

1. Age structure of population

Table 1.1: Basic characteristics of the age structure of population (on 31December)

	1970	1980	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total											
Population	4 539 890	4 996 329	5 295 877	5 314 155	5 336 455	5 356 207	5 367 790	5 378 932	5 387 650	5 393 382	5 398 657
Age group 0-14	1 239 782	1 303 715	1 301 474	1 278 904	1 256 032	1 225 988	1 195 288	1 164 897	1 133 678	1 101 841	1 069 374
Age group 15-59	2 668 703	3 023 379	3 205 692	3 237 802	3 277 286	3 321 122	3 358 767	3 396 450	3 432 610	3 466 436	3 498 392
Age group 60+	631 405	669 235	788 711	797 449	803 137	809 097	813 735	817 585	821 362	825 105	830 891
Age group 80+	49 421	77 223	105 746	109 199	112 216	115 806	112 765	107 059	100 478	95 209	99 728
Age group 0-14 (%)	27.3	26.1	24.6	24.1	23.5	22.9	22.3	21.7	21.0	20.4	19.8
Age group 15-59 (%)	58.8	60.5	60.5	60.9	61.4	62.0	62.6	63.1	63.7	64.3	64.8
Age group 60+ (%)	13.9	13.4	14.9	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.4
Age group 80+ (%)	1.1	1.5	2.0	2.1	2.1	2.2	2.1	2.0	1.9	1.8	1.9
Average age	32.0	32.6	33.7	33.9	34.0	34.3	34.5	34.8	35.1	35.4	35.7
Ageing index	33.6	39.7	42.4	43.8	45.3	47.2	49.1	51.2	53.4	55.4	57.5
Males											
Population	2 240 386	2 455 591	2 583 230	2 590 230	2 600 047	2 608 901	2 613 712	2 618 434	2 622 005	2 623 692	2 625 126
Age group 0-14	634 561	665 750	664 672	652 985	641 797	626 676	610 853	595 837	579 568	563 558	546 980
Age group 15-59	1 324 922	1 502 636	1 595 139	1 611 739	1 632 053	1 654 683	1 674 682	1 694 468	1 713 251	1 731 671	1 748 560
Age group 60+	280 903	287 205	323 419	325 506	326 197	327 542	328 177	328 129	329 186	328 463	329 586
Age group 80+	18 201	26 926	35 188	36 193	37 102	38 331	37 170	35 015	33 245	30 802	32 428
Age group 0-14 (%)	28.3	27.1	25.7	25.2	24.7	24.0	23.4	22.8	22.1	21.5	20.8
Age group 15-59 (%)	59.1	61.2	61.7	62.2	62.8	63.4	64.1	64.7	65.3	66.0	66.6
Age group 60+ (%)	12.5	11.7	12.5	12.6	12.5	12.6	12.6	12.5	12.6	12.5	12.6
Age group 80+ (%)	0.8	1.1	1.4	1.4	1.4	1.5	1.4	1.3	1.3	1.2	1.2
Average age	31.1	31.4	32.2	32.4	32.5	32.8	33.0	33.3	33.6	33.8	34.1
Ageing index	28.1	32.6	32.8	33.7	34.6	35.9	37.3	38.7	40.4	41.5	43.0
Females											
Population	2 299 504	2 540 738	2 712 647	2 723 925	2 736 408	2 747 306	2 754 078	2 760 498	2 765 645	2 769 690	2 773 531
Age group 0-14	605 221	637 965	636 802	625 919	614 235	599 312	584 435	569 060	554 110	538 283	522 394
Age group 15-59	1 343 781	1 520 743	1 610 553	1 626 063	1 645 233	1 666 439	1 684 085	1 701 982	1 719 359	1 734 765	1 749 832
Age group 60+	350 502	382 030	465 292	471 943	476 940	481 555	485 558	489 456	492 176	496 642	501 305
Age group 80+	31 220	50 297	70 558	73 006	75 114	77 475	75 595	72 044	67 233	64 407	67 300
Age group 0-14 (%)	26.3	25.1	23.5	23.0	22.4	21.8	21.2	20.6	20.0	19.4	18.8
Age group 15-59 (%)	58.4	59.9	59.4	59.7	60.1	60.7	61.1	61.7	62.2	62.6	63.1
Age group 60+ (%)	15.2	15.0	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	18.1
Age group 80+ (%)	1.4	2.0	2.6	2.7	2.7	2.8	2.7	2.6	2.4	2.3	2.4
Average age	33.0	33.7	35.1	35.3	35.5	35.7	36.0	36.3	36.5	36.9	37.2
Ageing index	39.3	47.2	52.4	54.3	56.4	58.9	61.5	64.3	67.0	69.9	72.8

The structure of population by age and sex is considered as a basic characteristic when studying demographic processes because most of them appear in population differently by sex and age. The current regional structures of population are directly linked to their development in the past. The contemporary age structure is a result of population processes from last hundred years and will directly influence the tendency of these processes for hundred forthcoming years. After a relative stabilisation of the mortality level in Slovakia, the age structure is being formed mainly by the influence of a differentia-

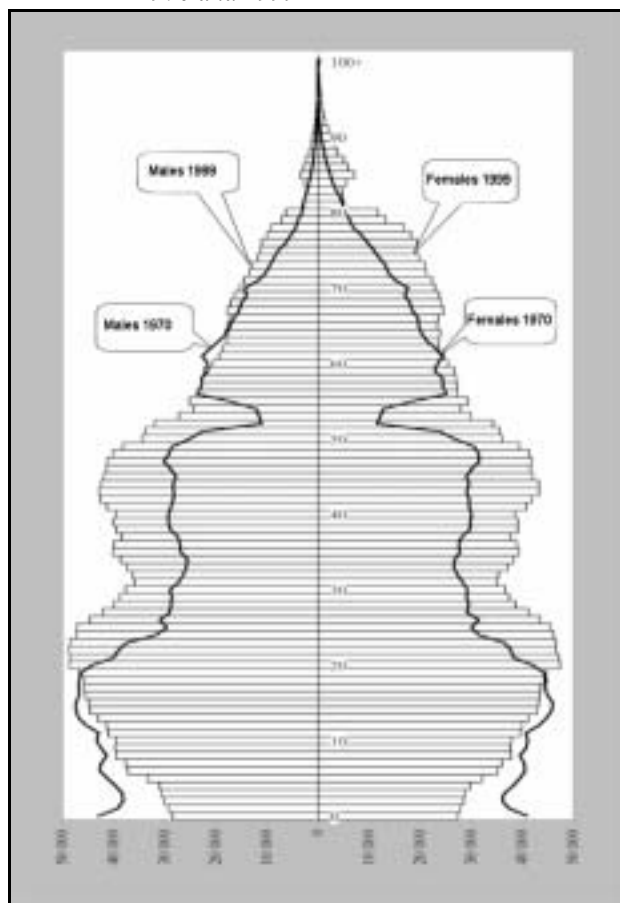
ted natality. The knowledge of the historical development of age structure of population is a necessary condition for the identification and explanation of population events and processes of nowadays as well as for the elaboration of their forecasts.

The most frequently used way of the interpretation of the age structure by sex and age is a graphical presentation, so-called age pyramid, which roughly presents the demographic history of population. The irregularities in the number of persons in the particular age categories reflect the facts, which have influenced the level

of reproduction (mainly the natality). This was the way by which the natality waves were created because the deformation in the age structure of population being once created would, as a rule, cyclically repeat in the future generation, usually, at lower extent. Due to the prolonging length of human life, the impact of older deformations is more long-term and significant than elsewhere in the past. Therefore, at the end of the twentieth century it is still necessary to take into account the consequences of natality depressions or waves from the first third of century, which influence the number of persons in some older age groups of population.

By comparing the age pyramids for 1970 and 1999, the significant differences in age structure of population can be observed which generally confirm the process of population ageing. There is a deep decrease in the numbers of the youngest age categories (under 20 years). On the other hand, all other age categories recorded an increase in numbers for the last 30 years. The most important is reflected in the reproductive age categories, the second sharp increase is in the categories of the post-productive age, especially in case of women (Graph 1.1).

Graph 1.1: Structure of population by age and sex in 1970 and 1999



The deformations of the age structure of population in Slovakia in 1970 appeared, despite the less extent and the shift being approximately 30 years, also in the age pyramid in 1999. In both years, but more significantly

in 1999, it can be seen that on the top of the age pyramid the population is more represented by women, which is the result of the different mortality level of men and women. Women reach older age as compared to male part of population in all advanced populations and, as the age is growing. Their share in population is increasing.

Until nowadays, the consequences of the World War I is observable whereas the lower number of people born in this time period is reflected also in the lower number of people living now. The influence of weak population age groups from the War period was in 1970 significant; it was reflected in the low number of people aged 52-55. Currently, these war age groups do not influence so sharply the age structure of population, however, a small cut is to be found at people aged 81-84.

The absence of generations from the period of the economic crisis in thirties explicitly appeared in the earlier time period in the age structure of Slovak population, partially it can be observed also in the graphic presentation in 1970 (age from 32 to 37). Nowadays this impact is less significant (age from 61 to 66).

Immediately after the World War II with regard to the improvement of socio-economic conditions we can identify a compensation period in the population development of Slovakia being characterised by positive features of the population reproduction (increase of natality, fertility, nuptiality, higher natural increase) and lasting until the half of fifties. The mentioned increase of natality is to be seen on the graph of age structure of population even in 1999 where the numerous age groups from the first half of fifties influence the proportion of people aged 43-49, i.e. people in the working age. After several years these numerous age groups will reach the age of retirement.

In the current age structure, a significant increase in the number of people at the age of the highest fertility is visible, i.e. the people born in seventies. The mentioned fact is caused by the cumulating of two factors: by the shift of powerful population age groups born in the compensation time period after the World War II towards the age of maximum fertility in seventies and by the increase in fertility as a consequence of its preceding low level and adoption of several pro-natality measures in seventies. Before 1989 it was expected that the natality wave from seventies would appear after 20-25 years in the increase of the number of live births, however, due to the change in socio-economic conditions in Slovakia and a consequent change in the demographic behaviour it did not happen.

With regard to the decrease in natality from eighties, the basis of the age pyramid started to be narrower, the most significant decrease of the natality level was in nineties, which was clearly reflected, in the sharp decrease of the number of persons in the youngest age categories. The shape of the age pyramid of the Slovak population witnesses the regressive type of age structure in which the children component of population is relatively less numerous and the population has an insufficient reproduction.

Main age groups

The relations between the main age groups were in seventies and eighties relatively stable. The share of children aged under 15 exceeded the quarter of population while the number of people aged 60 and over was less than 14%. The shares of main age groups, as a consequence of long-term changes in the natality and mortality levels, began to change more significantly only with regard to the changes in the demographic behaviour in nineties. In 1999, the share of children aged under 15 decreased below 20% and the share of people aged 60 and more approached 16%. The proportion of people aged 15-59 in the population has slightly increased from the long-term standpoint and currently their share reaches nearly 65% (Tab.1.1).

The above-mentioned main age groups are characterised not only by different number of persons but also by differences in the character of changes, which occurred in their number and structure during past years. Due to the long-lasting decrease in natality since eighties, which even had accelerated in nineties, the absolute number and the share of children in the population permanently decreased. However, these shortages were not regular in time, which is in relation with the irregular decrease of natality. In total, the number of people aged 0-14 decreased by 230 thousand from 1991 up to 1999, which is a decrease approximately by 18%. The share of children in population thus decreased during 1991-1999 from 24.6% down to 19.8% and reached the historical minimum. The mentioned irregularity in the natality development is reflected also in the uneven intensity of the decrease of the number of persons in the particular age groups. The most significant changes occurred in the youngest age groups. For the last 8 years (since 1991), the number of children aged under 5 decreased by more than 120 thousand, which is a decrease by more than the quarter and, at the same time, the proportion of this group of children in the population decreased from 9.0% down to 6.6% in 1999.

The irregular age structure and changes in the reproduction behaviour occurring in nineties are reflected also in the number and structure of the population aged 15-19. Since 1991, the number of persons in this main age group has increased absolutely by nearly 300 thousand, which means the increase approximately by 9%. The share of people aged 15-19 in the population increased during last ten years from 60.5% up to 64.8% in 1999. The development of the number of persons in the partial age categories of this main age group was, however, very different.

The most numerous generations of people born within the period of the natality wave during 1974 and 1979 shifted until 1999 towards the age from 20 to 25 by which the number of people in the age when the establishment of the own household and family can be assumed increased. During 1991-1999 the number of young people aged 20-25 increased by nearly 120 thousand, which is an increase by more than a quarter while the proportion of this group in the population increased within the observed time period from 8.5% up

to 10.5%. However, the increased potential numbers of brides and grooms did not appear in the initially expected increase of annual number of marriages due to the rapid decrease of nuptiality in the young age. Similarly, by the significant decrease in the fertility of young women, no rise of a secondary natality wave occurred although the number of potential mothers highly increased.

The less numerous generations of people born in sixties reached in 1999 the age of 30-39. Since 1991 until 1999, this age group recorded decrease of the number of people by approximately 76 thousand, i.e. by nearly 10%, while the share of people aged 30-39 in the population decreased approximately by 2 percentage points.

The very numerous age groups of people born in the period of a compensation phase after the World War II as well as the age groups of people born in the first half of fifties were at the beginning of nineties at the age of approximately 35 to 45. But currently these age groups shifted to the age of nearly 50, thus to the age in which it is more complicated to succeed at the labour market. These categories were in nineties on increase, in 1999 the number of people aged from 44 to 54 increased by more than 34% (i.e. more by nearly 207 thousand) as compared to 1991. The increase was a little bit higher in case of men (by 38%) than in the women's case, which might be related to the fact that in nineties the high excess male mortality in the middle age slightly decreased.

The number of people at the age of 60 and more increased in nineties by 42 thousand (a 5% increase) and, at the same time, the share of this group in the Slovak population increased from 14.9% up to 15.4% (Tab.1.2). This development was influenced also by a positive mortality development of the middle-aged and older people. The number of people older than 59 will increase, despite the maintenance of the current mortality conditions, due to the ongoing shift of the powerful population age groups towards this age. By dividing this age category into smaller groups we find out some differences in the development of particular age groups. When evaluating the number of persons in these age groups, it is necessary to take into account the growing tendency of mortality due age. Some characteristic features of the age structure from the past can be step-by-step changed or lost. Despite the fact that twenties were the time period of a natality wave, due to a higher mortality level especially in seventies and eighties, the generations born in this time period did not significantly differ by their number from the generations of younger people. Moreover, during nineties the people born within the increased natality shifted from the age about 60 to the age about 70. Therefore, in 1999, as compared to 1991, we can observe a moderate decrease of the number and share of the people aged from 60 until 69 and, on the contrary, a slight increase of the number and proportion of people aged from 70 to 79. The number and the share of people aged 80-84 are both influenced

by a very small number of people born during 1915-1919. This is the reason why the proportion of this population age group is very small. It creates only 0.9% (in 1991 it was 1.35%) while from 1991 until 1999 its

number fell by more than 21 thousand, which is more than 30%. In total, the proportion of people aged 80 and over in the Slovak population is not high; they form less than 2% from the total population (Tab. 1.2).

Tab. 1.2: Structure of population aged 60 and over

	1970	1980	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of persons											
60-64	214 971	151 200	237 234	237 545	234 356	230 621	226 290	220 899	216 018	214 775	215 704
65-69	170 830	182 422	216 069	212 453	209 253	208 798	209 918	210 018	210 824	208 390	205 296
70-74	126 137	157 005	131 885	153 438	174 662	179 022	181 378	179 638	177 306	174 666	174 871
75-79	70 046	101 385	97 777	84 814	72 650	74 850	83 384	99 971	116 736	132 065	135 292
80-84	33 363	54 051	69 900	71 790	72 677	73 535	68 923	61 734	53 813	45 937	48 399
85+	16 058	23 172	35 846	37 409	39 539	42 271	43 842	45 325	46 665	49 272	51 329
60+	631 405	669 235	788 711	797 449	803 137	809 097	813 735	817 585	821 362	825 105	830 891
Share in population aged 60 and over (%)											
60-64	34.05	22.59	30.08	29.79	29.18	28.50	27.81	27.02	26.30	26.03	25.96
65-69	27.06	27.26	27.40	26.64	26.05	25.81	25.80	25.69	25.67	25.26	24.71
70-74	19.98	23.46	16.72	19.24	21.75	22.13	22.29	21.97	21.59	21.17	21.05
75-79	11.09	15.15	12.40	10.64	9.05	9.25	10.25	12.23	14.21	16.01	16.28
80-84	5.28	8.08	8.86	9.00	9.05	9.09	8.47	7.55	6.55	5.57	5.82
85+	2.54	3.46	4.54	4.69	4.92	5.22	5.39	5.54	5.68	5.97	6.18
Share in total population (%)											
60-64	4.74	3.03	4.48	4.47	4.39	4.31	4.22	4.11	4.01	3.98	4.00
65-69	3.76	3.65	4.08	4.00	3.92	3.90	3.91	3.90	3.91	3.86	3.80
70-74	2.78	3.14	2.49	2.89	3.27	3.34	3.38	3.34	3.29	3.24	3.24
75-79	1.54	2.03	1.85	1.60	1.36	1.40	1.55	1.86	2.17	2.45	2.51
80-84	0.73	1.08	1.32	1.35	1.36	1.37	1.28	1.15	1.00	0.85	0.90
85+	0.35	0.46	0.68	0.70	0.74	0.79	0.82	0.84	0.87	0.91	0.95
60+	13.91	13.39	14.89	15.01	15.05	15.11	15.16	15.20	15.25	15.30	15.39

Ageing of population

During nineties the demographic ageing of population deepened. The number of older people in the population increased (absolute ageing) as well as their share (relative ageing). The ageing of population was reflected in all indicators by which this phenomenon can be expressed. The population started to be older very significantly mainly at the bottom of the age pyramid due to the lower numbers of born children, however, the ageing occurred also at the top of the pyramid which is caused by the fact that still more and more people reach the older age. By several authors, the main determinant of the population ageing in the "demographically advanced" countries is the decrease in natality or fertility while changes in mortality contribute to ageing to a minor extent. However, it can be assumed that the ageing from the top of the pyramid will significantly accelerate at the beginning of the 21st century by the shift of numerous age groups born after the World War II towards the post-productive age.

The demographic ageing of the Slovak population is documented also by the growth of some mean values, e.g. the average and median ages, while in 1999, both of these indicators reached the highest values until nowadays. The average age increased until 1999, as compa-

red to 1970, by nearly 4 years, from 32.0 up to 35.7 years and the median age increased from 28.2 up to 33.9 years, which is an increase by approximately 6 years. In the long-term development, both the average age as well as the median age is higher in case of women rather than in case of men, while the difference between genders is deepening. The difference in the average age of men and women increased from 1970 by 1.9 years up to 3.1 years in 1999 and if the median age was in consideration, the increase would be from 2.5 up to 3.4 years (Tab. 1.3).

Other indicators characterising the process of ageing may be the age index and Billeter index, the calculations of which are based on the biological (reproductive) population groups. The development of the age index for the past 30 years shows the change in the relation between the pre-reproductive and the post-reproductive components of population. In 1970, the pre-reproductive component significantly prevailed, the age index reached the value of approximately 121%, even in 1991 the number of people aged 0-14 slightly exceeded the number of people aged 50 and over in Slovakia, but in 1999 only 76 children fell on 100 people of the post-reproductive age. Similarly, the Billeter index, which

puts into ratio all three biological population groups, witnesses the ageing of our population. Its value subsequently decreases as the share of the children component decreases. In 1991, the index in consideration was

positive, although very close to zero, but after this year, with regard to the prevalence of the post-reproductive group over the pre-reproductive group, it reached negative values (Tab. 1.4).

Tab. 1.3: Selected mean values of age

	1970	1980	1991	1992	1993	1994	1995	1996	1997	1998	1999
Median age											
Males	27.0	27.9	30.2	30.4	30.6	30.9	31.2	31.4	31.7	32.0	32.2
Females	29.5	30.1	33.1	33.4	33.6	33.9	34.3	34.6	34.9	35.2	35.6
Total	28.2	29.0	31.6	31.9	32.1	32.4	32.7	33.0	33.3	33.6	33.9
Average age											
Males	31.1	31.4	32.2	32.4	32.5	32.8	33.0	33.3	33.6	33.8	34.1
Females	33.0	33.7	35.1	35.3	35.5	35.7	36.0	36.3	36.6	36.9	37.2
Total	32.0	32.6	33.7	33.9	34.0	34.3	34.5	34.8	35.1	35.4	35.7

Tab. 1.4 Indicators of the population ageing

	Age index (%)	Ageing index (%)	Billeter index (%)
1970	121.0	33.6	9.5
1980	107.2	39.7	3.5
1991	101.6	42.4	0.7
1992	99.3	43.8	-0.3
1993	96.9	45.3	-1.4
1994	93.7	47.2	-2.9
1995	90.8	49.1	-4.2
1996	87.6	51.2	-5.7
1997	83.8	53.4	-7.5
1998	80.1	55.4	-9.4
1999	76.4	57.5	-11.3

In nineties, the ratio of people aged 65 and over to the children component of population sharply changed (ageing index). In 1991, still 42 people aged 65 and more fell on 100 people younger than 15, in 1999 it was nearly 58 which is approximately by 24 people more than in 1970 (Tab. 1.4).

Economic burden

Changes in the population age structure in nineties are reflected also in the economic burden of population. The development of the dependency indices (I, II) and the economic dependency ratio is influenced by the decreasing share of children in the population (since 1991 until 1999) by approximately 5%, stagnating proportion of people in the post-productive age (at the level around 17.5%) and by a moderate increase of the share of productive component of population (from 1991 up to 1999 the growth by nearly 4%). While in 1991 more than 72 economically dependent people fell on 100 people in the productive age, in 1999 this number decreased down to 61 people. Such a sharp decrease of the economic dependency ratio is caused mainly by the decreasing share of children in the population which

is reflected also by the deep fall of the dependency index I in nineties, from approximately 42 children falling on 100 people of the productive age group in 1991 down to 32 children in 1999. The dependency index II expressing the number of people in the post-productive age falling on 100 people in productive age fell during nineties as well but not so significantly. While in 1991 nearly 30 people in post-productive age fell on 100 people in productive age, in 1999 it was nearly 29, which actually means the decrease of this index by 1% only (Tab.1.5, Tab. 1.6).

On the one hand, one can say that from the economic standpoint it is favourable if relatively low number of dependent people falls on the productive component of population. However, on the other hand, it can be assumed that this is only a temporary phenomenon and with regard to the assumed acceleration of the demographic ageing at the beginning of the 21 century, the share of the post-productive age group of population will grow at the cost of the productive age group by which the change in the development tendency of the economic burden of population will occur.

Population by sex

Beside the age structure, an important feature of population is its structure by sex, whereas in demographic analysis a combination of the population structure by both characteristics is very frequently in question. The structure by sex depends on various factors, the ratio of both genders at birth, where the males are slightly prevailing, furthermore on mortality which is in the SR higher at all age categories in case of men rather than in case of women (so-called excess male mortality), and on a long-term selective migration.

In total we can say that the Slovak population is characterised, from the long-term development point of view, by a positive femininity, although the femininity index is very variable, which is influenced by several factors of the social development (emigration, war losses etc.). For the last thirty years we can observe the growth of this index (Tab. 1.7). In 1970, 1026 women fell on 1000 men, in 1991 it was 1050 and in 1999 almost 1057 women.

The ratio of genders in the young age is very even. Regarding the biologically given moderate prevalence of the born boys, at the lower age categories the share of boys is higher than in case of girls, which, however, is diminishing in time. The masculinity of the young population decreases in time due to the higher mortality level which is, on the one hand given biologically and, on the other hand, caused by the fact that part of boys

and young men live in a more risky way and become more frequently victims of injuries and accidents. The age, in which women start to prevail the number of men, is step-by-step increasing in Slovak population. In 1970, males only under the age of 24 were slightly prevailing and from the age of 25, females started to prevail, while in 1999, males were prevailing females even up to the age of 42 (Graph 1.2, Graph 1.3).

Tab. 1.5: Structure of population by economic groups

	1970	1980	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total											
Total	4 539 890	4 996 329	5 295 877	5 314 155	5 336 455	5 356 207	5 367 790	5 378 932	5 387 650	5 393 382	5 398 657
Pre-productive age	1 239 782	1 303 715	1 301 474	1 278 904	1 256 032	1 225 988	1 195 288	1 164 897	1 133 678	1 101 841	1 069 374
Productive age	2 553 465	2 878 486	3 076 411	3 111 519	3 151 578	3 194 595	3 230 768	3 266 079	3 299 779	3 332 060	3 361 114
Post-productive age	746 643	814 128	917 992	923 732	928 845	935 624	941 734	947 956	954 193	959 481	968 169
Males											
Total	2 240 386	2 455 591	2 583 230	2 590 230	2 600 047	2 608 901	2 613 712	2 618 434	2 622 005	2 623 692	2 625 126
Pre-productive age	634 561	665 750	664 672	652 985	641 797	626 676	610 853	595 837	579 568	563 558	546 980
Productive age	1 324 922	1 502 636	1 595 139	1 611 739	1 632 053	1 654 683	1 674 682	1 694 468	1 713 251	1 731 671	1 748 560
Post-productive age	280 903	287 205	323 419	325 506	326 197	327 542	328 177	328 129	329 186	328 463	329 586
Females											
Total	2 299 504	2 540 738	2 712 647	2 723 925	2 736 408	2 747 306	2 754 078	2 760 498	2 765 645	2 769 690	2 773 531
Pre-productive age	605 221	637 965	636 802	625 919	614 235	599 312	584 435	569 060	554 110	538 283	522 394
Productive age	1 228 543	1 375 850	1 481 272	1 499 780	1 519 525	1 539 912	1 556 086	1 571 611	1 586 528	1 600 389	1 612 554
Post-productive age	465 740	526 923	594 573	598 226	602 648	608 082	613 557	619 827	625 007	631 018	638 583
Total (%)											
Pre-productive age	27.3	26.1	24.6	24.1	23.5	22.9	22.3	21.7	21.0	20.4	19.8
Productive age	56.2	57.6	58.1	58.6	59.1	59.6	60.2	60.7	61.2	61.8	62.3
Post-productive age	16.4	16.3	17.3	17.4	17.4	17.5	17.5	17.6	17.7	17.8	17.9
Males (%)											
Pre-productive age	28.3	27.1	25.7	25.2	24.7	24.0	23.4	22.8	22.1	21.5	20.8
Productive age	59.1	61.2	61.7	62.2	62.8	63.4	64.1	64.7	65.3	66.0	66.6
Post-productive age	12.5	11.7	12.5	12.6	12.5	12.6	12.6	12.5	12.6	12.5	12.6
Females (%)											
Pre-productive age	26.3	25.1	23.5	23.0	22.4	21.8	21.2	20.6	20.0	19.4	18.8
Productive age	53.4	54.2	54.6	55.1	55.5	56.1	56.5	56.9	57.4	57.8	58.1
Post-productive age	20.3	20.7	21.9	22.0	22.0	22.1	22.3	22.5	22.6	22.8	23.0

Tab. 1.6. Economic burden of population

	1970	1980	1991	1993	1994	1995	1996	1997	1998	1999
Dependency ratio I (%)	48.6	45.3	42.3	39.9	38.4	37.0	35.7	34.4	33.1	31.8
Dependency ratio II (%)	29.2	28.3	29.8	29.5	29.3	29.2	29.0	28.9	28.8	28.8
Economic dependency ratio	77.8	73.6	72.1	69.3	67.7	66.2	64.7	63.3	61.9	60.6

Starting with the age of 84, the number of women falling on 1000 men does not decline below 2000 while the femininity index reaches the maximum value at the age of 95 where 2644 women fall on 1000 men (Graph 1.2). This inequality of genders has risen not only as a consequence of a long-term excess male mortality but is also a result of war losses in case of men and their

higher emigration during 1948-1989. A slight reduction in mortality differences at medium and old age between men and women in nineties contributes to the fact that the relations between genders in case of older population are not deepening. The prevalence of women in case of older population is a characteristic feature in all advanced countries.

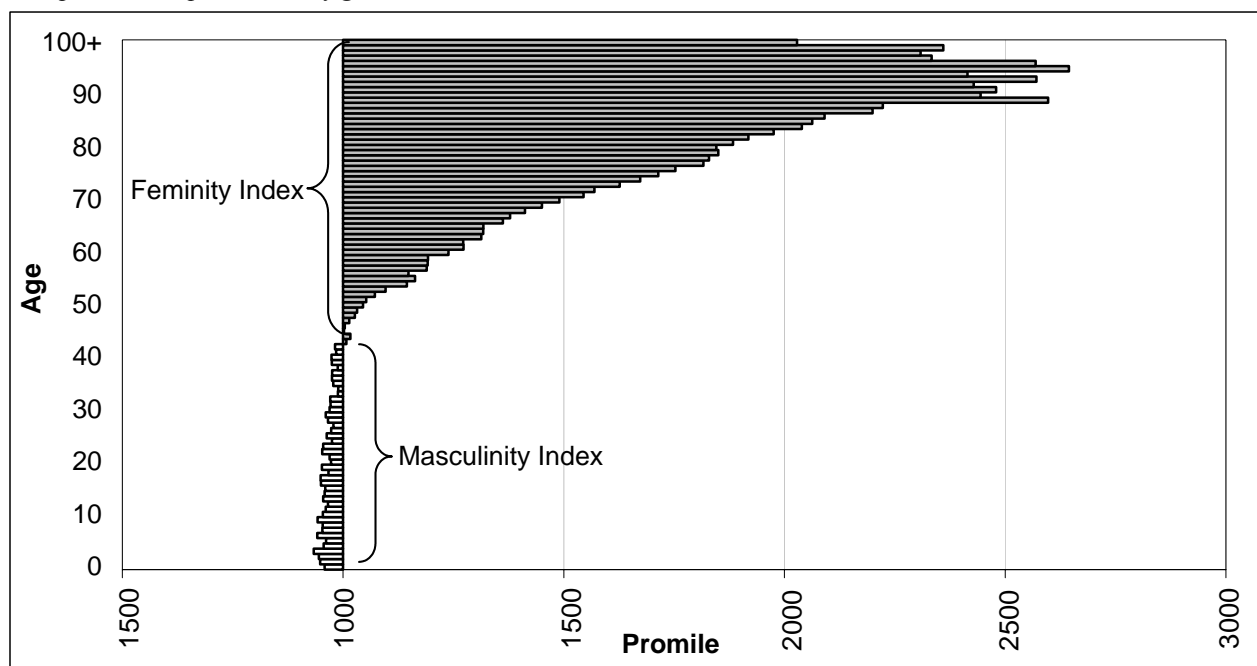
Tab. 1.7: Population by sex

	1970	1980	1991	1993	1994	1995	1996	1997	1998	1999
Share of women (%)	50.65	50.85	51.22	51.28	51.29	51.31	51.32	51.33	51.35	51.37
Number of women per 1000 men	1 026	1 035	1 050	1 052	1 053	1 054	1 054	1 055	1 056	1 057

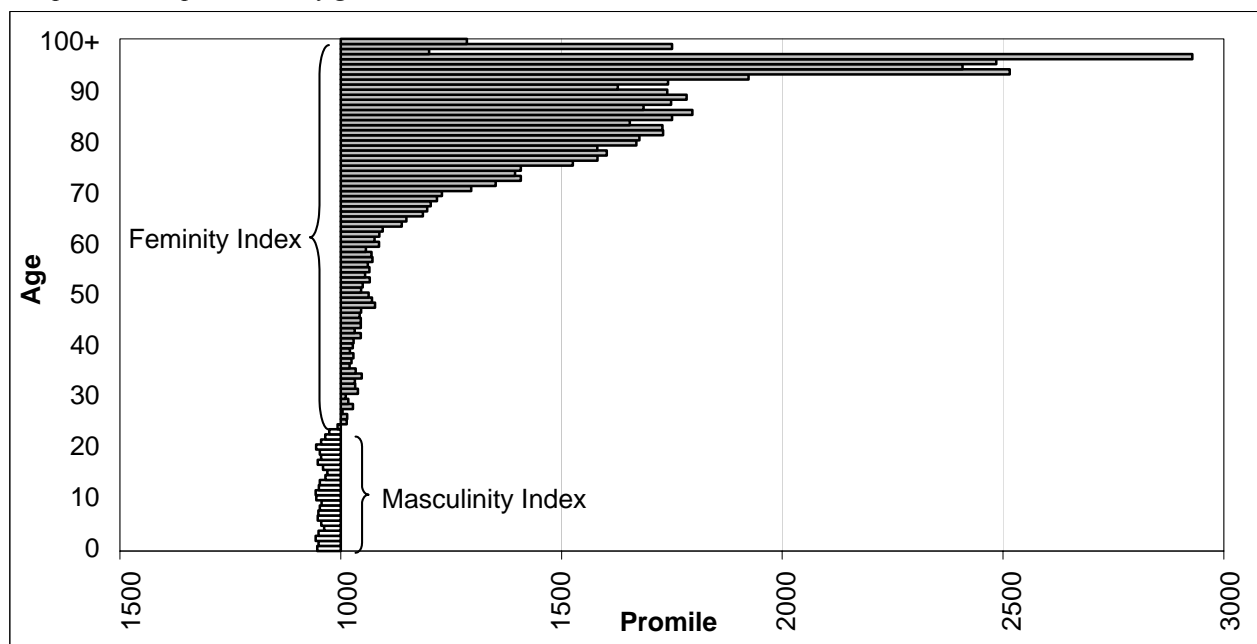
In 1970, the prevalence of genders had the same features as nowadays; the difference is on the one hand in the already mentioned lower age where females started to prevail males and, on the other hand, in the

fact that the femininity index reached lower values. With the exception of some age categories in case of the oldest population, the number of women falling on 1000 men did not exceed the value of 2000 (Graph 1.3).

Graph 1.2: The prevalence of genders in 1999



Graph 1.3: The prevalence of genders in 1970



Population by marital status

Changes in the demographic behaviour are reflected also in the population structure by marital status.

The decrease in nuptiality of young people and the rise of the age at marriage appeared in nineties by the increase of the number of single persons (expressed in absolute and relative values) older than 15, decrease of the number as well as the share of married people and consequently the share of divorced at younger age (under 24) declined. The relatively high number of divorces, which generally has had a growing tendency in

our country, caused the decrease of the share of people living in wedlock under the age of approximately 60. A permanent rise of divorce had a consequence in the growth of the number of divorced people and the increase of their share in population. From 1991 to 1999 the number of divorced persons increased by approximately 50% and their share in the population aged 15 and over increased from 3.9% up to 5.4% while in absolute and relative figures the prevalence of divorced women is being kept (Tab.1.8).

Tab. 1.8: Structure of population aged 15 and over by marital status (%)

	1980	1991	1995	1999	1980	1991	1995	1999
	Males				Females			
Single	27.79	27.94	30.46	32.86	19.81	19.53	21.89	24.16
Married	66.98	65.72	62.69	59.93	63.17	60.86	57.96	55.39
Divorced	2.03	3.29	3.98	4.67	2.80	4.39	5.17	5.99
Widowed	3.20	3.05	2.88	2.54	14.22	15.23	14.98	14.46

On the other hand, we observe in population a moderate increase of the widowed persons with the decrease in the number of widowers hidden in the background (since 1991 by approximately 10%) and a slight increase of widows (by nearly 3%). It can be assumed that the proportions of widowed persons will diminish proportionally to the decrease in the mortality intensity, especially in the age of 50, mainly in case of men. The absolute figures of widowed women are, however, still more than five times higher than the numbers of widowers.

From the demographic standpoint, the number of women in the reproductive age is important (aged from

15 to 49), especially in the age of the highest fertility (in the age from 20 to 29) as well as the share of these women living in wedlock. From this point of view, both the increase of the number of women in the reproductive age by nearly 7.5% and the increase of their share in the population from 25.4% upwards to 26.8% during 1991-1999 might be evaluated very positively. The share of this age category of women in the population of women exceeded 50%, whereas in 1999, it was even 52.2% (Tab. 1.9). It is mainly the result of the above mentioned natality wave from seventies which continuously reached the reproductive age.

Tab. 1.9: The number and share of women in the reproductive age

	1970	1980	1991	1993	1994	1995	1996	1997	1998	1999
Women in reproductive age	1 141 561	1 232 717	1 347 287	1 381 575	1 399 053	1 414 853	1 428 139	1 436 618	1 442 767	1 448 861
Share in total population (%)	25.2	24.7	25.4	25.9	26.1	26.4	26.6	26.7	26.8	26.8
Share in woman population (%)	49.6	48.5	49.7	50.5	50.9	51.4	51.7	51.9	52.1	52.2

The number of children born in Slovakia is still in a strong relation with the number of young married women. Whereas the total number of persons living in wedlock aged 20-29 in nineties increased, the number of persons living in wedlock within this age interval decreased (since 1991 until 1999, there was a decrease by nearly 22%). In 1991, approximately 29% of men and 56% of women aged 20-24 lived in wedlock, however, in 1999 there were approximately 14% of men and 31% of women. Similar decrease is to be seen also in the age category of 25-29 where the share of married men decreased from 68% down to 51% and the share of married women declined from 80% to 65%.

Age structure of population in regions

The characteristic feature of each larger territorial area is the existence of the differentiated population structures. The same is true for Slovakia because among

its particular regions we can observe significant differences in the demographic behaviour, which are consequently reflected in the level of nuptiality, divorces, abortion, fertility and mortality. The different economic and social development of particular regions indicates the migration of population, which also contributes to the formation of the age structure of the population of individual regions. From the facts mentioned above, it is clear that the age and sex structure of population is very different within the regions of Slovakia. The important differences can be observed even at the level of regions and they rise when making analysis at the level of districts or municipalities.

If we trace the regional differences of the age structure at the level of regions of the SR based on several indicators for 1999, two regional types will mainly appear. The first type is formed by regions with the progressive age structure of population e.g. the region of

Žilina, Prešov and Košice. As compared to the Slovak average, these regions are characterised by a high share of people aged 0-14 (over 20%) and, on the contrary, by a low share of the older population. The proportion of people aged 60 and over does not exceed in these regions 15% and the share of people aged 80 and over is lower than 1.8%. The high level of fertility in these regions ensures the prevalence of the young population and a slower ageing of population. The slower ageing in comparison with other parts of Slovakia is documented also by the lowest value of the ageing index, which does not reach 52%, as well as by the fact that half of the

population is in these regions younger than 33 years. Due to the high proportion of the children component in these regions, the economic dependency ratio significantly exceeds the Slovak average (Tab. 1.10).

The second type is formed by regions with the regressive age structure of population, thus with the high share of the older population and a relatively low share of children. The population of the following regions can be classified there: Nitra, Trenčín, Trnava and Banská Bystrica. This type of the age structure is conditioned mainly by two facts – the fertility and migration.

Tab. 1.10: Selected indicators of the population structure in regions of the SR in 1999

	BL	TA	TC	NI	ZI	BC	PV	KI ¹
Age group 0-14 (%)	16.36	18.6	18.94	18.13	21.21	19.05	23.66	21.16
Age group 60+ (%)	15.93	15.38	15.94	17.07	14.65	16.28	13.7	14.58
Age group 80+ (%)	1.94	1.83	1.93	2.13	1.72	2.11	1.57	1.63
Share of women aged 15-49 in woman population	54.12	52.95	52.31	51.39	52.17	51.65	51.65	52.09
Average age	37.5	36.1	36.2	37	34.8	36.4	33.4	34.8
Median age	36.9	34.4	34.6	35.5	32.5	35	30.5	32.8
Ageing index (%)	73.6	60.85	61.88	70.04	51.13	63.68	42.68	50.3
Economic dependency ratio (%)	54.09	57.82	59.94	61.14	61.74	61.32	65.39	61.87
Feminity index (‰)	1 107	1 051	1 042	1 068	1 033	1 069	1 033	1 057

The long-range lower level of live births is related to the faster ageing of population; thus, the share of the older population is increasing. The economically less advanced regions lose by migration mainly the productive-age population; their population is ageing. The share of children in these regions does not reach the Slovak average; it oscillates between 18-19%. The proportion of the older population is higher as the average share in Slovakia while the maximum share is reached by the region of Nitra with more than 17% of people aged 60 and over and with more than 2% of people aged 80 and over. Thus, it results into the fact that the ageing index is from this type of regions the highest in the region of Nitra (70%); the same is true for the average age (37 years) and for the median age (35.5 years). From this type of regions, the economic dependency ratio exceeds the level of 61%, in addition to the region of Nitra, also in the region of Banská Bystrica. Those are the only regions in Slovakia where the share of people aged 60 and over is higher than 16% and the share of people aged 80 and over is higher than 2% (Tab. 1.10).

The region of Bratislava is a special case. Mainly thanks to capital Bratislava, being the important urban centre, this region benefited in the past from the migration of young people. In this region the ageing index is the highest from all regions (73.6%), also the average and median age are the highest (37.5% and 36.9% respectively) which is, however, not conditioned by an extreme share of the old-age population but rather by the lowest share of people aged 0-14 (16.4%). In Bratislava, these values are even higher; the average age is 38 years, the median age is 37.8 years and the ageing index is even 77.9%. On the other hand, the economic dependency ratio in the region of Bratislava reaches the minimum from 8 regions (54.1%). It is a consequence of the mentioned low share of the children component as well as the highest proportion of the population in the productive age (64.9%). From all regions of the SR, the feminity is the highest one in this region (the feminity index is 1107‰), which is caused mainly thanks to Bratislava where almost 1128 women fall on 1000 men (Tab. 1.10).

¹ BL – Bratislava region, TA – Trnava region, TC – Trenčín region, NI – Nitra region, ZI – Žilina region, BC – Banská Bystrica region, PV – Prešov region, KI – Košice region