration in the Czech Republic meant persons moving across state borders linked to a permanent residence change and registered by statistical organisations. That is how migration had been analysed since 1954. (As of 1.7.1954, migration of Czechoslovak citizens, foreigners as well as stateless persons was officially recorded. During the 1990–1992 period, migration to and from Slovakia was included in international migration as well). But international migration is also represented by foreigners, registered by the Ministry of the Interior authorities, who come on the grounds of a residence permit – either permanent or temporary on long term visas (longer than 90 days) and foreigners who were granted political asylum (according to paragraph 73, law 325/1999 of the asylum legal code) or awaiting a pending visa decision (according to paragraph 35, law 326/1999 of foreigners residence legal code).

In 2000 Legislation on Foreigners Residence Conditions on the Czech Republic Territory Was Amended

Since 1 January 2000, foreigners residence has been newly regulated according to law # 326/1999 of legal code on foreigners residence in the Czech Republic and on certain laws amendment, law # 325/1999 of legal code on asylum and law amendment # 283/1991 of legal code including additional bye-laws and amendments. These new laws aim was to eliminate present legal measures flaws, to more efficiently regulate foreigners residence on our territory and harmonise our legal regulations with the EU legal requirements. The law on foreigners residence newly introduced two types of residence – temporary and permanent, regulated visa issue and extension problematic process and instituted a set of additional regulations. The instituted short term residence was replaced by the following terms: "temporary residence on territory without visa" and "temporary residence on short term visa". Permanent residence permits are still being issued on a limited scale and in legally determined cases, most frequently in the case of reunification with a Czech citizen, on humanitarian grounds, according to the Czech Republic foreign policy interest or after a minimum of eight years residence on a longer than 90-day visa and in additional specific cases. Instead of the term "long term residence" mentioned in the 1992 law "temporary residence on long term visa" was established. Foreigners with longer than 90-day visa can reside in the Czech Republic on long term visas, then on pending visas and visas issued for temporary protection. A foreigner can obtain a visa issued for temporary protection as long as s/he lives with a foreigner holding a residence permit, a pending visa is issued to foreigners who have filed for appeal regarding an asylum court ruling. A longer than 90-day residence visa is delivered to foreigners on grounds of residence purpose on our territory of a 365-day longest limit with a further possible extension as long as residence purpose continues.

In 2000, the situation of Slovak immigrants was differently regulated. According to governmental decree # 77 of 8.3.2000, Slovak citizens do not have to apply for a longer than 90-day residence visa but are allowed to reside on our territory only on the basis of a temporary residence certificate, issued by the alien registration police following their filing a claim including documents certifying residence purpose. In addition Slovak citizens do not have the duty of registering their residence at the alien registration police, as long as it is not a permanent one. Rules to obtain permanent residence have not changed and are practically similar regarding other foreigners, however family reunification or cohabitation with a Czech citizen are more frequent concerning Slovak citizens.

The most numerous category of foreigners and a group of rising economic, social as well as demographic significance is made up of foreigners residing on a longer than 90-day visa. Actually, to obtain this visa is much easier than the permanent residence one, despite these past few years immigration legislation tightening. (Since 29 May, 2000 there is a mandatory visa requirement with Russia and Belarus, as of 28 June 2000 with Ukraine, as of 22 October with Kirghizia, Moldavia, Kazakhstan and Turkmenistan). Ever since 1995 their number remains approximately three times higher than foreigners granted permanent residence. Moreover foreigners granted a permanent residence permit are registered according to international migration statistical authorities on grounds of permanent residence registration that is why more detailed demographic data concerning them are available.

International migration statistics compiled by the Czech Statistical Office and international migration data of the Ministry of the Interior do not provide comparable data and they cannot be connected since they are compiled according to a different interpretation of the mere concept of migration and separate principles. Not until 2001 legislative amendments did the Czech Republic migration situation came closer to reality, even though presented migrants figures cannot be assessed as exact.

INTERNAL MIGRATION

Until 2000, internal migration within the Czech Republic was based on officially registered changes of permanent residence municipalities by Czech citizens and foreign permanent residents as well; since 2001 foreigners residing in the Czech Republic on grounds of a longer than 90-day visa who remain on our territory longer than one year and persons granted political asylum internal migration are analysed as well. Residence change within a municipality is not included in internal migration statistics with the exception of Prague population changes, inter-urban districts moves having been analysed since 1992 (formerly inter-administrative districts moves until 1991).

Even in the 90's, migration development was connected to migration mobility long term decreasing trend identifiable in the Czech Republic since the end of major migration movements to settle border regions and later due to industrial regions development. Economic and social transformation, leading to living standard growing divergence between large regions, employment increasing differences and income regional differentiation were not enough of a stimulus triggering a greater moving intensity. Hypotheses implying that transforming conditions concerning labour would be balanced by migration thus the latter would contribute to regions living standard stability were not confirmed. The fact that not even ten years later, basic conditions required for an unproblematic move – first an actual free housing market and its relative accessibility, housing legislation simple rules, stability and economic subjects promising development – had not been met, added to population traditional reluctance to change its residence and reinforced home environment ties.

Since 1995 Internal Migration Range Remains at Approximately 200 000 Migrants

Migration decreasing extent, first of all to longer distances (inter-regional as well as inter-district migration), characteristic of the 90's first half, has stabilised since 1995. Whereas during the 1990–1993 period, approximately 250 000 persons yearly moved, in 1994–1995 migration was reduced to 207 000 and in 1996–1997 even down to less than 200 000. During the next two years, there was a moderate migration mobility revival but again in 2000 it decreased to 200 000, i.e. 17% less than in 1993. Since 1992, following early 90's decrease, regional migration relative percentage remained relatively stable, representing approximately one fourth of migration range, also regional inter-districts migration percentage represented approximately one fifth of migration extent. As of 1.1.2000, according to new regional organisation, appropriate migration relations between regions and districts are obviously different – with a greater number of regions, inter-regional migration percentage rose at the expense of inter-districts one. Most people moved within shorter distances; migration between municipalities within districts fluctuated from a maximum of 104 000 persons in 1990 down to a minimum of 78 000 migrants in 1996 up to 83 000 in 2000, representing more than two fifths of migration volume. If we add to it moving within Prague's urban districts, it would represent 55% of all movements – thus practically identical to previous years. However, whereas since 1997 numbers of migrants between municipalities within districts has moderately grown and their percentage out of total volume again oscillated above 40%, migration intensity within the frame of Prague's urban districts gradually decreased; since 1993, almost 41 000 persons have moved within Prague, thus moving numbers have decreased to approximately 27 000 persons, from 17% to 13% of total migration volume.

However concerning the case of Prague, differences between registered migration and actual migration may probably be particularly significant. In fact several factors contribute to migration between urban districts volume decrease: as to real migration, temporary stays in rented flats and various types of

housing facilities; due to ill-functioning housing market, lack of financially affordable housing and ongoing practices linked to public and state flats allotting, numerous people have a different residence than the one they are formally registered in. Prague inner city moving volume decrease is also due to the increasing number of Prague inhabitants moving to suburban regions, frequently offering new individual housing constructions (cheaper plots), thus many "Praguers" move to the capital close vicinity where they can more easily get an available and financially more accessible flat or house.

Table 7.7: Internal Migration Volume according to Administrative Units Types

Type of Migration	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000[3]	Index 1999/1993
	Number (thousands)											
Total Migration Volume in the CR[1, 4]	267.2	245.0	247.9	241.3	210.2	203.9	195.6	197.2	203.7	201.5	199.7	84
From Region to Region	71.3	61.8	58.5	57.3	50.7	49.2	46.2	46.9	48.9	48.6	57.3	85
From District to District within Region	59.4	54.4	52.9	49.0	43.4	42.4	40.0	40.8	41.5	41.9	32.6	86
From Municipality to Municipality within District	104.4	101.4	100.8	94.2	82.1	80.7	78.3	79.9	83.6	82.4	83.1	88
Within Prague[2]	32.1	27.4	35.7	40.8	34.0	31.6	31.1	29.6	29.7	28.6	26.7	70
	Migration Volume Structure (thousands)											
From Region to Region	26.7	25.2	23.6	23.8	24.1	24.1	23.6	23.8	24.0	24.1	28.7	101
From District to District within Region	22.2	22.2	21.3	20.3	20.7	20.8	20.5	20.7	20.3	20.8	16.3	103
From Municipality to Municipality within District	39.1	41.4	40.7	39.0	39.0	39.6	40.0	40.5	41.1	40.9	41.6	105
Within Prague[2]	12.0	11.2	14.4	16.9	16.2	15.5	15.9	15.0	14.6	14.2	13.4	84
Migration Volume in the CR per 1 000 Inhabitants	25.8	23.8	24.0	23.4	20.3	19.7	19.0	19.1	19.8	19.6	19.4	105

[1]Total volume including moving within Prague districts, in 1990–1991 including moving within Brno and Pilsen districts.
[2]In 1990–1991 migration in Prague analysed within administrative districts, since 1992 within urban ones.
[3]In 2000 migration volume between regions and between districts in regions is incomparable to previous years (new regional composition counting 14 regions); however both data total sum is comparable.
[4]2001 Preliminary data: internal migration volume: 204 600 persons.

Ever since 1992, Prague has a negative migration balance with suburban Prague-West and Prague-East districts and Prague's migration balance with these districts is still deteriorating. During the second half of the 90's, Prague had a negative migration balance with almost all Central Bohemia districts. In 2000, Prague's migration decrease as compared to Central Bohemia region reached almost 5 000 persons, mainly due to decreasing moving in migration.

Frequent moving out of large towns to their surrounding area gradually appeared in Brno and Pilsen as well, these tendencies were less perceptible in Olomouc, Liberec, Hradec Králové and České Budějovice; however the last three mentioned towns have not reached the limit of 100 000 inhabitants in the past few years. Regarding towns which do not enjoy the situation of independent districts, suburbanization tendency can only be very cautiously analysed on grounds of the large town negative migration balance and migration increases of towns and municipalities located in close vicinity, since within the above mentioned four districts, migration is usually published without stating its directions. Ostrava with its specific economic and social problems and its area characteristic urban population remained out of this development, migration within its area being more of an exchange nature; however even in Ostrava, population was dwindling due to migration.

Table 7.8: Large Towns Population Migration Exchange with Their Area Districts

Town (Area Districts)	Indicator	1990	1993	1995	1997	1998	1999	2000
Prague	Volume	4 410	3 806	3 568	3 735	4 540	4 866	5 113
(Prague-East, Prague-West)	Balance	272	–250	–850	–1 479	–2 430	–2 690	–3 123
Brno	Volume	2 666	2 163	2 098	2 269	2 126	2 329	2 060
(Brno-Outskirts)	Balance	468	–71	–468	–647	–556	–617	–766
Pilsen	Volume	2 139	1 690	1 568	1 518	1 684	1 727	1 807
(Pilsen-South, Pilsen-North)	Balance	185	16	–208	–388	–458	–567	–523
Ostrava	Volume	5 513	4 625	3 922	3 554	3 920	3 950	3 637
(Frýdek-Místek, Karviná, Opava, Nový Jičín)	Balance	–23	–537	–354	–428	–438	–364	–319

Note: The minus sign for balance means the large town loss in favour of surrounding districts.

The new administrative organisation valid since 2000 on the basis of these last years migration development merely confirmed large regions differentiation characteristic features. Central Bohemia region with highest increases and Prague with highest migration decreases belonged to regions (so-called NUTS 2) with a traditionally high migration volume and the highest migration effectiveness (ratio of migration balance and migration volume absolute value expressed in percentages) where at the same time in the 90's, significant changes as to migratory movements thus in migration balance orientation occurred. Actually these regions create the only mutually strong, linked economic environment. The Moravian-Silesian region indicated a high migration activity as well, caused by a great difference in migrants moving in and out according to their low numbers. Lowest migration mobility was confirmed in Southern Moravia and Czech-Moravian uplands (South-East) and in the Central Moravia region of stably settled population. These regions jointly with the Northeastern one, similarly to slightly migration more active Southern, Western and Northern Bohemia (Southwestern and Northwestern regions) distinguish themselves by a relatively balanced, though low number of moving in and out inhabitants, thus by a very low net migration, reduced gross migration and by a subsequent low migration effectiveness. It was confirmed that actually large regions, except Prague and Central Bohemia as well as Northern Moravia, remain closed to migration. Frequent migration on shorter distances, at the level of new regions, was only higher in Northwestern Bohemia where in the Ústí nad Labem district, a migration of an exchange nature occurred with an almost 9 000 migrants strong volume and an almost zero balance, as well as in the Karlovy Vary district where a low 4 600 migrants volume and a higher population migration decrease (balance –625 persons) led to a 17% migration activity.

Only Central Bohemia Region Denotes a Higher Population Increase Due to Migration, Especially at the Expense of Prague

Since Central Bohemia and the capital, Prague, are according to territory hierarchy, districts as well as regions, these regions indicated the highest migration mobility at the regional level. Likewise the Moravian-Silesian region is simultaneously an independent one and its specific migration situation was exceptional even at the regional level: after Prague it indicated the second highest population decrease due to migration (2 300 persons) at the highest activity (31.2%).

Similarly to the past few years, even in 2001 internal migration trends remained constant at the level of large regions. The highest increase, 5 300 migrants, was observed in Central Bohemia region, the highest decrease (–2 400 migrants) in the Moravian-Silesian region and in Prague (–2 000 migrants). In that same year Southern Bohemia, Pilsen, Zlín, Pardubice and Liberec regions still had a positive migration balance but it always concerned a few mere hundred migrants (Southern Bohemia's 456 migrants being the highest one). In addition, other regions migration decreases did not reach high values (626 migrants in the Karlovy Vary region).

Table 7.9: Internal Migration between the Czech Republic Regions in 2000

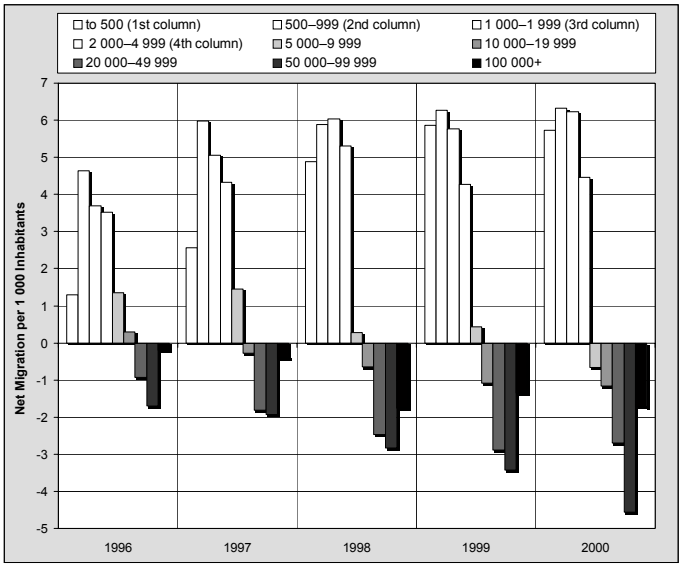
Region (NUTS 2)	Districts (NUTS 3) Included in Region	Moving in	Moving out	Balance	Volume	Activity (%)[1]
Prague	Prague	9 197	12 799	–3 602	21 996	16.4
Central Bohemia	Central Bohemia	13 089	7 248	5 841	20 337	28.7
Southwestern	Southern Bohemia, Plzeňský	4 918	4 452	466	9 370	5.0
Northwestern	Karlovarský, Ústecký	5 248	5 884	–636	11 132	5.7
Northeastern	Liberecký, Královéhradecký, Pardubický	6 248	6 059	189	12 307	1.5
Southeastern	Southern Moravia, Vysočina	5 115	5 245	–130	10 360	1.3
Central Moravia	Olomoucký, Zlínský	4 537	4 379	158	8 916	1.8
Moravia-Silesia	Moravia-Silesia	2 520	4 806	–2 286	7 326	31.2

[1]Migration activity, or migration effectiveness, is the relation of migration balance and migration volume absolute values, expressed in percentage.
Note: According to 1990 European Union classification (La Nomenclature des Unites Territoriales Statistiques – NUTS), as of 1.1.2000 NUTS 2 units (8 regions) were created; NUTS 3 designation is used for current regions, NUTS 4 for districts, NUTS 5 for municipalities. According to this hierarchic classification, the Czech Republic whole territory belongs to the NUTS 1 group.

In the 90's internal migration features new characteristics were population concentration halting and subsequent decrease and suburban processes beginning. Population moving preferences from the point of view of municipalities size groups changed as well as moving directions. Ever since the early 90's population concentration into larger areas gradual slowdown could be observed. First migration decrease of 50 000–100 000 inhabitants towns was observed whereas more than 100 000 inhabitants larger towns and smaller towns of less than 50 000 inhabitants were still gaining dwellers due to early 90's migration. Municipalities indicated migration increases (except the smallest ones of less than 500 inhabitants).

Since 1994, 20 000–50 000 inhabitants medium sized towns have also been losing population due to migration, since 1995 even 10 000 to 20 000 inhabitants towns and in 1996 more than 100 000 inhabitants large towns category as well. During the 1997–2000 period, migration decreases concerned the whole set

Figure 7.5: Net Migration by Municipalities Size Groups during 1996–2000 (internal and international migration)



of more than 10 000 inhabitants towns among which 50 000–100 000 inhabitants towns relatively lost the most (in 2000 migration decrease being of 4.6 migrants per 1 000 inhabitants). For the first time in 1999, population decrease due to migration was observed in 5 000–10 000 inhabitants municipalities.

In 5 000 inhabitants municipalities migration balance evolved the other way round. 500–999 inhabitants municipalities had the highest migration increase, migration relative increase reaching its maxima during the 1999–2000 period (6.3 migrants per 1 000 inhabitants). In larger municipalities migration balance intensity grew until 1998, and has since either oscillated or decreased. A specific development can be observed in less than 500 inhabitants smallest municipalities; since 1995 their former migration decrease turned into increases, migration relative balance reaching maxima in 1999 when their increase represented almost 6 migrants per 1 000 inhabitants. Deconcentration tendency or migration decrease, observed since 1995 in all size categories towns, grew throughout the second half of the 90's parallel to almost stable migration volume in small and medium towns, migration volume increase in 50 000–100 000 inhabitants and migration volume decrease in large towns except Prague. However migration balance and volume development according to municipalities size groups must be carefully evaluated since municipalities shifts into next size categories occur due to inhabitants numbers changes over the course of time. As to the smallest municipalities, their increases could be explained by some urban population second homes turning into permanent residences (residence in resorts for a longer part of the year) while urban flats are rented out or used by adult children (mainly privately owned or cooperative flats in large towns).

Larger Municipalities Particularly Large Towns Have Significant Migration Losses

Net migration general trend, 500 to 5 000 inhabitants municipalities growing attractiveness and large towns deconcentration tendencies, is significantly modified from the territory point of view due to municipality concrete location. Within large towns areas and residence agglomerations, the importance of suburban processes is spreading, thus even the smallest municipalities have migration increases; in contrast rural regions without any prospering production or services, neither adequate transport system nor connected opportunities to international economic activities, population is dwindling and certain towns as well as larger municipalities are loss-making in terms of migration. Suburban tendencies, also caused by an underdeveloped housing market, lacking financially accessible urban flats and by growing differences between plots, urban and suburban real estate prices, have first and to the largest extent evolved within the capital Prague's area (see table 7.8).

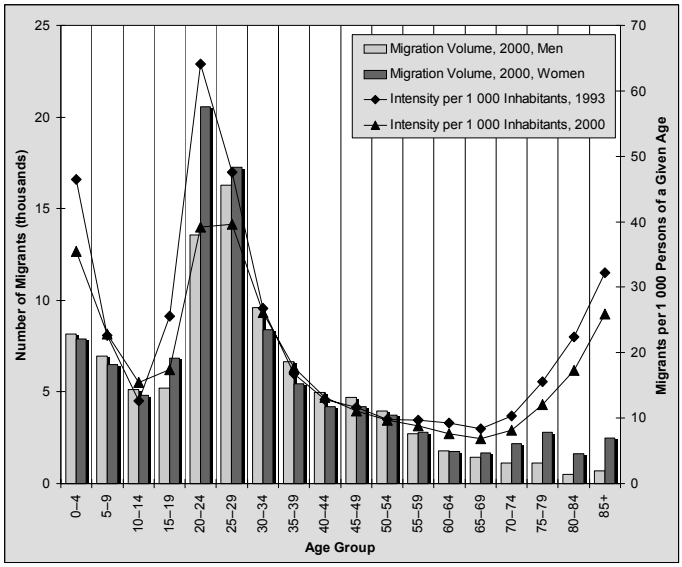
Table 7.10: Internal Migration (Migration Balance and Volume) according to Municipalities Size Groups

Municipalities	1995		1998		2000		1995	1998	2000
	Balance	Volume	Balance	Volume	Balance	Volume	Balance per 1 000 Inhabitants		
–500	945	36 179	3 608	36 864	4 424	37 048	1.1	4.2	5.2
500–999	2 634	35 336	4 487	36 299	5 081	36 195	3.1	5.2	5.8
1 000–1 999	3 039	35 085	4 950	35 828	5 144	35 536	3.4	5.5	5.7
2 000–4 999	2 818	37 794	4 914	39 532	4 370	39 112	2.7	4.6	4.0
5 000–9 999	232	30 954	–376	30 752	–1 104	29 946	0.2	–0.4	–1.2
10 000–19 999	–1 062	26 732	–1 518	28 284	–1 641	28 581	–1.2	–1.6	–1.7
20 000–49 999	–2 397	35 841	–4 031	36 163	–3 890	34 958	–1.9	–3.1	–3.1
50 000–99 999	–3 204	29 134	–5 226	31 394	–6 387	32 189	–2.9	–4.2	–5.1
100 000+	–3 005	41 805	–6 808	39 326	–5 997	38 871	–1.2	–3.1	–2.8
Prague	–1 799	21 029	–4 573	21 891	–3 602	21 996	–1.5	–3.8	–3.0

During the 90's migrants age composition significantly changed. Migration mobility decrease was the most obvious as to young people migration intensity diminution. First and foremost due to marriage postponing, often linked to the bride's move to her husband's, and total nuptiality lower level, moves intensity shrank in the 15–29 large age range, however the most within the 20–24 one. In 2000, marriage was mentioned as the reason for moving by almost 8% of migrants whereas in 1993 it was more than 9%, obviously within higher absolute numbers. Moving intensity became almost equal in 20–24 and 25–29 age groups, however concerning the 20–24 years old one it was one third lower compared

with 1993. Furthermore families with young children moved less than in 1993 and 60 years old and older senior citizens moving intensity decreased. Migrants percentages differences according to sex slumped – at the age of 15–24 specifically due to the effect of a lower nuptiality level, the percentage of migrant women more dynamically decreased than as to men, higher mobility was postponed to 25–29 and 30–34 ages, though then men moved more frequently. Older than 60 migrants percentage moderately grew (identically by 2 points for both sexes), even though in smaller numbers than in 1993 and with almost twice as many migrant women (in 2000 one fifth of migrant women was older than 60).

Figure 7.6: Internal Migration Volume and Intensity according to Age in 1993 and 2000



At the end of the 20th century, on one hand trends rooted in postwar migration history, and on the other hand new deconcentration and suburban ones could be observed in our internal migration development. Negative migration balance spread from large towns to the level of towns and municipalities groups counting 5 000 inhabitants and smaller municipalities, specifically of 500 to 2 000 inhabitants, indicated a population increase. Particularly during the second half of the 90's, a novelty within migration trends became suburban residential tendencies, mainly occurring in Prague and Brno but in other large towns as well, obviously mainly triggered by economic initiatives. Unemployment lower level in large towns linked to available urban flats minimum offer is the cause for specifically small municipalities in large towns areas growing attractiveness. Approximately 30% migrants move due to housing whereas job related moves which showed a decreasing trend, were mentioned as grounds for migration only by 6% in 2000.

Small Municipalities Located Close to Large Agglomerations Indicated Inhabitants Increases

Migration development additional trend has been poorly accessible small agglomerations ongoing depopulation, far from economic centres, being transformed into resorts. These country residences serve as second homes for specific urban dwellers strata (particularly retirees) residing there temporarily most of the year. However some former country residences have recovered their function as permanent residences.

It is indubitable that population lifestyles diversity is growing and that moving records on the basis of permanent residence changes only partially represent actual mobility. The significance of temporary mobility forms has increased – first of all temporary residence and commuting to work. Numerous people live in sublets and in hostels and are not registered as permanent residents mainly in large towns. However, despite many flaws internal migration statistics indicate population total mobility main part.

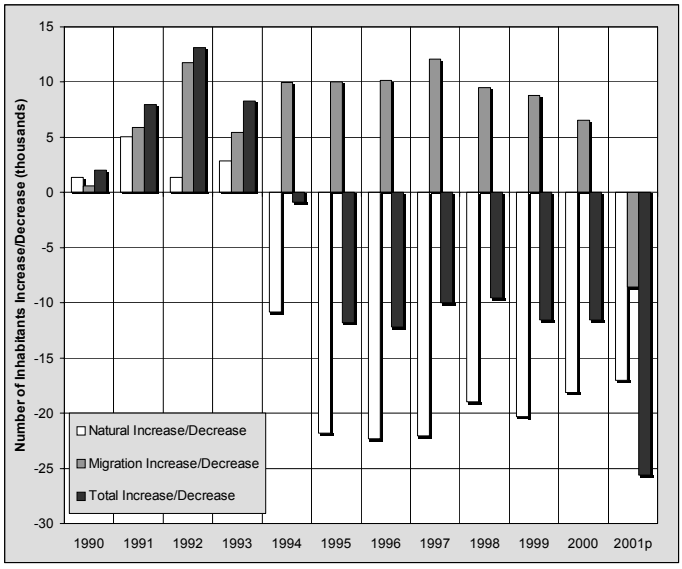
SHIFTS IN POPULATION SIZE

8

The Czech Republic population development during the 90's took on a new nature. Post-November 89 political situation changes affected foreign migration as well, thus ever since 1991 immigrants numbers have remained higher than those of emigrants leaving the Czech Republic, the latter becoming an immigration country again after a long period. Until 1993 population total number grew due to natural movement and migration, since 1994 population has been declining due to natural movement. The latter induced reductions reached their peak in 1996 up to the value of 22 300 inhabitants, therefore in 2000, the Czech Republic lost 18 100 inhabitants and in 2001 natural movement decrease dwindled down to only 1 000 inhabitants less. Migration gains during 1994–2000 did not exceed 10 000 inhabitants yearly (1997 being an exceptional year with an immigration increase of up to 12 000 inhabitants) and since 1998 they have kept on decreasing down to 6 500 inhabitants in 2000. Therefore migration increases were merely able to slow down population decreases due to natural movement, consequently as of 1994, the Czech Republic population total number has been decreasing.

Due to total number of inhabitants having moved abroad incomplete registration, it is realistic to assume even much lower migration gains as compared to foreign migration statistics thus of greater total losses. 2001 preliminary migration data led to migration data questioning: according to them, there were 8 600 foreign immigrants. However, it is true that for the first time in 2001, migrants granted a longer than 90 days residency visa (see Chapter 7) were counted within the total number according to migration balance updated procedure, nevertheless this modification does not fully explain such a major turning point in migration balance.

Figure 8.1: 1990–2001 Czech Republic Population Number Increases/Decreases



During the 1994–2000 period, the Czech Republic lost 134 000 inhabitants due to natural movement, gained almost 67 000 due to migration, thus total decrease was of 67 500 inhabitants. During the 1991–1993 period, the Czech Republic registered a population increase of 29 400 inhabitants, including a natural movement increase of 9 300 inhabitants. According to balance, total population loss amounted to approximately 38 000 inhabitants between 1991 and 2001 censuses (partial 2001 balance is not included due to census date). According to 1991 census results and 2001 census preliminary ones, the Czech Republic lost more than 79 000 permanent inhabitants. Thus population decrease stemming from balance results shrank to approximately half of inter-censuses decrease. Since natural movement registration is very reliable, part of the error which occurred during the inter-censuses period can be attributed to migration incomplete registration. However available data do not provide sufficient information needed to determine population miscalculations revealed during census, and emigrants from the Czech Republic incomplete registration effect on detected population number discrepancies.

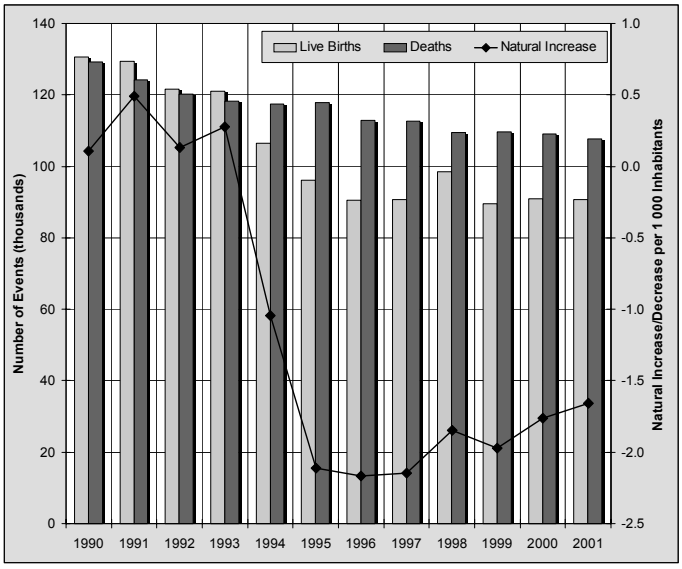
Table 8.1: Population Movement Balance

Population Increase/Decrease	1990–1992	1993	1994	1995	1996	1997	1998	1999	2000	2001p
	Increase/Decrease (thousands)									
Natural	7.8	2.8	–10.8	–21.8	–22.3	–22.1	–19.0	–20.3	–18.1	–17.0
Due to Migration	15.3	5.5	9.9	10.0	10.1	12.1	9.5	8.8	6.5	–8.6
Total	23.1	8.3	–0.9	–11.8	–12.2	–10.0	–9.5	–11.5	–11.6	–25.6
	Increase/Decrease per 1 000 Inhabitants									
Natural	0.2[1]	0.3	–1.1	–2.1	–2.2	–2.1	–1.8	–2.0	–1.8	–1.7
Due to Migration	0.5[1]	0.5	1.0	1.0	1.0	1.1	0.9	0.9	0.7	–0.8
Total	0.7[1]	0.8	–0.1	–1.1	–1.2	–1.0	–0.9	–1.1	–1.1	–2.5
Population Size as of 31.12 (thousands)	10 326[2]	10 334	10 333	10 321	10 309	10 299	10 290	10 278	10 267	10 270[3]

[1]1990–1992 average.
[2]As of 31.12.1992.
[3]Population number as to 31.12.2001 according to balance based on 2001 census results, including long-term residence permit holders.

Since the 2001 census, the Czech Republic population total number includes long term resident foreigners i.e. holding a longer than 90 days visa. According to this updated methodology, the Czech Republic counted 10 292 900 inhabitants, including 69 900 long-term foreign residents, according to census preliminary results. Out of population total number, men represented 48.8%, in absolute numbers 5 019 400 inhabitants. In regard to 1991 population census, male population increase was of 19 400 and its representation within total population by 0.3 points while female population decreased by 28 700. The new population balance stems from total number reached according to census thus following a 17 000 inhabitants decrease due to natural movement and 8 600 inhabitants due to migration, by late 2001, the Czech Republic counted 10 269 700 inhabitants (preliminary results).

Figure 8.2: Number of Live Births, Deaths and Natural Increase/Decrease Movement



Due to ongoing social and economic transformation, occurring by means of growing regional differences as to population living standard, the nineties meant a significant migration trend shift leading to population distribution – first of all from a regional point of view, then from the point of view of municipalities size categories.

From a regional perspective focused on districts study, internal migration affected the most population total number modifications; international migration influence was definitely weaker (international migration being the most significant as to population balance merely in big cities). Population total increases primarily changed on the basis of migration trends shifts, changes within districts display, according to natural movement increase rates, were negligible. Districts order variability was evaluated on the basis of relative increases average values during three three-year periods; a high rate of dependence confirmed a rather flat lowering of relative increases due to natural movement, in contrast differences in migration total were significant even in comparison to average values, thus districts order was greatly modified in the 90's (established very low data correlation rate concerning period's beginning and end).

Table 8.2: Districts Order Shifts according to Natural Movement Intensity, Migration and Population Size Increase

Period	Spearman Correlation Coefficient for Population Relative Increases/Decreases					
	Natural Movement		Migration		Total	
	1992–1994	1995–1997	1992–1994	1995–1997	1992–1994	1995–1997
1995–1997	0.96	x	0.27	x	0.45	x
1998–2000	0.93	0.94	0.20	0.76	0.07	0.61

Particularly during the second half of the 90's migration increases variability grew whereas differences in increases values decreased due to natural movement. First and foremost the relation of districts number with population decreases due to natural movement unfavourably evolved. Whereas still during the 1992–1994 period, population merely decreased by half due to natural movement (in 1990 only in 34 districts), during the 1998–2000 one, decreases due to natural movement were indicated in more than nine tenths of districts (in 2000, only Český Krumlov and Sokolov districts had an increase higher than 1%, increases of additional seven districts did not even reach 1%).

During the 90's, specifically suburban districts in large cities areas ranked among districts with highest total increases, since due to suburban trends there is a population increase triggered by migration (Prague's influence is spread over a larger vicinity than its definite area); Teplice district higher increase can be explained by its convenient border location and economic attractiveness. These districts have primarily replaced border districts which in the early 90's (but earlier as well) indicated highest total increases due to natural movement higher increases, respectively districts which in the past had already attracted migration, having at the same time higher increases due to natural movement (České Budějovice).

The group of districts with population highest decreases was on the one hand made up of large towns, as well as districts with significant migration decreases due to economic problems (Karviná) and on the other hand, of districts with steep decreases due to natural movement, where migration balance was insignificant or whose population was decreasing due to moving as well (Jičín). In 2000, a mere 23 Czech Republic districts – compared to preceding year it was one district less – indicated a population total increase whereas in 1992, almost an identical number of districts (26) showed a population total decrease.

Table 8.3: Population Increases Variability in the Czech Republic Districts (increases per 1 000 mean population)

Indicator	Increase/Decrease due to Natural Movement			Increase/Decrease due to Migration			Total Increase/Decrease		
	1992–1994	1995–1997	1998–2000	1992–1994	1995–1997	1998–2000	1992–1994	1995–1997	1998–2000
	Increases Variability								
Maximum	4.3	1.8	1.3	5.5	8.9	23.4	4.7	4.4	21.0
Minimum	–3.7	–5.0	–4.2	–4.2	–1.7	–2.6	–2.0	–4.7	–5.4
Range	8.0	6.7	5.5	9.6	10.6	26.1	6.7	9.1	26.4
Standard Deviation	1.9	1.5	1.2	2.2	1.7	3.5	1.3	1.7	3.2
Total	–0.2	–2.1	–1.9	0.9	1.0	0.8	0.7	–1.1	–1.1
	Number of Districts								
Inhabitants Increase	37	7	6	50	64	54	49	22	25
Inhabitants Decrease	39	70	71	26	13	23	27	55	52
Total	76	77	77	76	77	77	76	77	77

Table 8.4: Districts with Population Extreme Relative Increases/Decreases

1992–1994		1995–1997		1998–2000	
Total Increase (in ‰) – Highest Values					
Český Krumlov	5.5	Praha-západ	4.4	Praha-západ	21.0
Tachov	5.2	Český Krumlov	3.5	Praha-východ	8.7
České Budějovice	5.2	Teplice	2.8	Teplice	4.1
Česká Lípa	5.1	Česká Lípa	2.7	Nymburk	3.8
Sokolov	4.2	Brno-venkov	2.1	Brno-venkov	3.7
Bruntál	4.0	Sokolov	1.8	Plzeň-jih	3.1
Total Decrease (in ‰) – Highest Values					
Rakovník	–4.2	Plzeň-město	–4.7	Hl. m. Praha	–5.4
Písek	–3.9	Hl. m. Praha	–3.9	Plzeň-město	–5.2
Nymburk	–3.4	Brno-město	–3.5	Karviná	–3.5
Strakonice	–3.3	Rokycany	–3.3	Jičín	–3.5
Benešov	–3.1	Benešov	–3.3	Brno-město	–3.5
Plzeň-jih	–3.0	Rakovník	–3.2	Ostrava-město	–3.2
Migration Increase (in ‰) – Highest Values					
Praha–západ	4.7	Praha-západ	8.9	Praha-západ	23.4
České Budějovice	4.1	Teplice	5.4	Praha-východ	11.8
Rokycany	3.6	Plzeň-jih	4.5	Nymburk	7.7
Olomouc	3.2	Praha-východ	4.3	Teplice	6.7
Brno-město	3.0	Beroun	4.2	Plzeň-jih	6.3
Kroměříž	2.7	Brno-venkov	4.1	Brno-venkov	5.4
Migration Decrease (in ‰) – Highest Values					
Ostrava-město	–2.0	Plzeň-město	–1.7	Plzeň-město	–2.6
Písek	–1.9	Cheb	–1.3	Bruntál	–2.3
Strakonice	–1.4	Bruntál	–1.1	Karviná	–2.2
Pelhřimov	–1.3	Žďár nad Sázavou	–1.0	Hl. m. Praha	–1.7
Rakovník	–1.2	Ostrava-město	–1.0	Ostrava-město	–1.6
Ústí nad Labem	–1.0	Jeseník (1996–1997)	–0.5	Sokolov	–1.6
Increase Due to Natural Movement (in ‰) – Highest Values					
Sokolov	4.3	Sokolov	1.8	Český Krumlov	1.3
Český Krumlov	4.1	Český Krumlov	1.6	Sokolov	1.3
Bruntál	3.8	Bruntál	1.1	Tachov	0.7
Tachov	3.5	Česká Lípa	1.0	Bruntál	0.7
Česká Lípa	3.4	Tachov	0.6	Česká Lípa	0.6
Žďár nad Sázavou	3.0	Žďár nad Sázavou	0.4	Chomutov	0.3
Decrease Due to Natural Movement (in ‰) – Highest Values					
Nymburk	–3.7	Nymburk	–5.0	Kolín	–4.2
Praha-západ	–3.5	Rokycany	–4.7	Nymburk	–3.9
Hl. m. Praha	–3.2	Plzeň-jih	–4.6	Jičín	–3.8
Kolín	–3.2	Hl. m. Praha	–4.6	Hl. m. Praha	–3.7
Rakovník	–3.0	Praha-západ	–4.5	Rakovník	–3.6
Beroun	–2.9	Beroun	–4.5	Rokycany	–3.6

The Czech Republic Population Number Decrease Is More and More Regionally Differentiated

The second aspect of population distribution evolution during the 90's was population total number increases according to municipalities' size groups. Once again migration played a decisive key role in population total number evolution turning point, since reproductive behaviour changes from mid 90's on, led to population decreases due to natural movement in municipalities of all size categories. First large towns (approximately 3% yearly) were the fastest to lose population due to natural movement, then the smallest municipalities of up to 500 inhabitants (4.6% in 1995, 3.5% in 2000). Yet municipalities of up to 2 000 inhabitants were losing 2–3% yearly due to higher mortality rate than natality. During the first half of the 90's, migration decreases gradually shifted from small municipalities to the category of more than 10 000 inhabitants towns while at first, towns of more than 50 000 inhabitants started to lose population as well as smaller towns later on. In 2000, even municipalities belonging to the 5 000–10 000 category were concerned too due to migration. Nevertheless rural, mainly suburban municipalities and smaller towns indicated migration gains. Since 1998, Prague's population has been shrinking and other towns numbering more than 100 000 inhabitants as well since 1996.

Table 8.5: Population Increases/Decreases according to Municipalities Size Groups

Municipality Size Group	Total Increase/Decrease per 1 000 Inhabitants									
	1990	1991	1992	1993	1995	1996	1997	1998	1999	2000
–500			–8.2	–8.6	–3.0	–3.2	–1.4	1.1	2.0	2.1
500–999	–6.0	–4.2	–1.5	0.9	0.6	1.7	2.7	3.0	3.8	4.0
1 000–1 999			2.1	2.9	1.7	0.9	2.6	4.3	3.8	4.5
2 000–4 999	–0.3	1.3	3.1	4.1	1.7	1.6	2.3	3.7	2.4	3.0
5 000–9 999	1.0	2.4	3.3	2.2	–0.2	0.3	0.0	–0.9	–1.0	–2.0
10 000–19 999	2.2	3.7	3.7	3.7	–0.6	–0.4	–0.9	–0.9	–2.0	–1.7
20 000–49 999	6.3	6.2	4.3	3.1	–1.3	–1.1	–2.4	–2.8	–3.4	–3.2
50 000–99 999	–1.1	1.4	1.5	–0.7	–2.7	–2.7	–2.7	–3.8	–4.6	–5.6
100 000+	1.8	0.9	1.2	–0.1	–3.2	–3.7	–3.8	–5.0	–4.5	–4.5

As compared to the past, population distribution trends according to municipalities size groups have completely changed throughout the 90's. Instead of the past population concentration into towns, suburban processes started to develop particularly during the second half of the 90's, triggering population total number increase in urban areas. The main cause is rooted in soaring differences between urban and rural housing availability and in the ill-functioning housing market, these tendencies being additionally supported by lack of new affordable housing construction and high differences in property prices in large cities and their urban areas. Urban areas (starting with Prague) became attractive not merely to big city dwellers but to those of their widespread vicinity as well, thus former migration from the countryside to towns (or from smaller towns to large towns) was replaced by migration to urban areas.

Large Municipalities and Towns in Particular Indicate Population Greatest Decreases

During the second half of the 90's and in 2000 as well, municipalities between 500 and 5 000 inhabitants held the best perspectives from the point of view of population increases. Gradually their total increases rose to 3–4.5‰. However the growth of small towns of up to 5 000 inhabitants mainly concerned municipalities and smaller towns of large towns wide area, whereas population of municipalities located in difficult to reach regions, far from urban centres kept on shrinking. Population greatest total decreases (4–5‰) can be observed since 1998 in towns of more than 50 000 inhabitants.

In 2000 among cities of more than 50 000 dwellers, only Kladno showed a limited total population increase (64 dwellers). České Budějovice, Most, Chomutov and Frýdek-Místek indicated a growth due to natural movement, in other towns population lessened due to natural movement. Besides Kladno, all towns of this size group were losing population due to moving. Out of Prague's 5 700 dwellers decrease, almost 4 000 were due to natural movement, out of Brno's 1 700 dwellers decrease, natural movement decrease concerned more than 1 000 dwellers, in Ostrava decrease due to moving took over natural movement decrease, total loss amounting to 1 200 dwellers. However at the end of 2000 resulting population numbers balance did not correspond in most cases to two months later 1.3.2001 census findings.

Within the frame of comparing the Czech Republic population number balance and lower administrative units (regions, districts, municipalities) in late 2000 to population number according to 2001 census results, sometimes significant data differences were obtained. An error gradually appeared in population balance number mainly due to population migration incomplete registration. Still, not even a population census can comprehensively count total population. The 2001 census was not an exception, permanent

resident population miscalculation is estimated of up to a few tens of thousands inhabitants by the Czech Statistical Office.

Table 8.6: Comparison of Districts and Large Towns Inhabitants Numbers according to Population Balance and 2001 Census Preliminary Results

Districts with a Definitely Lower Population Size according to Census as Opposed to 31.12.2001 Balance		Districts with a Definitely Higher Population Size according to Census as Opposed to 31.12.2001 Balance	
Town/District	Census-Balance Difference	District	Census-Balance Difference
Prague (capital)	–26 505	Nymburk	1 583
Brno (city)	–5 886	Prague-West (capital suburban district)	1 582
Teplice	–3 784	Prague-East (capital suburban district)	1 426
Ostrava (city)	–2 169	Jičín	870
Pilsen (city)	–1 401	České Budějovice	815
Karviná	–1 389	Mladá Boleslav	724
Karlovy Vary	–1 300	Opava	719
Most	–1 028	Benešov	553
Frýdek-Místek	–972	Písek	498
Nový Jičín	–865	Kolín	467

Resident Inhabitants Real Number Is Distorted due to Incomplete Registration of 1991–2001 Migration and Miscalculation during 1991 and 2001 Censuses

By comparing balance figures with districts permanent residents numbers according to 2001 census, it ensues that in 36 districts there were fewer than 100 (Prostějov) and even 26 500 inhabitants less (Prague), according to the 31.12.2000 population balance numbers (the 100 inhabitants limit was estimated regarding the needed tolerance stemming from a two-month difference between 31 December and census date). Census established lower inhabitants numbers were mainly detected in large towns and Ostrava industrial districts as well as in a few Krušné Mountains districts; in contrast, Prague urban area and Central Bohemia districts as well as a few Southern Bohemia districts and Opava district had more inhabitants than according to balance. If we take into account suburban trends, it seems that the most significant errors occur due to incomplete registration of newly moved in inhabitants into urban areas, respectively to some migrants reluctance to register their permanent residency change (thus the reverse situation of migrants' neglecting to call off their former residency); that is why the census included additional inhabitants in these municipalities whereas in large towns they were fewer. Apparently inhabitants lower estimated number in large cities depend on frequent attempt at evading census – people live there in greater anonymity and more frequently consider census as a major infringement upon their privacy. The institution of so-called "second residences" is perhaps also reflected in census results, concerning certain urban population strata who spend part of the year in their country residences, and who may have declared the latter as their main residences.

Table 8.7: Population Distribution according to Municipalities Size Groups

Municipality Size Group	Share of Population in Size Group (%)			Municipality in Appropriate Size Group (%)		Population Distribution Difference	
	Census		Balance	Census		Census 2001–1991	Census 2001–Balance 2000
	1991	2001p	31.12. 2000	1991	2001		
–500	7.8	8.4	8.3	3 283	3 691	0.6	0.1
500–999	8.3	8.7	8.5	1 224	1 283	0.4	0.2
1 000–1 999	8.6	8.8	8.8	647	657	0.2	0.0
2 000–4 999	10.2	11.0	10.8	347	367	0.8	0.2
5 000–9 999	8.8	8.6	9.0	131	128	–0.2	–0.4
10 000–19 999	9.7	9.3	9.3	71	68	–0.4	0.0
20 000–49 999	11.6	12.1	12.2	41	42	0.5	–0.1
50 000–99 999	11.4	12.1	12.1	17	17	0.7	0.0
100 000+	23.4	20.9	21.0	7	5	–2.5	–0.1
Total Number of Inhabitants (thousands)	10 302.2	10 292.9	10 266.5	x	x	x	x
Total Number of Municipalities	x	x	x	5 768	6 258	x	x

Within the group of cities, census greatest miscalculations as opposed to balances occurred in large cities and in the Sub-Krušné Mountains region (Prague, Brno, Ostrava, Pilsen, Teplice, Most, Sokolov, Karlovy Vary). A relatively important population miscalculation concerning Jihlava, Hradec Králové and Kladno (500–700 town-dwellers) cannot be adequately explained; it could have been either a census evading or a non functional reverse registration of permanent residence change by district administration during the inter-censuses period. On the contrary, significantly higher population numbers were reached in Opava during the census, possibly indicating inadequacy of migration registration, actually former residences non functioning reverse calling off registration. Since these are census preliminary results, one should not overrate mentioned differences.

Evolution of population number, living in municipalities of diverse size groups according to census and balance data concerning 2000, partially reinforces the assertion of supporting the percentage of inhabitants living in municipalities of up to 5 000 inhabitants: however this percentage rose by only 2 points, from 35 to 37%. Similarly, the percentage of inhabitants living in towns counting more than 50 000 inhabitants decreased as well (from 35 to 33%). Yet data are distorted due to municipalities changing number and their endemic discrepancies, furthermore one has to consider inadequacies stemming from possible oscillations at size groups limits, if municipalities due to population slight number changes transfer from one group to another. Thus one may mention suburban trends in relation to Czech large cities, but there are no breaking through trends shifts as to residence concentration so far. Population distribution comparison according to municipalities size groups established on the basis of 2001 census and ongoing balances has showed mere negligible differences.

CHANGES IN POPULATION DEVELOPMENT IN 2001–2002

9

Yearly absolute figures concerning demographic events are not sufficient grounds to evaluate population migration and ongoing demographic processes. However, if they ensue from precedent detailed analyses drawn from intensive indicators in a repetitive time sequence, they are reliable enough to research long term trends, as in the above mentioned analysed year.

No Significant or Unexpected Changes Have Taken Place within the Czech Republic Population Development So Far

The August floods have damaged the Czech Statistical Office as well. Fortunately population movement analysed data have neither been destroyed nor lost, but significantly worsened working conditions will obviously impair securing Population Movement in 2001 publication normal analysis and editing within its usual deadline as in preceding years. That is the reason why 2001 data are not accompanied by certain intensive or structural characteristics. From a methodological point of view, the second most significant cause is the fact that as of the year 2001, all data from population new balance will be based on gender, age and family status according to 1.3.2001 population, houses and flats census. It is logical that former balance established since 1991 census, had been burdened throughout the years with certain inadequacies when determining demographic data and accidental mistakes within the frame of analysis (e.g. unidentified age projection). The main cause for discrepancy between both balances – the final one from 1991 census and the starting one from 2001 census – is, in addition to both censuses inadequate computing, on one hand population census definition change and on the other hand, the well known incomplete registration of Czech citizens permanent emigration abroad. Mainly due to the latter reason, minor modifications will occur within population age structure thus triggering certain intensive indicators possible discontinuity (greater year to year differences as in preceding years) as well.

Yet these realities do not affect absolute data concerning 2001 and 2002 demographic events numbers. That is why acquired differences oriented evaluation and preliminary computations or intensity indicators estimates can be considered as reliable. In most cases, they are already based on the Czech Statistical Office published data on grounds of migration preliminary results analysis and age structure according to new census results.

Throughout 2001 and 2002 no unexpected changes in demographic events numbers did occur – except obviously foreign migration, due to its findings radically modified methodology. Yearly marriages number fluctuation went on and due to a legislative change, the former reduced number of divorces rose again up to its precedent level. Though in 2002, live births total number increased by 2 000 following a six-year stagnation, this increase does not correspond to total female population number at reproductive age. According to projections, abortions total number is still decreasing, first of induced ones, and following an approximately three-year stabilization, the deceased total number has slightly increased. Consequently population total number decrease due to natural movement lessened. Foreign migration data are incomparable: earlier official migration increase due to number of emigrants data underestimation turned into, according to hypotheses, a relatively high increase.

Table 9.1: 2000–2002 Population Movement

Events	2000	2001	2002p	2001–2000 Difference		2002–2001 Difference	
				Abs.	%	Abs.	%
Marriages	55 321	52 374	52 732	–2 947	–5,3	358	0,7
Divorces	29 704	31 586	31 758	1 882	6,3	172	0,5
Live Births	90 910	90 715	92 786	–195	–0,2	2 071	2,3
Deaths	109 001	107 755	108 243	–1 246	–1,1	488	0,5
Decrease Due to Natural Movement	18 091	17 040	15 457	–1 051	–5,8	–1 583	–9,3
Immigrants	7 802	12 918	44 679	5 116	65,6	31 761	245,9
Emigrants	1 263	21 469	32 389	20 206	(17x)	10 920	50,9
Net Migration	6 539	–8 551	12 290	.	.	.	.
Total Decrease	11 552	25 591	3 167	.	.	.	.

Demographic events registered number relatively high stability is to a greater extent caused by population development constant conditions. Age structure ongoing current changes bear almost no influence, modifying merely slightly the number of potential future spouses, existing couples, as well as the number of women at reproductive age. Even in the social domain, conditions barely change. Population continuous very differentiated income growth went along with a lowering inflation rate, the number of available new flats has only moderately increased (certainly, improved conditions for young married couples to own their own flat can only occur later). However, unemployment continued to rise, mostly targeting young people thus becoming an important factor in their marriage decision and particularly in planning and timing their future children births. In 2001, the number of marriages slumped to its lowest registered minimum so far even though the number of potential future spouses kept on growing. In 2002 a negligible increase occurred. On one hand it led to a further decrease of first marriages and on the other hand, to single future spouses ongoing rising average age by approximately six months.

As expected after the new situation "stabilization" of marriage breakup solution following a preceding tightening, the total number of divorces rose but did not reach its 1996-1998 level. According to preliminary computing, total divorce rate (marriage breakups hypothetical percentage) further increased, reaching above the 45% limit of current marriages ending in divorce. Less frequent marriage contracting and furthermore at an older age is revealed by divorced marriages longer duration on average (11 years).

Marriage Postponement onto an Older Age Is Going on, Singles Numbers Are Still Rising as well as Children Born out of Wedlock

Already for its sixth consecutive year, the number of live born children has remained at the level of approximately 90 000. 2001 decrease was negligible, 2002 increase was more significant though it is a mere fluctuation occurring at approximately the same level. Total fertility (1.14) has not changed as compared to 2000, reaching 1.17 in 2002 though average age of mothers of children of all orders at childbirth kept on rising. However, at the same time a change occurred in childbirth structure: in 2001 the percentage of children born out of wedlock reached 23.5% and in 2002 it got close to the 25% limit, thus fertility intensity must have decreased as well as the number of children born to married women. It was one of the consequences of marriage postponement onto an older age or its refusal. One can assume that the majority of children born out of wedlock come from common-law marriages, less binding than legal ones particularly for men, though actually they fulfil their reproductive function as well. The number of registered abortions kept on decreasing at a slower pace, obviously due to the impact of reliable contraception use. However the number of spontaneous abortions reduced as well, thus the proportion of childbirths to spontaneous abortions improved. Total abortion rate decreased to a 0.60 value per woman at reproductive age, total induced abortion down to 0.44.

Following a three-year stabilization of yearly numbers of deaths within the range of 109 000–110 000, this long term decreasing trend stopped since there is an increasing number of the elderly with a higher mortality intensity. One may assume that life expectancy at birth has still been rising thus exceeding on average for both genders, the 75 years limit. Infant mortality reached 4.0–4.1 deceased infants of up to one year of age per 1 000 live births at a stabilized level. A higher live births number was more significant than a small increasing number of stillbirths thus leading to a merely limited modification of natural movement, therefore the 2001 difference between stillbirths and live births numbers amounted to 17 000. However in 2001, a more significant population decrease occurred due to foreign migration, registered according to a new methodology (see Migration Chapter) of 9 000, thus bringing total Czech population decrease down to approximately 26 000. Nevertheless in 2002 a reversal took place. Migration balance was highly active (12 000), particularly due to the impact of registered immigrants increasing number. Thus 2002 total population decrease slumped to 3 000.

To sum up, one can observe that ongoing, individual demographic processes throughout preceding years actually remained identical in 2001 and in 2002 as well. Even more significant than total population decrease, age structure major deformation is caused by numerously weak generations at the basis of the age pyramid (see graph 1.1). Nuptiality intensity increase has the most significant impact on possible fertility rate increase since more than three fourths of children are born to married couples. Fertility rate of actual couples is in fact substantially lower than that of married couples, specifically as to second childbirth.

Due to the fact that singles average marriage age as well as married women age at childbirth is still a few years lower than in most Western European countries, one may assume that marriage and childbirth postponement onto an older age will continue for a few more years. Only then will it be obvious to what extent, current fertility rate is the outcome of marriage timing (its postponement onto future spouses older age), respectively of legitimate marriages replacement by informal ones, and to what extent it actually is a refusal of permanent partner cohabitation and its consequence on future numbers of childbirths.

CZECH REPUBLIC POPULATION DEVELOPMENT FORECAST UNTIL 2050

10

All Czech Republic population development partial analyses common goal is to identify its general regularities and specific features, and first of all those which could help forecast population size and demographic structures future changes direction and intensity. Thus demographic research logical conclusion is demographic or population forecasts.

During the past few years, a few Czech Republic population forecasts originated at Prague Charles University Faculty of Science. 1991 population census results and subsequent population balance served as grounds for a series of five variant forecasts, compiled in 1993, 1995, 1998, 2000 and 2002. Their common denominator was, apart from identical information roots, shared methodological starting points and its stable authors' team as well. These common signs support comparative studies and represent a definite warranty as to forecasts quality, due to experience and knowledge combination.

Thanks to New Data Submitted Forecasts Confirm Already Known Trends of Czech Republic Population Rapid Ageing

Originally four forecasts were to represent the above-mentioned series while the present one was to stem from 2001 population census definitive findings. Changes in population categories delimitation within census, retroactively covering demographic events ordinary update throughout 2001, and first and foremost the expected delayed publication of census findings due to August floods led to, within the context of an ongoing wide interest in forecasting information, not giving up on compiling another forecast. Thus the presented forecast represents a certain compromise between the intention of compiling a totally new one, a so-called basic one, and a review of the former one, covering as well the period until 2050. Part of this forecast computation is still made up of subsequent orientation computations. However due to analytical reasons, their projected horizon has been moved to 2100. This computation results commentary, mostly analytically oriented, is not part of the hereby presented forecast.

From a methodological point of view, the new forecast was traditionally compiled according to demographic development classical cohort component pattern, registering demographic reproduction all three elements parallel effect – fertility, mortality and migration on structure created by dividing population into sex and age groups. Thus reproductive process individual elements became partial and to a certain degree main subjects of forecast interest and the basis of resulting recapitulative forecast.

Forecast conclusions introduced below are indebted to demographic development knowledge at the time of forecast compilation, 2000 population movement final data, sex and age structure as of 31.12.2000, 2001 movement preliminary basic data and in some cases 1.3.2001 census preliminary results as well, published by the Czech Statistical Office, were available. Indefiniteness, specific to all forecast conclusions, is expressed through three variants of expected development – medium, high and low. The medium variant conveys the most probable development direction and extreme variants represent the frame within which real development according to normal conditions as compared to starting ones should remain. Each variant of recapitulative forecast corresponds to reproduction elements development specific complex of ideas, therefore a given variant emerged as a combination of corresponding, analogously named forecast variants of development individual elements. At the same time partial forecasts variants designation corresponds to given processes intensity concrete indicators level – such as total fertility, life expectancy at birth and migration balance, and definitely not own processes level.

The presented forecast starting age structure contains all its irregularities originating during the past decades. Their gradual shift onto an older age usually triggers certain development fluctuations. Afterwards fluctuations became the strongest during these irregularities coming across an exposed age, e.g. female highest fertility one or high mortality probability one. The late 2000 age structure was chosen as the starting one, being the last balance structure related to 1991 census. Its most significant irregularities are represented by population waves caused by a high natality level in the forties, early fifties and mainly in the seventies. However future development will fundamentally indicate children born since the mid 90's very low numbers.

Parameters of future fertility level according to age indicated on table of total fertility expected level were drawn from generation characteristics. Probable development projections were first and foremost formulated on the basis of reflections on ongoing level changes corresponding to partial and combined indicators of fertility intensity between individual female years. Such limited cohorts are actually created by women sharing a similar life experience and that is why their reproductive behaviour is usually homogeneous to a certain extent. So-called transitional generations of women born between 1969 and 1980 created an exception, since an important part of one generation embraced a new behaviour pattern

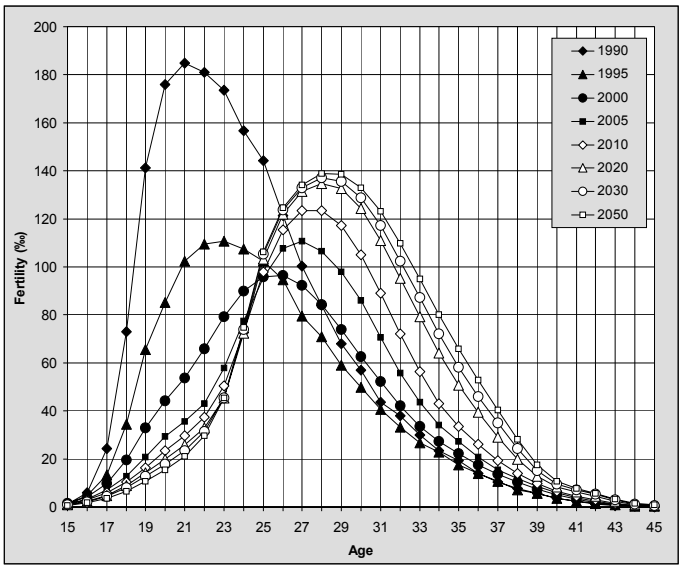
whereas an equally important part of another one still behaves according to traditional patterns. An increased attention was devoted to these generations fertility intensity analysis and forecast.

Table 10.1: Considered Variants of Fertility, Mortality and Migration Future Development

Year	Fertility (Total Fertility Rate)			Mortality (Life Expectancy at Birth)						Migration (Net Migration in thousands)		
				Men			Women					
	Variant			Variant			Variant			Variant		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
2000	1.14	1.14	1.14	71.65	71.65	71.65	78.35	78.35	78.35	6.5	6.5	6.5
2010	1.18	1.31	1.36	73.57	74.26	75.06	80.03	80.63	81.35	2.0	10.3	14.5
2020	1.32	1.50	1.58	75.53	76.73	77.83	81.66	82.72	83.71	4.0	13.1	20.3
2030	1.39	1.57	1.67	77.20	78.90	80.19	82.96	84.43	85.55	4.6	13.3	21.1
2040	1.43	1.61	1.74	78.62	80.62	81.96	83.98	85.79	87.01	4.7	12.6	20.5
2050	1.45	1.63	1.80	79.91	82.18	83.56	84.92	87.04	88.36	5.2	12.6	20.8

Even though the much awaited compensatory fertility increase did not even occur in 2000–2001, we did not abandon our fundamental hypothesis that young women's until 25 years of age ongoing rapid fertility level decrease would lead to a further fertility transposition onto an older age and its transformation into a totally new form. However in contrast to former notions, realisation of total fertility intensity will no longer be concentrated into a narrow age group, but it could be distributed among numerous age groups, due to proportionally higher reproductive behaviour differentiation. Former reproduction pattern, characterized by early marriage, followed by subsequent birth of two children, often within the frame of a single "extended" maternal leave and mother's subsequent return to permanent employment, has been nowadays given up by most women and replaced by a new pattern. Current and particularly future pattern is and will likely be completely different: children will be born only after certain different social and first of all economic female goals are reached, such as acquiring a higher professional qualification, an adequate professional position and income, i.e. during the period following expected, subjective future family securing. Thus less time will remain available for reproduction and children education which will be reflected in resulting subsequent lower children births per woman in future generations. This is further corroborated by the hypothesis that a lower female percentage will contract marriage as compared to the past and that unmarried women fertility level (including common-law marriages) will remain lower than married women one.

Figure 10.1: Fertility Level Development according to Age

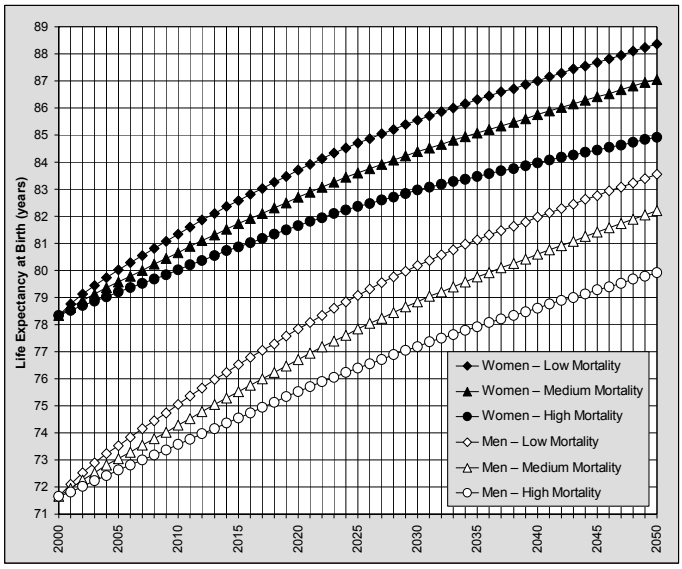


The concerned transposition will be a long term process and a smooth continuation of current changes. Its main part should, according to hypotheses, come to an end between 2015 and 2020. Then fertility level and structure, according to age could stabilise or undergo minimal changes. Forecast low variant relies on total fertility rate relatively limited increase and its stabilization between values of 1.4 to 1.5 live birth per one woman, thus below current European average. From the top, the curve rising up to forecast horizon of 1.8 child limits fertility level probable development, reflecting notions of reproduction within the frame of favourable conditions for families with children set up and existence. However the most probable seems to be reaching a limit corresponding to Western Europe fertility current relatively stabilised level (1.6 child). Concerning the few coming years, only the low variant allows for total fertility ongoing stagnating level, marking past periods postponed reproduction compensation low level. The two variants left stem from accumulated reproduction potential, rather than from notions of reproduction improved conditions, and rely on fertility intensity increase. All three scenarios create within the context of female age structure development a wide enough frame for number of children variant forecasted estimate.

Mortality rate relatively regular decrease combined with the latter distinct and stable enough structure during the last decade create favourable starting points for future mortality ratios forecast. Taking into consideration the Czech Republic mortality intensity current development, its sex and age differentiations, mortality structure shifts according to death causes and advanced countries mortality shifts evolution as well, we assume that mortality total level will continue to decrease. In the third

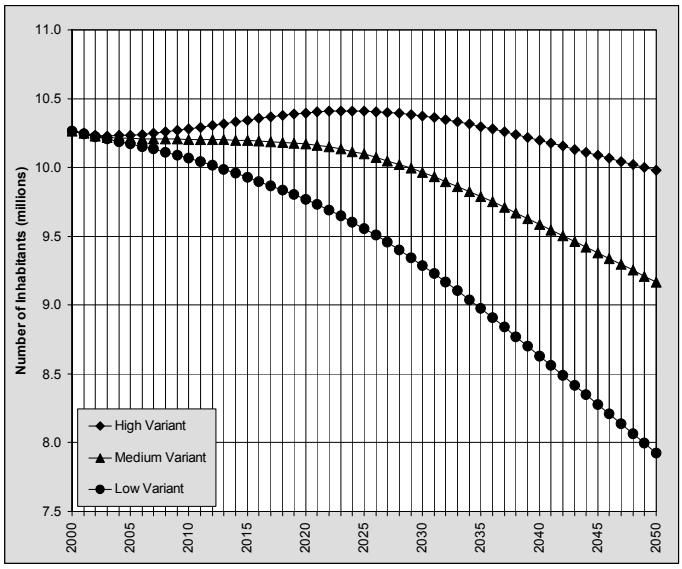
variant we expect average life expectancy increase at half rate, as compared to the 90's, when between 1990 and 2000, life expectancy concerning men approximately grew by 4 years and by 3 years concerning women. The low variant of mortality level forecast can be, despite studied combined indicator expected growth, described as relatively pessimistic, since reaching some Western countries, such as Sweden and Switzerland (76 to 77 for men and 83 to 84 for women) current mortality level is only expected between 2020 and 2030. In contrast, development according to high variant would mean reaching the rather ambitious goal of equating advanced countries life expectancy at birth prior to 2050. Due to mortality level decrease current reserves, all variants imply a relatively faster male mortality ratios improvement, consequently leading to an additional decrease of life expectancy difference according to sex and all its subsequent outcome.

Figure 10.2: Life Expectancy at Birth Forecast Development



Migration traditionally problematic forecast was separately compiled due to both immigration and emigration components. Hypotheses concerning both components development were confronted to hypotheses concerning probable migration balance extent during separate years. All variants rely on a positive migration balance throughout forecast period, except the first two years in the low variant case. Each scenario differs from the others mainly due to total migration balance different extent. Following population initial decreases due to foreign migration, the forecast low variant implies a migration gain increase of up to 3 000 to 4 000 inhabitants yearly. The medium variant considers in distant horizons a yearly gain of 12 000 to 13 000, even up to 20 000 inhabitants as far as the high variant is concerned. However foreign migration parameters actual values will be mainly decided upon by the political establishment, thus within a domain considerably impairing most forecast estimates reliability. Thus the greatest unknown is migration ratios shift as a result of the Czech Republic expected membership in the European Union. Nevertheless, in spite of a significant indefiniteness, migration does retain an inalienable place within population development forecast. From an objective point of view, on one hand it represents an important development component which reproduction significance should durably increase and on the other hand its inscription within forecast computation denotes migration real possibilities to make up for population expected losses resulting from natural movement deficit and eliminate age structure adverse development. In addition, the mere fact of not including migration in population forecast would significantly affect its authenticity.

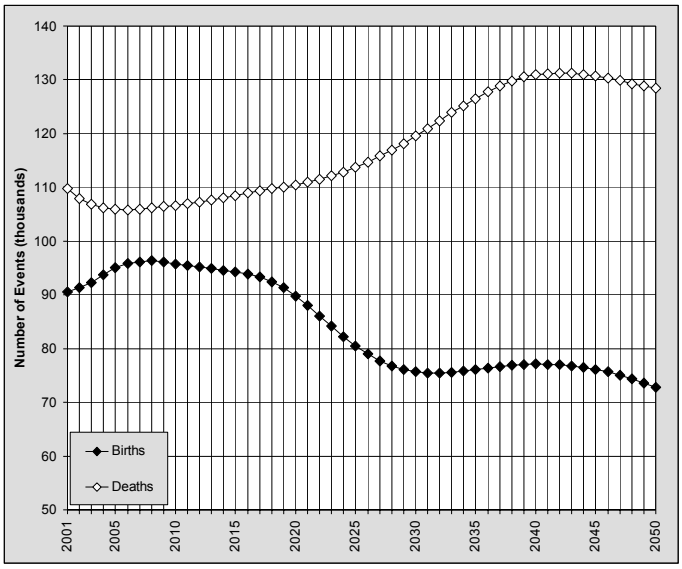
Figure 10.3: Population Size Forecast Development



According to present forecast results, Czech Republic population number future development is not completely definite. Its temporary stability seems to be the most probable one followed by a relatively intensive decrease after 2020. According to the low variant, population total number should decline throughout forecast period, while during the next decade yearly deficit should fluctuate approximately at the level of 20 000 inhabitants, subsequently rising up to 70 000. Yet, according to the high variant, a time limited current trend reversal could occur, leading to population decrease. Population number moderate growth, though possible merely until 2020, would rapidly give way to a relatively intensive decreasing situation, as a consequence of reductions on average of approximately 20 000 inhabitants yearly mainly after 2030. Within the frame of future development realistic limits, these findings lead to the fact that a short term increase or rather a total number stabilization could only be achieved due to a joint relatively high fertility level, a low mortality level and a significantly high net migration.

Neither mortality positive development nor rather high fertility level and migration gains common effect will be enough to maintain Czech Republic population long term total number above the 10 million limit. Throughout the period roughly until 2020, a yearly migration balance of up to 10 000 inhabitants could suffice, however later on it should fluctuate between 30 000 to 50 000, according to real development closeness to forecast variant. Expected adverse development due to natural movement may probably be only partially compensated by migration, following a very restricted period. Migration balance increase onto a level which would merely ensure population total

Figure 10.4: Expected Development of Births and Deaths



number at the 10 million limit even after 2020 has not been completely ruled out but is currently very difficult to imagine.

Differences in live births total number development among each forecast variant are due, at least until 2050, to diverse fertility level development hypotheses since potential mothers total number according to individual variant should remain very similar until then. However the intensity, according to which live births total number will gradually subside, aside from fertility level development, will specifically depend on decrease of women at high fertility age total number, unavoidable from a short term as well as long term perspective. Natality level development unfavourable perspective could be improved, though not fundamentally changed, only by means of a very efficient and immediate prenatal policy, leading to a faster fertility increase onto higher levels and would thus succeed in securing a higher number of mothers in the more remote future. This policy could lead to deceleration of childbirth postponing onto an older age (i.e. over 30 years of age), presenting higher risks for childless women at the end of their reproductive period. The difference in expected numbers of live births according to forecast extreme variants is a proof that considering supporting natality makes sense. Due to higher fertility conditions, combined with a higher migration increase, according to high variant more than 33 000 children would be born as compared to low scenario.

Age structure deteriorating will affect basic tendency of the deceased total number development as well. Not even mortality level additional significant decrease would actually lead to the deceased total number decrease. Approximately after 2015, yearly numbers of the deceased will gradually rise and after 2030, they will probably fluctuate somewhere between 120 000 and 130 000 inhabitants. This irreversible change stems from the shift of numerous generations born in mid 20th century onto an age of a fundamentally higher death risk. Thus age structure deteriorating will bear a stronger effect on the deceased numbers than on expected human life expectancy extension.

Table 10.2: Expected Development of Population Number and Its Age Structure

Variant	2000	2010	2020	2030	2040	2050
	Population Size (thousands)					
Low	10 267	10 066	9 767	9 287	8 630	7 924
Medium	10 267	10 205	10 170	9 964	9 589	9 167
High	10 267	10 280	10 397	10 373	10 197	9 978
	Share of Children up to 15 Years of Age (%)					
Low	16.2	13.3	12.7	11.5	10.8	10.9
Medium	16.2	13.7	13.9	12.8	12.0	12.5
High	16.2	13.7	14.2	13.1	12.6	13.3
	Share of the Elderly over 60 Years of Age (%)					
Low	18.5	23.5	28.1	31.9	38.7	42.2
Medium	18.5	23.6	28.0	31.6	37.9	40.7
High	18.5	23.7	28.3	31.9	37.8	40.1
	Share of Persons Aged 15–59 (%)					
Low	65.3	63.2	59.2	56.6	50.5	46.9
Medium	65.3	62.7	58.1	55.6	50.1	46.8
High	65.3	65.6	57.5	55.0	49.6	46.6

Population total number is definitely a significant demographic parameter of each country, nevertheless due to world globalization and capital as well as labour free movement, the Czech Republic position within the European unification process and its further economic and social development will not be determined according to population number extent. Certainly population age structure future development will be the most important. During the forecast first period, age structure will be strongly dependent on starting point, on structure which is part of the forecast. As a consequence of births number decrease in individual years, children component number extent and representation will shrink. Moreover relatively numerous older generations will shift onto higher age groups. Though at the beginning, their size will not be too much affected by mortality intensity expected decrease, one may openly state that in coming

years, the Czech Republic population age structure changes general and basic feature will be its further intensive ageing.

According to forecast medium variant during the next decade, anticipated children numbers of up to 15 years of age will probably decrease from the current 1.6 million to approximately 1.4 million. Consequently, during the next decade a moderate increase should occur though after 2020, children numbers decrease will continue, however this time it will be permanent and relatively steep. Children component percentage would dwindle below 14% during the first phase (2005–2020) and until 2050 it could further decrease to the 12% limit. Results of forecast corresponding low variant even disclose the possibility of children numbers ceaseless decrease down from present 1.6 million to approximately 1 million in 2030 with a marked tendency towards a further reduction. Thus fifty years from now, children aged up to 15 years of age would merely represent approximately one ninth of population expected total number. In case of a development according to the optimistic scenario, children numbers would decrease over a long period of time though significantly at a slower pace, and their relative percentage out of total population would remain at approximately 14%.

The elderly total number will evolve in a completely opposite way as to children component total number extent, i.e. the number of senior citizens aged 60 and more could almost double until 2050. Within current population, approximately 1.9 million inhabitants belong to this age group out of a population total number of 10.2 million, whereas in 2050, according to the medium variant, senior citizens could probably represent 3.7 million out of 9.2 million inhabitants. The elderly relative percentage within total population would thus increase from 19% to more than 40%. Forecasted development main factor will be numerously strong generations transition across the 60 age limit combined with average life expectancy growth. Life extension will also foster significant changes within analysed age group. In fact one can say that the more advanced the age, the more significant population change may be expected. If the number of senior citizens aged 60 and over approximately doubled during analysed period, then there would be three times more senior citizens older than 75 and even five times more older than 85 than nowadays.

The principal tendency of population number at productive age development, represented by the 15–59 age group, will be a permanent shrinking, represented during the 2000–2050 period by a decrease between 2 to 3 million persons. Thus population number at productive age would then shift from its 6.7 million starting value, representing within present development context a historical maximum, to a level between 3.7 up to 4.7 million persons in 2050, according to forecast scenarios fulfilling rate extent. At the same time, not only above-mentioned numbers will be modified but inner structure of this wide range age group as well. Similarly to total population ageing, age group at productive age will age too. If, currently this latter group is characterised by an average age of 35, in 2040 its value will be approximately 10 years higher, since the 70's population wave will have crossed the analysed high age limit.

Obviously differentiated development in basic age groups will lead to significant shifts in their mutual relations. The relation among children and productive components will change relatively slightly since in both cases inhabitants total number will decrease. However,

Figure 10.5a: 2010 Expected Population Age Structure Compared with 2000 Initial Age Structure

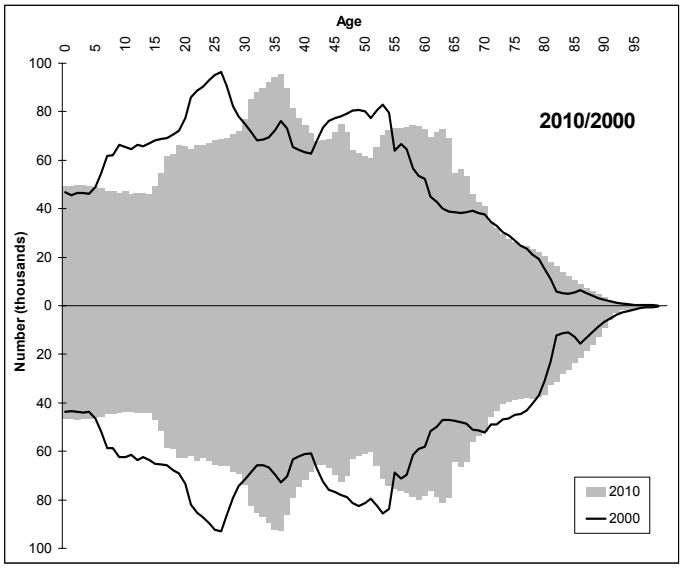


Figure 10.5b: 2030 Expected Population Age Structure Compared with 2000 Initial Age Structure

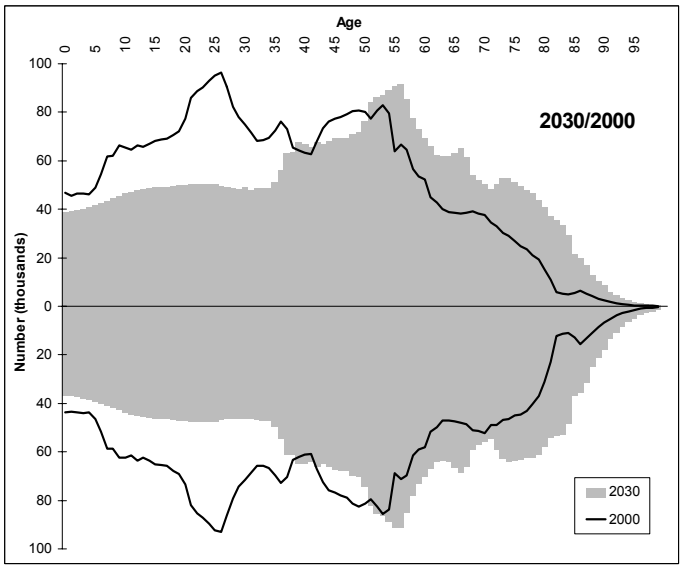
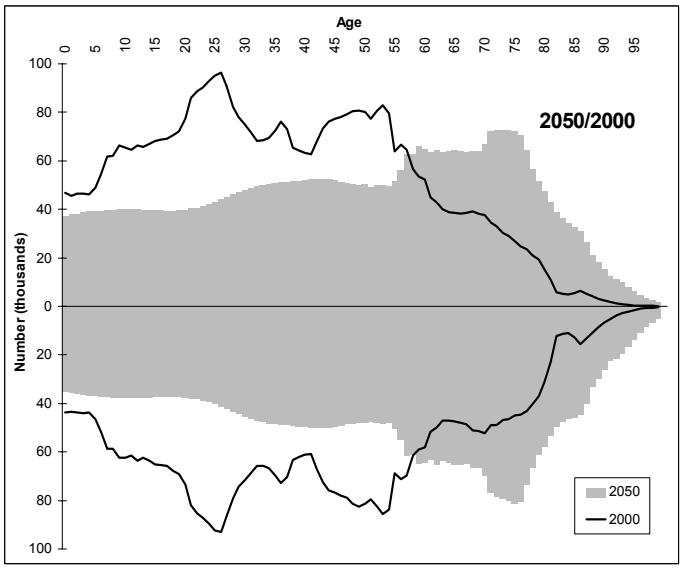
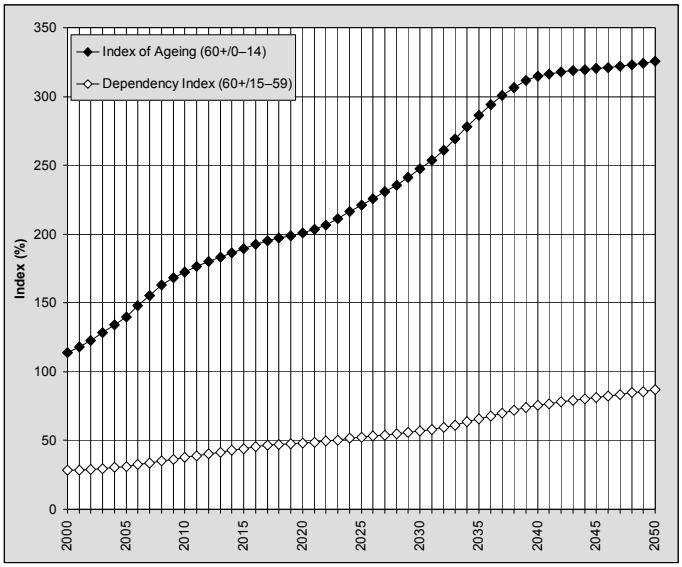


Figure 10.5c: 2050 Expected Population Age Structure Compared with 2000 Initial Age Structure



in the coming decades, ageing index, expressing the relation between the elderly total number and children total number, will undergo a significant change. Already during the period until 2030, this index values would more than double, even according to the most favourable scenario. If, currently, to 100 children aged up to 15 correspond 115 senior citizens aged 60 and over, then in 15 to 20 years horizon to 1 child aged 15 or less will correspond 2 persons older than 60. Metaphorically speaking: one set of grandparents would only have one grandchild younger than 15 and a little later not even one. During the next period 2030 to 2040, the ratio would probably reach the value of one to three and around 2050, according to the low variant, it could even be one to four; i.e. only every second set of grandparents would live to see their grandchild, furthermore on the condition that none of them would have more than one.

Figure 10.6: Expected Development of Total Number Relation among Selected Age Groups



The above mentioned change in ageing index values and its outcome belongs, due to its range (and its impact), to the category of hard to picture changes. At the same time it is not the sole cardinal change within the context of the Czech Republic future population size and structure development. Economically and socially, the permanently deteriorating relation between senior citizens and productive age citizens numbers will definitely be more significant. The dependence index, expressing this relation, will probably rise until 2030 from current 28% to more than double (56% to 58%) and in 2050 it could realistically fluctuate between 86% and 91% (medium variant – 87%).

Findings regarding dependence index swift increase represent forecast most important outcome, since the Czech Republic forecasted population changes main results will be particularly tied to this development aspect. Thus one needs to underline a fundamental fact concerning forecast results reliability. In contrast to forecast of childbirths numbers, estimated on the basis of developmentally less stable fertility parameters and above the limit roughly indicating one generation range and even of potential mothers numbers, most of whom were not born yet at the time of computation, forecast of senior citizens numbers is globally significantly more reliable. Older than 60 senior citizens numbers are determined decades in advance according to extent of generations already alive when forecast was compiled. Future extent of current generations will obviously be modified due to expected mortality level and migration. However mortality development is relatively stable and migration should not excessively influence older than 60 senior citizens numbers, minimally in the horizon of 2030. That is precisely why elderly population numbers forecast can be considered relatively reliable even in the horizon of a few decades.

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According to presented fundamental findings of the Czech Republic population development forecast, anticipated changes could most probably lead to long term and currently still hard to detect in many regards consequences for our society further development. At the same time, as to decisive orientations, there is no hope that development would take another permanently auspicious direction concerning society and conditions of its development, due to demographic structure changes mechanism. UN compiled demographic forecasts project as well that the Czech Republic population will perspectively belong to world oldest populations.

The Czech Republic realistically forecasted population development consequences – its decreases and permanently deteriorating age structure – will not only impact on the country's economy (reductions of potential workforce) but mainly on wide social sphere (huge increase of retirees and of the elderly medical care claims) even after a much needed economic activity increased age limit. However the Czech Republic population ageing outcome will also affect a sphere not included within forecast findings, that of society mentality and psyche, definitely affected by a very high percentage of elderly people.

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